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This is a "right-to-know" report and contains important information on the quality of your drinking water!

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Your Drinking Water Report

2008



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Dear Customer,

The Massachusetts Water Resources Authority is pleased to send you this year's annual report on your drinking water quality. MWRA and your local water department test thousands of water samples each week, under strict federal and state guidelines. The results for 2008 are excellent: for the 120 contaminants we test for, every standard was met. Recent tests have also shown that there are no traces of pharmaceuticals in MWRA water.

Your tap water is one of the best values around. For less than a penny a gallon, you receive some of the cleanest, best tasting drinking water in the country. That penny also provides you with experienced, professional staff who protect, treat and deliver your water and make sure it is always available.

MWRA has great confidence in the water we deliver to your home, and we want you to have the same confidence. This report contains important information, and I hope you take a moment to read through it. Please contact us if you have any questions or comments about your water quality, or any of MWRA's programs.

Sincerely,

Frederick A. Laskey

MWRA Executive Director

This report is required under the Federal Safe Drinking Water Act and provides information on:

Where your water comes from	2
Map of the water system	2
How your water is treated	3
Improvements to the system	3
Test results	4
Information about lead	5
Special notice for the immuno-compromised	6
List of further resources	_



SHARE YOUR COMMENTS
Call or email us and let us know
what you think about this report or
your water.

MASSACHUSETTS WATER RESOURCES AUTHORITY PWS ID #6000000 Charlestown Navy Yard Building 39, 1st Avenue Boston, MA 02129 617-242-5323 www.mwra.com Español 617-788-1190



The pristine watersheds enhance the value of the water by keeping potential pollutants out and making treatment easier.

Your water is one of the best values out there. For less than a penny per gallon, you get clean, well-protected, great tasting drinking water. MWRA and DCR's experienced staff protect the watersheds, disinfect and test the water, maintain the pipes and ensure that water is always running, clean and fresh!

WHERE DOES YOUR WATER COME FROM?

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 47 cities and towns of greater Boston and MetroWest. Your water comes from Quabbin Reservoir.

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, pesticides 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.

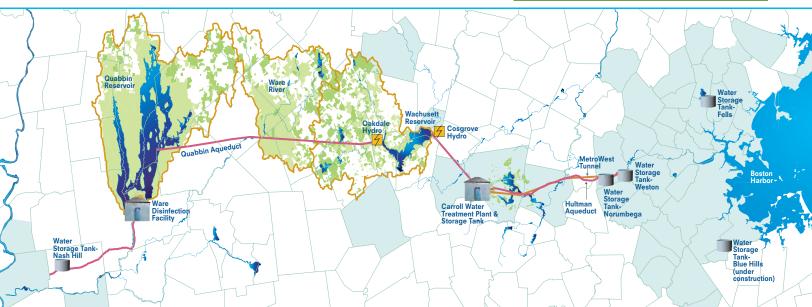
The Quabbin watershed is protected naturally as over 90% of the watershed is covered in forest and wetlands. About 83% of the total watershed land cannot be developed. The natural undevel-



oped 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 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." The report recommends that DCR and MWRA maintain present watershed plans and continue to work with the residents, farmers, and other interested parties to maintain the pristine watershed areas.

TAP WATER – THE GREEN CHOICE!
As water travels eastward through tunnels from the Quabbin and Wachusett Reservoirs, clean hydroelectric energy is produced. The electricity generated is used to reduce MWRA's energy demands. Also, the clean, fresh water is delivered straight to your home without the fuel consumption of trucking or the waste left behind by plastic bottles.



FROM THE RESERVOIR TO YOUR HOME



Even though tap and bottled water must meet the same standards, bottled water costs hundreds of times morea a penny for tap compared to \$1 to \$8 a gallon for bottled. Tap water must meet more intensive Environmental Protection Agency (EPA) testing requirements than bottled water, which is regulated by the Food and Drug Administration (FDA).

IMPROVEMENTS TO THE SYSTEM

Water travels 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.

