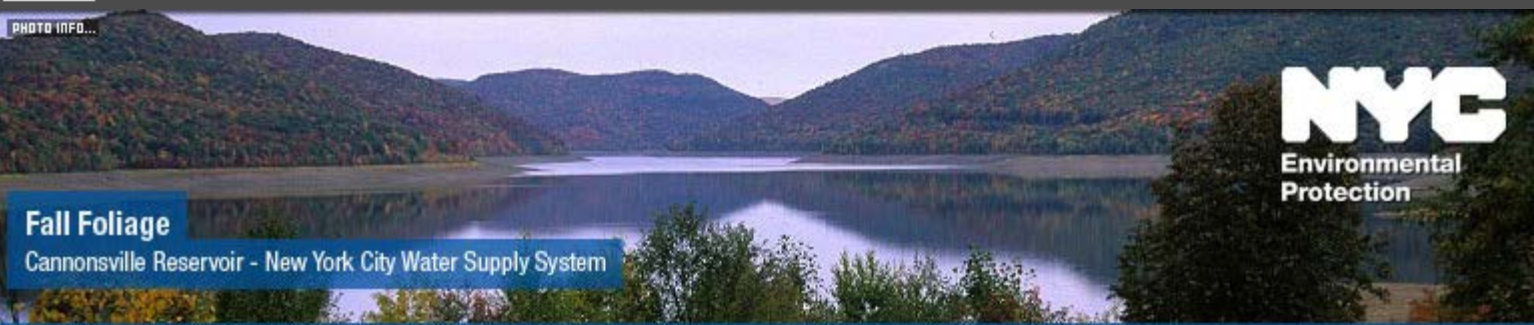




PHOTO INFO...



Fall Foliage

Cannonsville Reservoir - New York City Water Supply System

SEARCH [Advanced Search](#)

facebook

flickr

twitter

[Home](#)

CUSTOMER SERVICES

- [Ways to Pay Your Bill](#)
- [Account Information](#)
- [Customer Assistance](#)
- [Water Rates](#)
- [Property Managers and Trade Professionals](#)

WATER UTILITIES

- [Drinking Water](#)
- [Wastewater](#)
- [Stormwater](#)
- [Harbor Water](#)

THE WATERSHED

- [Watershed Protection](#)
- [Watershed Recreation](#)

CITYWIDE INITIATIVES

- [Regulatory Reform](#)
- [Environmental Education](#)
- [Conservation Programs](#)
- [Air Pollution Control](#)
- [Noise Codes & Complaints](#)

BUSINESSES & PROFESSIONALS

- [Forms & Permits](#)
- [Doing Business with DEP](#)
- [Asbestos Abatement](#)

FOR IMMEDIATE RELEASE

11-13

February 21, 2011

CONTACT:

Farrell Sklerov / Mercedes Padilla (718) 595-6600

DEP Completes Cleaning of Large Sewers in Southeast Queens

Vacuum Trucks Cleared Jamaica's Drainage Area to Avoid CSOs in Jamaica Bay

Environmental Protection Commissioner Cas Holloway today announced the completion of the cleaning of large sewers in southeast Queens using new state-of-the-art Vactor trucks. The cleaning of 12.2 miles of large sewers — called interceptors — removed roughly 1,008 cubic yards of debris weighing 1,562 tons, enough to fill 97 garbage trucks. The work will increase the amount of flow that local sewers can carry to the Jamaica Wastewater Treatment Plant because clear sewers lines have the ability to convey more stormwater during heavy rains, which ultimately reduces the likelihood and intensity of combined sewer overflows into Jamaica Bay. During storms, the parts of the sewer system often reach capacity, and must discharge a mix of stormwater and wastewater — called a combined sewer overflow, or CSO — into New York City's surrounding waterways. DEP estimates that the additional capacity made available through this work will help reduce CSOs by up to 25% in certain drainage areas, improving the water quality and ecological health of Jamaica Bay, and reducing flooding in local neighborhoods. To locate debris and sediment that has accumulated over the years, DEP used sonar technology and closed circuit television to survey the sewers in targeted areas. Once affected areas were identified, Vactor trucks used their powerful vacuum systems to suck out debris and sediment in order to clean the interceptors from a sewer area of 43.7 square miles.

"The most cost-effective way to reduce combined sewer overflows is to maximize the capacity of our existing sewer network, and clearing out 136 miles of our largest sewer lines will increase the system's storage capacity during rainstorms by hundreds of millions of gallons," said Commissioner Holloway. "We started this effort in Jamaica because we know that localized flooding is a problem for some residents, and to protect Jamaica Bay — one of the ecological gems of New York City. Optimizing our existing sewer network is a key part of the NYC Green Infrastructure Plan, which will save New Yorkers more than \$2 billion when fully implemented, and will dramatically reduce CSOs and improve water quality in New York Harbor."

