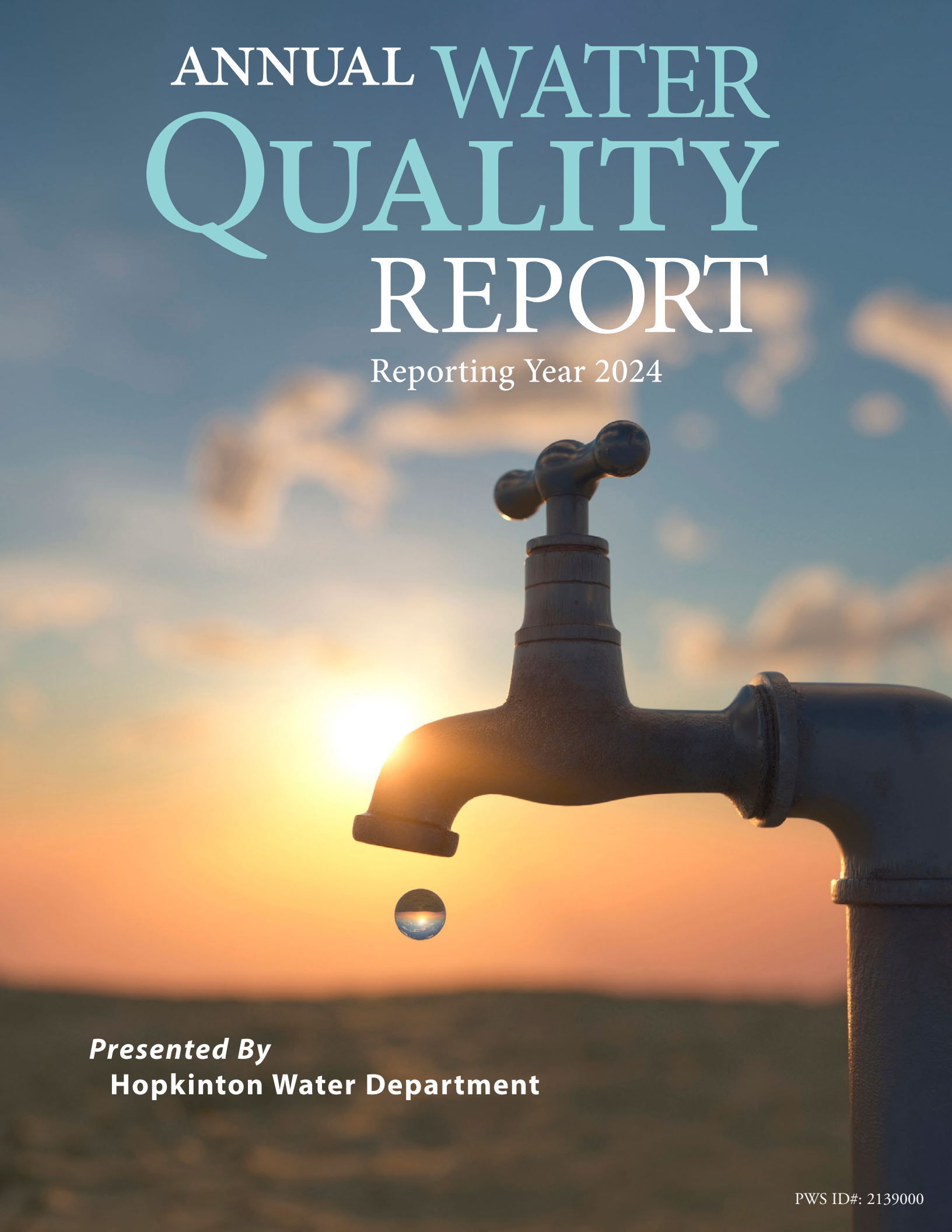
ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By

Hopkinton Water Department

PWS ID#: 2139000

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Where Does My Water Come From?

