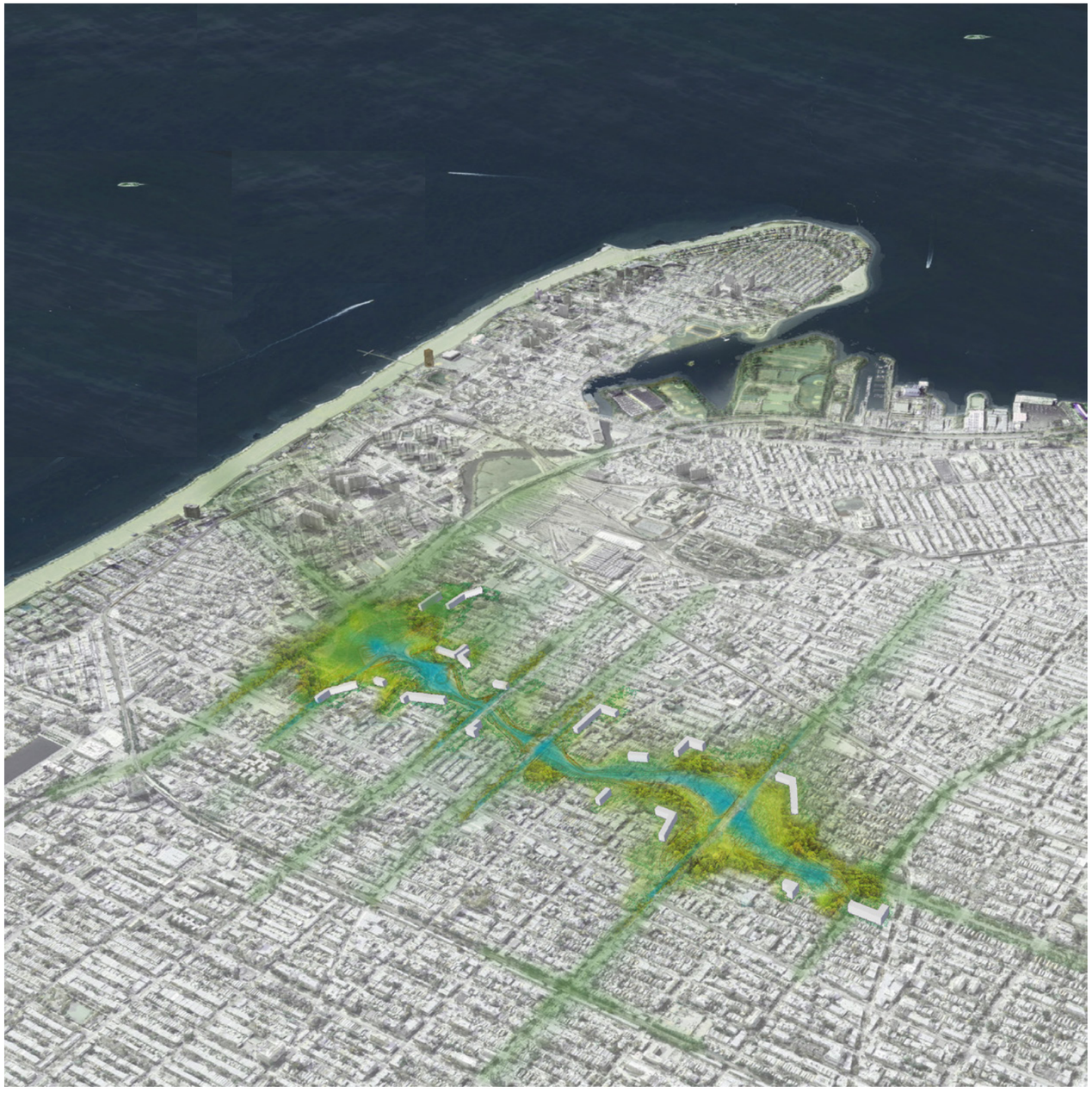


BLUE SCAR

 # Decentralization
 # Hacking Infrastructure

Summer 2024
Seunghu Kim, Jiali Jia, Maissa Eid, Patricio Munoz

Studio Pedagogy

New York City comprises 520 miles of shoreline that make the city even more vulnerable to climate change. On top of sea level rise and coastal storm surge, you will be asked to study and analyze other climate related hazards and vulnerabilities that may impact communities and urban systems in the future. Through an iterative analytical and design process, you will be asked to envision what a more resilient New York City could look like, how it will be experienced by different communities, how it would perform in the face of climate change, and what it will take to get there.

