

Goals & Recovery Functions

Goals

- 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



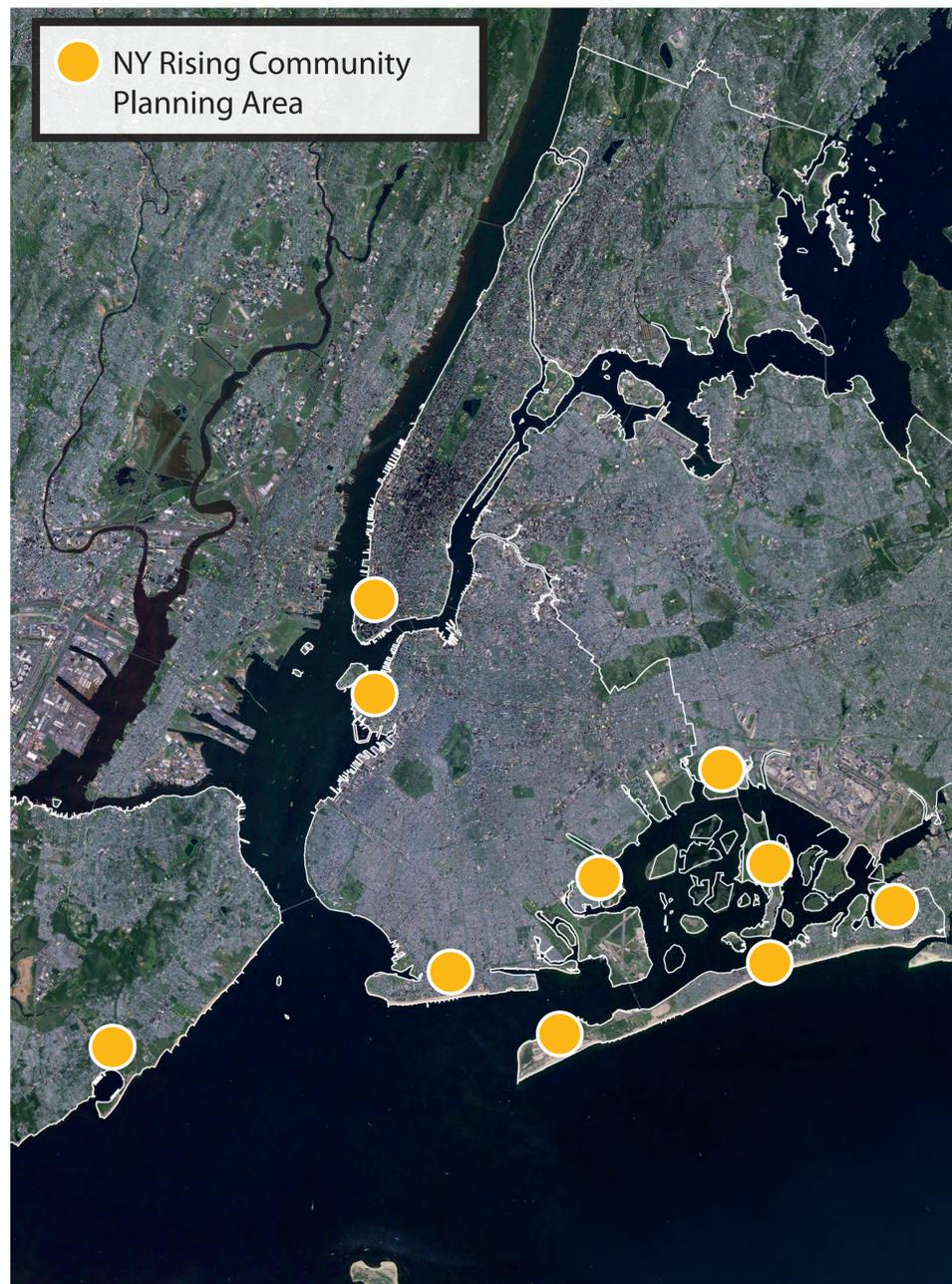
The NY Rising Community Reconstruction Program is helping communities impacted by Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy to rebuild and become more resilient through community-driven plans that consider current damage, future threats to community assets, and the community's economic 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.

Join the conversation!

#NYRising
@NYStormRecovery
NYStormRecovery



Map of Communities in NYC



New York City contains 10 of the 50 communities in New York State undergoing the NY Rising Community Reconstruction process.

