

InFLOWmation

Westford Water Department Newsletter



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Pavement of Pleasant/Concord and Graniteville Road

The final curb to curb overlay paving on the sections of Graniteville Road and Pleasant Street affected by the 2015 water main improvement projects will begin during the first week in May. Paving operations should take about a week (weather dependent). Motorists should seek alternate routes as detours and delays are expected.

Gate Valve Maintenance Program

Gate valves are used to isolate portions of the distribution system for emergency or routine repairs. They also function to shut off fire hydrants for repair or replacement. These valves are located at various points along the water mains and are accessed at the road surface through the gate box, covered by a metal lid (gate box cover). The covers are not sealed and gate boxes frequently collect silt, sediment and water, covering the gate valve.



Above: Crew cleaning out gate box

Gate valves need to be exercised periodically to prevent them from becoming inoperable, which could pose a serious problem in an emergency. Accordingly, we need to operate gate valves in the system on a regular basis. Our new valve trailer allows us to quickly clean out the valve boxes and efficiently conduct our valve maintenance program.

Below: 6" Gate Valve



Above: Crew operating gate valve

The 2015 Consumer Confidence Report is available (p. 3)
Rain Barrel Sale through May 19th (p. 4)
Water Use Restrictions in effect May 1 (p. 6)

Lead and Drinking Water

High levels of lead detected in Flint Michigan's drinking water has raised concerns about the safety of public water systems. Accordingly, it may be a good time to highlight the differences between the Flint situation and the practices of responsible water suppliers like the Westford Water Department (WWD).

The lead problem in Flint resulted from a change of the water supply source. In order to reduce costs, Flint switched from Detroit's supply (Lake Huron/Detroit River) to the Flint River about two years ago with the intention of implementing a new connection to Lake Huron. It turns out that water from the Flint River is more corrosive than the Detroit source. This in and of itself is not necessarily a problem as long as proper treatment is performed. However, Flint did not properly treat the Flint River water for corrosivity.

Where is the lead coming from?

The lead contamination did not come from the source water itself or even from the Flint Water System but from the customer's plumbing. Flint has a large number of lead service lines (the pipe extending from the water main in the street to the customer's home). Another source of lead is lead-containing solder - commonly used on copper pipes in older houses, and older brass faucets and fittings. Corrosive water lying stagnant within customer's leaded plumbing materials can leach lead into the water creating unsafe levels.

What can the water supplier do about corrosive water?

The WWD, like most municipal water systems are subject to the Federal Lead and Copper Rule (LCR). The purpose of this rule is to protect water system consumers from exposure to lead and copper in drinking water. The basic requirements of this rule include corrosion control of the source water, collecting tap water samples at higher-risk services, ruling out the source water as a significant source of lead, and educating customers about lead and suggesting actions they can take to reduce their exposure. There are also lead service line replacement requirements.

The WWD routinely satisfies all elements of the LCR:

- Potassium hydroxide is added to source water to reduce corrosivity.
- Lead and Copper sampling is performed at regular intervals at MassDEP approved locations.
- Information regarding lead in water is distributed in our annual Consumer Confidence Report and semiannual Inflowmation newsletter.
- Source water has been evaluated and is not a significant source of lead.

The WWD treats our source water (groundwater) for corrosivity by adding potassium hydroxide to increase the pH to just over 7.0. This reduces the corrosive effect water can have on older plumbing that may have lead fitting, fixtures, or solder present.

In addition, the WWD sends monthly chemical treatment reports to the MassDEP for their review and oversight. It is still unclear why Flint failed to properly treat their new source water and the governing authorities—Michigan DEQ - and ultimately the US EPA did nothing for so long.

Lead and Copper sampling program. The WWD with the assistance of our customers conducts a lead and copper testing program every three years. The program used to be run more frequently, but years of compliant results has allowed us to reduce the frequency. Samples collected directly from customer's taps under worst-case scenarios are tested for lead and copper at a Massachusetts Certified Laboratory, and the results are delivered to the specific customers, within the annual Consumer Confidence Report, and to the MassDEP. The most recent results from 2015 indicate that the WWD is in compliance with the lead and copper action levels.

Visit the Water Department website at:
www.westfordma.gov/water
for the electronic version of the Inflowmation to access the linked material in this newsletter.

I'm still worried about lead in my drinking water – what can I do?

There are steps customers can take if still concerned about lead in drinking water.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap until it becomes as cold as it will get before using water for drinking or cooking (this usually takes 30 seconds to 2 minutes but can take longer depending on the length of your service line).

Consumer Confidence Report

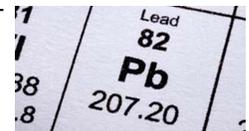
The Water Department provides our customers with a direct link to the current electronic copy of the CCR on the Water Department website. **Visiting the following website address will take you to the current CCR:**
<http://www.westfordma.gov/ccr>

The CCR contains important information about the source and quality of your drinking water, and is well worth the time to review. Since electronic delivery has become our primary method for providing the annual CCR it's important to note that:

- **The Westford Water Department no longer mails out paper copies of the CCR unless requested.**
- **If you have previously requested a paper copy then one will automatically be sent to you each year (there is no need to make additional requests).**
- **Please call at 978-399-2457 (or send email to mwarren@westfordma.gov) if you would like a paper copy delivered to your home or business.**

In addition, paper copies of the CCR will still be available at the Water Department, Town Hall and other municipal and community buildings.