MORE INFORMATION

NYC Department of Environmental Protection Communications & Intergovernmental Affairs

59-17 Junction Boulevard
19th Floor
Flushing, NY 11373

(718) 595 - 6600

[Construction, Demolition & Abatement](#)

ABOUT DEP

[Inside DEP](#)

[News](#)

[DEP Featured In...](#)

[Stories from DEP](#)

[Press Releases](#)

[Public Notices](#)

[Testimony and Public Comments](#)

[Capital Projects](#)

[Job Opportunities](#)

[Environmental Reviews](#)

[A to Z Index](#)

[Contact Us](#)

Last summer, DEP introduced two new \$450,000 trucks and started a two-year program to systematically clean sewer lines in the city. Southeast Queens was the first area to be cleaned as it appeared to have the most significant levels of debris in the interceptors, according to DEP's inspection of the entire sewer system. Debris sucked out the system included large objects such as tires, construction materials, large rocks and even a 15-foot ladder which was obstructing the sewer lines.

The Jamaica intercepting sewer system consists of two main branches, the east and west, is approximately 12.2 miles long and runs primarily along Linden Boulevard, Springfield Boulevard, 225th Street, and the South Conduit. The pipes vary from 42 to 177 inches in diameter and width. Analysis of the sediment data revealed that along the east interceptor and downstream of 79th Street and the South Conduit on the west interceptor, sediment and debris occupied more than 20% of the pipe volume. The Southeast Queens drainage area of approximately 43.7 square miles conveys about 75 million gallons a day to Jamaica Wastewater Treatment Plant. The Vactor trucks will now proceed to the Northeast section of Queens to clean the drainage area that is serviced by Tallman Island Wastewater Treatment Plant.

The diesel-powered Vactor trucks use a 30-foot hose to vacuum debris from sewers which are accessed through manholes that connect to the system. The trucks also have a water jet to clear clogs in the sewers. The vacuum pump is attached to the truck's intake hose which is lowered into the storm drain and the drain is flushed from all angles with the water coming from the tanks. The water helps the vacuum to suck up all the debris. Sediment and illegally dumped debris that can build up over many years in certain areas of the sewer system are cleaned in the process. When the Vactor trucks are full, the sediment and debris are transported to the Wards Island Wastewater Treatment Plant in Manhattan, where it is removed from the truck and placed in containers for transport to a landfill.

The two trucks now in service can collect up to three tons of sediment and debris each day to clean 136 miles of sewer interceptors. Interceptors used to be cleaned by contractors when they were heavily clogged or in response to emergencies. Now, interceptor cleaning has become a routine part of daily operations for DEP's in-house forces. Sewer interceptors range from four feet to 10 feet in diameter and are the last stop for wastewater flow before it is conveyed to the city's 14 wastewater treatment plants. The interceptors receive wastewater flow from the city's 7,400 miles of trunk sewer mains and lateral sewers, which take flow from homes, businesses and the catch basins on streets.

The Vactor trucks will complement the \$1.1 billion in investments planned or underway through 2019 to improve water quality by capturing overflows. These investments are in addition to the approximately \$1 billion in Combined Sewer Overflow-related projects that were completed or started construction between 2002 and 2009, including the Flushing Bay and Spring Creek Combined Sewer Overflow Retention Facilities now in operation. Since 2002, the City has invested more than \$5 billion to upgrade its 14 wastewater treatment plants. Because of these investments, DEP has achieved a number of milestones recently: reaching city-wide monthly average Clean Water Act secondary treatment standards for the first time ever — three years ahead of schedule; and agreeing to a historic

nitrogen-reduction program for Jamaica Bay with the State Department of Environmental Conservation and the Natural Resources Defense Council.

Optimizing the wastewater system is also a key element of the NYC Green Infrastructure Plan that was unveiled by Mayor Bloomberg last September. The plan will improve harbor water quality by capturing and retaining stormwater runoff before it enters the sewer system. The plan, which includes \$2.4 billion in green infrastructure, will reduce sewer overflows by 40% by 2030. This approach will also save \$2.4 billion over the next 20 years because it will reduce more costly investments in traditional sewage retention projects, like tanks and tunnels. Green infrastructure uses vegetation, soils, and other structural elements to absorb and evaporate water and to mimic natural areas and hydrologic cycles. These types of projects are a key component of PlaNYC's sustainability effort because they also shade and cool the city, improve air quality, and increase property values.

DEP manages the city's water supply, providing more than 1 billion gallons of water each day to more than 9 million residents, including 8 million in New York City. New York City's water is delivered from a watershed that extends more than 125 miles from the city, and comprises 19 reservoirs, and three controlled lakes. Approximately 7,000 miles of water mains, tunnels and aqueducts bring water to homes and businesses throughout the five boroughs, and 7,400 miles of sewer lines take wastewater to 14 in-city treatment plants. For more information, visit www.nyc.gov/dep or follow us on Facebook at www.facebook.com/nycwater.

- ▶ [View all press releases](#)
- ▶ [Sign up to receive DEP press releases by email](#)