# Ch. 2 - Background / Project Area (Community Context of the Superfund Designation)

Establish Gowanus as an Industrial Community

- 1. Brief history & evolution of use (historic map analysis)
- 2. Character of neighborhood & residents over time
- 3. Environmental hazards and local knowledge

#### Establish the Gowanus Pre & Post-Industrial Context

- 1. Historic uses
- 2. Environmental degradation
- 3. Urban Renewal schemes (and resistance to them)
- 4. Abandonment (of infrastructure esp)

Establish the relationship between real estate speculation (from outside developers, not insiders like Buddy Scotto) and first interest in environmental remediation by the state.

- 1. Locals understanding/acceptance of the place (Pearsall & Campenella)
- 2. Resistance to gentrification (Pearsall & Alexiou)
- 3. Environmental Justice for Industrial Communities (just green enough)
- 4. Solidarities with other EJ comms (TBD) a provocation raised by Pearsall

Establish the identity of the CAG at the beginning of the process.

- 1. Position myself
- 2. Notes from first meeting
- 3. Justice following so many deceptions & obfuscations by the state
- 4. Water as commons; at the beginning they came to the table

Why set up the context this way? Because the remediation offers something different...slowing the rate of change, challenging the "real estate state," and creating an ongoing and facilitated space for more community input to potentially shape the future of this very contested space and others like it.

#### **Chapter Introduction**

The Superfund cleanup of the Gowanus Canal in Brooklyn, launched in 2010, is occurring in a geography with historic racialized land uses and segregation (Taylor, 2019; Rothstein, 2017; Dillon, 2014). Following over 150 years of unregulated pollution to the water, land and air, more recent policies from red-lining to Urban Renewal were deployed in what was an undeniable sacrifice zone (Bullard, 2000; Lerner, 2010). Future research will examine several recent and ongoing environmental undertakings with participatory processes in Brooklyn's Gowanus neighborhood, focusing on the practices and context of the Community Advisory Group formed

by the US Environmental Protection Agency (EPA) as part of the Superfund cleanup of the canal. Though the environmental remediation of the heavily polluted canal promises to shape the future of Gowanus, the community context in place now can be recognized as a contact zone (Pratt, 1991; Torre, 2010) a construct that describes how groups with different interests and degrees of power struggle with constructive energy to find common ground.

This chapter introduces the industrial community of Gowanus, and is divided into a few epochs that loosely align with turning points in the development of the neighborhood, focusing on how knowledge of the environmental conditions have evolved over time, by the state and by the industrial community of residents and workers. First with a brief history of the development of the canal and industrial land uses surrounding it, followed by deindustrialization and other late 20th century urban policies that shaped life for residents and workers in the degraded environment. The final section brings us to the present and the environmental activism and justice debates that form the context of the remediation and introduces the context under which the Gowanus Community Advisory Group was formed.

# Early History of the Waterway

The Gowanus is a natural waterway and part of the estuary that for countless centuries has provided inland access for human activity near the waterfronts of the East River and the harbor connected to the Atlantic. The land where the now hard-scaped canal is situated was, and continues to be, a low-lying marshy basin and the terminus for countless small tributaries that run stream downslope along with rainwater during weather events. This area has always flooded and continues to be the bottom of the drain for flooded streets during heavy rain and now for climate-change related storms like Superstorm Sandy in 2012.



Fig. X Dutch East India Company Map of Red Hook and Gowanus from 1639 Source: Proteus Gowanus

The Lenape-Hoking were well-settled in the area of the Gowanus by the time the earliest Dutch colonists arrived, and their traditional Long House structures are visible on the oldest drawn map of the Gowanus from 1639 which depicts the marshy wetlands to the east of what was then the island of Red Hook (Fig. X)

The contours of the waterway and surrounding wetlands are better defined on Bernard Ratzer's survey map (Fig. X) which was drawn for the British Colonial Administration in 1766. During this period the canal began to take on a larger role in the new farming settlements of Brooklyn, providing easy access to the port for incoming goods. Famously, during the American Revolution, the waterway provided the stage for Washington's army, who blew up a bridge over

the Gowanus during the Battle of Long Island, seen in the 1777 Map of Provincial Conflicts (Fig. X), but it was in later decades that the role of the Canal took on critical proportions.





