

Gowanus Canal

Combined Sewer Overflows Long Term Control Plan

The Gowanus Canal is a man-made waterbody that extends 1.8 miles from Gowanus Bay to Butler Street. It runs through the neighborhoods of Red Hook, Gowanus, Carroll Gardens and Boerum Hill. Originally a tidal estuary called the Gowanus Creek; it was converted to a canal in the mid to late 19th century to promote commerce. The surrounding area eventually became fully urbanized and industrialized. For much of the Canal's history, industrial and other wastes were discharged directly to the Canal without treatment.

Currently, DEP has committed **\$160 million** to reduce pollution and improve water quality in the Gowanus Canal. Water quality improvement projects include rehabilitation/upgrade of the existing flushing tunnel system to increase flows through the canal, the replacement of the existing failed wastewater force main located within the Gowanus Canal flushing tunnel and upgrades to the pumping station building for improved capacity and reduced CSOs.

For the Gowanus Canal combined sewer overflow (CSO) long term control plan (LTCP), DEP will be evaluating additional improvements to reduce CSO impacts on water quality and related recreational uses within this waterbody, and will continue to work with the New York State Department of Environmental Conservation. The goal of the CSO LTCP is to identify the appropriate controls necessary to achieve waterbody-specific water quality standards, consistent with Federal CSO Policy and the water quality goals of the Clean Water Act.



Gowanus Canal

Flushing Tunnel Modernization

Under the Gowanus Facilities Upgrade Project, DEP installed three new submersible pumps to replace the original single propeller configuration, and rehabilitated portions of the 1.15 mile tunnel. The new interchangeable pumps eliminate the need for shutdowns at low tide and will virtually eliminate shutdowns for maintenance. In addition, the tunnel's flow capacity has increased from 154 million gallons per day (mgd) to 215 mgd.

Pump Station Reconstruction

DEP is also upgrading the Gowanus Wastewater Pumping Station, which pumps wastewater to the Red Hook Wastewater Treatment Plant. The project will increase the station's pumping capacity from 20 mgd to 30 mgd. In addition, DEP is constructing a new mile-long force main from the pumping station to the Columbia Street / Red Hook Interceptor Sewer. These improvements will decrease the frequency and intensity of CSO events and the volume of CSO discharged to the Canal by approximately 34% on an annual basis. In addition, DEP will install a screening device at the head end of the Canal to remove floatables and other solid materials that may be discharged during CSO events. The pumping station has been operational since June 2014 and final completion is scheduled for March 2015.



Green Infrastructure

DEP works with other city agencies to design, construct, and maintain green infrastructure (GI) on City-owned property such as sidewalks, schools, and parks. Green infrastructure (GI) practices mimic natural systems to collect and manage stormwater runoff from impervious surfaces. DEP is planning for \$2.4 billion in public and private funding for targeted GI to manage one inch of stormwater runoff from ten percent of the impervious surfaces of the combined sewer areas of the City by 2030. In January 2013, DEP began the design process to install GI in the Gowanus watershed. In late 2014/early 2015 construction will begin on GI practices in the streets and sidewalks of Carroll Gardens, Cobble Hill, Park Slope, and Prospect Heights. Additionally, a GI playground at P.S. 261 on Pacific Street has been renovated with green infrastructure practices and DEP is currently investigating other opportunities to install GI on schools, parks, and public housing. DEP also offers a grant program for private property owners who are interested in installing GI. More information can be



found at www.nyc.gov/greeninfrastructure



For more information on DEP's CSO program, please visit our website at www.nyc.gov/dep/ltcp or visit [www.Facebook.com/NYCWater](https://www.facebook.com/NYCWater).

Gowanus Canal Watershed Statistics

Total Drainage Area: 1,581 acres

Combined Sewer Contributory Area: 1,526 acres (97%)

Wastewater Treatment Plants: Red Hook and Owls Head

NYSDEC Classification: Class SD – Fishing