MASSACHUSETTS WATER RESOURCES AUTHORITY
100 First Avenue, Charlestown Navy Yard, Boston, MA 02129

MWRA WATER QUALITY UPDATE

August 2004 Highlights

•**MWRA achieved CT disinfection requirements for the month** at the Ware Disinfection Facility (WDF) and the Cosgrove Disinfection Facility (CDF). CT results appear on Page 5. The running annual averages for DBPs are higher this year as compared to last year, but still within standards. See page 7. Two communities had samples which violated the Total Coliform Rule criteria. See Page 6.

•**A significant "metallic" taste and odor episode** related to a bloom of algae (*Chrysosphaerella*) in the Wachusett Reservoir caused complaints that started on July 5 and stopped at the end of August. MWRA treated the reservoir to reduce algae problems five times in July and two additional times in August (8/6 and 8/12). This bloom ended by the end of August, and early September samples indicate no on-going problems. See www.mwra.com for more information.

•**E. coli bacteria** was discovered in the Town of Weston's water supply on August 16, 2004. Residents north of Route 20 were issued a boil water alert. All subsequent samples have been clear, and the boil water alert was lifted on August 20, 2004.

•**Severe weather conditions on the 20th caused a power outage at the Interim Corrosion Control Facility** which kept the facility offline for almost two hours. There were no regulatory violations or significant water quality concerns as a result.

•**The DEP has issued statewide emergency regulations that require water suppliers to test for perchlorate** down to one part per billion between two and four times over the next year. MWRA tested for Perchlorate in March and April of 2004 and results were below the lab detection limit of 0.5 µg/L or ppb. MWRA has never detected perchlorate in the water supply.

Let us know what you think *(617) 242-5323*

Release Date: September 20, 2004

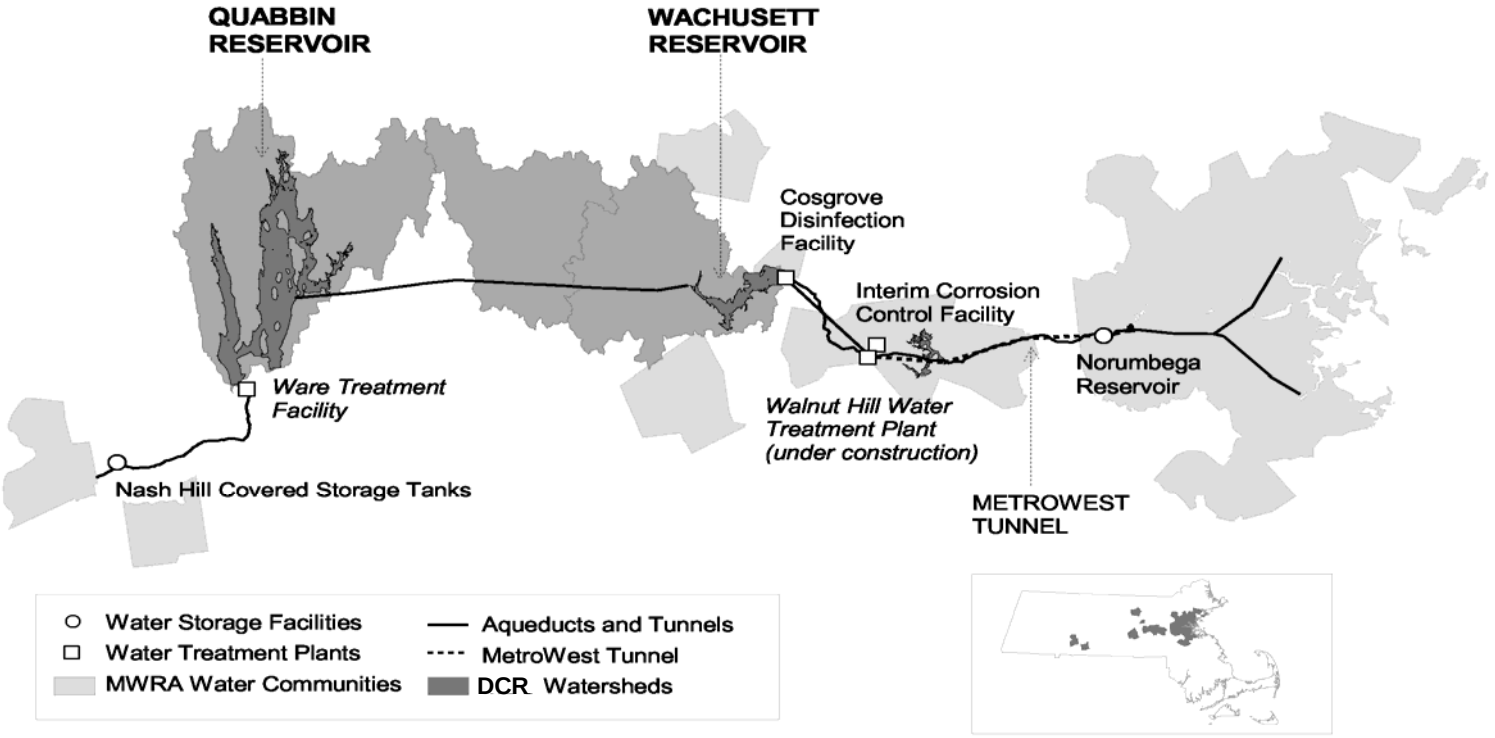
WATER QUALITY UPDATE
An Analysis of a August 2004 Sampling Data
For more information, please contact MWRA at (617) 242-5323, or visit www.mwra.com.

