Your Drinking Water

Massachusetts Water Resources Authority and the Winchester Department of Public Works

Where To Go For Further Information

- Massachusetts Water Resources Authority (MWRA) [www.mwra.com](http://www.mwra.com) 617-242-5323
- Massachusetts Dept. of Environmental Protection [www.mass.gov/dep](http://www.mass.gov/dep) 617-292-5500
- Massachusetts Dept. of Public Health (DPH) [www.mass.gov/dph](http://www.mass.gov/dph) 617-624-6000
- Department of Conservation and Recreation [www.mass.gov/dcr/watersupply](http://www.mass.gov/dcr/watersupply) 617-626-1250
- US Centers for Disease Control & Prevention (CDC) [www.cdc.gov](http://www.cdc.gov) 800-232-4636
- Source Water Assessment and Protection Reports [www.mwra.com/sourcewater.html](http://www.mwra.com/sourcewater.html) 617-242-5323

Public Meetings

- MWRA Board of Directors [www.mwra.com/boardofdirectors.html](http://www.mwra.com/boardofdirectors.html) 617-788-1117
- MWRA Advisory Board [www.mwraadvisoryboard.com](http://www.mwraadvisoryboard.com) 617-788-2050
- Water Supply Citizens Advisory Committee [www.mwra.com/wscac.html](http://www.mwra.com/wscac.html) 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
Dear Customer,

I am pleased to share with you the annual results of our water quality testing. Each year, MWRA takes hundreds of thousands of tests to ensure your water is safe and of the highest quality. In 2018, we again met every federal and state drinking water standard.

Lead in drinking water is an important issue and we continue to make progress on reducing the risk by treating the water to make it less corrosive, and working with our member communities to identify and remove lead service lines. More information can be found on pages 4 and 5 of this report.

Your water system is well protected – from the source reservoirs to the treatment plants to the storage tanks – and real-time water quality monitoring allows us to check the water every step of the way. We also have emergency plans for all of our facilities so we can quickly respond to any issue any time of day or night.

Our emergency planning also includes redundancy for every part of the water system. We are currently working on two large pipeline projects to the north and south that will allow us to re-route the water in the event of a break so that your service will not be interrupted. Also, we have begun the initial design phase for two new water tunnels that will allow us to make repairs to the existing system. You will be hearing more about this in the coming years as the project gets underway.

I hope you will take a few moments to read through this important report and learn more about your water system. We have great confidence in the water we deliver to your home and we want you to share that confidence. Please contact us if you have any questions about this report or any of MWRA’s programs.

Sincerely,

Frederick A. Laskey
Executive Director

Cover photo: Old Stone Church, Wachusett Reservoir
Why Your Water Tastes Great – High Quality Source Water

Your water comes from the Quabbin Reservoir, about 65 miles west of Boston, and the Wachusett Reservoir, about 35 miles west of Boston. Water from the Ware River can also add to the supply at times. These pristine 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 2018. Your water also comes from local water supplies. Please see page 7 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 watershed-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, including radioactive 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 pathogens - 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 water 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. Your water also comes from local supplies that have a separate report.

Testing Your Supplies – 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 that are 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 0.34 NTU. In 2018, turbidity was always below EPA’s 5 NTU standard. It was also below the stricter Massachusetts standard of 1 NTU 99.99% of the time, with the highest level 2.9 NTU.

MWRA also tests reservoir water for pathogens such as fecal coliform, bacteria and the parasites Cryptosporidium and Giardia that can enter the water from animal or human waste. All test results were well within state and federal testing and treatment standards. For more information, please visit www.mwra.com/ucmr/2018.html.

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 2018 test results are in the table below. The bottom line is the water quality is excellent. For results on your local water sources, please see page 7.

