2022 Consumer Confidence Report
for Lenox DPW Water Division

MassDEP PWSID # 1152000

This report is a close-up of the drinking water quality that we provided last year, 2022. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed residents and businesses are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Address: 275 Main Street, Lenox, MA 01240
Phone: (413)637-5525
Email: waterdept@townoflenox.com
Internet Address: www.townoflenox.com/water-division

Water System Improvements

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 Massachusetts certified operators who oversee the routine operations of our system. As part of our ongoing commitment to you, in 2022 we made the following improvements to our system:

- New 10 inch ductile iron watermain on Reservoir Road, replacing 1889 cast iron watermain. Three additional hydrants were added to Reservoir Road.
- Replacement of numerous fire hydrants around town, with more Hydrants in stock and ready to improve the distribution system for the upcoming year
- Staffing changes in the Water department

If you have any questions about any of these projects please call (413)637-5525 or check out the Town of Lenox website and the Water Division page at: www.townoflenox.com/water-division

YOUR DRINKING WATER SOURCE

The sources for the Lenox Water system are the Upper (Source ID 1152000-04S) and Lower (Source ID 1152000-01S) Root Reservoirs located on Reservoir Road. These surface water reservoirs are surrounded by town owned land with restricted use which protects these sources from contaminants. Water enters our Root Water Treatment Plant for filtering and chlorine is added for disinfection. In 2022 Lenox produced **210,895,752 gallons** of water, and no water was purchased from Pittsfield.

WATERSHED PROTECTION – How are these sources protected?

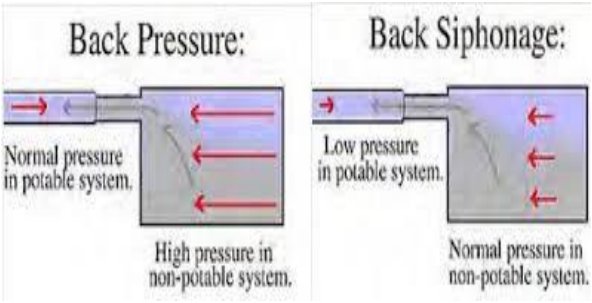
Watershed protection is in everyone's interest. A safe water supply depends on thoughtful use of the land. Public access is prohibited within 400 feet of the Lenox reservoirs and feeder brooks. Motorized vehicles are prohibited from the watershed. There is no trespassing on watershed property.

Please contact the Lenox Water Department at (413)637-5525 if you witness any suspicious activity or the Lenox Police Department at (413)637-2346 or 911

In 2002 a Source Water Assessment and Protection (SWAP) Report was completed by the MASS DEP for the Lenox reservoirs. The reservoirs were ranked moderate for susceptibility of contamination. The complete SWAP report is available at the Lenox DPW office, 275 Main Street, Lenox, MA 01240 or at: http://www.mass.gov/doc/western-region-source-water-assessment-protection-swap-program-reports/download

CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION INFO

A cross connection occurs whenever a drinking water line is linked to non-potable (not safe to drink) water. A garden hose connected to a weed killer spray bottle is an example of a cross connection. Faucets feeding hoses must have vacuum breakers to prevent back siphoning. Vacuum breakers are available at hardware stores. Surveys are done at commercial properties to assess needs for other types of backflow devices.

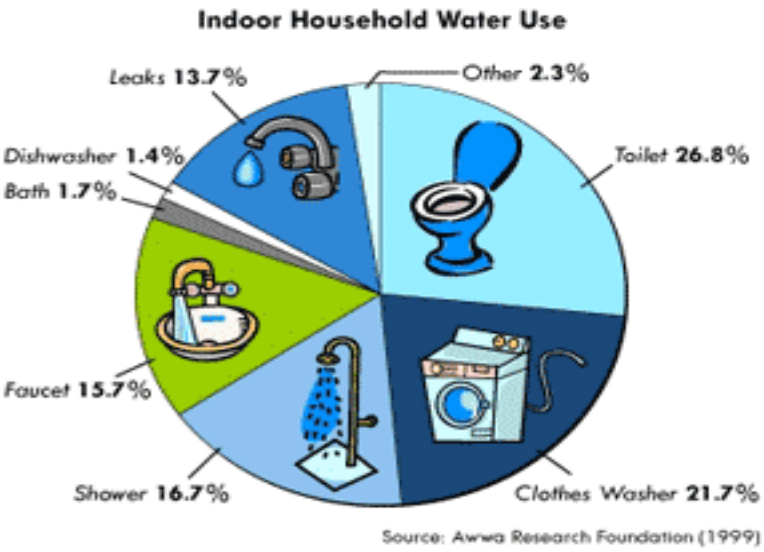


OTHER LENOX WATER SYSTEM INFORMATION

Hardness of water: 4.6 grains per gallon.