MWRA

The covered Nash Hill Storage Tanks were completed in June 1999 to replace the Nash Hill open reservoir. This tank helps to lessen the risk that contamination will get into your tap water. The treatment facilities were completed in the summer of 2001. The new facilities provide more efficient disinfection for your water. In 2005, on-line water quality monitoring was added at Nash Hill to ensure better monitoring of the water supply. In 2007, construction finished on a two-year pipeline project to provide improved reliability in emergencies for all three communities.

CHICOPEE (PWS ID #1061000)

In 2008, the Chicopee Water Department began renovating and repainting the Joseph Bourbeau Elevated Storage Tank on Royal Street with its contractor Abhe & Svoboda. Work began in the early Fall with hopes of completion by Winter. Unfortunately, cold weather prohibited paint application and the completion date was set back to the Spring of 2009. Two other major construction projects made their way through the planning, design, and bidding phases (those being the Front Street and Center Street projects). Both projects are slated for kick-off in 2009 with the Center Street project entailing a full water main replacement and reestablishment of the Springfield-Chicopee interconnection.



HOW WOULD I KNOW ABOUT A PROBLEM WITH THE WATER SUPPLY?

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

WILBRAHAM (PWS ID #1339000)

As required by DEP in April 2008, the 2.1 million gallon water storage tank was inspected by Merithew, Inc. The water tank was rated to be in very good condition with just some cosmetic improvements needed on the outside of the structure. The pre-stressed concrete tank was constructed in 1976 by Natgun, Inc.

MWRA completed the Pipeline Redundancy Project (PRP) during 2008. One new interconnection to the Chicopee Valley Aqueduct at Wilbraham's point of entry on Miller Street, Ludlow, along with 2300 feet of new 20 inch ductile iron water main are the significant components of the project. They will provide higher water pressure in the distribution system during the summer months. The higher water pressure for Wilbraham was activated in September, 2008. This increased pressure capability won't be fully utilized until the summer of 2009 comes along, because demand from residential irrigation systems can triple water usage which decreases our distribution system pressure by 6 to 10 psi. With the new set-up, residents are less likely to see a drop in pressure during the high demand periods. There is a pressure reducing valve at the Miller Street Chamber that instantly adjusts pressure as demand increases.

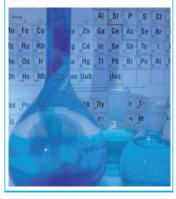
SOUTH HADLEY FIRE DISTRICT NO. 1 (PWS ID #1275000)

Within the past year, our crew has repaired 14 water main breaks throughout the distribution system. In addition, we have repaired 3 service leaks and 2 broken gate valves. These leaks have resulted in a significant loss of water for the department. In addition to the repair work, 77 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 2,400 feet of water main including fire hydrants and water services. We replaced 1,100 feet of 6" A.C. pipe with a new 12" ductile iron water main on Abbey Street between Old Lyman Road and Ann Street, and 1,400 feet of 8" A.C. pipe with 8" ductile iron water main on Taylor Street. The new mains will ensure reliability of supply, improved water quality and fire protection. The Board is thankful for the diligent efforts of our maintenance staff who installed the new distribution mains with in-house equipment. 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. Also, in an effort to preserve our history, the department has completed a restoration project on the gatehouse located in the Districts' Leaping Wells Reservoir. This project included replacing the roof, painting the gatehouse and replacement of the old wooden bridge with a metal structure to ensure access to the gatehouse.



Our professional lab staff has many years of experience and performs thousands of tests each week to make sure the water supplied meets all the federal and state standards.



TESTS BEFORE TREATMENT

We test the water as it leaves the reservoir to see how well protected our watershed is. 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 water) is one measure of overall water quality. Typical levels at Quabbin reservoir are 0.3 NTU (Nephelometric Turbidity Units), and the highest level in 2008 was 0.84 NTU. Therefore, Quabbin's turbidity level was always below both EPA's standard of 5.0 NTU and the stricter Massachusetts standard of 1.0 NTU.

MWRA also tests reservoir water for



pathogens - such as fecal coliform, bacteria, viruses, *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.

