

## Sneak Peek



Work continues on the final phase of a \$175 million comprehensive neighborhood infrastructure upgrade for Springfield Gardens, Queens. The project will add approximately nine miles of new storm sewers, eight miles of sanitary sewer lines, 47 storm sewer chambers, 71,450 feet of distribution water mains, 7,550 feet of trunk water mains, 505 manholes and 305 fire hydrants. When work is completed, stormwater in the neighborhood will be collected in 84 new catch

basins—and rather than being deposited in the sewer system, it will be diverted into a newly constructed system of wetlands. The wetlands will store the stormwater and allow suspended solids and debris to settle, and excess nutrients to be absorbed by vegetation. The filtered water will then make its way through existing wetlands and into Jamaica Bay. The Springfield Gardens upgrades are scheduled to be substantially completed by fall 2014. To see more photos of the project, click [here](#).

## Spotlight on Safety

### Summer Safety – Stay Cool on the Job

With hot weather scheduled for the New York City area this week, and Saturday marking the official first day of summer, thousands of workers will be at risk of serious illness or even death due to exposure to extreme heat. Labor-intensive activities in hot weather can raise the body's temperature beyond its ability to cool down through sweating. This is especially true while wearing Personal Protective Equipment or working in an area that does not have sufficient air circulation.

[The Occupational Safety and Health Administration's Campaign to Prevent Heat Illness in Outdoor Workers](#) urges employers to remember three key things: water, rest and shade. For workers, it is very important to recognize and immediately report the early symptoms of heat illnesses, such as a rash or cramps, as these can escalate to heat exhaustion or heat stroke—which can be deadly. Also see [DEP's Exposure to Extreme Heat and Cold Guidance](#).

## Commissioner's Corner

The post-World War II residential and commercial development of southeast Queens outpaced the extension of the City's sewer system, and many neighborhoods in the area are not yet equipped with catch basins or storm sewers to drain precipitation from the roadways and other impermeable surfaces. As the multi-year, \$6 billion effort to construct a comprehensive storm sewer system for the area continues through the City's capital construction program, DEP has initiated a number of smaller, targeted projects that can be advanced more rapidly and will help to manage stormwater and reduce flooding in the interim. Last week, work began on a project to install storm sewers and catch basins along 119<sup>th</sup> Avenue between 192<sup>nd</sup> Street and 195<sup>th</sup> Street. Working in collaboration with the Empowered Queens United in Action and Leadership (EQUAL) organization, BWSO engineers leveraged advances in the department's Geographic Information Systems and hydraulic modeling capabilities to arrive at a faster, targeted stormwater solution for this chronically challenging area. In this case, the addition of three blocks of new storm sewers will be connected to 18 street level catch basins and drain the stormwater towards an existing storm sewer located under 192<sup>nd</sup> Street. The \$1 million project is expected to be completed by the fall.

To target the locations that are most prone to flooding, DEP consulted with local elected officials and community groups, and analyzed 311 reports. Engineers then conducted field investigations during both wet and dry weather. The analysis considered the topography of the neighborhood, the hydraulic capacity and location of existing storm sewers, the relative elevations of existing sewers, and the nature and severity of the stormwater management challenges to identify specific areas where the strategic installation of storm sewers and catch basins could help to alleviate flooding.



The first two locations identified for upgrades and where work has already been completed include 113<sup>th</sup> Avenue between 156<sup>th</sup> and 157<sup>th</sup> Streets and 111<sup>th</sup> Avenue between 155<sup>th</sup> and 158<sup>th</sup> Streets. Analysis of additional locations is currently underway and DEP expects to approve additional projects in 2014.

As part of DEP's capital construction program, there are also numerous projects either ongoing or in the planning and design phase. These include the final stages of the \$175 million Springfield Gardens upgrade that will be completed in this fall and will bring nine miles of storm sewers and eight miles of sanitary sewers to the area. Also planned are a \$26 million upgrade for the Brookville Boulevard area, an \$18 million project that will bring high level storm sewers to the Twin Ponds neighborhood, and a \$5 million project to install an additional sewer line under 183<sup>rd</sup> Street at Jamaica Avenue.

