



I should know about your



YTIROHTUR SECOURCES AUTHORITY





Massachusetts Water Resources Authority and Chicopee, South Hadley FD #1, Wilbraham

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This is a "right-to-know" report required to be sent to you under the U.S. environmental protection laws. It contains important information on the quality of your drinking water!

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, llamenos al telefono 617-788-1190.

La relazione contiene impor-tanti 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. Tra-duza-o ou peça a alguém que o ajude a entendê-lo melhor.

Sprawozdanie zawlera ważne informacje na temat jakości wody w Twojej miejscowści. Poproś kogoś o przellurnaczenie go lub porozmawiaj z osoba która je dobrze rozumie

هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

يحتوي هذا التقرير على معلومات

σπουδαιες πληροφορειες για το ποσιμο νερο σας. Πρακακλω να το μεταφρασετε η να το σξολειασετε με καποιον που το καταλαβαινή απολητως.

мацию окачестве воды в Вашем районе. Переведите его или попросите другаб, хорошо понимающего текст, объяснить. Вам его содержание.

Im Bericht steht wichtige Information über die Qualität des Wassers Ihren Gemeinschaft. Der Bericht soll übersetzt werden, oder sprechen Sie mit einem Freund, der ihn gut aversteht.

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 请能看得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 "पीने के पानी" के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिये, या किसी जानकार से इस बारे में पळिये।

របាយការណ៍នេះមានពត៌មានសំខា ន់អំពីទឹកបរិភោក ។ សូមបកប្រែ 지역의 수질에 관한 중요한 정보 ឬពិគ្រោះជាមួយអ្នកដែលមើលយល់ របាយការណ៍នេះ ។

이 보고서에는 귀하가 거주하는 가 들어 있습니다. 이것을 변역 하거나 충분히 이해하시는 친구 와 상의하십시오.

Bản báo cáo có ghi những chi 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.

Le rapport contient des infor-mations concernant la qualité de l'eau de votre communauté. Faites-le traduire, ou parlez-en à un ami qui le comprend bien.

LARGE PRINT VERSION OF THIS REPORT IS AVAILABLE. PLEASE CALL US AT 617-242-5323 FOR A COPY.

a letter from the EXECUTIVE DIRECTOR





Dear Customer:

June, 2004

Once again, I am pleased to send you this annual report on your drinking water quality. With the help of your local water and health department, the report describes how we treat and deliver the tap water to your home. It also includes the test results for 2003 and other important information – and the news is good: excellent source water, major improvements in delivery and facilities, and high quality tap water.

MWRA and your local water department have continually improved the Chicopee Valley system. These improvements include a new tank in 1999 and new disinfection facilities in 2001. Future construction is planned to improve system pipelines and use a stronger disinfectant. These advances will ensure future generations that their water is top quality through the century. We have been working closely with local water departments to make certain that these new facilities are brought on-line on schedule without any disruptions to service.

I hope you will take a few moments to read this important report on your water. MWRA has great confidence in the water we deliver to over 2 million customers and we hope that this report will give you the same confidence. Please contact us if you have any questions or comments about your water quality, or any of MWRA's programs.

tapintowater.

share your THOUGHTS

Your comments on all of our reports help us improve them. We have continued to keep costs down on this report. Each copy costs only 31 cents to print and mail. Give us a call, send a letter or e-mail, and let us know what you think.

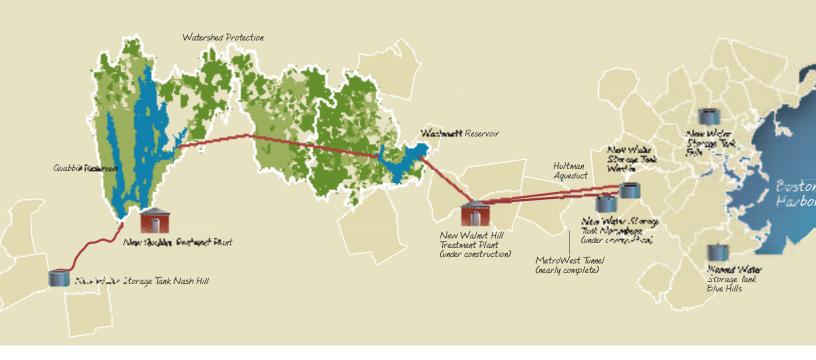
MASSACHUSETTS WATER RESOURCES AUTHORITY 100 FIRST AVENUE, BOSTON, MA 02129 (617) 242-5323, WWW.MWRA.COM ESPAÑOL 617-788-1190