New rates effective May , 2021 (reflected in November's bill): Water $8.22 per 1,000 gallons, Sewer $12.70 per 1,000 gallons.

Lenox Water Fact: Tap water continues to be a great value compared to bottled water. One thousand gallons of bottled water bought at a store costs as much as $1,000.



WATER CONSERVATION TIPS

Water consumption in Lenox will continue to increase as the town grows. Lenox needs to keep planning for additional sources of water. One source that Lenox has relied on for many years is the City of Pittsfield. Through an interconnection with the Pittsfield system Lenox can currently take a daily average of 212,500 gallons per day (gpd) and a peak of 430,000 gpd. That amount is about 35% of daily consumption in high use periods of the year. Lenox only uses Pittsfield water when demand exceeds our treatment plant's peak flow capacity of 1.1 million gallons per day or when we need to conserve our own supply in the Lenox reservoirs. Another important part of providing an adequate supply of water is conservation and the protection of our existing sources. Water is a limited resource and conservation needs to be a part of any municipalities' planning.

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 – viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants – 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 – may come from a variety of sources such as agricultural, 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 – can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (MASS DEP) 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 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. **Information about Lenox water is in the attached table. For more information about contaminants and potential health effects call the EPA Safe Drinking Water Hotline at 1-800-426-4791.**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 from their health care providers about drinking water. EPA/Centers for Disease Control list guidelines on appropriate means to lessen the risk or infection by cryptosporidium and are also available from the Safe Drinking Water Hotline at 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 Town of Lenox DPW 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."

IMPORTANT DEFINITIONS:

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

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 or expected risk to health. MCLG's allow for a margin of safety.

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 (ex: chlorine, chloramines, chlorine dioxide).

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known expected risk to health. The MRDLG does not reflect the benefits of the use of disinfectants to control microbial contaminants.

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.

Running Annual Average (RAA): The average of four consecutive quarters of data.
Secondary Maximum Contaminant Level (SMCL): These standards are developed to protect 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.
Unregulated Contaminants: Contaminants 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.
90th Percentile: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance.
Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. Coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND – Not detected
NTU – Nephelometric Turbidity Units
ppm – parts per million, or milligrams per liter (mg/L)
ppb – parts per billion, or micrograms per liter (µg/L)
pCi/L – Picocuries per liter (a measure of radioactivity)

Lenox PFAS information

PFAS, also referred to as PFOS or PFOA, are a group of chemicals that have been found in some firefighting foams, spills, landfills, food packaging, outdoor clothing, carpets, leather goods, ski waxes, and more. PFAS have been found to seep into surface soils, groundwater or surface water, and thereby contaminate drinking water. PFAS exposures have been linked to a variety of health risks, particularly in women who are pregnant or nursing, and in infants.

Lenox was required to conduct initial monitoring of PFAS for the Calendar year of 2021. Raw water and finished water samples were taken in January, 2021 and were conclusively **ND, Not detected**, for PFAS. Our waiver requires us to take PFAS every three years, so we will have to retest again in 2024.

The water quality information presented in the tables is from the most recent round of testing done in accordance with the regulations. All results shown were from samples collected during the last calendar year (2022) unless otherwise noted in the tables. Only the detected contaminants are shown.

Water Quality Testing Results – Regulated Contaminants

MICROBIOLOGICAL CONTAMINANT

Bacteria	Highest # Positive in a Month	MCL	MCLG	Violation	Possible Sources	Health Effects	Comment
Total Coliform Bacteria	1	1	0	NO	Naturally present in the environment	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present	**See assessment information at the end of this report**

DISINFECTION CONTAMINANTS

Contaminant	Date Collected	Highest Result or Average	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation	Possible Sources	Comment
Haloacetic Acids (PPB)	August 2022	8.57	8.5 – 8.5	60	60	NO	Byproduct of drinking water chlorination	
Trihalomethanes (PPB)	August 2022	42.5	42.5-42.5	80	80	NO	Byproduct of drinking water chlorination	
Chlorine (PPM)	Continuous 2022	1.15 (average)	0.80 – 1.50	4	4	NO	Added for disinfection at treatment plant	Continuosly monitored at the filtration plant

LEAD AND COPPER

Lead and Copper	Date Collected	90th Percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Sources of Contamination
Lead (PPB)	August 2020	1.0	15	0	20	0	Corrosion of plumbing systems
Copper (PPB)	August 2020	45.7	1,300	1,300	20	0	Corrosion of plumbing systems

