Sudbury
Water District

27th Annual Water Quality Report

2024

sudburywater.com

PWS ID NO 3288000

Additional copies of this report are available at our administration office:

199 Raymond Road

For more information about how Sudbury Water District
maintains the safety of your drinking water,
and to view previous years' reports go to

www.sudburywater.com/my-water/water-quality

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Sudbury Water District

Dear Customer,

The Sudbury Water District ("District") is once again proud to report that the water delivered to you has met or exceeded all Federal and State drinking water standards. This year's Water Quality Report includes water testing from January through December 2024 as well as other important information concerning your drinking water.

We remain committed to the planning, operation, and maintenance efforts required to produce and deliver high-quality drinking water for all household, commercial, and community needs. Our team strives to serve the community in a courteous, efficient, and environmentally responsible manner. We take great pride in our work and uphold values of integrity, professionalism, and teamwork in all that we do.

While maintaining water quality remains our top priority, we are equally committed to other critical areas, including service reliability, supply adequacy, future growth planning, water source protection, and conservation. We encourage you to take the time to read this report.

If you have any questions, or would like additional copies of this report, please contact our Administration Office at (978) 443-6602.

Sincerely,

Vincent J. Roy
Executive Director

Ted McAuliffe
Operations Manager

PFAS FILTRATION PROJECTS

APRIL 2025

EAST STREET WATER TREAMENT FACILITY/PFAS FILTRATION SYSTEM

EARLY CONSTRUCTION

APRIL 2025

EAST STREET WATER TREATMENT FACILITY/PFAS FILTRATION SYSTEM

EARLY CONSTRUCTION

RAYMOND ROAD WATER TREATMENT FACILITY/PFAS FILTRATION SYSTEM

OPERATING AS OF AUGUST 3, 2024

RAYMOND ROAD WATER TREATMENT FACILITY/PFAS FILTRATION SYSTEM - VESSELS

WHY AM I RECEIVING THIS REPORT?

In 1996 the Federal Safe Drinking Water Act mandated all community drinking water systems to prepare and distribute annually to their customers Consumer Confidence Reports (CCR's). In compliance with these regulations the District is pleased to present our 27th Annual Water Quality Report; a snapshot of the drinking water quality provided to you last year. Included are important details about where your water comes from, what it contains and how it compares to state and federal standards.

WHERE DOES MY WATER COME FROM?

The District operates nine active gravel-packed wells, located in three separate aquifers known as Raymond Road, Hop Brook, and Great Meadow. To support the distribution system, we maintain four ground-level storage tanks. Two of these tanks are located on Willis Hill and provide the majority of the overall storage capacity holding 3.0 million gallons (MG) and 2.0 MG respectively. Additional tanks include a 1.0 MG tank on Bigelow Drive and a 0.35 MG tank on Goodman Hill, bringing our total storage capacity to 6.35 MG.

These wells supply potable water and fire protection to approximately 95% of the homes and businesses within the District's public water supply system. The remaining 5% of the community relies on privately owned artesian wells, which are not under the District's jurisdiction. Our public water system includes approximately 6,400 service connections and distributes water through a network of over 147 miles of water mains.

The District's nine wells have a combined maximum pumping capacity of 7.6 million gallons per day (MGD). However, to ensure long-term sustainability, the Massachusetts Department of Environmental Protection (MassDEP) regulates withdrawals at lower maximum daily limits. Additionally, the distribution system is not designed to operate all wells simultaneously. Instead, it serves to maintain system pressure and meet peak local demands. Distribution supports hourly fluctuations in usage, while storage ensures sufficient water is available for fire protection and emergency situations, such as pipeline breaks or mechanical failures. Properly located storage tanks also help stabilize water pressure throughout the system. Maintaining near-full storage levels is essential to ensure maximum available pressure and reliable fire flow. At the same time, allowing tank levels to fluctuate helps to minimize water stagnation and supports water quality management.

Because water quality can vary across the nine wells, each site is equipped with treatment systems specifically designed to address the contaminants present at that location. After treatment, water is pumped to elevated storage tanks for distribution. When tanks are full, well pumps shut off and water is gravity-fed to customers. Once tank levels drop to the designated "start" level, the pumps restart, and the cycle begins again. To accommodate scheduled or emergency maintenance, different wells may be brought online or taken offline as needed. As a result, the water delivered to your home is typically a blend from multiple wells rather than a single source.