Water Quality Update
This is a monthly report containing information about the quality of water supplied by MWRA. It provides a more detailed review of water quality than the annual water quality report that is mailed each June to customers in our service area. The report is available at www.mwra.com.

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. 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. 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 Department of Conservation and Recreation (DCR), 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.

The map below indicates the location of reservoirs, treatment facilities, and service communities.



Indicators of Water Quality

Tests are conducted on water sampled at the source reservoirs (source or raw water) and also on water after treatment (treated water). MWRA routinely uses six general indicators of water quality: microbial, corrosiveness, disinfection by-products, turbidity and algae, disinfectant residual, and mineral analysis. Testing frequencies vary by parameter.

The Federal Safe Drinking Water Act (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 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
August 2004

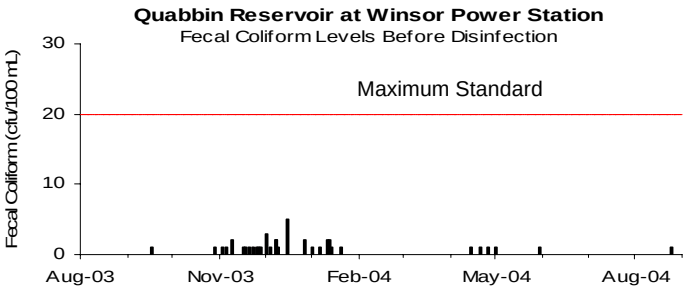
Source Water - Microbial Results

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, 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 more than 20 fecal coliforms per 100ml.

Sample Site: Quabbin Reservoir

Quabbin Reservoir water is sampled at the Ware Disinfection Facility (WDF) raw water tap before entering the CVA system as of July 13th. Prior data was sampled at Winsor Dam. MWRA met the six-month running average standard for fecal coliform continuously at this location over the last year.

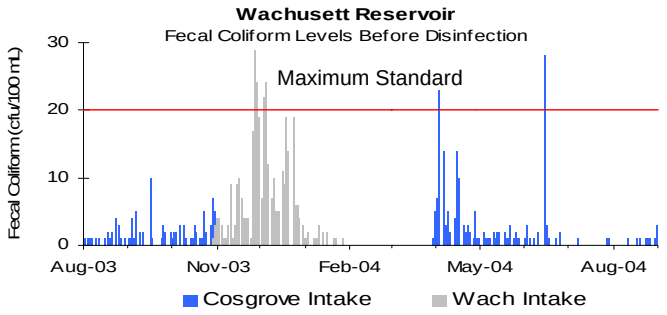
One of the 31 samples was positive during August. Colony count was in the single digits.



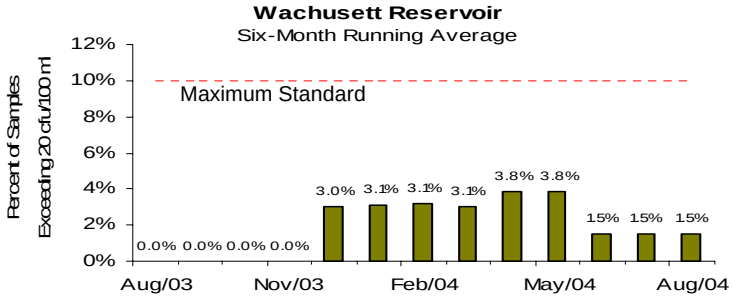
Sample Site: Wachusett Reservoir

Wachusett Reservoir water Is sampled before it enters the MetroWest and Metropolitan Boston systems. Samples were collected at the Wachusett Intake from November 1, 2003 to March 16, 2004; samples before and after this period are taken at the Cosgrove Intake. For the current six-month period, 1.5% of the samples have exceeded a count of 20 cfu/100ml (2 out of 131 samples have exceeded 20 cfu/100ml).

Fecal coliform levels tend to increase during the winter because, when water bodies near Wachusett ice over, waterfowl seek open water. Many roost at Wachusett, which tends to freeze later in the year than smaller ponds nearby.