REGULATED CONTAMINANTS

Contaminant	Date Collected	Highest Detect Value	Range Detected	Average Detected	MCL or MRDL	MCLG or MRDLG	Violation	Comment
Turbidity (NTU)	Continuous	0.35	0.04-0.35	0.08	TT (1.00)	N/A (0.10)	NO	Source: Soil Runoff. Turbidity is a measure of the cloudiness of water. It is a good indicator of the effectiveness of our filtration system. Lowest monthly percentage of samples less than 1.00 ntu was 100% (all months met limits)
Nitrate (PPM)	August 2022	ND	ND	ND	10	10	NO	Source: Soil Runoff
Nitrite (PPM)	July 2020	ND	ND	ND	1	1	NO	Source: Soil Runoff

VOLATILE ORGANIC COMPOUNDS

Compound	Date Collected	Highest Detect Value	Range Detected	Average Detected	MCL or MRDL	MCLG or MRDLG	Violation
Chloroform	December 2022	0.76	0.76-0.76	0.76	18	50	NO
Comments Source: Trihalomethane; by-product of drinking water chlorination. Health Effects: 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.							

SECONDAY CONTAMINANTS

Contaminant	Date Collected	Highest Detect Value	Range Detected	Average Detect	SMCL	ORSG or Health Advisory	Violation	Comment
Iron (PPB)	October 2022	ND	ND	ND	300	300	NO	Source: Used in drinking water pipes
Manganese (PPB)	October 2022	8.33	8.33-8.55	5.22	50	300*	NO	Source: Found naturally in the air, soil, and water.

*US EPA and MassDEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects and a one-day and 10-day HA of 1000ppb for acute exposure.

UNREGULATED CONTAMINANTS – 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 Contaminant	Date Collected	Highest Detect Value	Range Detected	Average Detect	SMCL	ORSG or Health Advisory	Violation	Comment
Sodium (PPM)	September 2022	2.54	2.54-2.54	2.54		20	NO	Source: Naturally occurring, also road deicing

RADIONUCLIDE CONTAMINANTS

Contaminant	Date Collected	Detect Value	Std. Dev. (+/-)	MCL	MCLG	Violation	Comment
Gross Alpha (pCi/L)	August 2015 Next 2024	1.10	+/- 1.34	15	None	NO	Source: Occur naturally and in man-made nuclear materials
Combined Radium	August 2015 Next 2024	0.73	----	5	None	NO	Source: Occur naturally and in man-made nuclear materials

OTHER WATER QUALITY TESTING INFORMATION

Perchlorate was not detected in a sample taken on August 31, 2021.

MassDEP has reduced the monitoring requirements for **Synthetic Organic Compounds (SOCs)**, **Inorganic Compounds (IOCs)**, and **Volatile Organic Compounds (VOCs),** because the source is not at risk of contamination. MassDEP may change these waiver determinations any time it deems necessary. The Town of Lenox will need to test for all of these compounds in the 2020-2022 testing cycle, at which point monitoring waivers may be granted for future cycles. Therefore:

IOCs were sampled for on September 15, 2022. The sample was found to meet all applicable EPA and MassDEP standards, with the exception of Sodium, which is listed in the above chart.

VOCs were sampled for on December 14, 2022. The sample was found to meet all applicable EPA and MassDEP standards, with the exception of Chloroform, which is listed in the above chart.

The last sample collected for **SOCs** was taken on September 7, 2021, and was found to meet all applicable EPA and MassDEP standards. **SOCs** will be required to be tested again in 2024.

COLIFORM ASSESSMENT INFORMATION

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. In September and November of 2022, we found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct 1 Level 1 Assessment and 1 Level 2 Assessment These separate Assessments were completed and filed with MassDEP Western Region. Following September's Bacteria sampling at our Pumping Station, The Water Department replaced existing Sampling taps with new fixtures and plumbing. After November's Bacteria sampling, regular monthly flushing at the Washington Mountain Storage Tank has resulted in higher chlorine residuals. The below chart is a list of the planned corrective actions the Town of Lenox is required to do and the completed or planned completion date.

Planned Corrective Actions after Level 1 and Level 2 Coliform Assessment	Completed Date/ Planned Completion Date
Replace two existing Sample tap fixtures and plumbing in the Water Plant Pumping Station	December 2022
Collect additional Upstream and Downstream samples along with required Repeat Sample after any Coliform Presence found.	As required
Monthly Flushing of the Washington Mountain Water storage Tank System.	Monthly

For more information about the Coliform Assessment,
(413)637-5525 waterdept@townoflenox.com 275 Main Street, Lenox, MA 01240

This notice is being sent to you by the Lenox DPW Water Division. MassDEP Water System ID # 1152000
Date Distributed: May 15, 2023

Please check the Town Website for Updates on 2023 Spring (April/May) water main/hydrant flushing