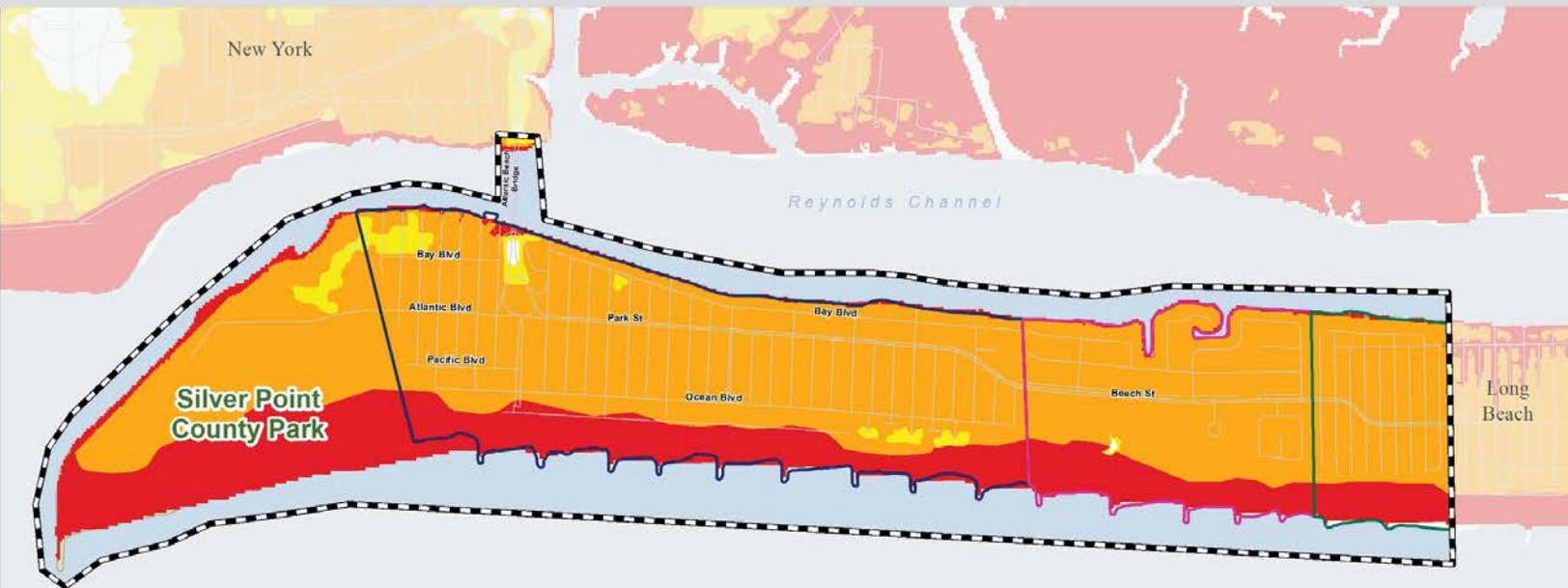




**New York Rising**  
Community Reconstruction Program

# Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach Conceptual Plan

October 2013



*This document was developed by the Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach Planning Committee as part of the NY Rising Community Reconstruction (NYRCR) Program within the Governor's Office of Storm Recovery. The NYRCR Program is supported by NYS Homes and Community Renewal, NYS Department of State, and NYS Department of Transportation.*

*Assistance was provided by the following consulting firms:*

*URS Corporation*

*Sustainable Long Island*

*The LiRo Group*

*Planning4Places LLC*



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## FOREWORD

The New York Rising Community Reconstruction (NYRCR) program was established by Governor Andrew M. Cuomo to provide additional rebuilding and revitalization assistance to communities damaged by Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee. This program empowers communities to prepare locally-driven recovery plans to identify innovative reconstruction projects and other needed actions to allow each community not only to survive, but also to thrive in an era when natural risks will become increasingly common.

The NYRCR program is managed by the Governor's Office of Storm Recovery in conjunction with New York State Homes and Community Renewal and the Department of State. The NYRCR program consists of both planning and implementation phases, to assist communities in making informed recovery decisions.

