Program Introduction

NY RISING COMMUNITY RECONSTRUCTION

**Goals & Recovery Functions**

- Increase resiliency of key assets
- Address short, medium, and long-term risks
- Balance costs and benefits
- Protect vulnerable populations
- Drive economic growth
- Coordinate with regional initiatives
- Outline steps for implementation

**Community Reconstruction Plan**

**Six Recovery Functions**

- Community Planning 
- Economic Development
- Health & Human Services
- Housing
- Infrastructure
- Natural & Cultural Resources

**Goals**

The NY Rising Community Reconstruction Program is helping communities impacted by Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy to rebuild and become more resilient through community-driven plans that consider current damage, future threats to community assets, and the community’s economic future. Residents are here today to participate in a public meeting to learn more about the program, share their input on possible strategies for increasing the resiliency of Red Hook, and review the work completed to date in the Needs and Opportunities Assessment.

**Map of Communities in NYC**

- NY Rising Community Planning Area

**Planning Process & Work Schedule**

**Planning Process**

- Identify, Assess, and Prioritize
- Define Needs and Opportunities
- Set goals for Recovery Statement
- Identify Strategies, Projects and Actions for outreach
- Estimate costs, benefits, and public support
- Identify Funding Sources, Develop Implementation Plan
- Final Community Reconstruction Plan

**Work Schedule**

- Deliverables
  - Sept.
  - Oct.
  - Nov.
  - Dec.
  - Jan.
  - Feb.
  - Mar.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision, Asset &amp; Risk Assessments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needs and Opportunities Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List of Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List of Priority Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Concept Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Public Meeting #2: November 19th
- Public Meeting #3: November 30th
- Public Meeting #4: December 30th
- Public Meeting #5: March 31st

**For more information, please contact:**

info@stormrecovery.ny.gov

www.stormrecovery.ny.gov/community-reconstruction-program

Red Hook interactive map:

www.redhook.nyrisingmap.org

Join the conversation!

#NYRising
@NYStormRecovery
NYStormRecovery
Empowered by the spirit of unity that helped the Red Hook community survive Hurricane/Superstorm Sandy, our vision for a resilient and thriving future is to work as a holistic community to strengthen the historic waterfront Red Hook peninsula by minimizing differences and maximizing cooperation among all who live and work here. Mindful of the growing climate-related risks to our beloved community and the immediate need for improved emergency preparedness measures, our actions will serve to help to develop measures that will protect our neighborhood from flood inundation, increase the safety of our citizens, and move towards a resilient community. We are committed to maintaining and expanding affordable housing and increased economic activity with an emphasis on local job development, recognizing the importance of their interdependence. Our rebuilding efforts towards a resilient and sustainable community are focused on a sincere triple bottom line integration of environment, economy, and community, which will require substantial improvement to our long-neglected infrastructure including sewers, transportation, communications, power and energy provision, and education.
Needs and Opportunities Assessment

Public and Planning Committee Comments

**ECONOMIC DEVELOPMENT**
- Preserve, expand, and increase the resiliency of diverse commercial and industrial uses
  - “Rezoning to acknowledge flood base plane”
  - “More diverse businesses”
  - Make industrial buildings more resilient
- Better use of Atlantic Basin waterfront and lease adjacent sheds so they relate to waterfront uses
- Better use of Brooklyn Cruise Terminal shed and parking lot, and Atlantic Basin parking lot
- Work to streamline environmental regulations so that Red Hook can rebuild plans
- Encourage small and local business development
- Explore options for increasing demand
- Leverage vacant lots for new development
- Help businesses utilize ongoing flood mitigation educational workshop and programs (e.g. BIDIC, NYC Planning)
- Explore infill retail in Red Hook Houses

**HOUSING**
- Preserve and expand affordable and insuring housing
  - Affordable housing - built with green building design.” Want too high - leading to polarization of community.”
  - “Funding for low income/affordable housing.”
  - Affordable flood insurance” Roll back increased flood insurance rates.”
- “BigGr Water/Flood Insurance Reform Act of 2012: minimize impact to allow wise financial decisions.”
- Explore ways to offset insurance increases
- “Rezoning so more mixed income (especially affordable) housing can be built and generate more pedestrian traffic”
- Mitigate financial hardship from flood insurance rate increases
- Leverage undeveloped residential zoned lots for mixed-income housing
- Leverage vacant lots
- Explore Floor Area Ratio (FAR) bonuses
- Address needs of residents still displaced after Sandy

**HEALTH & HUMAN SERVICES**
- Ensure resilient food supply
  - Explore Added Value Farm potential contribution to resilient food supply plan
- Improve access to healthcare services
  - “Need Hospital”
  - “Health center and better system for sharing information”
  - “Better mental health services”
- Ensure public safety