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Executive Director

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THIS REPORT IS REQUIRED UNDER THE FEDERAL SAFE DRINKING WATER ACT PUBLIC LAW 104-12, SECTION 1414(C)(4) MWRA PWS ID #6000000, CHICOPEE PWS ID #1061000, SOUTH HADLEY, FD ID #1339000, WILBRAHAM PWS ID #1275000



Where does your Watercome from?

MWRA SUPPLIES WHOLESALE WATER IN THE CHICOPEE VALLEY TO CHICOPEE, WILBRAHAM, AND SOUTH HADLEY FIRE DISTRICT #1 (FD#1). Your water comes from Quabbin Reservoir, which provides about 10 million gallons of high quality water each day to these three communities. Water from the Ware River can add to the supply at times. MWRA also serves 40 cities and towns of greater Boston and MetroWest.

Rain and snow falling on the Quabbin watershed - 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, including low levels of natural radioactive minerals, 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 contaminants 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 by the MWRA, and the watershed patrolled daily by the Department of Conservation and Recreation (DCR).

QUESTION

How would I know about a problem with the water supply?

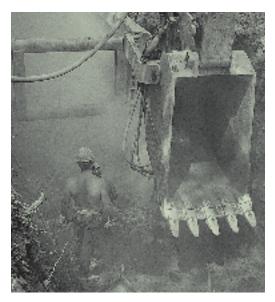


MWRA and your local water department keep a close watch on the water supply. The law requires that you be told if there is a problem with your water. You would get the news by radio, television and newspapers, from MWRA, your local water and health departments, and the state Departments of Public Health (DPH) and Environmental Protection (DEP).

QUESTION

MAJOR IMPROVEMENTS underway

Water must travel through the 15-mile Chicopee Valley Aqueduct and through some hundreds of miles of local distribution pipes under your street before it reaches your tap. To continue providing high quality water, each part of the water system needs routine maintenance and, when necessary, major improvements or new facilities.



MWRA - STORAGETANK & DISINFECTION FACILITIES

The covered storage tank was 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 a more consistent primary disinfection for your water.

MWRA - FUTURE IMPROVEMENTS

New pipelines are planned to allow reliable delivery, even in emergencies. Construction is expected to begin in 2004. Studies are underway on new disinfection processes using ultraviolet (UV) light to naturally inactivate pathogens.

CHICOPEE

In 2003, 1120 feet of 4 inch cast iron pipe and 6353 feet of 8 inch cast iron and cement pipe have been replaced, with 2235 feet of new 8 & 12 inch

ductile iron pipe installed to better provide fire protection and improve overall water quality. Additionally, in cooperation with MWRA, the Water Department is involved with designing system redundancy for the Chicopee Valley Aqueduct to ensure an uninterrupted supply of water.

SOUTH HADLEY FIRE DISTRICT #1

In the past year, twenty-six new services have been connected to the distribution system. As part of the District's ongoing commitment to improving the distribution system, the Department replaced 1600 ft of 8 inch mains along Lawn and Park streets. Three fire hydrants were replaced as well. The new mains will improve water quality, fire flows, and provide years of reliable service in both areas. The Water Department personnel installed the water main, which resulted in a considerable cost savings to the District. Water mains in the future will continue to be replaced by the Department's staff when conditions and time are favorable. To assist in this effort, the Department is upgrading and purchasing equipment to provide reliability for future projects.