Source Name	Mass DEP Source ID #	Source Type	Location of Aquifer
GP Well No 2A	3288000-02G	Groundwater	Raymond Road
GP Well No 3A	3288000-11G	Groundwater	Hop Brook
GP Well No 4	3288000-04G	Groundwater	Raymond Road
GP Well No 5	3288000-05G	Groundwater	Great Meadow
GP Well No 6	3288000-06G	Groundwater	Raymond Road
GP Well No 7	3288000-07G	Groundwater	Raymond Road
GP Well No 8A	3288000-12G	Groundwater	Hop Brook
GP Well No 9	3288000-09G	Groundwater	Raymond Road
GP Well No 10	3288000-10G	Groundwater	Hop Brook

IS MY WATER TREATED?

Yes, your water is treated to ensure it is safe and of high quality. The District takes several steps to remove contaminants and enhance water quality before it reaches your tap:

- Disinfection: A disinfectant is added to protect against microbial contaminants.
- Fluoridation: Fluoride is added to promote dental health and hygiene.
- Aeration and Filtration: These processes help remove volatile organic compounds (VOCs).
- Iron and Manganese Removal: Filtration is used to reduce levels of naturally occurring iron and manganese.
- Chemical Neutralization: The water is chemically balanced to minimize corrosion and maintain pH stability.

These treatment processes ensure that the water delivered to your home is safe, clean and meets or exceeds all federal and state drinking water standards.

HOW ARE THESE SOURCES PROTECTED?

We all care deeply about the quality of our drinking water. The District takes numerous steps to protect its ground sources from potential contamination. Drinking water wells can be threatened by various sources, including stormwater runoff, road salting, and improper disposal of hazardous materials. To mitigate these risks, each well has designated protection areas where proactive efforts are focused.

ZONE I AND ZONE II PROTECTION AREAS

Zone I is a 400-foot radius around the wellhead where only water-supply activities are permitted. However, many public water supplies were developed prior to current MassDEP regulations, and some Zone I areas contain non-water supply uses such as homes, recreation fields, or roads. Zone II represents the primary recharge area for the aquifer and is determined by hydrogeologic studies approved by MassDEP. The District's wells fall within three distinct water supply protection areas, with parts extending into the towns of Concord and Framingham.

Zone II areas in Sudbury are primarily residential, forested or wetlands, with smaller areas used for recreation, agriculture, commercial and light industrial purposes.

SUSCEPTIBILITY TO CONTAMINATION

In 2001 MassDEP completed a Source Water Assessment and Protection (SWAP) Report that identified that our sources have a high susceptibility to contamination mainly because:

- Non-water supply activities exist within Zone I.
- The aquifers lack of natural hydrogeologic barriers (e.g., clay layers) that would otherwise slow or block contamination.

Important Note: Susceptibility does not mean the water is contaminated; it simply indicates a greater potential for contamination based on surrounding land uses.

PROTECTIVE MEASURES IN PLACE

To protect your drinking water, the District implements a range of Best Management Practices (BPM's) including:

- Regular inspections of Zone I areas.
- Monitoring for more than 100 potential contaminants.
- Coordinating with emergency response teams to manage stormwater runoff in Zone II.
- Disinfecting, filtering, and treating the water.
- Implementing land use controls to comply with MassDEP's Drinking Water Regulations.

The District has also partnered with the Town to explore the feasibility of sewering the commercial section of Route 20 to further reduce potential contamination risks.

WATER RESOURCE PROTECTION OVERLAY DISTRICT (WRPOD)

Another layer of protection comes from the Town's Water Resource Protection Overlay District (WRPOD). The zoning regulation restricts certain land uses, such as dumping or hazardous material storage in wellhead areas to protect groundwater. The goals of the WRPOD include:

- Promoting public health, safety, and welfare.
- Preserving current and future water supplies.
- Preventing pollution and conserving natural resources.
- Monitoring groundwater and surface water for early detection of contamination.

LEARN MORE

MassDEP's full SWAP Report for the District is available at:

- https://www.sudburywater.com/swap/
- https://www.mass.gov/doc/northeast-region-source-water-assessment-protection-swap-program-reports/download

Actual water quality is best demonstrated by the results of regular testing. For the most current data, please refer to this year's Water Quality Report. The District remains committed to delivering high-quality drinking water while proactively protecting our valuable groundwater sources.