**NATURAL & CULTURAL RESOURCES**
- Repair and increase public access to the waterfront for economic and recreational uses
  - “Salt Pan” waterfront with a softened, natural coastline - invites exploration of present Brooklyn waterfront parks”
- Make use of large, easily accessible waterfront
- Expedit regulatory review for pier repairs

**COMMUNITY PLANNING & CAPACITY BUILDING**
- Leverage strong community capacity developed in wake of Sandy
  - “Sandy galvanized a tight community, keep building on it”
- Improve emergency preparedness response and communication strategies
  - “Seasonal preparedness drills”
  - “Quick response in general after incident”
- Trained coordinated emergency teams citizen - every block”
- “Need a coordinated strategy & reps at local, state & federal levels”
- Inter Red Hook community networks”
- “Stable communication platform”
- Explore Hess management change as an opportunity to negotiate for emergency diesel provision
- Expand and solidify community cultural and recreational resources and organizations
  - “Community center: Cultural, education center”
  - “Youth center”
  - “Sustainable home for local nonprofits”
- Repair & use for youth of Visitation Church basement”
- “More 24/7 public social spaces”
- “A neighborhood coral”
- “Community boast[al] with experienced maritime rescue team”
- Better utilize existing school and church facilities for adult and youth activities
- Take advantage of existing training opportunities and resources
- Stabilize existing cultural nonprofit resources

**INFRASTRUCTURE**
- Improve drainage and reduce flooding from sewer back-up
  - “Sewerage”
  - “Coastal protection barriers”
- “Increased seawall/breakwater at Richards St., Van Brunt, and Gowanus facing streets”
- “Privately owned property on waterfront to participate in protecting interior of neighborhood”
- “Gates on Gowanus”
- “Green polders with water parks inside & bike paths on top”
- “Oyster bed”
- Leverage the Brooklyn Greenway route in planning for coastal resiliency

**INCREASE RENALITY OF RED HOOK HOUSES**
- Increase resiliency of Red Hook Houses
  - “Increase budget for NYCHA infrastructural repairs”
  - “Retrofit boilers for NYCHA”
  - “Move NYCHA boiler to roof”
  - “Leverage assets of Red Hook Houses”
  - “Affordable use, empowered residents”
- Empower Red Hook Houses residents to invest in apartment improvements

**INCREASE VEGETATION RESILIENCE**
- “A lot of our trees are now dying. In addition to salt-tolerance, let’s also take into account scale as we replace them. No super-tall trees/weak forms near buildings.”

**PROVIDE ACCESS TO FLOOD-PROOF EMERGENCY CENTER**
- “Shelter/evacuation center with food supply, medical etc.”
- Warehouse locale for generators—a stockpile of ready gas.
- Raised lots at Home Depot (could be used for Emergency response in the future)
- Various vacant lots could be located to a new safe house
- Adjacent neighborhoods have ample high ground

**RED HOOK NY RISING COMMUNITY RECONSTRUCTION**

Note: Comments in quotes reflect direct quotes from Committee members and the public.
Those not in quotes are paraphrased from conversations at Planning Committee and Public Meetings.
Needs & Opportunities Assessment

Asset Maps
Assets include a variety of at-risk places and resources within a community. They may facilitate economic and social activities in a community, or may refer to critical infrastructure required to support those activities. The following maps show key assets as identified by the Planning Committee and Public.

NY Department of State Risk Zones

Housing and Economic Assets Map

Source: NY Department of State

Source: NYC Department of City Planning MapPluto, 13v1

Infrastructure Systems Asset Map

Health & Social Services and Natural & Cultural Resource Assets

Source: NYC Department of City Planning MapPluto, 13v1

Source: NYC Department of City Planning MapPluto, 13v1

Red Hook

NY RISING COMMUNITY RECONSTRUCTION
Housing Resiliency

**Strategy: Increase the physical and economic resiliency of housing**

Approaches to addressing housing needs could involve physical alterations to make homes more resilient, financial assistance to help pay for insurance or upgrade costs, and technical assistance to navigate programs and implement physical upgrades. Examples could include:

**Physical:**
**Flood resiliency options for Red Hook Houses and residential buildings**

- Elevate ground floor uses and mechanical systems

  With climate change models showing more frequent and intense storms, increasing the resiliency of housing in the 100 year floodplain is becoming more critical. Flood protection methods differ for new and existing housing. For existing housing, options include elevating mechanical systems and moving residential uses above the ground floor. For new housing, buildings can be constructed with a higher ground floor base elevation.