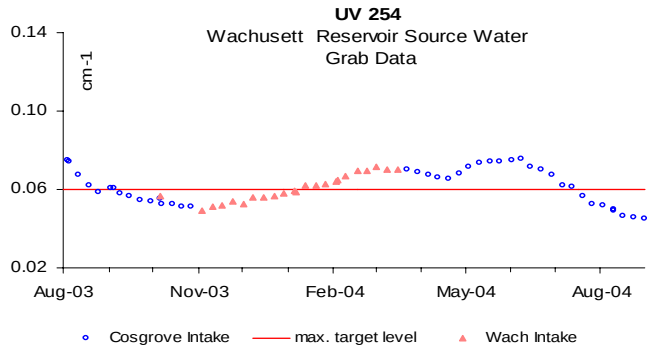


Nine of the 22 samples were positive during August. None of the samples exceeded the 20 cfu/100ml count. All of the colony counts were in the single digits.



UV

UV-254 is a surrogate measure of reactive organic matter and is a good predictor for DBP levels. It remained above the Quabbin transfer trigger level of 0.06 A/cm from early January of 2004 until July 12th. Quabbin transfer was initiated on May 19 and levels have dropped to 0.45 A/cm.

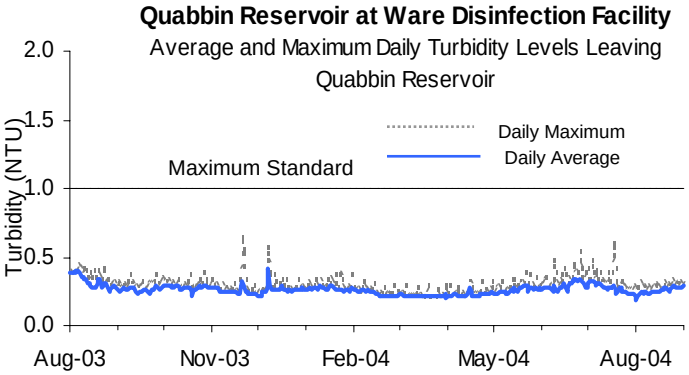


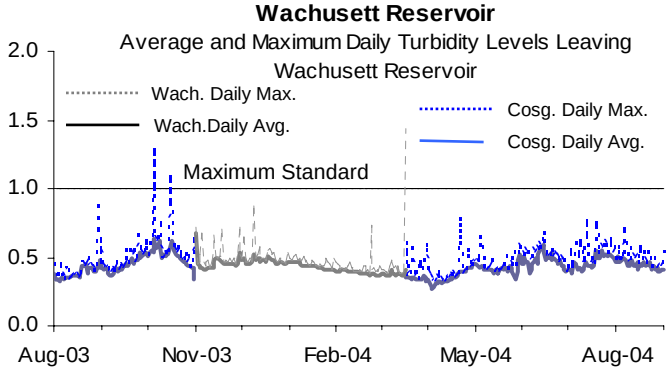
Source Water – Turbidity and Algae Results
August 2004

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. Samples from Wachusett Reservoir were taken at Wachusett Intake before chlorination from November 1, 2003 to March 16, 2004; samples before and after this period were taken at the Cosgrove Intake. 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 and Wachusett were within DEP standards for the month.

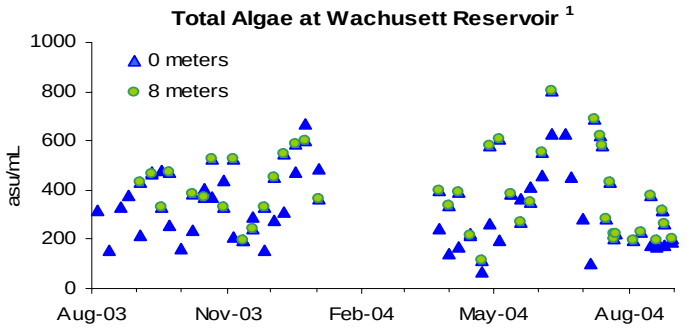


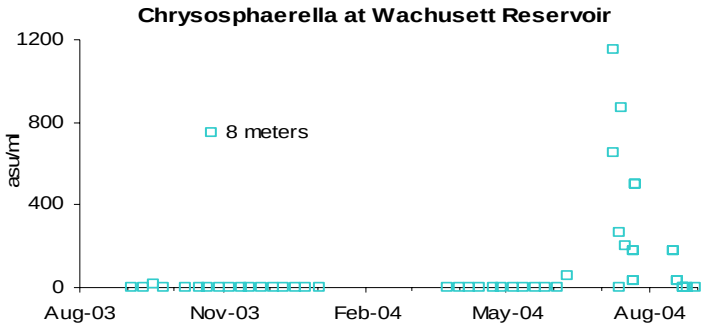


Source Water – Algae Results

Algal levels in reservoirs are monitored by DCR 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 may treat the reservoirs with copper sulfate, an algaecide.

Of the 275 complaints received during August from local water departments, 264 concerned taste and odor due to algae. All were varying degrees of a metallic taste/odor attributed to a *Chrysosphaerella* bloom in the Wachusett Reservoir. The complaints were reported system wide. The Wachusett Reservoir was treated with copper sulfate on August 6th and 12th to control the algae blooms. The bloom dissipated by the end of August and complaints attributed to this algae have ceased.