SUBSTANCES FOUND IN DRINKING 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.

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 (1-800-426-4791).

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.

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).

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.

MINIMIZING LEAD EXPOSURE

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. The District 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 the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water 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, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water, and wish to have your water tested, contact the District Administration Office at (978) 443-6602 to coordinate lead testing. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

CROSS CONNECTION CONTROL PROGRAM

WHAT IS A CROSS CONNECTION?

A cross-connection is any actual or potential connection between the potable (drinkable) water supply and a source of contamination, such as sewage, chemicals or gas. If such a connection exists, there is a risk that contaminants could enter the public water system, creating a serious health hazard.

Backflow can happen in two main ways:

- BACKPRESSURE occurs when the pressure in a non-potable system becomes greater than the potable water supply pressure, leading to the potential for backflow and contamination. This differential pressure can cause water or other substances to flow in the reverse direction, potentially introducing contaminants into the public water supply. Common sources of backpressure include booster pumps, elevated storage tanks and pressurized systems (e.g., boilers).
- BACK SIPHONAGE can happen due to various factors, including elevated tanks, pressure-producing equipment, and even temperature increases in boilers. Essentially, it means the water is being forced backward into the main water supply due to increased pressure in a connected system. For example, when the pressure in a non-potable system (e.g., a boiler or irrigation system) exceeds the pressure in the public water system, backflow from the unapproved source could push contaminants back into the potable water.

To prevent this, the District operates a Cross Connection Control Program designed to identify and eliminate or protect against these hazards, helping to ensure the continued safety of your drinking water.

WHERE DO I FIND CROSS CONNECTIONS?

The most common household cross-connection is a garden hose connected to an outdoor faucet. This becomes a potential hazard when the hose is submerged in non-potable water—such as a swimming pool—or connected to a chemical sprayer for activities like weed control. In these situations, contaminants could be drawn back into the drinking water supply if backflow occurs. To protect the public water system, the District conducts regular surveys of industrial, commercial, and municipal facilities to identify and eliminate cross-connections or ensure they are properly protected with backflow prevention devices. The District is also responsible for inspecting and testing each device to ensure it functions correctly and provides maximum protection to the water supply.

WHAT CAN I DO TO PREVENT BACKFLOW?

You can help protect your home's plumbing—and the public water supply—by installing a hose-bib vacuum breaker on each of your outdoor water faucets. These inexpensive devices prevent water from being siphoned back into your home's water system from potentially polluted or contaminated sources, such as a garden hose submerged in a pool or connected to a chemical sprayer. Vacuum breakers typically cost around $10 and are available at most hardware or home improvement stores. Their installation is a simple yet effective way to reduce the risk of backflow contamination.

WHO SHOULD I CONTACT FOR MORE INFORMATION ABOUT BACKFLOW PREVENTION?

If you have any questions or concerns about backflow protection, please contact the District's Cross Connection Control Program Coordinator:

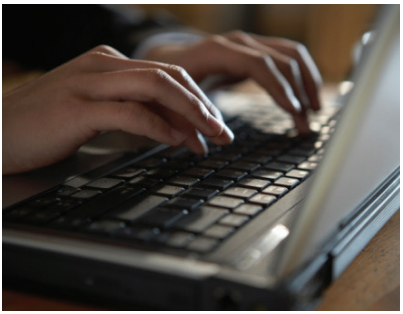
Nigel Dwarika
(978) 443-6602
ndwarika@sudburywater.com

Nigel is happy to assist you with information, guidance, or support regarding backflow prevention in your home or business.

WHO DO I CONTACT IF I HAVE CONCERNS ABOUT MY LOCAL DRINKING WATER?

The District is staffed by a dedicated team of six field technicians and five administrative professionals, all committed to delivering high-quality drinking water to your home. Both administrative and field personnel are available during regular business hours on weekdays to address public water supply needs and respond to customer inquiries. If you have questions or concerns about your drinking water, please contact our Administration Office at (978) 443-6602 or visit our website at www.sudburywater.com. The site is regularly updated with important notices, meeting dates, water quality test results, and answers to frequently asked questions.

