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Dear Customer,

This year, MWRA turns 40 and throughout the year we are celebrating the work of revitalizing our drinking water system, delivering the nation's best tasting water, and the clean-up of Boston Harbor. We are proud of all that we have accomplished together and remain energized by the challenges and possibilities on the horizon.

This report provides you with the results of our drinking water testing for 2024. Every year, we take hundreds of thousands of tests to ensure that your water is safe. Our state-of-the-art surveillance system monitors your water every step of the way, from forest to faucet. Once again, MWRA met every state and federal standard and the quality of your drinking water is excellent.

As you will read in the pages ahead, great water starts at the source. At MWRA, we recognize all that has gone into creating this magnificent resource and understand the value and importance of protecting it. That is why MWRA and its partner agencies have worked hard to protect hundreds of thousands of acres in watersheds, providing excellent resource protection and creating an accidental wilderness that yields tourism and recreational opportunities across the region. These preservation efforts are the reason our water meets the current state and federal standards for PFAS with levels so low they cannot be quantified.

MWRA is proud to be a leader in helping communities reduce the risk of lead in drinking water. MWRA's source water does not have lead, but it can enter water if you have a lead service line or home plumbing with lead solder. Our corrosion control treatment helped reduce lead levels in higher risk homes by 90%, and since 2016, we have provided \$44 million to help communities to replace lead service lines. Please read your community's letter for more information on your local water system and consider replacing your lead service line if you have one.

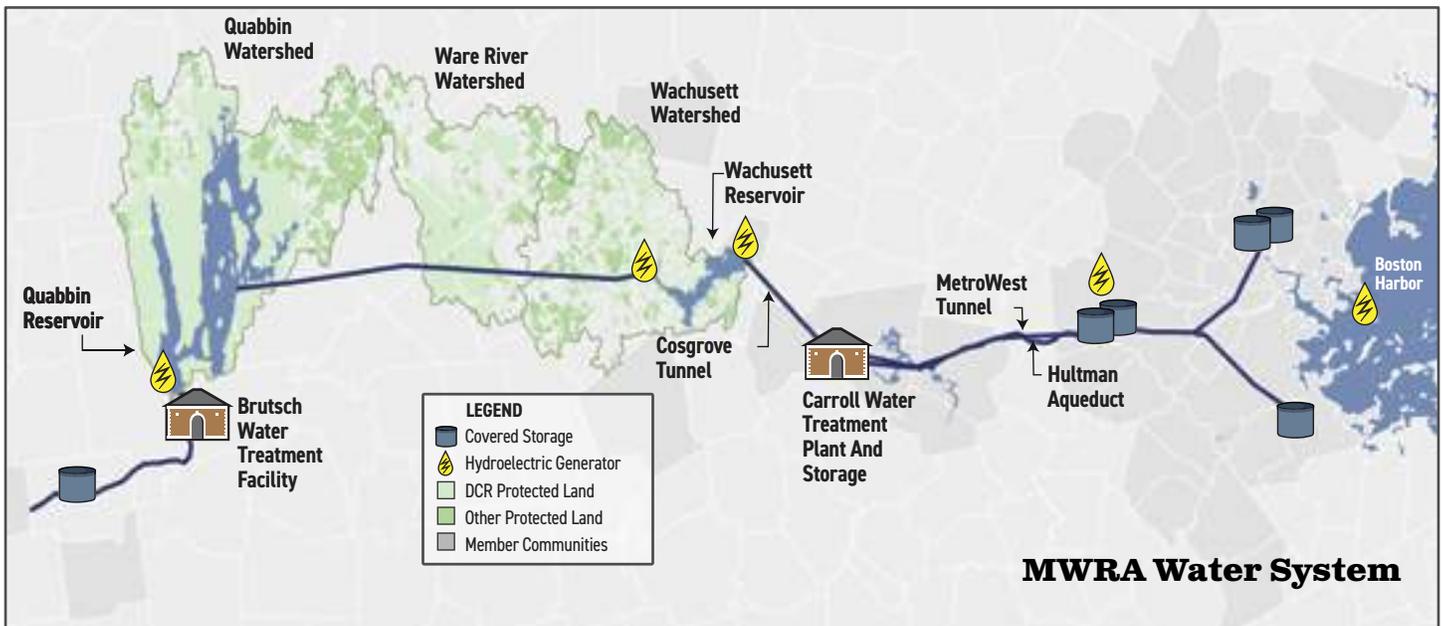
Last summer, our region experienced significant drought. Thanks to all of our customers' efforts to use water wisely, MWRA's reservoirs remained at normal operating levels. As stewards of these reservoirs, water conservation efforts remain a constant priority at MWRA.

