



Every Drop Counts.

This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

Im Bericht steht wichtige Information über die Qualität des Wassers Ihrer Gemeinschaft. Der Bericht soll übersetzt werden, oder sprechen Sie mit einem Freund, der ihn gut versteht.

Si usted desea obtener una copia de este reporte en español, llámenos al teléfono 617-788-1190.

这份报告中有些重要的信息。讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

La relazione contiene importanti informazioni sulla qualità dell'acqua della Comunità. Tra-durla o parlarne con un amico che lo comprenda.

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

O relatório contém informações importantes sobre a qualidade da água da comunidade. Tra-duza-o ou peça a alguém que o ajude a entendê-lo melhor.

इस रिपोर्ट में पीने के पानी के बिबरन पर बहुत महत्वपूर्ण चीजें दी गई हैं। कृपया हमका अनुवाद कीजिये, या किसी जानकार से इस बारे में पूछिये।

Sprawozdanie zawiera ważne informacje na temat jakości wody w Twojej miejscowości. Poproś kogoś o przeliumaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

ထေ့ပာဏ်းစေးမာတိဓာဒ်သိဝါ ဝိမိတိဗျာဓိကောဓ် ၊ အုမဗမိဗျာဓိ ဗျာဓိဓာဏ်းသုဗျာဓိဓာဏ်းစေ့ဗျာဓိ ဝိမာဏ်းဓာဏ်း ၊

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته أو ابحث للتقرير مع صديق لك يفهم هذه المعلومات جيدا.

이 보고서는 귀하의 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

Η κατάσταση αναφοράς παρουσιάζει αποδεκτές πληροφορίες για το ποσοστό νερού σας. Προκαλέστε να το μεταφραστεί ή να το εξηγήσετε με κάποιον που το καταλαβαίνει επαρκώς.

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.



Ce rapport contient des informations importantes à propos de votre eau potable. Demandez à quelqu'un de traduire ces informations pour vous ou discuter avec une personne qui comprend ces informations.



Massachusetts Water Resources Authority And Your Local Water Department

Where To Go For Further Information

- Massachusetts Water Resources Authority (MWRA) www.mwra.com
- Department of Conservation and Recreation (DCR) www.mass.gov/dcr/watersupply
- Massachusetts Dept. of Public Health (DPH) www.mass.gov/dph
- Massachusetts Dept. of Environmental Protection www.mass.gov/dp
- US Centers for Disease Control & Prevention (CDC) www.cdc.gov
- List of State Certified Water Quality Testing Labs www.mwra.com/your-water-system/drinking-water-quality/lead-testing
- Source Water Assessment and Protection Reports www.mwra.com/your-water-system
- Information on Water Conservation www.mwra.com/your-water-system/water-conservation

- 617-242-5323
- 617-626-1250
- 617-624-6000
- 617-292-5500
- 800-232-4636
- 617-242-5323
- 617-242-5323
- 617-242-SAVE

Public Meetings

- MWRA Board of Directors www.mwra.com/about-mwra/governance-management/board-directors
- MWRA Advisory Board www.mwraadvisoryboard.com
- Water Supply Citizens Advisory Committee www.mwra.com/about-mwra/advisory-groups

- 617-788-1117
- 617-788-2050
- 413-213-0454

For A Larger Print Version, Call 617-242-5323. This report is required under the Federal Safe Drinking Water Act. MWRA PWS ID# 6000000



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Dear Customer,

MWRA is pleased to highlight the work our staff do to provide you with reliable, high quality and great tasting tap water, every day. We are proud of all that we have accomplished together and remain energized by the challenges of continuing that great service as the weather, climate and your expectations change.

This report provides you with the results of our drinking water testing for 2025. Every year, we take hundreds of thousands of tests to ensure that your water is safe. Our state-of-the-art monitoring system checks 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.

Great water starts at the source. At MWRA, we recognize all that has gone into creating this magnificent resource. That is why MWRA and its partner agencies have worked hard to protect hundreds of thousands of acres in the watersheds, creating an accidental wilderness that provides wildlife habitat and recreational opportunities. These preservation efforts are the reason our water easily meets the state and federal standards for PFAS.

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 has helped reduce lead levels in higher risk homes by 90%, and since 2016, we have provided \$72.4 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.

