

Special Guest *Commissioner's Corner*



John Petito, DEP's Acting Deputy Commissioner for the Bureau of Wastewater Treatment, is a guest commentator this week.

Jamaica Bay is widely recognized as one of the most bountiful wildlife habitats in the northeastern United States. It is a 31-square-mile water body with a broader watershed of approximately 142 square miles, which includes portions of Brooklyn, Queens, and Nassau County. The Bay is a diverse ecological

resource that supports multiple habitats, including open water, salt marshes, grasslands, coastal woodlands, maritime shrublands, and brackish and freshwater wetlands. These habitats support 91 fish species, 325 species of birds, and many reptile, amphibian, and small mammal species.

DEP operates four wastewater treatment plants along Jamaica Bay that play an essential role in protecting public health as well as the ecology and habitat of the waterway. The Jamaica Wastewater Treatment Plant was originally built in 1903 and is designed to treat 100 million gallons of wastewater per day from roughly 728,000 residents living in a nearly 26,000 acre area of Southeast Queens. DEP recently completed an \$83 million upgrade to the Plant that will reduce the amount of nitrogen discharged from the facility into Jamaica Bay by approximately 6,500 pounds per



day, or nearly 2.5 million pounds each year. The nitrogen reduction project included the installation of new equipment to convert the organic nitrogen present in wastewater into inert nitrogen gas that can then be released harmlessly into the atmosphere before the treated water is released into the surrounding waterways.

Nitrogen is a naturally occurring element that is found in food and other organic materials and is present in wastewater when it enters treatment plants. Because nitrogen is not a pathogen and poses no threat to human health, the wastewater treatment plants were not originally designed to remove it from the treated water before it is discharged into the receiving water body. However, high levels of nitrogen can degrade the overall ecology of a waterway by reducing levels of dissolved oxygen and promoting excessive algae growth, especially in warm weather months.

The newly installed biological nutrient removal technology at the Jamaica Plant required sig-

nificant upgrades to the facility including the overhaul of the existing aeration tanks, the installation of new aeration tank influent gates, mixers, and froth control systems. In addition the upgrade included a new tapered diffuser grid, a new process air header, refurbished process air blowers, and automation of the aeration system instrumentation and control. These upgrades will help to ensure that the Plant remains in a state of good repair for decades to come.

The work is being funded by DEP and is the result of an agreement between DEP, the Office of the New York State Attorney General, and the New York State Department of Environmental Conservation.

The investment in the nitrogen reduction technology is just one of many ongoing projects DEP is working on to improve the health of Jamaica Bay. Find more information on an upcoming sewer upgrade project [here](#) and the larger Jamaica Bay Watershed Protection Plan [here](#).

Spotlight on Safety

Ebola Update

The New York City Department of Health and Mental Hygiene (DOHMH) and partner agencies are continuing to monitor the Ebola situation, and test individuals as necessary, to ensure that residents of New York City remain protected from the spread of the disease. The virus is still affecting only a limited number of countries in West Africa and the risk to New Yorkers remains very low. However, it is important to remain vigilant and if someone has recently traveled to the affected areas of West Africa and develops a fever within 21 days, or has had

contact with a person who is sick with Ebola, they should isolate themselves and call 911 immediately to receive care. Anyone will receive care regardless of their immigration status or if they have insurance. Remember, the Ebola virus is only spread through **direct contact** (through broken skin or mucous membranes) with the blood or bodily fluids of an infected carrier. Further, a person with Ebola is only contagious when they begin to show symptoms. Knowing the facts will help to avoid a culture of fear and discrimination. For more information view a [DOHMH video](#).

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.



Watershed Winter Recreation



Over the last decade, DEP has tripled the amount of City-owned water supply land that is open for recreation to more than 125,000 acres. This includes 19 new parcels of land in Delaware, Greene, Schoharie, Sullivan and Ulster Counties that were opened in 2014. In this photo, a trail located in Roxbury, in Delaware County is used for snowshoeing.

Water and Sewer Upgrade for Bayside



The City recently began a \$20 million upgrade to the water mains and sewers that serve the Bayside neighborhood of northeast Queens. The work includes the installation of nearly 3 miles of new distribution water mains. The new ductile iron mains will replace the unlined cast iron mains that currently serve the neighborhood and were installed in the 1930s. The project will also include the installation of 1.3 miles of new steel trunk water mains, which serve as a conduit between the large water tunnels and the local distribution mains. The new water mains will help to accommodate the added demand from the growing population of northeast Queens and will ensure adequate water pressure for firefighters and a reliable supply of high quality drinking water for the area. While the roadway is opened to add the new water mains, the project will also include upgrades to the area's sanitary and storm sewers.



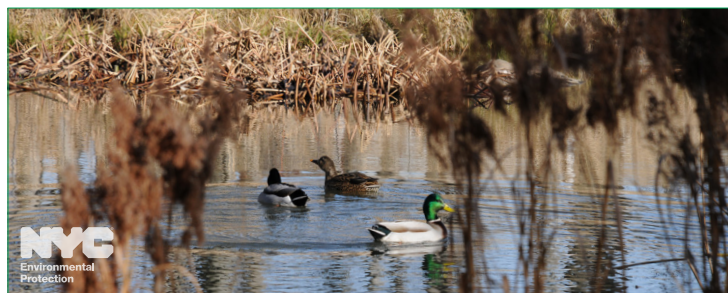
Make a New Year's Resolution to Volunteer!

NYC Service is encouraging all New Yorkers to make volunteering a New Year's resolution for 2015 and they will help you keep your resolution throughout the new year. Go to nyc.gov/service to register.

A terrific opportunity is available on Monday January 26, 2015 when the Department of Homeless Services (DHS) will conduct its annual Homeless Outreach Population Estimate (HOPE) Count. It is a unique opportunity to volunteer and participate in an extraordinary citywide effort. DHS needs approximately 3,000 volunteers to help survey the number of homeless individuals living on city streets, parks and in other public spaces throughout New York City.

Volunteers will assist from approximately 10:30pm to 4:00am and employees interested in helping to conduct the survey should visit nyc.gov/dhs or CityShare to register. Any questions can be directed to the HOPE team at hope@dhs.nyc.gov.

Duck, Duck... Duck!



DEP's award winning Bluebelt program preserves natural drainage corridors such as streams and ponds, and optimizes them to help control and filter stormwater. DEP has built Bluebelts for approximately one third of Staten Island's land area and they also provide important open spaces and serve as a habitat for diverse wildlife, including these mallard ducks that were recently spotted swimming in the Arden Heights Bluebelt.

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