



# MASSACHUSETTS WATER RESOURCES AUTHORITY

## WATER QUALITY UPDATE An Analysis of June 2002 Sampling Data

This is a monthly report containing information about the quality of water supplied by MWRA. We hope this report is useful to you as a local water supplier, public health official, water consumer or observer of MWRA's system performance. It provides a more detailed review of water quality than the annual water quality report that is mailed each June to every customer in our service area. To view this annual report, please visit [www.mwra.com/water/html/awqr.htm](http://www.mwra.com/water/html/awqr.htm).

### Indicators of Water Quality

MWRA routinely uses six general indicators of water quality:

- Microbial
- Corrosiveness (pH and alkalinity)
- Disinfection By-Products
- Turbidity & Algae
- Disinfectant Residual
- Mineral Analysis

Tests are conducted on water sampled at the source reservoirs (source or raw water) and also on water after treatment that is sampled from MWRA or community lines (treated water). A map on Page 2 indicates the location of reservoirs, treatment facilities, and service communities. Testing frequencies vary by parameter. The following pages contain information on all of the above indicators.

### June 2002 Highlights

- **MWRA achieved CT disinfection requirements for the month** at both Ware Disinfection Facility (WDF) and Cosgrove Disinfection Facility (CDF). Chlorine dose at CDF remained at 1.6 mg/L. Dose at Ware Disinfection Facility remained at 1.4 mg/L. Dose at Norumbega remained at 1.6 mg/L. Levels of disinfection by-products (DBPs) were comparable to those in May. No town violated the Total Coliform Rule criteria. CT results appear on Page 5. TCR results are on Page 6. DBP results appear on Page 7.
- **A portion of Revere's water system was shutdown on June 19th** at the Revere Beach Parkway at Woods Avenue in order for new piping to be installed by MWRA staff. The work was coordinated with Revere Public Works and Revere Fire Department. Notification was placed in the newspapers and on the Revere cable TV station. Work was completed the week of the 24th. There was only one no water complaint.
- **Copper sulfate was added to the Wachusett Reservoir to treat the algae *Anabaena*** on June 20th. The Wachusett communities were notified and informed that the treatment may cause a grassy/fishy odor or taste in the water that will clear up in a few days. No complaints were reported. See page 4.
- **About 2,000 residents and businesses reported telephone outages June 25th.** The disruption was triggered at about 2:15 p.m. when Verizon failed to properly locate its buried cables and a contractor with the MWRA working on a construction project at the corner of Spurr Street and Western Avenue in Allston accidentally drove a steel piling through this set of cables severing the line. The location of the buried cables were improperly labeled. Verizon is investigating the mislabeling of the buried cables as well as working on the restoration of service to its customers.
- **An important new web based source for health care providers** with information on drinking water and health issues has recently been developed by the American Water Works Association and the Arnot Ogden Medical Center. The website is [www.WaterHealthConnection.aomc.org](http://www.WaterHealthConnection.aomc.org). See page 9 for more information.
- **For your convenience, and to help save money and paper, you can now receive the monthly *Water Quality Update* on-line instead of via post. Each month, we will send you an e-mail with the highlights and the link to the *Water Quality Update* on-line on our web-page. Please send an e-mail to [Joshua.Das@mwra.state.ma.us](mailto:Joshua.Das@mwra.state.ma.us) if you are interested.**

*For more information, please contact MWRA at (617) 242-5323, or visit [www.mwra.com](http://www.mwra.com)*

*100 First Avenue, Charlestown Navy Yard, Boston, MA 02129.*

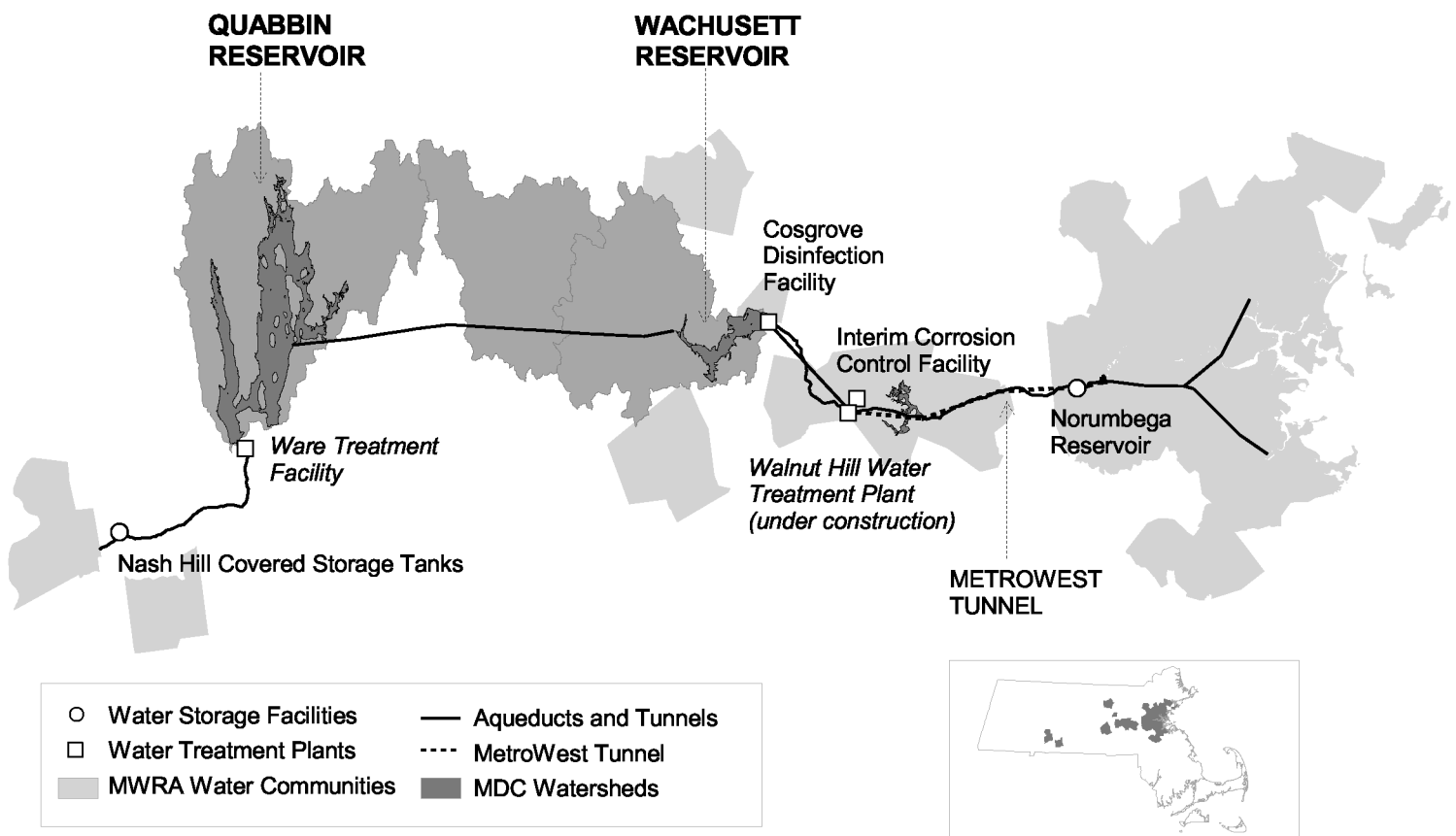
*For further information regarding health concerns, please contact the Department of Public Health/Division of Epidemiology at (617) 983-6800 or Boston Public Health Commission at (617) 534-5611.*

