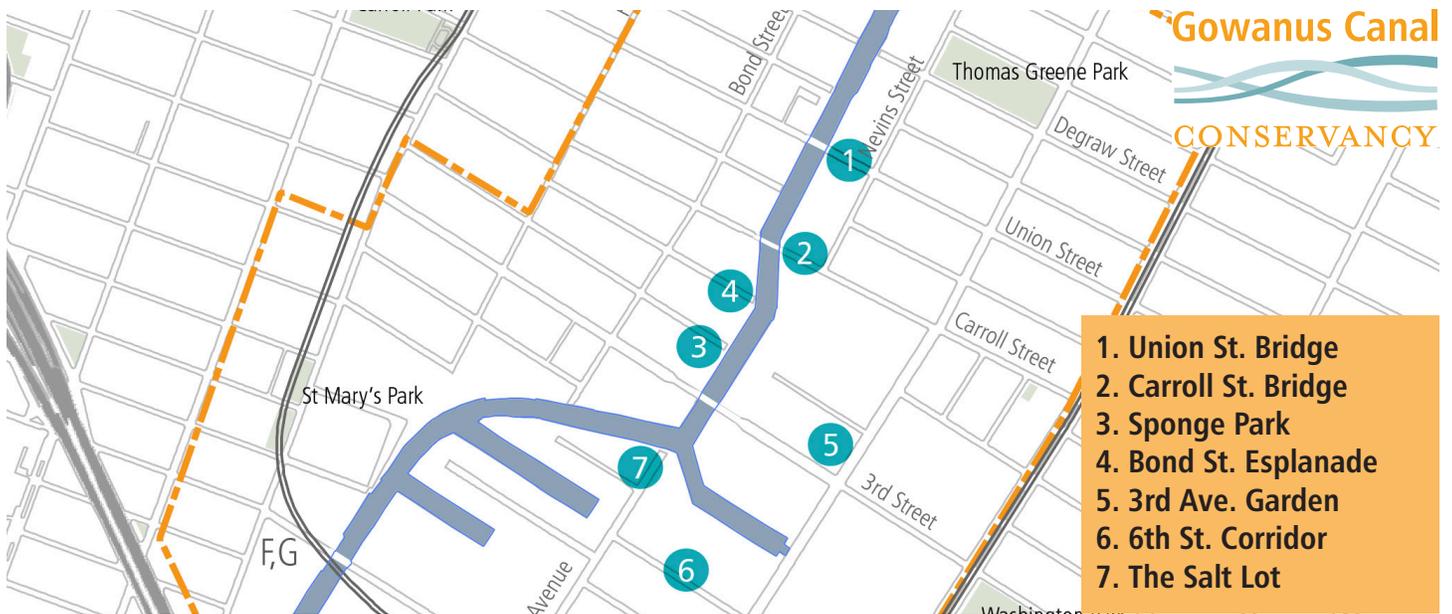


Gowanus Canal Self-Guided Walking Tour



Overview

The 1.8 mile Gowanus Canal is a tidal estuary that flows into the New York Harbor. Prior to becoming a canal, the Gowanus Creek area was home to the Lenape Indigenous people, lowland salt marshes, and abundant wildlife. The Canal was built during the Civil War/Industrial Era (1853-1868) in response to the growing demands for commercial transport and population growth in Brooklyn. The Gowanus Canal is considered one of the most polluted waterways in the country due to contamination from historical industrial waste and ongoing combined sewer overflow (CSO). In 2010, the US Environmental Protection Agency (EPA) declared the Gowanus Canal a Superfund site, and it is now undergoing clean up.

Site 1: Union Street Bridge

You are at the northernmost bridge crossing the Gowanus Canal, looking at the head of the Canal. The industrial contamination in the Canal came primarily from three former manufactured gas plants (MGPs): Fulton MGP, Citizens MGP, and Metropolitan. Coal tar, a waste byproduct of gas production, was dumped into the Canal and soil until the Clean Water Act was passed in 1972, making such activities illegal. Thanks to the Superfund clean-up efforts, approximately 10 feet of contaminated soil along the entire canal will be dredged, or removed, and the bottom will be covered by a multi-layer cap to prevent further contamination from the coal tar beneath. Bulkheads (retaining walls) are being rebuilt along the Canal's edges to support the land while the canal is dredged. The first phase of dredging and capping will begin here in November 2020, once the new bulkheads have been installed. To learn more about the Superfund clean-up or to get involved, check out the Gowanus Canal Community Advisory Group (CAG).

