2023 Annual Drinking Water Quality Report

For the Public Water System of the

City of Pittsfield, Massachusetts

MassDEP Public Water Supply ID #1236000

This report is a snapshot of the drinking water quality that we provided last year. 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 customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Address: 901 Holmes Road, Pittsfield, MA, 01201

Contact Person: Jason Murphy, Superintendent

Telephone: (413) 499 9339

Internet Address:
https://www.cityofpittsfield.org/city_hall/public_works_and_utilities/water_division/index.php
(note: all spaces in above address are underscores)
or go to https://www.cityofpittsfield.org → City Hall → Public Utilities → 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 a Massachusetts-certified operator who oversees the routine operations of our system.

In 2023, several new improvements were made to the City of Pittsfield public water system. Construction was ongoing on a new chemical building for the Ashley Water Treatment Plant to come online in 2024. A new water main was installed on Valentine Road. A new water tank came online on Tamarack Road. 29 public hydrants were replaced.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may attend the regular meetings of the City Council. City Council meetings fall on the second and fourth Tuesdays of each month, except July and August, at 7:00 pm. City Council meets in the Council Chambers on the second floor of City Hall. You may also contact your local elected representatives, such as city councilors or the Mayor's office, with any water quality concerns.

YOUR DRINKING WATER SOURCES

Where does my drinking water come from?

The drinking water for the City of Pittsfield comes from six surface reservoirs, all outside the City; none comes from wells. Cleveland Reservoir and Sackett Reservoir lie in the Town of Hinsdale; Ashley Lake, Lower Ashley Intake Reservoir, Farnham Reservoir, and Sandwash Reservoir lie in the Town of Washington. The City of Pittsfield restricts use of these reservoirs and the land around them to protect the water supply from contamination.

How is my water treated to make it safe for consumption?

Our water system makes every effort to provide you with safe and pure drinking water. To improve the quality of the water delivered to you, we treat it to remove several contaminants and impurities. Our two water filtration plants, the Ashley Water Treatment Plant in the Town of Dalton and the Cleveland Water Treatment Plant in the Town of Hinsdale, treat water by using aluminum sulfate and sodium aluminate to remove particulate matter by coagulation and flocculation. Sodium hydroxide (caustic soda) and zinc orthophosphate are added to the drinking water to make it less corrosive to pipes, and chlorine is added later in the process, via the Ashley and Cleveland chlorinators, to disinfect the water. The processed water is pumped throughout the City via five pump stations and stored in six ground-level water tanks.
The water quality of our system is constantly monitored by the City of Pittsfield and MassDEP to determine the effectiveness of existing water treatments and to determine if any additional treatment is required.

What hazards exist for our water supply?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the sources serving the City of Pittsfield potable water supply system. The SWAP Report assesses the susceptibility of public water supplies to contamination. A susceptibility ranking of "high" was assigned to this system because of at least one high land use within the City water supply protection area. The complete SWAP report is available online at *https://www.mass.gov/doc/western-region-source-water-assessment-protection-swap-program-reports/download*. For more information, call (413) 499 9339.

Several common sources of contamination can pollute the water supply. Improperly maintained or nonworking septic systems can be a source of microbial contamination if unsuitable materials are disposed into them. Common household substances, such as fertilizers, paints, weed killers, and pesticides, can endanger public water. Underground oil storage tanks, if maintained improperly, can lead to leaks or spills. Storm water can pick up and carry debris and contaminants from roadways and lawns as it flows to catch basins. See below for further explanation on potential drinking water contaminants.

How is our water source protected, and how can protection improve further?

The SWAP Report notes the key issues of watershed management, utility line rights-of-way, residential land use, and transportation corridors in or around the protection areas for the City water sources. The report commends our water system on promoting measures to protect our potable water supply sources.

In order to maintain and improve source water protection, the SWAP report recommends several key measures. Access should be controlled to areas surrounding the City water supply. Regular inspections should be made of the protection areas and any problems encountered remedied. Emergency response teams in the areas of the water sources should be educated on the water supply protection issues and should be prepared to respond to any accidents or spills in the vicinity of the sources. Residents in the areas of the water supplies can help protect sources by limiting fertilizer and pesticide use, maintaining septic systems properly, participating in hazardous materials collection events, and being vigilant for any suspicious or potentially harmful activities.

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 can result from urban stormwater runoff, industrial and 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 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 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 amounts 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 EPA's Safe Drinking Water Hotline at (800) 426 4791. Some people may be more vulnerable to contaminants in drinking water than the general population. Some elderly, some infants, and immunocompromised persons, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, and those with HIV/AIDS or other immune system disorders, 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 at (800) 426 4791.

