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

WATER QUALITY UPDATE



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



MWRA WATER QUALITY UPDATE February 2004 Highlights

- •MWRA achieved CT disinfection requirements for the month at both Ware Disinfection Facility (WDF) and Wachusett Temporary Disinfection Facility (WTDF). Chlorine dose at WTDF was lowered to 2.3 mg/L from 2.4 mg/L on the 17th. Dose at Norumbega remained at 1.5 mg/L. The running annual averages for DBPs are higher this year as compared to last year see page 7. CT results appear on Page 5. No community had samples which violated the Total Coliform Rule criteria. See Page 6.
- •MWRA's target for distribution system alkalinity was raised from 35 mg/L to 40 mg/L on the 20th to further reduce the corrosivity of water. See page 6.
- •Framingham reported 166 "white water" complaints for February. White water, or cloudy water, is caused by air bubbles in the water and is completely harmless. White water usually happens when it is very cold outside because the solubility of air in water increases as water temperature decreases and/or water pressure increases. Further information including pictures is available on our website //http://www.mwra.com.
- •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 a year over the next year. Perchlorate is known to disrupt thyroid function and could be harmful to young children and pregnant women. MWRA tested for Perchlorate in 2003 at 4 ppb and did not detect it.
- •MWRA will be publishing a notice on the failure by MWRA communities to collect exactly the correct number of lead and copper samples in 2003 before the end of March. Materials have been provided to water and health departments. For more info call 617 242-5323.
- •In Mid March: transitioning off Wachusett Aqueduct and back onto the Cosgrove Tunnel. Norumbega Open Reservoir will be taken off-line.

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

Release Date: March 20, 2004

Water Quality Update

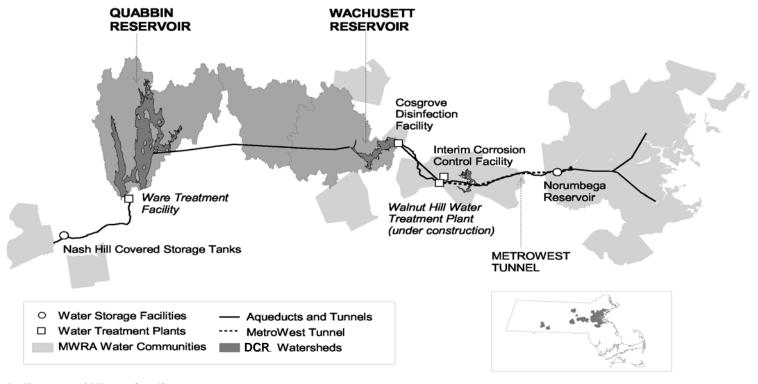
This is a monthly report containing information about the quality of water supplied by MWRA. It provides a more detailed review of water quality than the annual water quality report that is mailed each June to customers in our service area. The report is available at www.mwra.com.

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 February 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 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 sixmonth running average standard for fecal coliform continuously at this location over the last year.

None of the 29 samples were positive during February.

Sample Site: Wachusett Reservoir

Wachusett Reservoir water is sampled at Wachusett Intake before entering the MetroWest and Metropolitan Boston systems. For the current six-month period, 3.1% of the samples have exceeded a count of 20 cfu/100ml.

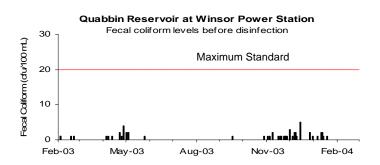
Fecal coliform levels tend to increase during the winter, because, when water bodies near Wachusett ice over, waterfowl seek open water. Many roost at Wachusett, which tends to freeze later in the year than smaller ponds nearby. DCR's bird harassment program to move the birds away from the intake area is over for the season as the reservoir froze over the middle of January 2004.

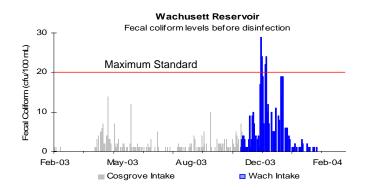
None of the 20 samples were positive during February.