## The Water System

MWRA provides about 250 million gallons of water each day to 46 cities and towns in Massachusetts. Each municipality is responsible for distributing the water within its own community. Thirty of the customer communities are fully supplied by MWRA. The other communities use MWRA water to augment their own supplies, either on a regular basis or in times of water shortage. More than two million people are served by the MWRA water supply system.

Quabbin Reservoir is the primary source of water for our system and one of the country's largest water supply impoundments, with a capacity of 412 billion gallons. Quabbin water represents source water for the Chicopee Valley Aqueduct (CVA) system, serving South Hadley Fire District #1, Chicopee, and Wilbraham. Water is transferred from Quabbin Reservoir to the 65 billion gallon Wachusett Reservoir in Clinton via the Quabbin Aqueduct. Wachusett water represents source water for MetroWest and Metropolitan Boston communities.

The watershed areas of the Quabbin and Wachusett Reservoirs total 401 square miles. The Metropolitan District Commission (MDC), which manages the watersheds, and MWRA are committed to protection of the water supply through aggressive watershed protection as the first line of defense against water contamination. Three-quarters of the watersheds are protected lands and over 80% are either forest or wetlands.



### Federal Safe Drinking Water Act (SDWA)

The SDWA sets standards for source and treated water quality. The standards relate to coliform, turbidity, watershed protection, disinfection and disinfection by-products, over 120 potential chemical contaminants, and waterborne disease outbreaks. MWRA monitors for these parameters on schedules ranging from daily to annually.

Customer communities must also meet certain standards under the SDWA concerning distribution of treated drinking water. The Total Coliform Rule (TCR) helps to alert communities to possible microbial contamination as well as the adequacy of residual disinfection within the local distribution system. MWRA provides testing services for many of the communities, and tests over 1500 samples per month. Under the SDWA, a violation of the TCR occurs when greater than 5% of the samples in a community are positive for total coliform during a month.

# Source Water – Microbial Results

## June 2002

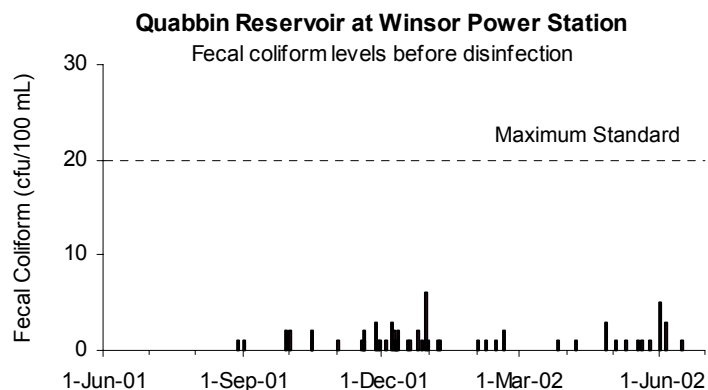
### Source Water - Microbial Results

Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. Fecal coliform is a subclass of the coliform group which are identified by their growth at temperatures comparable to those in the intestinal tract of mammals. They act as indicators of possible fecal contamination. The Surface Water Treatment Rule for unfiltered supplies requires that no more than 10% of source water samples prior to disinfection over any six-month period have over 20 fecal coliforms per 100ml.

#### Sample Site: Quabbin Reservoir

Quabbin Reservoir water is sampled at Winsor Dam before entering the CVA system. MWRA met the six-month running average standard for fecal coliform continuously at this location over the last year.

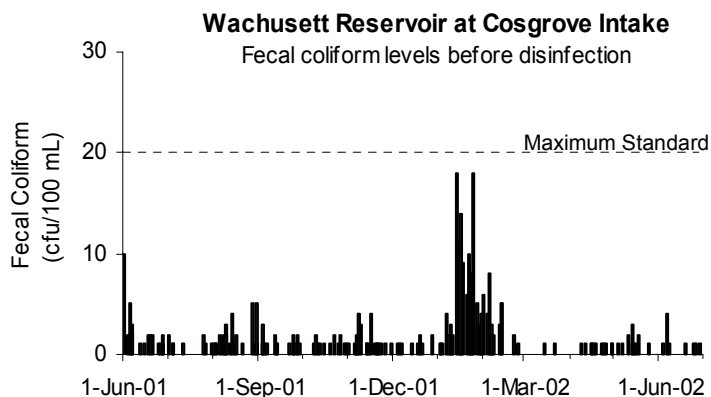
3 of 30 samples were positive during June. Colony counts were in the single digits.