WILBRAHAM

During 2003, the Water Department repaired 6 water main breaks and installed 16 new water services. Total water usage was 405,824,000 gallons, approximately 96.7% of the last ten-years average water consumption. On Pidgeon Drive, the Water Department is installing a water main from Ruth Drive to Main Street. Water service laterals for every house on Pidgeon Drive will also be provided. To date, 350 feet of 8 inch ductile iron pipe has been installed for this project. On Woodsley Drive, the Water Department replaced twelve water service saddles that had been installed on the water mains, as part of the original development in 1987. The original iron saddles had corroded badly and had been a source of two water breaks during 2003. The newly installed saddles are stainless steel and should last indefinitely. Completion of this project was given a top priority and was completed on October 15, 2003. The record cold weather of January and February 2003 resulted in a record number of frozen water pipes and water meters. During last winter, the Water Department responded to 27 freeze-up calls that were a direct result of the weather.

How does MWRA protect my water?

DCR rangers, in partnership with MWRA, patrol the Quabbin and Wachusett Reservoirs and incoming streams within the watershed every day. The water is tested daily for many parameters, and many more tests are performed weekly and monthly. Operators monitor the water that comes to your community 24 hours a day, 365 days a year.



Also, in response to any heightened alerts from the Department of Homeland Security, MWRA has taken extra security steps including locking down operational facilities, added facility checks, increased water quality monitoring, and many other security measures.

QUESTION

My water has a "strange" taste or odor sometimes. Can I drink it?



Sometimes algae can cause a "fishy" or "grassy" odor. You can safely drink, cook with, or bathe in this water. Algae are normal, harmless plants that appear in the reservoirs at certain times of the year. MWRA treats the reservoirs to control algae. If you have a concern, call MWRA or your local water department.



WATER TEST RESULTS -

before treatment

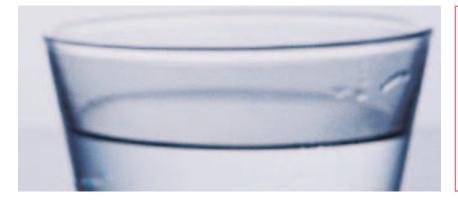
Your water is tested each step of the way – from the reservoir to the tap. Test results show few contaminants are found in the reservoir water. Those few that are found are present in very small amounts, well below EPA's standards. Turbidity (or cloudiness of water) is one measure of overall water quality. Typical levels are 0.3 NTU (Nephelometric Turbidity Units). Quabbin's turbidity level was always below EPA's standard of 5.0 NTU and the stricter Massachusetts standard of 1.0 NTU, with the highest value of 0.73 NTU.

MWRA also tests Quabbin reservoir water for pathogens (often called "germs") - such as fecal coliform, bacteria, 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 standards. No *Cryptosporidium* or *Giardia* was found in samples taken every other week.



WATER TEST RESULTS - after treatment

EPA and State regulations also require many water quality tests after treatment. MWRA follows, and even goes beyond, these required tests. This allows us to better monitor your water.



WHAT DOESTHIS TABLE TELL ME?

EPA requires that we test for over 120 contaminants. MWRA found only the 6 listed here as well as those listed on the next pages.

WHAT IS THE BOTTOM LINE?

All of the levels are lower than EPA's Maximum Contaminant Levels (MCLs).

WATER TEST RESULTS - AFTER TREATMENT

compound	units	(MCL) highest level allowed	(we found) detected level	range of detections	(MCLG) ideal goal	violation	how it gets in the water
Barium	ppm	2	0.0059	0.0056-0.0059	2	No	Common mineral in nature
Fluoride	ppm	4	0.08	0.02-0.08	4	No	Erosion of natural mineral deposits
Nitrate	ppm	10	0.03	0.01-0.03	10	No	Natural deposits, stormwater/fertilizer runoff
Alpha Emitters	pCi/L	15	0.4	0.4	0	No	Erosion of natural mineral deposits
Beta Particles	pCi/L	50*	2.1	2.1	0	No	Erosion of natural mineral deposits
Combined Radium	pCi/L	5	0.1	0.1	0	No	Erosion of natural mineral deposits