The development of this conceptual plan is the result of innumerable hours of effort from volunteer planning committee members, members of the public, municipal employees, elected officials, state employees, and planning consultants. Across the state, over 102 communities are working together to build back better and stronger.

This conceptual plan is a snapshot of the current thoughts of the community and planning committee. The plans will evolve as communities analyze the risk to their assets, their needs and opportunities, the potential costs and benefits of projects and actions, and their priorities. As projects are more fully defined, the potential impact on neighboring municipalities or the region as a whole may lead to further modifications.

In the months ahead, communities will develop ways to implement additional strategies for economic revitalization, human services, housing, infrastructure, natural and cultural resources, and the community's capacity to implement changes.

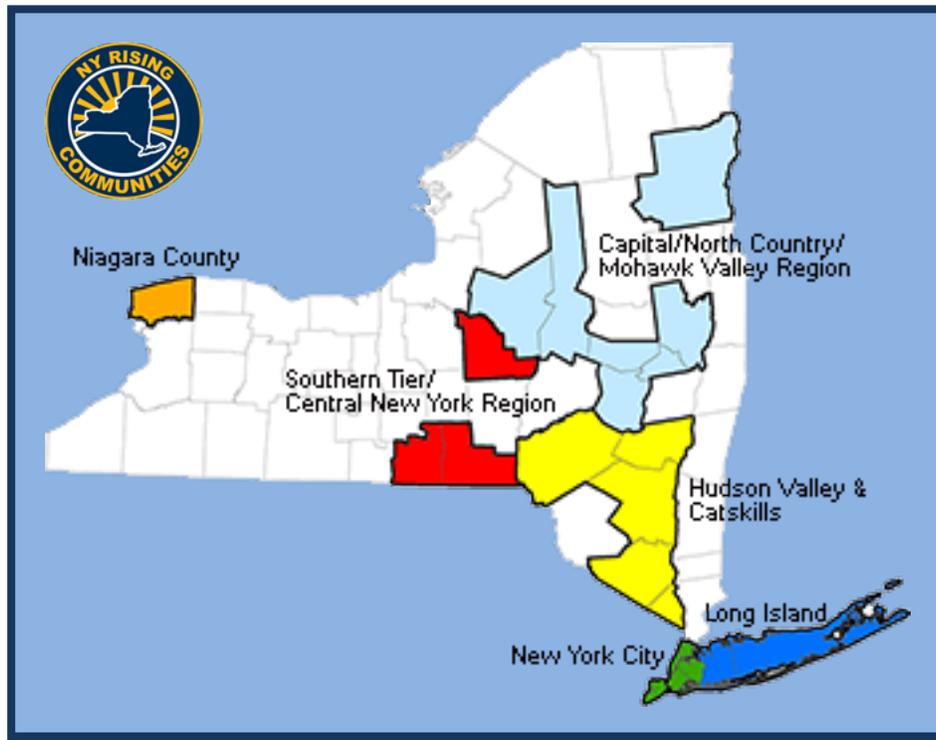
Implementation of the proposed projects and actions found in this conceptual plan is subject to applicable federal, state, and local laws and regulations. Inclusion of a project or action in this conceptual plan does not guarantee that a particular project or action will be eligible for Community Development Block Grant – Disaster Recovery (CDBG-DR) funding. Proposed projects or actions may be eligible for other state or federal funding, or could be accomplished with municipal, nonprofit or private investment.

Each NYRCR Community will continue to engage the public as they develop a final plan for community reconstruction. Events will be held to receive feedback on the conceptual plan, to provide an understanding of risk to assets, and to gather additional ideas for strategies, projects and actions.

October 31, 2013



# New York Rising Communities



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Find out more at: [StormRecovery.ny.gov/Community-Reconstruction-Program](http://StormRecovery.ny.gov/Community-Reconstruction-Program)



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## Preface

The Village of Atlantic Beach and the unincorporated hamlets of Atlantic Beach Estates and East Atlantic Beach are beach communities on the western end of Long Beach Barrier Island, which is off the south shore of Long Island. The communities are in Nassau County. Located approximately 25 miles from New York City, the communities have approximately 4,000 permanent residents, but the population increases significantly during the summer with an influx of people from New York City and nearby Long Island towns.