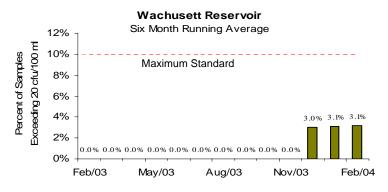
Sample Site: Norumbega Reservoir

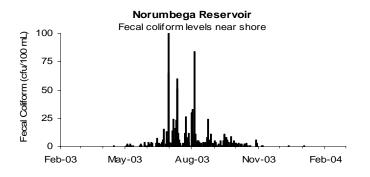
Norumbega Reservoir in Weston receives flows from Wachusett for temporary storage each day during low demand hours, which are then discharged during high demand. Norumbega water is sampled from the shore near the gatehouse before disinfection. Coliform levels are elevated periodically, partly because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

None of the 29 samples from water taken along the shore were positive for fecal coliform during February. Seasonally, coliform levels tend to increase due to rain, warm temperatures, wind direction, and birds.







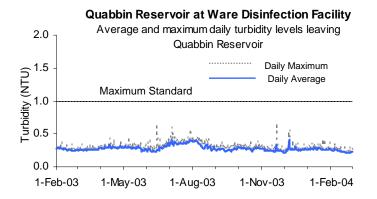


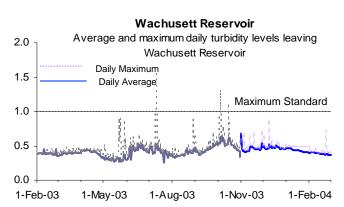
Source Water – Turbidity and Algae Results February 2004

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 are taken at Wachusett Intake before chlorination as of November 1st. 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 Reservoir were within DEP standards for the month.

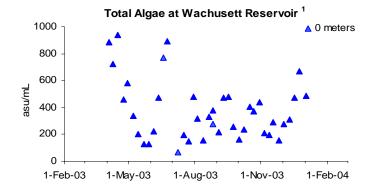


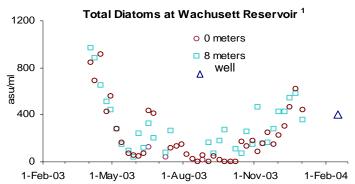


Source Water - Algae Results

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. Wachusett Reservoir has frozen at the Intake area. The last samples were collected on January 2nd. The DCR broke through the ice at Wachusett Gatehouse/ Intake Line #1 "well" on February 17th to collect algae samples.

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 alga blooms, MWRA may treat the reservoirs with copper sulfate, an algaecide. Of 379 complaints received during February from local water departments, three concerned taste and odor that may be due to algae.





^{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 February 2004

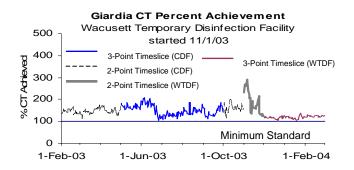
Treated Water - Primary Disinfection

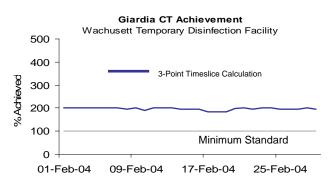
MWRA provides disinfection adequate to achieve EPA's requirement of 99.9% inactivation of *Giardia* cysts and 99.99% inactivation of viruses in drinking water using a calculation based on three sample points that DEP approved in June, 1999. The two-point timeslice, three-point timeslice, or integrated 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 was lowered to 2.3 mg/L from 2.4 mg/L on the 17th. CT was met each day in February, as well as every day for the last year.





Quabbin Reservoir at Ware Disinfection Facility (CVA Supply):

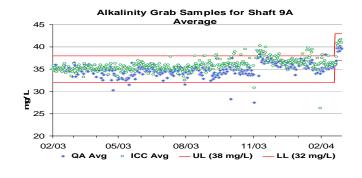
Chlorine dose remained at 1.3 mg/L. CT was met each day in January, as well as every day for the last year.

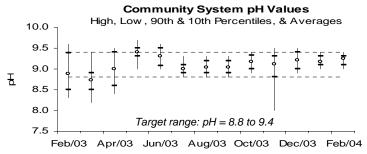




Treated Water – pH and Alkalinity Results

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. MWRA's target for distribution system alkalinity was raised from 35 to 40 mg/l on February 20th to further reduce the corrosivity of the water. 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 February, 100% of the samples were within the target range.





