

# **Annual Water Quality Report**

## ***Water testing performed in 2012***

Westminster Department of Public Works  
PWS ID #2332000

### ***Is my water safe?***

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

### ***Do I need to take special precautions?***

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### ***Where does my water come from?***

The Town of Westminster Water Department customers receive water from the City of Fitchburg. The Regional Treatment Facility located on Hager Park Road-Route 140 can draw water from 3 reservoirs located in Westminster, Princeton, and Hubbardston. These reservoirs are Meetinghouse Pond, Mare Meadow Reservoir, and Bickford Pond. After the water leaves the reservoirs, the Treatment Facility treats the water to remove contaminants and adds disinfectant to protect our customer's against microbial contaminants. Once water is treated, it is pumped from our booster pump station, located just south of the Treatment Facility, into the distribution system to Westminster water customers.

### ***Source Water Assessment and Protection (SWAP) program***

Massachusetts conducts a source water susceptibility assessment as a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area. In 2002, the MassDEP, ranked Fitchburg's reservoirs as having high susceptibility. The susceptibility of a water source to contamination does not imply poor water quality. Actual water quality is best reflected by the results of regular water tests. Fitchburg protects the drinking water by monitoring the water for chemicals, treating, filtering, and disinfecting the water supply, and by protecting the land surrounding the reservoirs. The full SWAP, which explains the MassDEP ranking, can be viewed online at <http://www.mass.gov/dep/water/drinking/2097000.pdf> or by calling the Fitchburg Water Division of Water Supply at (978) 345-9616.

### **Why are there contaminants in my drinking water?**

**Drinking water, including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) 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; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe** to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **How can I get involved?**

The Public Works Commission meets the 2nd and 4th Monday of each month beginning at 6 p.m. at the Department of Public Works, 2 Oakmont Avenue. These meetings are open to the public and often have water related issues on the agenda.

### **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

### **Source Water Protection Tips**

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

### **Additional Information for Fluoridation**

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system the fluoride level is adjusted to an optimal level averaging one part per million (ppm or mg/l) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the United States who receive the health and economic benefits of fluoridation.

### **Additional Information for Lead**

Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children, who are typically more vulnerable to lead in drinking water than the general population. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Westminster 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 reduce lead content by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Additional information about lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or online at <http://www.epa.gov/safewater/lead>.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u> <u>Low</u>   <u>High</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	0.54	0.05	1.24	2012	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	25.6	9.1	26.3	2012	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	NA	80	59.2	43.5	75.6	2012	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.009	ND	0.009	2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride <sup>1</sup> (ppm)	4	4	1.13	0	1.13	2012	No	Water additive which promotes strong teeth
Sodium <sup>2</sup> (ppm)		MPL	23.1	20.5	23.1	2012	No	Erosion of natural deposits; Leaching
<b>Microbiological Contaminants</b>								
Turbidity <sup>3</sup> (NTU)	NA	0.3	98.39	NA		2012	No	Soil runoff
98.39% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.36. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Total Coliform (positive samples/month)	0	1	1	NA		2012	No	Naturally present in the environment

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
<b>Inorganic Contaminants</b>							
Copper <sup>4</sup> - action level at consumer taps (ppm)	1.3	1.3	0.47	2012	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead <sup>4</sup> - action level at consumer taps (ppb)	0	15	0.014	2012	2	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Unregulated Contaminants

<u>Contaminants</u>	<u>State MCL</u>	<u>Your Water</u>	<u>Violation</u>	<u>Explanation and Comment</u>
Sulfate	NA	4.2 ppm	No	Natural sources

## Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL or MRDL</u>	<u>Your Water</u>	<u>Violation</u>	<u>Typical Source</u>
Asbestos (MFL) (2011)	7	7	ND	No	Decay of asbestos cement water mains; Erosion of natural deposits
Tetrachloroethylene (ppb)	0	5	ND	No	Discharge from factories and dry cleaners

## Initial Distribution System Evaluation (IDSE)<sup>5</sup>

<u>Contaminants</u>	<u>Range</u>		<u>Sample</u>	<u>Typical Source</u>
	<u>Low</u>	<u>High</u>	<u>Date</u>	
Haloacetic Acids (HAA5) (ppb)	17.3	46.0	2009	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	ND	98.3	2009	By-product of drinking water disinfection

<sup>1</sup> Fluoride has an SMCL of 2 ppm.

<sup>2</sup> 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. Sodium has an ORSG of 20 ppm.

<sup>3</sup> Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality.

<sup>4</sup> 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.

<sup>5</sup> We were required by the EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations.

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
MFL	MFL: million fibers per liter, used to measure asbestos concentration
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	MCLG: Maximum Contaminant 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.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
90 <sup>th</sup> Percentile	Out of every 10 homes sampled, 9 were at or below this level
Unregulated Contaminants	Unregulated contaminants are those for which EPA has not established drinking water standards.
Secondary Maximum Contaminant Level or SMCL	These standards are developed to protect the aesthetic qualities of drinking water and are not health based.
Massachusetts Office of Research and Standards Guideline or ORSG	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.

**For more information please contact:**

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