In 2012, Superstorm Sandy damaged homes and beach clubs in the communities. Eight beach clubs, which are major economic assets, were severely damaged, and the cost to rebuild them exceeded \$10 million. The storm also damaged roads, electrical systems, drainage systems, government facilities, bulkheads, and dunes. The communities have undertaken massive clean-up efforts.

The State of New York has developed the New York Rising Community Reconstruction (NYRCR) Program, an innovative post-disaster planning process. The three communities are taking advantage of the program to improve their resilience as they continue to recover and rebuild.

This document is the Conceptual Plan for the development of the Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach Community Reconstruction Plan (NYRCR Plan), which will be based on the NYRCR Program. The Conceptual Plan consists of background on the communities, a summary of the damage in the communities from Superstorm Sandy, a preliminary list of community assets that need to be protected, the level of flooding risk, the needs and opportunities for rebuilding that have been identified to date, preliminary rebuilding strategies, and the process that will be followed to implement the strategies.

The NYRCR Plan will be completed by March 2014 and will involve input from residents, community leaders, business leaders, and stakeholder representatives of community-based organizations.



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# 1 Introduction and Background

The State of New York has developed the New York Rising Community Reconstruction (NYRCR) Program, an innovative post-disaster planning process, to help communities rebuild better and safer.

Communities will use the process to develop NYRCR Plans that will address repairing existing damage, mitigating future threats to the community, and fostering the future safety and resiliency of the community.

NYRCR Plans will also help communities obtain funding to implement the plans.



East Atlantic Beach

## 1.1 The NYRCR Conceptual Plan for the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach

This document contains the Conceptual Plan for developing the NYRCR Plan, which will be led by the NYRCR Planning Committee and will include input from the public.

The NYRCR Planning Committee consists of the community representatives listed in Table 1.

**Table 1: Members of the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach NYRCR Planning Committee\***

Member	VAB/ABE/EAB	Organization/Affiliation
Jonathan B. Kohan	VAB Co-Chair	Chief (ret.) Atlantic Beach Rescue; Treasurer and Member, Town of Hempstead Industrial Development Authority; resident, Village of Atlantic Beach
A. Licatesi	ABE Co-Chair	Atlantic Beach Water Reclamation District; Past Chair, Atlantic Beach Estates Association; resident, Atlantic Beach Estates
John Coletti	ABE Committee Member	Co-Chair, East Atlantic Beach Civic Association; resident, East Atlantic Beach
Annette Ellis	VAB Committee Member	Real Estate Broker, Beach Club Owner, Atlantic Beach; resident, Atlantic Beach Estates
Eric Landsman	ABE Committee Member	Co-Chair, East Atlantic Beach Civic Association; resident, East Atlantic Beach



Member	VAB/ABE/EAB	Organization/Affiliation
Scott Mason	ABE Committee Member	Chair, Atlantic Beach Water Reclamation District; resident, East Atlantic Beach
Mark Marinoff	VAB Committee Member	President, M. Marin Restoration, Inc.; resident, Atlantic Beach Estates
Alex Michaelis	VAB Committee Member	Superintendent, Atlantic Beach Water Reclamation District
Stephen Mahler	Ex-Officio Member	Mayor of the Village of Atlantic Beach
Steven Cherson	Ex-Officio Member	Building and Plans Examiner
Thomas Polsinelli	VAB Committee Member	President, Water Club Home Owners Association; resident, Water Club
Anthony Ponte	VAB Committee Member	Resident, Atlantic Beach Estates
Howard Taub	VAB Committee Member	Beach Club Owner, Village of Atlantic Beach
David Woolfe	VAB Committee Member	Member, Atlantic Beach Rescue and Long Beach Fire Department; Office of Emergency Management, Village of Atlantic Beach; resident, Village of Atlantic Beach (West End)
Jessie Blue	Intern	Lawrence High School
Matt Greenwald	Intern	Lawrence High School
Ethan Kohan	Intern	Lawrence High School

The NYRCR Planning Committee will partner with planning experts from the New York Department of State and the Planning Team, which consists of staff from URS Corporation (URS), Sustainable Long Island, the LiRo Group, Planning4Places, and AIM Development.<sup>1</sup>

