



1924 Aerial Photo, Source: The City of New York

Environmental Remediation

A legacy of pollution in and around the Gowanus Canal has led to a need for substantial remediation. From the mid-nineteenth to the mid-twentieth century, Gowanus was a center of heavy industry, including coal gasification (manufactured gas) plants, oil refineries, chemical plants, cement works, machine shops and tanneries. Underground chemical storage and runoff from these sites spread toxins throughout the area, and coal tar and other contaminants continue to leach into soil and migrate due to container leaks, improper disposal, the natural topography and high water table of the former wetlands and creeks that were filled in to form today's neighborhood.

City, State, and federal government agencies have made long-term commitments to support remediation throughout the neighborhood. The U.S. Environmental Protection Agency (EPA) placed the Canal on its National Priorities (Superfund) List in 2010 and has coordinated the parties that were historically responsible for the Canal's contamination in establishing extensive plans to clean it up. EPA's remediation plan focuses on hazardous substances located in and beneath the Canal, primarily non-aqueous phase liquid (NAPL) and associated polycyclic aromatic hydrocarbons (PAHs), which were discharged from the three former manufactured gas plants. As part of the plan, EPA also mandated the construction of underground tanks to store combined sewage during wet weather events to reduce overflow into the Canal.

New York State's Department of Environmental Conservation (NYSDEC) and NYC Office of Environmental Remediation (OER) have both developed remedial programs and incentives programs to facilitate the investigation and remediation of brownfield sites. The goals and strategies below aim to summarize and coordinate among existing cleanup efforts and bring additional tools to promote the cleanup of upland brownfield sites.

Goal: Support continuing clean-up of the Gowanus Canal and properties across the neighborhood Canal Remediation

Support and assist the EPA in its coordination of dredging and restoration of the Gowanus Canal under the Superfund program

EPA has identified approximately 25 potentially responsible parties (PRPs) in connection with contamination of the Canal. The PRPs, which include National Grid and the City, have worked with EPA to develop a plan for Canal remediation and to pay for the cleanup.

- Members of EPA's Gowanus Community Advisory Group (CAG) have participated in the Gowanus Study as members of the Sustainability and Resiliency, Public Realm and other working groups. DCP, DEP and other City agencies will continue to engage with CAG members and EPA staff in development of a Gowanus neighborhood plan and any changes to land use or infrastructure investment in the area.
- The City will continue to work with EPA to facilitate Canal access and staging, including use of City properties and streets as needed for remediation work.

Reduce CSO pollution entering the Canal

In addition to dredging, the EPA mandated the construction of underground tanks to store combined sewage during wet weather events.

- DEP has worked with EPA on behalf of the City to plan construction of underground CSO facilities to significantly reduce sewer overflow in the Canal. For more information, see Sustainability and Resiliency Goal 2 on page 23.
- The CSO facilities will, together with other recent City infrastructure investments including modernization of the Flushing Tunnel and reconstruction of the Gowanus pump station, help improve the health of the Canal.
- The City's High Level Storm Sewer project along 3rd Avenue will help to reduce street flooding and the amount of pollution that may be discharged into the Canal during heavy rain storms (see Sustainability and Resiliency, pages 21-23).

Cleanup and Reuse of Contaminated Sites Leverage redevelopment to provide brownfield remediation

New development on contaminated sites will require the owner or developer to thoroughly investigate and remediate the property before construction.

- (E) designations placed on properties in the area will require property owners that propose new development or land uses to thoroughly investigate and, if necessary, remediate the property under the guidance of OER.
- More information on (E) designations can be found at <https://www1.nyc.gov/site/planning/applicants/e-faq.page>.

When there is a **change in zoning** or other action pursuant to the Zoning Resolution that allows additional development to occur on a property, or permits uses not previously allowed, **an (E) designation may be added to note an environmental requirement** pertaining to potential hazardous materials contamination, high ambient noise levels or air emission concerns on a particular property.



Former Citizens MGP site - Huntington Street

“Site investigation and remediation may present opportunities for local training and employment.”

Comment from Sustainability and Resiliency Working Group member - Spring 2017

Facilitate and incentivize voluntary clean-up of private properties

The City and State promote and assist in remediation of contaminated properties to protect public health and the environment, and to encourage redevelopment.

- NYSDEC manages several programs that facilitate environmental remediation. The Brownfield Cleanup Program (BCP) encourages cleanup of contaminated properties for reuse and redevelopment through incentives to property owners, including liability protection and tax credits. Eligibility for the more lucrative tangible property tax credits is generally restricted to sites building affordable housing or located in economically distressed areas. NYSDEC approves Remedial Work Plans and certifies that the property has been cleaned up to New York State Standards. More information on BCP is available at <http://www.dec.ny.gov/chemical/8450.html>.
- The New York City Voluntary Cleanup Program (VCP) is a voluntary environmental remediation program administered by OER. It was established to ensure that any vacant property in NYC with light to moderate levels of contamination can be cleaned up to New York State standards. Eligibility for VCP incentives – which can include liability protection, cleanup cost offsets and soil recycling services – depends on compliance with OER’s investigation plans, remedial work plans and long-term site management plans. More information on VCP can be found at <http://www.nyc.gov/html/oer/html/voluntary-cleanup-program/vcp.shtml>.

Help community organizations participate in redevelopment planning

Community organizations in Gowanus have opportunities to be involved in brownfield planning and redevelopment.

- The remediation of Thomas Greene Playground will be followed by reconstruction of the park. The NYC Department of Parks & Recreation (NYC Parks) will seek input from community members and Community Board 6, among others, in its review process for the park’s design.
- OER will continue to engage with Gowanus community organizations on opportunities for pre-development grants to support their redevelopment of vacant, underutilized sites. These grants are available to help community organizations produce plans and designs for sites, foster community engagement or contract with professional vendors for remediation-related work. More information on community brownfield planning grants is available at <http://www.nyc.gov/html/oer/html/brownfield-incentive-grants/big-required-grant-documentation.shtml>.
- The NYC Clean Soil Bank (CSB) provides clean native soil excavated during construction on development sites in the city to sites that need it for construction or other projects. Priorities include projects led by community-based organizations that improve social equity by reducing contaminant exposures, projects that improve waterfront resilience and projects that are working with government to remediate land. For more information about the CSB, see <http://www.nyc.gov/html/oer/html/nyc-clean-soil-bank/nyc-clean-soil-bank.shtml>.