1. Algae samples collected between 0 to 3 meters represent the same area of water column and are generally equivalent. These samples will be shown in the graphs as 0 meters.

Treated Water – Disinfection and pH Results
August 2004

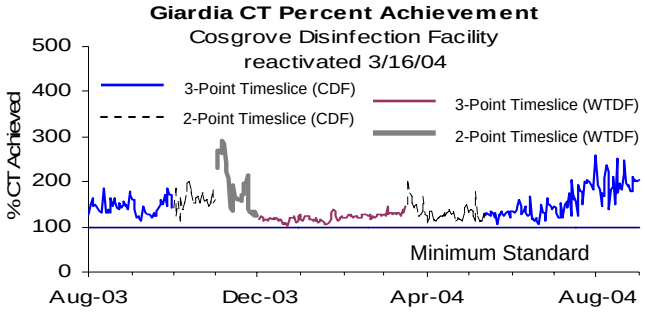
Treated Water - Primary Disinfection

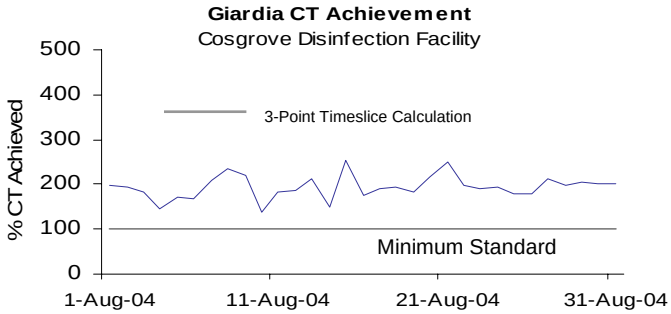
MWRA provides disinfection adequate to achieve EPA's requirement of 99.9% inactivation of *Giardia* cysts and 99.99% inactivation of viruses in drinking water using a calculation based on three sample points that DEP approved in June, 1999. The two-point timeslice, three-point timeslice, or integrated methods are alternative calculation methods which can also be used to comply with CT regulations.

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.

Wachusett Reservoir - MetroBoston Supply:

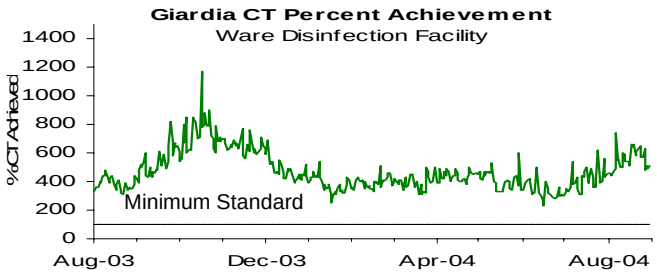
Chlorine dose at the Cosgrove Disinfection Facility (CDF) varied between 1.5 and 1.9 mg/L. CT was met each day in August, as well as every day for the last year.

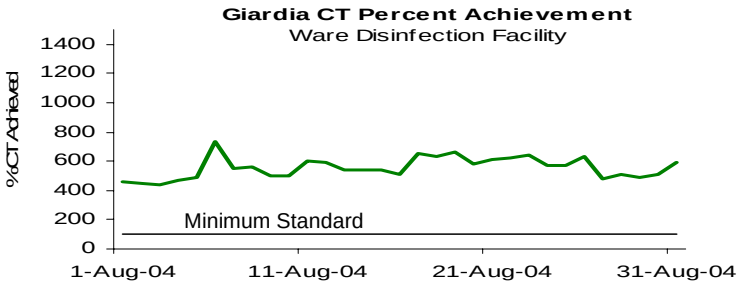




Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

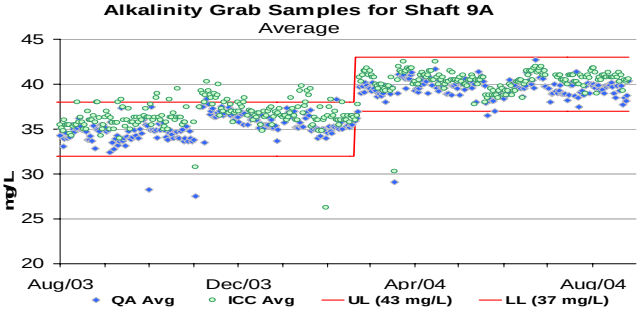
Chlorine dose remained at 1.3 mg/L. CT was met each day in August, as well as every day for the last year.