#### Sample Site: Wachusett Reservoir

Wachusett Reservoir water is sampled at Cosgrove Intake before entering the MetroWest and Metropolitan Boston systems. MWRA met the six-month running average standard for fecal coliform continuously at this location over the last year.

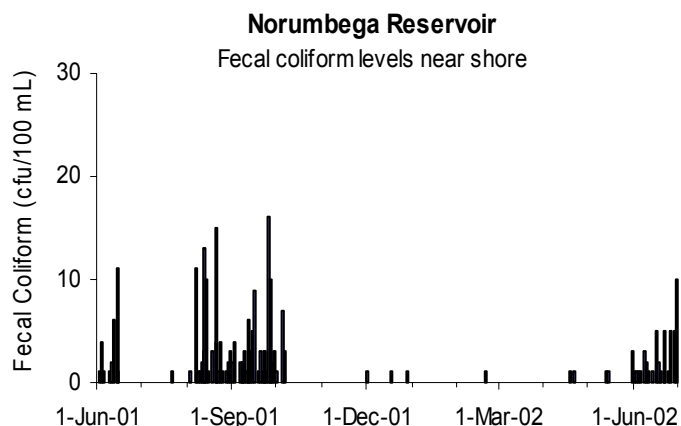
7 of 20 samples were positive for fecal coliform. Colony counts were in the single digits.



#### Sample Site: Norumbega Reservoir

Norumbega Reservoir in Weston receives flows from Wachusett for temporary storage each day during low demand hours, which are then discharged during high demand. Norumbega water is sampled from the shore near the gatehouse before disinfection. Coliform levels are elevated periodically, partly because samples collected from the shore of this small reservoir are more susceptible to local disturbances. Covered storage is scheduled to replace this open reservoir in 2004.

17 of 30 samples from water taken along the shore were positive for fecal coliform during June. The colony counts were below 20 cfu/ 100 mL.



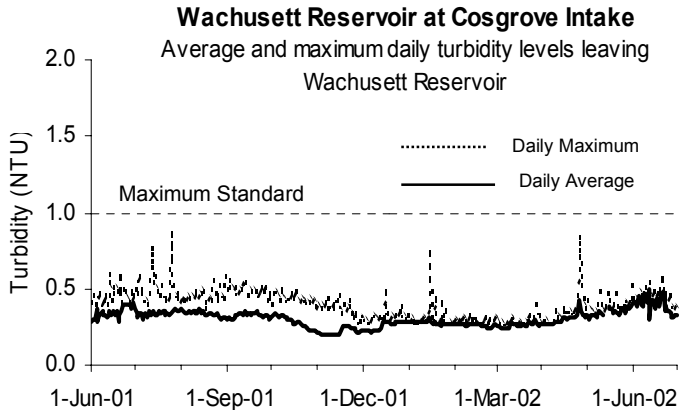
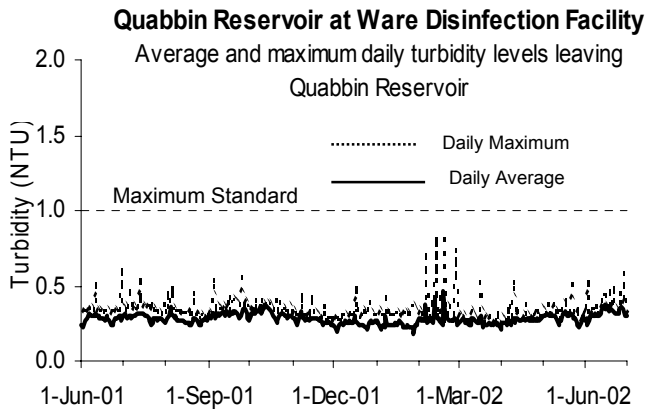
# Source Water – Turbidity and Algae Results

## June 2002

### Source Water – Turbidity Results

Turbidity is a measure of suspended and colloidal particles including clay, silt, organic and inorganic matter, algae and microorganisms. The effects of turbidity depend on the nature of the matter that causes the turbidity. High levels of particulate matter may have a higher chlorine demand or may protect bacteria from the disinfectant effects of chlorine, thereby interfering with the disinfectant residual throughout the distribution system.

Samples for turbidity from Quabbin Reservoir are collected at the Ware Disinfection Facility before chlorination. These samples represent reservoir water entering the CVA system. Samples are also taken at Cosgrove Intake, representing water quality before chlorination for source water serving the MetroWest and Metropolitan Boston systems. The Massachusetts Department of Environmental Protection standard for source water turbidity for unfiltered water supply systems is a maximum of 1.0 NTU; the EPA standard is a maximum of 5.0 NTU. Maximum turbidity results at Quabbin Reservoir and at Wachusett Reservoir were within DEP standards for the month.

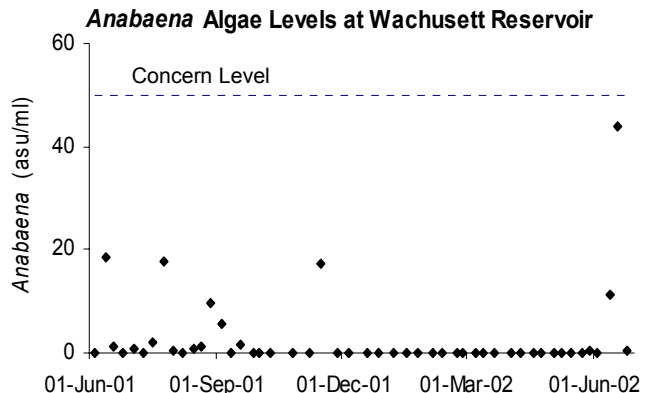
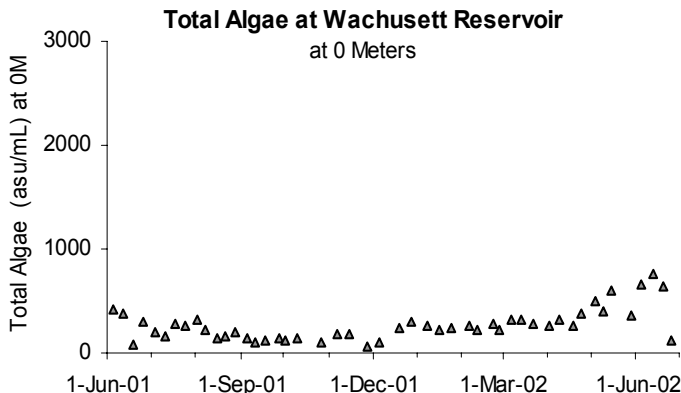


### Source Water – Algae Results

Algal levels in reservoirs are monitored by MDC and MWRA. These results, along with taste and odor complaints, are used to make decisions on source water treatment for algae control.

