

Drink Tap Water

Your 2010 Drinking Water Test Results from the Massachusetts Water Resources Authority

be green!



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, llámenos al teléfono 617-788-1190.

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

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

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

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. برجى ترجمته، أو ابحت التقرير مع صديق لك يفهم هذه المعلومات جيداً.

Η κατοίχων αναφορά παραρτηματική σπουδαίες πληροφορίες για το ποσίο νερό σας. Προσκαλώ να το μεταφράσετε ή να το συζητήσετε με κάποιον που το καταλαβαίνει καλύτερα.

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.

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

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。

इस रिपोर्ट में 'पनि के पानी' के निम्न पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद करें, या किसी जानकार से इस बारे में पूछें।

ထေ့ကတင်စမ်းချာစတီထာဝလံသာ ဝံမိမိနိဂပိတေက ဖုလ္လမကံပုပုထိပုကးသာယုမုကံလံပရိထာပလံ ထေ့ကတင်စမ်း ဖု

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

Bản báo cáo có ghi những chỉ 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.



Massachusetts Water Resources Authority and Your Local Water Department



This report is required under the Federal Safe Drinking Water Act Public Law 104-182, Section 1414(c)(4) MWRA PWS ID# 6000000

Where To Go For Further Information

| | | |
|--|--|--------------|
| Massachusetts Water Resources Authority (MWRA) | www.mwra.com | 617-242-5323 |
| Massachusetts Dept. of Environmental Protection | www.mass.gov/dep | 617-292-5500 |
| Department of Conservation and Recreation | www.mass.gov/dcr/watersupply.htm | 617-626-1250 |
| Massachusetts Dept. of Public Health (DPH) | www.mass.gov/dph | 617-624-6000 |
| US Centers for Disease Control & Prevention (CDC) | www.cdc.gov | 800-232-4636 |
| List of State Certified Water Quality Testing Labs | www.mwra.com/04water/html/testinglabs.html | 617-242-5323 |
| Source Water Assessment and Protection Reports | www.mwra.com/sourcewater.htm | 617-242-5323 |
| Information on Water Conservation | www.mwra.com/conservation.html | 617-242-SAVE |

Public Meetings

| | | |
|--|--|--------------|
| MWRA Board of Directors | www.mwra.com/02org/html/boardofdirectors.htm | 617-788-1117 |
| MWRA Advisory Board | www.mwraadvisoryboard.com | 617-788-2050 |
| Water Supply Citizens Advisory Committee | www.mwra.com/02org/html/wscac.htm | 413-213-0454 |



For a large print version of this report, call 617-242-5323.



Where Does Your Water Come From?

Dear Customer,

This report contains the 2010 test results on your drinking water. Hundreds of thousands of tests taken confirmed that the quality of your water is excellent. For 2010, MWRA met every federal and state drinking water standard.

As we continue to make improvements to the water system, we will soon begin building ultraviolet disinfection facilities at our Quabbin Treatment Plant. Together with chlorine, this will give us two forms of powerful disinfection as required by federal regulations.

You may have heard press reports earlier this year about a chemical found in drinking water called Hexavalent Chromium, or Chromium 6. Although there are no federal standards for this substance, MWRA has begun to perform voluntary quarterly testing for it as recommended by the Environmental Protection Agency. In response to the Japanese earthquake, we have also tested for and found no traces of radioactive iodine or cesium. As more information becomes available, we will share it with you on our website at www.mwra.com.

I hope you take a moment to read the important information in this report. We want you to share our confidence in your drinking water.

Sincerely,

Frederick A. Laskey
Executive Director



MWRA Board Of Directors

Richard K. Sullivan, Jr., Chairman, John J. Carroll, Vice-Chair, Joseph C. Foti, Secretary, Joel A. Barrera, Kevin L. Cotter, Michael S. Gove, James W. Hunt III, Vincent G. Mannering, Andrew M. Pappastergion, Marie T. Turner, John J. Walsh

MWRA Supplies About 10 Million Gallons Of High Quality Water Each Day to three Chicopee Valley communities: Chicopee, Wilbraham, and South Hadley Fire District #1 (FD#1). MWRA also serves 48 cities and towns in greater Boston and Metro-West. Your water comes from the Quabbin Reservoir. Water from the Ware River can add to the supply at times.