The Committee is focused on developing the NYRCR Plan in coordination with the Planner, Region Lead, and the Planning Team. The NYRCR Planning Committee identified needs, opportunities, and strategies for the Conceptual



Flooding in Atlantic Beach as a result of Superstorm Sandy (source: VAB Village Administrator and Building Plans Examiner)

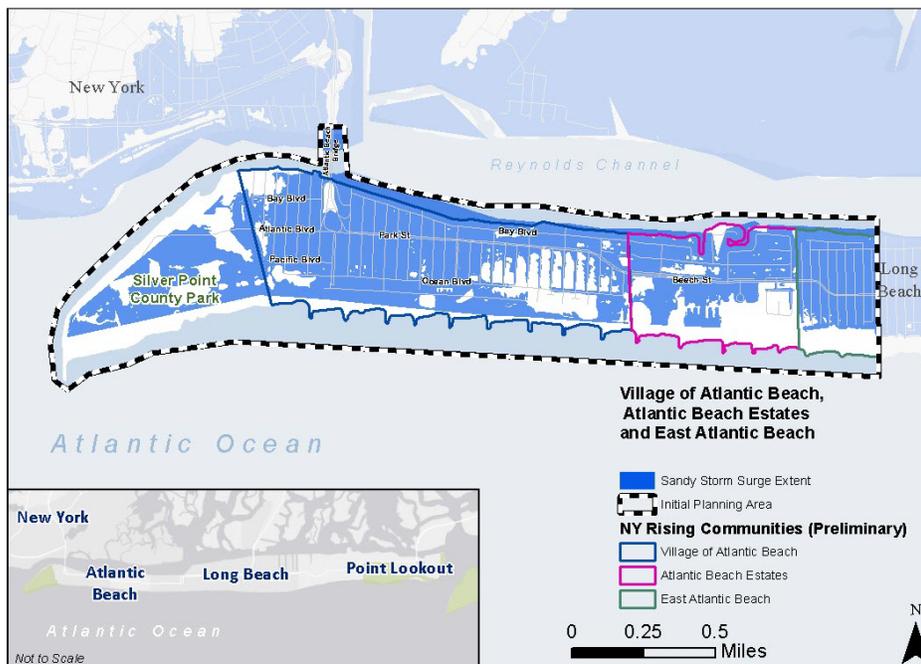
<sup>1</sup> The Planning Team, which consists of staff from URS, was hired through a State process administered by New York State Homes and Community Renewal through its Office of Community Renewal and the Housing Trust Fund Corporation



Plan in a series of six weekly committee meetings. Representatives from the NYRCR Planning Committee met individually with stakeholder representatives from the Atlantic Beach Water Reclamation Plant, the Atlantic Beach Fire District and the Atlantic Beach Rescue Unit, the Village Board Members representing the incorporated Village of Atlantic Beach, and the East Atlantic Beach Civic Association.

## 1.2 Geographic Scope

The geographic scope, referred to as the NYRCR Planning Area, encompasses the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach (see Figure 1). The NYRCR Planning Committee identified the geographic scope based on municipal boundaries, the extent of the Superstorm Sandy storm surge, and other flooded or damaged areas.



**Figure 1:** Geographic scope (NYRCR Planning Area) of the NYRCR Plan

## 1.3 Community Overview

The three communities are located on the western end of Long Beach Barrier Island, which is off the south shore of Long Island. Reynolds Channel is to the north, Long Beach is to the east, and the Atlantic Ocean is to the south and west.

The Village of Atlantic Beach covers 1 square mile; Atlantic Beach Estates covers 0.9 square mile; and East Atlantic Beach covers 0.6 square mile. Silverpoint Park, located directly west of the Village of Atlantic Beach, is a county park and is leased and operated



by a private beach club. The NYRCR Planning Area shares the island with the City of Long Beach and the communities of Lido Beach and Point Lookout to the east.

Three road bridges provide access to Long Beach Barrier Island. One of them is the Atlantic Beach Bridge (New York State Route 878), a toll bridge that provides access to the Village of Atlantic Beach. The other two bridges are in Long Beach and Point Lookout (east of the NYRCR Planning Area).



