



LTCP Frequently Asked Questions

- **What is wastewater and where does it go? How much wastewater is treated in NYC?**

Every day, wastewater, also known as sanitary sewage, goes down toilets and drains in homes, schools, businesses and factories and then flows into New York City's sewer system. Wastewater treatment plants remove most pollutants from wastewater before it is released to local waterways. At the plants, physical and biological processes closely duplicate how wetlands, rivers, streams and lakes naturally purify water. Treatment at these plants is quick, taking only about seven hours to remove most of the pollutants from the wastewater. The amazing treatment system that cleans our wastewater consists of: over 6,000 miles of sewer pipes; 140,000 sewer catch basins; 426 permitted outfalls for the discharge of combined sewer overflows (CSOs); 95 wastewater pumping stations that transport wastewater to 14 wastewater treatment plants located throughout the 5 boroughs and approximately 1.2 billion gallons of wastewater are treated daily in New York City.
- **What is stormwater and where does it go?**

Stormwater is generated from rain and melting snow which is conveyed over impervious surfaces such as rooftops, streets, and sidewalks. Impervious surfaces prevent the rain from being absorbed into the ground. As a result, much of the stormwater in New York City flows over impervious surfaces into roof drains or catch basins in the streets, and from there into the sewers. These impervious surfaces cover approximately 72% of New York City's 305 square miles in land area and generate a significant amount of stormwater.
- **What is a combined sewer overflow (CSO)?**

The majority of New York City's sewer system is combined, which means it is used to convey both wastewater and stormwater flows. Sometimes, during heavy rain and snow storms, combined sewers receive higher than normal flows. Treatment plants are unable to handle flows that are more than twice their design capacity and when this occurs, a mix of excess stormwater and untreated wastewater discharges directly into the city's waterways at certain outfalls to prevent upstream flooding. This is called a combined sewer overflow (CSO). CSOs are a concern because of their effect on water quality and recreational uses in local waterways.
- **What is being done to control CSO discharges?**

DEP has spent over \$1.8 billion to date on controlling CSO discharges and has committed to spend an additional \$1.6 billion on grey infrastructure that is projected to reduce CSO discharges by approximately 8.4 billion gallons a year (from a baseline of 30 billion gallons a year. Recent DEP construction projects have included upgrades in key wastewater treatment facilities, storm sewer expansions and the construction of several large CSO retention tanks to further mitigate this chronic source of pollution. Existing infrastructure developments have increased DEP's standardized CSO capture rate from about 30% in 1980 to over 72% today. Some of the most recent increases can be attributed to the implementation of additional CSO control measures such as the upgraded Spring Creek and Flushing Bay CSO Retention Facilities that came online in 2007, and the Paerdegat Basin and Alley Creek CSO Retention Facilities, which came online in 2011.
- **What is being done to manage stormwater?**

DEP has a broad citywide effort to better manage stormwater using a variety of innovative,

sustainable green infrastructure. Improved stormwater management is an important component of the PlaNYC initiative and Green Infrastructure Plan. Green infrastructure, also called source controls, is a set of techniques that detain or retain stormwater runoff through capture and controlled release, infiltration into the ground, vegetative uptake and evapotranspiration. DEP is also targeting managing one inch of stormwater run-off from 10% of impervious areas in the combined sewer areas of NYC using green infrastructure. DEP has allocated about \$730 million in public funding over the next ten years to help advance this green initiative.

• **What is the difference between “grey” and “green” infrastructure CSO controls?**

Grey infrastructure typically denotes end-of-pipe controls such as floatables control, CSO retention tanks, bending weirs, or sewer modifications. Green infrastructure typically denotes source controls that reduce or slow the rate at which storm water enters the combined sewer system including green and blue roofs, bioswales, rain gardens, subsurface detention systems and rain barrels.

• **What is a Long Term Control Plan (LTCP) and what are the goals of the program?**

On March 8, 2012, the New York State Department of Environmental Conservation (DEC) and DEP signed a groundbreaking agreement to reduce CSOs using a green and grey infrastructure approach. Under the requirements of the Clean Water Act and US Environmental Protection Agency (EPA) CSO Control Policy, and as part of this consent agreement, DEP will develop LTCPs, or comprehensive evaluations of long term solutions, to reduce CSOs and improve water quality in NYC’s waterbodies and waterways. The goal of each LTCP is to identify appropriate CSO controls necessary to achieve waterbody-specific water quality standards, consistent with the Federal CSO Policy and the water quality goals of the Clean Water Act to achieve Fishable/Swimmable waters wherever feasible.

• **What is the LTCP schedule?**

The following table illustrates proposed timelines for LTCP development processes, related DEC milestones and public participation opportunities within each specific waterbody:

LTCP	2012				2013				2014				2015				2016				2017				2018			
	Q1	Q2	Q3	Q4																								
Alley Creek																												
Westchester Creek*																												
Hutchinson River																												
Flushing Creek																												
Bronx River																												
Gowanus Canal																												
Coney Island Creek*																												
Jamaica Bay and Tributaries																												
Flushing Bay																												
Newtown Creek																												
Citywide																												

*Pending Modification Request

 LTCP Development and Participation Schedule

 LTCP Submittal to DEC

For more information on DEP’s CSO program, please visit our website at www.nyc.gov/dep or visit www.facebook.com/NYCWater.