I would like to recognize the DEP team that has been focused on this important work, including **Mahsa Forkin** and **Katie Mockler** for project management, **Ben Mancell** and **Stephanie Fowler** for mapping and data analysis, **Kamil Dyrda**, **Yesenia Lendor-Montero**, **Donald Eloi**, **Abiodun Quadri**, **Jean-Denis Lucien**, **Eugenio Cadiz**, **Mark Stettner**, and **John Callies** for field inspections, and **Alex Vega** for construction.

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. 🙌

## Focus on the Field



Captain **Chris Reil** likes to say that he has the best corner office in the city. As the Sludge Boat Red Hook makes its way around New York Harbor he sees the sun rise and set, and gets spectacular views of all five boroughs. He also helps to ensure that the final steps in the wastewater treatment process can be completed, which ultimately protects public health and the quality of water in the harbor.

Reil was born and raised in Brooklyn and, when his family later moved to Staten Island, he graduated from Tottenville High School. Earlier in his career he worked for the Sandy Hook Pilots, who help navigate vessels around New York Harbor. Reil joined DEP's Bureau of Wastewater Treatment (BWT) in 1982 as a deck hand and for nine years he loaded and unloaded the boats, steered them as directed and performed regular deck maintenance. With a federal pilots license issued by the United States Coast Guard, for the last 22 years he has been a captain and has worked at the helm of all of DEP's sludge vessels.

BWT's Marine Section is based out of Wards Island and they operate a fleet of sludge vessels that transport nearly 1.2 billion gallons of sludge for dewatering each year. The fleet currently includes three older-model sludge boats and two new ones that have recently arrived in the city. There are nine captains who are responsible for the operation of the sludge vessels and they work thirteen-hour shifts, three days each week. In addition to the captain, each boat is staffed by a mate, a chief engineer,

an assistant engineer and two mariners.

The new generation of sludge boats are wider, have a greater cargo capacity, and a shallower draft that will allow them to navigate into Whale Creek and dock at the Newtown Creek Wastewater Treatment Plant. Operating a large vessel around New York's local waterways can be challenging, and Reil credits the top notch crews for deftly handling the possibility of inclement weather, heavy traffic around the Battery and the strong currents at Hell's Gate.

"I feel very lucky to work with the talented group of seamen at DEP," said Reil. "They're all true professionals and they take great pride in the important work we do to protect the health of the harbor."

"Captain Reil has tremendous experience navigating New York Harbor and this allows him to effectively operate DEP's sludge boats and mentor the next generation of DEP's seamen," said Chief of BWT's Marine Operations and Maintenance Section **Kevin Byrnes**. "He is a true asset to the department and a valued member of the Marine Section."

Reil has two grown daughters who both live in Brooklyn and he now resides in Orange County. In his free time, he enjoys biking and cooking, and, since his wife works for an airline, they also do a lot of travelling. His well-worn passport has been stamped in Morocco, Bali, Vietnam, Paris and Rome. Click [here](#) to see more photos of a recent trip on a sludge boat.

## RoboBuoy



Last week, BWS Water Quality staff assembled and deployed a new robotic monitoring buoy on Neversink Reservoir. The buoy is solar powered and it provides constant, near real-time monitoring data. This

is the seventh such buoy to be deployed on the City's upstate reservoirs and they reflect the bureau's efforts to utilize technology to constantly monitor the quality of water entering and leaving the reservoirs. Click [here](#) to see more photos.

## Trout in the 'Watershed' Classroom



Last week, students from the Woodstock Day School culminated their nearly year-long project to raise juvenile brown trout in their school classroom and release them into the Upper Esopus Creek. As part of the "Trout in the Classroom" program, the students monitored water temperature, clarity, dissolved oxygen, ammonia, and PH while the trout were raised in tanks and they also learned

how the fish play an important role in the water ecology of the streams that feed New York City's water supply. This year, more than 2,000 students from schools in New York City and the upstate watersheds participated in the program.

## Press Box



**CITY'S ENVIRONMENTAL PROTECTION DEPARTMENT PLANS TO FIX ST. ALBANS FLOODING:** "When it rains, it pours for some residents in St. Albans who have been dealing with chronic flooding for decades. The Department of Environmental Protection has a plan to fix the situation, though."

View the entire New York 1 story [here](#)

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