Rain and snow falling on the watersheds – protected land around the reservoirs – turn into streams that flow to the reservoirs. Water comes in contact with soil, rock, plants, and other material as it follows nature’s path to the reservoir. While this process helps clean the water, it can also dissolve and carry very small amounts of material into the reservoir. Minerals from soil and rock do not usually cause problems in the water. But water can also transport contaminants from human and animal activity. These can include bacteria, viruses and fertilizers – some of which can cause illness. The test results in this report show that these are not a problem in Quabbin Reservoir’s watershed.

Quabbin watershed is protected naturally as over 90% of the watershed is covered in forest and wetlands. About 83% of the total watershed land cannot be developed. The natural undeveloped watershed helps to keep MWRA water clean and clear. Also, to ensure safety, the streams and the reservoir are tested often and patrolled daily by the Department of Conservation and Recreation (DCR).

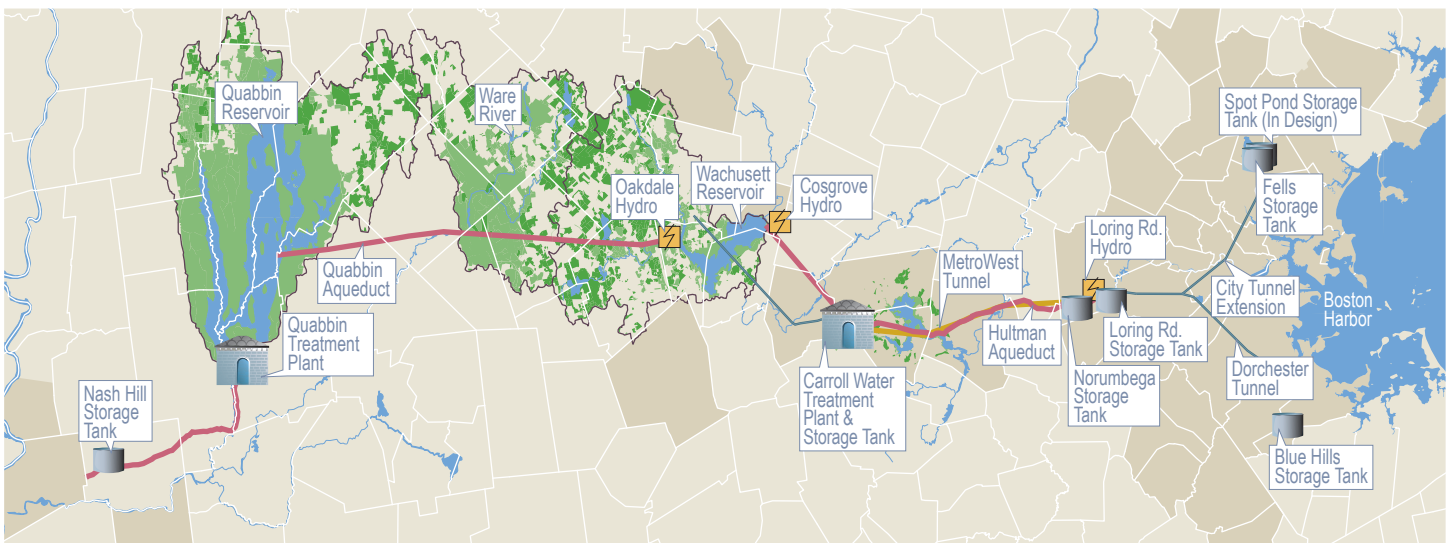
The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program Report for the Quabbin Reservoir. The DEP report commends DCR and MWRA on the existing source protection plans, and states that our “watershed protection programs are very successful and greatly reduce the actual risk of contamination.” The report recommends that DCR and MWRA maintain present watershed plans and continue to work with residents, farmers, and other interested parties to maintain the pristine watershed areas.



PHOTO BY ALLAN JUNG - THE METROWEST DAILY NEWS

The Green Choice

MWRA has emphasized “green” improvements including harnessing wind, solar and hydro energy. Tap water is delivered straight to your home without trucking or plastic waste. Drink tap water and be green.





