

SESSION 5: The effects of the USACE proposal on the region's critical infrastructure and long-term planning

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Agenda

- NYC's Coastal Resiliency
- Neighborhood Coastal Protection Planning Guidance
- Looking ahead

NYC Coastal Resiliency

We are advancing coastal resiliency projects in all five boroughs:

Brooklyn:

- Sea Gate T-Groin – *Completed*
- Red Hook Coastal Resiliency – *100% Design Completion*
- Coney Island Creek Raised Shoreline – *In Design*

Manhattan:

- East Side Coastal Resiliency Project – *In Construction*
- Lower Manhattan Coastal Resiliency Project – *BMCR In Construction*

Staten Island

- Staten Island Levee Project - *In Design*
- Tottenville Reinforced Dunes – *In Design*
- Travis Ave Raised Shoreline - *100% Design Completion*

Queens:

- Reconstructed Rockaway Boardwalk – *Completed*
- Beach renourishment – *Completed*
- Rockaway Atlantic Shorefront – *In Construction*
- Rockaway Bayside - *In Design*
- Bayswater Park Shoreline Berm and Restoration – *100% Design Completion*
- Rockaway Park Shoreline Restoration – *In Design*
- Mott Basin Raised Shoreline – *In Design*

Bronx:

- Hunts Point Energy Resiliency – *In Design*

Nearly 10 miles of dunes have *completed construction* across Staten Island and the Rockaways
40+ interim flood protections sites have been *installed* all across the city.

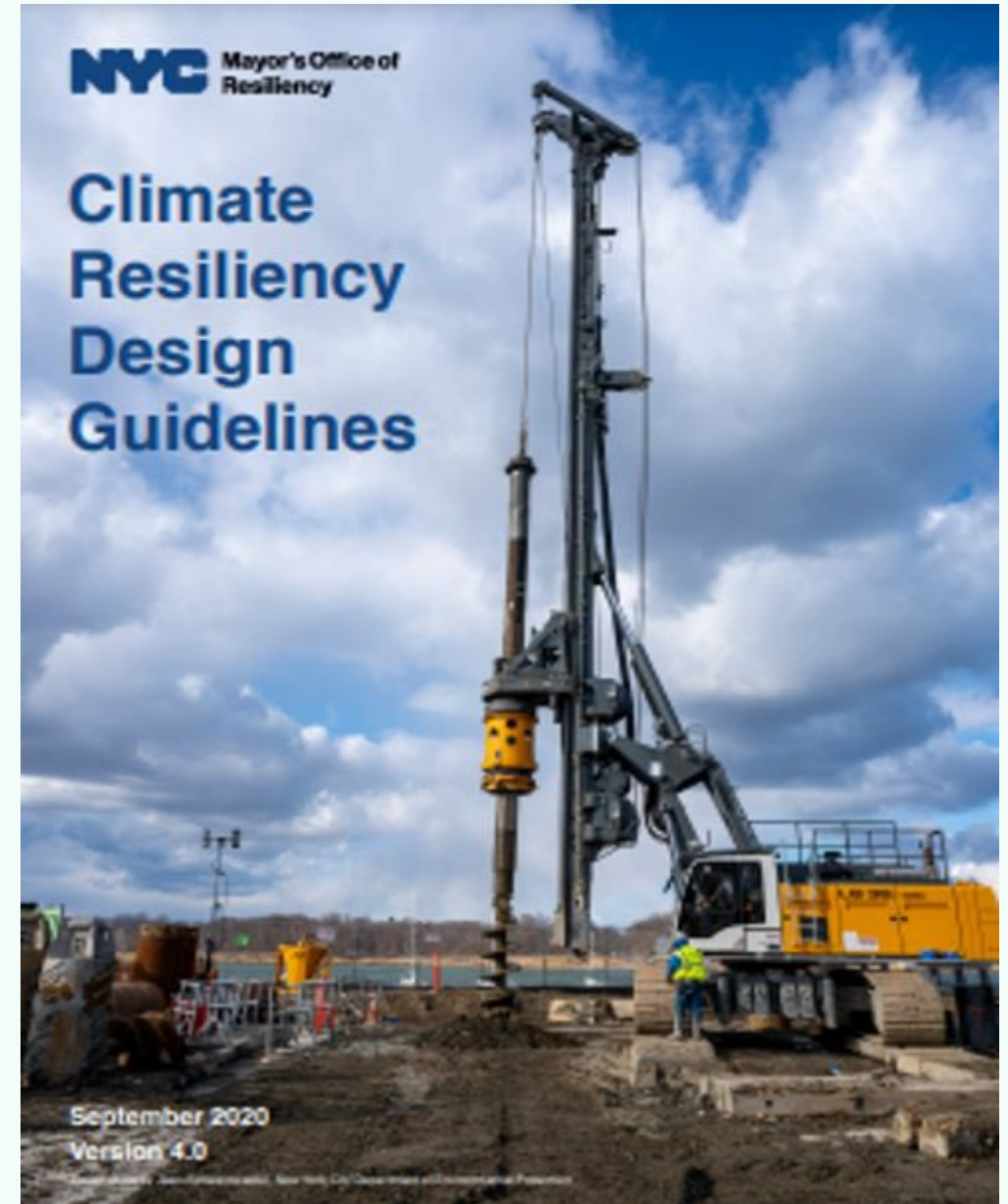


*Rockaways Atlantic Shorefront
Construction of Rock Jetties*

NYC Coastal Resiliency

Zoning, assets, building level approach:

