

Webster Water Department

38 Hill Street - P.O. Box 793

Webster, MA 01570

Phone # (508) 949-3861 & 3863

Fax: (508) 949-3868



PWSID # 2316000

2011 Consumer Awareness Report - January 1 to December 31, 2011

The Quality of Your Drinking Water

The Webster Water Department is committed to providing our customers with high quality drinking water that meets or surpasses state and federal standards for quality and safety. To insure delivery of a quality product, we have made significant investments in treatment facilities, water quality monitoring, and the distribution system. We are pleased to report the results of our 2011 water testing to inform you about our drinking water. The Webster Water Department will be mailing you a report each year with information about annual water quality. The Water Department also keeps in compliance with other drinking water regulations such as monitoring and reporting for compliance data, record keeping, cross connection control, and lead and copper control requirements.

Webster's Water System

The Town of Webster's water system includes three groundwater supplies and pumping stations, two water storage tanks which holds a combined 2.6 million gallons of water and over 80 miles of water main. Presently two stations have a backup generator to supply water to customers in case of an emergency. Our three water sources are:

- # 1 Pump Station – Five Blended Gravel Packed Wells – Memorial Beach Drive
- # 2 Pump Station – Gravel Packed Well – Memorial Beach Drive
- # 3 Pump Station – Gravel Packed Well – Bigelow Road

Water Conservation

A water use restriction bylaw was passed at the Annual Town Meeting in June 2002. During drought conditions and emergencies, the Webster Water Department has the authority to limit or ban outdoor water usage. During such emergencies, it is important to make sure that there is enough water available for indoor consumption and fire protection. There is a \$50.00 fine for the first violation and \$100.00 fine for each subsequent violation. The Water Department encourages efficient use of water to ensure an adequate supply for the future. Good practices including using water efficient fixtures and appliances (toilets & showerheads), repairing leaky faucets and toilets, and watering lawns early in the morning or late in the evening when evaporation rates are the lowest. Reducing water use will also serve to reduce your water and sewer bills. Another excellent way to save water is through the practice of using "low water use plants" and limiting lawn size. Copies of the water use restriction bylaw and information about water conservation are available at the Webster Water Department Office at 38 Hill Street, Webster, MA.

Educational Information

In order to ensure that tap water is safe to drink, the Massachusetts Department of Environmental Protection (MassDEP) and the US Environmental Protection Agency (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 (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Pesticides and Herbicides that may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Statement for Vulnerable Populations

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 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).

Manganese Information

Manganese is a naturally occurring mineral found in rocks, soil and groundwater and surface water. EPA and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 0.05 mg/l. At levels greater than 0.05 mg/l (50 ppb) the water may appear brown, taste unpleasant and may leave black stains on bathroom fixtures and laundry. While manganese is part of a healthy diet, it can be harmful if consumed in large concentrations.

EPA has also set a health guideline for lifetime exposure to manganese in drinking water of 0.3 mg/l (300 ppb). EPA considered this level to be a protective limit for adults from potential neurological effects over a lifetime of exposure. For short-term 10-day exposures, EPA advises that levels in drinking water be below 1 mg/l (1000 ppb). Infants and children less than 1 year of age should not be given drinking water with manganese levels above 0.3 mg/l (300 ppb) for more than 10 days. This recommendation is based on concerns about effects to the nervous system that are more likely to occur in younger children and because formula-fed infants/children already receive adequate manganese as an added essential nutrient in their formula. Formula-fed infants or children may consume more manganese than the rest of the family if the manganese-fortified formula is prepared with water that also contains manganese. In addition, young children appear to absorb more but excrete less manganese than older children. See: www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf.

Lead Information

Infants and young children are typically more vulnerable to lead in drinking water than the general population. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Webster Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 1-800-426-4791 or at www.epa.gov/safewater/lead.

Internal Corrosion of Household Plumbing

To prevent the corrosion of household plumbing, the Town of Webster has an Aeration Corrosion Control Facility, which has been fully on line since July of 2001. Water samples for lead and copper are taken from 62 sites throughout the Town which include samples from two schools and one daycare facility to see if Webster is in compliance with the federal Lead and Copper Rule. The round of samples taken in September 2011 showed that Webster Drinking Water was found to be below the levels allowed for both lead and copper in drinking water. As long as the sample results are in compliance, sampling for amounts of lead and copper in the drinking water will only have to be performed on an annual basis. Should the town ever fall out of compliance, the periods of sampling per year will be increased and the problem must be addressed. The Venturi Aeration System is supposed to raise the pH of the drinking water to a non-corrosive state. The numbers have not always gone up as they should and this is the reason for failing on some of the sampling in the past. Listed within this report are the results of the September 2011 testing. Drinking water from all sources is being monitored on a daily basis as required by MassDEP.