Project Statement

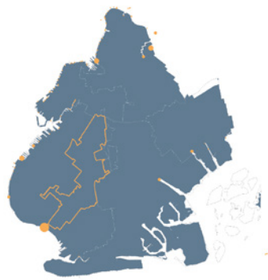
Water is one of the most important challenges facing all coastal cities around the world which contains 40 percent of the global population. In the face of unprecedented climate change, New York City's deteriorating sewer system is a critical point of failure. Ever more increasing rainwater flooding threatens to revert the glorious New York City back to the 1850s when waterborne diseases were out of control. Understanding the history of inequitable investment in neighborhoods, this will impact more towards environmental injustice areas, especially to the people in need. This project guides the labor in architecture and urban design projects, emphasizing a long-term multidisciplinary approach that sustainably addresses rainwater and sewage problems in New York City.

Critical Case Studies

Dogma - Everyday is Like Sunday

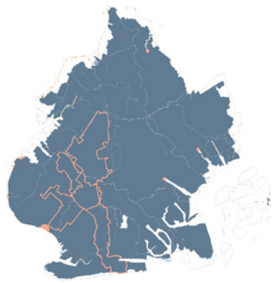
Bird's Eye View of the Blue Scar

Blue Scar filled with stormwater after flashflood event, rather than going towards sewer system.