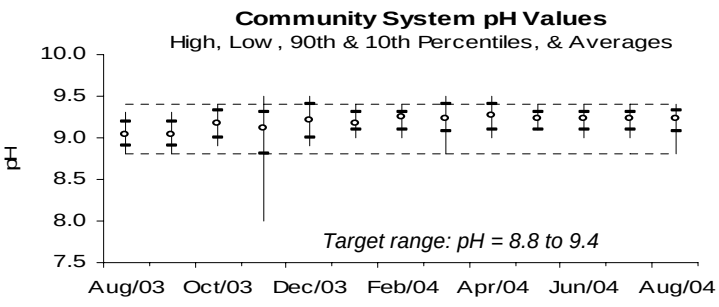




Treated Water – pH and Alkalinity Results

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 is 9.1 and alkalinity is 40 mg/l. MWRA's goal is to have 80% of distribution system pH samples fall between 8.8 and 9.4. MWRA staff collects and analyzes samples for pH from 28 community locations on a biweekly schedule to measure pH levels. In August, 100% of the samples were within the target range.





Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program
August 2004

Background

While all communities collect bacteria samples for the Total Coliform Rule (TCR), 37 cities and towns (including Deer Island Laboratory and Westboro State Hospital) use the MWRA's Laboratory for TCR compliance testing. These communities collect samples for bacteriological analysis and measure water temperature and chlorine residual at the time of collection. The other 10 MWRA customer communities (including Lynn GE Plant) have their samples tested elsewhere and these towns should be contacted directly for their monthly results.

There are 144 sampling locations for which the MWRA is required to report TCR results. This includes a subset of the community TCR locations, as well as sites along the MWRA transmission system, water storage tanks and pumping stations.

The Safe Drinking Water Act (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

Thirteen of the 1,896 community samples (2.11%) system-wide tested positive for confirmed total coliform during the month of August. Weston and Westborough State Hospital failed the TCR for August. None of the 691 MWRA samples (0.0%) tested positive for confirmed total coliform. Weston samples tested positive for *E. coli* and a boil water advisory was issued.
All thirty-seven communities that submitted chlorine residual data maintained an average disinfectant residual of at least 0.2 mg/L. 3.6% of the community samples had 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?	August 2004 Minimum Chlorine Residual (mg/L)	August 2003 Minimum Chlorine Residual (mg/L)	August 2004 Average Chlorine Residual (mg/L)	August 2003 Average Chlorine Residual (mg/L)
ARLINGTON	56	0 (0%)			0.01	0.05	0.45	0.63
BELMONT	32	0 (0%)			0.13	0.05	0.94	0.77
BOSTON	252	0 (0%)			0.20	0.31	1.07	1.22
BROOKLINE	85	0 (0%)			0.61	1.01	1.33	1.30
CHELSEA	40	0 (0%)			0.24	0.11	1.06	0.96
DEER ISLAND	20	0 (0%)			0.23	0.63	1.09	1.11
EVERETT	50	0 (0%)			0.31	0.49	0.75	0.86
FRAMINGHAM (c)	76	0 (0%)			0.19	0.14	1.10	1.24
LEXINGTON	45	0 (0%)			0.10	0.13	1.10	1.12
LYNNFIELD	6	0 (0%)			0.37	0.17	0.69	0.68
MALDEN	75	0 (0%)			0.70	0.76	0.86	0.96
MARBLEHEAD	24	0 (0%)			0.24	0.27	0.95	1.04
MARLBOROUGH (b)(c)	53	0 (0%)			0.08	0.19	1.15	1.06
MEDFORD	85	0 (0%)			0.11	0.22	0.96	0.91
MELROSE	45	0 (0%)			0.03	0.04	0.37	0.53
MILTON	40	0 (0%)			0.20	0.12	0.95	0.98
NAHANT	10	0 (0%)			0.29	0.05	0.66	0.78
NEEDHAM (b)	41	0 (0%)			0.03	0.02	0.59	0.75
NEWTON	88	0 (0%)			0.14	0.40	1.20	1.05
NORTHBOROUGH	16	0 (0%)			0.30	0.30	1.29	1.38
NORWOOD	36	0 (0%)			0.02	0.01	0.62	0.62
QUINCY	104	0 (0%)			0.06	0.25	0.91	1.03
REVERE	52	0 (0%)			0.47	0.20	1.11	0.97
SAUGUS	40	0 (0%)			0.98	0.87	1.13	1.12
SOMERVILLE	83	1 (1.2%)		no	0.01	0.04	0.84	0.88
SOUTHBOROUGH (c)	11	0 (0%)			0.15	0.11	0.75	0.88
STONEHAM	28	0 (0%)			0.16	0.64	1.20	1.14
SWAMPSCOTT	18	0 (0%)			0.24	0.60	0.78	1.08
WAKEFIELD (b)	44	0 (0%)			0.13	0.35	0.70	0.81
WALTHAM	72	1 (1.4%)		no	0.01	0.30	0.95	1.12
WATERTOWN	40	0 (0%)			0.25	0.24	0.89	0.71
WELLESLEY (b)	35	0 (0%)			0.07	0.05	0.47	0.39
WESTBORO HOSPITAL	20	8 (40.0%)		yes	0.07	0.16	0.37	0.34
WESTON (c)	50	3 (6.0%)	4% (e)	yes	0.01	0.24	0.68	0.77
WINCHESTER (b)	25	0 (0%)			0.11	0.10	0.47	0.50
WINTHROP	24	0 (0%)			0.21	0.31	0.96	0.96
WOBURN (b)	75	0 (0%)			0.07	0.18	0.64	0.76
Total:	1896	13(2.11%)						
MASS. WATER RESOURCES AUTHORITY (d)	691	0 (0%)			0.01	0.04	1.08	1.11

