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

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

Massachusetts Water Resources Authority (MWRA)
Massachusetts Dept. of Environmental Protection
Department of Conservation and Recreation
Massachusetts Dept. of Public Health (DPH)
US Centers for Disease Control & Prevention (CDC)
List of State Certified Water Quality Testing Labs
Source Water Assessment and Protection Reports
Information on Water Conservation
Public Meetings
MWRA Board of Directors
MWRA Advisory Board
Water Supply Citizens Advisory Committee

Where To Go For Further Information

This report is required under the Federal Safe Drinking Water Act. MWRA PWS ID# 6000000

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

La relazione contiene importanti informazioni sulla qualità dell'acqua della Comunità. Traduca o parlarne con un amico che la comprenda.

O relatório contém informações importantes sobre a qualidade da água da comunidade. Traduza-o ou peça a alguém que o ajude a entender melhor.

In this report, you will find information about your drinking water. Please translate it, or speak with someone who understands it.

In questo rapporto, troverete informazioni sulla qualità dell'acqua della vostra comunità. Traducetelo o parlate con qualcuno che la comprenda.

In this report, you will find information about your drinking water. Please translate it, or speak with someone who understands it.

在报告中，您将找到有关您的饮用水的重要信息。请将其翻译成您懂的语言，或者与了解它的人交流。

Massachusetts Water Resources Authority Authority and Your Local Water Department

For a large print version, call 617-242-5323.
Dear Customer,

I am pleased to share with you the results of our water quality testing. MWRA takes hundreds of thousands of tests each year, and for 2013, we again met every federal and state drinking water standard. System-wide, we have been below the Lead Action Level for the past ten years. Please read your community’s letter on page 4 for more information on your local water system.

The big news this year is that we have completed the start-up of a new ultraviolet (UV) disinfection facility at the John J. Carroll Water Treatment Plant in Marlborough, improving the quality of the drinking water we deliver to you.

UV light is essentially a more potent form of natural disinfection from sunlight. UV enables MWRA to inactivate the most difficult to kill pathogens - which could potentially be in the source water - without the use of additional chemicals and any associated disinfection by-products. The UV process and MWRA’s high quality source water allow MWRA to meet new regulatory requirements cost effectively.

Since 2005, your water has been treated with ozone - produced by applying an electrical current to pure oxygen. Ozone has ensured strong protection against microbes and viruses, improves water clarity, and has actually made the water taste better. The addition of the UV to the ozone process provides additional assurance that any pathogens potentially in our reservoirs will be rendered harmless.

In addition, fluoride is added to promote dental health and the water chemistry is adjusted to reduce corrosion of lead and copper from home plumbing. Last, we add monochloramine, a mild and long-lasting disinfectant combining chlorine and ammonia to protect the water as it travels through miles of pipelines to your home.

In a few short years, water treatment has gone from chlorine with its taste and odor issues, to ozone and now ultraviolet – with no additional chemicals and no disinfection by-products. Just better, safer water.

I hope you will take a few moments to read this report. We want you to have the same confidence we have in the water we deliver to over 2 million customers. Please contact us if you have any questions or comments about your water quality, or any of MWRA’s programs.

Sincerely,

Frederick A. Laskey
Executive Director
Where Does Your Water Come From?

Your water comes from the Quabbin Reservoir, about 65 miles west of Boston, and the Wachusett Reservoir, about 35 miles west of Boston. These reservoirs supply wholesale water to local water departments in 51 communities. The two reservoirs combined supplied about 200 million gallons a day of high quality water to consumers in 2013.

The Quabbin and Wachusett watersheds are naturally protected with over 85% of the watersheds covered in forest and wetlands. To ensure safety, the streams and reservoirs are tested often and patrolled daily by the Department of Conservation and Recreation (DCR).