(Lead cont, from p. 2) This procedure must be done at each drinking water tap. Do not use hot water for cooking or drinking. Hot water tends to dissolve higher levels of lead more quickly than cold water. Instead, draw cold water from the tap and heat on stove. Boiling water does not reduce lead levels! In fact, boiling will only concentrate any lead present in the water. If you are concerned about lead in your water, you may wish to have your water tested by a [Certified Laboratory](#). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.



Times have changed – for the better

Lead Reduction Act - The Reduction of Lead in Drinking Water Act (Lead Reduction Act) was signed into law by President Barack Obama in January of 2011. This Act changed the definition of “lead free” from a maximum of 8.0 percent to 0.25 percent (for flux and solder, the new definition of “lead-free” is not containing more than 0.2% lead). The Lead Reduction Act took effect on January 4, 2014, and requires new pipes, fittings, plumbing fittings, and fixtures to meet the new definition of “lead free”. Keep in mind that the lead-free requirements only apply to potable water supplies, and items used for non-potable uses (such as manufacturing or industrial processing, irrigation, etc.) are exempt from these requirements.

The Lead Reduction Act also applies to any household fixture (say a kitchen faucet) that will be used for human consumption (i.e. potable water). Any such faucet or fixture for sale after January 4, 2014 must meet the new definition of “lead-free”. This also applies to items such as hot water heaters and any other item that is integrated into the plumbing system.

Does Westford have active lead water service lines?

There are no known lead service lines still in use in Westford, but a handful of older lead “gooseneck” connections exist. This is the connection between the customer service line and the water main used in older galvanized services – and no longer installed. Service lines in Westford consist mostly of copper or plastic material. All new installations are plastic and no gooseneck connection is necessary.

Copper service line pipe and gooseneck

Lead gooseneck

Galvanized service line pipe



Perfluorooctanoic Acid (PFOA)

PFOA has been in the news recently with reports of this chemical being detected in drinking water wells in some New Hampshire towns near a plastics manufacturing facility, prompting an investigation by the New Hampshire Department of Environmental Services (NH DES). PFOA is a fully fluorinated organic compound that along with perfluorooctyl sulfonate (PFOS) are the two perfluorinated chemicals produced in the largest amounts in the United States. PFOA is a synthetic substance that is not found naturally in the environment. PFOA is also considered an emerging contaminant and is under investigation by the USEPA because: it is very persistent in the environment, is found at very low levels both in the environment and in the blood of the general U.S. population, remains in people for a very long time, and causes developmental and other adverse effects in laboratory animals.

PFOA is used to make fluoropolymers which are materials with special properties that have hundreds of industrial and manufacturing applications. Fluoropolymers impart valuable properties such as fire resistance, oil and stain resistance, and water repellency. PFOA can also be produced by the breakdown of some fluorinated compounds used for surface treatment purposes. PFOA has been found in microwave popcorn bags and pizza boxes, and consumer products made by fluoropolymers and fluorinated telomers such as Teflon® and other trademarked products may contain trace amounts of PFOA and other related perfluorinated impurities. For more information visit the Water Department website: www.westfordma.gov/water for [MassDEP](#) and [EPA factsheets](#).

The Westford Water Department performed four sampling rounds for perfluorinated compounds (including PFOA) in 2014-2015 as part of the third Unregulated Compound Monitoring Program (UCMR 3). PFOA was detected at trace concentrations only in the last round of sampling. No other perfluorinated compounds were detected. There is currently no regulatory standard for PFOA, but the USEPA has established a provisional health advisory (PHA) level of 0.4 parts per billion (ppb). Refer to the [2015 CCR](#) for PFOA results.

2016 Rain Barrel Sale

The Westford Water Department is pleased to once again partner with The Great American Rain Barrel Company to provide a town rain barrel program. Rain barrels can be purchased on line. Visit the Great American Rain Barrel Company website at <https://www.greatamericanrainbarrel.com> and click on “Shop Community Programs” and click on “Westford” (this link is also available through the Water Department website at www.westfordma.gov/water). The deadline for purchasing rain barrels is May 19th at 5:00 pm, and pick-up will be on Thursday May 26th from 4:00-6:00 pm at the Water Department (60 Forge Village Road).



What to do when we flush fire hydrants

Hydrant flushing stirs up the naturally-accumulated sediment in the water mains, temporarily turning the water to a reddish-brown color. If you happen to turn on your faucet when the main is being flushed this discolored water will be drawn into your plumbing. This water is safe and does not pose a health problem, but you understandably will not want to drink or wash with it. Here's what we suggest:



If you notice discolored water, discontinue using the water and wait until we are finished flushing in your area.