<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 (MCL) 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>0.01</td>
<td>0.01-0.011</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>Mono-Chloramine</td>
<td>ppm</td>
<td>4-MRDPL</td>
<td>2.08</td>
<td>0.03-3.8</td>
<td>4-MRDLG</td>
<td>No</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>0.70</td>
<td>0.31-0.78</td>
<td>4</td>
<td>No</td>
</tr>
<tr>
<td>Nitrate*</td>
<td>ppm</td>
<td>10</td>
<td>0.09</td>
<td>0.05-0.09</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Nitrite</td>
<td>ppm</td>
<td>1</td>
<td>0.006</td>
<td>ND-0.006</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>ppb</td>
<td>80</td>
<td>16.4</td>
<td>7.13-21.0</td>
<td>ns</td>
<td>No</td>
</tr>
<tr>
<td>Halocetic Acids-5</td>
<td>ppb</td>
<td>60</td>
<td>16.7</td>
<td>3.5-22.3</td>
<td>ns</td>
<td>No</td>
</tr>
<tr>
<td>Total Coliform</td>
<td>%</td>
<td>5</td>
<td>1.4% (Sept)</td>
<td>ND-1.4%</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td>Combined Radium*</td>
<td>pCi/L</td>
<td>5</td>
<td>1.76</td>
<td>ND-1.76</td>
<td>0</td>
<td>No</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 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 and nitrite, not the average. pCi/L=Picocuries/Liter. *Result from 2014.
Why Your Water Tastes Great – Water Treatment

The MWRA has invested in state-of-the-art treatment to make sure your water is clean, fresh, and tastes great. Part of the reason that the water tastes so good is MWRA’s advanced treatment at the John J. Carroll Water Treatment Plant in Marlborough. Since 2005, your water has been treated with ozone - produced by pure oxygen. Ozone ensures strong protection against microbes and viruses, improves water clarity and makes the water taste better. In 2014, we also started using ultraviolet (UV) disinfection, further improving the quality of water. UV light is essentially a more potent form of the natural disinfection from sunlight and ensures that any pathogens potentially in our reservoirs are rendered harmless.

In addition, fluoride is added to promote dental health and the water chemistry is adjusted to reduce corrosion of home plumbing. Last, we add mono-chloramine, a mild and long-lasting disinfectant combining chlorine and ammonia to protect the water as it travels through miles of pipelines to your home. Your local water may have different treatment. Please see page 7.

Emergency Preparedness

To confidently deliver the high-quality water you expect, MWRA must be prepared for all situations. MWRA and DCR staff are out in the watersheds every day walking the land, monitoring activities and protecting the source. Whether managing wildlife, rerouting road runoff away from the reservoir or regulating development activity, DCR’s biologists, engineers and planners are at work keeping the source pristine.

MWRA continuously monitors water quality within the reservoir with monitoring buoys and underwater sampling stations at multiple locations with the ability to sample at multiple depths. If there were an accident in the reservoir, a pipeline, or in one of our communities, we are ready to respond with mobile disinfection units and pumps, a mobile laboratory and staff who have been trained and participate in drills.

Modern water systems rely on computers and specialized control systems to operate efficiently. We have invested in cyber security systems to prevent disruption, and have backup operation centers in case our regular control center is damaged or inaccessible.

Redundant pipelines and tunnels also allow inspection and maintenance of key facilities while ensuring uninterrupted service. We have just completed the Wachusett Aqueduct Pumping Station in Marlborough, which now provides a second way to get water to the treatment plant. We are also nearing completion of projects to provide redundant pipelines to the north and south of Boston. Design is underway to repair and improve the Weston Aqueduct Supply Main #3 in Weston, Waltham, Belmont, Arlington and Medford. Planning for two new tunnels north and south of Boston that will provide redundancy is now well underway.

On-going Pipeline Rehabilitation

MWRA continues to rehabilitate and replace pipelines throughout the distribution system to improve both reliability and water quality. MWRA also provides zero-interest loans to customer communities for local pipeline projects. In 2018, $43 million was loaned to communities for 25 projects for the replacement of older, unlined pipes with new cement-lined ductile iron water pipes or rehabilitation with cleaning and new cement lining.

Sodium Facts

Sodium in water contributes only a small fraction of a person’s overall sodium intake (less than 5%). MWRA tests for sodium monthly and the highest level found was 41.6 mg/L (about 8 mg per 8 oz. glass). This would be considered VERY LOW SODIUM by the Food and Drug Administration.
Lead In Tap Water Continues To Be In The News and you may have some concerns about the safety of your tap water. MWRA’s water system has been below the Lead Action Level for over a decade. Of nearly 2,300 samples taken in the last 5 years, 98% were below this 15 ppb level.