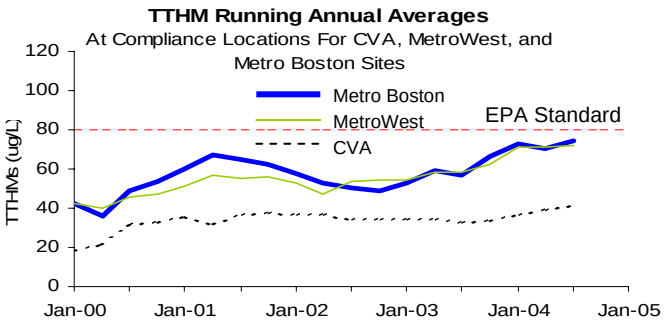
(a) The number of samples collected depends on the population served and the number of repeat samples required.
(b) These communities are partially supplied, and may mix their chlorinated supply with MWRA chloraminated supply.
(c) These communities locally chloraminate.
(d) MWRA sampling program includes a subset of community TCR sites as well as sites along the transmission system, tanks and pumping stations.
(e) *E.coli* % Positive was incorrectly reported as 2%. Weston had two confirmed *E.coli* samples for August, thus, 4% is correct.

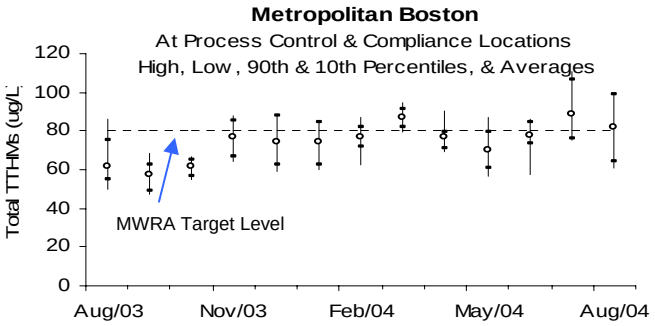
Treated Water - Disinfection By-Product (DBP) Levels in Communities
August 2004

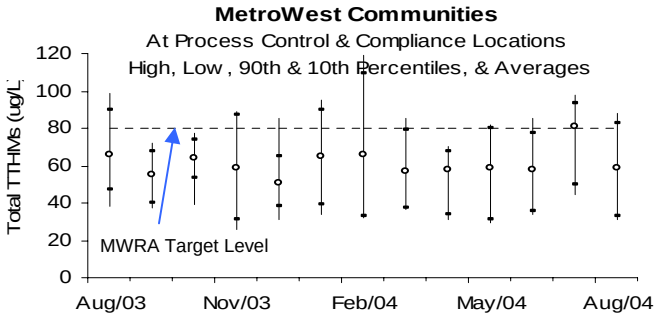
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAAs) are by-products of disinfection treatment with chlorine. Chlorination levels, the presence of organic precursors, pH levels, the contact time of water with chlorine used for disinfection, and temperature all affect TTHM and HAA levels. DBPs are of concern due to their potential adverse health effects at high levels. EPA's running annual average standards are 80 ug/L for TTHMs and 60 ug/L for HAA5. 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.

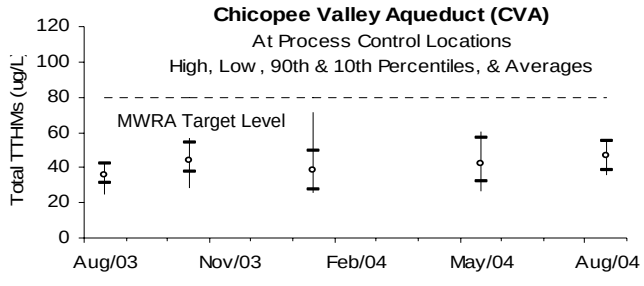
The running annual average for TTHMs and HAA5s at compliance locations, represented in the graphs at the top of the page, remained below current standards. Average monthly TTHM levels at all process control sampling locations for the MetroWest communities are lower to those of last year, while the Metropolitan Boston and CVA communities levels are higher. Average monthly HAA5 levels at all process control sampling locations for the Metropolitan Boston and CVA communities are generally similar to those of last year, while the MetroWest communities are slightly higher compared to last year. The CVA system monitoring has been reduced from monthly to quarterly per DEP requirements.