Most taste and odor complaints at the tap are due to algae, which originate in source reservoirs, typically in trace amounts. Occasionally, a particular species grows rapidly, increasing its concentration in water. When *Synura*, *Anabaena*, or other nuisance algae blooms, MWRA treats the reservoirs with copper sulfate, an algacide.

Copper sulfate was added June 20th to treat *Anabaena* when levels reached MWRA's concern level of 50 asu/mL. Of 72 complaints received during June from local water departments, only 17 concerned taste and odor that may be due to algae.



# Treated Water – Disinfection and pH Results

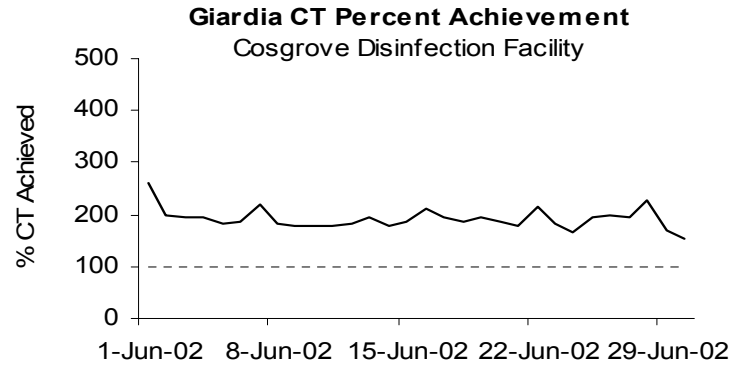
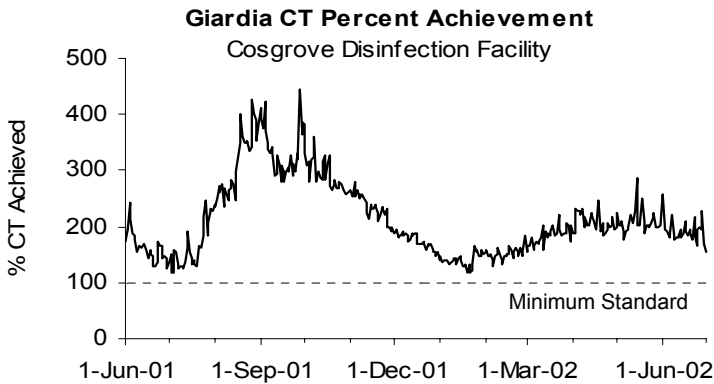
## June 2002

### Treated Water - Primary Disinfection

#### Wachusett Reservoir at Cosgrove Disinfection Facility (MetroBoston Supply):

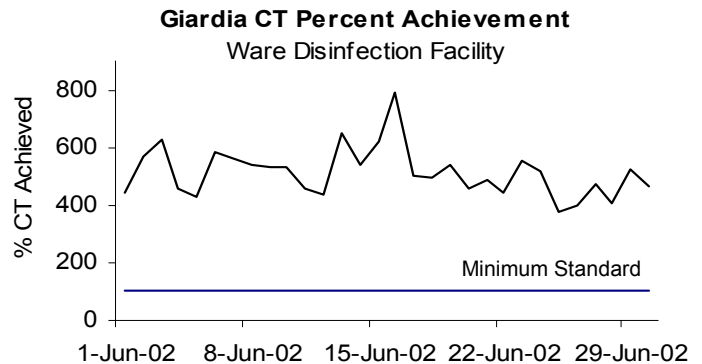
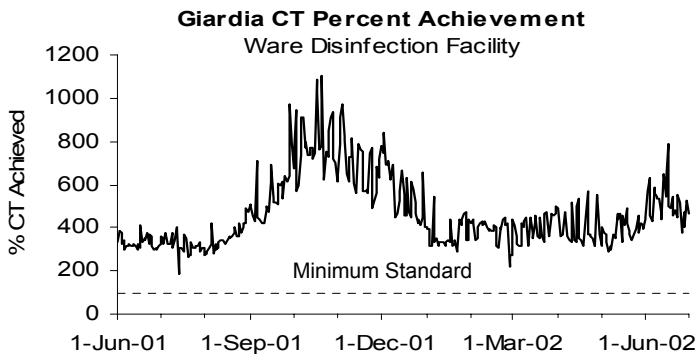
MWRA provides disinfection adequate to achieve EPA's requirement of 99.9% inactivation of *Giardia* cysts and 99.99% inactivation of viruses in drinking water using a calculation based on three sample points that DEP approved in June, 1999. CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement. The concentration (C) of the disinfectant in the water over time (T) yields a measure of the effectiveness of disinfection, CT. The required CT varies with disinfectant type, water temperature, pH, and other factors. MWRA calculates daily CT inactivation rates at maximum flow, as specified by EPA regulations.

Chlorine dose remained at 1.6 mg/L. CT was met each day in June, as well as every day for the last year.



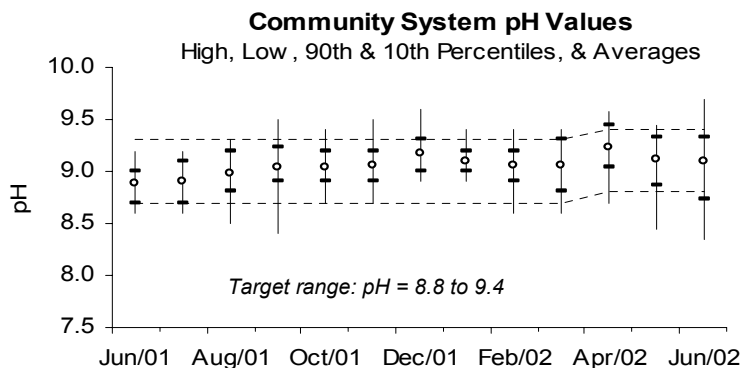
#### Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

Chlorine dose remained at 1.4 mg/L. CT was met each day in June, as well as every day since reporting began in August, 2000.