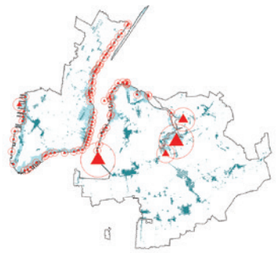


Brooklyn Sewershed

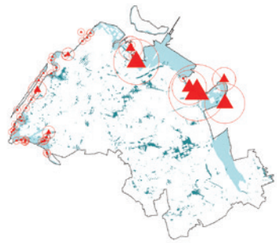
Brooklyn Watershed



Mismatch

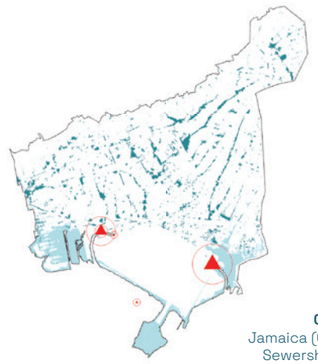


003
Newtown Creek (MN-BK)
Sewershed



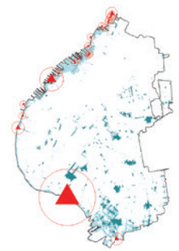
004
Bowery Bay (QN)
Sewershed

005
Hunts Point (BX)
Sewershed

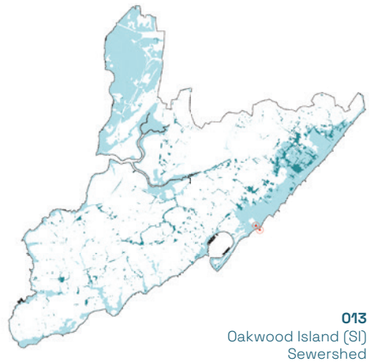


008
Jamaica (QN)
Sewershed

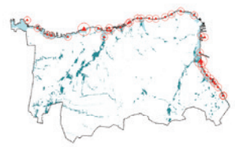
009
26th Ward (BK) Ward
Sewershed



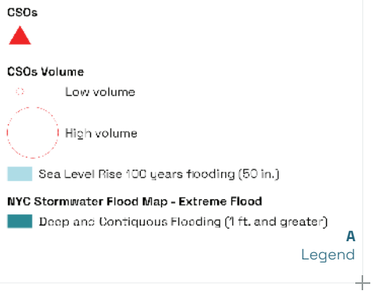
010
Owls Head (BK)
Sewershed



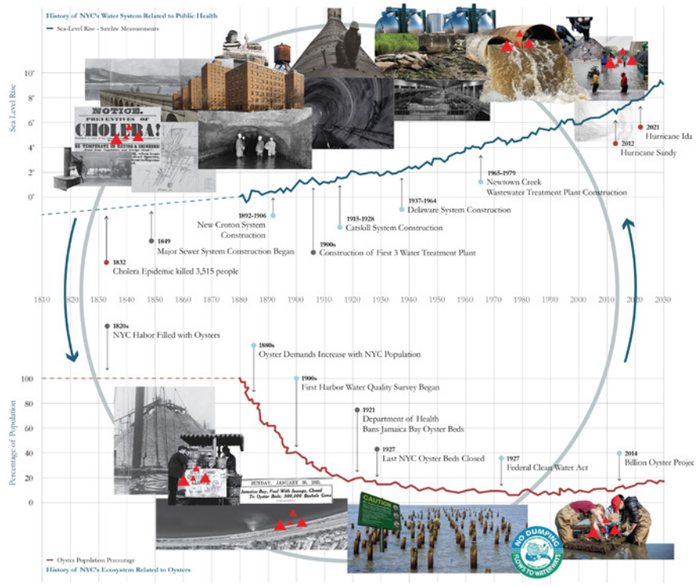
013
Oakwood Island (SI)
Sewershed

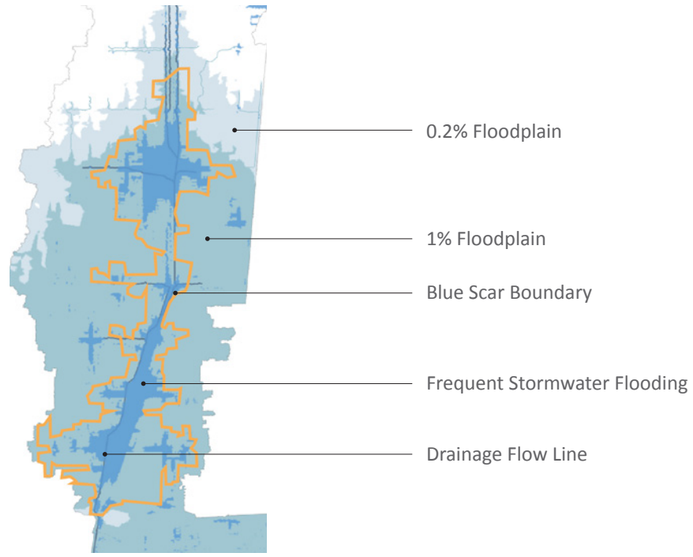


014
Port Richmond (SI)
Sewershed



A
Legend





Systematic Mismatch

Conflict between two systems, causing massive infrastructure failure.

