Newtown Creek

Introduction

Newtown Creek is a 3.8 mile waterway connected to the East River and serves as the border between Western Queens and North Brooklyn. The Creek was originally a salt marsh environment with numerous fresh water streams feeding into brackish waters including plentiful amounts of fish and shellfish harvested by native Lenape tribes and early European colonialists. As the Creek became a hub for industrial activity in the 19th century, the environment was drastically altered to accommodate factories and maritime use; this included filling in marsh, bulkheading shorelines and deepening channels. By the early 20th century the Creek became one of the busiest waterways in the country, carrying more value and volume of cargo than the entire Mississippi River. Goods manufactured in the area included fertilizers, chemicals, glues, ropes, dyes and many varieties of petroleum products. However, the decline of American manufacturing after World War II led to abandoned and underutilized properties as well as loss of skilled jobs in the area. Heavy industrial use, with insignificant environmental regulation and protection, left a legacy of toxic contamination, still present within the sediments of the Creek. In 2010, the Creek was declared a federal Superfund site.

Active Bulkheads

At it's busiest, Newtown Creek was home to 500 manufacturing businesses. Over 15,000 vessels traversed the waterway annually. As recently as the 1950's, ocean-going freighters were a common sight as far east as Maspeth. These days, maritime traffic is less active, but there are still many working waterfront facilities which primarily handle waste and petroleum products as indicated on this map. Moving bulk materials by barge is more efficient economically and environmentally. A single barge has the same capacity as 28 – 56 long haul trucks, depending on the industry. Compared to other transportation modes, barge transport of bulk materials is safer in terms of worker injuries, generates far fewer toxic air emissions and reduces maintenance costs for roads and bridges.

Street Access Sites

Newtown Creek is lacking in public access. As of 2015, there are only two officially recognized public spaces on the Creek: the Manhattan Ave Street End (NYC Parks Department) and The Newtown Creek Nature Walk (NYC Dept. of Environmental Protection). A number of other street end sites around the creek provide potential for public access, including the 'Plank Road' site in Maspeth where NCA began restoration work in 2013.

Naturalized Bulkheads

Much of the Newtown Creek shoreline is bulkheaded to accommodate maritime use and increase land use of properties adjacent to the Creek. Some portions of the shoreline maintain a more naturalized state where the edge slopes from water to land as opposed to dropping off 90 degrees as with bulkheads. These shores offer truer intertidal zones, or portions of land that are submerged twice a day by the incoming tides. Such intertidal areas provide critical habitat for numerous marine plants and animals native to the Creek.

Greenpoint Oil Spill

In 1978 a Coast Guard patrol spotted massive oil plumes on the Creek near Meeker Avenue. This spurred an investigation which found 17 to 30 million gallons of oil underneath Greenpoint, Brooklyn. Released into the environment from Standard Oil (now ExxonMobil) and other nearby refineries during decades of operations; the spill is currently being remediated under supervision of the NY State Department of Environmental Conservation. As of 2015, some 12.5 million gallons of petroleum product have been removed. This map shows the original extent of the plume - the 2nd largest oil spill in US history.

Potentially Responsible Parties

In 2010, the US EPA designated Newtown Creek a federal Superfund site. Part of the Superfund process is identifying potentially responsible parties (PRP) that have contributed to the contamination and will be held liable paying for the cost of cleanup and restoration. The Newtown Creek PRPs include ExxonMobil, British Petroleum, Texaco, Getty, National Grid, Phelps Dodge and the City of New York.

****Combined Sewer Overflow**

As little as a tenth of an inch of rainfall can trigger Combined Sewer Overflow (CSO), which is when stormwater combines with sanitary sewers, treatment plants reach a capacity for intake and untreated sewage and stormwater enters the waterway via CSO outfall pipes located throughout the city. The Creek receives over 2 billion gallons of CSO each year, which has tremendous impact on water quality and represents the largest source of present day pollution.

Public Libraries

The Brooklyn and Queens public libraries partnered with NCA to host weather stations at branches within the Creek watershed. These stations provide real time weather data and are connected to our #CSOalert system that lets residents know when CSO events are likely occurring. By conserving water during these events we can lessen the amount of pollution entering the Creek.

Remedial Sites

The NY State Department of Environmental Conservation is working with property owners to remediate a number of contaminated sites surrounding Newtown Creek. Similar to the Greenpoint Oil Spill, these are often remnants of old industrial operations where toxic chemicals have leached into the soil and groundwater, posing significant health threats to the local community of humans and non human organisms. This map shows a number of these remedial sites that are currently being investigated or cleaned up. For more information about each site and the cleanup process visit dec.ny.gov.

1600 Shoreline & Parky Historic Features

The geography of Newtown Creek has changed tremendously since the arrival of the first Europeans to the area in 1609. Shown here is an outline of the Creek as it existed at that time, with much of the surrounding shoreline consisting of extensive marsh and numerous streams feeding into the creek.

NOTICE: Newtown Creek is a federally designated Superfund site. Due to poor water quality and contamination of the sediments within Newtown Creek, it is NOT advisable to swim, wade or consume fish or shellfish.

54

55

This map was produced by the Newtown Creek Alliance,

MANHATTAN

NEWTOWN CREEK ALLIAN

Ins map was produced by the Newtown Creek Alliance, for more information visit their website newtowncreekalliance.org

Cartography by Ed Jacobus (Ed may be contacted at ecjacobus@iCloud.com)