I hope you will take a moment to read this report. We want you to have the same confidence in the water we deliver to your houses and businesses that we do. Please contact us with any questions or comments about your water quality or any of MWRA's programs.

Sincerely,

Frederick A. Laskey
Executive Director

For more information on MWRA and its Board of Directors, visit www.mwra.com



From Forest To Faucet: Great Water Starts At The Source



The MWRA was created 40 years ago, in 1985, to upgrade the region's water and sewer systems to modern health and environmental standards and return them to good working order. While pipes, pumps, and treatment facilities definitely needed work, our predecessors left us with thoughtfully-designed and well-constructed source watersheds and reservoirs, which provide the foundation of our supply system.

Since 1985, MWRA professionals have been working to upgrade, maintain and operate the regional system that provides a reliable safe supply of drinking water to your community. Today, MWRA staff work to ensure the delivery of safe, pure water for your home, school or business, 24/7/365. We collaborate with water departments in 53 communities to ensure the continuing delivery of safe drinking water to over 2.7 million people at their homes and businesses.

This annual MWRA drinking water quality report for 2024 provides information on how we provide high quality water to your community and to you. Keeping the water safe is a continuous process, from watershed to water tap. From the 400 square mile forest-covered watersheds, to billions of gallons of water in the reservoirs, through treatment and thousands of miles of pipelines, and finally to your drinking water faucet, MWRA's water experts conduct hundreds of thousands of tests on your water every year.

Protected At The Source

The water MWRA and your community provide to your home or business starts with our two pristine reservoirs in central Massachusetts – the Quabbin Reservoir, 65 miles from Boston, and the Wachusett Reservoir, 35 miles from Boston. Combined, these two reservoirs provide an average of 200 million gallons of pure, highly protected, high quality water each day. The Ware River provides additional water when needed. The Quabbin and Wachusett watersheds—areas that drain water to the reservoirs—are naturally protected. Over the past 40 years, MWRA and our partner agency, the Department of Conservation and Recreation (DCR), have added over 26,400 additional

acres of permanently protected land, maintaining forest cover and preventing activities that could negatively affect water quality. Today, more than 62 percent of the watershed is permanently protected.

More than 86 percent of the land is covered with forests and wetlands, which filter the rain and snow that enter the streams that flow to the reservoirs. This water comes in contact with soil, rock, plants, and other material as it follows its natural path to the reservoirs. This process helps to clean the water, but it also can dissolve and carry very small amounts of material into the reservoir. Minerals and rock do not typically cause problems in the water. Water can also transport contaminants, including naturally occurring minerals, and bacteria, viruses or other potential pathogens from human and animal activity that can cause illness.

Testing results show that few contaminants are found in the reservoir water, and those few are in very small amounts well below EPA's treatment standards. MWRA and DCR staff work together to implement our nationally recognized watershed protection program. The Department of Environmental Protection's (MassDEP) Source Water Assessment report for the Quabbin and Wachusett Reservoirs commended DCR and MWRA for our source water protection plans. The report states that our "watershed protection programs are very successful and greatly reduce the actual risk of contamination." MWRA and DCR follow the report recommendations to maintain the pristine watershed areas and high quality source water. For more information on our source water, go to: www.mwra.com or www.mass.gov/orgs/dcr-office-of-watershed-management.



Water: Tested From The Streams To Your Sink

DCR biologists and environmental scientists sample the streams that feed the reservoirs to identify and resolve potential pollution sources, and to monitor water quality trends. MWRA and DCR scientists sample and analyze water in the reservoirs, and use specialized monitoring buoys to remotely and

continuously monitor the reservoirs. These first steps in testing, as the water heads to your sink, help MWRA operators make decisions on how to manage the reservoirs and set treatment parameters.