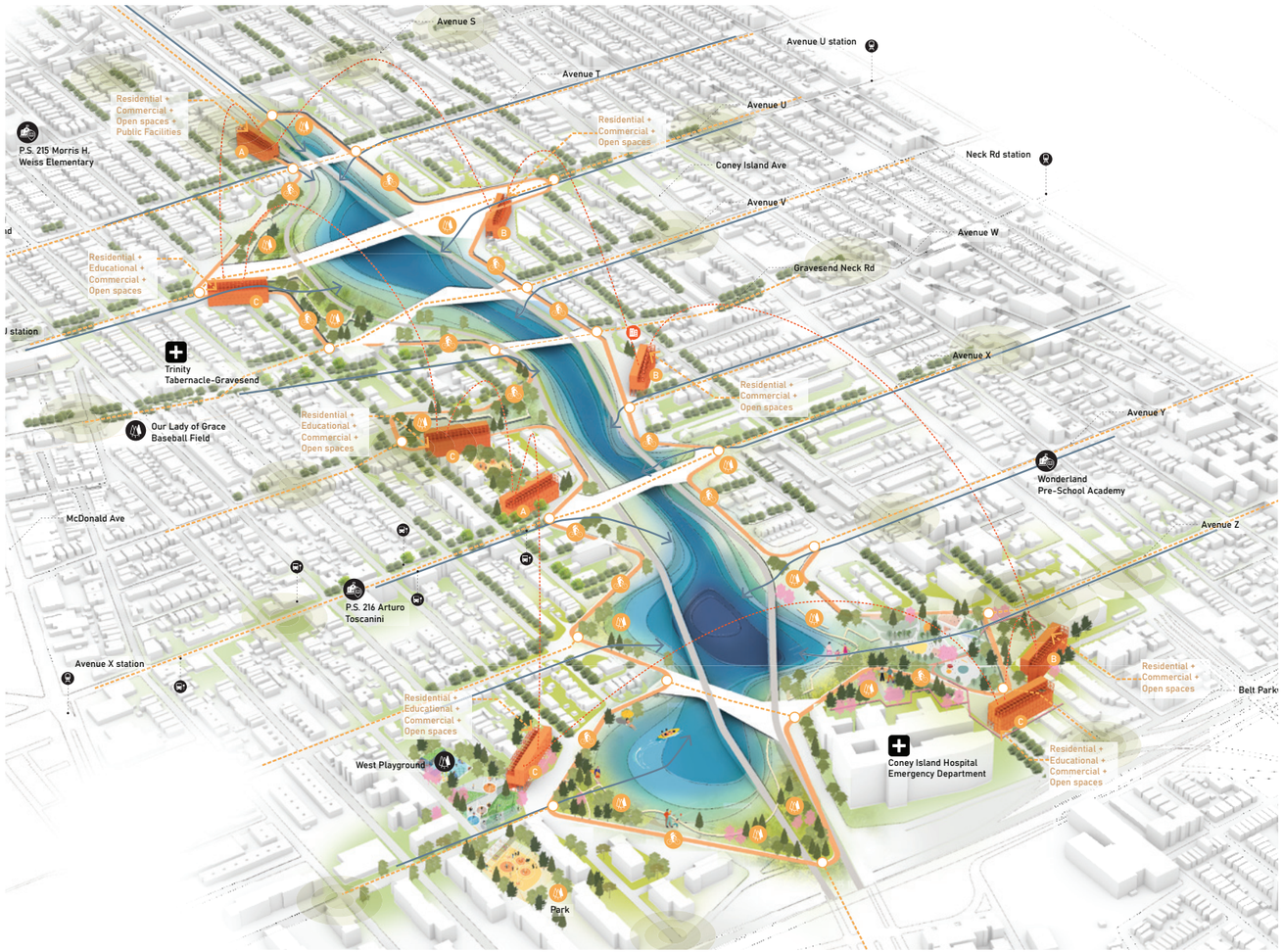
NYC Sewershed Catalog

A new way of mapping NYC. Ever more increasing pluvial flooding threatens to revert the glorious New York City back to the 1850s when waterborne diseases were out of control. This sewershed catalog reveals where infrastructure is failing.

CSOs Storymap / Boundary of the Blue Scar

↑ Understanding the history of NYC getting its freshwater from 120 miles up north, using it and dumping it as CSOs, resulting sea level rise and near extinction of oysters.

↓ The boundary of the Blue Scar was given by the area stormwater flooding area, acknowledging that this is where the water wants to be.



Overall Diagram of the Blue Scar

Blue Scar integrated in the neighborhood, providing rainwater basin and unique experience for community. Filled with stormwater after flash flood event, rather than going towards sewer system, causing CSOs.

Through permanent dry/wet areas, the Blue Scar becomes an recreation assets during dry seasons. Previously neglected area of the neighborhood became a place of building new relationship with nature.

NYC Stormwater Flooding Map

Once mapped as a threat, this is now an opportunity to dismantle parts of our city to cohabitate with nature, creating a meaningful dialogue and relationship with nature.