Residential Cross Connections

A cross connection occurs when contaminated water mixes with the potable drinking water supply. One way a homeowner can prevent a possible cross connection from occurring is to attach hose bib vacuum breakers to your outside faucets. Under certain conditions, contaminated water can be back siphoned through your garden hose when in use. By attaching this vacuum breaker to your outside faucet, water being used outdoors cannot be back siphoned into your home or into the Town's drinking water supply. It is an inexpensive way to help protect the drinking water in your home and the Town's drinking water system. Another inexpensive way to protect the water supply is to have a dual residential check valve installed in your home on your side of the water meter. If you should have any questions about cross connections and devices, please contact the Webster Water Department at 508-949-3861 or visit the Webster Water Department Office at 38 Hill Street in Webster.

Source Water Assessment Program (SWAP)

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Webster citizens and our local officials can work together to better protect our drinking water sources. The MassDEP has completed the Source Water Assessment and Protection (SWAP) report for the Webster Water Department. The complete report is available at the Water Department or online at www.mass.gov/dep/water/drinking/2316000.pdf. It contains important information on land uses and

potential threats within the protected areas of our wells. Webster's susceptibility ranking was determined by MassDEP to be *high*, which means we need to be extra vigilant in monitoring or restricting activities that might contaminate our water supply.

The SWAP report also includes recommendations related to residential land uses, transportation corridors, hazardous materials storage and use, oil or hazardous material contamination sites, wastewater treatment plants, and wellhead protection planning. The Webster Water Department has been commended by MassDEP for taking an active role in promoting source protection measures in our water supply protection areas. The SWAP information can be used to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

We can help protect these vital resources by continuing with public educational efforts with the schools, business community and general public. Citizens can also help protect our water supply by proper maintenance of septic systems. You can help by pumping out your septic system every two years and do not use septic system cleaners. Never dump hazardous substances down septic or storm drains. For additional information or to offer suggestions or ideas to generate public awareness, please call the Water Department at 508-949-3861 or stop by our office.

Water Quality Summary-2011

The Webster Water Department samples the municipal drinking water in accordance with state and federal regulations. Drinking water bacteria samples are taken twice per month at each routine sampling location, while sampling for all other parameters are taken throughout the year as required by the state. Samples are sent to a state-certified lab for analysis. Results are then sent to the state and also kept on file with the Town of Webster.

Permanent disinfection facilities were constructed at all three of Webster's drinking water distribution stations during the spring and summer months of 2004. With chlorine added to Webster's municipal drinking water, the Town is now assured of proper protection from bacteria and other contaminants that could enter the drinking water supply. It is the goal of the EPA, along with MassDEP to ensure the safest drinking water possible for human consumption. If you should have any questions concerning any contaminants tested for in the Town's public drinking water, please contact the Water Department at 508-949-3861 or 3863. The Webster Water Department takes all precautions to maintain and deliver the best quality drinking water possible to the public.

**WEBSTER DPW WATER DIVISION
2011 CCR TABLES**

The following results were from sampling done in 2011 or during the most recent monitoring period for each contaminant group.

Lead and Copper	Dates Collected	90 TH Percentile*	Action Level (AL)	MCLG	Exceeds AL (Y/N)	# of Sites Sampled	# of Sites above AL	Possible Source of Contamination
Lead (ppb)	9/14 – 9/23/11	8.9	15	0	N	65	2	Corrosion of household plumbing systems
Copper (ppm)	9/14 – 9/23/11	1	1.3	1.3	N	65	1	Corrosion of household plumbing systems

*Lead and copper compliance is based on the 90th percentile value, which is the highest level found in 9 out of every 10 homes sampled. This number is compared to the action level for each contaminant.

Bacteria	Highest # Positive Samples in a Month	MCL	MCLG	Violation (Y/N)	Possible Sources
Total Coliform	1	1	0	N	Naturally present in the environment
E. Coli	0	*	0	N	Human and animal fecal waste

*Compliance with the E. coli MCL is determined upon additional repeat testing.

Inorganic Contaminants	Date(s) Collected	Highest Result or Highest RAA*	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Sources
Nitrate (ppm)	4/5/11	1.1	0.17 – 1.1	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Nitrite (ppm)	4/5/11	0.022	0 – 0.022	1	1	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Barium (ppm)	6/18/09	0.027	0.01-0.027	2	2	N	Erosion of natural deposits
Beryllium (ppb)	6/18/09	1	0-1	4	4	N	Discharge from electrical industries; natural deposits
Radioactive Contaminants							
Gross Alpha (pCi/l)	Quarterly in 2009	3.31	0-3.31	15	0	N	Erosion of natural deposits
Radium 226 & 228 (pCi/l)	Quarterly in 2009	1.6	0.2 – 1.6	5	0	N	Decay of natural and manmade deposits
Disinfection Contaminants							
Haloacetic Acids (HAA5s) (ppb)	Quarterly in 2011	1*	0-1.2	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2011	3*	0.5 – 5.5	80	--	N	Byproduct of drinking water chlorination
Chlorine (ppm)	18 Samples a Month	0.16*	0 – 1.3	4	4	N	Water additive used to control microbes

*Highest RAA = highest running annual average of four consecutive quarters.