From the Reservoir to Your Home



Water Treatment – From The Reservoir To Community Pipelines

Your water is treated at the Ware Disinfection Facility before it enters the Chicopee Valley Aqueduct. The first treatment step is primary disinfection where MWRA's licensed operators carefully add measured doses of chlorine to water to kill pathogens that may be present. Licensed operators in Chicopee perform additional booster disinfection at the point where the local pipes take water from the Aqueduct. Each community also treats the water to reduce leaching of lead from home plumbing.

Water must travel through the 15-mile Chicopee Valley Aqueduct and through some of the hundreds of miles of local distribution pipes under your streets before it reaches your tap. To continue providing high quality water, each part of the water system needs routine maintenance and, when necessary, improvements or new facilities. 2010 marked MWRA's 25th year; take a look at the anniversary report at www.mwra.com.

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.

There are two standards for turbidity: all water must be below 5 NTU (Nephelometric Turbidity Units), and can only be above 1 NTU if it does not interfere with effective disinfection. MWRA met both of these standards. Typical levels at the Quabbin Reservoir are 0.3 NTU and were below the 1 NTU over 99.99% of the time. The highest level was 2.1 NTU for a few hours after the December blizzard, but 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. All test results were well within state and federal testing and treatment standards.

Test Results – After Treatment

EPA and State regulations require many water quality tests after treatment to check the water you are drinking. MWRA conducts tens of thousands of tests per year on over 120 contaminants (for a complete list visit www.mwra.com). Details about 2010 test results are in the table below. See page 5 for local data.

Test Results - After Treatment

| 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 | 0.007 | 0.006-0.007 | 2 | No | Common mineral in nature |
| Nitrate [^] | ppm | 10 | 0.01 | 0.01 | 10 | No | Atmospheric deposition |

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. ppm=parts per million [^]As required by DEP, the maximum result is reported for nitrate, not the average.



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 617-242-5323 or visit www.mwra.com/crosscon.html.

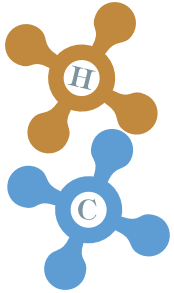
Water Conservation

On average, each person uses about 60 gallons of water each day. There are many simple ways you can conserve water and lower your bills, including: fixing leaks, installing low-flush toilets and low-flow shower heads, or minimizing your outdoor water use. To find out more about MWRA's conservation program, call 617-242-SAVE or visit www.mwra.com.





Tests in Community Pipes



MWRA And Local Water Departments

work together to test water all the way to the tap. We test samples of water in the city and town systems 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, these bacteria 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 given month may be positive for total coliform. If a water sample tests positive for total coliform, we run more specific tests for *E.coli*. *E.coli* is a pathogen found in human and animal fecal waste that can cause illness. No *E.coli* was found in any CVA community in 2010.



| Community | Highest % of positive samples and month | Violation of EPA's 5% limit |
|--------------------|---|-----------------------------|
| South Hadley FD #1 | 1 out of 19 (Oct) | No |

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 Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

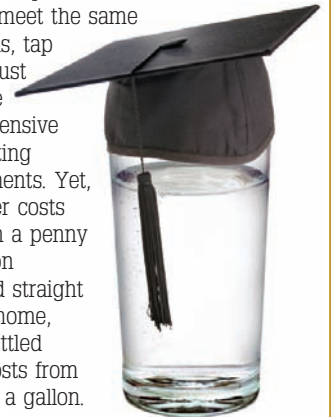


Are there Drugs in My Drinking Water?

You may have heard news reports about pharmaceuticals found in drinking water supplies in some parts of the country. Test results have shown no traces of drugs in MWRA's water supply. Pharmaceuticals in drinking water are more of a concern for water supplies that have wastewater discharges into them, but since MWRA's water sources are well protected, this is not a concern.