This annual water quality report provides MWRA customers with important information on water quality. MWRA also has monthly water quality reports, information on specific potential contaminants, water system updates, and more at mwra.com. We welcome your questions at 617-242-5323 or Ask.MWRA@mwra.com.

A key initial test for water quality leaving the reservoirs is turbidity, or cloudiness. Turbidity refers to the amount of suspended particles in the water and can impair water disinfection. All water must be below 5 NTU (nephelometric turbidity units), and water can only be above 1 NTU if it does not interfere with effective disinfection. In 2024, typical levels in the Wachusett Reservoir were 0.29 NTU, and highest level was only 0.48 NTU.

MWRA also tests water for potential disease causing organisms, including fecal coliform bacteria, and parasites such as *Giardia* and *Cryptosporidium*, that can enter the water from animal or human waste. All test results were well within state and federal treatment standards. Learn more about test results for waterborne contaminants and their potential health impacts at: mwra.com.

Your Water Makes Electricity

As the water leaves Wachusett Reservoir in the Cosgrove tunnel towards the treatment plant in Marlborough, it passes through a hydroelectric generator, creating clean green renewable power, lowering MWRA's costs, and reducing greenhouse gas emissions. The generator at the Cosgrove Intake is one of five that capture excess energy from the water as it moves from Quabbin Reservoir all the way to the wastewater treatment plant on Deer Island. Renewable resources are about 30% of MWRA electrical use.

Your Water Wins Awards MWRA once again won an outstanding performance award from MassDEP for consistently providing high quality water and meeting and exceeding with all regulatory standards.

Treated And Tested: All The Way To Your Home



The combination of high quality protected source water, and well designed and operated treatment, means that your water not only meets EPA's safety standards, but it also tastes good. No need for bottled water, it's great right from the tap.

How Your Water Is Treated

MWRA has made significant investments in treatment and monitoring technologies, bringing the water system into the 21st century. Upgraded corrosion control treatment, installed in 1996, has reduced lead levels at the tap by around 90 percent (see pages 4 and 5). The John J. Carroll Water Treatment Plant in Marlborough, completed in 2005, with the addition of UV treatment in 2014, provides state-of-the-art disinfection.

At the Carroll treatment plant, our well-trained and licensed operators add measured doses of treatment chemicals, and continuously monitor dozens of parameters, to ensure that the treated water meets all standards. Treatment steps include:

- **Ozone**, made from pure oxygen, disinfects the water, killing bacteria, viruses and other organisms, and improves water clarity and taste.
- **Ultraviolet light (UV)**, a natural disinfectant like sunlight, renders pathogens non-infectious.
- **Fluoride** protects dental health.
- The water chemistry is adjusted to reduce corrosion of lead from home plumbing (see page 4).
- **Monochloramine** (a compound of chlorine and ammonia), provides a mild and long-lasting disinfectant to protect the water as it travels through miles of pipelines to your home.

More Testing In Tanks And Pipes

After we treat your water, MWRA staff test it as it leaves the treatment plant, and as it travels towards your home, as required by EPA and state regulations. MWRA sampling teams, and chemists and biologists at MWRA's four laboratories conduct hundreds of thousands of tests per year for over 120 potential contaminants. A complete list is available on mwra.com. The results for 2024 are shown in the table below. They confirm the quality and safety of the water your community receives from MWRA.

Sodium and Drinking Water



MWRA tests for sodium monthly and the highest level was 36 mg/L (about 8 mg per 8 oz. glass of water) This level would be considered Very Low Sodium by the Food and Drug Administration (FDA). Sodium in drinking water contributes only a small fraction of a person's overall intake (less than 5%)