**Financial:**
**Financial and technical assistance for homeowners to offset retrofit and insurance costs**

- *A Stronger, More Resilient New York – New York City*

  “Even if every structure destroyed or damaged by Sandy were rebuilt to the highest resiliency standards, this would still leave tens of thousands of existing structures in the 100-year floodplain vulnerable—with more becoming vulnerable as the climate changes. Subject to available funding, the City, therefore, will launch a: $1.2 billion program to provide incentives to owners of existing buildings in the 100-year floodplain to encourage them to make resiliency investments in those buildings. Of the up to $1.2 billion available through the program, the City will reserve up to $100 million for 1- to 3-family homes, up to $500 million for distribution across the five boroughs based on each borough’s share of vulnerable buildings, citywide, up to $90 million for small businesses, and $100 million for affordable housing developments.”

**Regulatory:**
**Zoning to increase resiliency of housing**

- *Increased height allowance in Flood Resilience Zoning Text – New York City*

  Flood Resilience Zoning Text which complies with FEMA’s new, higher flood elevations, was adopted by the NYC Department of City Planning in October 2013. The zoning amendment allows for increased height for buildings that are required to eliminate certain ground floor uses due to flood resiliency and safety requirements.

  This zoning amendment allows building owners to recapture any floor space that was lost due to required removal of residential and other uses on the ground floor.
### Housing Resiliency

#### Initial Projects/Recommendations

- Establish financial tools to offset costs of insurance or retrofit
- Build new affordable housing above flood elevation
- Address NYCHA energy issues / elevate mechanicals
- Facilitate Red Hook Houses investments, via NYCHA or individual residents
- Explore options for flood-proofing ground floor of multifamily and single-family homes
- Explore alternate, insurable uses for ground floor space
- Leverage existing undeveloped residentially zoned lots and vacant buildings for mixed-income housing
- Rezone to allow for more housing
- Leverage existing nonprofit network to support dislocated households

#### Questions

- What are the key resiliency needs in Red Hook Houses?
- If you have explored physical resiliency strategies for a low-lying home, what have you learned to be most useful?
- What kinds of financial tools are most needed?

#### Actions, Plans, and Services Underway

- 5th Ave Committee / Donors Collaborative / Brooklyn Community Foundation housing recovery coordination functions
- Alexandros Washburn analysis of resiliency in New York City
- Resiliency Text Amendment (NYC DCP)
- Urban Waterfront Adaptive Strategies (NYC DCP)
- Designing for Flood Risk (AIA)
- FEMA Affordability Study
- NYC requests to delay implementation of Biggerts-Waters
Adapt commercial space to mitigate flood damage

Wet flood-proofing is a technique of allowing flood water to enter a building and designing to speed drainage and drying after a flood. Commercial space can be adapted to lessen damage from flooding. In the above example, the rear space of a business is elevated to provide a flood-proof area for storing goods during a flood event while the lower area is designed to flood.

**Economic Sustainability**

**Strategy: Increase the resiliency of existing businesses and promote opportunities for economic development**

Physical resiliency for commercial buildings can be achieved through a variety of approaches. In Red Hook, the variety of commercial building types—ranging from large, historic warehouse buildings to ground floor storefronts in mixed-use buildings—require different approaches such as:

**Design Approaches**

<table>
<thead>
<tr>
<th>Protect with flood barrier</th>
<th>Elevate building or building mechanicals</th>
<th>Flood-proof building as flood barrier</th>
<th>Wet flood-proof ground floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verizon Building Deployable Floodwall – New York City</td>
<td>Elevated water heater and mechanicals in basement</td>
<td>Buildings as flood protection - England</td>
<td>Adapt commercial space to mitigate flood damage</td>
</tr>
</tbody>
</table>

**Verizon Building Deployable Floodwall – New York City**

Businesses can layer in additional protection for the building envelope and interior. This can take the form of a deployable flood wall around buildings, or other measures that work with the façade, interior, or structure of the building. Verizon has installed such a system at its headquarters in Lower Manhattan.

**Elevate building or building mechanicals**

Cost-efficient methods such as elevating any mechanical equipment located in the basement can save equipment from flooding damage and lessen the amount of time a building is without critical services such as water and/or heat.

**Flood-proof building as flood barrier**

Buildings can be adapted to serve as a component of a flood barrier system. This technique has been utilized with older existing buildings as in the example above and in new construction in places such as HafenCity, Hamburg Germany.