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 service line if it is made of lead, 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 about 80 percent since this treatment change. MWRA’s water system has been below the Lead Action Level for over a decade. Of the nearly 2,300 samples taken in the last 5 years, 98% were below the 15 ppb level.

MWRA Meets Lead Standard In 2018
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 23 sampling rounds over the past 14 years have been below the EPA standard. Results for the 458 samples taken in September 2018 are shown in the table. Nine out of 10 houses were below 9.7 ppb, which is below the Action Level of 15 ppb. Your community letter on page 7 will provide you with local results and more information.

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.

### Lead & Copper Results - September 2018

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Range</th>
<th>90% Value</th>
<th>(Target) Action Level</th>
<th>(Ideal Goal) MCLG</th>
<th>#Homes Above AL/#HomesTested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)</td>
<td>0-601</td>
<td>9.7</td>
<td>15</td>
<td>0</td>
<td>20/458</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>0-1.52</td>
<td>0.122</td>
<td>1.3</td>
<td>1.3</td>
<td>1/455</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 3.

### 90% Lead Levels In MWRA System Of Fully Served Communities (ppb)

<table>
<thead>
<tr>
<th>Year</th>
<th>Lead Levels (ppb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>64</td>
</tr>
<tr>
<td>1997</td>
<td>40</td>
</tr>
<tr>
<td>2012</td>
<td>8</td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
</tr>
<tr>
<td>2014</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
</tr>
<tr>
<td>2016</td>
<td>1</td>
</tr>
<tr>
<td>2017</td>
<td>9</td>
</tr>
<tr>
<td>2018</td>
<td>10</td>
</tr>
</tbody>
</table>

Lead Action Level = 15 ppb
**What Do I Do If I Have A Lead Service Line?**

**What Is A Lead Service Line?**

**What Is The Concern?**

A service line is the pipe that connects your house to the water main in the street. Some service lines that run from older homes (constructed before 1940) are made from lead. Many of these older service lines have been replaced, but some remain. These service lines are the main source of lead in tap water in homes that have them. Therefore, removing lead service lines is a priority to reduce the potential for lead exposure, particularly if a pregnant woman or child lives at your home.

**How Do I Replace My Lead Service Line?**

If you have a lead service line, you should consider replacing it. Many communities have programs to help with the replacement cost. Removing the whole lead service line is important. It is the only way to ensure that your service line will not be adding lead to your water. Partial replacements - which leave some lead behind - do not lower lead levels and in many cases, can actually increase lead levels.

**MWRA Program To Replace Lead Service Lines**

To help communities in removing lead service lines, MWRA and its Advisory Board approved a program to make available $100 million in zero-interest loans to its member communities to fully replace lead service lines. Under the program, each community can develop its own program, tailored to their local circumstances. So far, MWRA has distributed over $10 million to nine communities. To find out more, please read your community letter or contact your local water department.

**How Do I Get My Home’s Tap Water Tested For Lead?**

There is a list of labs and sampling instructions available on the lead testing page at www.mwra.com or you can call MWRA at 617-242-5323. Also, some communities have testing available for residents. Please contact your local water department for more information.

**Lead Testing In Schools**

Starting in 2016, MWRA, in coordination with DEP, provided no-cost lab analysis and technical assistance for schools and day care centers across all of MWRA’s water communities. Almost all of MWRA communities have already participated in the program. Sampling is on-going. Nearly 34,000 tests have been completed from over 430 schools across 44 communities. Most of the results are available on the DEP website – www.mass.gov/dep (search for lead in schools). Some results may also be available through your local community website, DPW or school department.

**IF I HAVE A LEAD SERVICE LINE?**

- You can identify a lead service line by carefully scratching it with a key.
- Have it replaced with a new copper service line.

For more information on lead service lines go to www.mwra.com.

**WHAT CAN I DO**

to reduce my exposure to lead in drinking water?

