

# On The Water Front

News and Information About Your Water and Sewer Utilities

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## From The Commissioner

An unfortunate side effect of our public fight with EPA is that it has become easy for some to assume that DPW&P is "anti-environment" and does not want to do anything in terms of stormwater management. That perspective is wrong. The fact is, Worcester DPW&P has been very diligent in addressing stormwater issues for decades. As the first NPDES stormwater permit holder in New England, Worcester has been ahead of most other communities and has a solid track record of performance.

But what about today and into the future? Is DPW&P content to sit back and point to past accomplishments, satisfied that it has done enough? The answer to that question is a resounding NO! In advancing its stormwater program DPW&P's vision is one of continuous improvement, not stagnation. Our plans are to assess new strategies for stormwater control and implement those that are effective and within our financial means. We do not want to fall in to the trap of assuming there is a single solution to stormwater problems. Rather, we see a variety of approaches, each of which may prove effective in the right situation. Ours is not a program committed just to "gray infrastructure" or just to "green infrastructure" but to a blend with selection based on site specific assessment.

So, in the coming months and years, DPW&P will look at rain gardens, tree box filters, recharge basins and artificial wetlands. We will also be assessing more particle separators, end of pipe treatment systems, pervious pavement and detention basins. There is no single stormwater problem, thus there is no single solution. DPW&P is committed to a program of continuous improvement that produces meaningful benefits to the environment and the community while keeping costs reasonable. This three-pronged approach that considers the environment, people and finances is the right approach and the way that stormwater management should be addressed.

There is more to stormwater management than EPA permits, billion dollar mandates and rancorous debate. Worcester DPW&P will continue to fight to protect its rights and ratepayers, hold EPA to be accountable and limit their mandates to those allowed by law and push for reasonable, cost effective means to advance improved water quality in our lakes, ponds and rivers. At the same time, DPW&P will continue to implement a very effective program to manage stormwater in Worcester.

Robert L. Moylan, Jr., P. E.  
Commissioner of Public Works & Parks

## Fix Those Leaks and Save!

The DPW&P Water and Sewer Billing Office often receive calls from customers troubled by higher than usual bills. In response to these inquiries Water Service Inspectors are typically sent to the address in question to perform a house inspection. A thorough check of all plumbing fixtures and the use of dye tablets or more sophisticated electronic flow monitors usually identify leaks as the reason for a high water bill.

Dripping or running faucets, and most commonly, leaking toilet tanks, waste a lot of water and cost you money. Although this waste is not the intended use of the water it does register on the water meter and you are liable for the cost of all water that goes through your meter. If you identify a toilet tank leak as the likely source of a high water bill you still have to pay that bill. **Abatements will not be granted simply because your bill was high due to a leak.** Regardless of whether your metered water use was intentional or not the costs to collect, treat and distribute clean water and then to collect, transport and treat wastewater remain the same. It would be wise to routinely check for and repair leaks before the problem goes on too long and significantly increases your bill.

Finding and fixing leaks need not be a difficult or costly process. Your water meter is designed to actually help you in this chore. To locate a leak follow these simple suggestions:

- ◆ Look for the small black triangle on the face of your water meter. If this leak indicator is spinning it means that water is flowing through the meter. If no water is being used and the indicator is spinning you must have a leak. Beware, however, that some leaks are intermittent and may not be occurring while you are checking the leak indicator.
- ◆ DPW&P Water Operations reads most meters quarterly. A lot of water can be wasted through leaks in the three months between meter readings. Read your own meter more often, once per week is not too extreme, and keep a written record.
- ◆ By most estimates 90% of leaks in residential plumbing systems are found at the toilet tank. These leaks occur at the bottom of the tank around the flapper plug or at the top of the tank at the overflow tube. To test the flapper plug remove the lid from the tank and mark the water level with a pencil. Shut off the water supply to the toilet. If the water remains at the mark for 10 minutes the flapper plug is not leaking. If the water level drops below the mark you should repair or replace the flapper plug. Water in the tank should be at least one inch below the top of the overflow tube. A water level too near the top of the tube may result in wasted water. Adjusting the float that controls the water level will correct this problem. These simple repairs can be done by "do-it-yourselfers." If you are not sure about doing this work contact a plumber.
- ◆ Leak detecting dye tablets, available from DPW&P Water Operations, can also be used to locate toilet tank leaks. Put a dye tablet in the toilet tank and wait 15 minutes. If colored water appears in the bowl, you have a leak. The dye tablet kits contain other valuable tips for finding and fixing leaks. Call the Water & Sewer Billing Office at 508-799-1440 to receive a free leak detection kit.