Planning Process & Work Schedule

Planning Process



Work Schedule

- Planning Committee Meeting
- Public Meeting
- Deliverable Due Date

Deliverables	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Work Plan	● Sept. 20						
Vision, Asset & Risk Assessments	1 2 ●						
Needs and Opportunities Assessment		3 1 4 ●	Nov. 13				
List of Strategies			5 2 ●	Nov. 30			
List of Priority Projects				6 ●	Dec. 30		
Final Concept Plan					7 3 8 4 ●		Mar. 31

For more information, please contact:
info@stormrecovery.ny.gov

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

Red Hook interactive map:
www.redhook.nyrisingmap.org



Program Introduction NY RISING COMMUNITY RECONSTRUCTION

Needs & Opportunities Assessment

Needs and Opportunities

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 waterspace and lease adjacent sheds so they relate to waterborne 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 piers
- 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. SBIDC, NYC Planning)
- Explore infill retail in Red Hook Houses

Support job creation, economic opportunity, and equity

- “Job creation & neighborhood investment.” “Create a strong economic foundation for community.”
- “Empower young people to build wealth”
- “Help to bridge class divide between projects and rest of the neighborhood”
- Build a produce market and retail market
- Leverage PortSide New York and Harbor School as possible incubators for maritime industry and education
- Provide job training

Leverage funding opportunities to rehabilitate and increase resiliency of historic buildings

- Pursue landmark status for historically significant buildings
- Make use of State Historic Preservation Office (SHPO) grant to restore historic buildings damaged by Sandy

HOUSING

Preserve and expand affordable and insurable housing

- “Affordable housing - built with green building design.” “Rent too high - leading to polarization of community.” “Funding for low income/affordable housing.”
- “Affordable flood insurance.” “Roll back increased flood insurance rates.” “Biggert Waters [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 increase
- Leverage undeveloped residentially zoned lots for mixed-income housing
- Leverage vacant lots
- Explore Floor Area Ratio (FAR) bonuses
- Address needs of residents still displaced after Sandy

Provide funding, guidance, and policy for rehab and resiliency of low-lying homes

- “Funds & plans to maintain current housing to be flood ready.” “Retrofits to accommodate/address risks.”
- “Local network for information sharing on rebuilding regs & resiliency”
- “Green building incentives”

Increase resiliency of Red Hook Houses

- “Increase budget for NYCHA infrastructural repairs”
- “Retrofitted boilers for NYCHA”
- “Move NYCHA boiler to roof”
- “Leverage assets of Red Hook Houses (creative uses, empowered residents)”
- Empower Red Hook Houses residents to invest in apartment improvements

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

Prevent pollution release during flooding

- Reinforce laws and regulations controlling storage of toxic materials

NATURAL & CULTURAL RESOURCES

Repair and increase public access to the waterfront for economic and recreational uses

- “Soften ‘hard’ waterfront with a softened, natural coastline- invites expansion of present Brooklyn waterfront parks”
- Make use of large, easily accessible waterfront
- Expedite regulatory review for pier repairs

Expand and solidify community cultural and recreational resources and organizations

- “Community center.” “Cultural, education center.”
- “Youth center”
- “Sustainable home for local non-profits”
- “Repair & use for youth of Visitation Church basement”
- “More 24/7 public social spaces”
- “A neighborhood corps!”
- “Community boathous[e] 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

Increase vegetation resiliency

- “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.”

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 & regs at local, state & federal levels”
- “Inter Red Hook communication networks.” “Stable communication platform (redhookwifi is a start)”
- Explore Hess management change as an opportunity to negotiate for emergency diesel provision

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 used to locate a new safe house
- Adjacent neighborhoods have ample high ground

INFRASTRUCTURE

Improve drainage and reduce flooding from sewer back-up

- “Improve drainage/stormwater drainage.” “Sewage treatment smell & danger of leakage & flooding.” “Address [combined sewer overflow] CSO backups”
- Address/fix pump at Van Brunt and Reed and identify who is responsible for upkeep of it
- Citywide green roof/storm-water retention/green streets pilot programs
- Alley between Pioneer and Visitation provides opportunity for green infrastructure pilot project

Provide coastal flood protection

- “Seawalls.” “Coastal protection barriers. Dykes. Seawall.” “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

Improve and increase resilience of pedestrian and transportation options, and mitigate adverse vehicle impacts