Our system uses groundwater as its primary source, in addition to water purchased from Ashland's Howe Street treatment facility. Our groundwater sources include the following eight wells:

SOURCE NAME	DEP SOURCE ID	SOURCE TYPE	LOCATION OF SOURCE
Fruit St. Well No. 1	2139000-01G	Groundwater	Off Fruit Street
Fruit St. Well No. 2	2139000-02G	Groundwater	Off Fruit Street
Fruit St. Well No. 3	2139000-03G	Groundwater	Off Fruit Street
Whitehall Well No. 4	2139000-04G	Groundwater	Off Donna Pass near Whitehall Reservoir
Whitehall Well No. 5	2139000-05G	Groundwater	Off Donna Pass near Whitehall Reservoir
Fruit St. Well No. 6	2139000-06G	Groundwater	Off Fruit Street
Well No. 7	2139000-07G	Groundwater	Off Alprilla Farm Road
Well No. 8	2139000-08G	Groundwater	Off Alprilla Farm Road
Ashland Treatment Plant		Groundwater	Howe Street Ashland

Water Treatment Process

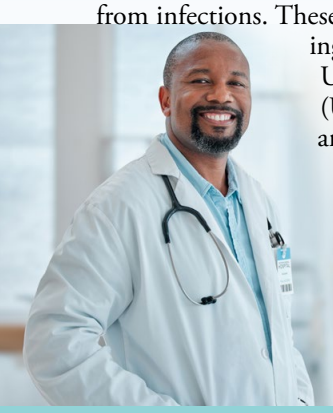
Our system makes every effort to provide you with safe and pure drinking water. To improve the quality of the water delivered to you, we treat it for several contaminants. This includes a disinfectant to protect you against microbial contaminants and chemical treatment to reduce lead and copper concentrations. The department has completed installation of per- and polyfluoroalkyl substance (PFAS) filters at Fruit Street. In addition to chemical treatment, water from the Howe Street water treatment facility in Ashland is filtered.

Community Participation

The board of selectmen, who act as water and sewer commissioners, meet on the first and third Tuesday of each month.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 (800-426-4791) or epa.gov/safewater.



About Our Violation

We received notification that our water system had exceeded the PFAS6 maximum contaminant level (MCL) of 20 parts per trillion in Quarter 1 (January-March 2024). We are in the process of implementing treatment options to remove PFAS6. Notably, a PFAS filter was brought on-line in June to remediate the issue. There is currently also a bottled water rebate program for those in an affected category.

Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.

Questions?

If you have any questions about this report, or any questions regarding your water utility, please contact Eric Carty, Hopkinton Department of Public Works, at (508) 497-9765.

Source Water Assessment

What Is My System's Ranking?

A moderate susceptibility ranking was assigned to this system using the information collected during the assessment by the DEP.

Where Can I See the SWAP Report?

The complete source water assessment plan (SWAP) report is available at the Hopkinton Water Department and mass.gov/lists/source-water-assessment-and-protection-swap-program-documents#swap-reports-for-massachusetts-water-supplies-. For more information, call Eric Carty at (508) 497-9765.

Ashland's SWAP report is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources. According to the SWAP, Ashland's water system had a moderate susceptibility rating. If you would like to review the SWAP, please feel free to contact our office during regular office hours or visit mass.gov/lists/source-water-assessment-and-protection-swap-program-documents#swap-reports-for-massachusetts-water-supplies-.

How Can I help Protect Our Sources?

Please be cognizant that any pesticides, herbicides, or chemical lawn care you use could potentially make their way into your water supply. Please use organic products, which are available at home improvement stores and Weston Nurseries.

We also ask that you refrain from storing oil, gasoline, paint, and other potential hazards in old containers or drums that may leak. If you have these items and need to dispose of them, please contact the Department of Public Works at (508) 497-9740. Each spring, a hazardous waste collection is held, and these products can be disposed of properly during this time. Thank you for your assistance in preserving and protecting our precious water supplies. If you have any questions, please feel free to call us.

