

Chapter 16

Balancing Urban Renewal, Eco–Gentrification, and Social Justice in the Gowanus Canal: A Case Study in Sustainability and Social Equity

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Abstract

Urban renewal projects aim to revitalize neglected neighborhoods but often result in gentrification and displacement. This study examines the ongoing revitalization of Brooklyn's Gowanus Canal, a Superfund site since 2010. Using David Harvey's spatial dialectics and Giorgio Agamben's concept of bare life, it explores how environmental restoration can unintentionally drive gentrification, displacing long-term residents and attracting wealthier newcomers. Interviews with local residents, housing advocates, and real estate professionals reveal the tension between ecological improvements and social equity. While cleanup efforts have boosted property values and neighborhood appeal, they have also heightened housing pressures on low-income residents. This paper argues that equitable urban renewal requires policies balancing ecological progress with protections for vulnerable communities.

INTRODUCTION

The Gowanus Canal, a 1.5-mile waterway in western Brooklyn, New York, stretches from Butler Street in Boerum Hill to Gowanus Bay, connecting to the Upper New York Bay. Historically, the canal included four short branches, or “turning basins,” allowing vessels to reverse direction. The canal's watershed spans approximately 1,758 acres, with 1,612 acres served by combined sewers draining to

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the Red Hook or Owls Head Wastewater Resource Recovery Facilities. There are 11 combined sewer overflow (CSO) sites discharge into the canal (Gowanus Canal - DEP, n.d.).

Originally a tidal creek winding through marshlands, the Gowanus Canal was drastically altered during the urbanization of New York City. By 1870, it had been dredged, straightened, and bulkheaded, transforming it into a significant industrial waterway for transporting materials to and from surrounding industries (Gowanus Canal - DEP, n.d.). This development replaced natural marshlands and freshwater streams with combined sewers and storm drains, increasing runoff. These changes deprived the canal of natural mechanisms to absorb hydraulic and pollutant loads, while limited the natural circulation with New York Harbor allowed the pollutants to accumulate, significantly degrading water quality (Gowanus Canal - DEP, n.d.).

In 2010, the Environmental Protection Agency (EPA) designated the Gowanus Canal as a Superfund site, initiating cleanup efforts to address its contamination (Gowanus Canal - DEP, n.d.). Plans include dredging polluted sediment, capping the canal bed, and constructing two combined sewer overflow tanks to store up to 12 million gallons of sewage during storms (Gowanus Canal - DEP, n.d.). The first tank, the Red Hook facility, will prevent up to 8 million gallons of combined sewage from entering the canal and is being built alongside a 1.6-acre public waterfront open space (Gowanus Canal - DEP, n.d.). The New York City Department of Environmental Protection (DEP) has also implemented an air monitoring program to protect the community during construction (Gowanus Canal - DEP, n.d.).

While the canal's cleanup represents a landmark environmental restoration effort, it also raises critical questions about the socio-economic impacts of urban renewal. Projects like this aim to restore ecological balance and promote economic growth. Still, they often trigger eco-gentrification—where environmental improvements benefit affluent newcomers while marginalizing long-time, low-income residents (Dooling, 2009; Quantel, 2009; Checker, 2011; Immergluck and Balan, 2017). The Gowanus neighborhood, once characterized by industrial lofts, workers' housing, and a burgeoning artist community, is now experiencing rising property values, luxury developments, and displacement pressures. Advocates argue that such initiatives improve public health and increase the quality of life and property values (Dorset, 2011), yet they also exacerbate housing inequities and cultural marginalization (Wolch et al., 2014; Li & Grant, 2022).

This conflict between environmental restoration and social equity reflects a broader paradox in urban planning, where economic and ecological priorities often come at the expense of vulnerable populations (Haase et al., 2017). Much of the existing literature on the Gowanus Canal focuses on the health impacts of its pollution, highlighting risks to residents from long-term exposure to industrial contaminants. While these studies are critical to understanding the canal's legacy of environmental injustice, they often neglect the socio-economic transformations accompanying remediation. Significant gaps remain in exploring how eco-gentrification alters communities' demographic and cultural fabric, mainly through displacement and rising housing costs. Additionally, the dominant top-down planning perspective in urban renewal limits community-driven insights, excluding marginalized populations from decision-making processes (Krings & Schusler, 2020).

This paper addresses these gaps by examining the Gowanus Canal's evolution through the lens of eco-gentrification and social justice. Drawing on academic research, policy-driven literature, participatory observation, and case studies, it investigates the intersections of environmental restoration, economic development, and socio-economic equity. This analysis contributes to the discourse on sustainable and socially integrative cities by situating the Gowanus Canal within broader urban renewal debates while proposing actionable strategies to balance ecological restoration with equity and inclusion.

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