### Treated Water – pH Results

MWRA adjusts the alkalinity and pH of Wachusett water to reduce its corrosivity in order to minimize the leaching of lead and copper from service lines and home plumbing systems into the water. MWRA's target for distribution system pH was raised from 9.0 to 9.1 on March 25th per DEP. Upper and lower target bands were adjusted to 8.8 and 9.4: MWRA's goal is to have all distribution system samples fall between these targets. MWRA staff collects and analyzes samples for pH from 26 community locations on a biweekly schedule to measure pH levels. In June, about 95% of the samples were within the target range.



# Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

## June 2002

### Background

While all communities collect bacteria samples for the TCR, 36 cities and towns (including Westboro State Hospital) use the MWRA Laboratory for Total Coliform Rule compliance testing. These communities collect samples for bacteriological analysis and measure water temperature and chlorine residual at the time of collection. Cambridge conducts their own monitoring. The other 9 MWRA customer communities have their samples tested elsewhere and these towns should be contacted directly for their monthly results.

There are 144 sampling locations in which the MWRA is required to report TCR results. This includes a subset of the communities as well as the tanks, pumping stations and reservoirs.

The SDWA requires that no more than 5% of all samples may be total coliform positive in a month (or that no more than 1 sample be positive when less than 40 samples are collected each month). Public notification is required if this standard is exceeded.

*Escherichia coli* (*E.coli*) is a specific coliform species that is almost always present in fecal material and whose presence indicates likely bacterial contamination of fecal origin. If *E. coli* are detected in a drinking water sample, this is considered evidence of a critical public health concern. Additional testing is conducted immediately and joint corrective action by DEP, MWRA, and the community is undertaken. Public notification is required if follow-up tests confirm the presence of *E. coli* or total coliform. MWRA considers a disinfectant residual of 0.2 mg/L a minimum target level at all points in the distribution system.

### Highlights

Four of the 1696 samples (0.43% system-wide) tested positive for confirmed total coliform during the month of June. 3 of 690 MWRA samples tested positive for confirmed total coliform. No samples tested positive for *E. coli*. No town failed the TCR rule for the month.

All thirty-six communities that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. Nineteen communities had one or more samples with a disinfectant residual lower than 0.2 mg/L.

TCR results by Community								
Town	Samples Tested for Coliform (a)	Total Coliform # (%) Positive	E.coli % Positive	Public Notification Required?	June 2002 Minimum Chlorine Residual (mg/L)	June 2001 Minimum Chlorine Residual (mg/L)	June 2002 Average Chlorine Residual (mg/L)	June 2001 Average Chlorine Residual (mg/L)
ARLINGTON	56	0 (0%)	0.0%		0.01	0.15	0.68	1.08
BELMONT	32	0 (0%)	0.0%		0.02	0.20	0.63	1.02
BOSTON	224	0 (0%)	0.0%		0.35	0.48	1.27	1.58
BROOKLINE	68	0 (0%)	0.0%		1.03	1.10	1.44	1.77
CHELSEA	32	0 (0%)	0.0%		0.37	0.19	1.11	1.37
EVERETT	40	0 (0%)	0.0%		0.46	1.30	1.12	1.58
FRAMINGHAM (c)	72	0 (0%)	0.0%		0.13	0.24	1.25	1.27
LEXINGTON	36	0 (0%)	0.0%		0.60	1.05	1.32	1.54
LYNNFIELD	6	0 (0%)	0.0%		0.39	1.17	1.13	1.43
MALDEN	60	0 (0%)	0.0%		0.07	0.07	0.93	1.17
MARBLEHEAD	24	0 (0%)	0.0%		0.30	0.70	1.17	1.48
MARLBOROUGH (b)(c)	85	3 (3.53%)	0.0%	no	0.21	0.21	1.31	1.03
MEDFORD	68	0 (0%)	0.0%		0.11	0.10	0.96	1.03
MELROSE	36	0 (0%)	0.0%		0.04	0.10	1.04	1.21
MILTON	32	0 (0%)	0.0%		0.12	0.88	1.14	1.35
NAHANT	10	0 (0%)	0.0%		0.08	0.02	0.70	0.26
NEEDHAM (b)	41	0 (0%)	0.0%		0.05	0.02	0.87	0.87
NEWTON	88	0 (0%)	0.0%		1.03	0.88	1.43	1.50
NORTHBOROUGH	13	0 (0%)	0.0%		1.29	1.41	1.73	2.02
NORWOOD	40	0 (0%)	0.0%		0.01	0.05	0.66	0.79
QUINCY	92	0 (0%)	0.0%		0.16	0.40	1.15	1.44
REVERE	55	1 (1.82%)	0.0%	no	0.48	0.66	1.17	1.52
SAUGUS	32	0 (0%)	0.0%		1.02	1.32	1.34	1.56
SOMERVILLE	80	0 (0%)	0.0%		0.02	0.20	0.91	1.19
SOUTHBOROUGH (c)	12	0 (0%)	0.0%		0.26	0.30	0.83	0.86
STONEHAM	28	0 (0%)	0.0%		0.45	0.59	1.11	1.56
SWAMPSCOTT	18	0 (0%)	0.0%		0.92	0.90	1.30	1.20
WAKEFIELD (b)	44	0 (0%)	0.0%		0.03	0.30	0.85	1.06
WALTHAM	68	0 (0%)	0.0%		0.12	0.10	1.06	1.48
WATERTOWN	40	0 (0%)	0.0%		0.24	0.60	1.24	1.39
WELLESLEY (b)	36	0 (0%)	0.0%		0.12	0.10	0.56	0.52
WESTBORO HOSPITAL	6	0 (0%)	0.0%		0.02		0.20	
WESTON (c)	18	0 (0%)	0.0%		0.02	0.09	0.85	1.19
WINCHESTER (b)	20	0 (0%)	0.0%		0.04	0.16	0.71	0.86
WINTHROP	24	0 (0%)	0.0%		0.32	0.70	1.09	1.23
WOBURN (b)	60	0 (0%)	0.0%		0.03	0.03	0.54	0.71
Total:	1696	4 (0.24%)						
MASS. WATER RESOURCES AUTHORITY	690	3 (0.43%)	0.0%	no	0.02	0.02	1.30	1.44

(a) The number of samples collected depends on the population served and the number of repeat samples required.