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

Background

While all communities collect bacteria samples for the Total Coliform Rule (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 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 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

Two of the 1,679 community samples (0.12%) system-wide tested positive for confirmed total coliform during the month of February. No samples tested positive for *E. coli*. One of the 639 MWRA samples (0.16%) tested positive for confirmed total coliform. No samples tested positive for *E. coli*. No towns 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. 1.6% 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		Public Notification Required?	February 2004 Minimum Chlorine Residual (mg/L)	February 2003 Minimum Chlorine Residual (mg/L)	February 2004 Average Chlorine Residual (mg/L)	February 2003 Average Chlorine Residual (mg/L)		
ARLINGTON	56	0 (0%)			0.02	0.06	1.05	1.07		
BELMONT	32	0 (0%)			0.97	0.17	1.51	1.14		
BOSTON	224	0 (0%)			0.97	0.66	1.64	1.41		
BROOKLINE	68	0 (0%)			1.09	1.25	1.68	1.51		
CHELSEA	32	0 (0%)			1.24	0.76	1.61	1.33		
DEER ISLAND	16	0 (0%)			0.83	1.12	1.52	1.43		
EVERETT	40	0 (0%)			0.00	0.51	0.67	1.04		
FRAMINGHAM (c)	72	0 (0%)			0.21	1.05	1.19	1.47		
LEXINGTON	36	0 (0%)			0.83	0.88	1.62	1.41		
LYNNFIELD	6	0 (0%)			0.65	0.57	1.17	0.95		
MALDEN	60	0 (0%)			0.91	0.07	1.08	1.01		
MARBLEHEAD	24	0 (0%)			0.22	0.28	1.38	1.21		
MARLBOROUGH (b)(c)	52	0 (0%)			0.82	0.77	1.14	1.13		
MEDFORD	68	0 (0%)			0.80	0.39	1.49	1.13		
MELROSE	36	0 (0%)			0.04	0.05	0.74	0.82		
MILTON	32	0 (0%)			0.28	0.80	1.20	1.19		
NAHANT	10	0 (0%)			0.09	0.14	1.09	1.05		
NEEDHAM (b)	41	0 (0%)			0.03	0.04	0.25	0.40		
NEWTON	88	0 (0%)			0.92	1.06	1.71	1.44		
NORTHBOROUGH	16	0 (0%)			1.10	1.27	1.45	1.56		
NORWOOD	36	0 (0%)			0.09	0.05	1.39	1.12		
QUINCY	95	1 (1.05%)		no	0.48	0.35	1.50	1.38		
REVERE	52	0 (0%)			0.66	1.00	1.50	1.43		
SAUGUS	32	0 (0%)			1.21	1.37	1.55	1.48		
SOMERVILLE	80	0 (0%)			0.09	0.17	1.29	1.24		
SOUTHBOROUGH (c)	10	0 (0%)			0.05	0.23	1.06	1.20		
STONEHAM	28	0 (0%)			0.58	1.13	1.61	1.52		
SWAMPSCOTT	18	0 (0%)			0.93	1.12	1.25	1.31		
WAKEFIELD (b)	44	0 (0%)			0.59	0.30	1.20	1.14		
WALTHAM	68	0 (0%)			0.34	0.01	1.45	0.74		
WATERTOWN	43	1 (2.33%)		no	0.80	0.35	1.41	1.09		
WELLESLEY (b)	36	0 (0%)			0.21	0.09	0.48	0.49		
WESTBORO HOSPITAL	5	0 (0%)			0.44	0.50	1.14	0.65		
WESTON (c)	16	0 (0%)			0.38	1.03	1.24	1.31		
WINCHESTER (b)	20	0 (0%)			0.07	0.05	0.63	0.57		
WINTHROP	24	0 (0%)			1.40	1.06	1.60	1.41		
WOBURN (b)	63	0 (0%)			0.10	0.09	0.72	0.74		
Total:	1679	2 (0.12%)								
MASS. WATER RESOURCES AUTHORITY (d)	639	1 (0.16%)		no	0.00	0.04	1.47	1.29		

⁽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.

