




YOUR AWARD WINNING WATER

Drinking Water
Test Results 2014
Massachusetts Water
Resources Authority 

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

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.

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

这份报告中有些重要的信息。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。

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

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。

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

इस रिपोर्ट में पीने के पानी के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद करें/पढ़ें, या किसी जानकार से इस बारे में पूछिये।

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

ထေ့ထေ့ကမ်းစားစာတိုင်းအား အိမ်ထဲရှိစက်ကန် ၂ လှည့်ကန်မှ ထိုထိုကားကားမှထွက်ရှိသောစရိတ်ထပ် ထေ့ထေ့ကမ်းစား ၊

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيدا.

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

Η έκθεση αναφορά παρουσιάζει σπουδαίες πληροφορίες για το ποσιμο νερό σας. Παρακαλώ να το μεταφράσετε ή να το εξηγήσετε με κάποιον που το καταλαβαίνει απόλυτως.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيدا.



Massachusetts Water Resources Authority
and Your Local Water Department

This report is required under the Federal Safe Drinking Water Act. 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, call 617-242-5323.



MWRA BOARD OF DIRECTORS

Matthew A. Beaton, Chairman

John J. Carroll, Vice-Chair

Joseph C. Foti, Secretary

Austin F. Blackmon

Kevin L. Cotter

Paul E. Flanagan

Andrew M. Pappastergion

Henry F. Vitale

John J. Walsh

Jennifer L. Wolowicz

Dear Customer,

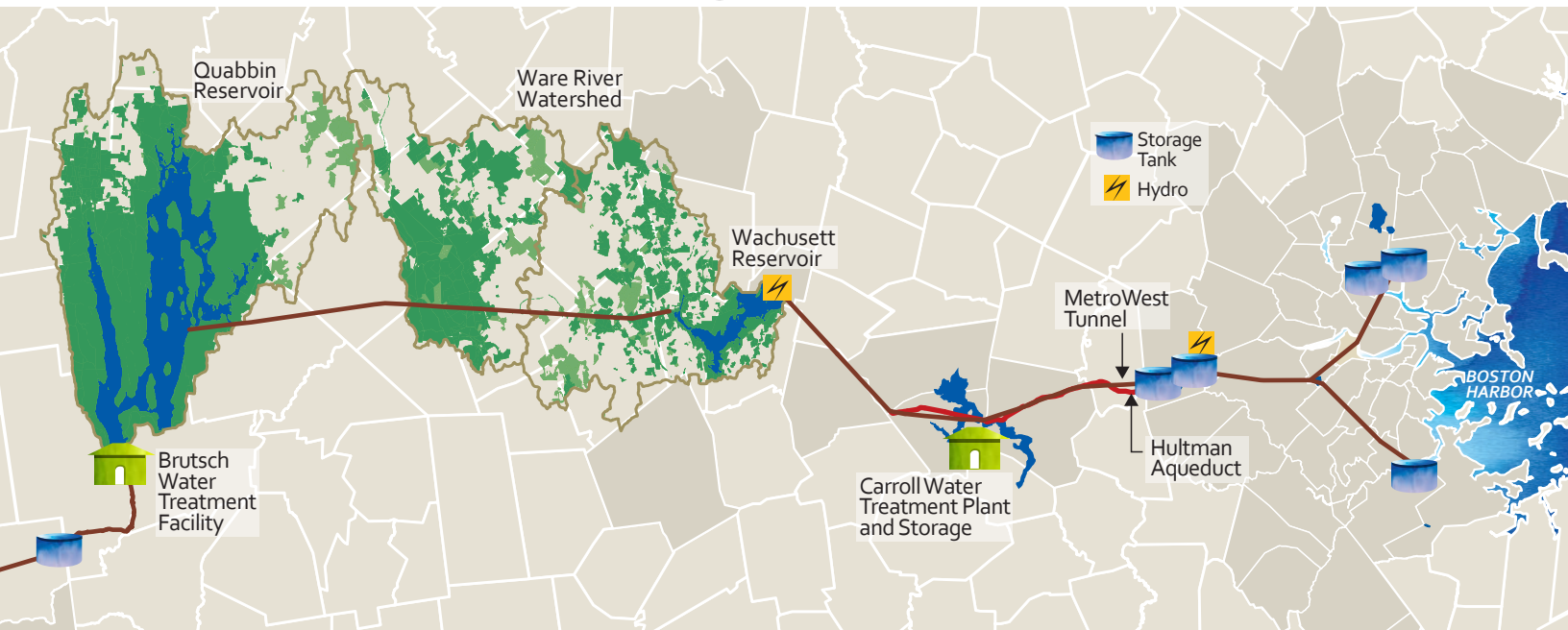
Clean, fresh water that tastes great – that’s what you expect when you fill your glass, and that’s what MWRA delivers right to your faucet. In fact, MWRA water was chosen as the best tasting water in the country in 2014 at an annual conference of water specialists. Also, this year, MWRA is proud to unveil the William A. Brutsch Treatment Facility, the brand new treatment plant for the CVA communities.

