



# INFLOWMATION

Westford Water Department Newsletter

Water Commissioners:

- Elizabeth Denly, Chairperson
- Hugh C. Maguire, Vice Chair
- Titus Palmer Secretary
- Alternate (open)



Department Contacts:

- Stephen Cronin, Superintendent
- Marco Philippon, Water Operations Manager
- Larry Panaro Business Manager
- Mark Warren Environmental Compliance Manager

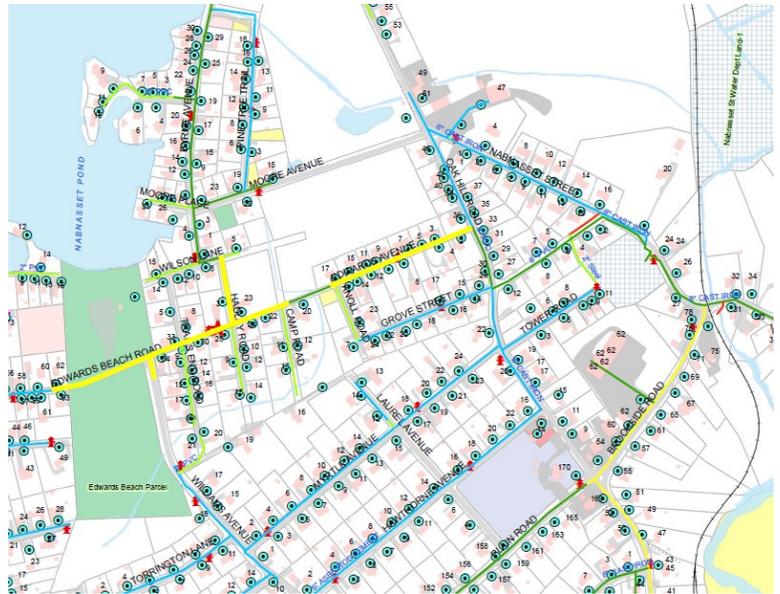


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**Nabnasset Water Main Improvement Project**

The Water Department plans on upgrading a portion of the water mains in the Nabnasset neighborhood. Approximately 2,500 linear feet of 8” asbestos cement main on Edwards Avenue and Hadley Road are slated to be replaced with 8” ductile iron pipe (see map area highlighted in yellow). This stretch of main has been identified as a distribution system



deficiency due to its history of breakage, and needs to be replaced. Included in the project, new main will be run between Birch Road extension and Edwards Avenue. By connecting these mains we will get rid of 2 dead ends—which can contribute to poor water quality conditions. Approximately 24 service connections will be renewed, and new gates and fire hydrants installed. The benefit of replacing the old, troublesome section of water main, and adding a new section is improved flow, which provides increased fire protection and also improves water quality and reduces water hammer issues. Additionally, we should see less main breaks in the area reducing the occurrence of emergency water shutoffs for repairs.

**Equipment Upgrades**



Earlier this spring, the Water Department was awarded a grant by the Massachusetts Department of Public Health – Office of Oral Health providing funds to update public water supply fluoride equipment. This grant permitted us to purchase and install new fluoride treatment and monitoring equipment. We are pleased to provide our customers with the benefits of an efficient and modern fluoridation treatment system.



**Above: New Fluoride Monitor and Pumps**

## Commercial Cross Connections

Chemical dispensers commonly used in the food service and building maintenance trades are very popular and provide a quick and easy way to provide ready-mixed volumes of soaps, detergents, and sanitizers. Many dispensers are connected directly to the public water system in order to dilute the concentrated material. This connection constitutes a cross-connection and must be appropriately protected from backflow.



Many dispensers come with built-in air gaps or other backflow devices, and are labeled with ASSE 1055. Massachusetts also requires that the water feed line to the device be protected with a dual-check valve with an atmospheric vent as an added protection. A dispenser without a built-in device requires a reduced pressure zone (RPZ) backflow device on the water feed line.

The important thing to know is that these dispensers must be installed according to Mass plumbing code and must also meet MassDEP requirements for backflow protection for chemical dispensers. Dispensers that are hard-piped require a plumbing permit. For additional details contact the Water Department or visit the Water Department website at [www.westfordma.gov/water](http://www.westfordma.gov/water).

## Chlorine Taste to Water

Occasionally we hear that there is a chlorine taste or odor to the water in Westford. This taste/odor can be caused by our disinfection of the water with chlorine as required by the MassDEP. In fact, the MassDEP requires that a trace concentration of chlorine (called a chlorine residual) be present in the drinking water to the last free flowing tap. Disinfection kills harmful bacteria that can cause sickness in humans, and keeps our water safe.