(b) These communities are partially supplied, and may mix their chlorinated supply with MWRA chloraminated supply.

(c) These communities chloramine

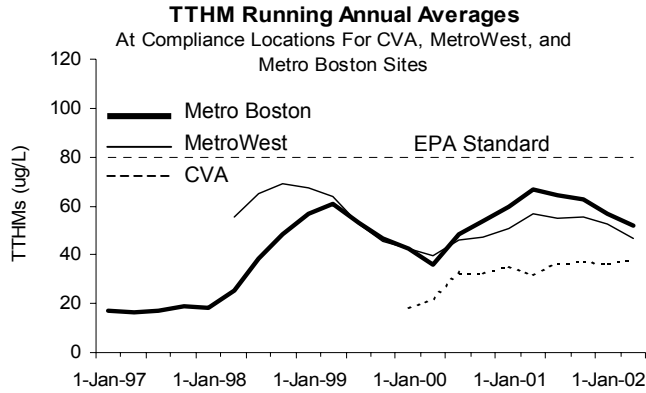
# Treated Water - Disinfection By-Product (DBP) Levels in Communities

## June 2002

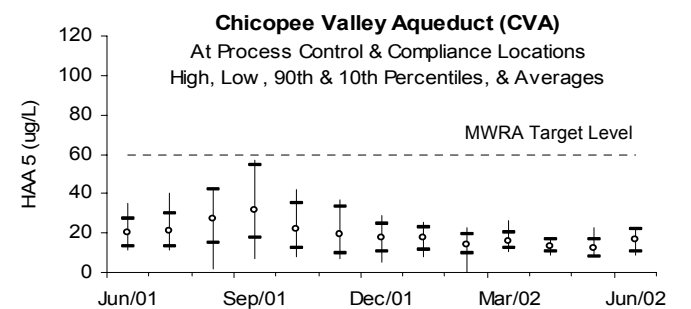
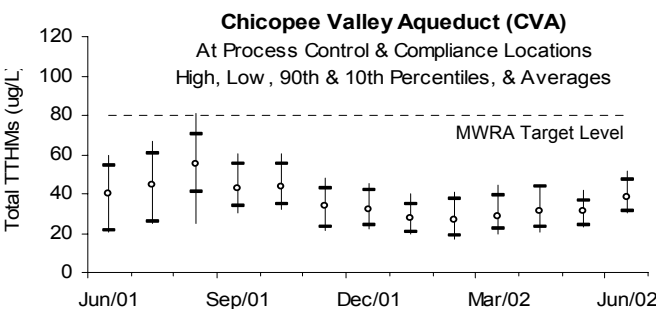
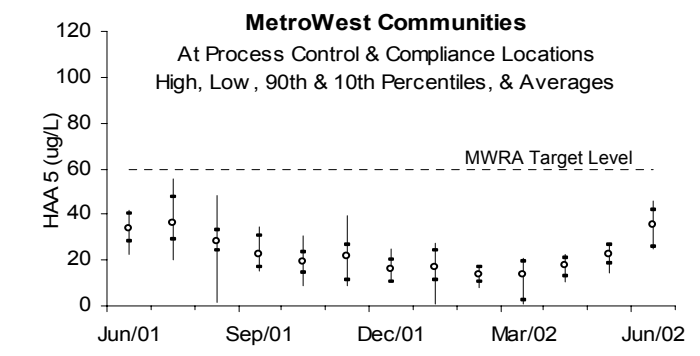
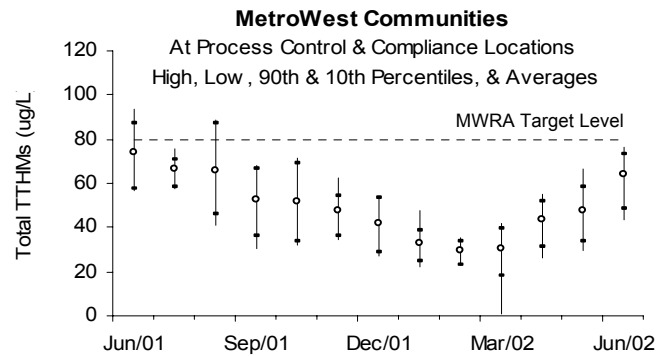
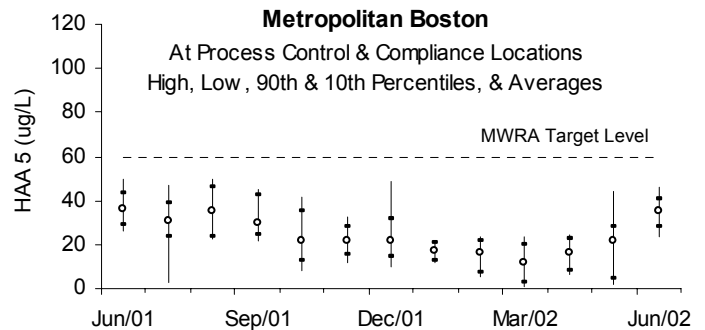
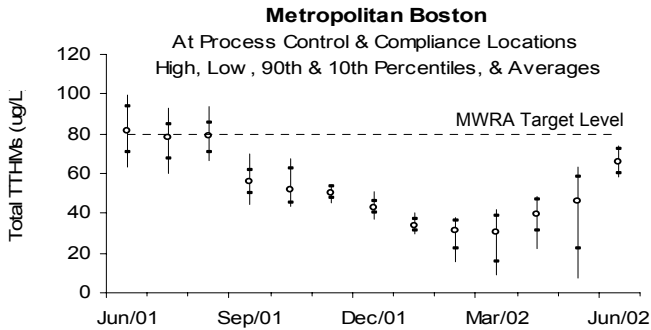
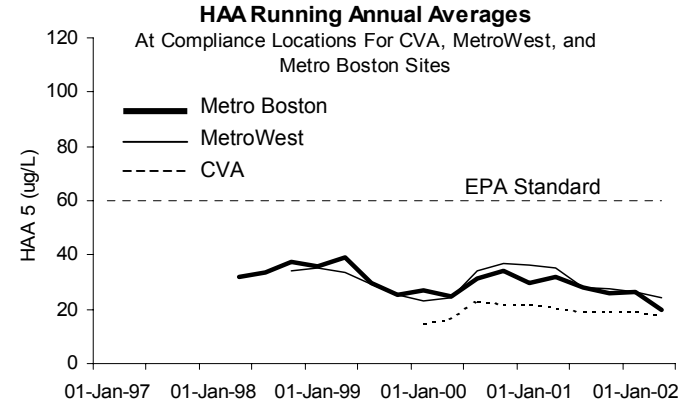
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAAs) are by-products of disinfection treatment with chlorine. Chlorination levels, the presence of organic precursors, pH levels, the contact time of water with chlorine used for disinfection, and temperature all affect TTHM and HAA levels. DBPs are of concern due to their potential adverse health effects at high levels. The EPA running annual average standards are 80 ug/L for TTHMs and 60 ug/L for HAA 5. DEP requires that compliance samples be collected quarterly. MWRA samples weekly at some locations, monthly and quarterly at others. **Metro Boston numbers are used for compliance purposes**; results presented below from CVA and MetroWest sampling sites enable MWRA staff to monitor control of MWRA treatment processes. Individual CVA and MetroWest communities are responsible for their own compliance monitoring and reporting. They must be contacted directly for their results.

