

### **NYC Environmental Protection Officials Visit GNHWPCA**

The Greater New Haven Water Pollution Control Authority (GNHWPCA) recently hosted a meeting with the New York City Department of Environmental Protection (NYCDEP) to share information regarding our flow monitoring program. USEPA Region 2 (Covering New York, New Jersey, Puerto Rico and the US Virgin Islands) suggested that NYCDEP meet with the GNHWPCA to discuss our flow monitoring methodology. Although NYCDEP's system is much larger than that of the GNHWPCA, the challenge of flow monitoring is the same.

Until recently, most systems used a modeling method to determine how much water they needed to control. Flow monitoring can also be accomplished by setting meters in pipes and at outfalls along the collection system. In this manner, data is collected to determine the volume and velocity of water flowing through the system and out into our waterways under various conditions. The GNHWPCA is implementing a flow monitoring system that will allow us to determine how much stormwater is entering and flowing through our system. Our goal is to design a functionally better and more cost effective system that will incorporate both "green" and "gray" infrastructure concepts.

At the meeting, the GNHWPCA and the NYCDEP discussed their experiences and shared problems and solutions in designing and implementing flow monitoring systems. The experts present identified specific issues that make data collection complex. There are practical issues related to the integrity and cost of the meters. Permanently installed meters are very expensive. If damaged, data is lost and repairs are costly. Movable meters are less expensive and can be relocated to capture data under varying circumstances.

Sharing information and experiences is a great way to acquire and explore new ideas. It also provides an opportunity to collaborate on policy development. Both GNHWPCA and NYCDEP officials lauded this effort and look forward to other opportunities to work together and learn from each other.

### **MEET ONE OF OUR BOARD MEMBERS**



I am a life-long resident of New Haven. I attended and graduated from the New Haven Public Schools. I served as a police officer in New Haven for thirty years. During my service as a police officer, I attended numerous professional training courses and seminars. I owned and operated two local businesses. Public service in our community has always

been important to me. To that end, I have served on many boards and commissions that have benefitted the citizens of New Haven and the surrounding communities.Serving on the board of Directors of the GNHWPCA has been enlightening and challenging. The works done by the GNHWPCA are essential to our quality of life and to the health of our citizens. The Authority is setting a path forward protecting the environment and positioning the GNHWPCA as an asset to the communities it serves. The staff at the GNHWPCA is doing an outstanding job in protecting the public health and the environment while working to keep our user fees low. I am honored to serve the City of New Haven as a member of the Board.

-Michael Fimiani, New Haven

### **2012 MEETING SCHEDULE**

The GNHWPCA will hold its' regular monthly meetings on the second Tuesday of the month, at 6:00 PM, at the Administrative Offices, 260 East Street, New Haven, CT. The meeting dates are:

January 8, 2013	July 9, 2013
February 12, 2013	August 13, 2013
March 12, 2013	September 10, 2013
April 9, 2013	October 8, 2013
May 14, 2013	November 12, 2013
June 11, 2013	December 10, 2013

# SewerWorks

# **Sewer Backups and Backwater Valves**

### **PROTECTING YOUR ASSETS**

Sewer backups can occur at any time without warning. The Greater New Haven Water Pollution Control Authority (GNHWPCA) works to prevent backups through preventative cleaning, and by continuously reinvesting in our infrastructure.

Household sewer blockages can be caused by the buildup of cooking fat or oils, excess toilet tissue, tree roots, or improper plumbing. In order to assure that your system and ours functions properly, do not flush fats, oil, grease, heavy paper or cloth products down the toilet.

### WHAT CAN YOU DO TO HELP?

Sanitary sewer backups have three main causes: a blockage in the service line from the house to the public sewer, a blockage in the public sewer main, or overloading of the public sewer main during rainstorms.

Your house may be contributing storm water runoff or ground water to the sanitary sewer system through plumbing connections. A storm or ground water problem may overload the sanitary sewer system and cause backups of sewage into basements. You can help the situation by disconnecting these storm or ground water sources. Any ground water or storm water that enters the sanitary sewer through foundation drains, roof downspouts, or sump pumps should be removed from the sanitary sewer.

### **BACKWATER VALVES**

Backups in the service line can be prevented by installing a valve in the line. These valves can be installed outside the house where it is easier to install and maintain them.

There are tasks that you can perform to protect your house and to reduce sewer backup damage. These tasks may also help protect your home from flooding caused by storm water runoff or seepage.

- Relocate items that are subject to water damage to higher floors or elevated locations.
- Protect what cannot be moved. A floodwall or protection closet can be built around immovable equipment. These protection walls should be constructed to withstand the pressure caused by flood waters.
- Another alternative is to place the equipment on a pedestal/ pallet above a projected flood height.

**WARNING:** NEVER ENTER A FLOODED BASEMENT UNLESS ABSOLUTELY NECES-SARY, AND THEN ONLY WITH EXTREME CAUTION. THE POSSIBILITY OF ELECTRO-CUTION IS ALWAYS PRESENT.

## **GNHWPCA** goes Solar

The GNHWPCA is currently in the process of installing a solar thermal system at the 260 East Street administration building. The existing 30 gallon electric hot water heater that provides all of the domestic hot water demand in the building is a low efficiency, low volume unit that



has limited useful life remaining. We are installing an efficient solar thermal collector and a new 50 gallon high efficiency thermal storage tank, to minimize the usage and run time of the electric hot water heater and save over 80 percent of the electricity used to heat domestic hot water at the building.

The project is being done by DBS Energy, a Connecticut based company. We anticipate that the solar thermal system will provide 80 to 90 percent of the hot water required year round. The system when completed is expected to displace approximately \$1,622 of electricity costs over a year and the collectors will offset 2,750 pounds of CO2 every year.

In the future, the GNHWPCA is investigating an opportunity to install a canopy solar photovoltaic system to generate clean, renewable electricity for use in the building. This system could potentially supply 22,000 kWh of electricity a year with a very economical payback of 7 years. This system has a life expectancy of 25 years.