After flushing is completed all you need to do is open a **cold water tap** and let your water run until it becomes clear (usually after a few minutes).

Running cold water is important because if you turn on the hot water the discolored water will be drawn into your hot water tank. If this happens you may want to allow the sediment in the water to settle and then drain a few gallons of water from the bottom of the tank before running any appliances that use hot water.

If you know we are in the area flushing the best thing to do is not turn on your water until we are done! Visit our website at www.westfordma.gov/water to find out the area(s) being flushed that day.

Water Hardness and the Use of Softeners

What is water hardness?

Hardness generally refers to the concentration of 2 non-toxic minerals (calcium and magnesium) in the water. At high concentrations, these minerals can make creating soap suds difficult and therefore washing “hard”. Conversely, water with low mineral content makes it easier to create suds – and is referred to as “soft”. Another effect of hard water can be the presence of whitish spotting, streaks, or scale on dishes and fixtures. Hardness is naturally-occurring and does not present any health concerns.

How does a water softener work?

Most common water softeners lower the hardness concentration using ion exchange technology. This method replaces the calcium and/or magnesium with sodium. An alternative to using sodium as the softener medium is potassium, which is typically more expensive. Reverse-osmosis technology can also be used to remove hardness, but this is significantly more expensive than ion exchange.

Is Westford Water Department water hard?

Westford uses groundwater for our supply. Groundwater is typically more hard than surface water as water—being the universal solvent—picks up minerals as it flows underground. Hardness levels will vary throughout the year, but our latest results (from the 2015 CCR) are 74–84 parts per million (ppm). Compared to the below hardness scale you can see that Westford water is classified as moderately hard.

Do I need a water softener

This is entirely a customer preference as hardness does not present any health concerns.

Why doesn't Westford treat the water for hardness?

Generally, it is considered impractical for municipalities to treat water with a hardness of less than 200 ppm as softener plants are expensive to build and operate, and hardness does not present any health concerns.

Hardness Table

Hardness Classification	mg/L
Soft	0-60
Moderately Hard	61-120
Hard	121-180
Very Hard	≥181

Some things to consider before installing a water softener

Many water softeners use sodium as the ion exchange agent, which will add sodium to the water dependent on the hardness concentration of the water. People on sodium-restricted diets may want to consult with their physician before installation of this type of softener. Using potassium as the exchange agent (more expensive) or installing a reverse osmosis system (even more expensive) are alternatives to using sodium as the ion exchange agent.

Softened water tends to be more corrosive. This can be a concern with older plumbing systems that may contain leaded brass fixture, lead fittings, or lead solder as the more aggressive water tends to leach out more lead.

Using water that has been softened (using the sodium ion exchange method) to water your lawn or gardens can be detrimental over the long term. Over time, the softened water will build up sodium levels in the soil and cause breakdown of the soil structure, both of which can harm lawns and plantings.

Many of these problems can be avoided by installing the softener only on the hot water line. You will get the benefit of using softened water in your appliances (where hard water problems like scale tend to manifest themselves) while maintaining the un-softened water for drinking, cooking, and irrigation.

[Have a question about your private well?](#)

Visit the Health Department website at www.westfordma.gov/health and click on the “Private Wells” link **or** Contact Jeff Stephens, Director of Environmental Services, Westford Health Dept.: 978-692-5509 or at jstephens@westfordma.gov. The Private Wells website provides helpful links to MassDEP and the U.S. EPA for information on: different types of wells, Mass licensed well drillers, MassDEP certified laboratories for drinking water, water quality testing, common water quality issues. In addition, Westford Well Water Regulations and the minimum testing requirements for property sales is provided. Please note: ***There may be no connection between a private well and the public water system.***



Westford Water Department
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60 Forge Village Road
Westford, MA 01886

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How to Reach Us

Main Phone Line (978) 692-5529
Superintendent (978) 399-2455
Water Operations Manager
(978) 399-2456
Business Manager (978) 399-2453
Environmental Compliance Manager
(978)399-2457
Billing and Property Transfers
(978) 692-5529
Accounts Payable (978) 692-5529

Visit our website:
www.westfordma.gov/water

After Hours

In the event of a water emergency outside of the work day, call the Police Department at 978-692-2161. The police dispatcher will contact our on-call personnel for quick response.

Water Use Restrictions

Stage I Voluntary water use restrictions will go into effect on May 1 and run through October 31. During this time we ask that customers follow the odd/even day watering schedule and only water before 9 am or after 6 pm. Odd/even means odd-numbered addresses may water on odd-numbered days, and even-numbered addresses on even-numbered days.

If it becomes necessary to implement the **Stage II Mandatory** water use restriction then customers must restrict watering to the odd/even schedule and before 9 am and after 6 pm. Pool filling is prohibited under Stage II.

If **Stage III Emergency** water use restrictions are implemented then all outdoor non-essential water use is prohibited.

Notification of upgrades to water use restriction stages will be accomplished by outdoor signage, notice in the local newspaper, town email notices, and Water Department website posting.

Please help us conserve water!