Since October 2014, the Brutsch Facility treats an average of 8 million gallons of water per day with ultraviolet light (UV), improving the quality of the drinking water we deliver to you. UV light is essentially a more potent form of natural disinfection from sunlight. UV enables MWRA to inactivate the most difficult to kill pathogens – which could potentially be in the source water – without the use of additional chemicals and any associated disinfection by-products. The UV process and MWRA’s high quality source water allow MWRA to meet new regulatory requirements cost effectively.

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
Frederick A. Laskey
Executive Director



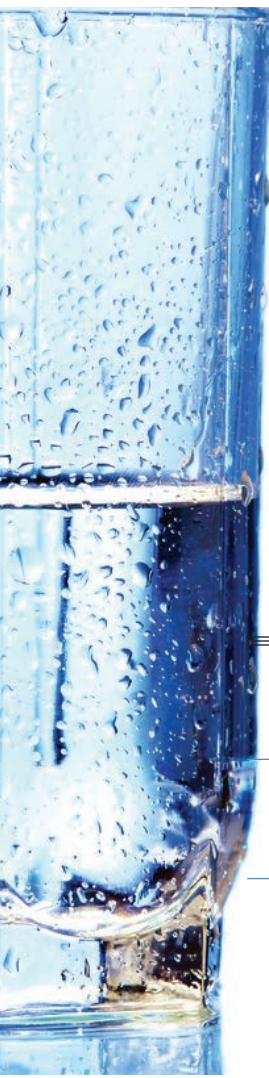


WHERE DOES YOUR WATER COME FROM?

MWRA supplies about 10 million gallons of high quality water each day to three Chicopee Valley Aqueduct communities: Chicopee, Wilbraham, and South Hadley Fire District #1 (FD#1). MWRA also serves 48 cities and towns in greater Boston and MetroWest. Your water comes from 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.



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 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 the residents, farmers, and other interested parties to maintain the pristine watershed areas.

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 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 only can be above 1 NTU if it does not interfere with effective disinfection. In 2014, turbidity was always below both the 5.0 and 1.0 standards, with the highest level of 0.55 NTU. Typical levels at the Quabbin Reservoir are 0.3 NTU.

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. In 2014, all test results were well within state and federal testing and treatment standards.

TESTING 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 (a complete list is available on www.mwra.com). Details about 2014 test results are in the table below.

William A. Brutsch served as the steward for the water system during his 32-year career with the Metropolitan District Commission and MWRA. Under his leadership, the foundations were laid for the modernization of one of the country's great water systems. Bill is buried at the Quabbin Park Cemetary, near the shores of the great waters he cared for so much.

MWRA Board member Jennifer Wolowicz at the facility dedication.

BRUTSCH WATER TREATMENT FACILITY



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	0.006	0.006-0.007	2	No	Common mineral in nature
Fluoride	ppm	4	0.05	0-0.05	4	No	Mineral in nature
Nitrate^	ppm	10	0.013	0-0.013	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.



INVESTMENTS IN YOUR WATER SYSTEM

Preparing Dams for Climate Change

Since 2006, MWRA has spent over \$21 million on dam safety projects. All MWRA dams, dikes, spillways and appurtenances are inspected routinely by licensed dam safety engineers and are in good condition.

Protecting Reservoirs While Providing Open Space

The best way to deliver clean, safe water is to start with high quality source water. Since 1985, \$134.5 million has been invested in land preservation around the Quabbin, Ware and Wachusett watersheds.

Monitoring Water Quality in Real Time

Your water is monitored by a state-of-the-art system in real time – 24 hours a day, seven days a week – to make sure it is free of contaminants. This allows MWRA to respond to changes in water quality almost immediately.

Taking Advantage of Gravity

MWRA operates three hydroelectric generators that capture the energy of the water as it flows east providing \$1.5 million in renewable energy annually.

What you need to know about lead in tap water ~~~~~

MWRA water is lead-free when it leaves the reservoirs, and MWRA and local pipes do not add lead to the water. However, lead can get into water through household plumbing including some service lines (the pipe from the street to your house). Check with your local water department if you have a lead service line. If you do, you should replace it.

Under EPA rules, your local water department must test water in homes that are likely to have high lead levels. 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 2014.

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, or MWRA at 617-242-5353 or www.mwra.com/lead.



Tap water - the smart choice ~~~~~

Although tap water and bottled water have to meet the same standards, tap water is delivered straight to your home without trucking or plastic waste. Bottled water produces over 10,000 times the amount of greenhouse gasses compared to tap water. Tap water costs less than a penny per gallon, while bottled water can cost between \$1 and \$8 per gallon. **Tap water is the smart choice!**