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.

HOW DID WE DO IN 2008?

No bacteria were found in any CVA community system in 2008.



TESTS AFTER TREATMENT EPA and State regulations also require many water quality tests after treatment to check the water you are drinking. MWRA follows - and even goes beyond - these tests. We conduct tens of thousands of tests per year. This testing allows us to better monitor your water.

Quabbin Reservoir Water Results - After Treatment

Compound	Units	(MCL) Highest Level Allowed	(MCLG) Ideal Goal	(We found) Detected Level-Average	Violation	Range of Detections	How it gets in the water
BARIUM	ppm	2	2	0.007	No	0.006-0.007	Common mineral in nature
FLUORIDE	ppm	4	4	0.05	No	0.03-0.06	Natural deposits
NITRATE*	ppm	10	10	0.015	No	0.013-0.015	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 ppb=parts per billion *As required by DEP, the maximum result is reported for nitrate, not the average.



WATER TREATMENT RESERVOIR TO COMMUNITY PIPELINES



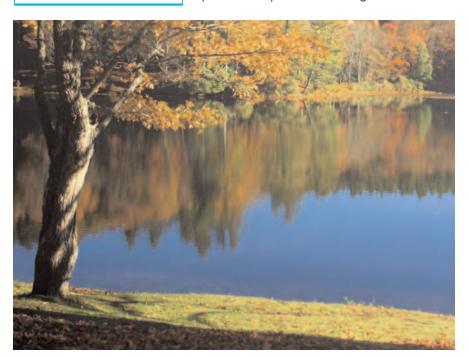
MWRA WATER: Clean, crisp water straight from the tap – no bottles, no extra cash, no costly transport, and no trash.

Because of its excellent watershed conditions and protection, Quabbin Reservoir does not need a filtration step in its treatment. The state Department of Environmental Protection set special conditions in 1991 to maintain Quabbin's high quality water.

But, even high quality water must be properly treated. MWRA's licensed treatment operators treat water at the reservoir before it enters the Chicopee Valley Aqueduct. The first treatment step is the 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. Lead results are on page 6.

CHICOPEE WATER DEPARTMENT:

The Chicopee Water Department's Corrosion Control Facility continues to provide excellent water quality by adjusting the water's pH and alkalinity levels. Sodium Carbonate and Sodium Bicarbonate (baking soda) are used to make this adjustment. 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 level 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 and the water's chemistry is adjusted to minimize corrosion well before it reaches the homes of Chicopee's residents. In 2008, there were 30 samples collected for the analysis of lead and copper in Chicopee's drinking water. The EPA has reduced the number of samples that must be collected by the Chicopee Water Department due to its successful maintenance of low to absent levels of lead and copper in the water system. The Chicopee Water Department has also continued upgrading its SCADA (Supervisory Control and Data Acquisition) computer system by adding many new alarms and better overall control of its treatment processes.

WILBRAHAM:

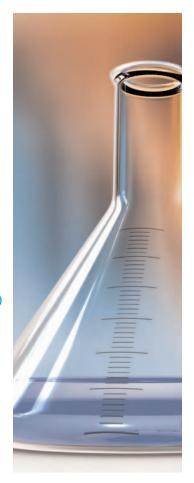
During 2008, the Water Division completed Lead & Copper sampling at 20 homes and 2 schools. This DEP required sampling was possible due to the cooperation of residents willing to perform first draw sampling at their homes. The results of the sampling were excellent; indicating our Corrosion Control Program (injecting Sodium Silicate) continues to work flawlessly as it has since its beginning in 1997. The Water Division has to sample 20 additional homes & 2 schools during 2009. If sampling results again are good then Wilbraham will return to sampling for Lead & Copper once every three years.

A new permanent Corrosion Control Facility will be built by the end of 2009. DEP required Wilbraham to sign an Administrative Consent Order (ACO) in 2008 to accomplish that task. Stantec, Inc. is the engineering consultant for the project. The new facility and associated work will cost approximately one million dollars and will be located on Miller Street, Ludlow, MA.