We try to keep the chlorine concentration in the drinking water at the most optimum level possible, providing safety while keeping in mind taste. However, some people are more sensitive to the chlorine residual than others.

If you are sensitive there are a couple easy ways to reduce the chlorine taste. Using a common carbon filter will remove the chlorine taste/odor. Alternatively, if you fill a container with tap water and let it sit in your refrigerator for a few hours the chlorine taste will dissipate.

## Consumer Confidence Report

The Water Department provides our customers with a direct link to an 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 will become our primary method for providing the annual CCR it's important to note that:

- **The Westford Water Department will no longer be mailing out paper copies of the CCR unless requested.**
- **Please call at 978-399-2457 (or send email to [mwarren@westfordma.gov](mailto:mwarren@westfordma.gov)) if you would like a paper copy delivered to your home or business.**

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

## Water Hardness

What is water hardness? Hardness 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.

What causes water hardness? Water flowing through the ground naturally dissolves and picks up minerals leading to varying degrees of hardness dependent on the area geology.

Is Westford Water Hard? Westford Water Department drinking water is considered "moderately hard", which is common for Massachusetts. The most recent annual distribution system samples ranged from 78 mg/l–85 mg/L. Refer to the Hardness Table for common distinctions of water hardness (from USGS).

What can I do about hardness? Although water hardness does not present a health problem – it can create aesthetic issues such as the previously mentioned streaking or scaling of dishes and fixtures. Installation of a water softener can lower the hardness concentra-



**Water Hardness—cont.**

-tion by replacing the calcium or magnesium with sodium or potassium. People on restricted diets may want to consider this fact before installation of a softener. Additionally, a water softener adds salt to the environment. Another means to remove hardness is the installation of a more-expensive reverse-osmosis treatment unit.

**Hardness Table**

Hardness Classification	mg/L	gpg
Soft	0-60	0-3.5
Moderately hard	61-120	3.56-7.01
Hard	121-180	7.06-10.51
Very Hard	≥181	≥10.57

mg/L = milligrams per liter  
gpg = grains per gallon

*InFLOWmation is published twice a year for all residents and businesses of Westford. Our goal is to keep you informed of events, our challenges and our accomplishments. We also strive to educate and encourage good stewardship of our water resources.*

**Rain Barrels**

The Water Department partnered with Great American Rain Barrel of Hyde Park, Massachusetts for a rain barrel sale in 2013.

Rain barrels can be connected to a home’s downspout to collect rainwater for lawn and garden irrigation. The water collected in the barrels is temperate and non-chlorinated, which is preferable for garden plants.

These devices serve as an effective means to conserve water and to reduce storm runoff. Over 35 rain barrels were sold at a discounted municipal price.

**Below: Rain barrels in attractive earth tones**



**Open House**

The Water and Health Departments hosted the first Water Department Open House and Environmental Health and Wellness Expo in the spring of 2013. This event featured many informative displays and vendors including water conservation, organic lawn care, backflow prevention, rain barrels, emergency preparedness, Title V/Septic Systems, private wells, and much more. The expo was well attended and both young and old enjoyed free delicious Kimballs ice cream served by Water Department staff.



In addition, the winners of the Water Department grade 4 poster contest and Health Department grade 5 recycle contest were announced. To see the winning posters visit the Water Department website at [www.westfordma.gov/water](http://www.westfordma.gov/water).



**Left: Backflow Demonstration**

**Above: Health Department Display**

## Green Lawns without Green Waters

Overfeeding our lawns can green our rivers and ponds. Applying more fertilizer than the label recommends or your soil needs will not improve your lawn, and instead the extra fertilizer may wash off into nearby waterways. Just as fertilizer helps plants grow on the land, it encourages algae and other aquatic plants to grow in water. Dense weeds and algae reduce oxygen in the water, which in turn harms fish and other aquatic life. Extra nutrients such as phosphorus and nitrogen that are found in fertilizers can cause blue-green algae blooms and the blooms can have major impacts on animals, aquatic life, our water bodies, wells, humans, and our recreational lifestyles. “Green water” is also much less attractive for boating, swimming and other recreation practices.

In Westford, the Health Department is coordinating with town staff, residents, and lake/pond association members to form a coalition to improve and maintain the health of Westford’s Lakes and Ponds.

Some ways you can help.....

Calibrate your spreader.