Most Recent Test Results	Total Trihalomethanes (TTHMs) in ppb MCL=80 ppb MCLG=no standard		Halocetic Acids (HAA5) in ppb MCL=60 ppb MCLG=no standard		Chlorine in ppm MRDL=4 ppm MRDLG=4 ppm		Lead in ppb AL=15 ppb MCLG=0		Copper in ppm AL=1.3 ppm MCLG=1.3		Sodium in ppm
	Annual Average	Range	Annual Average	Range	Annual Average	Range	# Samples over AL	90% Value	# Samples over AL	90% Value	
Chicopee	57.8	28.9-69.1	36.8	18.4-51.2	0.91	0.12-1.41	2 of 30	3.8*	0 of 30	0.13*	14.3
South Hadley FD #1	54.4	28.1-75.9	19.1	11.3-29.3	0.54	0.16-0.84	3 of 30	5.4^	0 of 30	0.03^	7.3
Wilbraham	57.9	26.4-69.9	22.6	12.5-27.9	0.8	0.6-1.1	0 of 20	1.4*	0 of 20	0.54*	7.1

KEY: The definitions for MCL and MCLG are on page 2. *Results are from 2012. Next sampling is in 2015. ^= Results from 2013. Next sampling is in 2016. **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



Your Community Information

EACH COMMUNITY HAS SPECIFIC TREATMENT AND IMPROVEMENTS THAT ARE LISTED BELOW:

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. 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.

This spring, the Chicopee Water Department will be required to collect 30 water samples which will be analyzed for lead and copper concentration. The Environmental Protection Agency (EPA) requires that these samples be collected and their results reported on the next Consumer Confidence Report in 2016. We have had great results for many years now due to our treatment processes at the Chicopee Water Treatment Plant and anticipate similar results this year.

The Chicopee Water Department maintains 274 miles of distribution water mains through over 16,000 connections to approximately 55,000 residents. Water main projects are ongoing across the service area, and we also continue to respond to leaks and maintain emergency service 24/7.

SOUTH HADLEY FIRE DISTRICT #1

Phone: 413-532-0666
PWS ID# 1275000

The District has been successfully using Sodium Silicate for corrosion control in order to comply with the federally mandated Lead and Copper Rule since 1998. Sodium Silicate increases the pH of the water and provides a microscopic coating on the inside of the residential plumbing systems to prevent possible lead leaching from solder and fixtures into the water. Our next required sampling round of 30 homes will be spring of 2016.

We installed a DEP approved seasonal booster chlorination system at our Alvord St. water tank. Throughout the past year, our disinfectant residuals have been significantly better in that end of the distribution system with the additional chlorine. Within the past year, our crew has repaired 6 water main breaks and 4 service leaks throughout the distribution system. In addition to the repair work, 3 new services and one fire line have been connected to the distribution system. We also replaced a total of 1900 feet of main on Judd Ave. and 900 feet of main on South St. including fire hydrants and water services on both streets. The new mains will ensure reliability of supply, sustain water quality and fire protection.

South Hadley had one TCR violation this year in October (5.3%) that was associated with a low chlorine residual. We recently installed a booster chlorination system at our Alvord St. tank to hopefully prevent coliform issues like this in the future.

We feel strongly that the Water Department – Fire District #1 has been operated very efficiently by providing the residents with what they expect from a municipal department at the lowest possible cost. We would also like to extend our thanks to the Town Departments for their cooperation. Please take a moment to view our website that has frequently updated information about our Department at www.shdistrict1.org.

WILBRAHAM

Phone: 413-596-2807
PWS ID# 1339000

The Corrosion Control Facility on Miller Street in Ludlow, which injects sodium silicate into the water, continues to operate successfully. The last lead and copper sampling round in 2012 was excellent indicating our Corrosion Control Program continues to work flawlessly as it has since its beginning in 1997.

During 2014 the list of duties performed by the Water Division included: maintaining the 4 water booster stations, the 2.1 million gallon water tank and our corrosion control facility; 4 water breaks were repaired, 9 new water service installations, 65 fire hydrants were flushed and checked for proper drainage, 3 fire hydrants were replaced, over 50 main line gate valves were cleaned and checked for operation and exercised, and the water main was extended on both Pease St and Daniel Drive. Total water usage in 2014 was 404,459,000 gallons as measured by the MWRA master meter.

The Massachusetts DEP Drinking Water Program granted the Water Division an extension of eighteen months to provide emergency standby electrical generators at the Brookmont Drive & Macintosh Drive water booster stations.





WHY YOUR WATER TASTES GREAT - WATER TREATMENT

Your water is treated at the Brutsch Disinfection Facility before it enters the Chicopee Valley Aqueduct. The first treatment step is disinfection of reservoir water. MWRA's licensed treatment operators carefully add measured doses of chlorine, and then further treat the water with UV light. Both disinfection processes are designed to kill pathogens (germs) that may be present in the water. 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.

MWRA completed an ultraviolet light (UV) disinfection plant in 2014 to meet new EPA standards. With UV light, CVA water now has state-of-the-art disinfection, which will ensure clean water for many years to come.

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 2014.

Award winning tap water!

In 2014, MWRA won **Best Tasting Water in the US** at the American Water Works Association Annual Conference. We competed against water suppliers from across the country. MWRA also received the Public Water System Award for excellent performance from the Massachusetts Department of Environmental Protection.



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

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

The 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 works

On average, MWRA delivers 200 million gallons of water each day – over 120 million gallons less than it did in the 1980s.