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

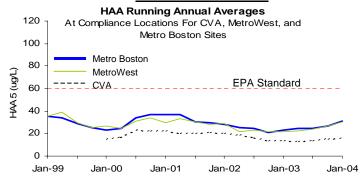
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAAs) are by-products of disinfection treatment with chlorine. Chlorination levels, the presence of organic precursors, pH levels, the contact time of water with chlorine used for disinfection, and temperature all affect TTHM and HAA levels. DBPs are of concern due to their potential adverse health effects at high levels. 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.

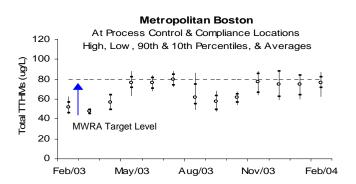
The running annual average for TTHMs and HAA5s at compliance locations, represented in the graphs at the top of the page, remained below current standards. Average monthly HAA5 and TTHM levels at all process control sampling locations for the MetroWest, CVA and Metropolitan Boston communities are higher than those of last year. The CVA system monitoring has been reduced from monthly to quarterly per DEP requirements. The Metropolitan communities are higher than those of last year due in part to the use of the Wachusett Aqueduct and the resulting need for higher chlorine doses.

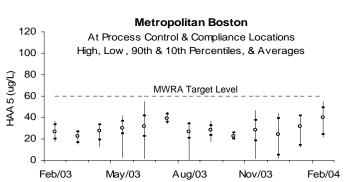
TOTAL TRIHALOMETHANES

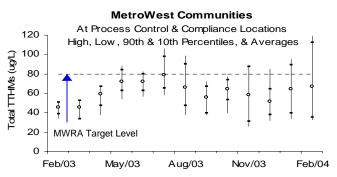
TTHM Running Annual Averages At Compliance Locations For CVA, MetroWest, and 120 Metro Boston Sites 100 Metro Boston **FPA Standard** MetroWest 80 TTHINS (ug/L) CVA 60 40 20 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04

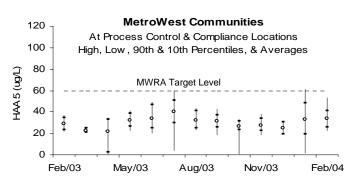
HALOACETIC ACIDS

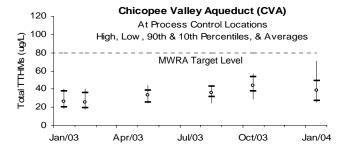


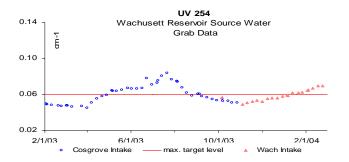












MWRA Monthly Water Quality Analysis February 2004

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 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.