Rain and snow falling on the watersheds - protected land around the reservoirs - turn into 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. While this process helps to clean the water, it can also dissolve and carry very small amounts of material into the reservoir. Minerals from soil and rock do not typically cause problems in the water. But, water can also transport contaminants from human and animal activity. These can include bacteria and viruses - some of which can cause illness. The test data in this report show that these contaminants are not a problem in your reservoirs' watersheds.

The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program report for the Quabbin and Wachusett Reservoirs. The DEP report commends DCR and MWRA on the existing source protection plans, and states that our “watershed protection programs are very successful and greatly reduce the actual risk of contamination.” MWRA follows the report recommendations to maintain the pristine watershed areas using existing watershed plans.

Testing Your Water – Every Step of the Way

Test results show few contaminants are found in the reservoir water. The few that are found are in very small amounts, well below EPA’s standards.

Turbidity (or cloudiness of the water) is one measure of overall water quality. 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. Typical levels at the Wachusett Reservoir are 0.3 NTU. In 2013, turbidity was below 1 NTU over 99.99% of the time, with the highest level at 1.17 NTU. This did not interfere with effective disinfection.

MWRA also tests reservoir water for pathogens such as fecal coliform, bacteria, viruses, and the parasites Cryptosporidium and Giardia. They can enter the water from animal or human waste. No Cryptosporidium or Giardia was found in the water in 2013.

Test Results – After Treatment

EPA and state regulations require many water quality tests after treatment to check the water you are drinking. MWRA conducts hundreds of thousands of tests per year on over 120 contaminants (a complete list is available on www.mwra.com). Details about 2013 test results are in the table below. The bottom line is that water quality is excellent.

Water Quality Test Results for 2013

<table>
<thead>
<tr>
<th>Compound</th>
<th>Units</th>
<th>(MCL) Highest Level Allowed</th>
<th>(We found) Detected Level-Average</th>
<th>Range of Detections</th>
<th>(MCLG) Ideal Goal</th>
<th>Violation</th>
<th>How it gets in the water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium</td>
<td>ppm</td>
<td>2</td>
<td>0.008</td>
<td>0.007-0.009</td>
<td>2</td>
<td>No</td>
<td>Common mineral in nature</td>
</tr>
<tr>
<td>Monochloramine</td>
<td>ppm</td>
<td>4-MRDL</td>
<td>1.8</td>
<td>0.01-4.0</td>
<td>4-MRDLG</td>
<td>No</td>
<td>Water disinfectant</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>1.04</td>
<td>0.37-1.1</td>
<td>4</td>
<td>No</td>
<td>Additive for dental health</td>
</tr>
<tr>
<td>Nitrate^</td>
<td>ppm</td>
<td>10</td>
<td>0.08</td>
<td>0.01-0.08</td>
<td>10</td>
<td>No</td>
<td>Atmospheric deposition</td>
</tr>
<tr>
<td>Nitrite^</td>
<td>ppm</td>
<td>1</td>
<td>0.005</td>
<td>ND-0.005</td>
<td>1</td>
<td>No</td>
<td>Byproduct of water disinfection</td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>ppb</td>
<td>80</td>
<td>10.1</td>
<td>3.0-13.9</td>
<td>ns</td>
<td>No</td>
<td>Byproduct of water disinfection</td>
</tr>
<tr>
<td>Haloacetic Acids-5</td>
<td>ppb</td>
<td>60</td>
<td>9.0</td>
<td>1.4-13.2</td>
<td>ns</td>
<td>No</td>
<td>Byproduct of water disinfection</td>
</tr>
<tr>
<td>Total Coliform</td>
<td>%</td>
<td>5%</td>
<td>0.5% (Nov)</td>
<td>ND-0.5%</td>
<td>0</td>
<td>No</td>
<td>Naturally present in environment</td>
</tr>
</tbody>
</table>

*KEY: MCL=Maximum Contaminant Level. The highest level of a contaminant allowed in water. MCLs are set as close to the 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. MRDL=Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. 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
^As required by DEP, the maximum result is reported for nitrate and nitrite, not the average.
Your Tap Water – Award Winning and Affordable!
In 2013, we won New England’s Best-Tasting water award from the New England Water Works Association and the National Sustainability Award from the American Council for an Energy-Efficient Economy. Great tasting, green, and also cheap! Tap water costs less than a penny per gallon delivered straight to your home, while bottled water can cost from $1 to $8 a gallon.