MWRA Water Test Results 2024

Detected Contaminants

Compound	Units	(MCL) Highest Level Allowed	(We Found) Detected Level-Average	Range of Detections	(MCLG) Ideal goal	Violation	How It Gets in the Water
Barium	ppm	2	0.008	0.008-0.009	2	No	Common mineral in nature
Fluoride	ppm	4	0.7	0.33-0.77	4	No	Additive for dental health
Nitrate [^]	ppm	10	0.62	0.037-0.62	10	No	Byproduct of disinfection
Radium-226*	pCi/L	5	0.82	0.82	0	No	Erosion of natural deposits
Haloacetic Acids-5	ppb	60	22.9	4.4-24.9	NS	No	Byproduct of water disinfection
Total Trihalomethanes	ppb	80	26.3	7.9-24.4	NS	No	Byproduct of water disinfection
Monochloramine	ppm	4-MRDL	1.94	0.04-3.85	4-MRDLG	No	Water disinfectant

KEY: MCL = Maximum Contaminant Level. The highest level of a contaminant allowed in water. MCLs are set as close to MCLGs as feasible using the best available technology. MCLG = Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. 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 health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination. ppm = parts per million. ppb = parts per billion. NS = no standard. ND = non-detect. [^] = As required by DEP, the maximum result is reported for nitrate. * = Radium result from 2023.

Working To Keep Lead Out Of Drinking Water



water, and wish to have your water tested, contact your local water department (see your community letter). 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>.

MWRA Meets Lead Standard In 2024

Under EPA and DEP rules, MWRA and your local water department are required to test local tap water each year. We collect samples from homes with lead service lines or lead solder. The EPA rule requires that 9 of 10 homes tested must have lead levels below the Action Level of 15 parts per billion (ppb).

Lead affects young children and may cause damage to the brain, slow growth and development, and create learning and behavior problems. Preventing lead exposure is particularly important if a pregnant woman or a child lives in your home or apartment. Lead can also impact the health of your entire family. While lead poisoning frequently comes from exposure to lead paint chips or dust, lead in drinking water can also contribute to total lead exposure. Learn about the health impacts of lead and how to reduce exposure to this toxic metal.

Lead & Copper Results, September 2024

	Range	90% Value	Action Level	Ideal Goal (MCLG)	#Homes Above AL/ #Homes Tested
Lead (ppb)	ND-1390	6.9	15	0	16/595
Copper (ppb)	0.6-186	93	1300	1300	0/595

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

How Lead Can Enter Drinking Water

Lead in your home plumbing, or a lead service line, can contribute to elevated lead levels in the water you drink. MWRA's water is lead-free when it leaves our reservoirs. Water mains that provide water to your community are made mostly of iron, steel, or concrete, and do not add lead to the water. Corrosion, or wearing away of lead-based materials, can add lead to tap water, especially if water sits in the pipes for a long time before it is used. Lead can enter your tap water from your service line—the small pipe connecting your home to the water main—if it is made of lead, or from lead solder used in plumbing, or some older brass faucets.

MWRA Treatment Reduces Lead Corrosion

Water is often called the universal solvent. In 1996, MWRA constructed new corrosion control treatment facilities and began treating the water to reduce its natural tendency to dissolve metals such as lead. MWRA's licensed treatment operators adjust the water's pH and buffering capacity by adding sodium carbonate and carbon dioxide to the water. This treatment makes water less corrosive and reduces leaching of lead into drinking water. Lead levels found in tests of tap water have dropped by nearly 90% since we made this treatment change. Learn more about the reduction of lead in drinking water at mwra.com.

Important EPA Information On Lead

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. MWRA is responsible for providing high quality drinking water and your community is responsible for 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

What Is An Action Level?

The ideal amount of lead is none. An Action Level is the amount of lead in water that requires action to reduce exposure. If your home or school drinking water is above the lead Action Level, additional steps to reduce lead may be required. If more than 10% of your community's samples were over the lead Action Level, your local water department is taking action to address the problem. See your community letter.

This testing process can provide information on whether lead is corroding and mixing with the drinking water. Because we target sampling to homes with known lead in their plumbing, the results do not reflect lead levels in all homes.

All MWRA sampling rounds over the past 22 years have been below the EPA Action Level. In 2024, nine out of ten homes were below 6.9 ppb—below the 15 ppb Action Level. See your community letter for local results and more information.

Only one community—Malden—exceeded the Action Level in 2024.

Investing in Finding and Removing Lead

Lead Service Lines

A service line is the small pipe that connects your home or building to the water main in the street. If your service line is made of lead, it can be a main source of lead in your tap water. Older lines that combined galvanized iron and lead connectors ("goose-necks") can also release lead. Lead service lines should be removed entirely to prevent lead in your drinking water.

