



**Environmental
Protection**

Deputy Mayor Holloway and Environmental Protection Commissioner Strickland Announce Completion of Two- Year Sewer Cleaning Project to Increase Flow Capacity and Reduce Combined Sewer Overflows

**More than 26 Miles of Pipe Cleaned and Nearly 29 Million Pounds
of Debris Removed;**

**Improved Capacity Will Reduce Combined Sewer Overflows by
Nearly 100 Million Gallons Annually**

Deputy Mayor Cas Holloway and Environmental Protection (DEP) Commissioner Carter Strickland today announced the completion of a two-year sewer cleaning project aimed at increasing flow capacity and reducing the discharge of untreated wastewater into New York's waterways. Like other older urban areas, New York City is largely serviced by a combined sewer system where stormwater and wastewater are carried through a single pipe. During heavy rain storms, the system can exceed its capacity and discharge a mix of stormwater and wastewater — called a combined sewer overflow (CSO) — into New York Harbor from the approximately 420 combined sewer outfalls throughout the city. Using a floating sonar device, DEP surveyed 136 miles of large sewers, called interceptor sewers, and found that roughly 19% of them required cleaning. DEP cleaned 138,000 linear feet of pipe (26 miles) and removed nearly 29 million pounds of debris and sediment - enough to fill nearly three Olympic-sized swimming pools. The cleaned interceptor sewers now provide about 1.9 million gallons of extra capacity during wet weather, reducing the discharge of untreated CSO into New York City's waterways by nearly 100 million gallons annually. The project is the first phase of an ongoing program to ensure that the City's sewer system is operating at peak efficiency.

“The waters surrounding New York City are cleaner than they’ve been in more than a century thanks to the significant infrastructure investments we’ve made, particularly during the past decade,” said Deputy Mayor for Operations Cas Holloway. “DEP’s Strategic Plan established specific objectives for continuing improvements to our wastewater collection and treatment

systems. The ongoing interceptor maintenance program that Commissioner Strickland is implementing will guarantee further progress.”

“Optimizing our existing infrastructure is a cost-effective way to reduce overflows and improve water quality,” said Commissioner Strickland. “In conjunction with the NYC Green Infrastructure Plan launched by Mayor Bloomberg in 2010, this initiative to continually clean our major sewers will further reduce water pollution, helping to open more waterways for recreational use and advance one of the core goals of PlaNYC.”

In June, 2010, DEP announced the interceptor sewer cleaning project and set an ambitious timeline to survey all 136 miles of interceptor sewers and clean blockages. Interceptor sewers are the superhighways for wastewater from homes and businesses, and stormwater that flows into catch basins in the streets before reaching one of the City’s 14 wastewater treatment plants. During dry weather, interceptor sewers convey 1.3 billion gallons of wastewater per day. During storms, flows can increase to almost 4 billion gallons per day. The wastewater flowing in the interceptor sewers typically moves fast enough to prevent sediment from settling to the bottom of the pipe. However, heavy trash that is illegally disposed of in the sewer system and other debris can create dams that slow the flow and allow sediment to settle.

Interceptor sewers are cleaned using Vactor trucks with 30-foot hoses to vacuum debris and a water jet to break up clogs in the sewers. Blockages typically consist of sediment and debris that can build up over many years in certain areas of the sewer system. Each Vactor truck can remove between 12 and 18 cubic yards of material before having to be emptied. In some locations, the debris in the interceptor sewers was so heavy that it could not be removed by DEP Vactor trucks, so other technologies were used.

DEP surveyed 136 miles of interceptor sewers using a floating sonar device, which also assessed the structural condition of the interceptor sewers. Their overall condition was found to be very good, though minor repairs are necessary to ensure long-term reliability. Repair contracts are now being scheduled. DEP will continue to perform sonar surveys on all inceptor sewers and any indicated cleaning on a two-year cycle, allowing crews to promptly address repairs and remove additional accumulations of debris. This ongoing program will ensure peak hydraulic capacity in the interceptor sewers.

DEP has been working in close partnership with the New York State Department of Environmental Conservation on the interceptor cleaning program and a number of other initiatives to further reduce CSO. These include capital improvements and management practices to

address the needs of specific water bodies, like Paerdegat Basin and Flushing Bay. More than \$1 billion have been invested since 2002 on CSO infrastructure, and Mayor Bloomberg has committed an additional \$1.7 billion over the next decade. Optimizing the wastewater system is also a key element of the NYC Green Infrastructure Plan unveiled by Mayor Bloomberg in September, 2010. The plan, the product of more than one year of planning and analysis, will improve harbor water quality by capturing and retaining stormwater runoff before it enters the sewer system. The plan includes more than \$5 billion in public and private investments in green infrastructure and cost-effective grey infrastructure, and will reduce CSO by 40% by 2030. The Department of Environmental Conservation and DEP recently announced a groundbreaking agreement allowing the City to move forward with this groundbreaking plan. Green infrastructure uses vegetation, soils, and other structural elements to absorb and evaporate water and to mimic natural areas and hydrologic cycles. Green infrastructure also helps to shade and cool the city, improve air quality, and increase property values.

DEP manages the city's water supply, providing more than one billion gallons of water each day to more than nine million residents, including eight million in New York City. The water is delivered from a watershed that extends more than 125 miles from the city, comprising 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 and 95 pump stations take wastewater to 14 in-city treatment plants. DEP employs nearly 6,000 employees, including almost 1,000 in the upstate watershed. DEP has a robust capital program with a planned \$13.2 billion in investments over the next 10 years that creates up to 3,000 construction-related jobs per year. For more information, like us on Facebook at www.facebook.com/nycwater, or follow us on Twitter at www.twitter.com/nycwater.

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