You can also manage your water account 24/7 through our customer web portal at https://sudburywater.epayub.com. By registering your account, you can:



- View and download past invoices.
- Access detailed account information.
- Update your communication preferences.
- Make one-time payments or enroll in autopay.

For additional assistance, Executive Director Vincent Roy is available during business hours by phone at (978) 443-6602 or by email at vroy@sudburywater.com.

While office hours are limited, the District ensures continuous support with an experienced field technician on call 24/7, 365 days a year for emergencies and after-hours issues. In the event of a water emergency after business hours, please call 911 and request that the Sudbury Police Department dispatch the on-call water technician to respond promptly.

ARE THERE OPPORTUNITIES FOR PUBLIC PARTICIPATION?

Yes, the Board of Water Commissioners holds public meetings bi-weekly at 5:00 p.m. at the District's Administration Office, located at 199 Raymond Road. These meetings provide an open forum to discuss and vote on matters related to your drinking water supply. Executive Director Vincent Roy updates the Commissioners on ongoing projects and emerging issues, helping ensure transparency and informed decision-making. We encourage residents to attend these meetings to:

- Learn more about how your drinking water is managed.
- Stay informed about local water initiatives and infrastructure.
- Voice questions, concerns, or suggestions directly to the Commissioners and Director Roy.

To obtain the current meeting schedule, please contact our Administration Office at (978) 443-6602 or visit our online meeting calendar at www.sudburywater.com.

Your participation is valued, get involved and help shape the future of Sudbury's water supply.

WATER CONSERVATION:

MassDEP has mandated that the District implement restrictions on non-essential outdoor water use. While these measures may not be popular with all residents, they are similar in restrictions in many neighboring communities. The primary goal is to ensure an adequate water supply for drinking and fire protection, while also preserving the quality and quantity of local aquatic habitat, including ponds, rivers, and wetlands.

By using water more efficiently, you help:

- Conserve essential water resources for future generations.
- Protect the environment.
- Reduce your household water bills

Small changes in your daily habits can make a big difference. Below are some outdoor water-saving tips you can easily implement at home:

OUTDOOR WATER CONSERVATION TIPS:

- **Water only when needed: Overwatering weakens lawns by encouraging shallow root systems. Aim for one inch of water per week, including rainfall.**
- **Water at the right time: Water your lawn early in the morning or late in the evening to reduce evaporation and improve absorption.**
- **Use mulch: Applying mulch around plants and trees helps retain soil moisture and keeps roots cool.**
- **Raise your mower blades: Keeping your grass longer and your mower blades sharp help shade roots and reduces water loss through evaporation.**
- **Use shut-off nozzles: Always attach shut-off nozzles to hoses and install automatic shut-off devices on irrigation systems. An unattended hose can use 10 gallons or more per minute.**
- **Install smart sensors: Use soil moisture sensors and rain sensors with your irrigation system to prevent watering when the soil is already moist or when it's raining.**

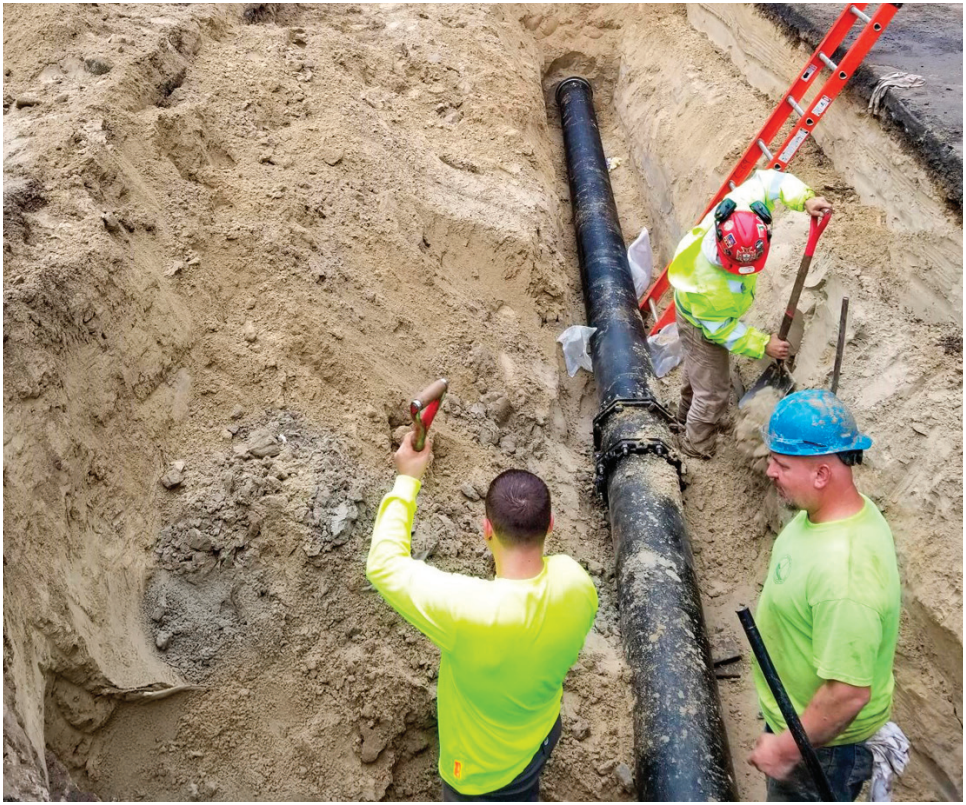
By making these simple adjustments, you can play a crucial role in protecting our water supply and ensuring its sustainability for years to come.