Village of Atlantic Beach

The Village of Atlantic Beach was incorporated as a village in 1962; the hamlets of Atlantic Beach Estates and East Atlantic Beach remain unincorporated under the purview of the Town of Hempstead. The NYRCR Planning Area has a population of approximately 4,000 (approximately 1,900 residents in the Village of Atlantic Beach and approximately 2,000 residents in East Atlantic Beach and Atlantic Beach Estates).<sup>2</sup> The demographic profile is provided in Table 2.

**Table 2: Demographic Profile of the Village of Atlantic Beach and East Atlantic Beach**

Demographic	Village of Atlantic Beach		East Atlantic Beach	
	Number	Percentage	Number	Percentage
Population	1,891	—	2,049	—
Race/ethnicity				
White	1,827	96.6%	1,967	96.0%
African American	12	0.6%	14	0.7%
American Indian / Alaskan Native	0	0.0%	0	0.0%
Asian	18	1.0%	22	1.1%
Hawaiian, Pacific Islander	0	0.0%	0	0.0%
Other	21	1.1%	2	1.1%
Two or more races	13	0.7%	23	1.1%
Hispanic of any race	74	3.9%	109	5.3%
Median age	53	—	46	—
Income				
Median household income	\$102,188	—	\$104,886	—
Poverty rate (families)	—	3.9%	—	0.0%
Housing				
Number of households	857	—	888	—
Owner-occupied housing units	653	76.2%	678	76.2%
Renter-occupied housing units	204	23.8%	210	23.8%
Average household size	2.21	—	2.41	—

<sup>2</sup> U.S. Census Bureau, Census 2010 Summary File 1.



Demographic	Village of Atlantic Beach	East Atlantic Beach
Median home value	\$798,780 —	\$766,187 —

Source: U.S. Census Bureau, Census 2010 Summary File 1

## 1.4 Existing Development

The three communities are characterized primarily by detached single-family homes on relatively large lots and denser residential areas and beach clubs that are close to the beaches. According to the 2010 U.S. Census, approximately 17 percent of the housing in the Village of Atlantic Beach is seasonal, and 6 percent of the housing in East Atlantic Beach is seasonal.<sup>3</sup> Anecdotal discussions with local officials suggest that the actual proportion of seasonal housing in the Village of Atlantic Beach may be as high as 40 percent.

The beach clubs that line the boardwalks along the Atlantic Ocean are the area’s primary economic assets. Village Hall and the Tennis Center are key facilities that serve as community gathering spaces, and they served as emergency shelters during Superstorm Sandy.

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## 2 Summary of the Effects of Superstorm Sandy

Superstorm Sandy struck New York on October 29, 2012, bringing a storm surge of 9 to 12 feet above normal tide levels from Kings Point on the western end of Long Island Sound to the Battery on the southern tip of Manhattan.<sup>4</sup> Superstorm Sandy is the largest storm in New York’s recorded history to land ashore. Superstorm Sandy’s effect was devastating, causing widespread damage to lives, homes, businesses, core infrastructure, government property, and an economy beginning to recovering from a financial crisis. The storm caused 53 fatalities,<sup>5</sup> destroyed an estimated 305,000 homes,<sup>6</sup> affected more than 2,000

<sup>3</sup> U.S. Census Bureau, Census 2010 Summary File 1.

<sup>4</sup> National Hurricane Center, NHC AL182012, *Tropical Cyclone Report Hurricane Sandy 22-29 October 2012* (February 12, 2013). Available at [http://www.nhc.noaa.gov/data/tcr/AL182012\\_Sandy.pdf](http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf). Accessed October 2013.

<sup>5</sup> Centers for Disease Control and Prevention, “Deaths Associated with Hurricane Sandy, October – November 2012.” *Morbidity and Mortality Weekly Report (May 24, 2013)*. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6220a1.htm>. Accessed October 2013.