SOUTH HADLEY FIRE DISTRICT #1:

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 2008, we will sample the 30 sites within the distribution system yearly for the next two years. We are confident those samples will be in compliance and allow us to sample once every three years starting in 2011.

WHAT TO KNOW ABOUT LEAD IN TAP WATER



All three CVA communities met the 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 water. However, lead can get into tap water through pipes in the 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 for long time in the pipes before use.

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).



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 foods for infants.

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

Test your tap water. Contact MWRA (617-242-5323, www.mwra.com) for more tips and a list of certified labs.

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.

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 DOES THIS TABLE TELL ME? This table lists results for lead, copper, sodium, and disinfection by-products including trihalomethanes and haloacetic acids. All results for lead, copper, sodium, and disinfection by-products were IN COMPLIANCE with drinking water regulations.

Local Test Results for 2008

	Total Trihalomethanes (TTHMs) in ppb MCL=80 ppb		Haloacetic Acids (HAA5) in ppb MCL=60 ppb		Lead in ppb Action Level (AL) of 15 ppb MCLG=0		Copper in ppm Action Level (AL) of 1.3 ppm MCLG=1.3 ppm		Chlorine in ppm MRDL=4 ppm MRDL=4ppm		Sodium in mg/L
Your City or Town	Annual Average	Range	Annual Average	Range	#Samples Over Al	90% Value	# Samples Over AL	90% Value	Annual Average	Range	
Chicopee	45.0	23.6-59.9	38.9	18.2-53.9	0 of 30	0	0 of 30	0.17	0.82	0.14-1.45	14.7
South Hadley FD #1	54.8	20.0-55.1	22.3	1.3-31.4	1 of 30	10.7	0 of 30	0.02	0.46	0.03-0.9	NA
Wilbraham	56.4	21.1-55.4	19.6	1-28.8	0 of 20	4.3	0 of 20	0.13	0.3	0.2-0.7	6.0
Westover-Air Force Base	29.9	23.5-63.3	16.2	0-33.0	0 of 10	4.8	0 of 10	0.21	0.7	0.32-1.24	NA

Definitions for MCL and MCLG are on page 3. 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 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. AL=Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. ppb=parts per billion ppm=parts per million NA=not available

IMPORTANT EPA & DEP INFORMATION

AND TAP WATER



ARE THERE DRUGS IN MY DRINKING WATER?

Recently, 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 with water supplies that have wastewater discharged into them, but since MWRA's water sources are well protected, this is not a concern.

CONTAMINANTS IN BOTTLED 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, Massachusetts DEP and EPA prescribe regulations that 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 that must provide the same protection for public health.



Massachusetts DEP recommends the installation of backflow prevention devices for all

inside and outside hose connections. For more information on cross connections and how to help protect the water in your home as well as

the drinking water system in your town, please visit www.mwra.com or call 617-242-5323.

INFORMATION ABOUT CROSS CONNECTIONS



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

HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

WHERE TO GO FOR MORE INFORMATION...

Massachusetts Water Resources Authority (MWRA)	www.mwra.com	617-242-5323
Massachusetts Department 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 Department of Public Health (DPH)	www.mass.gov/dph	617-624-6000
US Centers for Disease Control and 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 Report	www.mwra.com/sourcewater.htm	617-242-5323
Information on Cross Connections	www.mwra.com/04water/html/crossconnection.htm	617-242-5323

Public Meetings

MWRA Board of Directors	www.mwra.com/02org/html/boardofdirectors.htm	617-788-1117
MWRA Advisory Board	www.mwraadvisoryboard.com	617-742-7561
Water Supply Citizens Advisory Committee	www.mwra.com/02org/html/wscac.htm	413-586-8861

Community Water Systems

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Chicopee Water Department	413-594-3420
South Hadley Fire District #1	413-532-0666
Wilbraham Water Department	413-596-2807

If you would like more in-depth information on your water quality, a monthly report is available at www.mwra.com or by calling 617-242-5323. Thank you for reading this report.