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, llame al teléfono 617-788-1190.

Massachusetts Water Resources Authority and Your Local Water Department

Where To Go For Further Information

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

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

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 or 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 provides a high level of protection against microbes and viruses, improves water clarity, and has actually made the water taste better. The addition of 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 light— with no additional chemicals and no disinfection by-products. Just better, safer water.

Your local water supply may have different treatment. Please see page 4 for more information.

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. Your water also comes from local water supplies. Please see page 4 for more information.

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, very small amounts of material can enter the reservoir.

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.

Sodium Facts

Sodium in water contributes only a small fraction of a person’s overall sodium intake (less than 10%). MWRA tests for sodium monthly and the highest level found was 35.9 mg/L (about 9 mg per 8 oz. glass). This would be considered Very Low Sodium by the Food and Drug Administration.

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). For results on your local water supply, please see page 4. Details about 2013 test results are in the table below. The bottom line is that water quality is excellent.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Units</th>
<th>(MCL) Highest Level Allowed (We found)</th>
<th>Detected Level-Average</th>
<th>Range of Detects</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></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. 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

^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. If your community found any total coliform, it will be listed within the community letter on page 4.

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.

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).

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.

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!

UV treatment units

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.
Dear Customer,

The 2013 Drinking Water Report to Consumers is a report on the quality of drinking water supplied by the Winchester Water Department (WWD) in partnership with the Massachusetts Water Resources Authority. We are happy to be working with MWRA in this joint communication on the quality of drinking water arriving at your home. This annual report provides detailed information on the Winchester and MWRA source water reservoirs and the quality of water determined through federal and state testing guidelines.

Water for the Town of Winchester comes from the MWRA Water System and town-owned reservoirs located in the Middlesex Fells Reservation off of South Border Road. A filtration plant located at the South Reservoir treats the Winchester water. The South Reservoir is protected through Sanitary Surveys, Water Quality Testing, Reservoir Patrolling and Watershed Management. Protection of MWRA’s source reservoirs is discussed in the Report. The Winchester water system is made up of three pressure distribution networks; the Westside High System, the Eastside High System and the Middle Low System. The Westside High System receives water from the MWRA on a daily basis. This system serves streets located west of Cambridge Street. The Eastside High System receives its water from the Winchester Water Treatment Plant from October to April and receives MWRA water from May to September. The Eastside High System serves the area east of Washington Street, east of Main Street to Symmes Corner and the streets east of Grove Street. The Middle Low System receives its water from the Winchester Water Treatment Plant on a daily basis and serves streets west of Washington Street, west of Main Street and west of Grove Street.

The Town of Winchester, through the efforts of the Board of Selectmen and Town Meeting Members, has taken an aggressive approach in ensuring our drinking water meets the highest standards. The following are some system improvements over the last few years:

- Construction of a 2 million gallon-per-day (mgd) water treatment plant;
- Construction of a 1 mgd storage tank;
- 100 % replacement, cleaning and lining of over 23 miles of water mains in the Winchester distribution system;
- Demolition of an aging water tank;
- The MWRA installed a 24-inch water line on Forest Street that serves as a back up to Winchester’s water system.

**SOURCE WATER ASSESSMENT**

The DEP conducted a source water assessment survey in 2003 to assess the susceptibility of the towns’ water supply. The full report is available online at www.mass.gov/dep/water/drinking/swapover.htm

The Town of Winchester and the MWRA analyze water samples on a routine basis to ensure compliance with all state and federal regulatory requirements. Annual system-wide flushing and replacement of lead gooseneck water services were also performed. Listed below are several substances that were tested for in Winchester’s sources of drinking water during 2013. The table also shows the results of each contaminant found in the water compared to the highest levels allowed by law (MCL). Not listed are the more than 200 other substances for which we tested that were not detected in our water during 2013.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>MCL (mg/l)</th>
<th>Detected Level</th>
<th>Violations</th>
<th>How It Gets In the Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>0.3</td>
<td>0.075</td>
<td>NO</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>1.1</td>
<td>NO</td>
<td>Water additive that promotes strong teeth</td>
</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>N5</td>
<td>22</td>
<td>NO</td>
<td>Widely present in reservoirs</td>
</tr>
<tr>
<td>TTHM</td>
<td>ppb</td>
<td>80</td>
<td>38.7</td>
<td>NO</td>
<td>By product of disinfection</td>
</tr>
<tr>
<td>Haloacetic Acid</td>
<td>ppb</td>
<td>60</td>
<td>11.2</td>
<td>NO</td>
<td>By product of disinfection</td>
</tr>
<tr>
<td>Nitrate</td>
<td>ppm</td>
<td>10</td>
<td>ND</td>
<td>NO</td>
<td>Naturally present in water</td>
</tr>
<tr>
<td>Lead</td>
<td>ppb</td>
<td>15</td>
<td>97% passed</td>
<td>NO</td>
<td>Present in household plumbing</td>
</tr>
<tr>
<td>Copper</td>
<td>ppm</td>
<td>1.3</td>
<td>100% passed</td>
<td>NO</td>
<td>Present in household plumbing</td>
</tr>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>4.0</td>
<td>0.59</td>
<td>NO</td>
<td>Disinfectant</td>
</tr>
</tbody>
</table>

Key: NTU = Nephelometric Turbidity Unit, PPM = Parts per million, TTHM = Total Trihalomethanes, MCL = Maximum Contaminant Level: The highest allowed level of a contaminant in drinking water.

**10 Things You Can Do To Prevent Stormwater Runoff Pollution:**

- Never dump anything into the storm drain system
- Pick up after your pet
- Direct downspouts away from paved surfaces
- Limit the use of fertilizers
- Compost your yard waste
- Vegetate bare spots in your yard
- Take your car to a commercial car wash
- Check your car for leaks and recycle used motor oil
- Sweep up your yard debris rather than hosing down the area
- Properly dispose of hazardous household wastes

If you would like additional information on your drinking water, or on town meetings, call Steve Swymer at the Winchester Water Department at (781) 721-7100 or you can call MWRA or US EPA at the numbers in the Report.
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. For lead and copper results for your local water supply, see page 4.

### 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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**How do I reduce my exposure to lead in drinking water?**

- 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.