

## Reservoir Ops Shows They “Con-du-it,” and Do it Well!

**B**efore water makes its way into the city’s distribution system, every drop of water coming from the Catskill and Delaware aqueducts must first make its way to Hillview Reservoir, where it is treated. Hillview, constructed in 1915, holds 900 million gallons of water, approximately 90% of the city’s daily supply.

Recently, BWSO’s Reservoir Operations detected a water leak above the ground between two shaft buildings at Hillview called Downtake 1 and Downtake 2, which is the start of City Water Tunnels No. 1, 2 and 3. Suspecting the leak was coming from the South Connecting Conduit, which connects Downtake 1 and 2, Reservoir Operations shut down and dewatered the conduit to perform an inspection and to make repairs. The loss of this piece of infrastructure could have had severe impact to the city’s water supply.



The South Connecting Conduit, put into service in the 1930s, is a critical component of the operational system at Hillview. It provides a hydraulic balance between reservoir storage and tunnel demand. It is a 736-foot-long, 14’6”-diameter reinforced concrete conduit. Since redundancy is built into the system, other infrastructure was used while the South Connecting Conduit was being repaired.

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## Spotlight on Safety

### Slips, Trips and Falls

Slips, trips and falls are no laughing matter; these injuries are responsible for more than 1.5 million emergency room visits per year. According to the National Safety Council, 15% of accidental deaths are caused by falls, second only to motor vehicle accidents; and according to the U.S. Department of Labor, slips, trips and falls are the most common occupational accident.

- A slip occurs when there is too little traction or friction between the shoe and walking surface.
- A trip occurs when a person’s foot contacts an object in the way or is not able to see or react to changes in elevation (drops or rises), throwing them off balance.

- Falls occur when a person loses balance and/or there is not adequate fall protection.

As a matter of fact, OSHA is in the process of finalizing a revised working and walking surface safety standard, in part to combat and reduce serious fall injuries. DEP will also be adding *Fall Protection* as a new policy in 2011. At DEP, the percentage of recordable injuries attributable to slips and falls range between 30% and 65% depending on the Bureau.

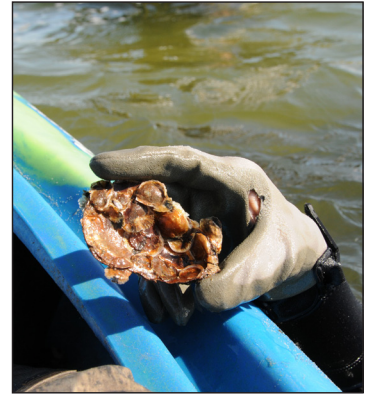
Most of these are preventable. To read the full article, including some safety tips, click here [🔗](#).

At DEP, everyone is responsible for safety. If you or anyone on your team is concerned about your working conditions, it’s okay to ask your supervisor or your bureau’s EHS liaison how they can help. If you’ve still got questions, you can call the EHS Employee Concerns Hotline. It’s DEP’s responsibility to acknowledge and fix unsafe situations, procedures, and practices. With your help, we’ll not only get the job done, we’ll make it safer for ourselves, our coworkers, our families, and our city.

CALL (800) 897-9677 OR SEND A MESSAGE THROUGH PIPELINE. HELP IS ON THE WAY. [🔗](#)

## Commissioner’s Corner

2010 has been a historic year for the restoration of Jamaica Bay. Last Tuesday, working with Cornell Cooperative Extension of Suffolk County, Ecological Restoration & Management, and Biohabitats, we re-introduced oyster beds to Jamaica Bay for the first time since they disappeared many decades ago. A single oyster can filter roughly 35 gallons of water per day, and the 10,000 that we have added will help to improve water quality by filtering out nitrogen, which can reduce oxygen levels and degrade the overall ecology of a water body. You can read the great coverage by the Daily News here [🔗](#). The fact that oysters can now survive in the bay is further proof that **Mayor Bloomberg’s** investments in water infrastructure are paying off. Last February, the Mayor announced a historic agreement to cut nitrogen discharges into the bay by nearly 50%, and committed an additional \$100 million over the next decade to achieve that goal. Special thanks to Director of Ecological Services **John McLaughlin** and Marine Biologist **Bob Will** for their work on the oyster re-introduction, and many other projects that are part of a comprehensive restoration effort.



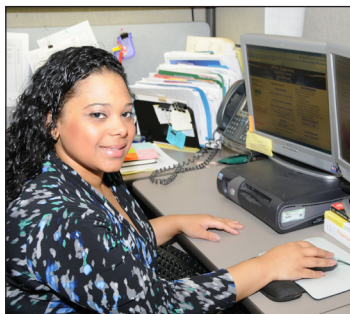
To strengthen our customer service efforts, we have been holding outreach events throughout the city over the past few weeks. These meetings give our 835,000 customers an opportunity to learn about recently launched programs that can reduce water bills, or provide help to those who may be having difficulty making their payments on time. Many thanks to Council members **Leroy Comrie**, **Oliver Koppell**, **Lew Fidler**, and the office of the late **Thomas White** for co-sponsoring these events with us. A full schedule can be found here [🔗](#).

On Wednesday, I greeted **Jeff Weil**, the new superintendent at the Hunts Point Wastewater Treatment Plant. Jeff worked his way up the DEP ranks, starting as a Sewage Treatment Worker at the Newtown Creek plant in 1978. In his new role, Jeff will oversee the operations and maintenance of the approximately 100 employees at the plant, which is capable of handling up to 200 million gallons of wastewater per day and houses our most extensive nitrogen removal process. He takes over for former-superintendent **Bob Durbin**, who recently retired. We wish them both well.