Figure X. Ratzer's Survey 1766

Source: Proteus Gowanus

Figure X. Map of Provincial Conflicts 1777 Source: Proteus Gowanus

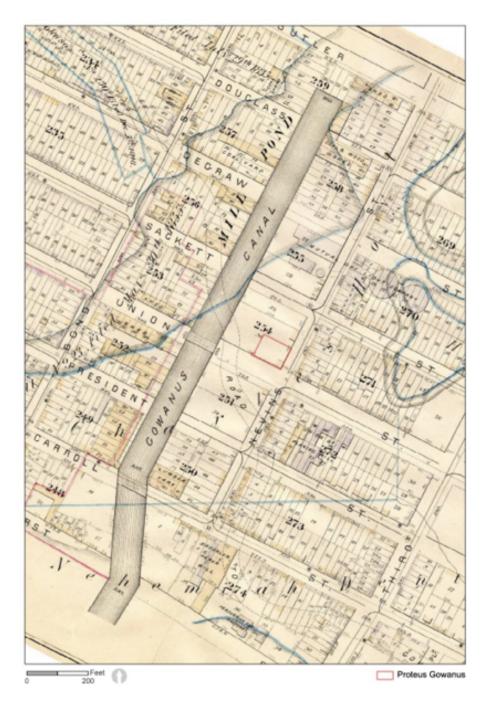
# Role of Gowanus Canal in Building Brownstone Brooklyn (1830s - 1870s)

By the 1830s the residential development of Brooklyn was in full swing, with most of the current grid encompassing the neighborhoods now named Carroll Gardens, Cobble Hill, Boerum Hill and Gowanus was locked in place. Most of the lots on these residential blocks were developed well before the opening of the Brooklyn Bridge in 1883, and much of the building material needed for the construction of the famous brownstone townhouses was brought into the city of Brooklyn using the Gowanus. The waterway was first dredged to meet this first housing development boom by railroad magnate, Edwin Clark Litchfield, in the 1870s (Campenella,

2019). "Mined, cut and dressed, the chocolate rock was loaded onto river boats like the *Brownstone* bound for Red Hook and Gowanus Creek." (Campenella, 2019, p. 297)

ADD - Development of the residential and commercial buildings; construct the character, much of which remains today.

The built fabric of the blocks surrounding the canal, which was hardened by 1880, as seen in Figure X below, was always a mix of residential and commercial buildings. Warehouses, factories, piers and turning basins were intermingled with small scale, two-and-three story masonry and wooden row houses that were home to low income residents who worked nearby or were unable to live elsewhere. As in other toxic urban places, the community was always turning over as new underprivileged residents replaced those able to relocate. Historian Steven High, who has spent decades working with residents who live in Montreal along the Lachine Canal notes that industrial communities, ever-inhabited and used by lower income residents and workers, have always had a fluid quality (2022).



Bromley Fire Insurance Map of Gowanus from 1880

Source: Proteus Gowanus

(How deep to go with this history? Location of ASPCA and historic conditions?)

Critical Industrial Infrastructure

As Brooklyn developed, heavy industry concentrated on the Gowanus Canal shoreline (including coal gas manufacturers, oil refineries, machine shops, chemical plants, cement makers, sulfur producers, soap makers, and tanneries) discharged their untreated waste into the canal (Alexiou, 2015; Gould & Lewis, 2017). The canal and its surrounding land became an unregulated repository for raw sewage from surrounding households and hazardous waste from heavy industrial activity. By the twentieth century, the waterway became so polluted that it was dubbed "Lavender Lake" due to its unnatural hue from a concentration of noxious effluents.

Because the industry on the Canal's banks was considered critical to the economy of New York City and the region, polluting the estuary and surrounding land was permitted, which placed the health and well-being of the local workforce and residents at risk (Gould & Lewis, 2017).