Site 2: Carroll Street Bridge

You are standing on the Gowanus Canal's oldest bridge. Built in 1889, this is one of four retractable bridges remaining in the United States. Notice where the bridge deck slides back on metal tracks to open. During rainstorms, combined sewer overflow (CSO) pollutes the Canal with untreated sewage and stormwater runoff coming from the surrounding neighborhoods - one of these outfalls is just below, on the southeast side of the bridge. In NYC's combined sewer system, both sewage and stormwater runoff travel in a single pipe to be cleaned at a wastewater treatment facility. On rainy days this pipe can quickly reach capacity, and the overflow is discharged into nearby waterbodies before it's cleaned. The Gowanus Canal receives about 363 million gallons of CSO per year, containing oil, road salt, animal feces, human feces, cooking oil, pharmaceuticals, and cleaning products. There are over 400 CSO outfalls throughout the City that discharge CSO into NYC waterways and 12 along the Gowanus Canal. The City of New York, under the Clean Water Act and the Superfund, is installing grey infrastructure upgrades in the neighborhood to help address CSO. One of these upgrades is a high level storm sewer that collects just stormwater and releases it directly into the Canal, easing pressure on the combined system.

Site 3: Sponge Park (2nd Street)

Welcome to Sponge Park! This is a green infrastructure pilot project installed by the NYC Department of Environmental Protection (DEP) to help reduce CSO in the Canal. Green infrastructure is an approach to water management that mimics the natural water cycle by planting vegetation, including trees, plants, wetlands, and other permeable surfaces that soak up stormwater and help to reduce CSO. Rain barrels, rain gardens, green roofs, and blue roofs are also examples of green infrastructure. Sponge Park captures stormwater that flows down 2nd Street, as water enters through the two inlets in the curb and flows into several underground cisterns, or tanks. This water is absorbed by plants and any excess water flows into the Gowanus Canal. If Sponge Park is properly maintained (clear of litter and debris and plants are healthy), the space can manage up to one million gallons of stormwater! Similar to Sponge Park, bioswales, or curbside rain gardens, are designed to maximize the amount of water that can be absorbed and filtered from the street. They include hardy, native plants that can survive tough city conditions and possess engineered soil, layers of fabric, stone, and permeable concrete. NYC plans to install 8,000 curbside rain gardens by 2030. A single curbside rain garden can capture over 2,000 gallons of stormwater!

Site 4: 363/5 Bond Esplanade

You are now facing towards the 363/5 Bond buildings. Gowanus is in the midst of a City-led rezoning that will fundamentally change the waterfront and land use along the northern part of the Canal, allowing residential and mixed use developments like this one. Any new development on the waterfront must include a public esplanade, just like the one you're currently standing on. There is an opportunity for these spaces to knit together into a comprehensive public park, but coordination and site specific policy is necessary to make sure that the design and programming respond to the unique character of the Canal and neighborhood. GCC is working to guide this design and programming through development of the Gowanus Lowlands Master Plan and advocacy for a robust Waterfront Access Plan with site specific parameters as part of the City-led rezoning. A Gowanus rezoning has the potential to create a neighborhood that is equitable, sustainable, and healthy for all community members, but there is more work to be done over the coming months to meet community needs. You can learn about our advocacy as part of the Gowanus Neighborhood Coalition for Justice by visiting gncj.org.

Site 5: 3rd Avenue Garden

You are now at one of GCC's first guerrilla gardens, built in 2012. Formerly an unused stretch of sidewalk, this garden was designed entirely by volunteers with native plants and donated materials. Volunteers help build and maintain green space like this in the neighborhood, including gardens and street trees.

Site 6: 6th Street Green Corridor

As you look down 6th Street, from 2nd Avenue to 4th Avenue, you will see 11 curbside rain gardens, or bioswales, built by GCC back in 2014 with funding from the NYC DEP and EPA. These curbside rain gardens were each designed to capture 3,000 gallons of stormwater, and the native plants provide habitat for pollinators. GCC maintains this green corridor with the help of volunteers.

Site 7: The Salt Lot

You made it to the last stop on this tour! In front of you, you'll see the 2nd Avenue Garden, a rain garden built on the street-end and maintained by volunteers. There is another CSO outfall at the end of the street. If you look through the fence, you can see the Salt Lot, Gowanus Canal Conservancy's volunteer, education, and stewardship hub. It is also the home of the Lowlands Nursery. This space is shared with the NYC Department of Sanitation and the NYC Compost Project, Big Reuse. GCC volunteers developed a robust compost operation, and won participatory budgeting funds to build out this larger facility that processes up to 150 tons of organic waste per year. As you peer through the fence, you may notice large piles of salt, which DSNY utilizes to improve slippery winter road conditions. In the coming years, this site will be dug up to build a four million gallon CSO storage tank. GCC envisions a future space as a model for infrastructure that serves the community, by incorporating the diverse uses that currently occupy the Salt Lot while enhancing this public infrastructure with additional public program areas.

To learn more, visit gowanuscanalconservancy.org and follow us on social media.