TOTAL TRIHALOMETHANES

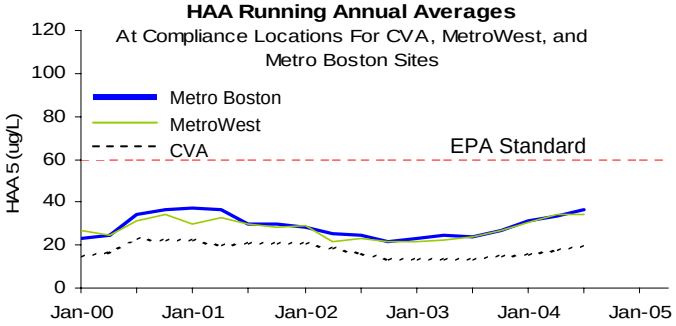


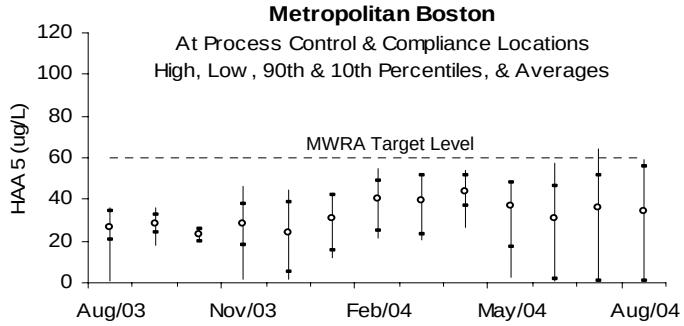


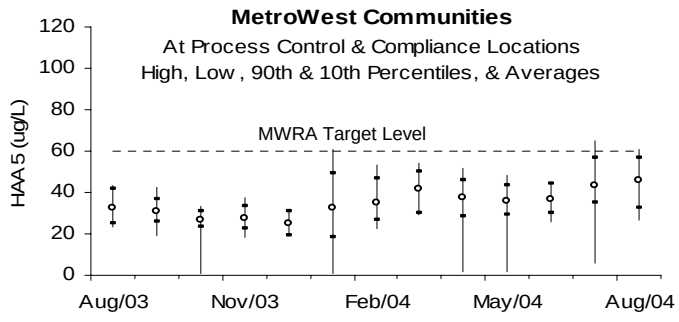


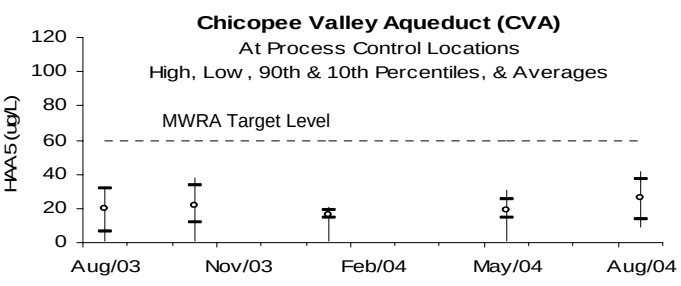


HALOACETIC ACIDS









MWRA Monthly Water Quality Analysis
August 2004

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 parameters indicated in bold is quarterly, as they either (1) have minimal variability or (2) are always below detection levels.