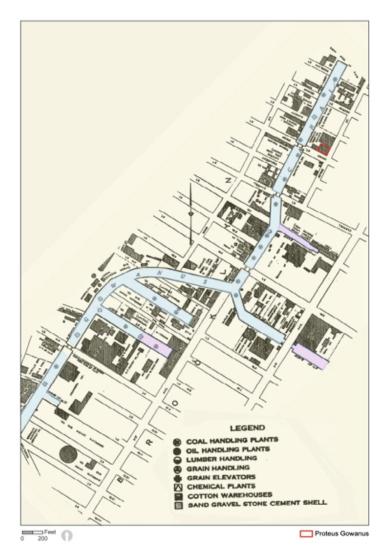


Figure X. 1942 USACE Survey of Gowanus Canal Industries Source: Proteus Gowanus

# Racial Capitalism & Role of Zoning/ Land Use

 Gowanus was developed long before the introduction of the City's 1916 Zoning Resolution and later attempts to separate industrial land uses from the residential with the 1961 Zoning Resolution.

In many communities, one of the most powerful public policy tools deployed by the state are zoning designations (Bingham & Shapiro, 2020). Zoning constitutes a set of policies that segregate land uses, principally dividing up land for industrial, residential, and commercial uses, but it can also result in segregating people (Angotti & Hanhardt, 2001; Pulido, 2000). The

regulation of allowable land uses through zoning can influence community well-being in a variety of ways: Zoning determines where activities with noxious effluents that reduce the quality of air, water, or land (e.g., heavy industry or a highway) will be sited.

When zoning designations heap environmental contaminants into the air, water, and ground of already-burdened communities, it results in sites some call sacrifice zones, land adjacent to waste disposal and toxic effluents from industry (Bullard, 2000; Lerner, 2010; Opotow, 2018). Typically, sacrifice zones are also designated for low- income residential housing; indeed, public housing is often sited near known environmental hazards (Gould & Lewis, 2017).

#### **Urban Renewal**

Gowanus Expressway & Public Housing Development

Gowanus Houses broke ground in 1949 and neighboring Wycoff Gardens followed just a few years later. The NYCHA developments were built for low income residents, many of whom were displaced from the housing demolished to build the campuses. They were racially integrated and home to working class families, many of whom were industrial workers from the factories along the Gowanus. It is important to note that two ethnic enclaves were displaced in Northern Gowanus where the housing authority chose to redevelop; a small Irish enclave and the community inhabited by the Mohawk Ironworkers (Freilich, 1963).

(Map of NYC "Racial Colonies" has Gowanus Irish enclave to insert)



Fig. X 1950 View from the Ex-Lax building on Atlantic Avenue of newly constructed Gowanus Houses with manufactured gas plant towering above the buildings on an adjacent block and a second one on the horizon. Source: NYPL

### Neglect & Deindustrialization

NYC's Industrial Policy (Angotti, Hanhardt, Bingham & Shapiro) The Long Crisis Organized Abandonment (Gilmore) Structural Violence (High)

 "Factory closures, neighborhood abandonment, urban renewal, precarious employment, and environmental gentrification are all links in the industrial chain." (High, 2022, p. 322)

#### New Investment (placeholder header!)

Steven High (2022) studied the effects of deindustrialization in Montreal, conducting a
cross-neighborhood analysis, finding "...a disregard for what actually happens when
middle-class people flood into deindustrialized but now gentrifying neighborhoods: rents
skyrocket, house values and property taxes climb, the number of rental properties
diminish, stores become more upscale, and neighborhood groups pivot away from
poorer residents." (p. 319-320)

Brownstoners & Preservationists (Suliman Osman & Campenella) Creative Economy & Makers (Alexiou)

 Prior to the first proposed rezoning for decades the tenancy of the industrial buildings had been changing and lower rents drew in a mix of artist studios, rehearsal spaces, performance venues and other creatives toiled alongside lighter industry (Pearsall, 2013)

#### Environmental Activism in Gowanus

 First environmental activists (Gowanus Dredgers and Gowanus Canal Conservancy established)

### Water Quality and pollution

The state agency tasked with regulating water quality and enforcing the Clean Water Act, the NYS Department of Environmental Conservation (DEC) allowed the Gowanus waterway to remain designated as Class-SD waterway, a classification that is not in compliance with the Clean Water Act (NYC DEP, 2007) and is the lowest standard for a saline waterway.

