

**FOR IMMEDIATE RELEASE:**

November 19, 2012

**No. 90**

## **Department of Environmental Protection Releases 2012 Sewer Performance Report**

*Report demonstrates that DEP's data-driven, proactive approach to operation and maintenance of the sewer system has improved performance and reliability;*

*Almost 700 miles of sewer lines targeted and cleaned in FY 2012, a 116% increase over five years earlier; Sewer backup complaints dropped city-wide by 36% over the same time period*

Environmental Protection Commissioner Carter Strickland today released the 2012 State of the Sewers Report, which found that DEP's rigorous inspection, analysis and cleaning program has produced tangible improvements to the level of sewer service city-wide. The Report provides an overview of how the City's sewer system works, DEP's approach to inspection, cleaning and repair of the system, a breakdown of the most recurrent causes of sewer blockages, a look at the new employee training facility and safety programs, how advanced analytics, software and mapping tools are being used to target problematic areas and hydraulic modeling is guiding designs for future capital projects and city-wide and borough by borough performance analytics.

"A well-functioning sewer system is a key component of the continued growth and prosperity of New York City and this Report demonstrates that by employing innovative tools and strategies we are operating our system better and more effectively than ever before," said Commissioner Strickland. "By using advanced analytics and a risk-management based approach we have been able to target our resources at specific problematic locations throughout our 7,500 miles of sewer lines to not only fix the problem now, but to proactively address the underlying condition and prevent future problems. Our employees have always been dedicated to keeping the system running well, even if it requires working in extreme weather such as Hurricane Sandy, and they will continue to have the best available tools to perform that mission."

Some key city-wide performance statistics from the last five years include:

- Sewer backup complaints have dropped from more than 21,600 to fewer than 13,900, a decrease of 36%.
- Confirmed sewer backups have dropped from more than 7,700 to fewer than 4,900, a decrease of 37%.
- Sewer segments with recurring backups have decreased from more than 1500 to fewer than 950, a decrease of 38%.
- Miles of sewer lines cleaned has increased from over 320 miles to almost 700 miles, a 116% increase.

- Defective catch basin complaints have dropped from more than 18,000 to 12,370, a 32% decrease.

Additional key statistics:

- Over the last three years DEP has constructed 40 miles of new sewer lines. During the next two years DEP will construct 99 miles of new sewer lines.
- 99.3% of catch basins are in a state of good repair.

In 2011, DEP created a Capacity, Management, Operations and Maintenance unit within the Bureau of Water and Sewer Operations. This unit employs advanced strategies to ensure that DEP resources are being targeted in areas that would benefit most from proactive interventions like increased cleaning. To target these areas, DEP enhanced its existing Geographic Information System (GIS) with digital, searchable maps of all sewer lines, manholes and other infrastructure; developed procedures and guidelines to institutionalize pre-existing field practices and crews were trained to follow the guidelines; and enhanced data on customer service requests to include cause, location and frequency to facilitate identification of trends and provide better service.

DEP developed software to combine existing sewer infrastructure data with a geographic distribution of confirmed sewer backups on digital maps. Each borough is divided into small working units called grids and they are then color coded based on frequency of sewer backups and type of sewer system. Clusters of confirmed sewer backups are then closely inspected by field staff to identify the underlying factors and primary causes of the backups. Once a cause is identified a remediation plan is developed that can include degreasing, regular cleaning and repair or replacement of the sewer line. Since the program began, grease buildup in the pipes from commercial and residential properties has been found to be the primary cause of blockages 61% of the time. Analysts also compare the maps over time to see which areas have shown improvement or may need regular targeted maintenance.

The Report also outlines pilot projects DEP has undertaken including the use of sensors on the underside of manhole covers that can wirelessly transmit a signal to a DEP repair yard if the elevation of wastewater in the sewer reaches a point that indicates it needs inspection and possible maintenance. DEP also has an extensive collection of CCTV and Sonar inspection videos of the sewer lines and is evaluating cataloging systems to integrate those surveys with GIS maps to provide analysts and field crews with up to date information about the sewer line including its dimensions, materials and age, along with any inspection videos in the catalog. For more information and to view the Report in its entirety visit [nyc.gov/dep](http://nyc.gov/dep).

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 7,500 miles of sewer lines and 96 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](http://www.facebook.com/nycwater), or follow us on Twitter at [www.twitter.com/nycwater](http://www.twitter.com/nycwater).

**Contact:** Chris Gilbride / Ted Timbers (718) 595-6600