- Be careful of places you may find lead in or near your home. Paint, soil, dust and some pottery may contain lead.
- Let the water run before using it: fresh water is better than stale! To save water, fill a pitcher with fresh water and place in the refrigerator for future use.
- Any time water has gone unused for more than 6 hours, run each faucet used for drinking or cooking until after the water becomes cold.
- Never use hot water from the faucet for drinking or cooking, especially when making baby formula or other food for infants.
- Check your plumbing fixtures to see if they are lead-free. Read the labels closely.
- Remove loose lead solder and debris. Every few months remove the aerator from each faucet in your home and flush the pipes for 3-5 minutes.
- Call the Department of Public Health at 800-532-9571 or EPA at 800-424-LEAD for health information.
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 as tap water. More than half of our energy needs for water treatment and delivery are met with green power including hydroelectric generators and solar panels.

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. If total coliform is detected in more than 5% of 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, 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 or E. coli, it will be listed within the community letter on page 7.

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. U.S. 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.

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 these regulations, and to see a listing of what was found in MWRA water, please visit www.mwra.com/UCMR/2018.

Cross Connection Information
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 617-242-5323 or visit mwra.com/crosscon.

Watershed Protection keeps the water supply clean and safe while providing open space. All of the trees and protected land in the Quabbin, Wachusett and Ware River watersheds act as a natural filter, and it is one of the reasons MWRA water has been rated as the best in the country. Since 1985, almost $150 million has been invested in land protection.
The 2018 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's 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;
- Replacement, cleaning & lining of over 23 miles of water mains in the Winchester distribution system;
- Replacement of 521 lead goose necks by in-house and contractor;
- The MWRA installed a 24-inch water line on Forest Street that serves as a back up to Winchester’s water system;
- The Town of Winchester has entered into the Lead Service Line Replacement Program with the MWRA.

## SOURCE WATER ASSESSMENT

The DEP conducted a source water assessment survey in 2003 to assess the susceptibility of the town’s 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 lead gooseneck replacement of water services were also performed. Listed below are several substances that were tested for in Winchester’s sources of drinking water during 2018. 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 2018. The town received a 3-year waiver from lead and copper testing from the DEP due to 3 years of not exceeding 90% Action Level.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Units</th>
<th>MCL</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>0.068</td>
<td>NO</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>0.7</td>
<td>NO</td>
<td>Water additive that promotes strong teeth</td>
</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>ns</td>
<td>35.7</td>
<td>NO</td>
<td>Widely present in reservoirs</td>
</tr>
<tr>
<td>TTHM</td>
<td>ppb</td>
<td>80</td>
<td>42.4</td>
<td>NO</td>
<td>By product of disinfection</td>
</tr>
<tr>
<td>Haloacetic Acid</td>
<td>ppb</td>
<td>60</td>
<td>8.7</td>
<td>NO</td>
<td>By product of disinfection</td>
</tr>
<tr>
<td>Nitrate</td>
<td>ppm</td>
<td>10</td>
<td>0.15</td>
<td>NO</td>
<td>Naturally present in water</td>
</tr>
<tr>
<td>Lead</td>
<td>ppm</td>
<td>0.015</td>
<td>0.001*</td>
<td>NO</td>
<td>Present in water system and household plumbing</td>
</tr>
<tr>
<td>Copper</td>
<td>ppm</td>
<td>1.3</td>
<td>0.061*</td>
<td>NO</td>
<td>Present in water system and household plumbing</td>
</tr>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>4</td>
<td>0.69</td>
<td>NO</td>
<td>Disinfectant</td>
</tr>
</tbody>
</table>

**Key:** 
- NTU = Nephelometric Turbidity Unit  
- PPM = Parts per million  
- PBP = Parts per billion  
- TTHM = Total Trihalomethanes  
- MCL = Maximum Contaminant Level  
- Soil runoff  
- Water additive that promotes strong teeth  
- Widely present in reservoirs  
- By product of disinfection  
- Naturally present in water  
- Present in water system and household plumbing  
- Disinfectant

In the calendar year 2018 the Town of Winchester used 56% of its total water use through two MWRA connections. The remaining 44% of water use was supplied through the Winchester Water Treatment Plant. During the year the Town of Winchester took 364 coliform samples which were tested and came back with no coliform present. The Town of Winchester maintains 112 miles of water mains, approximately 900 fire hydrants and two storage tanks. The Town of Winchester has an active cross connection control program to alleviate the water system from any contamination.

If you would like additional information on your drinking water, or on meetings call Jim Gibbons at the Winchester Water Department at (781) 721-7100 or you can call MWRA or US EPA at the numbers in the Report.