	CVA System		Metropolitan Boston →				Standards →		
Component	Quabbin Reservoir at Ware	Ludlow Monitoring Station (Treated)	Wachusett Reservoir at Cosgrove Intake	ICC Marlboro (Treated)	Comm Ave., Newton (Treated)	Shaft 9A, Malden (Treated)	Standard	Units	Exceedance
Alkalinity	2.6	3.1	4.7	38	39.7	39.8		MG/L	
Aluminum	< ***15.0***	< ***15.0***	< ***15.0***	***19.0***	***21.3***	***20.9***	50-200 (e)	UG/L	NO
Ammonia-N	< 0.005	< 0.005	< 0.005	< 0.005	0.357	0.356		MG/L	
Antimony	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	6 (a)	UG/L	NO
Arsenic	< ***0.8***	< ***0.8***	< ***0.8***	< ***0.8***	< ***0.8***	< ***0.8***	50 (a)	UG/L	NO
Barium	***6.8***	***6.7***	8.84	8.8	10.2	9.5	2000 (a)	UG/L	NO
Beryllium	< ***0.1***	< ***0.1***	< ***0.1***	< ***0.2***	< ***0.1***	< ***0.1***	4 (a)	UG/L	NO
Bromate	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	10 (a)	UG/L	NO
Bromide	9.5	4.5	14.6	6.9	6.1	6.5		UG/L	
Cadmium	< ***0.2***	< ***0.2***	< ***0.2***	< ***0.2***	< ***0.2***	< ***0.2***	5 (a)	UG/L	NO
Calcium	***2220***	***2220***	4110	4140	4620	4590		UG/L	
Chloride	7.3	8.7	18.2	19.5	22.5	23.4	250 (e)	MG/L	NO
Chlorine, Free	NS	0.70	NS	0.24	NS	NS	4 (c)(d)	MG/L	NO
Chlorine, Total	NS	NS	NS	NS	1.58	1.53	4 (c)(d)	MG/L	NO
Chromium	< ***0.6***	< ***0.6***	< ***0.6***	< ***0.6***	< ***0.6***	< ***0.6***	100 (a)	UG/L	NO
Coliform, Fecal, MF Method	0	NS	0	NS	NS	NS	20 (b)	CFU/100 mL	NO
Coliform, Total, MF Method (h)	17	0	0	0	0	0	100 (b) 0 (c)	CFU/100 mL	NO
Copper **	< ***0.9***	< ***0.9***	***6.1***	***6.9***	***4.8***	***7.5***	1300 (f) 1000 (g)	UG/L	NO
Cyanide	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	0.2 (a)	MG/L	NO
Fluoride	***0.03***	***0.09***	< 0.02	0.82	0.80	0.78	4 (a)	MG/L	NO
Hardness	***7.7***	***7.8***	13.6	13.7	15.1	15		MG/L	
Iron **	8.7	7.2	21.5	24.0	23.3	25.9	300 (e)	UG/L	NO
Lead	< ***1.2***	< ***1.2***	< ***1.2***	< ***1.2***	< ***1.2***	< ***1.2***	15 (a)	UG/L	NO
Magnesium	***546***	***542***	806	804	873	850		UG/L	
Manganese	***1.6***	***2.1***	8.1	7.1	7.1	6.5	50 (e)	UG/L	NO
Mercury	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	< ***0.01***	2 (a)	UG/L	NO
Nickel	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***		UG/L	
Nitrate-N	< ***0.005***	< ***0.005***	***0.088***	***0.089***	***0.105***	***0.098***	10 (a)	MG/L	NO
Nitrate+Nitrite - N	< 0.005	< 0.005	0.062	0.064	0.0759	0.062			
Nitrite	< ***0.005***	< ***0.005***	< ***0.005***	< ***0.005***	< ***0.005***	< ***0.005***	1 (a)	MG/L	NO
Orthophosphate	***0.003***	***0.003***	***0.003***	***0.008***	***0.009***	***0.009***		MG/L	
pH	6.8	6.8	6.3	9.0	9.3	9.3		S.U.	
Potassium	***488***	***525***	761	800	920	876		UG/L	
Selenium	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	< ***0.9***	50 (a)	UG/L	NO
Silica (SiO2)	***1590***	***1620***	1780	2440	2650	2350		UG/L	
Silver	< ***0.4***	< ***0.4***	< ***0.4***	< ***0.4***	< ***0.4***	< ***0.4***	100 (e)	UG/L	NO
Sodium	***4.8***	***5.8***	11.1	28.7	31.3	31.5		MG/L	
Specific Conductance	48	53	97	166	***182***	***182***		UMHO/cm	
Standard Plate Count, HPC (48 Hrs @ 35C)	NS	NS	3200*	1	2	0	500 (c)	CFU/mL	NO
Sulfate (SO4)	***5.2***	***5.1***	6.3	6.4	6.7	6.5	250 (e)	MG/L	
Thallium	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***	< ***1.0***	2 (a)	UG/L	NO
Total Dissolved Solids	< 25	34	61	73	123	105	500 (d)	MG/L	
Total Organic Carbon	1.7	***1.7***	2.4	2.3	2.4	2.5		MG/L	
Total Phosphorus	0.009	0.007	0.006	0.017	0.017	0.016		MG/L	
UV-254	0.026	0.019	0.052	0.041	0.050	0.049		A	
Zinc **	***1.8***	***2.6***	2.3	2.3	4.5	2.4	5000 (e)	UG/L	NO

(a) = Primary MCL standard (health related). DEP "Drinking Water Regulations", 310CMR 22.00.

(b) = Primary MCL standard (health related), applies to source (raw) water only. DEP "Drinking Water Regulations", 310CMR 22.00.

(c) = Primary MCL standard (health related). DEP "Drinking Water Regulations", 310CMR 22.00. Applies to samples of treated water downstream of Wachusett and Quabbin Reservoirs.

(d) = Maximum Residual Disinfectant Level. DEP "Drinking Water Regulations", 310CMR 22.00.

(e) = Secondary MCL standard (aesthetic related). DEP "Drinking Water Regulations", 310CMR 22.00.

(f) - Refers to 90th percentile Action Level

(g) - Refers to a single sample, secondary MCL

(h) - 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
NTU = Nephelometric Turbidity Unit
MG/L = milligrams per liter = parts per million
< = less than method detection limit

HPC = Heterotrophic Plate Count
Inv Res = Invalid sample result
** = Metal results may be elevated due to local plumbing at the sample tap.
Bold Italics = Quarterly Samples

Most results are based on single grab samples collected on August 2, 9 and 23, 2004 and analyzed by MWRA and contract laboratories. ***Quarterly Samples are from July 2004.***

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.

*HPC standards pertain to the distribution system. This site represents the raw water, before primary treatment.