**Wet flood-proof ground floor**

Wet flood-proofing is a technique of allowing flood water to enter a building and designing to speed drainage and drying after a flood. Commercial space can be adapted to lessen damage from flooding. In the above example, the rear space of a business is elevated to provide a flood-proof area for storing goods during a flood event while the lower area is designed to flood.
Economic Sustainability

**Strategy:** Increase the resiliency of existing businesses and promote opportunities for economic development.

Flood protection is expensive and many commercial establishments are already struggling due to the lost business and repairs from Superstorm Sandy. The high costs of flood protection can be overcome through implementation approaches, that depending on an area’s needs, together comprise a toolkit for enabling action:

### Implementation Approaches

#### Manage

Coordination amongst business owners allows for implementation of flood protection and recovery after the storm. Possible management structures could include establishing a merchant’s association that could share emergency resources such as back-up generators, fuel, and pumps.

#### Regulate

Regulations can help determine what can be built and how it can be built. In certain conditions, regulations can mitigate what is at risk, or help to make sure that recovery is made easier by removing obstacles.

#### Finance/Incentivize

Grants can be made to the businesses for improvements directly, allowing for the fast adoption of strategies where they are most needed. When grants aren’t an option, low-cost loans can help spread the cost of improvements over the course of many years, making the investment feasible to the business owner.
## Economic Sustainability

### Initial Projects/Recommendations
- Identify financial tools to address increased insurance and retrofit costs for local businesses
- Establish commercial partnership to leverage existing resources
- Leverage State Historic Preservation Office (SHPO) grant to restore historic commercial buildings damaged by Sandy
- Explore options for floodable ground-floor uses in commercial structures
- Explore mixed-use zoning to incentivize hardening for industrial uses, and increase retail demand
- Change DEC regulations so that Red Hook can rebuild piers more quickly

### Questions
- What collaborative efforts are currently underway to address/organize businesses around resiliency?
- Where do you see opportunities in RH for these alternate design approaches?
- What kinds of financial tools are most needed? (e.g. Operating costs, cost of repairs, insurance costs, etc.)
- If we were to focus on a specific retail corridor as a pilot for new initiatives, where would you prioritize?

### Actions, Plans, and Services Underway
- Red Hook Small Business Hazard Mitigation Study (SBIDC)
- Small Business Preparedness Plan (SBIDC)
- HUD Rebuild By Design
- Special Initiative for Rebuilding and Resiliency (SIRR) Report
- Urban Waterfront Adaptive Strategies (NYC DCP)
- Designing for Flood Risk (AIA)
- Preservation Plan for Red Hook (Columbia U.)
- Historic Landmarks & Flood Risk Study (NYC DCP)
Economic Opportunity

Strategy: Strengthen individual economic resiliency and financial resources

A vibrant economy is an important element to a community’s resiliency. Encouraging employment opportunities for a variety of skill-sets, providing job opportunities for residents, providing appropriate job training, and supporting entrepreneurship and the development of micro businesses are amongst the examples of elements that can help build a resilient community and economy.

Job training and placement programs

Conservation Corps of Greater New Orleans - New Orleans, LA

After Hurricane Katrina, Limitless Inc. collaborated with the national Conservation Corps network to train at-risk, inner-city youth for work as certified environmental field technicians. This program sought to train youth for employment in a growing sector and participate in activities that would increase the resiliency of the area.

Corps members were paid for up to 25 hours a week and received a $1,250 educational stipend. In the case of those finishing Limitless Vistas’ certification program, starting wages range from $14 to $18 an hour, with room for advancement.

Attract and establish new businesses

New Amsterdam Market - New York City

Investments and formation of new businesses generate employment and can benefit surrounding businesses by increasing pedestrian activity and increasing amenities. Open air markets and marina uses are examples of businesses that have been cited as opportunities in Red Hook.

New Amsterdam Market is an example of a business that has improved the local economy for a variety of businesses.

Support entrepreneurship and micro businesses

Micro-Business Development Program - VT

The statewide Micro-Business Development Program helps low-to-moderate income residents who want to gain the skills and knowledge needed to start, expand, or enhance a micro business.

Micro loans provided through this program generally range from $500 to $25,000 and are administered through Community Action Agencies across the state.
# Economic Opportunity

## Initial Projects/Recommendations
- Identify and fill any gaps in job training and education resources
- Identify opportunities to support micro-businesses
- Explore market opportunity for marina, multipurpose marine facilities, and/or produce market
- Explore potential for incubators for maritime industry & education

## Questions
- What are the gaps in existing business and employment options?
- What challenges have been found in cultivating businesses?
- What types of jobs and training are needed in Red Hook?

## Actions, Plans, and Services Underway
- Red Hook Initiative programs
- 5th Avenue Committee grant application