

Commissioner's Corner



Last week, DEP joined with the Billion Oyster Project to install nearly 50,000 oysters in Jamaica Bay—the largest single installation of breeding oysters in New York City. The New York/New Jersey Harbor was once blanketed by oysters, but due to over harvesting, dredging and pollution, they became functionally extinct decades ago. Oysters are widely recognized as a key component of a healthy marine ecosystem as they filter pollutants from the water, help to protect wetlands and shoreline from erosion and storm surge, and provide habitat for communities of fish and other aquatic organisms. The goal of this research project is to create a self-sustaining population of oysters, which will in turn improve water quality and protect critical wetlands.

The installation includes a central donor bed composed of the nearly 50,000 adult and spat-on-shell oysters as well as four smaller receiving beds composed of clam/oyster shell and broken porcelain. The porcelain was harvested from nearly 5,000 inefficient toilets that were recycled from the citywide

water conservation program. Having reached reproductive maturity, it is anticipated that the adult oysters will spawn. The resulting fertilized eggs will grow as free-floating larvae in the water column until the young oysters will attach themselves to the shells of the parent oysters on the donor bed or onto any one of the four receiver beds. With successful establishment and recruitment, the donor bed and the receiving beds are anticipated to show a measurable increase in oyster larvae attachment as well as an increase in the growth of mature oysters. The hope is that the oysters will become self-sustaining, spawning seasonally and providing new recruits.

Existing water quality monitoring at the site of the oyster beds will serve as a baseline for future comparison. This includes temperature, pH, salinity, conductivity, turbidity, dissolved oxygen and chlorophyll. Monitoring will continue for two years after the installation of the beds in order to establish water quality benefits provided by the oysters. Measurements will also be taken to better understand the rate

at which the oysters are removing nutrients from the water.

Prior DEP oyster reintroduction pilot studies showed adequate environmental conditions for oyster growth and survival within Jamaica Bay, including water quality within normal tolerances for the eastern oyster. The results also indicated that the oysters had reproduced. In addition, an increase in biodiversity was observed, including many species using the pilot sites for breeding and feeding amongst the establishment of new plants. However, no recruitment of new oysters was observed. It is believed that the lack of recruitment is mainly due to the relatively small size of the pilot sites and the overall lack of oyster populations in and around Jamaica Bay and the New York/New Jersey Harbor.

The next step in restoring oysters in Jamaica Bay is to determine the effect of placing larger oyster beds in areas that could protect salt marshes from further erosion while

improving water quality. It has been well documented that marshes and shorelines are eroding at an accelerated rate in Jamaica Bay due to a number of changes over time, including dredging and filling and climate change. Efforts are underway to restore some of the lost marshes. This study would test the effectiveness of living shorelines in the form of a relatively large oyster bed to slow erosive forces on these habitats.

In addition to our partners at the Billion Oyster Project, this research project has been made possible by a \$1 million grant from the U.S. Department of Interior, which is administered by the National Fish and Wildlife Foundation. I'd also like to recognize DEP's team, including **Angela Licata, John McLaughlin, Mikeal Parlow, David Lin, Qi Long (Jackie) Chen and Ben Huff.** [Click here](#) to read the New York Times story and [here](#) to view additional photos and video.

Spotlight on Safety

In Case of An Active Shooter: Run, Hide, Fight!

As scary as it may seem, an active shooter situation can present itself at any time. Are we ready? The Department of Homeland Security (DHS) defines an active shooter as an individual actively engaged in killing or attempting to kill people in a confined and populated area.

Next week, an Active Shooter computer based training will be rolled out to the Agency. All employees will be required to take this training. The focus of this training is how employees should respond to an active shooter situation in the workplace. Also, information on identifying potential workplace violence indicators

and actions to take to prevent and prepare for such a situation will be included.

An active shooter event is unpredictable and evolves quickly, so be prepared to:

- **Run:** have an escape route and plan in mind
- **Hide:** hide in an area out of the shooter's view
- **Fight:** as a last resort and only if one's life is in imminent danger

For additional information on preparing for an active shooter event in the workplace visit [DHS Active Shooter - Pocket Card Information](#).



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.

On Patrol at Ashokan



DEP police officers on bicycles are seen cruising past the aerator fountain at Ashokan Reservoir, located in upstate Ulster County. During the warmer months, DEP Police use bike patrols in addition to the more traditional stationary posts, vehicle patrols, surveillance, investigation, and technology in order to protect the City's water supply from terrorism, pollution, and crime. DEP Police cover an area of responsibility that includes the 2,000 square-miles of upstate watershed and the associated critical infrastructure along with critical locations in the Bronx. There are seven DEP police precincts, including five precincts located in the West-of-Hudson area and two precincts located in the East-of-Hudson area.

Upgrade for Fresh Creek



DEP recently began work on a [\\$56.5 million infrastructure project](#) in the Canarsie and East New York neighborhoods of Brooklyn that will reduce street flooding, improve the reliability of the drinking water delivery system, rebuild the roadways, and reduce Combined Sewer Overflows by nearly 200 million gallons annually. This first phase of work will see the replacement of nearly four miles of water mains, the construction of more than two miles of new, high-level storm sewers, and the full rehabilitation of the roadways. This work constitutes the first portion of a three-phase capital project that in total will include the construction of more than seven miles of new, high-level storm sewers to collect stormwater runoff, thereby diverting it from the existing combined sewer system and improving the health of Fresh Creek and Jamaica Bay. During the first phase of work, construction will take place on Flatlands Avenue and Avenue J, as well as the side streets between East 98th Street and East 108th Street. DEP is funding the project and DDC is managing the construction, which is anticipated to be completed by the end of 2018.

The Big Dig at Woodrow Bluebelt



Construction is well underway on the [largest ever Bluebelt expansion](#) in the South Shore's Woodrow section of Staten Island. The \$48 million infrastructure project will collect stormwater from local roadways and direct its flow to a new wetland being built on City-owned property at the east end of Sheldon Avenue. Greening of the landscape will feature the planting of 723 canopy trees, 166 shrubs, 36,850 plants and wildflowers, as well as 115,000 square feet of seeding. The Bluebelt will hold and naturally filter the stormwater before it eventually drains into the Arthur Kill. The upgrades also include the installation of 15,059 linear feet of new storm sewers, and 197 catch basins to better manage the precipitation that falls in the area and reduce localized flooding. In addition, 23,278 linear feet of new sanitary sewers will allow 590 homes to connect to the City's sewer system and discontinue the use of septic tanks.

DEP Employees Urged to Donate Blood



DEP is once again participating in a fall blood drive with the New York Blood Centers to help provide the gift of life and maintain the community's blood supply. Blood drives will be taking place at the below locations and times. Donors with an O-negative blood type, or "universal donors," are especially urged to give because their blood can be transferred to anyone. **Lefrak:** 6th Floor Training Room, 9/7, and 9/8, 7:45am to 1:45pm; **Grahamsville Region Area:** Grahamsville Fire House, 10/1, 9:00am to 3:00pm; **Downsville Region Area:** Downsville Fire Hall, 9/14, 9:00am to 2:00pm; **Kensico/Highland Regions-Sutton Park Area:** Sutton Park, 2nd Floor, Large Training Room, 9/8, 8:30am to 2:30pm; **Kingston/Catskill Area:** 51 Albany Avenue, 9/12 and 9/19, both from 1:00 to 6:00pm.

We welcome your feedback! To submit an announcement or suggestion, please email us at: newsletter@dep.nyc.gov.