- “Better transportation throughout”
- “Improve & expand ferry service.” “Need more waterborne transportation.”
- “Need a bus into Lower Manhattan via the tunnel now!! At regular fare”
- Improve pedestrian and bicycle network
- Improve pedestrian connections under Brooklyn-Queens Expressway (BQE)
- Develop streetcar loop
- Coordinate with existing plans and projects
- Address transportation related nuisances such as bus traffic, fumes, fast tractor-trailer speeds, truck traffic along neighborhood streets, and bus storage
- Calm truck traffic on Van Brunt Street

INFRASTRUCTURE

Ensure resilient and redundant sources of power

- “Solar power”
- “Distributed power preferably via renewable sources”
- “Tax incentives & grants for green initiatives such as green roofs, solar power, and storm water collection on residential buildings”
- “Wind turbines/microturbine”
- “Tidal power”
- “Coral reefs”
- “Community based back-up power & phone/internet”
- Address frequent ConEd outages
- Enhance ConEd emergency plan/provisions
- Shorten duration utilities are out after a flood event

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.

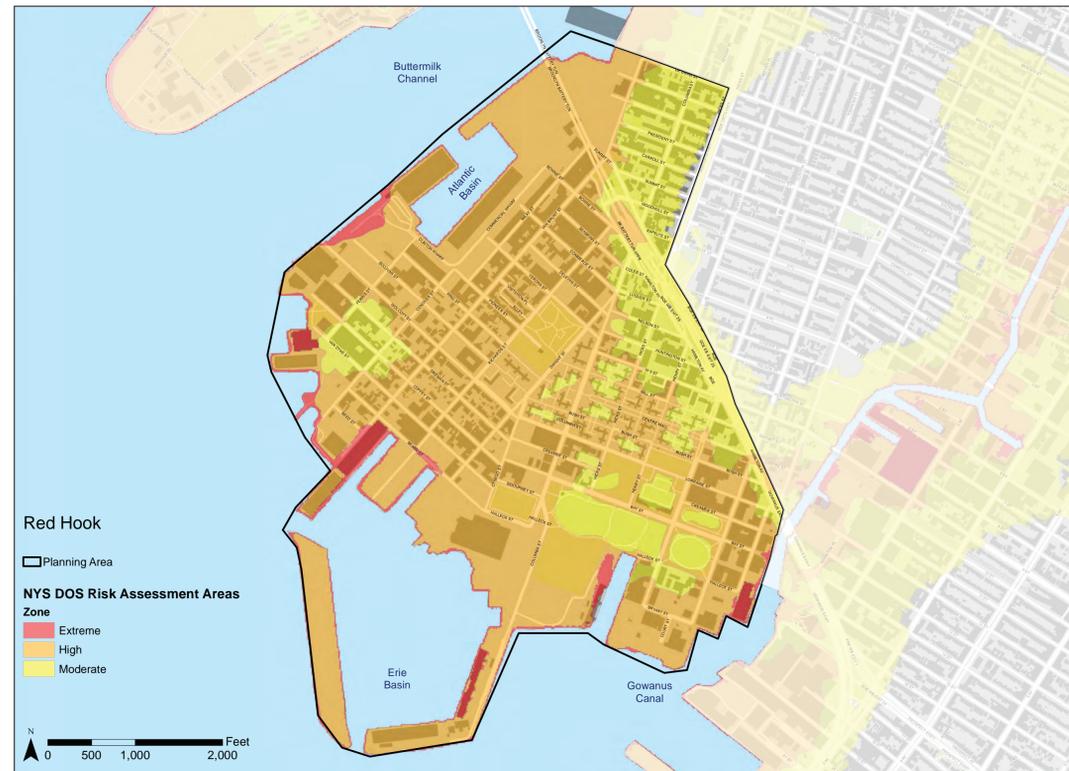


Needs & Opportunities Assessment

Asset Maps

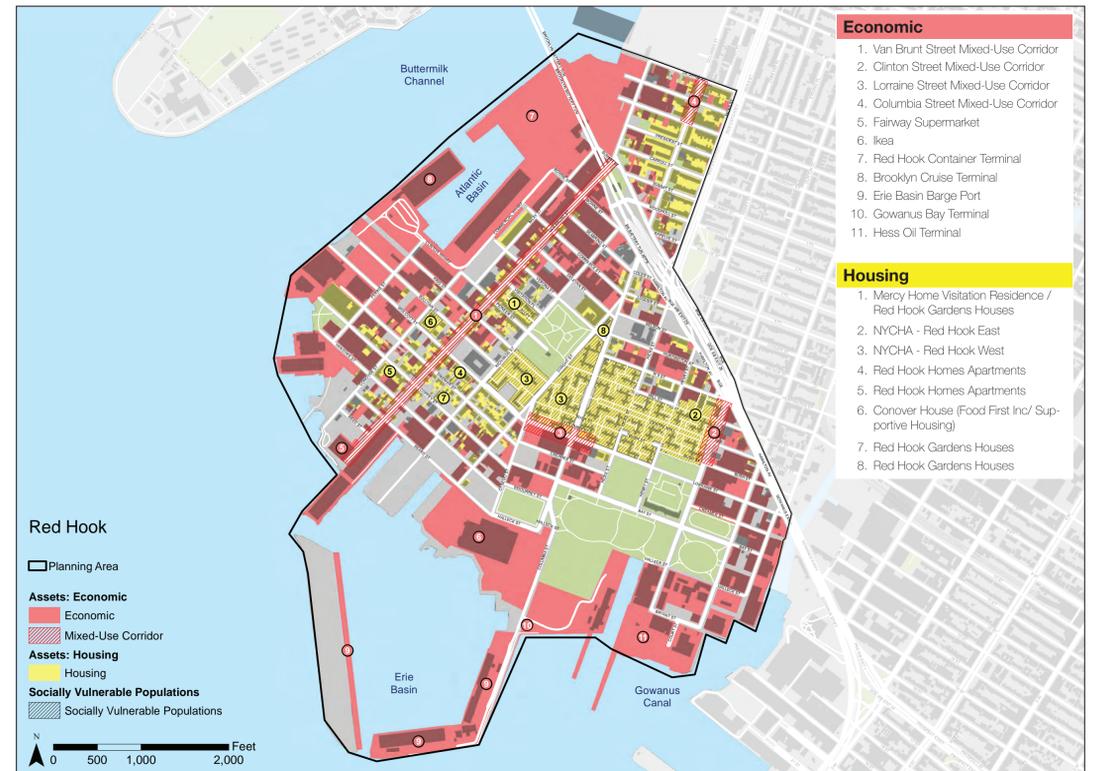
Assets include a variety of at-risk places and resources within a community. They may facilitate economic and social activities in a community, or may refer to critical infrastructure required to support those activities. The following maps show key assets as identified by the Planning Committee and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