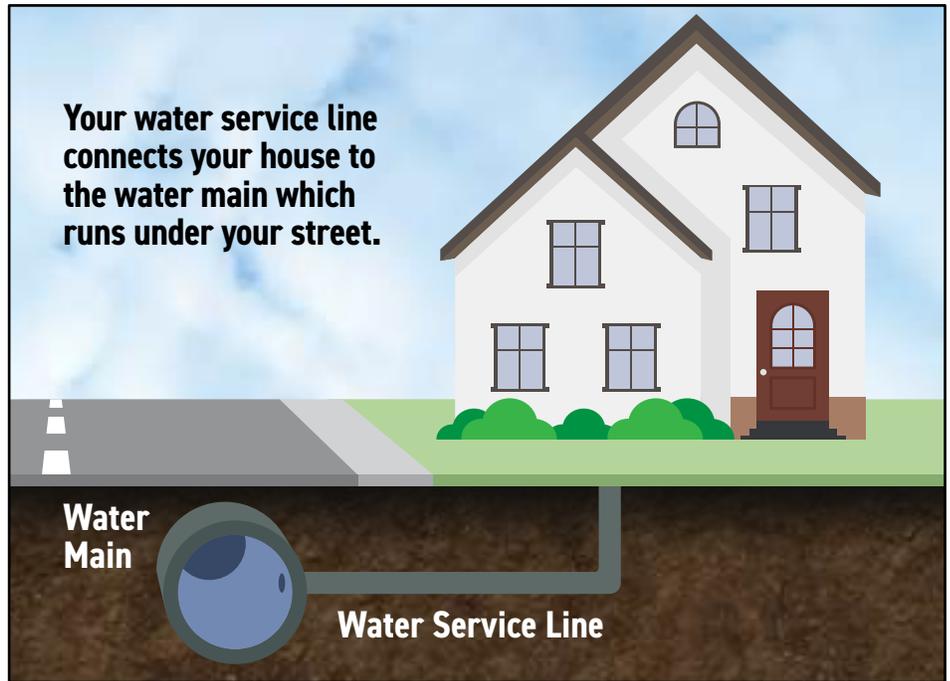
Find Them All

In October 2024, every community completed an inventory of every service line and submitted it to MassDEP. In November, they mailed a letter to each property that their records indicated had a lead service line or a galvanized line that could contribute lead with information about the risks of lead and how to get the service line replaced. They also mailed a letter to every property where they did not have records about the service line material with information on how to determine if it was made of lead. Your community letter has more information.

Many communities have on-line service line maps. You can also see if your service line is made of lead by scratching the pipe near your water meter with a key or other metal object. Lead pipes will show a dull grey color, while copper pipes will not. For a how-to guide, go to: www.epa.gov/pyt.

Working To Replace Lead Service Lines

To help replace lead service lines, MWRA and its Advisory Board offer zero-interest loans to member communities. Each MWRA community can develop its own local plan, and many communities have already taken steps to remove lead service lines. Since 2016, MWRA has provided \$44 million to 17 communities to replace lead service lines.



In 2024, MWRA added an additional \$100 million in loans and grants to encourage communities to fully replace lead service lines at no cost to home owners, and set a goal of full replacement by 2032. Talk to your local water department about their efforts to find and replace lead service lines.

How To Test Your Drinking Water

If you are concerned about lead piping in your home, contact your local water department about testing for lead in your drinking water. For a list of certified laboratories and sampling instructions go to: www.mwra.com/your-water-system/drinking-water-quality/lead-testing.

Steps To Reduce Lead In Your Home Or Office

- Find out if you have a lead service line, and get it replaced.
- Let water run before using it - fresh water is better than stale.
- Any time water has not been used for more than 6 hours, run the faucet used for drinking water or cooking for at least one minute or until after the water runs cold. To save water, fill a pitcher with fresh water and place it in the refrigerator.
- Never use hot water from the faucet for drinking or cooking, especially when making baby formula or other food for infants or young children.
- Remove loose lead solder and debris. Every few months, remove and clean the aerator from each faucet and run water for 3 to 5 minutes.
- Be careful of places where you may find lead in or near your home. Paint, soil, dust and pottery may contain lead. Call the Massachusetts Department of Public Health at 1-800-532-9571 or 1-800-424-LEAD.