Throughout most of last year, and continuing this spring, Massachusetts has experienced significant drought. Thanks to our customers' efforts to use water wisely, and the massive storage capacity of our reservoirs, MWRA supplies were uninterrupted and mandatory conservation measures were not needed. As stewards of these reservoirs, water conservation efforts remain a constant priority at MWRA.

This report is being sent during a transition of leadership at the MWRA. A few weeks ago, MWRA longtime Executive Director, Fred Laskey retired. Mr. Laskey was at the helm of this organization for 25 years and during his tenure, he oversaw an incredible transformation in every aspect of our operations, creating the MWRA that we know today. We celebrate his service and honor his legacy by working every day to safeguard the incredible resources under our stewardship.

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.

Sincerely,

Stephen Estes-Smargiassi
Interim Executive Director

What's Inside?

MWRA's Annual Water Quality Report provides you with the results of drinking water testing during 2025. We are pleased to share that MWRA drinking water meets every state and federal standard. Our water comes from the well-protected Quabbin and Wachusett Reservoirs, where extensive watershed protection keeps source water pristine, helping to maintain safe supplies even as climate conditions change. Our robust system ensures reliable, high-quality water, and our immense reservoir storage and proactive resilience planning ensure a sustainable supply even during droughts.

This report discusses the MWRA treatment, rigorous testing and continuous 24/7 monitoring from the reservoir to your tap, corrosion control efforts to reduce lead from household plumbing, and actions you can take at home to protect water quality. Inside, you will also find your community's notice regarding the local test results on bacteria, lead and copper. We hope that you will take a few minutes to look through this report so you can see what we see every day—that your drinking water is carefully monitored, well protected, and something we are proud to deliver.

If you have any questions, want this report in another language or larger print, or just want to learn more about your water, please call us at 617-242-5323 or email Ask.MWRA@mwra.com. We welcome your questions. MWRA also has monthly water quality reports, information on specific potential contaminants, water system updates, and more at mwra.com/moreinfo or scan the QR code inside.

Please share this information with anyone who drinks this water (or their guardians), especially those who may not have received this report directly (for example, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand, mail, email, or another method.



Protecting Your Water: From Watershed To Water Glass



Water Quality Monitoring Buoy

Protected At The Source

The water MWRA and your community provide to your home or business starts with the pristine Quabbin Reservoir with 412 billion gallons of storage and the Wachusett Reservoir with 65 billion gallons of storage. Combined, these two reservoirs provide an average of about 200 million gallons of pure, highly protected, high quality water each day. The Ware River provides additional water when needed. The Quabbin, Ware and Wachusett watersheds, 400 square miles that drain water to the reservoirs, are naturally protected.

More than 86 percent of the watershed 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 and 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 the federal Environmental Protection Agency's (EPA) treatment standards. MWRA and the Department of Conservation and Recreation (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/moreinfo.

Water: Tested From The Forest Streams To Your Sink Faucet

We collaborate with the DCR and water departments in 53 communities to ensure the continued delivery of safe drinking water to over 2.5 million people at their homes and businesses.