NY Department of State Risk Zones



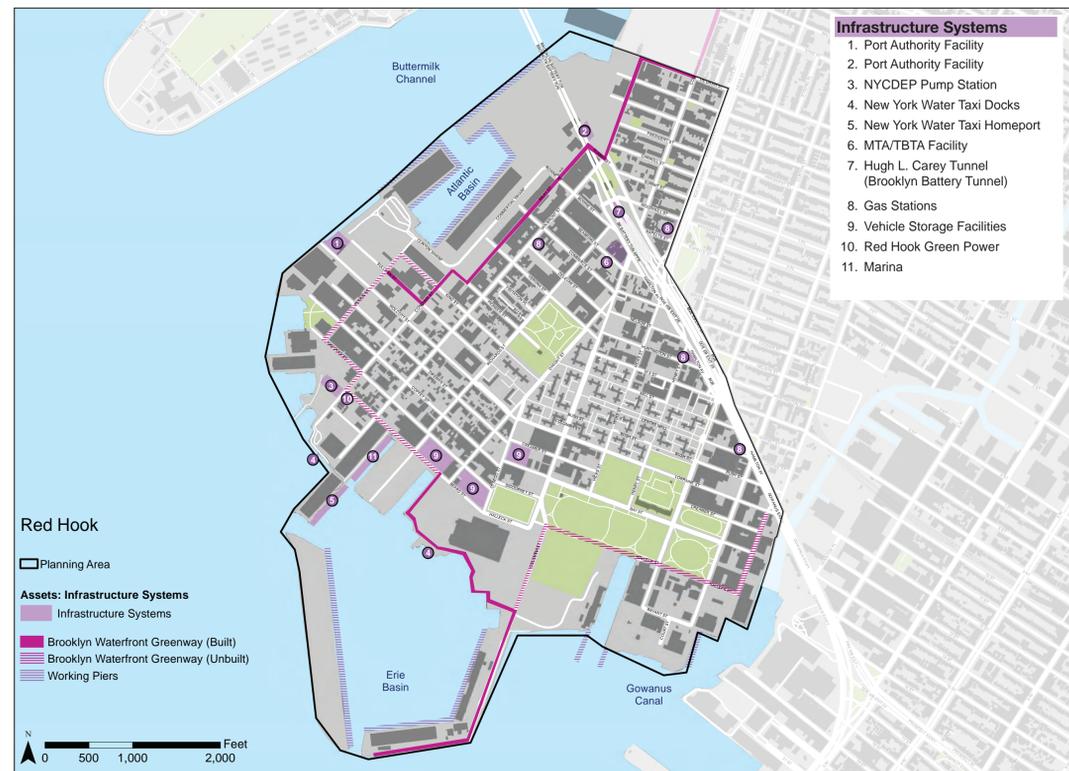
Source: NY Department of State

Housing and Economic Assets Map



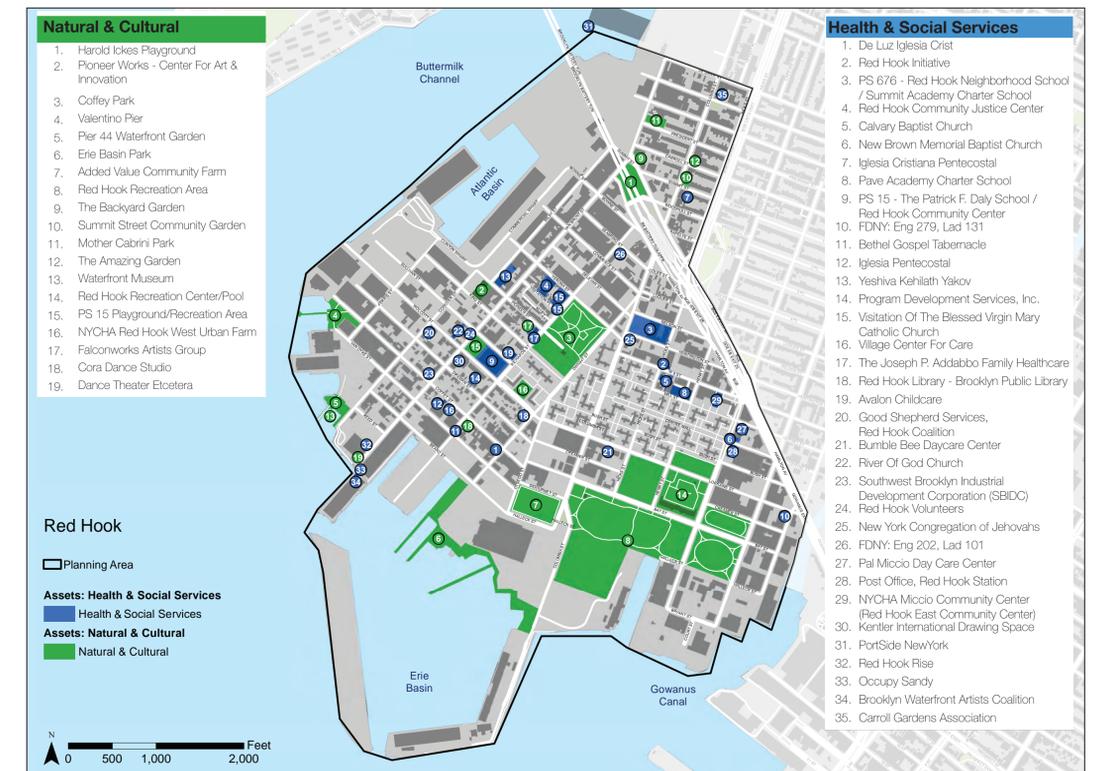
Source: NYC Department of City Planning MapPluto, 13v1

