



Department of
Design and
Construction



DDC Coastal Resiliency to **YOUR** School

Hosted by the NYC Department of Design and Construction

1 Learn about **flood protection**,
infrastructure and **coastal resiliency**

2 Understand **project benefits** and
construction in New York City

3 Discuss **potential careers** in the
design and construction industry
that **YOU** can pursue

Who
NYC Schools

Why
To educate students about the
importance of resiliency projects in
their communities, and the career
opportunities they can pursue.

How
Our team can bring a presentation directly
to your classroom or work with educators to
incorporate the program into your lessons.



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Visit the ESCR website
for more information:
[NYC.GOV/ESCR](https://nyc.gov/escr)



Description:

The *DDC Coastal Resiliency to Your School* program is a special interactive program tailored to students, explaining the history, design, and construction techniques of the NYC Department of Design and Construction's (DDC) coastal resiliency projects in New York City. Through these discussions, students are introduced to themes like resiliency, climate change, the importance of flood mitigation, and career opportunities which the students can one day aspire to pursue.

The presentation provides an overview of the DDC's function as the City's primary builder. It outlines the need for resiliency projects by highlighting the impacts of Superstorm Sandy and climate change in the city, along with an explanation of coastal resilience and why our region needs it. We describe the various flood protection methods utilized by the East Side Coastal Resiliency (ESCR), Brooklyn Bridge-Montgomery Coastal Resiliency (BMCR), and Red Hook Coastal Resiliency (RHCR) projects, including expanded drainage capacity, floodwalls, and floodgates. Rebuilding East River Park is a major element of ESCR and provides an opportunity to discuss the role of resilient plant species, environmentally friendly design, and accessibility.

In a city as large and diverse as New York, no major construction project can take place without significant community engagement efforts. The learning dialogue highlights its importance and several of the strategies undertaken by the City to bring New Yorkers' voices into the design and construction process. Finally, students are provided an overview of the great variety of career paths available to those interested in construction and resilience.

We work with educators to tailor the information for their students. The team welcomes the opportunity to come to your classroom to lead the presentation ourselves, but we're also happy to provide any further resources to help incorporate these themes into your lesson planning on your own.

Vocabulary:

- **Accessibility:** equal access for people with disabilities to any environment, movement, information or communication.
- **Americans with Disabilities Act (ADA):** civil rights law that prohibits discrimination against people with disabilities in everyday activities.
- **Climate Change:** refers to long-term shifts in temperatures and weather patterns. Warmer temperatures are changing weather patterns and disrupting the usual balance of nature.
- **Coastal Resilience:** the ability of coastline developments to recover quickly from difficulties, like storms.
- **Ecological Diversity:** the variety of ecosystems, animals, and plants in any environment.
- **Equity:** the quality of being fair and impartial.
- **FEMA:** the Federal Emergency Management Agency is part of the federal government and helps to make sure communities are equipped to prepare for and respond to disasters.
- **Flood Mitigation:** an action to reduce the loss of life and property by lessening the impact of flooding.
- **Floodgate:** a deployable structure that can be closed during floods to protect people and infrastructure.
- **Floodwall:** a permanent structure that prevents floodwaters from reaching buildings and infrastructure.
- **Infrastructure:** the basic physical systems of a business, region, or nation and often involves the production of public goods or production processes.
- **Resilience:** is the capacity to recover quickly from difficulties – toughness.
- **Sustainability:** meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Discussion Questions:

- Who likes parks and why are they important?
- What is climate change and how will it impact New York City?
- What are some ways we can protect our communities against climate change?
- Why are ecological diversity, accessibility, and sustainability important when building new public spaces?
- Why is community engagement an important part of building a park or other public spaces?

Additional Resources:

ESCR project factsheets: <https://on.nyc.gov/4hH237I>

ESCR newsletters: <https://on.nyc.gov/411VyFF>

BMCR newsletters: <https://on.nyc.gov/3X6bEN7>

Construction progress videos: <https://on.nyc.gov/4jZuX4C>

DDC Publications: <https://on.nyc.gov/4hT5hoE>

Contact Us:

Email: ESCRCL1@ddccr.com

Submit An Inquiry: nyc.gov/escr/contact



ESCR website: nyc.gov/escr BMCR website: nyc.gov/bmcr RHCR website: nyc.gov/rhcr



ESCR Project Area 2 (PA2)

Asser Levy Playground
Stuyvesant Cove Park
Murphy Brothers Playground
COMPLETED OCTOBER 2024

ESCR Project Area 1 (PA1)

East River Park

Parallel Conveyance (PC)

■ Various Locations

Brooklyn Bridge - Montgomery Coastal Resiliency (BMCR)

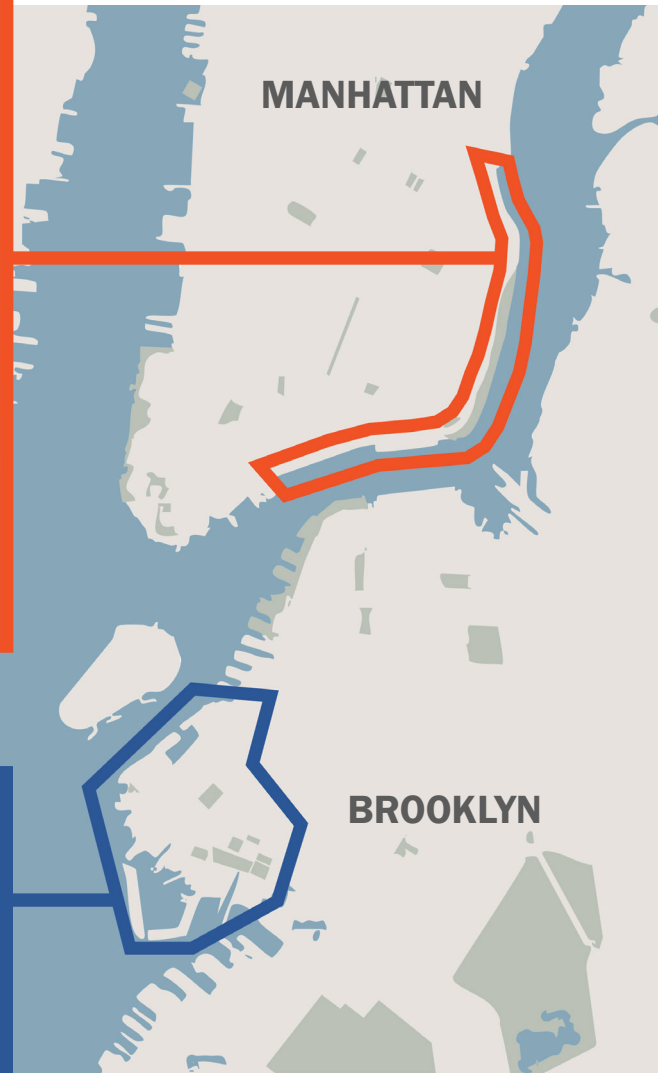
Brooklyn Bridge to Montgomery Street

Red Hook Coastal Resiliency (RHCR)

Atlantic Basin
Beard Street

Manhattan Projects:

- 3.2 miles of flood protection
- 150K residents removed from FEMA floodplain
- Protected up to 100-year storm with sea level rise as projected for 2050



Brooklyn (Red Hook):

- Flood risk reduction benefits for 10,000 residents
- Protected up to 10-year storm with sea level rise as projected for 2050