Unregulated and Secondary Contaminants	Date Collected	Highest Result	Average	SMCL	ORSG	Possible Sources
Sulfate (ppm)	6/18/09	18	12	250	--	Natural sources
Sodium (ppm)	6/18/09	85	41*	--	20	Natural sources; runoff from road salt
Iron (ppb) Pump Station #1 Pump Station #2 Pump Station #3	4/5 & 10/19/11 2/3 & 10/19/11 4/5 & 10/19/11	170 250 0	165 245 0	300	--	Naturally occurring; corrosion of cast iron pipes
Manganese (ppb) Pump Station #1 Pump Station #2 Pump Station #3	4/5 & 10/19/11 2/3, 4/5, & 10/19/11 4/5 & 10/19/11	180** 600 310	180 548 237	50***	--	Erosion of natural deposits
MTBE (ppb)	11/16/09	0.55	0.02	20 - 40	70	Fuel additive

*Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are being carefully controlled.

** This result represents the finished water distributed to customers from Pump Station #1. It was calculated by averaging the results from the five wells that supply water to that pump station. All water from Pump Station #1 is blended.

*** EPA has established a lifetime health advisory (HA) value of 0.3 mg/l (300 ppb) for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1 mg/l (1000 ppb) for acute exposure. Please see page 2 of this report for additional information about manganese.

Definitions

MCL = maximum contamination level. The highest level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG = maximum contamination level goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

AL = action level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (ug/l)

pCi/l = picocuries per liter (a measure of radioactivity)

Unregulated Contaminants – Unregulated contaminants are substances without MCLs for which EPA requires monitoring. For some of these substances, the Massachusetts Office of Research and Standards (ORS) has developed state guidelines or secondary MCLs.

SMCL = secondary maximum contaminant level. These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

ORSG = Massachusetts Office of Research and Standards guideline. This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Compliance in 2011

MassDEP issued a notice of noncompliance (NON) to the Webster Water Department for not collecting the required number of lead & copper samples in 2011. The department is revising its sample plan to make provisions for the next sampling period.

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring Requirements Not Met for the Webster Water Department**

Our water system did not complete all the required monitoring over the past year, which is a violation. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the third quarter of 2011 we did not complete all monitoring or testing for lead and copper and therefore cannot be sure of the quality of our drinking water during that time.

What should I do? There is nothing you need to do at this time. The table below lists the contaminants we did not properly test for during the last year, how often we are supposed to sample for them, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples will be taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were or will be taken
Lead & Copper	60 Samples once per year	57	June through September 2011	57 Taken Sept 2011. Next sampling June – Sept 2012

What happened? What is being done? The Webster Water Department is required to collect 60 samples/year for lead and copper testing. Only 57 eligible samples were collected. The Webster Water Department is revising its sampling plan for MassDEP approval and the proper number of samples will be taken in 2012. The Webster Water Department relies on residents to participate in the lead and copper monitoring program for it to be successful. Participation involves collecting a sample, typically in the morning before any other water is used in the home (called a "first draw" sample) from a kitchen or bathroom tap. If you have a home build prior to 1986 and are interested in participating, please contact the Webster Water Department. For more information, please contact the Webster Water Department at 508-949-3861 or PO Box 793, Webster, MA 01570.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Webster Water Department PWS ID #: 2316000 Date distributed: 5/18/12

Water Department Staff

Kevin J. Esposito, Water - Assistant Superintendent
Michelle Roy, Administrative Assistant
Dennis P. Bouchard, Water Foreman/Certified Operator
Michael Annese, Utility Specialist/Certified Operator
Joseph Patterson, Utility Specialist/Certified Operator
Sean Reese, Utility Specialist/Certified Operator

Contact Us

As a customer of the Webster Water Department you have the right to participate in decisions concerning your drinking water. The Board of Selectmen, as Water Commissioners, will schedule workshops or post agenda items as necessary. Any concerns can be addressed through the board or the Webster Water Department.

If you have any questions about this report or if you would like additional copies, please contact Water - Assistant Superintendent Kevin Esposito at 508-949-3861 at the office or by email at kesposito@webster-ma.gov.

The Water Department office hours are 7 A.M. to 3 P.M. Monday through Friday. We are now located at 38 Hill Street in Webster. Please visit our new web page <http://www.webster-ma.gov> for information and forms.

After hours if there is an emergency, please call the Webster Police Department at 508-943-1212.