RESILIENT NEIGHBORHOODS INITIATIVE: SHEEPSHEAD BAY/GERRITSEN BEACH CB 15 UPDATE APRIL 25, 2017
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.

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This requires **multiple lines of defense:**

- infrastructure hardening where feasible,
- emergency preparedness, and
- **utilizing building code and zoning** as tools so buildings are protected from future flooding due to sea level rise.
Flood resilience zoning (DCP)

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

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

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

- **SIRR Report** (2013) long-term, citywide resiliency framework
- **PFIRM + Freeboard** (2012) DOB requires most restrictive map; additional elevation
- **Executive Order 230** (2012) mayoral override of zoning
- **One New York** (2015) moves from recovery to future resiliency

- **Build it Back** (2015) lessons learned in rebuilding effort inform zoning changes
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- **Neighborhood Studies** (2014-17) will inform the text and local rezonings
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Reduce flood risks
Develop zoning strategies and other tools to advance short-term, cost-effective investments that can make New York City’s building stock more resilient to severe storms and better protect our coastline.

Plan for adaptation over time
Climate change will increase coastal risks over time, including more tidal flooding in some areas. It is important to take measures to reduce the long-term vulnerabilities that neighborhoods will face over time.

Ensure neighborhoods are both resilient and vibrant
Encourage high-quality development that is both resilient and respects each neighborhood’s built environment, such as by limiting building height and improving public space.
Timeline

- **Spring 2013 – Winter 2014** New York Rising Program
- **June 2014** Resilient Neighborhoods Initiative Kickoff at CB15
- **Fall 2014 – Spring 2015** Community Advisory Committee Meetings
- **August 2015** Gerritsen Beach Homeowners Association
- **November 2015** CB 15 update on Resilient Neighborhoods Studies
- **Fall 2016 – Spring 2017** Councilmember Briefings
- **April 2017** Brooklyn Borough Board
Currently in NYC, Building Code and Zoning rules are based off the 1% annual chance floodplain, as shown on the Preliminary Flood Insurance Rate Map.

For flood insurance purposes, the Effective Flood Insurance Rate Map is used.
Resiliency Challenges in Gerritsen Beach

- **Sunken lots and residential uses below the DFE**: vulnerability to coastal flooding is exacerbated by high DFEs and sunken lots.

- **Large homes on shallow lots with limited light and air**: Lots with narrow yards that pose challenges for existing zoning compliance, elevation strategies, ADA access, streetscape, and neighborhood character.

- **Narrow streets**: Many of the streets are as narrow as 20 feet, particularly in the southern section of the neighborhood, which present safety risks and accessibility issues during emergencies.

- **Density**: current zoning designation allows for multi-family development, which could over-stress existing storm sewer infrastructure.
Resiliency Challenges in Sheepshead Bay

Sheepshead Bay Road
- High BFE (4-6’)
- Attached building type difficult to elevate
- Small businesses unable to afford extensive retrofitting options

Residential Areas
- Detached homes and apartment buildings
- Buildings on irregular lots
- Bungalow courts on sunken lots with infrastructure issues

Special Sheepshead Bay District
- High BFE, below grade retail, diverse building typologies
- Variety of building types at water’s edge w/ high BFE, sunken lots, SLR risk
- Apartment buildings with ground floor units that are overbuilt/ difficult to retrofit
What We’ve Learned

Based on our work in Sheepshead Bay, Gerritsen Beach, and other floodplain communities, we’ve learned:

1. **Height**
   - Homeowners may face the loss of subgrade spaces when retrofitting.

2. **Height**
   - Properties owners may want to address future risk by over-elevating.

3. **Ground Floors**
   - Current incentives to keep active ground floors may not be enough.

4. **Homes in M Districts**
   - Existing homes in M. Districts, if damaged, may not be able to rebuild.

5. **Old Homes in Small Lots**
   - Old bungalow homes on small lots may need more flexibility to rebuild in the future.

6. **Highly Vulnerable Areas**
   - Density may need to be limited in highly vulnerable areas.
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Gerritsen Beach
- Allows for multi-family buildings
- Max building height 35ft above DFE (already 6-8ft above street level)
- Inefficient footprint due to zoning requirements
- Max building height 2 to 3 stories
- Often do not comply with side yard regulations
Rezone from multi-family R4 to one and two family R4-1 to prevent out of context development

Reduce side yard requirements to allow for a better building layout

Limit height at 25 feet or two (2) stories to match existing built character

Further limit new development to one-family homes for lots < 3,000 sf in line with existing infrastructure capacity

No change in allowable FAR
Gerritsen Beach Waterfront Proposed Zoning Strategies

- On lots not directly fronting the water, **rezone** from multi-family C3 to one and two family R4-1 to prevent out of context development.

- Limit development in areas at higher risk along the waterfront to commercial uses only.

Subject to Wave Risk (LiMWA)

C3 Zoning District
Gerritsen Avenue Proposed Zoning Strategies

- Expand C2-2 designation along existing commercial uses
- Allow for a wider range of uses to serve the local community
Resilient Neighborhoods
Sheepshead Bay
Special Sheepshead Bay District

Created in 1973 to promote waterfront related uses and encourage the creation of new public open space.

- Special District does not have any guidance on resiliency
- Public open space requirements are not aligned with today's resiliency design standards
- Plazas are allowed to be sunken up to 2 feet below grade.
ACTIVE COMMERCIAL GROUND FLOORS
Require retail spaces have optimal floor to ceiling heights to allow for a range of uses.

UPDATE PUBLIC SPACE REGULATIONS
Align SSBD text with resiliency and urban design best practices to ensure open space is accessible and can withstand flooding.
Attached Homes

Multi-family Buildings

Identify citywide zoning modifications that make it easier retrofit attached buildings and apartment buildings.
- Sheepshead Bay Road is case study in Resilient Retail Report
- The report provides retrofit and design strategies for commercial buildings
Bungalows

- DCP provided retrofitting and zoning analysis to the Build it Back program
- Build it Back evaluating elevation/reconstruction options and infrastructure repairs.
1. Make the provisions of the current, temporary 2013 Flood Text permanent

2. **Fix** and **improve** provisions based on lessons learned from Resilient Neighborhood Studies and other areas in the floodplain

3. Begin to **promote** new development + proactive retrofitting to high resiliency standards
Given the difficult issues involved, DCP plans a robust public engagement process:

- Partner with stakeholders to educate and promote awareness of flood risk and resiliency issues
- Explain how zoning tools relate to resiliency
- Explore unique neighborhood issues through in-depth public presentations and workshops
- Develop a proposal through an iterative process that is shaped by feedback

* Schedule is tentative and subject to change
**Key Findings/Next Steps**

- Many neighborhoods will be especially hard hit when risk increases and rates move toward actuarial rates. Rates could reach up to $4000 a year.

- City is advocating that FEMA explore more cost-effective retrofitting strategies.
Next Steps

- Report release in late April/early May
- 2017-2018 outreach on Flood Text II
- Proposed local zoning actions will travel with Flood Text II
Flood Insurance and Retrofitting Resources

Flood risk information and address lookup

floodhelpny.org

For more information and updates visit our website:

www.nyc.gov/resilientneighborhoods

or email us:

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