Leave grass clippings on the lawn to lessen the need for fertilizer.

Use fertilizers, pesticides, and herbicides sparingly. Sweep and overspray back onto the lawn.

Mow 2.5-3 inches high with a sharp blade to encourage dense growth and deter weeds.

Never discard yard waste down storm drains or into waterways.

Water deeply and infrequently, and time watering to avoid evaporation and runoff.

Reseed bare areas with drought-tolerant varieties of grass.

If you hire a lawn care contractor, speak with him or her about their application practices.



### Water bodies with heavy algae blooms:

#### Swimming anyone?

#### Day at the beach?



### Private Well Corner

The Westford Water Department services roughly 75% of the town. The remaining residents rely on private drinking water wells. For questions regarding private wells—including when you should have your well tested—contact Darren MacCaughey, Director of Environmental Services, Westford Health Dept.: 978-692-5509 or at [dmaccaughey@westfordma.gov](mailto:dmaccaughey@westfordma.gov).

## Sodium In Drinking Water



The Westford Water Department (WWD) monitors for sodium in drinking water on an annual basis. Road salt is a common contributor to sodium concentrations in groundwater. The Massachusetts Department of Environmental Protection (MassDEP) requires all water suppliers (like the Westford Water Department) to notify their local Boards of Health, the Massachusetts Department of Health, and the MassDEP of the detected concentrations of sodium in drinking water. Notification is required so that individuals who are on sodium restricted diets or who wish to monitor their sodium intake for other reasons will be able to take the amount of sodium in their drinking water into account.

The WWD most recently collected drinking water samples for sodium on 5/2/2013, and provided notification of the results to the required departments in June of 2013. Sodium results are also reported in the annual Consumer Confidence Report (CCR).

**Current Sodium in Drinking Water Results (5/2/2013 collection date): 51.4 mg/L - 68.6 mg/L.**

For more information see the Sodium in Drinking Water Fact Sheet provided by the Massachusetts Department of Public Health available on the Water Department website at [www.westfordma.gov/water](http://www.westfordma.gov/water) (under the Education and Outreach link on the left side of the website).

## Another Reason Why Water Is So Cool...

Water has several unique properties—and this is one of my favorites: Most substances become denser (i.e. greater mass per volume— comparable to weight) as temperature goes down. This is also true for water—only up to a critical point! Once water hits 4 deg C (or 39.2 deg F) it then reverses that trend and starts to become less dense. If not for this very unusual property ice would sink to the bottom of water bodies and life on earth would be profoundly different. Think about that!



## Fire Hydrant Shoveling— Our Annual Friendly Reminder...

It's nearly time to tune up your snowblower or find those shovels! This is a friendly reminder that we need your help in keeping the fire hydrants free from snow. Unlike many other towns, the Water Department is responsible for clearing hydrants of snow. With over 1,000 hydrants in town it takes us considerable time to get to them all after each major snow storm. The more help we get from folks the quicker we can get them cleared and easily accessible in the event of an emergency. The last thing anyone wants is to have to search for a buried hydrant during an emergency.



Also—please remember that: In accordance with Massachusetts General Law Chapter 148 Section 27B it is unlawful to pile, push, or plow snow or ice on or against any fire hydrant in any public or private way. ***Please make sure not to shovel, plow, or blow snow onto the hydrants when clearing your property!***

The Westford Water Department not only digs out hydrants after the storm, but also annually inspects each fire hydrant, and notifies the Fire Department if any are out of service.



**Westford Water Department**  
**INFLOWMATION**  
**October 2013**  
**60 Forge Village Road**  
**Westford, MA 01886**

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**Hours of Operation:**

7am to 4pm Monday-Friday  
(except Holidays)

**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.

**Goings and Comings...**

While two esteemed members of the Westford Water family recently moved on to greener pastures—we've also added a new friendly face:

Leslie Thomas resigned from the Board of Water Commissioners after over 17 years of selfless and distinguished service to Westford Water customers. Leslie was instrumental in the development of both our Forge and Nutting Road water treatment plants.

Dianne Cloutier retired this past summer after 14 years with the Water Department. Dianne was not only an indispensable asset to the Department, but always served our customers with a smile.

We wish Leslie and Dianne the best of luck with their future endeavors. You will both be missed!

Lauri Plourde joined the Water Department in August to fill the Records Supervisor position vacated by Dianne. Lauri formerly worked in the Accounting office, and has been with the Town for over 2 years. We're pleased to welcome Lauri to the Department.