Infrastructure Systems Asset Map



Source: NYC Department of City Planning MapPluto, 13v1

Health & Social Services and Natural & Cultural Resource Assets



Source: NYC Department of City Planning MapPluto, 13v1

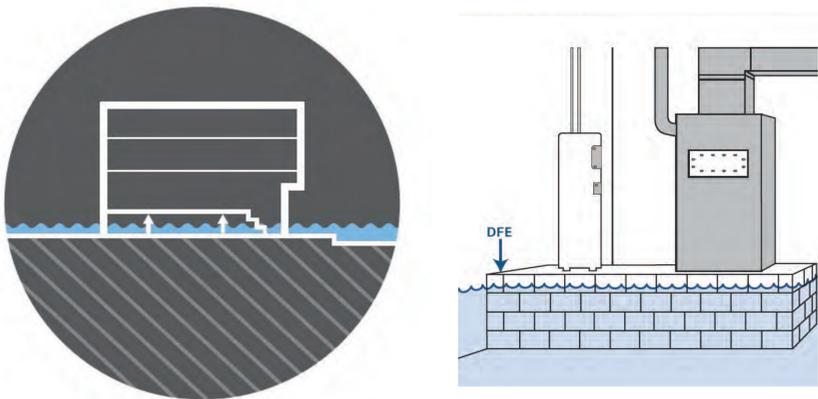


Housing Resiliency

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.

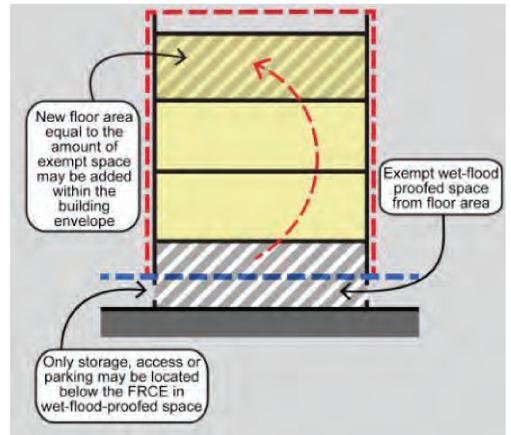
Financial: Financial and technical assistance for homeowners to offset retrofit and insurance costs



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



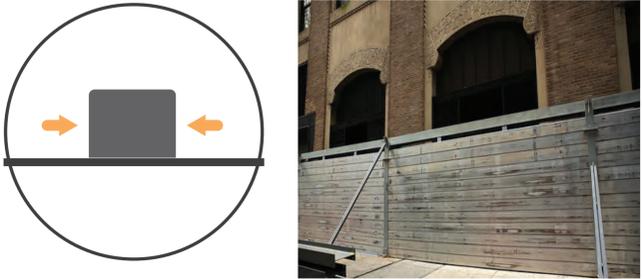
Economic Sustainability

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

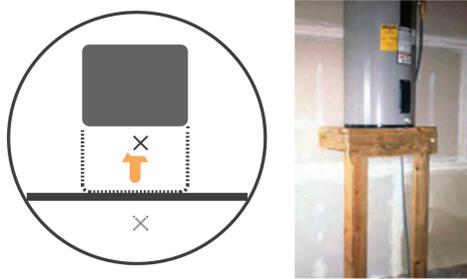
Protect with flood barrier



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



Elevated water heater and mechanicals in basement

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.

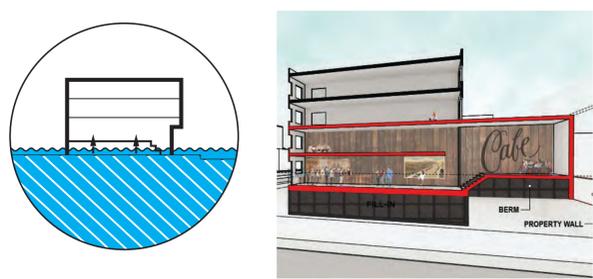
Flood-proof building as flood barrier



Buildings as flood protection - England

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



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

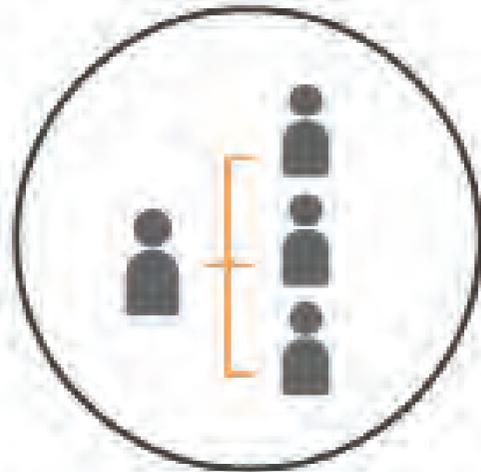
Strategy: Increase the resiliency of existing businesses and promote opportunities for economic devel-

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



MANAGE

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.



REGULATE

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.



FINANCE



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