The community has been advocating for a change in this status, going so far as to introduce canoes onto the waterway as a way to force the change. The very first resolution adopted unanimously by the newly formed Gowanus CAG in 2012 was to request a reclassification of the canal surface waters from Class-SD to one that recognizes and protects recreational uses (Gowanus CAG, 2019) and is an improved standard to maintain and regulate.

Though certainly not the worst pollution in place here, it was the coal tar waste from three historic manufactured gas plants once active on the canal that triggered the Superfund designation (EPA, 2011) bypassing the vague promised cleanups proposed by the City and State and establishing the EPA as the lead agency.

----- end of progress as of 4/25 -----

#### Discussion (\*\*I wrote this section for the chapter first, after outlining on pg. 1)

Future research will examine several recent and ongoing environmental undertakings with participatory processes in Brooklyn's Gowanus neighborhood, focusing on the practices and context of the Community Advisory Group formed by the US Environmental Protection Agency (EPA) as part of the Superfund cleanup of the canal. This CAG constitutes a *relational community* (Young, 2016; Sonn & Fisher, 1996) made up of stakeholders, with unequal power, working together to oversee the cleanup. In many ways the Gowanus CAG makes the most

sense as a community formed by a process, as opposed to the ways that government agencies attempt to treat communities as entities served by a process.

It is clear that for local residents living in and around toxic environments that they can see, smell and feel that harm to the environment incubates a particular kind of community activist. Their rejection of the *slow violence* (Nixon, 2011; Davies, 2019; add Cahill?) is a result of being forced into a state of watchfulness, of being both a witness and expert, whose knowledge has been ignored or outright denied by state actors charged with protecting residents and communities from harm (Checker, 2005).

Living with environmental injustice and having deep knowledge about this creates an opportunity for communities to take on many heroic roles, some more defensive and embedded. For example, the final notation collected by the community advisory group notetaker (me) from one of the first public meetings (Gowanus Canal Community Advisory Group, 2012) recorded a CAG member suggesting that the group be renamed, "Argos," the watchdog of Greek mythology. Performing the role of watchdog requires a long-term commitment and requires residents to remain invested in the issues and the solutions. Watchdogs show up to public meetings (even on zoom) to call out agency staff and elected officials for continuing to ignore, neglect, short change or obfuscate community priorities with regards to the environment. In Gowanus this organized watchfulness began with the Superfund cleanup, but has extended into several other processes that have contemplated change in the community–from the two rezoning studies that followed, to a raucous public meeting hosted by the NYS DEC last Thursday. It is an unfair but important pragmatic state, and the democratic practices of individuals and the group strengthen over time and spill over into other aspects of communal life.

Much research has shown that community participation is a complex process, balancing a diverse set of actors, interests and outcomes. While the level of community participation can be highly variable, it is generally the final outcome of participation that residents are concerned with, and they do understand "the difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process" (Arnstein, 1969, p. 216). Even in cases where Sherry Arnsteins's ideal, citizen control, is not possible, researchers have identified that successful participation could lead to further engagement in

political issues if the process allows participants to feel that their participation can affect the process outcome (Milbrath & Goel, 1977).

This study tackles the question: how can government support civil society action that advances intersectional environmental and social justice to shape more truly sustainable change in communities?

An important critique comes from Melissa Checker (2019, 2020) who has studied community participation in environmental justice communities in NYC and beyond, noting how the local struggle for just environmental outcomes has evolved hand-in-hand with sustainability concepts (Checker, 2020) heralded by the real estate state resulting in the needs of communities being superseded by the drive for real estate profit in community after community (Stein, 2019). She spotlights the labor burden placed on activist volunteers who are deputized to take on the work that is the responsibility of the government (2020).

The following (proposed & outlined) chapter will consider the opportunities inherent in the Superfund process, including the agency requirements and the cleanup timeline, both of which afford opportunities for a more inclusive and reparative approach that not only does not duplicate historic harms, but allows for understanding and healing.

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