A more resilient New York City

A more resilient NYC is one where neighborhoods, buildings and infrastructure can withstand and recover quickly from flooding and climate events.

Coastal defenses are strengthened as first line of defense against flooding and sea level rise.

Buildings are designed to withstand and recover from flooding.

Infrastructure is protected from climate hazards.

Residents and businesses are prepared.
DCP Climate Resiliency Initiatives

**Flood Text (2013)** initial, temporary regulations building off EO 230

**SRNR (2015)** provides additional zoning relief to expedite recovery

**Local Rezonings (2017)**
In vulnerable areas of Queens and Staten Island

**Flood Text II (2018)** to be updated and made permanent

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**Executive Order 230 (2012)** mayoral override of zoning

**PFIRM + Freeboard (2012)** DOB requires most restrictive map; additional elevation

**SIRR Report (2013)** long-term, citywide resiliency framework

**Build it Back (2015)** lessons learned in rebuilding effort inform zoning changes

**Neighborhood Studies (2014-17)** will inform the text and local rezonings

**Resilient Retail & Resilient Industry (2014-17)** will inform the text

**One New York (2015)** moves from recovery to future resiliency
2013 Citywide Flood Resilience Text Amendment

*Intended to be updated based on lessons learned, expires 1 year after adoption of PFIRM.

- **Height**: increased the height limit of all buildings in the floodplain by allowing height to be measured from the Design Flood Elevation (DFE), and in some cases, a higher reference point.

- **Floor area**: allowed discounting of floor space when lost in order to come into compliance with the latest building standards (raised entryways, mechanical space, floodproofed areas).

- **Retrofitting older buildings**: overrides typical zoning rules for non-complying and non-conforming buildings, giving them wide latitude to retrofit and rebuild.

- **Design standards**: required elevated buildings to mitigate their impact on the streetscape.

APPROVED
Resilient Neighborhoods Study Areas

- West Chelsea
- East Village / Lower East Side / Two Bridges
- Hamilton Beach / Old Howard Beach
- Canarsie
- Broad Channel
- Gerritsen Beach
- Sheepshead Bay
- Rockaway Park / Rockaway Beach
- East Shore

- Resilient Neighborhoods Study Area
- 1% annual chance floodplain

Note: The map shows various study areas located in different parts of New York City.
Flood risk in East Shore of SI

2015 Preliminary Flood Insurance Rate Maps

- **V Zone**
- **Coastal A Zone** (1% annual chance floodplain)
- **A Zone**
- **Shaded X Zone** (0.2% annual chance floodplain)
- **Limit of Moderate Wave Action (LMWA)**
- **Study Area Boundary**

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**Total Number of Buildings by Flood Zone**
- **Coastal A Zone**: 461 Buildings
- **A Zone**: 9,985 Buildings
- **X Zone**: 2,057 Buildings
Approach to future zoning + land use strategies

Where flood risk is exceptional, including places identified as buyout areas.

Flood risk and local planning considerations

Limit
Zoning and other tools should limit exposure to damage and disruption by limiting the density future development.

Accommodate
Adjust zoning to allow buildings to retrofit, by providing flexibility and removing obstacles to resiliency investments.

Encourage
Encourage construction of new development built to a higher standard of flood protection.

Where risk from extreme events can be managed through infrastructure and context can support growth.
East Shore Resilient Neighborhoods Study

Reduce Flood Risk

- Army Corps Line of Protection + interior drainage
- Local Land-Use Action

Advance Resilient Building

- Cottage Envelope Accommodate
- Citywide Flood Text
- New Dorp Beach Accommodate
- Local Zoning Action

Strengthen Key Waterfront Destinations

- Midland Avenue & Sand Lane Encourage
- Local Zoning Action

Preserve Natural Environments

- Limit Density in NYS Enhanced Buyout Areas Limit
- Local Zoning Action

*NYS Buyout Area boundaries shown for illustrative purposes

Approved
East Shore Projected Milestones

### 2017
- **1st Qtr:**
  - DPR Shoreline Parks Plan Interim Report published in June 2017
- **2nd Qtr:**
  - East Shore Report release
  - City Council adopted East Shore Buyout Areas text
- **3rd Qtr:**
  - Ongoing: Draft proposal for Midland Ave/Sand Lane/New Dorp proposal & DCP Citywide Flood Text Amendment Update
- **4th Qtr:**
  - Begin Environmental Review/public review for Midland Ave/Sand Lane/New Dorp proposal & DCP Citywide Flood Text Amendment Update

### 2018
- **1st Qtr:**
  - Army Corps Line of Protection and interior drainage - Design Phase Ongoing
- **2nd Qtr:**
  - Execute Construction Agreement with NYS & NYC
- **Beyond:**
  - Initial Construction contract awards (Late 2019)

### Enhanced Buyout Areas
- **Oakwood Beach:** Acquired 303 properties & 80% land returned to open space
- **Graham Beach:** Acquired 101 properties & 60% land returned to open space
- **Ocean Breeze:** Acquired 90 properties & 66% land returned to open space

### Built it Back
- 100% of City-managed projects started construction
- 92% of City-managed projects in SI are complete
- 91% of City-managed projects Citywide are complete

### City Acquisition & Buyout
- Build it Back is purchasing severely damaged homes in SI, continuing to work with homeowners in BiB

### New Creek Bluebelt low flow channel (NC-7 & NC-8, and channel portions of NC-9 & NC-17 - Ongoing

### Last Chance Pond Park (NC-11 & NC-12)
- Work to begin

### Hylan Boulevard (NC-13) work to begin

### DPR Shoreline Parks Plan Interim Report published in June 2017

### Final phase of conceptual plan to begin - Stay tuned for kick off community meeting in Spring 2018