Monthly TTHM and HAA5 levels at all process control sampling locations are similar to those of last year in all regions. The running annual average for TTHMs at compliance locations, represented in the graphs at the top of the page, remained below current standards.

### TOTAL TRIHALOMETHANES



### HALOACETIC ACIDS



# MWRA Monthly Water Quality Analysis

## June 2002

This page provides information on water quality at six locations in the MWRA transmission system. Results reflect a "snapshot" in time and may not represent typical conditions. Elevated levels of a particular parameter may occur from time to time. MWRA staff review these numbers carefully and follow-up unusual results by re-analyzing samples, collecting new samples, or auditing sample sites. More rigorous daily or weekly monitoring of select parameters at these and other locations provides a better overall picture of water quality and is reported for some parameters elsewhere in this document. Monitoring for a number of parameters in this table will be reduced to quarterly, if they either (1) have minimal variability or (2) are always below detection levels.

Component	CVA System →			Metropolitan Boston →			Standards →		
	Quabbin Reservoir at Ware Disinfection Facility (Raw)	Nash Hill Storage Tanks (Treated)	Wachusett Reservoir at Cosgrove Intake (Raw)	ICC, Marlboro (Treated)	Comm Ave., Newton (Treated)	Shaft 9A, Malden (Treated)	MCL Standard	Units	Exceedance
Alkalinity	2.7	3.3	4.9	34.2	34.5	34.6		MG/L	
Aluminum	Quarterly	Quarterly	<15	41	<15	47	50-200 (a)	UG/L	NO
Ammonia-N	<0.005	<0.005	0.006	0.005	0.360	0.358		MG/L	
Antimony	Quarterly	Quarterly	<0.9	<0.9	<0.9	<0.9		UG/L	
Arsenic	Quarterly	Quarterly	<0.8	<0.8	<0.8	<0.8	50 (b)	UG/L	NO
Barium	Quarterly	Quarterly	8.4	9.9	8.5	9.7	2000 (b)	UG/L	NO
Beryllium	Quarterly	Quarterly	<0.1	<0.1	<0.1	<0.1	4 (b)	UG/L	NO
Bromate	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	10	UG/L	NO
Bromide	8.7	1.2	14.3	4.7	3.7	2.4		UG/L	
Cadmium	Quarterly	Quarterly	<0.2	<0.1	<0.2	<0.1	5 (b)	UG/L	NO
Calcium	Quarterly	Quarterly	4090	4430	4070	4320		UG/L	
Chloride	Quarterly	Quarterly	18.9	19.4	20.0	19.7	250 (a)	MG/L	NO
Chlorine, Free	NS	0.40	NS	0.64	0.23	0.13		MG/L	
Chlorine, Total	NS	NS	NS	0.69	1.76	1.62		MG/L	
Chromium	Quarterly	Quarterly	<0.6	0.8	<0.6	0.7	100 (b)	UG/L	NO
Coliform, Fecal, MF Method	0	NS	0	NS	0	NS	20 (c)	CFU/100 mL	NO
Coliform, Total, MF Method (e)	0	0	0	0	0	0	100 (c) 0 (d)	CFU/100 mL	NO
Copper **	1.3	10.2	6.2	12.5	2.1	6.3	1300 (b)	UG/L	NO
Cyanide	Quarterly	Quarterly	NS	NS	NS	NS	0.2 (b)	MG/L	NO
Fluoride	Quarterly	Quarterly	<0.02	1.0	0.8	1.0	4 (b)	MG/L	NO
Hardness	Quarterly	Quarterly	13.5	14.8	13.4	14.4		MG/L	
Iron **	Quarterly	Quarterly	15.5	57.0	19.4	66.4	300 (a)	UG/L	NO
Lead	Quarterly	Quarterly	<1.2	3.1	<1.2	<1.2	15 (b)	UG/L	NO
Magnesium	Quarterly	Quarterly	797	902	783	865		UG/L	
Manganese	Quarterly	Quarterly	5.2	29.8	8.0	25.8	50 (a)	UG/L	NO
Mercury	Quarterly	Quarterly	<0.01	<0.01	<0.01	<0.01	2 (b)	UG/L	NO
Nickel	Quarterly	Quarterly	<1	<1	<1	<1		UG/L	
Nitrate-N	0.005	0.011	0.043	0.040	0.040	0.048	10 (b)	MG/L	NO
Nitrite	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		MG/L	
Orthophosphate	Quarterly	Quarterly	<0.003	0.008	0.008	0.006		MG/L	
pH	7.1	7.3	7.0	9.2	9.1	9.1		S.U.	
Potassium	Quarterly	Quarterly	839	864	819	859		UG/L	
Selenium	Quarterly	Quarterly	<0.9	<0.9	<0.9	<0.9	50 (b)	UG/L	NO
Silica (SiO2)	Quarterly	Quarterly	1310	2100	1840	2110		UG/L	
Silver	Quarterly	Quarterly	<0.4	<0.4	<0.4	<0.4	100 (a)	UG/L	NO
Sodium	Quarterly	Quarterly	11.0	27.0	26.2	26.5		MG/L	
Specific Conductance	43	NS	96	158	158	149		UMHO/C	
Standard Plate Count, HPC (48 Hrs @ 35C)	NS	NS	13	46	0	0	500 (d)	CFU/mL	NO
Sulfate (SO4)	Quarterly	Quarterly	5.8	6.1	6.3	5.8		MG/L	
Thallium	Quarterly	Quarterly	<1	<1	<1	<1		UG/L	
Total Dissolved Solids	<50	<50	50	76	88	76		MG/L	
Total Organic Carbon	1.80	Quarterly	2.3	2.5	2.4	2.3		MG/L	
Total Phosphorus	0.013	0.008	0.011	0.016	0.010	0.015		MG/L	
UV-254	0.016	0.010	0.040	0.032	0.041	0.038		A	
Zinc **	Quarterly	Quarterly	10.6	10.1	4.4	6.3	5000 (a)	UG/L	NO