	CVA :		Metropolitan Boston ——▶								I Standards — →			
Component	Quabbin Reservoir at Ware Disinfection Facility (Raw)	Ludlow Monitoring Station (Treated)	g F	Wachusett Reservoir at Wachusett ntake* (Raw)		Marlboro eated)	N	nm Ave., ewton reated)	Ma	aft 9A, alden eated)	Standard	Units	Exceedance	
Alkalinity	2.7	3.4		5.3		34.4		35.6		35.4		MG/L		
Aluminum	< 10.0	< 10.0) .	< 10.0	<	10.0		10.4		11.4	50-200 (d)	UG/L	NO	
Ammonia-N	0.007	< 0.00	5	0.018	<	0.005		0.409		0.406		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	5.9	6.2		9.8		10.0		10.0		9.9	2000 (a)	UG/L	NO	
Beryllium	< 0.1	< 0.1	-	< 0.1	<	0.1	٧	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	5.5	5.3		17.1	T	9.9		5.07		5.8	- ()	UG/L		
Cadmium	< 0.2	< 0.2		< 0.2	<	0.2	٧	0.2	<	0.2	5 (a)	UG/L	NO	
Calcium	2240	2290		4920	T	4980		5070		5080	- (~)	UG/L		
Chloride	7.2	8.6		24.9	†	23.6		24.5		25.6	250 (d)	MG/L	NO	
Chlorine, Free	NS	0.87	,	NS		0.90		NS		NS	200 (d)	MG/L	110	
Chlorine, Total	NS	NS		NS	1	1.04		1.90		1.78		MG/L		
Chromium	< 0.6	< 0.6		< 0.6	<	0.6	~	0.6	<	0.6	100 (a)	UG/L	NO	
Coliform, Fecal, MF Method	0	NS		0.0	_	NS	_	NS	_	NS	20 (b)	CFU/100 mL	NO	
Coliform, Total, MF Method (e)	1	0	_	3	-	0		1		0	100 (b) 0 (c)	CFU/100 mL	NO	
			_	2.7	<u> </u>	3.2		2.7	-	6.2			NO	
Copper **	< 0.9	< 0.9									1300 (a)	UG/L		
Cyanide	< 0.01	< 0.01		< 0.01	<	0.01	<	0.01	<	0.01	0.2 (a)	MG/L	NO	
Fluoride	0.06	0.07		0.04		1.21		1.16		1.17	4 (a)	MG/L	NO	
Hardness	7.8	7.9		16.1		16.3		16.6		16.6		MG/L		
Iron **	12.0	12.5	_	26.3		28.6		29.6		27.9	300 (d)	UG/L	NO	
Lead	< 1.2	< 1.2		< 1.2	<	1.2	<	1.2	<	1.2	15 (a)	UG/L	NO	
Magnesium	540	533		938		938		949		945		UG/L		
Manganese	2.6	2.2		7.9		8.1		8.4		8.2	50 (d)	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	٧	1.0	<	1.0		UG/L		
Nitrate-N	0.005	0.00	5	0.034		0.029		0.09		0.027	10 (a)	MG/L	NO	
Nitrate+Nitrite - N	0.0222	0.03	1	0.097		0.095		0.101		0.096				
Nitrite	< 0.005	< 0.00	5 -	< 0.005	<	0.005	~	0.005	<	0.005	1 (a)	MG/L	NO	
Orthophosphate	< 0.003	0.00	3	0.004		0.008		0.007		0.007		MG/L		
pH	6.8	6.4		8.9		7.2		9.2		9.2		S.U.		
Potassium	506	510		929		990		964		974		UG/L		
Selenium	< 0.9	< 0.9		< 0.9	<	0.9	<	0.9	<	0.9	50 (a)	UG/L	NO	
Silica (SiO2)	1070	1070		2660		3210		3200		3160	(-7	UG/L	-	
Silver	< 0.4	< 0.4	_	< 0.4	<	0.4	~	0.4	<	0.4	100 (d)	UG/L	NO	
Sodium	4.5	5.8	_	13.7	Ė	28.8	Ė	29.4		29.2	(/	MG/L		
Specific Conductance	48	53	\dashv	121		184		183		184		UMHO/cm		
Standard Plate Count, HPC (48 Hrs @ 35C)	NS	NS		49		53		3		2	500 (c)	CFU/mL	NO	
Sulfate (SO4)	5.2	5.2		6.7	 	6.8	 	6.9	 	6.8	500 (c)	MG/L	INO	
Thallium	< 1.0	< 1.0		< 1.0	<	1.0	~	1.0	<	1.0	2 (a)	UG/L	NO	
			+		_		_		<		∠ (a)		INU	
Total Dissolved Solids	< 32	< 53	+	86	├	117	<u> </u>	122	-	119	1	MG/L		
Total Organic Carbon	1.7	1.7	_	2.5		2.4		2.5		2.4		MG/L		
Total Phosphorus	0.005	< 0.00		0.006	<u> </u>	0.013	<u> </u>	0.012	ļ	0.017		MG/L		
UV-254	0.023	0.01		0.070	<u> </u>	0.048		0.058	ļ	0.058		Α		
Zinc **	1.7	2.5		1.6		1.7		2.0		1.7	5000 (d)	UG/L	NO	

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

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

*=Quarterly results are from the Cosgrove Intake

** = 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 February 2nd and 9th of 2004 and analyzed by MWRA and contract laboratories. Quarterly Samples are from January 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.

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

⁽e) - Confirmed results only are reported