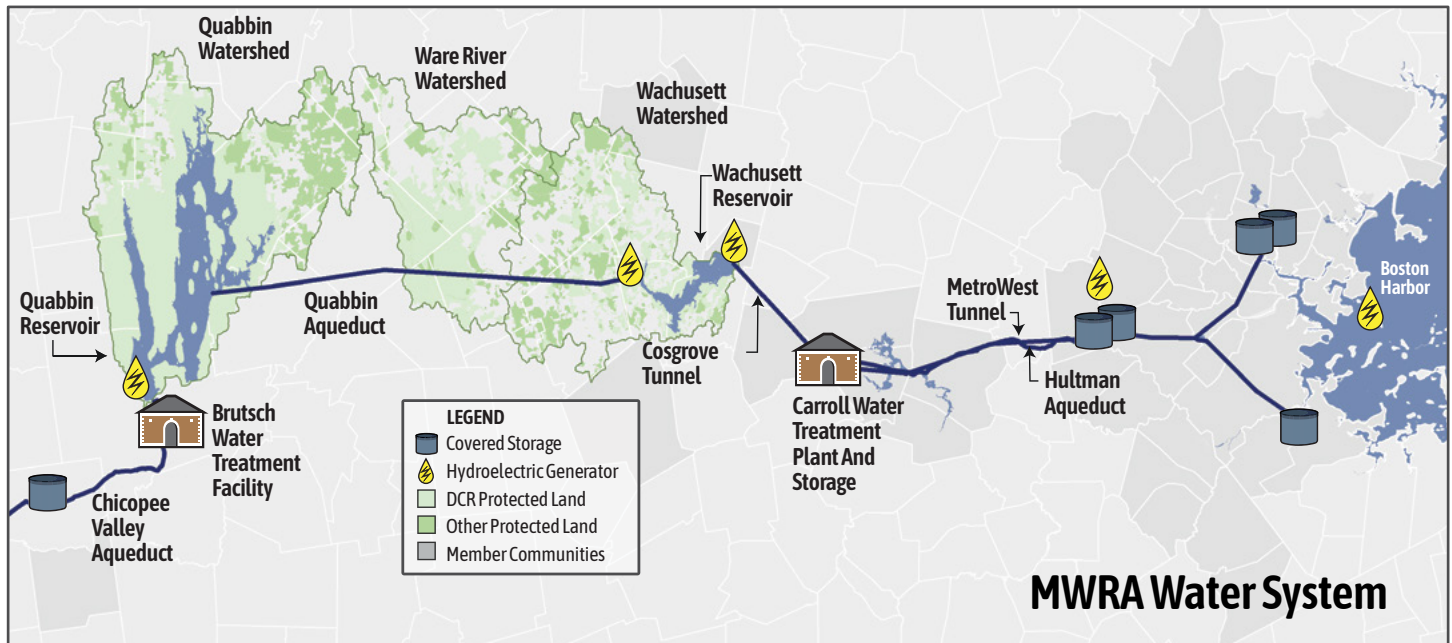
DCR biologists and environmental scientists sample the streams that feed the reservoirs to identify and resolve potential pollution sources, and to monitor water quality trends. MWRA and DCR scientists sample and analyze water in the reservoirs, and use specialized monitoring buoys to remotely and continuously 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. We are tracking carefully how our changing climate affects our sources to ensure a long-term resilient supply.

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 they can impair water disinfection. All water must be below five NTU (nephelometric turbidity units), and water can only be above one NTU if it does not interfere with effective disinfection. In 2025, typical levels in the Wachusett Reservoir were 0.26 NTU, and the maximum result was 0.67 NTU.

MWRA also tests source 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/moreinfo.

Because New England is seeing both heavier rainstorms and longer dry spells, MWRA carefully manages the Quabbin and Wachusett reservoirs to provide the hundreds of millions of gallons of water the region needs every day even during extended droughts—keeping your water reliable in any forecast.



MWRA Water System



Treated And Tested: All The Way From The Source To Your Home

How We Treat Your Drinking Water

Since 2005, the MWRA's John J. Carroll Water Treatment Plant in Marlborough has provided state-of-the-art disinfection, upgraded corrosion control, and ultraviolet (UV) treatment to your water before it travels through miles of pipes to your tap.

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

- **Ozone**, made from pure oxygen, disinfects the water, killing bacteria, viruses and other organisms while improving taste and clarity.
- **UV light**, a form of natural disinfectant like sunlight, renders pathogens non-infectious.
- **Fluoride** protects dental health and prevents tooth decay.
- **pH and alkalinity** are adjusted with sodium carbonate and carbon dioxide to reduce corrosion of lead from home plumbing. (See page 4.)
- **Monochloramine** (a compound of chlorine and ammonia), is a mild and long-lasting disinfectant designed to protect the water as it travels through miles of pipelines to your home.

The Carroll Treatment Plant is designed with two separate parallel flow paths for redundancy and adaptability. This allows the plant to continue operating even when one half is being maintained or upgraded.



John J. Carroll Water Treatment Plant

More Testing In Tanks And Pipes

Once your water is treated, MWRA staff follows and goes beyond EPA requirements and state regulations by testing the water as it leaves the treatment plant and travels through MWRA and community pipes and tanks to your tap. Our sampling teams, chemists, and biologists conduct hundreds of thousands of tests each year for over 120 contaminants at MWRA's four laboratories; you can find the complete list of contaminants at mwra.com/moreinfo. The table below shows the 2025 results for detected contaminants, confirming the quality of water your community receives from MWRA.

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. In 2025, MWRA water won the New England regional taste contest. No need for bottled water—it's great right from the tap.