- Special Coastal Districts
- Zoning for Coastal Resiliency Flood Resiliency text amendment
- Building Code (Appendix G)
- Climate Resiliency Design Guidelines (CRDG)





Neighborhood Coastal Flood Protection Project Planning Guidance

December 2021

- The City developed guidance to inform the implementation of future coastal protection projects
- Development of the Guidance was an internal, multi-agency effort drawing from lessons learned after Hurricane Sandy
- Four sections: **1. Guiding Principles**, 2. Internal Management, 3. Public Engagement, **4. Technical Analysis**

Guiding Principles

The Guiding Principles establish a vision for New York City's neighborhood coastal flood protection projects to be equitable, resilient and well designed.

Goal 1: Equitably Address Neighborhood Needs

1. Center equity in all aspects of project development
2. Conduct neighborhood-based planning and analysis
3. Consult, engage, communicate, and partner with the public
4. Maximize community benefits

Goal 2: Increase Resiliency

5. Apply the best and latest climate science
6. Reduce coastal flood risk
7. Mitigate drainage impacts
8. Ensure flood hazards and other environmental burdens are not shifted to other neighborhoods

Goal 2: Increase Resiliency (Cont.)

9. Maximize resiliency benefits
10. Maximize environmental benefits and minimize negative environmental impacts
11. Design a fully functional closed system
12. Align with broader city policy and project goals

Goal 3: Apply the Best Design Standards

13. Improve neighborhood quality of life and urban design
14. Prioritize natural features where feasible
15. Maximize passive infrastructure features
16. Minimize operations and maintenance needs

Technical and Feasibility Guidance

Feasibility not only considers whether a project can be technically implemented from an engineering standpoint, but also considers important factors such as:

- Regulatory Compliance
- Benefit Cost Ratio
- Environmental Reviews
- Constructability
- Operations and Maintenance Needs
- Integration into Existing Urban Fabric

Look ahead:

- **Strategic Climate Plan**
- **Climate Strong Communities (CSC)**

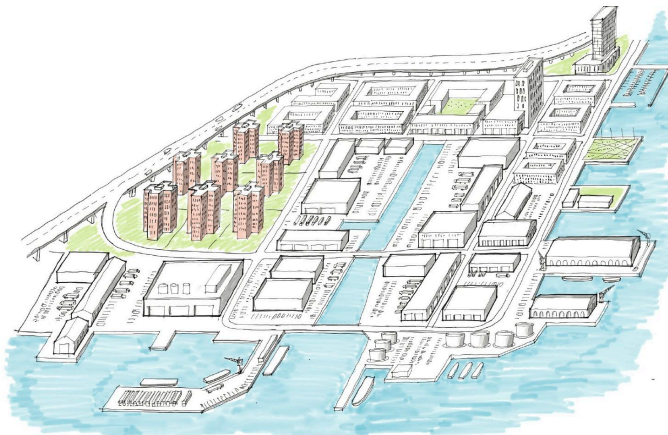
Look ahead: Strategic Climate Plan

- Mandated by Local Law every 4 years
 - Next release in April 2023
- Articulate long-term goals and set climate agenda for Adams administration
- Requires annual progress report

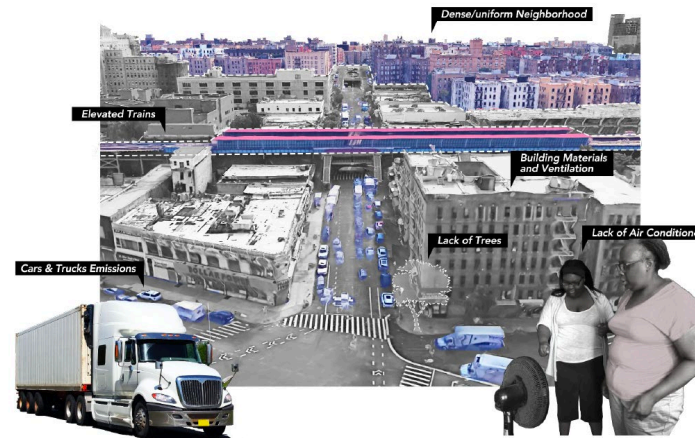


Look ahead: Climate Strong Communities

- Responsive to USACE HATS Alternative 3B limitations
- Next generation of sustainability and resiliency projects in NYC, focused on environmental justice
- Builds on existing community plans and priorities
- Captures federal funding and fast tracks applications by using urban model projects based on built environment and demographic characteristics



Former industrial/NYCHA coastal risk



Dense residential with extreme heat + precipitation risk



USACE HATS preferred alternative risk

Thank You

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Resources:

Neighborhood Coastal Protection Project Planning Guidance:

<https://climate.cityofnewyork.us/wp-content/uploads/2022/10/Coastal-Protection-Guidance.pdf>

Climate Resiliency Design Guidelines:

<https://climate.cityofnewyork.us/wp-content/uploads/2022/10/CRDG-4-1-May-2022.pdf>

Department of City Planning (DCP):

<https://www.nyc.gov/site/planning/plans/flood-resilience-zoning-text-update/flood-resilience-zoning-text-update.page>