Lead Testing In Schools And Childcare Facilities

Children can consume much of their drinking water at school or childcare. Plumbing there may contain lead and contribute to lead exposure. MWRA and MassDEP provide technical assistance and no-cost lab analysis in MWRA communities. Since 2016, MWRA's laboratory staff have conducted nearly 45,000 tests for 668 schools and childcares. Results are available on the MassDEP website at: www.mass.gov/dep (search for "lead in schools") or contact your local school department.



Information We All Need



Building for Reliability

Since 1985, MWRA has replaced all of its open distribution storage reservoirs with new covered storage tanks. These tanks store water to help manage pressure during peak usage times each day, as well as provide water for firefighting and other emergencies. The water you drink now travels all the way from the reservoir to your tap safely enclosed. This has greatly increased the security of the system, reduced the risk of accidental contamination and helped maintain consistent water quality.

Maintaining the system and adding redundancy allows us to continue uninterrupted water delivery to your community, even if sections of our system need inspection, repair or rehabilitation. In 2003, MWRA completed construction of the 17.6 mile Metro West Water Supply Tunnel. The tunnel, which is 14 feet in diameter and runs from roughly I-495 to Route 128, provides redundancy to the 1940's era Hultman Aqueduct, and allowed it to be taken off line and rehabilitated. MWRA's engineers and geologists are now working on a similar project to provide redundancy to the tunnels inside Route 128. We have completed environmental review and begun final design for two new tunnels north and south of Boston to provide reliable service to the entire region, as well as interim improvements to add resilience to the system. We also have major projects underway to rehabilitate the 125 year old Weston Aqueduct Supply Main 3, a 60-inch pipe in Weston, Waltham, Belmont, Arlington and Medford. See mwra.com for more information.

Your community is investing in reliability as well. MWRA provides zero-interest loans to communities for pipeline rehabilitation and other water quality improvements. Since 1998, MWRA has provided \$621 million to communities to maintain and improve their delivery of high quality water all the way to your home by rehabilitating or replacing over 632 miles of older water mains. During 2024, we loaned \$28 million to 8 communities for pipeline and other water projects.



EPA Information On Bottled Water And Tap Water

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) or MWRA. In order to ensure that tap water is safe to drink, MassDEP and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public

water systems. The U.S. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health (MDPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Important Health Information from EPA

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 disorder, 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Monitoring For PFAS

PFAS, or per- and polyfluoroalkyl substances, used since the 1940's for many purposes, from stain and water proofing to firefighting, continue to be a national concern. Due to our well protected sources, tests of MWRA water show only trace amounts of these compounds, well below the state PFAS6 standard of 20 parts per trillion. MWRA also meets the new EPA standards announced in April 2024. See mwra.com for results and more details.

Working With Your Community to Test Your Water

MWRA works with local water department staff to sample and test 300-500 water samples each week for total coliform bacteria. Total coliform bacteria can come from the intestines of warm-blooded animals, or can be found in soil, plants, or other places. Most of the time, they are not harmful. However, their presence could signal that harmful bacteria from fecal waste may be there as well. If total coliform is detected in more than 5% of water samples in a month, the water system is required to investigate the possible source and fix any identified problems. If a water sample does test positive, our laboratory staff run a more specific test for *E. coli*, which is a bacteria found in human and animal fecal waste and may cause illness. If your community was required to do an investigation, or found *E. coli*, it will be in the included letter from your community.

Important Research For New Regulations

MWRA works with EPA and health research organizations to help define new national drinking water standards by collecting data on water contaminants that are not yet regulated. Very few of these potential contaminants are found in MWRA water due to our source water protection efforts. Detailed information on testing for unregulated contaminants, as well as data on PFAS, disinfection by-products, *Giardia* and *Cryptosporidium*, and other contaminants can be found at www.mwra.com, search for UCMR.



