

The Water Connection

Fall 2005

The newsletter for Concord Water customers

Concord's Seasonal Water Main Flushing

During the spring and fall seasons when residents are busy working on their lawns, Concord Public Works is busy flushing our 121 miles of water main. Flushing is routinely conducted in spring and fall because the demand for water tends to be at its lowest and cold weather is not an issue.

Water mains are flushed for several reasons. It allows hydrants to be periodically used and identified for maintenance or replacement and provides an opportunity for tests to be done to determine if water flow and pressure are sufficient.

Most importantly, flushing enhances water quality. It allows sediment built up in the water mains, especially dead ends and low-flow areas, to work its way out of the system. The high velocity of water causes a scouring action that draws the sediment out. Left alone, this sediment may cause discoloration when water flow changes, ultimately making its way into customers' homes.

Iron and manganese, which are naturally present in Concord's groundwater, cause the sediment and color. Although the water is safe to drink when it appears this way, it can cause staining of fixtures and laundry, and nobody really

wants to drink a glass of water that is not clear!

Every neighborhood gets flushed roughly every other year. Additional flushing is conducted if sediment historically has built up in certain neighborhoods or if a large amount of customers in a certain area have had problems. A well-designed flushing program does not require water to flow from every hydrant. Our goal is to flush water mains, not hydrants.

Public notification of the flushing is key to minimizing disturbances in customers' homes. CPW publicizes the flushing schedule and general areas expected to be impacted one to two weeks before the flushing starts. Look for this information in the Concord Journal, Concord Cable TV (channel 8), and on the Town's website at www.concordnet.org/cpw.

It is important to remember that flushing can cause discoloration in other areas of Town not directly being flushed and street listings published only indicate the general areas being worked in.

Anyone having questions regarding the flushing program may contact CPW's Environmental Analyst, Matthew Mostoller, at 978-318-3250. 💧

Town Pilots "Smart" Irrigation

The Town is testing out new irrigation controllers that use weather information to determine when the landscape needs to be watered and how much water to apply.

Thanks to a new concept called Smart Water Application Technology (SWAT), irrigation controllers can monitor weather and use data for a specific location and landscape. They keep track of temperature, rain, wind, the plants' evaporation and transpiration rates, and in some cases, plant type.

Studies out West have shown that switching to a "smart" controller can reduce water use up to 30 percent. Smart controllers have been installed on irrigation systems at the Town House, Monument Square, and Cushing Field.

In addition to the Town-owned locations, 10 residences have been recruited to participate in the study. Next summer, we will evaluate three different devices to see how well they work here in Concord. Water use and landscape appearance will be monitored at all the locations.

The smart controllers are designed to apply the proper amount of water plants need. Overwatering lawns is a common mistake many people make and can cause fungal diseases and other problems.

To learn more about smart controllers, visit the Irrigation Association's website at www.irrigation.org/swat. 💧



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Cross Connection Control and You

Concord Public Works Water Rules and Regulations, as well as Massachusetts's drinking water regulations, require that public water supplies be protected from potential contamination resulting from cross connections.

What is a cross connection?

A cross connection occurs whenever a potable drinking water line is directly or indirectly linked to a piece of equipment or piping containing non-potable water.

Why should I be concerned?

An unprotected or inadequately protected cross connection in your home or workplace could contaminate the drinking water not only in your building, but also in neighboring homes and businesses. Severe illnesses have been caused by cross connection contamination that could have been prevented.

How does this happen?

Typically this occurs when equipment, plumbing fixtures or attachments such as garden hoses may contain chemicals or water that becomes contaminated over time. When something unexpected happens that alters water pressure in the line or the direction of water flow, contaminants are then sucked from the equipment and into the drinking water line.

Can it happen at my home?

Outdoor hose bibbs and garden hoses tend to be the most common sources of cross connections at home. The garden hose creates a hazard when submerged in non-potable water such as a swimming pool or when attached to a chemical sprayer for weed killing. Fertilizer, garden chemicals or other materials may contaminate hoses left lying on the ground. Other household cross connections can occur when lawn irrigation systems, boilers, water filtration devices, and fire service systems are connected to the home's plumbing.

How can I be protected?

All industrial, commercial and institutional facilities are annually surveyed to ensure that all potential cross connections are identified and eliminated or protected by a backflow preventer. We also inspect and test these backflow preventers to make sure they are providing maximum protection.

At home, do not attach any chemical or non-potable liquid applicators to anything connected to your plumbing system. Outdoors, install hose bibb vacuum breakers on any outside faucet. Owners of in-ground irrigation systems are required to have an operable backflow preventer installed on the system. ♦

Coming Soon! Water Efficiency Labeling

EPA, along with representatives from water utilities, environmental groups, manufacturers, and state and federal agencies are coming up with a water-efficiency labeling system similar to the Energy Star program that currently rates the energy efficiency of a large variety of products.

The goals of this program are to:

- ♦ Help purchasers identify and understand the advantages of water-efficient products for residential, commercial or industrial use;
- ♦ Motivate manufacturers to produce more competitive water-efficient products; and
- ♦ Encourage distributors, retailers and local water utilities to promote these products.

The products on EPA's "short list" to rate first include clothes washers, commercial dishwashers, cooling towers and landscape irrigation controllers.

EPA plans to launch the program in early 2006. Stay tuned for more information. ♦

Money-Saving Tips From Concord Water

Waterfree Urinals Cut Water & Sewer Bills

Commercial and institutional water customers may be interested in visiting the "facilities" at the Water & Sewer Building at 135 Keyes Road.

The Water & Sewer Division recently replaced the two urinals in the men's room with zero-water using urinals. The two units manufactured by Falcon Waterfree Technologies were installed last May and have been working just fine.

According to the manufacturer, each fixture can save up to 40,000 gallons of water per year, which means lower water and sewer bills. In addition, maintenance costs are reduced since flushometer repairs are eliminated.

Thousands of zero-water urinals are in use around the world, including schools, stadiums, restaurants, parks and even the Taj Mahal.

So guys, come on over to Keyes Road to see for yourself. To learn more about Falcon Waterfree products, go to www.falconwaterfree.com.



Five Easy Ways to Save Water

- ♦ **Check your toilets for leaks.** Put a little food coloring in the toilet tank and wait about 10 minutes (don't flush). If the color appears in the water in the bowl, you have a leak that should be repaired. It is estimated that approximately 25 percent of all toilets leak.
- ♦ **Use your washing machine for full loads only.**
- ♦ **Fix leaky faucets.** Even the smallest drip from a worn washer can waste 20 gallons a day.
- ♦ **Keep showers to five minutes or less.**
- ♦ **Turn off the water while brushing your teeth.**