Make the smart choice and drink tap water.

Tests in Community Pipes
MWRA and local water departments test 300 to 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. The EPA requires that no more than 5% of the samples in a month may be positive. If a water sample does test positive, we run more specific tests for E. coli, which is a bacteria found in human and animal fecal waste and may cause illness. No E. coli was found in any MWRA community in 2013. If your community found any total coliform, it will be listed within the community letter on page 4.

Contaminants in 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, the Massachusetts DEP and EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Information About Cross Connections
Massachusetts DEP recommends the installation of backflow prevention devices for inside and outside hose connections to help protect the water in your home as well as the drinking water system in your town. For more information on cross connections, please call 617-242-5352 or visit www.mwra.com/crosscon.html.

Research for New Regulations
MWRA has been working with EPA and other researchers to define new national drinking water standards by testing for unregulated contaminants. To read more about this testing, and to see a listing of what was found, please visit www.mwra.com/UCMR/2013.html.

Drink Local and Be Green
Tap water is delivered straight to your home without trucking or plastic waste. Bottled water produces over 10,000 times the amount of greenhouse gases compared to tap water. Half of our energy needs for water and wastewater treatment are met with green power including hydro-energy, wind turbines, and solar panels.

Drink local! Drink tap water! Be green!

Drinking Water and People with Weakened Immune Systems
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 EPA’s Safe Drinking Water Hotline (1-800-426-4791).
City of Melrose
PUBLIC WORKS

John Scenna
Director of Public Works

Dear Consumer:

This annual report provides detailed information on the MWRA’s source water reservoirs and the quality of our water as determined through federal and state criteria. Water quality test data, as well as definitions of the terms used in the drinking water industry are presented in clear and readily understandable language. We hope that this report provides you with a better understanding regarding your water supply. If you require more information on particular topics, please call the City of Melrose Public Works Department Water Division at 781-665-0142 or our Engineering Division at 781-979-4172. Other informational contacts and phone numbers are provided in the report for the MWRA and the U.S. Environmental Protection Agency (EPA).

Locally, the City of Melrose is continuing an intensive citywide construction program aimed at upgrading its water infrastructure. During the past ten years, Melrose has completed the construction of two new water pump stations and installed over 41,000 linear feet or nearly 7.8 miles of new 8”, 10”, 12” and 16” water mains to increase the ISO insurance fire flow ratings and local area fire flow improvements, and to improve water pressure and water quality of our domestic water system. During 2013, the City studied its water system to develop a capital efficiency plan and utilized that plan to develop design plans for the upgrade of nearly 5,000 feet of water main. In 2014, the City will construct these new mains, install new copper water services, and install new hydrants and gate valves to replace the aging and inoperable hydrants and gate valves.

In addition to these major water programs, the City performed a uni-directional hydrant flushing program, hydrant testing, and leak detection survey in 2013 and will continue these programs in the future. These preventative measures will decrease the buildup of iron and mineral deposits in our piping, reduce discoloration of water, reduce the likelihood of water main breaks, improve water accountability, quality and pressure, and identify areas of leakage and areas in need of repair within our system of approximately 90 road miles of water mains. The City continues its in-house meter reading program for our 8,500 water customers, which allows better accountability for water usage and less lost or unaccounted for water use and plans to implement a City wide meter replacement program in 2014. In 2013, our overall water consumption was 817,700,000 gallons. This usage represents about a 1.4% increase from the prior year.