Want to know more? Check out DPW&P's new home leak detection video on the City of Worcester website at [www.worcesterma.gov](http://www.worcesterma.gov)

## Is There a Rain Garden In Your Future?

Much of the talk regarding stormwater in Worcester has centered around the ongoing debate about EPA permits and what is fair and reasonable. While that dispute carries on it should not detract from our continuing efforts to improve stormwater quality in a sound, responsible and cost effective way. Stormwater management is truly a community effort that requires everyone to play a role. One way that homeowners and businesses can contribute is by managing stormwater on their own property through construction of a rain garden.

A rain garden is a shallow depression in the ground to which stormwater runoff from roofs, driveways, sidewalks and other small, impervious surfaces is directed. Rather than having this runoff flow to the street and enter the City storm drain, the water flows to the rain garden and percolates into the ground. The garden part comes in the form of flowering and ornamental plants, grasses, shrubs and trees that are planted in the rain garden depression. These plants enliven the landscape while serving a stormwater function by taking up some of the runoff captured in the rain garden and absorbing nutrients from the stormwater. Runoff can contain phosphorus and nitrogen that are essential for plant growth. Should these nutrients reach the City storm drain system they

will be carried to the nearest lake, pond or stream and contribute to algae and weed growth. A rain garden will help keep some of these nutrients out of our waterways.



Rain gardens do not work everywhere. They are not suitable if there is a high water table, steep slopes, slow draining soils like clay, where cellar flooding is an issue or on or near contaminated soil sites where percolating runoff can mobilize contaminants. They work best on flat areas with sandy or gravelly soils and should be placed a minimum of ten feet away from building foundations.

If you are planning to improve your property through gardens and landscaping and want to help Worcester better manage stormwater, consider creating a rain garden. There are a variety of resources available that will help guide you through the proper locating, designing and construction of a rain garden.

### RAIN GARDEN RESOURCES ON THE WEB

<http://www.greenscapes.org/raingardens>

<http://www.lowimpactdevelopment.org>

[http://nemo.uconn.edu/publications/rain\\_garden\\_broch.pdf](http://nemo.uconn.edu/publications/rain_garden_broch.pdf)

<http://learningstore.uwex.edu/assets/pdfs/GWQ037.pdf>

### DPW&P Rain Garden Registry

Have you built a rain garden on your property that you would like to highlight? Worcester DPW&P will be creating a rain garden registry on the City website to document where rain gardens have been created in Worcester and give credit to those helping manage stormwater. Email us a photo and brief description of your rain garden. Check the City of Worcester website later this summer for the Rain Garden Registry.

[www.worcesterma.gov/dpw](http://www.worcesterma.gov/dpw)

### DPW&P Stormwater Management Targets Phosphorus

For freshwater resources like lakes, ponds, rivers and streams phosphorus is usually the limiting nutrient. In some circumstances, adding higher amounts of phosphorus to these waters can result in algae blooms and aquatic weed growth. Stormwater is known to contain phosphorus that runs off of lawns from excess fertilizer and from streets and paved parking areas from car exhaust deposits, sand from winter ice control and the breakdown of leaves. Soil also contains phosphorus so erosion of disturbed soil can contribute phosphorus to our water bodies and streams.

Part of DPW&P's stormwater management strategy is to implement Best Management Practices (BMPs) that remove phosphorus before it can go through the storm drain system and enter our waters. Some of our most effective BMPs are street sweeping, leaf collection and catch basin cleaning.

In 2010 these BMPs removed the following quantities of phosphorus:

Street Sweeping	65,026 pounds
Leaf Collection	6,114 pounds
Catch Basin Cleaning	6,567 pounds
<b>Total Phosphorus Removed</b>	<b>77,707 pounds</b>

Reducing phosphorus in stormwater is an important part of our effort to protect and improve our lakes, ponds and rivers for people and wildlife.



If you have questions, comments or suggestions related to the content of  
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