KEY: MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment 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-about one drop in one 55 gallon barrel of water ppb = parts per billion-about one drop in 1000 barrels of water pCi/I = picoCuries per liter *EPA considers 50 pCi/L to be the level of concern for beta particles Avg = Average

RESULTS FOR TREATED WATER-IN COMMUNITY PIPELINES

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, and can also be found in soil, on plants, and other places. Most of the time, these bacteria are not harmful to humans. 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 (germ) found in human and animal fecal waste that can cause illness.

HOW DID WE DO IN 2003?

No coliform was found in any CVA community systems in 2003.

WATER TREATMENT - from the reservoir to community pipelines

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 we carefully add measured doses of chlorine to water to kill pathogens that may be present. Licensed operators from CVA communities perform additional booster disinfection, when needed, at the point where the local pipes take water from the Aqueduct. This process, called

residual disinfection, protects the water while in the local pipes. Each community also treats the water to reduce leaching of lead from home plumbing.

CHICOPEE WATER DEPARTMENT:

The treatment plant adds sodium bicarbonate (similar to baking soda) and three other compounds to adjust the water chemistry. This treatment has eliminated "red" water problems at the tap caused by iron from the water mains, green stains on home plumbing fixtures caused by copper, and the absorption of lead from home plumbing. The lead and copper data on the next page shows that this treatment has been very successful. As a result, Chicopee has been granted the option to reduce the frequency of sampling under the regulations from 30 sites once every six months to 30 sites once every three years. The next round of lead and copper sampling will take place in the spring of 2004.

SOUTH HADLEY FIRE DISTRICT #1

The Departments' continued use of sodium silicate for corrosion control is still successful in complying with the Department of Environmental Protection (DEP) Lead and Copper Rule. Due to this successful use of silicate, the District successfully passed the requirements for Lead and Copper three years consecutively and is now required to sample every three years.

WILBRAHAM

The Water Department's Corrosion Control Program (CCP) continues to operate very well, as our lead and copper results have shown. The program is based on the flow-paced injection of sodium silicate into Quabbin water. Due to our effective CCP, DEP currently requires Wilbraham to sample for lead and copper only once every three years. We are currently scheduled to accomplish the next round of lead and copper sampling in the summer of 2004.

FURTHER INFORMATION ON RADON

MWRA has been working with EPA and other researchers to define new national drinking water rules by testing for compounds which are not regulated, including radon. In 2003, radon was found once at a level of 11 picoCuries per liter. Radon is a radioactive gas that is found in soil and tap water throughout the United States. Compared to radon entering the home through soil, radon entering the home through tap water is a very small source of radon in indoor air. For additional information, call 1-800-RADON95 or call EPA's Radon Hotline, 1-800-SOS-RADON.



My water is cloudy or discolored once in a while. Can I drink it?

You can safely drink, cook with, or bathe in this water. If you have a concern, call the MWRA or your local water department.

Water is piped under pressure throughout the system. Sometimes air can become trapped in the water causing cloudiness. This happens more often in cold weather. This cloudiness is only temporary, and the water clears up in a short time.



Rust from old iron pipes can cause a red, brown, or yellow color in water.
Changes in water speed or direction in your local pipes cause rust to be carried along. This can happen when the valves are being repaired, the system is being flushed or tested, or fire hydrants are in use. Wait until the water is clear before doing laundry to avoid staining clothes.

What should I do about lead in tap water?

- Be careful of other places you may find lead in or near your home.
 Paint, soil, dust, and some pottery may contain lead.
- Run the tap until after the water feels cold. Then fill a pitcher with water and place in refrigerator for future use.



- Never use hot water from the faucet for drinking or cooking, especially when making baby formula.
- Never boil water to remove lead. Boiling water for an extended time may make the lead more concentrated.
- Get your water tested for lead. Call 617-242-5323 or go to www.mwra.com for a list of laboratories and more information on lead.
- Ask your local water department if there are lead service pipes leading to your home.