We receive many inquiries about lead in the drinking water. The simple answer is there is no lead in the water supply; however, lead can enter your tap water through contact with brass fixtures (which contains lead in the alloy), lead solder (which is now outlawed), old lead plumbing in the house or in the service line from the main to your house. Melrose takes samples twice yearly from 15 homes with lead; lead/tin solder and verified lead solder services. In the September 2013 sampling, results showed Melrose at 11.7 ppb which is below the Action Level of 15 ppb. Even with the positive test results, we will continue to aggressively replace lead services and sampling to continue monitoring lead levels. In addition, the City will continue to work with the Melrose Health Department, schools, community clinics, hospitals, pediatricians, family planning clinics and others to ensure that the citizens are informed about lead safety in water. To find out if you have a lead service line and how it can be replaced, please contact the Melrose Public Works Engineering Division at 781-979-4172. For more information about the potential for lead in the tap water and steps you can take to reduce exposure, please see page 5 or contact the Melrose Public Works Water Division.

In addition to the lead sampling program, Melrose tests residential tap water samples weekly for coliform, an indicator of bacteria, which may signal the presence of more serious bacteria. Should background coliform be noted in any sample, further testing is done to determine the presence of more hazardous organisms. No background coliform was found in any sample during 2013.

Sincerely,

John V. Scenna
Director of Public Works.
Important Information from EPA about Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. MWRA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/safewater/lead.

What You Need to Know about Lead in Tap Water

MWRA water is lead-free when it leaves the reservoirs. MWRA and local pipes that carry the water to your community are made mostly of iron and steel and do not add lead to the water. However, lead can get into tap water through pipes in your home, your lead service line, lead solder used in plumbing, and some brass fixtures. Corrosion or wearing away of lead-based materials can add lead to tap water, especially if water sits for a long time in the pipes before it is used.

In 1996, MWRA began adding sodium carbonate and carbon dioxide to adjust the water’s pH and buffering capacity. This change has made the water less corrosive, thereby reducing the leaching of lead into drinking water. Lead levels found in sample tests of tap water have dropped by almost 90% since this treatment change.

MWRA Meets Lead Standard in 2013

Under EPA rules, each year MWRA and your local water department must test tap water in a sample of homes that are likely to have high lead levels. These are usually homes with lead service lines or lead solder. The EPA rule requires that 9 out of 10, or 90%, of the sampled homes must have lead levels below the Action Level of 15 parts per billion (ppb).

All 18 sampling rounds over the past ten years have been below the EPA standard. Results for the 452 samples taken in September 2013 are shown in the table. 9 out of 10 houses were below 6.3 ppb, which is below the Action Level of 15 ppb. Only two communities had more than one home test above the Action Level for lead. If you live in either of these communities, your town letter on page 4 will provide you with more information.

### September 2013 Lead and Copper Results

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>90% Value</th>
<th>(Target) Action Level</th>
<th>(Ideal Goal) MCLG</th>
<th>% Home Above AL/# Homes Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)</td>
<td>0-46.9</td>
<td>6.3</td>
<td>15</td>
<td>0</td>
<td>8/452</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>0-0.3</td>
<td>0.1</td>
<td>1.3</td>
<td>0</td>
<td>0/452</td>
</tr>
</tbody>
</table>

**KEY:** AL = Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Definition of MCLG available on page 2.

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Run the tap until after the water feels cold. To save water, fill a pitcher with fresh water and place in the refrigerator for future use.

Never use hot water from the faucet for drinking or cooking, especially when making baby formula or other food for infants.

Ask your local water department if there are lead service lines leading to your home.

Check your plumbing fixtures to see if they are lead-free. Read the labels closely.

Test your tap water. Call the MWRA Drinking Water Hotline (617-242-5323) or visit our website for more tips and a list of DEP certified labs that can test your water.

Be careful of places you may find lead in or near your home. Paint, soil, dust and some pottery may contain lead.

Call the Department of Public Health at 1-800-532-9571 or EPA at 1-800-424-LEAD for health information.