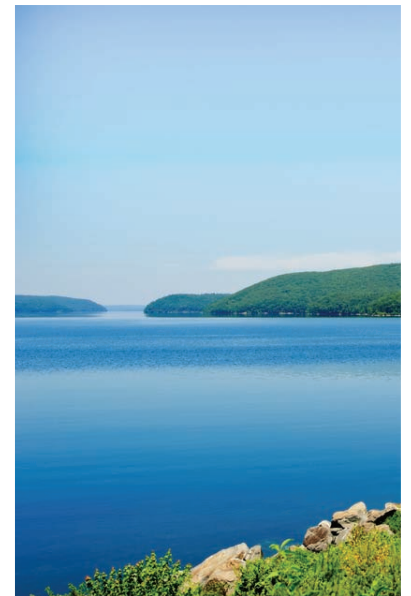
The Smart Choice!

Although tap water and bottled water have to meet the same standards, tap water must meet the more intensive EPA testing requirements. Yet, tap water costs less than a penny per gallon delivered straight to your home, while bottled water costs from \$1 to \$8 a gallon.



How Would I Know About A Problem With My Drinking Water?

MWRA and your local water department keep close watch on the drinking water supply. If there is a problem with your water, you would get the news by radio, television, newspapers, state and local government, health officials, and from the MWRA.





Your Community Information

Chicopee

Phone: 413-594-3420
PWS ID# 1061000

The Chicopee Water Department's Corrosion Control Facility continues to provide excellent water quality by adjusting the water's pH and alkalinity levels using sodium carbonate and sodium bicarbonate (baking soda). A phosphate blend also adds an extra level of protection by further reducing corrosion throughout the system. The benefits of these treatment processes are evident in the reduced levels of dissolved metals such as lead, copper, and iron in the city's water supply.

Under the Safe Drinking Water Act, water samples must be collected specifically for the analysis of lead and copper. Household plumbing is the main contributor of these metals in our drinking water. The Chicopee Water Department was not required to collect any lead and copper samples by the Environmental Protection Agency (EPA) in 2010. This is due to the Chicopee Water Department's successful maintenance of low to absent levels of lead and copper in the water system during 2009. The next round of lead and copper samples will be collected in the spring of 2012.

Chicopee continues to improve its system to ensure high quality water is delivered. The Water Department is upgrading its SCADA (Supervisory Control and Data Acquisition) computer system by adding many new alarms and better control of treatment.



South Hadley FD #1

Phone: 413-532-0666
PWS ID# 1275000

The District continues the successful use of Sodium Silicate for corrosion control in order to comply with the federally mandated Lead and Copper Rule. Sodium Silicate increases the pH of the water and also provides a coating on the inside of the residential plumbing systems to prevent any possible lead leaching into the water. Due to the success of our last round of samples in June of 2010, we will now sample the 30 sites within the distribution system every three years. The District would like to thank the participating homeowners for taking the time to sample correctly in order for us to sample again in 2013.

Within the past year, our staff has repaired five water main breaks. In addition we have repaired three service leaks along with two bell joint leaks on the District's 16" pipeline. These leaks had resulted in a significant loss of water and expense for the department. In addition to the repair work, nine new services have been connected to the distribution system.



As part of our continual commitment to improving the distribution system, our staff has replaced a total of 3,700 ft. of water main including fire hydrants and water services. The first project was completing the replacement of 2,700 ft. of 8" A.C. pipe with a new 8" ductile iron water main on Canal St. between West Summit St. and High St. We were fortunate to receive grant money for the materials as part of the Town's Community Development Block Grant for improvements along Canal St. The second project was the replacement of 1,000 ft of 6" A.C. pipe with 8" ductile iron water main on Linda St. The new mains will ensure reliability of supply, improved water quality and fire protection. The Board of Water Commissioners is again thankful for the diligent efforts of our maintenance staff for installing the new distribution mains with in-house equipment in addition to all other duties assigned to them throughout the year. These efforts continue to allow the District to cost-effectively replace significant amounts of water mains with funds appropriated within our budget. Our commitment will continue as circumstances, funding and time permit.

Wilbraham

Phone: 413-596-2807
PWS ID# 1339000

In 2009, the Water Division completed lead and copper sampling at 20 homes and 2 schools in the distribution system. The results were excellent, indicating our corrosion control program (injecting sodium silicate) continues to work effectively as it has since 1997. The Water Department has been put on a once every three year cycle of lead and copper sampling. Our next scheduled sampling is for 2012.