Being Prepared for Drought

Despite the hot dry weather in 2024 and many months of drought conditions across Massachusetts, MWRA's water supply reservoirs remained within their normal operating range throughout the year. Why? Two reasons. Together the Quabbin and Wachusett Reservoirs hold an astonishing amount of water—477 billion gallons, enough water to supply the region for over 6 years. Secondly, because our customers are water savvy. Water use in our region has dropped from over 330 million gallons per day in 1985 when MWRA was created, to around 200 million gallons per

day now. This keeps our reservoirs full, reduces the cost of building and operating our facilities, and makes MWRA drought resilient. Thanks for your help.

Cross Connection Information

MassDEP recommends the installation of backflow prevention devices for all hose connections to help protect the water in your home as well as the town system. For more information on cross connections, please call 617-242-5323 or visit www.mwra.com/your-water-system/drinking-water-quality/cross-connections.



Do Your Part for Water Conservation

Be mindful of water use indoors:

- Don't let the water run in the kitchen or bathroom
- Check for leaking faucets or toilets
- Don't use the toilet as a trash can
- Buy water efficient appliances

Water outdoors only when needed:

- If there has been an inch of rain—no need to water that week
- Avoid watering during the heat of the day
- Plant native plants that need less water

For more water saving tips, visit mwra.com

Why Save Water?

- It helps keep our reservoirs full
- Saving water can save you money by lowering your monthly water and sewer bill
- Wildlife, rivers and crops all need water too
- Reducing water use reduces energy use and cost by decreasing the energy need to pump, treat and heat water

Request free MWRA water conservation kits at: wc.mwra.com/home

Help Protect Boston Harbor and Our Rivers

- Only flush toilet paper—most “flushable wipes” can clog pipes and cause overflows.
 - Fats, oil and grease go in the trash, not the drain.
 - Sump pumps and roof drains should connect to a storm drain or a dry well, not the sanitary sewer.
- Too much clean water can overload the sewer system.

For more information, go to mwra.com.



MWRA in the Community:

Our staff is always looking for the next generation of MWRA employees. Keep an eye out for our team at career fairs and events in your community.



MWRA's high quality source water was made possible by the sacrifice of the 2500 people who lived in the four towns that were removed to build the Quabbin Reservoir. Their homes and farms are now part of the 'accidental wilderness' that protects and purifies your water.



CITY OF SOMERVILLE, MASSACHUSETTS
WATER AND SEWER DEPARTMENT
KATJANA BALLANTYNE
MAYOR

Kelley Hebert, Director of Finance
Director Water and Sewer
Neil Viner, Interim Director Water and Sewer

The City of Somerville Water Department, in conjunction with the MWRA, is pleased to provide this annual newsletter to inform all Somerville residents about our water distribution system and water quality. We are happy to report that our drinking water meets all federal and state requirements set forth by the EPA's Safe Drinking Water Act. By continuing to comply with these strict regulations for public water systems, the Somerville Water Department can be confident that our drinking water is safe.

The City purchases treated water from the MWRA. The water is delivered through seven MWRA master meters into the City's distribution system. The system consists of pipes, valves, hydrants, and service lines, which deliver the water to homes, businesses, and other facilities for drinking and other uses such as fire protection.

Somerville's distribution system consists of approximately 125 miles of water mains ranging from four to twenty inches in diameter, much of which was installed in the late 1800s to early 1900s. To maintain and protect the system, the Water Department exercises gate valves, flushes water mains utilizing fire hydrants, maintains and replaces fire hydrants, oversees construction projects such as rehabilitation and replacement of older unlined water mains, service line repair and installations, and coordinates a comprehensive cross connection control program. In 2024, the Water Department, with assistance from our on-call contractor, replaced 18 fire hydrants, 5 gate valves, and exercised approximately 379 gate valves through our Hydrant Flushing Program to improve system reliability. The Spring Hill Project has replaced approximately 2,526 linear feet of high and low service water main, 21 gate valves and 6 hydrants. The Broadway Project has replaced approximately 3,224 linear feet of high service water main, 45 gate valves and 11 hydrants. The Poplar St. Pump Station Project has replaced 792 linear feet of low service water main, 11 gate valves and 1 hydrant.