Cross Connection Inspection/Backflow Prevention Program

Cross connections are potentially hazardous situations for a public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between a potable water supply and any source through which it is possible to introduce any substance (such as gasoline, soap, gray water, or an industrial chemical) other than potable water to the water supply. Common cross connection scenarios are garden hoses whose spouts are submerged in buckets of soapy water or connected to spray bottles of weed killer.

A backflow, or unintended flow of water toward a source, is caused when a higher pressure develops at a water system than in a water supply. This can occur with an increase in pressure in the target system (backsiphonage) or a decrease of pressure in the supply (backpressure). Since fluids flow from higher pressure to lower pressure, a backflow event can occur when such a variation in pressure occurs somewhere in the system or the supply. This variation may result from a water main break, an unusually high demand for water (such as a building fire), or even a submerged hose end that is higher than the tap to which it is connected.

Prevention of contamination of the water supply from backflow events is the responsibility of the water user. Responsibility begins at the connection from the public main to the user system and includes all piping included in the water distribution system on the property. Any water user whose internal water system is found to present a potential or actual cross connection conflict with the City potable water supply must have a backflow prevention assembly appropriate for the hazard level of the facility installed, maintained, and periodically tested at the user's expense to protect the public, per Chapter 22, Section 23.2 of the Code of the City of Pittsfield.

The City of Pittsfield is not currently required to survey residential properties for cross connections. However, residential properties still may have potential or actual cross connections, most commonly involving outdoor faucets, hot tubs, and swimming pools. All faucets to which hoses attach must have a hose bib vacuum breaker to prevent backsiphonage. To obtain a copy of the Massachusetts regulations regarding cross connections (310 CMR 22.22), or for any further information regarding cross connections, please contact the Massachusetts Department of Environmental Protection Western Regional Office at (413) 784 1100.

Do I need to be concerned about certain contaminants detected in my water?

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 City of Pittsfield 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

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 is 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 of expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

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

90th Percentile – Level at or below which 9 out of every 10 homes or businesses sampled were measured.

ppm = parts per million, or milligrams per liter (mg/L); 1 ppm approximately equates to 1 minute in 2 years
ppb = parts per billion, or micrograms per liter (µg/L); 1 ppb approximately equates to 1 minute in 2,000 years

ppt = parts per trillion, or nanograms per liter (ng/L); 1 ppt approximately equates to 1 minute in 2,000,000 years
NTU = Nephelometric Turbidity Units (measure of cloudiness of a fluid)
ND = Not Detected (may be present, but does not appear in a concentration significant enough to be measurable by testing procedure)
pCi/L = picocuries (units of radioactivity equivalent to 0.037 radioactive disintegrations per second) per liter

Secondary Maximum Contaminant Level (SMCL) – Standard developed to protect the aesthetic qualities of drinking water; it is not health-based.
Massachusetts Office of Research and Standards Guideline (ORSG) – 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.

WATER QUALITY TESTING RESULTS

What Does This Data Represent?
The water quality information presented in the table(s) 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(s).

	Date(s) Collected	90TH percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead (ppb)	8/1/23-8/31/23	2.0	15	0	30	**0**	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	8/7/23-8/31/23	0.106	1.3	1.3	30	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

	Highest # Positive in a month	MCL	MCLG	Violation (Y/N)	Possible Source of Contamination
Total Coliform	0	1	0	N	Naturally present in the environment
Fecal Coliform or *E.coli*	0	*	0	N	Human and animal fecal waste

* Compliance with the Fecal Coliform/E.coli MCL is determined upon additional repeat testing.

	TT	Highest Detected Daily Value	Violation (Y/N)	**Possible Source of Contamination**
Turbidity (NTU)	5	**1.39 (7/31/23)**	**N**	Soil runoff
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.				