Substances That Could Be in Water

To ensure that tap water is safe to drink, U.S. EPA and Massachusetts Department of Environmental Protection (DEP) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed),and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Hopkinton Water Department is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact Eric Carty at (508) 497-9765. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be viewed at https://www.hopkintonma.gov/departments/department_of_public_works/water_and_sewer/lead_copper_inventory.php. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Hopkinton Water Department		Ashland Water Department			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2024	15	0	NA	NA	2.85	1.21–2.85	No	Erosion of natural deposits
Asbestos (MFL)	2021	7	7	0.19	0.19–0.19	NA	NA	No	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	2024	2	2	0.0146	0.0146–0.0146	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Bromate (ppb)	2024	10	0	NA	NA	0.5	ND–2.4	No	By-product of drinking water disinfection
Chloramines (ppm)	2024	[4]	[4]	NA	NA	0.76	ND–2.54	No	Water additive used to control microbes
Combined Radium (pCi/L)	2024	5	0	0.958	0.633–0.958	0.676[1]	NA	No	Erosion of natural deposits
Dichloromethane (ppb)	2024	5	0	0.60	ND–0.60	NA	NA	No	Discharge from pharmaceutical and chemical factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	5	3.6–7	19	ND–35	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	2	ND–2	0.15	0.11–0.24	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
PFAS6 (ppt)	2024	20	NA	27.4	ND–27.4	6.49	ND–13.3	Yes[2]	Discharges and emissions from industrial and manufacturing sources associated with the production or use of moisture- and oil-resistant coatings on fabrics and other materials; Use and disposal of firefighting foams
Tetrachloroethylene (ppb)	2024	5	0	NA	NA	1.06	0.07–3	No	Discharge from factories and dry cleaners
Total Coliform Bacteria (positive samples)	2022	TT	NA	0	NA	0[3]	NA	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	26	12–38	34.5	24–52	No	By-product of drinking water disinfection
Turbidity (NTU)	2021	TT	NA	NA	NA	0.08	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Hopkinton Water Department			Ashland Water Department				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	1.134	0.0319–3.888	6/60	0.309	NA	0/33	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2024	15	0	9.0	ND–9.0	3/60	3.6	NA	0/33	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	Hopkinton Water Department AMOUNT DETECTED	Hopkinton Water Department RANGE LOW-HIGH	Ashland Water Department AMOUNT DETECTED	Ashland Water Department RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Color (units)	2020	15	NA	5	ND–5	2.88[4]	ND–11[4]	No	Naturally occurring organic materials
Iron (ppb)	2024	300	NA	5.36[5]	ND–5.36[5]	40	ND–160	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2024	50[6]	NA	1.67[7]	0.011–1.67[7]	20	ND–60	No	Leaching from natural deposits
pH (units)	2024	6.5-8.5	NA	NA	NA	7.52	6.85–8.5	No	Naturally occurring
Zinc (ppm)	2024	5	NA	0.0295	ND–0.0295	NA	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES[8]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Hopkinton Water Department AMOUNT DETECTED	Hopkinton Water Department RANGE LOW-HIGH	Ashland Water Department AMOUNT DETECTED	Ashland Water Department RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2020	2.65	ND–2.65	NA	NA	NA
Chlorodibromomethane (ppm)	2022	0.62	ND–0.62	NA	NA	NA
Chloroform (ppb)	2024	0.24	ND–0.67	NA	NA	By-product of drinking water chlorination
Dichlorodifluoromethane (ppb)	2024	0.67	ND–0.67	NA	NA	NA
Naphthalene	2022	0.76[9]	ND–0.76[9]	NA	NA	NA
Nickel (ppb)	2024	0.003	0.003–0.003	NA	NA	Naturally occurring
Sodium (ppm)	2024	44	28.3–44	74.6[1]	NA	Natural sources; Runoff from road salt; By-product of treatment

[1] Sampled in 2023.
[2] This is a Hopkinton Water Department violation only.
[3] Sampled in 2021.
[4] Sampled in 2024.
[5] High level is from Well 5, which is only run in an emergency.
[6] Manganese is a naturally occurring mineral found in rocks, soil, groundwater, and surface water. Manganese is necessary for proper nutrition and part of a healthy diet, but it can have undesirable effects on certain sensitive populations at elevated concentrations. U.S. EPA and DEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects.
[7] High level is from Well 2, which is only used in an emergency.
[8] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.
[9] Sample was exposed to mothballs in the building air.

Definitions

0th %ile: 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.

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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

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