IMPROVEMENTS TO THE WATER DISTRIBUTION SYSTEM IN 2024:

Routine maintenance and system upgrades are vital to ensuring safe and reliable drinking water. Throughout 2024, the District undertook several key projects and initiatives to maintain and improve the performance of the water distribution system. Below are some of the notable improvements completed during this period:

- Completed the Raymond Road Water Treatment Facility/PFAS Filtration System in August 2024.
- Awarded contract for the East Street Water Treatment Facility/PFAS Filtration System to Barbato Construction. Project completion is anticipated by August 2026.
- Initiated evaluation and preliminary design of a PFAS mitigation system for Wells 4 and 6.

- Conducted a feasibility study for potential emergency and long-term water supply connections with surrounding communities and the Massachusetts Water Resources Authority (MWRA).
- Participated in the MWRA Metrowest Expansion Study, supporting regional water supply planning.
- Preliminary design for Well 5 replacement began, funded through the Housing Choice Grant Program.
- Installed 80 feet of new 12-inch ductile iron water main on Dutton Road, Peakham Road, and Boston Post Road in support of the Eversource High Voltage Line Project.
- Completed a Lead Service Line Inventory, meeting compliance with new regulatory requirements funded through a MassDEP grant.
- Advanced the District's Asset Management Program, now 90% complete, funded through the MassDEP grant program.
- Improved water quality and fire protection coverage by installing 23 new fire hydrants on dead-end streets and cul-de-sacs.
- Performed a comprehensive leak detection survey across the entire water distribution system to locate and eliminate water loss.
- Participated in a pilot leak detection program, by installing 50 sound listening-devices on fire hydrants throughout Town for continuous monitoring.



FUTURE PROJECTS FOR 2025:

- Continue construction of the East Street Water Treatment Facility/PFAS Filtration System by Barbato Construction, with project completion anticipated in August 2026.
- Complete design and prepared bid-ready documents for the PFAS mitigation system at Wells 4 and 6.
- Finalize the Asset Management Program project.
- Complete engineering design and prepare bid-ready documents for the water main replacement on Landham Road, from Boston Post Road to the Framingham town line.
- Expand the installation of hydrant leak-detection devices throughout Town to enhance system monitoring and reduce water loss.

We hope you find this report informative and that it will help you to become familiar with your public water supply. The Board of Water Commissioners and all Districts employees are committed to delivering the highest quality drinking water along with outstanding customer service. We welcome your comments and questions regarding the District, its operations, or this Annual Water Quality Report. Please feel free to contact us at (978) 443-6602 with any questions, or concerns.

Board of Water Commissioners,

Robert H, Sheldon, Chairperson

Joshua M. Fox

Robert E. Boyd, Jr.

WHAT DOES THIS DATA REPRESENT?

The water quality information presented in the following table(s) is from the most recent round of testing done in accordance with the 1996 Safe Drinking Water Act Amendments. All data shown was collected during the last calendar year (January-December 2024) unless otherwise noted. We monitor for certain contaminants less than once per year because concentrations of those certain contaminants are not expected to vary significantly from year to year. As a result, some of the District's analytical data represented in the table below is more than a year old. For those contaminants, the date of the last sample is shown in the table.