The new permanent Corrosion Control Facility (CCF) on Miller St. in Ludlow officially started operation on April 15, 2010. Upon start-up of the facility, DEP performed a comprehensive inspection of its operation and safety features. Along with the new telemetry and pressure reducing valve, the alarms and sensors at the Water Department shop office, the water tank on Bartlett Ct., and the MacIntosh Dr. Water Booster Station were all upgraded.

The 6" transite water mains on Brookside Circle, Drive and Road; and East and South Colonial Rd. were replaced with 8" ductile iron pipe. A section of Brainard Rd. and West Colonial Rd. had its water mains replaced and upgraded with new 8" ductile iron pipe. Pigeon Dr. had its water main extended and looped with Main St. to eliminate a dead end. Approximately 135 water service laterals were installed for these streets. The projects were part of a \$1.2 million bond approved at the May 2009 Town Meeting. The MacIntosh Dr. Water Booster Station had a major renovation in May 2010 with new suction and discharge headers installed, as well as new 4" copper pipe to replace the faulty original 4" steel pipe headers.





What You Need to Know About Lead In Tap Water

All Three CVA communities met EPA standards for 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, 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 a long time in the pipes before it is used.

What Are We Doing About Lead?

Your local water department tests tap water at a number of homes in the communities. But not just any homes. Under Environmental Protection Agency regulations, homes that are likely to have high lead levels - usually older homes likely to have lead service lines or lead solder - must be tested. The EPA rule requires that 9 out of 10, or 90%, of these sampled homes must have lead levels below the Action Level of 15 parts per billion (ppb).

Lead levels found in tap water in sampled homes have dropped significantly since the CVA communities improved treatment to make water less corrosive. This means the water is less likely to absorb lead from pipes and other fixtures. All three CVA communities were below the lead Action Level in 2010.



Important Lead Information from EPA

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. Your community 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 at www.epa.gov/safewater/lead.

What Can I Do to reduce 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 is a lead service line 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 where you may find lead in or near your home. Paint, soil, dust and some pottery may contain lead.
- ▶ Call the MA Department of Public Health at 1-800-532-9571 or EPA at 1-800-424-LEAD for health information.

Local Test Results for 2010

| | Total Trihalomethanes (TTHMs) in ppb MCL=80 ppb (Avg) MCLG=0 | | Halocetic Acids (HAA5) in ppb MCL=60 ppb (Avg) MCLG=0 | | Chlorine in ppm MRDL=4 ppm (Avg) MRDLG=4 ppm | | Lead in ppb Action Level (AL)=15 ppb MCLG=0 | | Copper in ppm Action Level = 1.3 ppm MCLG=0 | | Sodium in mg/L |
|-------------------------|--|-------------|---|-------------|--|------------|---|-----------|---|-----------|----------------|
| | Annual Average | Range | Annual Average | Range | Annual Average | Range | # Samples over AL | 90% Value | # Samples over AL | 90% Value | |
| Chicopee | 46.5 | 24.0 - 82.7 | 27 | 18.8 - 29.4 | 1.0 | 0.1 - 0.6 | 0 of 30 | 1.8 | 0 of 30 | 0.15 | 15.1 |
| South Hadley FD #1 | 52.1 | 33.5 - 78.7 | 17 | 11.0 - 23.1 | 0.5 | 0.05 - 0.8 | 3 of 30 | 13.2 | 0 of 30 | 0.04 | 7.4 |
| Wilbraham | 47.7 | 22.8 - 67.6 | 16 | 1.8 - 26.4 | 0.5 | 0.2 - 0.7 | 0 of 20 | 7.1 | 0 of 20 | 0.4 | 7.0 |
| Westover-Air Force Base | 46.1 | 33.3 - 74.4 | 38.8 | 24.7 - 62.4 | 0.7 | 0.3 - 1.3 | 0 of 10 | 4.5 | 0 of 10 | 0.3 | NA |

KEY: **AL** = The definitions for MCL and MCLG are on page 2. **AL** = Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **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 **NA** = not available