- (a) = Secondary MCL standard (aesthetic related). DEP "Drinking Water Regulations", 310CMR 22.00.
- (b) = Primary MCL standard (health related). DEP "Drinking Water Regulations", 310CMR 22.00.
- (c) = Primary MCL standard (health related), applies to source (raw) water only. DEP "Drinking Water Regulations", 310CMR 22.00.
- (d) = Primary MCL standard (health related). DEP "Drinking Water Regulations", 310CMR 22.00. Applies to samples of treated water downstream of Wachusett and Quabbin Reservoirs.
- (e) - Confirmed results only are reported

MCL = Maximum Contaminant Level  
 CFU = Colony Forming Unit  
 S.U. = Standard Units  
 UG/L = micrograms per liter = parts per billion  
 NS = No sample

C.U. = Color Unit  
 NTU = Nephelometric Turbidity Unit  
 MG/L = milligrams per liter = parts per million  
 < = less than method detection limit  
 \*\* = Metal results may be elevated due to local plumbing at the sample tap.

Q = Reduced to Quarterly Monitoring  
 HPC = Heterotrophic Plate Count  
 umhos = ohms/1000  
 Inv Res = Invalid sample result

Most results are based on single grab samples collected on June 3 & 4, 2002 and analyzed by MWRA and contract laboratories.

**NOTE:** MWRA tests for cadmium and mercury are more sensitive than the EPA-set levels of detection and reporting. For cadmium any level below 1.0 ug/L and for mercury any level below 0.2 ug/L are under the EPA minimum detection limits. MWRA will continue to report any result below these detection limits here in the monthly report but will follow EPA reporting requirements and not report them in the EPA-regulated annual Consumer Confidence Report.



## New Water and Health Web Page June 2002

An important new web based source for health care providers with information on drinking water and health issues has recently been developed by the [American Water Works Association](#) and the [Arnot Ogden Medical Center](#). It was designed to help health care providers get easy access to information on water issues for their patients. The site provides excellent, concise material drawn from peer-reviewed journals. The web site is [www.WaterHealthConnection.aomc.org](http://www.WaterHealthConnection.aomc.org). The AWWA press release for the website follows below.

### **Recognizing Waterborne Disease and the Health Effects of Water Contamination: What Every Physician in Your Community Needs To Know**

Funded by American Water Works Association and Arnot Ogden Medical Center  
Author: Patricia L. Meinhardt, MD, MPH, MA

Maintaining water quality and securing the safety of water supplies in the United States requires a collaborative partnership between the medical community and water utility practitioners. The importance of this collaboration has been underscored by the growing threat to the security of our nation's infrastructure that includes the possibility of intentional contamination of US water reserves by covert terrorism.

**Practicing physicians are likely to be the first to observe unusual illness patterns or disease trends resulting from intentional biological or chemical contamination of water supplies and must understand their critical role in detecting water-related disease and in cooperating with water utilities to protect their community's public health.**

**A new medical website** has been launched to assist healthcare providers recognize and manage waterborne disease and the health effects of water pollution resulting from either **natural OR intentional** contamination of water. The contents of this medical website, *Recognizing Waterborne Disease and the Health Effects of Water Pollution: A Physician On-Line Reference Guide* are accessible at [www.WaterHealthConnection.aomc.org](http://www.WaterHealthConnection.aomc.org).

Unique features of this medical website include:

- "24/7" availability with free access to 366 webpages of comprehensive information.
- Clinically relevant information detailing detection and management of water-related disease from both waterborne pathogen and chemical contaminant exposure
- Repository of physician anti-terrorism preparedness and readiness resources
- Special risk communication and patient risk evaluation guidelines for both healthy and susceptible populations regarding water-related disease
- "Ease of use" technology tools and website support for busy physician users
- Targeted search engines providing quick and easy access to 200 websites covering a diverse array of waterborne disease and water contamination issues
- Peer-reviewed content by leading medical and public health experts from medical academia and public health agencies including CDC, ATSDR, and EPA
- CME accreditation for credits toward AMA Physician's Recognition Award

**Please share this important resource with your medical, public health, and water utility colleagues!**