MWRA Water Test Results 2025

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 | 0.007–0.009 | 2 | No | Common mineral in nature |
| Fluoride | ppm | 4 | 0.71 | 0.4–0.8 | 4 | No | Additive for dental health |
| Nitrite | ppm | 1 | 0.005 | ND–0.005 | 1 | No | Byproduct of disinfection |
| Nitrate ^A | ppm | 10 | 0.64 | 0.01–0.64 | 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 | 15.8 | 2.5–23.2 | NS | No | Byproduct of water disinfection |
| Total Trihalomethanes | ppb | 80 | 16.1 | 2.8–35.3 | NS | No | Byproduct of water disinfection |
| Monochloramine | ppm | 4-MRDL | 1.99 | 0.02–3.7 | 4-MRDLG | No | Water disinfectant |

KEY: **Contaminant** = any physical, chemical, biological, or radiological substance of matter in water where it does not belong or at levels that could cause harmful effects on humans or the environment. **MCL (Maximum Contaminant Level)** = the highest level of a contaminant allowed in water, which is set as close to maximum contaminant level goals as possible 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, allowing 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 (or mg/L). **ppb** = parts per billion (or µg/L). **NS** = no standard. **ND** = not detected. ^A = the maximum result reported for nitrate, as required by DEP. ^{*} = Radium result is from 2023.

Reducing Lead Exposure



Quabbin Reservoir

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 drinking water at home, school, or work is above the lead Action Level, additional steps to reduce lead may be needed. 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.

Preventing lead exposure is especially important if a pregnant woman or a child lives in your home, but it can also impact the health of your entire family. Lead can affect young children by potentially causing damage to the brain, slowing growth and development, and creating learning or behavior problems. While lead poisoning often comes from paint chips and dust, you can also be exposed through your drinking water. It's important to learn about the health impacts of lead and how to reduce your total exposure. We will be sure to do our part by continuing to provide your community with reliable information, ensuring you can stay informed and updated.

How Lead Enters Drinking Water

MWRA's water is lead-free when it leaves our reservoirs. Water mains that provide water for your community are generally made of iron, steel, or concrete, which do not release lead into your water. However, lead can enter tap water from your service line—the small pipe connecting your home to the water main—if it is made of lead, lead solder used in plumbing, or from older brass faucets. This is due to corrosion, or wearing away of lead-based materials, which can pose an increased risk of exposure, especially when water sits in the pipes for a long time before it is used.

MWRA Treatment Reduces Lead Corrosion

MWRA operates its modern corrosion control treatment facilities 24/7 to reduce water's natural tendency to dissolve metals such as lead and copper. Our licensed treatment operators adjust the water's pH and buffering capacity by adding sodium carbonate and carbon dioxide to the water. This makes water less corrosive, reduces leaching of lead into drinking water, and has decreased levels in tests of tap water by nearly 90% since 1996. To ensure that the treatment is working effectively, MWRA monitors water quality parameters set by MassDEP daily. Learn more about the reduction of lead in drinking water at mwra.com/moreinfo.

Lead And Copper Results, September/October 2025

| | Range | 90% Value | Action Level | (MCLG) Ideal Goal | # Homes Above AL |
|--------------|----------|-----------|--------------|-------------------|------------------|
| Lead (ppb) | ND-874 | 5.96 | 15 | 0 | 18 of 594 |
| Copper (ppb) | 0.66-251 | 96.6 | 1300 | 1300 | 0 of 594 |

KEY: **AL (Action Level)** = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow. **90% Value (90th percentile)** = Out of every ten homes sampled, nine were at or below this level.

Important EPA Information On Lead

MWRA is responsible for providing high quality drinking water but cannot control the variety of materials used in the plumbing of your home. Lead in drinking water comes primarily from materials and parts used in service lines or your in-home plumbing. MWRA and your local community are working to identify and replace lead service lines. Lead can cause serious health effects in people of all ages, especially pregnant women, infants (both formula-fed and breastfed), and young children.

Lead levels can vary over time, and exposure is possible even when your tap sampling results do not detect it at one single point in time. You can help protect yourself and your family by taking steps to reduce your family's risk of exposure. This can be done by identifying and removing lead materials within your home plumbing.

You should only use cold water for drinking, cooking, and making baby formula. Before doing so, remember to flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing your laundry, and even washing a load of dishes. Please note that boiling water does not remove lead from water. If you have a lead service line or a galvanized line requiring replacement, you may need to flush your pipes for a longer period. Using a filter certified by an American National Standards Institute accredited certifier to reduce lead can also be effective in decreasing lead exposures. Carefully follow the instructions provided with the filter to ensure it is being used properly.