GOOD NEWS ABOUT Lead in tap water



MWRA's source water and the water in distribution pipes in your community is lead free. However, water left in contact with lead pipes or

fixtures for a long time can leach out lead pipes, lead solder, and some brass fixtures, or the service line that connects the distribution main to your home plumbing, if it is made of lead.

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 met the EPA standards for lead in tap water.

IMPORTANT INFORMATION FROM EPA ABOUT LEAD

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap until after it feels cold before using tap water.

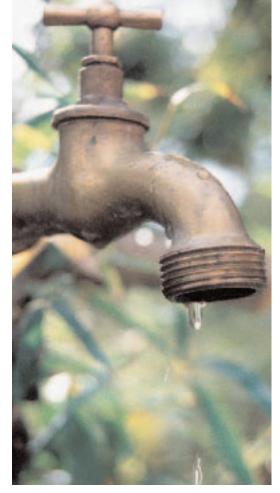
WHAT DOESTHIS TABLE TELL ME?

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 2003

	Total Trihalomethanes in ppb (TTHMs) MCL=80 ppb MCLG=0		Haloacetic Acids in ppb (HAA5) MCL=60 ppb MCLG=0		Lead in ppb Action Level of 15 ppb MCLG=0		Copper in ppm Action Level of 1.3 ppm MCLG=1.3 ppm		Chlorine in ppb MRDL=4 ppm MRDLG=4 ppm		Sodium in ppm
Your city or town	Annual Average	Range	Annual Average	Range	# Sites	Results	# Sites	Results	Annual Average	Range	
Chicopee	32	19-50	21	10-38	0 of 30	2	0 of 30	0.13	0.55	0.02-0.96	15.7
South Hadley FD #1	38	19-47	15	8-27	1 of 15	8.4	1 of 5	0.036	0.33	0.05-0.7	6.7
Wilbraham	35	18-57	12	0.5-32	0 of 15	10.7	0 of 15	0.055	0.35	0.1-0.7	6.2
Westover Air Force Base 1	NR	NR	NR	NR	0 of 6	12.6	0 of 6	0.20	NR	NR	NR

For definitions of MCL (Maximum Contaminant Level) and MCLG (Maximum Contaminant Level Goal), see page 4. 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 which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. ppm = parts per million ppb = parts per billion NR = Testing not required 1 Westover Air Force Base receives wholesale water from Chicopee. Consumers in these systems should see Westover insert page for water quality analysis.



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 EPA's Safe Drinking Water Hotline

important INFORMATION from EPA & DEP...

(1-800-426-4791) or your local water supplier. 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 which must provide the same protection for public health.

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 Safe Drinking Water Hotline (1-800-426-4791).

QUESTION

Is my water considered hard or soft?

Your tap water is considered soft, and it is good for laundry and shampooing. Water is measured by "hardness", which is the amount of dissolved minerals in your water. MWRA water has a hardness of about 12-milligrams/liter (or less than 1 grain/gallon by older measures). For comparison, hard water would have greater than 75-mg/1 hardness. If you have any questions on the character of your water, feel free to contact us.



WHERE TO GO FOR FURTHER INFORMATION-

HEALTH ISSUES	WEBSITES	PHONE
Massachusetts Department of Public Health (DPH)	www.mass.gov/dph	617-624-6000
US Centers for Disease Control & Prevention (CDC)	www.cdc.gov	800-311-3435
List of State Certified Water Quality Testing Labs	www.mwra.com/water/html/qual6.htm	617-242-5323
WATER SYSTEM & REGULATIONS		
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 & Recreation	www.mass.gov/dcr	617-626-1250
Source Water Assessment and Protection Report	www.mwra.com/sourcewater.htm	617-242-5323
COMMUNITY WATER SYSTEMS		
Chicopee Water Department		413-594-3420
South Hadley Fire District #1		413-532-0666
Wilbraham		413-596-2807