The City of Somerville monitors the drinking water for specific contaminants of concern on a regular basis. We are collecting weekly samples at 21 different locations throughout the distribution system. The samples are analyzed for temperature, chlorine residual, and the presence of total coliform bacteria. A total of 1041 samples were collected. In August 2024, Somerville's drinking water tested positive for coliform bacteria at regular testing sites.

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. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify and fix any problems that were found during these assessments

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. During the past year, one Level 2 assessment was required to be completed for our water system. In addition, we were required to take two corrective actions and we completed both of these actions. The Water Department implemented solutions and monitored the distribution system for water quality. The City of Somerville performed a chlorine study that led to the discovery of 5 closed gate valves in the distribution system. The gate valves were reopened allowing for better flow in the area and water mains were flushed to improve water quality. After the solutions were implemented, the regular testing sites tested clear of coliform. Somerville completed the Level 2 Assessment in September 2024 and submitted it to MassDEP.

All public water suppliers are required by the EPA to regularly test for lead and copper. As part of the sampling program Somerville tests water taps in 20 houses and 2 schools from a DEP approved list of locations. The lead 90th percentile was 6.44 ppb compared to the action level of 15 ppb. The copper 90th percentile was 84.6 ppb compared to action level of 1300 ppb. One household exceeded the Action Level for lead and that lead service was replaced with copper through the Broadway Project. The system is in compliance.

	Range	90 th Percentile Value	Action Level	MCLG	Samples Over Action Level
Lead	0.075–1390 ppb	6.44 ppb	15 ppb	0 ppb	1 of 20
Copper	4.38–93.40 ppb	84.6 ppb	1300 ppb	1300 ppb	0 of 20

Due to elevated lead levels in 2020 and 2021, we have taken advantage of the “Lead Service Replacement Program” offered by the MWRA, and we replaced a total of 46 lead services using a combination of the program and routine maintenance this year. Since the start of the program, Somerville has replaced 309 lead services. At the start of 2025, there are 100 known lead services remaining and we are projected to replace 44 lead services this year. At this pace, Somerville will replace all known lead services within the next few years. We will continue to focus on removing lead services from the system to improve water quality as we continue the program.

As part of the Lead and Copper Rule Revisions (LCRR), the City of Somerville completed a water service inventory which is now available on the city’s website: www.somervillema.gov/departments/programs/lead-service-line-replacement-program.

Residents are encouraged to look up their address to check their water service material and sign up for the Lead Service Replacement Program if lead piping is listed. The sign up for the program can be found with the link above. Additionally, in November, the City sent letters to residents and property owners at addresses listed with lead, galvanized steel and unknown material service lines. The letters describe the dangers of lead in drinking water and to contact the Water Department to sign up for the Lead Service Replacement Program or to further assist with confirming the water service pipe material.

In last year’s annual water quality report, we reported on a 2020-2021 monitoring violation related to lead and copper sampling. That notice failed to meet all of MassDEP’s notification requirements, so we are providing additional information in this report. The monitoring violation was due to the fact that Somerville had not properly updated and maintained our materials evaluation, which resulting in our sampling at sites which did not have lead service lines. As we indicated in last June’s report, we have updated our sampling plan and instituted procedures to ensure that future sampling meets all requirements. We also summarized rather than providing this exact language in the notice *“We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2020-2021, we did not complete all monitoring or testing for lead and copper at Tier 1 locations, and therefore cannot be sure of the quality of your drinking water during that time.”* While there are no actions that you should take related to this 2020-2021 event, we urge you to read the lead-related materials on pages 4 and 5 and in this letter. MassDEP also requires that we ask that you *please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.* If you have questions about this notice, please contact us at the email or phone number in the next paragraph.

The City of Somerville’s Water Department continues to focus on providing outstanding water quality and service reliability. Should you have questions or concerns about whether you have a lead service line or have a question about the City’s water distribution system, the Water Department is available to help. To report a problem please use the Somerville 311 system. For general inquiries or meeting dates, you can call us at 617-625- 6600, ext. 5850, email us at water@somervillema.gov, or you can also visit the Water Department web page at <http://www.somervillema.gov/departments/dpw/water-and-sewer>.