If you are concerned about lead in your 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 www.epa.gov/safewater/lead. Scan the QR code for more information.

MWRA Meets Lead Standard In 2025

Every year, MWRA and your local water department are required to test local tap water, following EPA and DEP regulations. The EPA rule requires us to collect samples from homes with lead service lines or lead solder, and nine out of ten of those homes must have lead levels below the Action Level of 15 parts per billion (ppb).

This testing process provides communities, homeowners, and your local water department with information on whether lead is corroding and mixing with the drinking water. These results do not reflect lead levels in all homes because we target homes with known lead already in their plumbing.

Over the past 23 years, all MWRA sampling rounds have been below the EPA Action Level. In 2025, nine out of ten homes were below 5.9 ppb—well below the 15 ppb Action Level. See your community letter for local results and more information.

Boston, Malden, and Medford exceeded the Action Level in 2025. See your letter for more information.



Finding and Removing Lead

What Is A Lead Service Line?

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. Service lines that combine galvanized iron and lead pipe can also release lead. Lead service lines should be removed entirely to prevent lead in your drinking water.

Where Are They?

Every community has completed an initial inventory of service lines and submitted it to MassDEP. By the end of each year, each community must mail a letter to every property that had a lead service line or a galvanized line that could contribute lead with information. The letter describes the risks of lead and how to get the service line replaced. It must also mail a letter to every property for which information about the service line material was lacking and provide information on how to determine if it was made of lead.

Many communities have online 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.

Your local water department staff can help you find out if you have a lead service line and provide help in replacing it. In some cases, an onsite check is necessary to determine the specific piping material to your building.



Replacing Lead Service Lines

MWRA and its Advisory Board offer zero-interest loans to member communities to help replace lead service lines through MWRA's Lead Service Line Replacement Program. Each MWRA community is empowered to create local strategies

for removing lead service lines, with many already actively replacing these pipes to improve water quality.

To encourage replacement of the portion of the lead service line on private property, MWRA is now offering a 25 percent grant to communities that do the full replacement at no cost to property owners. As of December 2025, MWRA has distributed a total of \$72.4 million in Lead Service Line Replacement Loan Program funds to 22 communities. Our goal is to ensure full replacement in all homes by 2032, creating a lead-free future. We encourage you to reach out to your local water department about their efforts to find and replace your lead service lines.



Lead Testing In Schools And Childcare Facilities

Children can consume much of their drinking water at school or childcare facilities, and that plumbing may contain lead which can 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 over 47,000 tests from 737 schools and daycares in 49 communities. Results are available on the MassDEP website at: www.mass.gov/dep (search for "lead in schools") or contact your local school department.



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 more information on, a list of certified laboratories, and sampling instructions, go to mwra.com/moreinfo or scan the QR code above.

Steps To Reduce Lead In Your Home Or Office

- Find out if you have a lead service line, and get it replaced.
- **Let the water run** before using it—fresh water tastes better than stale anyway.
- If the water has not been used for more than six 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 1-800-424-LEAD for more information.

Water Service Lines



Copper

Galvanized

Lead With Bulb

Lead

Important Water Quality Takeaways



Tank cleaning at Carroll Water Treatment Plant

Information On Bottled And Tap Water From The EPA

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of these contaminants does not necessarily mean that your water poses a health risk. More information about contaminants and potential health effects can be obtained by going to www.epa.gov/safewaterhotline or contacting MWRA. To ensure that your tap water is safe to drink, MassDEP and the EPA prescribe regulations which limit the amount of certain contaminants in the water provided by public water systems. The FDA and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water, which provide the same protection for public health.



A Message For Vulnerable Populations

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 disorder, some elderly, and infants, can be particularly at risk for infections. These people should

seek advice about their drinking water from their health care providers. EPA and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available at www.epa.gov/safewaterhotline.

Working With Your Community To Test Your Water

Total coliform bacteria come from the intestine of warm-blooded animals and can be found in soil, plants, or other places. Oftentimes, they are not harmful. However, their presence could be an indicator that harmful bacteria may be present. Every week, MWRA works with local water departments to sample and test between 300 and 500 water samples for total coliform bacteria. If total coliform is detected in more than 5% of water samples in a month, the water system is required to investigate the possible sources and fix any identified problems. If one of these samples test positive, our laboratory staff will run a more specific test for *E. coli*, which is a type of coliform bacteria found in human and animal fecal waste, potentially causing illness. Your community letter will tell you if it was required to do a coliform investigation or found *E. coli*. MWRA had a single, unconfirmed *E. coli* detection in July. The goal for *E. coli* detections is zero, but since repeat samples at that location and nearby were clear of both total coliform and *E. coli*, this was not a violation, and no further actions were necessary.