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							
Barium (ppm)	12/26/23	0.0107	0.0054-0.0107	2	2	**N**	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrite (ppm)	11/10/20	<1	<1	1	1	**N**	Runoff from fertilizer use; leaching from septic tanks; sewage; 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
PFAS6 (ppt)	1/11/23, 7/17/23, 12/20/23	0.00	0.00	20	N/A	**N**	Discharges/emissions from industrial/ manufacturing associated with the production or use of PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing PFAS, such as firefighting foams.
Radioactive Contaminants							
Gross Alpha (pCi/l) (minus uranium)	9/3/2015	0.584	0.359-0.584	15	0	**N**	Erosion of natural deposits
Radium 226 & 228 (pCi/L) (combined values)	9/3/2015	0.49	0.36-0.49	5	0	**N**	Erosion of natural deposits
Synthetic Organic Contaminants							
2,4-D (ppb)	2/11/2021	<0.100	<0.100	70	70	**N**	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	2/11/2021	<0.200	<0.200	50	50	**N**	Residue of banned herbicide
Alachlor (ppb)	2/11/2021	<0.196	<0.196	2	0	**N**	Runoff from herbicide used on row crops
Atrazine (ppb)	2/11/2021	<0.098	<0.098	3	3	**N**	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	2/11/2021	<20	<20	200	0	**N**	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	2/11/2021	<0.900	<0.900	40	40	**N**	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	2/11/2021	<0.200	<0.200	2	0	**N**	Residue of banned termiticide
Dalapon (ppb)	2/11/2021	<1.00	<1.00	200	200	**N**	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	2/11/2021	<0.588	<0.588	400	400	**N**	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	2/11/2021	<0.588	<0.588	6	0	**N**	Discharge from rubber and chemical factories
Dibromochloropropane (DBCP) (ppt)	2/11/2021	<10	<10	200	0	**N**	Runoff/leaching from soil fumigant used on soybeans, cotton, and orchards
Dinoseb (ppb)	2/11/2021	<0.200	<0.200	7	7	**N**	Runoff from herbicide used on soybeans and vegetables
Endrin (ppb)	2/11/2021	<0.0100	<0.0100	2	2	**N**	Residue of banned insecticide
Ethylene dibromide (EDB) (ppt)	2/11/2021	<0.0100	<0.0100	20	0	**N**	Residue of leaded gasoline or runoff from soil fumigant used on tobacco or strawberries
Heptachlor (ppt)	2/11/2021	<39	<39	400	0	**N**	Residue of banned pesticide
Heptachlor epoxide (ppt)	2/11/2021	<2	<2	200	0	**N**	Breakdown of heptachlor

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
Hexachlorobenzene (ppb)	2/11/2021	<0.098	<0.098	1	0	**N**	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	2/11/2021	<0.098	<0.098	50	50	**N**	Discharge from chemical factories
Lindane (ppt)	2/11/2021	<20	<20	200	200	**N**	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	2/11/2021	<0.098	<0.098	40	40	**N**	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl (Vydate) (ppb)	2/11/2021	<1.00	<1.00	200	200	**N**	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Polychlorinated biphenyls (PCBs) (ppt)	2/11/2021	<500	<500	500	0	**N**	Runoff from landfills; discharge of waste chemicals; residue of banned use in electrical transformers
Pentachlorophenol (ppb)	2/11/2021	<0.0400	<0.0400	1	0	**N**	Discharge from wood preserving factories
Picloram (ppb)	2/11/2021	<0.100	<0.100	500	500	**N**	Herbicide runoff
Simazine (ppb)	2/11/2021	<0.069	<0.7069	4	4	**N**	Herbicide runoff
Toxaphene (ppb)	2/11/2021	<1.00	<1.00	3	0	**N**	Runoff/leaching from insecticide used on cotton and cattle
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2023	52.7	26.3-88.4	80	-----	**N**	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly in 2023	30.5	23.1-39.5	60	-----	**N**	Byproduct of drinking water disinfection
Chlorine (ppm) (free, total or combined)	Monthly in 2023	1.55	0.02-2.08	4	4	**N**	Water additive used to control microbes

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)	12/26/23	8.28-13.6	10.94	----	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Other Organic Contaminants - When detected at treatment plant as VOC residuals, not TTHM compliance						
Chloroform (ppb)	7/17/23	0.74-1.84	1.29	---	70	By-product of drinking water chlorination
Manganese* (ppb)	5/5/23	ND-0.05	0.05	50	300 ppb Health Advisory	Erosion of natural deposits
Aluminum (ppb)	6/15/20	52.7	52.7	200	---	Byproduct of treatment process

City of Pittsfield
Department of Public Utilities
70 Allen Street
Pittsfield, MA 01201

Unregulated and Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Chloride (ppm)	6/15/20	14.8	14.8	250	---	Runoff from road de-icing, use of inorganic fertilizers, landfill leachates, septic tank effluents, animal feeds, industrial effluents, irrigation drainage
Color (C.U.)	6/15/20	<1	<1	15	---	Naturally occurring organic material
Copper (ppm)	6/15/20	ND-0.0013	0.0007	1	---	Naturally occurring organic material
Odor (T.O.N.)	6/15/20	<1	<1	3	N/A	Erosion of natural deposits; Leaching from wood preservatives
pH	6/15/20	7.44-7.64	7.54	6.5-8.5	N/A	-----
Silver (ppb)	6/15/20	<1	<1	100	N/A	Erosion of natural deposits
Total Dissolved Solids (TDS) (ppm)	6/15/20	57.0-96.0	76.5	500	N/A	Erosion of natural deposits.
Zinc (ppm)	6/15/20	<0.0051	<0.0051	5	N/A	Erosion of natural deposits, leaching from plumbing materials

* US EPA has established a lifetime health advisory (HA) value of 300 ppb for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1000 ppb for acute exposure.

COMPLIANCE WITH DRINKING WATER REGULATIONS

We are 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.