Regulated Contaminants are those for which the EPA has set legal limits on the levels allowed in drinking water. The limits reflect both the level that protects human health and the level that water systems can achieve using the best available technology.

Radioactive Contaminant	Date Collected	Highest Result	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Yes/No)	Possible Source of Contamination
Gross Alpha emitter (pCi/L)	09/13/23	1.08	ND - 1.08	15 pCi/l	0	No	Erosion of natural deposits.
Radium 226 & 228 (pCi/L) (combined values)	01/07/20	1.0	0.3 - 1.0	5 pCl/l	N/A	No	Erosion of natural deposits.

Inorganic Contaminant	Date Collected	Highest Result	Range Detected	MCL or MRDL	MCLG, MRDLG or ORSG	Violation (Yes/No)	Possible Source of Contamination
Arsenic (ppb)	06/11/24	0.0016	N/A	10 ppb	N/A	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium (ppm)	06/11/24	0.058	0.009 - 0.058	2 ppm	2 ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm) (free, total or combined)	Monthly 2024	0.71	0.38 - 0.71	4 ppm	4 ppm	No	Water additive used to control microbes.
Cyanide (ppm)	06/11/24	ND	N/A	0.2 ppm	0.2 ppm	No	Discharge for steel and metal factories/ Discharge from plastic and fertilizer factories.
Fluoride (ppm)	Monthly 2024	0.67	0.10 - 0.67	4 ppm [1]	4 ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (ppm)	06/11/24	3.9	0.71 - 3.9	10 ppm	10 ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.

Inorganic Contaminant (Continued)	Date Collected	Highest Result	Range Detected	MCL or MRDL	MCLG, MRDLG or ORSG	Violation (Yes/No)	Possible Source of Contamination
Perchlorate (ppb)	09/04/24	0.26	.058 - 0.26	2 ppb	N/A	No	Rocket propellants, fireworks, munitions, flares, blasting agents.
PFAS6 (ppt)	Monthly 2024	18.2	ND - 18.2	20 ppt	N/A	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.
PFAS 6 Health Effects	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.						

Contaminant	Date(s) Collected	90th Percentile	Action Level/MCL	MCLG	No of Sites Sampled	No of Sites Above Action Level	Possible Source of Contamination
[2] Copper (ppm)	06/04/24 12/03/24	0.14 0.16	1.3 ppm	1.3 ppm	30 30	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
[2] Lead (ppb)	06/04/24 12/03/24	0.0071 0.0029	15 ppb	0	30 30	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Volatile Organic Contaminant	Date Collected	[3] Highest RAA	Range Detected	MCL or MRDL	MCLG, MRDLG or ORSG	Violation (Yes/No)	Possible Source of Contamination
Haloacetic Acids (ppb) (HAA5)	Quarterly 2024	25	0.0023 - 0.053	60 ppb	60 ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (ppb)	Quarterly 2024	51	1.0 - 90	80 ppb	N/A	No	By-product of drinking water chlorination.

Unregulated Contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminants	Date(s) Collected	Highest Result Detected	Range Detected	ORSG	Possible Source of Contamination
Bromodichloromethane (ppb)	Quarterly 2024	9.3	ND - 9.3	N/A	Trihalomethane; by-product of drinking water chlorination.
Bromoform (ppb)	Quarterly 2024	ND	ND	N/A	Trihalomethane; by-product of drinking water chlorination.
Chloroform (ppb)	Quarterly 2024	12	ND - 12	70 ppb	A by-product of drinking water chlorination (regulated collectively with total trihalomethanes ; in non-chlorinated sources, chloroform may be naturally occurring.
Dibromochloromethane (ppb)	Quarterly 2024	3.3	ND - 3.3	N/A	Trihalomethane; by-product of drinking water chlorination.

	Date Collected	Highest Result Detected	Range Detected	MCL or MRDL	MCLG, MRDLG or ORSG	Violation (Yes/No)	Possible Source of Contamination
Sodium (ppm)	05/11/2021	63.6	8.7-63.6	N/A	20 ppm	No	Natural sources; runoff from use as salt on roadways; by-product of treatment process.
Sodium Health Effects	Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.						