Cross Connection Information

A cross-connection occurs whenever the drinking water supply may be in contact with potential sources of contamination. MassDEP recommends the installation of backflow prevention devices on all hose connections to

Sodium and Drinking Water



Sodium in drinking water contributes only a small fraction of a person's overall intake (less than 5%). MWRA tests for sodium monthly, and the highest level was

35.6 mg per liter (about eight mg per eight-ounce glass of water). This level is considered Very Low Sodium by the Food and Drug Administration (FDA).

help protect the water in your home and the town system. For more information on cross connections, please scan the QR code below.

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 reliable 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 mwra.com/moreinfo.

MWRA Meets all PFAS Standards

Since the 1940s, PFAS, or per- and polyfluoroalkyl substances (sometimes called "forever chemicals"), have been used for many purposes—from personal care products and water proofing to firefighting. This continues to be a national concern. Our well-protected sources have shown only trace amounts of these compounds in MWRA water, well below the state PFAS6 standard of 20 parts per trillion and the upcoming EPA standards announced in April 2024. Scan the QR code for results and more details on PFAS.

The sacrifices of the 2500 people who lived in the four towns that were removed to build the Quabbin Reservoir continue to help protect our drinking water, even today. Learn more at MWRA.com/moreinfo.



Inspection of UV Header at Carroll Water Treatment Plant

Building and Managing for Reliability

MWRA is focused on ensuring your water remains reliable, even as we face the challenges of aging infrastructure and a changing climate. Reliability means having a "Plan B" to protect public health, provide proper sanitation and fire protection. Our infrastructure is designed thoughtfully so that no single point of failure will stop your water delivery.

A key concept is **redundancy** – separate parallel ways to deliver water that allow us to inspect, maintain and rehabilitate key assets. We completed the **MetroWest Tunnel** in 2003. This 17.6-mile 14-foot diameter tunnel provides a critical backup to the 1940s-era Hultman Aqueduct, delivering water from the Carroll Water Treatment Plant in Marlborough to the edge of the Metro area in Weston, allowing for essential repairs without service interruptions. MWRA is well along in design for two new tunnels north and south of Boston. These will provide redundancy to the aging tunnels inside Route 128, allowing the entire region to stay connected. Similar efforts are underway, on a smaller scale, in other areas of the region.

Modernizing Main Lines - Major rehabilitation is underway on the 125-year-old Weston Aqueduct Supply Main 3 to strengthen the backbone of our delivery network. This five-foot diameter steel pipe runs through Weston, Waltham, Belmont, Arlington, and Medford and is a key part of the supply system north of Boston. MWRA also continues to rehabilitate older unlined cast iron pipes throughout our system.

We don't just manage the big pipes; we help your town stay resilient too. Through zero-interest loans, **MWRA helps communities** replace or rehab aging local mains to prevent leaks and maintain high water quality. We provided \$30.5 million to 19 communities for pipeline and other water projects in 2025, and over \$651 million since 1998. Together, we are building a system that is ready for whatever the future brings.

Weather-Ready Water

With climate change bringing more intense storms and seasonal droughts, MWRA's huge reservoirs and drought-management planning help ensure a reliable water supply today and for the future. The Quabbin and Wachusett reservoirs can hold a combined 477 billion gallons of water – the equivalent of six years of water use. MWRA and DCR monitor reservoir levels daily: Quabbin levels fluctuate based on precipitation and runoff and water use, and Wachusett is kept at a relatively full level to maintain water quality. Their storage capacity is designed to handle drought conditions, filling during wet and average conditions, and dropping during dry periods, ensuring a reliable, long-term supply of high-quality drinking water for over 2.5 million people, even during extended dry periods.



Water Conservation

Part of what makes our region drought resilient is the dramatic drop in water use since the 1980s. Water use in our region has dropped from over 330 million gallons to around 200 million gallons per day, due to fewer leaks, water saving appliances, and customers using water wisely. This keeps our reservoirs full, reduces the cost of building and operating our facilities, and protects the environment.