Did you know that last week was National Customer Service Week? On Friday, we honored the 500-plus members of the Bureau of Customer Services, the dedicated public face of DEP who work with our customers every day with patience, professionalism, and sensitivity. A special congratulations to Customer Services Support Director **Karen Leclaire**! She was selected among all DEP employees to be honored personally by Mayor Bloomberg last Monday for providing outstanding customer service above and beyond what is expected.

## Did You Know?

... that in fiscal year 2010, DEP responded to 368 water main breaks and 596 sewer breaks.



Some say DEP is like a family, but **Janet Amaro** literally grew up here. At 16 years old, Janet joined DEP in her Junior year of high school through a Cooperative Education Program.

Since then, Janet—a Principal Administrative Associate reporting to Drainage Review Section Chief **Paul Faublas** and Review & Construction Compliance Chief **David Ramia**—has taken on a lot more responsibility.

Janet serves as a Program Administrator for the Engineering

Project Tracking databases, where she coordinates user activity and generates reports. Deputy Commissioner **Jim Roberts** selected Janet to participate in a working group to improve DEP's permitting process, and Director of Engineering **Magdi Farag** entrusted her with establishing and maintaining DEP's project-tracking database.

In her spare time, Janet is pursuing a Master's Degree in Public Administration, specializing in Law and Management. "Because I've worked with DEP since I was 16 years old, I've established a love for Civil Service." She's been "inspired to make a difference by serving great causes and creating change for citizens of this city." An animal lover, she's also worked with the Mayor's Alliance for NYC's Animals, and has participated with her dog Lilly in The American Cancer Society's relay for life.

### Event Calendar:

#### October is German/Italian/Polish American Heritage Month

To celebrate German/Italian/Polish American Heritage Month, DEP will have a display of posters, artifacts, puzzles, and recipes in the 3rd Floor Corridor near the Cafeteria entrance.

For more information on the history of each individual heritage month, please click [here](#)

**Then:** The earliest NYC distribution system conveyed water in wooden pipes laid by the Manhattan Company starting in 1801. The pipe pictured here was unearthed in Beekman Street in 2006. The wooden pipes began to be replaced with cast iron in 1827. Unfortunately, this did not improve the quality of the water which was sourced from polluted ground water up until the introduction of Croton water in 1842.



**Now:** In the early 1900s, steel pipe started to replace cast iron for large diameter trunk water mains. NYC has also used ductile iron and pre-stressed concrete pipe for trunk water mains in a few locations.

The water pipe pictured here is being installed at 99th Avenue and Francis Lewis Boulevard, in Queens. It is a 48-inch steel pipe and was recently completed and put into service. It appears to be white because the pipe is wrapped with a protective coating in the factory. The interior of the pipe is factory coated with a concrete lining.



Q. I was at a cousin's house the other day and she was making pasta and started the process by using hot tap water. Many years ago I thought someone at DEP had told me never use hot water in cooking because you can expose yourself to larger levels of lead and other impurities that are picked up in the pipes and/or the hot water heater. My cousin thought that this was nonsense and using hot water is more energy efficient. My question is, is it okay to start cooking using hot tap water?

A. DEP's water supply and distribution systems provide safe, delicious and healthy drinking water. But, sometimes the insides of hot water heaters and older pipes in some buildings may contain harmful metals, including lead, that corrode and enter your hot water supply. Normally, all one has to do is run cold water to flush out anything undesirable, but hot water, especially after sitting in older water heaters, can concentrate impurities and is a prime breeding ground for some types of bacteria. The federal Centers for Disease Control and Prevention recommends that consumers, especially children, drink and cook only with cold water because of this potential contamination. So from now on, cook and drink with water from your cold water tap and save your hot water for the shower.

## Milestones

Congratulations to **Robert Petrelli**, BWS, for 30 years of service at DEP.

Best wishes to **Julio Nunes**, BWSO, and **Sandra Morrow** who were married on September 25, 2010.

(Reservoir Ops Shows They "Con-du-it," and Do it Well!... continued)

"It's always good to be able to improve our infrastructure and in this case it was a big group effort," said Reservoir Operations Division Chief **Will Melendez**. "A lot of people deserve credit in getting this done: Operations, DEP Police, BWS Operations and Water Quality, the ACCO's office, Legal Affairs, the Comptroller's office, our tradesmen within the division and primary contractor Halcyon and subcontractor More-trench. We had to make a lot of adjustments during the process and this was a good opportunity to learn about this important piece of infrastructure."

The work to fix the cracks in the conduit—by injecting Polyurethane grout—began in late June and the conduit was placed back into service on September 30. To dewater the conduit, Reservoir Operations installed three stop shutters and closed three sluice gates on the Downtake 1 side. The sluice gate clutch handles were locked and tagged with chains to prevent opening of the gates. On the Downtake 2 side, an enormous stop shutter was installed by crane.

With the water no longer moving, pumps were used to dewater the conduit. Once it was dewatered, DEP noticed a stream of water entering the conduit from the side of Downtake 2, causing potential for engulfment. To mitigate this, smaller pumps were placed into each of the three bays at Downtake 1 to remove excess water.

Next, a confined space entry was made in order to perform air monitoring of the conduit. Subsequent entries were made by Reservoir Operations with the assistance of the DEP Police Emergency Service Unit. The entries were a testament to the importance of detailed planning, proper communication and coordination between operations, Environmental, Health and Safety, and contractors.

Since the chance to inspect the conduit does not come often, workers took the opportunity to address any joints which exhibited signs of potential leakage, ensuring that the conduit will continue to do its critical job now and well into the future.

**We welcome your feedback! To submit an announcement or suggestion, please email us at: [newsletter@dep.nyc.gov](mailto:newsletter@dep.nyc.gov).**