Secondary Contaminants are non-mandatory water quality standards. The EPA does not enforce "secondary maximum contamination levels" or SMCL. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

Secondary Contaminants	Date(s) Collected	Range Detected	SMCL	ORSG	Possible Source of Contamination
Hardness (ppm)	10/31/24	68-176	N/A	N/A	Not applicable (No SMCL)
Iron (ppm)	10/31/24	0.0-0.22	0.3 ppm	N/A	Natural and industrial sources as well as aging and corroding distribution systems and household pipes.
Manganese (ppm)	10/31/24	0.0-0.12	0.05 ppm	0.3 ppm	Erosion of natural deposits; discharge from industrial uses.
Manganese Health and/or Aesthetic Effects	Infants and children who drink water containing manganese at high concentrations may have learning behavior problems. People with liver disease who drink water containing manganese at high concentrations may have neurological disorders.				
pH	Daily 2024	7.0-8.5	6.5 - 8.5	N/A	Low pH: bitter metallic taste; corrosion. High pH: slippery feel; soda taste; deposits.

Key:

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level. Tis number is compared to the action level to determine lead and copper compliance.

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

Maximum Contamination Level or (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 Contamination Level Goal or (MCLG): The level of a contamination 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 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 of expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A: Not Applicable **ND:** Not Detected

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.

pCi/L: Picocuries per liter (a measure of radioactivity)

PFAS: Per- and polyfluoroalkyl substances

ppm: Parts per million, the same as milligrams per liter or mg/L (One ppm is equivalent to one drop of water in a 10 gallon tank).

ppb: Parts per billion, the same as micrograms per liter or ug/L (One ppb is equivalent to one drop of water in a 10,000 gallon swimming pool).

ppt: Parts per trillion, the same as or nanograms per liter or (ng/L) (One ppt is equivalent to one grain of sand in 35 Junior Olympic sized swimming pools holding 288,000 gallons of water each or 10,000,000 gallons of water combined).

PWS: Public water system

RAA: Running Annual Average

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

SWAP: Source Water Assessment and Protection Program

Ug/L: Micrograms per liter (the same as parts per billion or ppb)

(1) Fluoride also has a secondary contaminant level (SMCL) of 2ppm to better protect human health.
(2) The data presented in this report is from the most recent testing done in accordance with federal regulations for the lead and copper rule.
(3) Highest Running Annual Average (RAA) = highest running annual average of four consecutive quarters.

Our water system received a Notice of Noncompliance from MassDEP in May 2024 regarding PFAS6 monitoring for Well 6. In response, we have revised our PFAS6 sampling protocols to prevent future violations. Additionally, the District received a Notice of Noncompliance from MassDEP related to our Water Management Act (WMA) Permit, specifically Special Condition 6, which addresses Unaccounted-for Water (UAW). The permit requires that UAW remain below 10% of total water withdrawals for at least two of the three most recent reporting years. To address this issue, the District conducted a comprehensive audit of the water distribution system and our water loss control program to ensure alignment with MassDEP standards. As a result, our most recent Annual Statistical Report submitted to MassDEP shows a UAW rate of 6.1%, well within the required threshold.

We hope you find this report informative, allowing you the opportunity to become familiar with your public water supply. Your Commissioners and District employees strive to achieve the highest quality drinking water together with outstanding customer service. We invite your comments and questions regarding the District, its operation and this Annual Quality Report. Questions, comments or concerns may be addressed by calling (978) 443-6602.

An environmentally friendly electronic alternative to this traditional paper report can be found online at www.sudburywater.com/my-water/water-quality, which significantly reduces waste by saving paper, ink, and other production costs.

For more information about how Sudbury Water District maintains the safety of your drinking water and to view previous year's reports go to **www.sudburywater.com/my-water/water-quality.**

VISIT OUR WEBSITE FOR THE LATEST NEWS AND INFORMATION ON FLUSHING, WATER RESTRICTIONS, MEETINGS, AND MORE!

FLUSHING

Sudbury Water District flushes hydrants every spring and fall, in an effort to clear water mains of sediment and mineral build up.

RESTRICTIONS

See current restrictions at www.sudburywater.com.

MEETINGS

All meetings are held at 5 p.m. at the office of the Sudbury Water District, 199 Raymond Road.

PLUS, PAY YOUR BILL ONLINE AT WWW.SUDBURYWATER.COM!

Sudbury Water District

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