It is important to conserve water wherever you can, both indoors and outdoors. Your support does not go unnoticed. Thanks for your help. Check out the list of actions you can take to help keep our water supply sustainable. For more information and water saving tips, go to mwra.com/moreinfo.

Small changes can have big impacts.
Request your free MWRA water conservation kit at: wc.mwra.com/home

Climate Change Action

MWRA has a long-standing commitment to decrease greenhouse gas emissions and increase our renewable energy use, supporting our mission to protect public health and promote environmental stewardship. MWRA's

resiliency planning, combined with our dedication to advance Massachusetts' climate and energy goals, has been shown through early investment in energy efficiency, customer conservation, and renewable energy production. MWRA has also invested in future-proofing facilities against rising sea levels so we can continue to provide reliably and environmentally sound service for decades to come.

Your Water Makes Electricity

Electricity and water do mix! As the water leaves Wachusett Reservoir and heads toward the treatment plant in Marlborough, it passes through a hydroelectric generator. This creates clean, green renewable power, lowers MWRA's costs, and reduces greenhouse gas emissions. This generator at the Cosgrove Intake is one of five units designed to capture excess energy as water travels from the Quabbin Reservoir all the way to the wastewater treatment plant on Deer Island. Almost 30% of MWRA's electrical use relies on renewable resources, with self-generated power from biomass, hydro, wind, and solar.

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 lowers energy use and cost by decreasing the energy needed to pump, treat and heat water.



Boston Harbor from Nut Island

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 down 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/moreinfo.



Town of Marblehead WATER AND SEWER COMMISSION

www.marblehead.org/water

Phone: 781-631-0102
Email: Water@marblehead.org

Dear Marblehead Water Customer:

The Massachusetts Water Resources Authority (MWRA) and Marblehead Water and Sewer Commission have prepared this 2025 Drinking Water Quality Report to provide you with an annual update on the quality of water supplied to you by the Marblehead Water Department and the MWRA. Marblehead purchases all of its water directly from the MWRA. If you are interested in details of the Marblehead Water Distribution System, maintenance and operations, see the Annual Town Report, or visit the Marblehead website: www.marbleheadma.gov

In Marblehead, an elected five-member board oversees all water and sewer functions. Serving with me on the Commission are Gregory Bates, Vice Chairman; Barton Hyte, Secretary; Greg Burt; and James Maher. Our Superintendent Amy McHugh, along with a skilled staff of 22 individuals, handle the day-to-day operations of the water and sewer systems as well as the permitting, billing processes, and customer relations.

The Commission suffered an untimely loss with the passing of Commissioner F. Carlton Siegel. Mr. Siegel was a dedicated member of the Commission for 36 years and will be remembered for his practical wisdom, ingenuity, passion, and generosity in sharing his prowess and skillset regarding all things water and sewer.

Lead and Copper

In 2025, the Water Department continued its review of material for the 7,982 water service lines in Marblehead following the EPA revisions to the Lead and Copper Rule. To date, we have successfully identified 6,970 water services through a combination of record review and field inspections. We thank all 1,337 residents who have completed the self-reporting method of service identification. We are happy to report that no lead service lines have been identified and the majority of service lines in Marblehead are copper. The Commission is still working on identifying the remaining 1,012 services through continued record review and field inspections. If a property's water service line material is classified as unknown or is one of the 4 properties in town with a water service that is galvanized requiring replacement, a letter was sent to the property notifying that a further inspection was required to record the service line material. The Commission has taken a 0% interest loan with the MWRA which includes grant value for service replacement that meet certain criteria. The Commission recommends that you contact the water department (email: water@marbleheadma.gov) to confirm the year of installation and the material used for your water service, or to review the inventory at our office. Should your service material be galvanized iron, the water department will be happy to discuss the procedure for water service line replacement. We also would like to note that there may be other possible sources of lead in drinking water including household plumbing systems such as brass fixtures and piping (which contains lead in the alloy) or lead solder.

Each year Marblehead tests 20 homes for lead and copper levels. The results were all below the Action Levels for lead (15 parts per billion or ppb) and copper (1300 ppb) set by Massachusetts Department of Environmental Protection (MassDEP).

| | Range | 90 th Percentile Value | Action Level | MCLG | Samples Over Action Level |
|--------|----------------|-----------------------------------|--------------|----------|---------------------------|
| Lead | 0.126–6.18 ppb | 1.58 ppb | 15 ppb | 0 ppb | 0 of 20 |
| Copper | 9.84–93.6 ppb | 88.8 ppb | 1300 ppb | 1300 ppb | 0 of 20 |

Along with residential homes tested, the Commission annually selects two schools to participate in the Lead and Copper Program. In 2025, one lead sample from the four samples collected tested above the action limit of 15 ppb. The school immediately took the fixture out of service, replaced the fixture, and completed repeat sampling. Results were received and reviewed prior to the fixture being put back in service.

All schools in Marblehead were tested in 2016. Sample results from 2016 to present can be found by using the links provided on the Marblehead water department's web page: www.marbleheadma.gov/water.

Should you want information on water testing for lead at your property, visit www.mwra.com

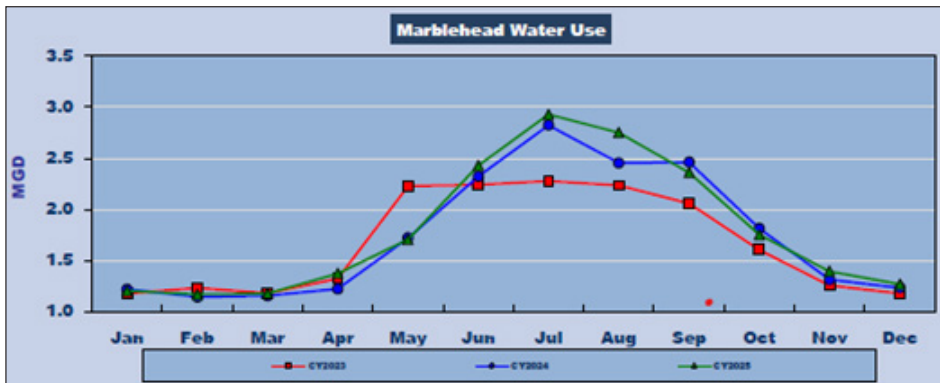
System Improvements

The Commission is continually maintaining Marblehead's distribution system which consists of over 100 miles of pipeline, two booster pumping stations, one water tank, over 800 hydrants, and 1300 valves to ensure the best water quality and service possible. The Commission reviews and approves a capital spending program which prioritizes and schedules water system upgrades, while striving to stabilize rates for each customer. In the coming years, capital improvements are focused on increasing flow and water quality. This work in 2025 included the replacement of 2,600 feet of 6-inch unlined cast iron water mains with 8-inch cement lined ductile iron water mains on Curtis Street, Roosevelt Ave, and Gerry Street; the replacement of 2000 feet of 6-inch unlined cast iron water main with 8-inch PVC pipe on Bubier Road; cleaning and lining of 1600 feet of 10-inch unlined cast iron water main on Pleasant Street (Spring Street to Washington Street); cleaning and lining of 1800 feet of 12-inch unlined cast iron water main on Pleasant Street (Mohawk Road to Vine Street); cleaning and lining of 1300 feet of 6-inch unlined cast iron water main on Rowland Street. This totals to almost 2 miles of water pipe improved throughout town.

Water Conservation

Marblehead experienced high water use during the summer and early fall of 2025. This is attributed to the many homes and businesses who have lawn irrigation. The Commission has a two-step conservation-based rate for both water and sewer. A household of four with average use and minimal outside watering would only be invoiced at the lower rate.

The Commission encourages water conservation. Residents should visit www.mwra.com/your-water-system/water-conservation for information on ways to conserve water. Marblehead is also a member of Green Scapes. Property owners in particular who have lawn irrigation should visit www.greenscapes.org and download the copy of GREENSCAPES GUIDE Landscaping Practices that protect our families and wildlife.



Keeping you Informed

The Commission and its staff aim to keep its customers informed. The town website: www.marbleheadma.gov holds three informative pages: Water and Sewer Commission, Water Department, and Sewer Department for customers to learn more about all the systems under the Commission's purview. The Commission holds monthly public meetings located at the Water and Sewer Office located at 11 Tower Way. Meeting times

and agendas are posted on the town website.

We hope that you will find this Annual Water Quality Report to Consumers interesting and educational. Please feel free to contact Superintendent Amy McHugh at (781) 631-0102 or email Water@marbleheadma.gov with any questions, concerns, or comments.

Sincerely,
Thomas Murray
Chairman