<sup>6</sup> National Hurricane Center, NHC AL182012, *Tropical Cyclone Report Hurricane Sandy 22-29 October 2012* (February 12, 2013). Available at [http://www.nhc.noaa.gov/data/tcr/AL182012\\_Sandy.pdf](http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf). Accessed October 2013.



miles of roads, produced catastrophic flooding in subways and tunnels, and damaged major power transmission systems. Fourteen counties in New York were declared Federal disaster areas.<sup>7</sup> Economic losses in New York as a result of Superstorm Sandy were estimated to be between \$30 and \$50 billion, with an estimated \$10 to \$20 billion in insured losses.<sup>8</sup> New York State Governor Andrew Cuomo stated that storm damage would cost New York State nearly \$42 billion, with the vast majority of damage centered on New York City and Long Island.<sup>9</sup>



Damage to Atlantic Beach as a result of Superstorm Sandy (source: VAB Village Administrator and Building Plans Examiner).

Much of the NYRCR Planning Area was inundated, including nearly the entire bayside of the community (north of Park and Beech Streets) and the western portion of the Village of Atlantic Beach.

In the Village of Atlantic Beach, key infrastructure facilities and the NYRCR Planning Area's key economic assets, 14 private beach clubs that line the oceanfront, were damaged. Damage to homes included heavy damage to 350 units. More than 174 homes suffered more than 50 percent damage. Flood damage affected 328 units; 33 residences had more than 4 feet of water.<sup>10</sup> Many club owners secured loans, made renovations, and were able to open in time for the 2013 summer season.



Damage to the Village of Atlantic Beach after Superstorm Sandy (source: VAB Village Administrator and Building Plans Examiner).

<sup>7</sup> State of New York. State of New York Action Plan for Community Development Block Grant Program Disaster Recovery. Prepared by the New York Homes and Community Renewal Office of Community Renewal. Federal Register Docket No. FR-5696-N-01. April 2013.

<sup>8</sup> EQECAT. Post-Landfall Loss Estimates for Superstorm Sandy. November 1, 2012. Available at <http://www.eqecat.com/catwatch/post-landfall-loss-estimates-superstorm-sandy-released-2012-11-01/>. Accessed October 2013.

<sup>9</sup> Kaplan, T. and R. Hernandez, "Cuomo Cites Broad Reach of Hurricane Sandy in Aid Appeal", New York Times (November 26, 2012). Available at <http://www.nytimes.com/2012/11/27/nyregion/governor-cuomo-says-hurricane-sandy-was-worse-than-katrina.html>. Accessed October 2013.

<sup>10</sup> U.S. Department of Housing and Urban Development, "Sandy Damage Estimates by Block Group" (n.d.). Available at [http://www.huduser.org/maps/map\\_sandy\\_blockgroup.html](http://www.huduser.org/maps/map_sandy_blockgroup.html). Accessed October 2013.



In East Atlantic Beach, 653 homes were damaged, 510 of which sustained more than 50 percent damage. A total of 633 units had flood damage, including 42 residences with more than 4 feet of water. The dune system protected East Atlantic Beach and bore the brunt of the storm's damage in some locations. The storm damaged roads, electrical systems, drainage systems, government facilities, bulkheads, and dunes. Many of these assets were already subject to repetitive damage and loss during normal storm events because of low elevations and inadequate mitigation and hardening. Power was not restored to the NYRCR Planning Area until weeks after the storm because of the assessment by Long Island Power Authority (LIPA), now Public Service Electric and Gas Company (PSEG), that Long Beach Barrier Island could not safely receive power pending major repairs.



Damage to Atlantic Beach as a result of Superstorm Sandy (source: VAB Village Administrator and Building Plans Examiner)

The Federal Emergency Management Agency (FEMA) deployed a Mitigation Assessment Team (MAT) to New Jersey and New York to investigate building performance during the storm. Based on the assessment, the MAT reached these conclusions:<sup>11</sup>

- **Buildings:** Buildings on strong foundations above the level of flooding that occurred in Superstorm Sandy performed well. Buildings below the flood level sustained damage as a result of inundation, hydrodynamic forces, waves, or floating debris loads. Many buildings affected by flooding had basements with finishes, contents, and mechanical, electrical, and plumbing systems that were damaged.
- **Dunes:** The presence of wide beaches and tall, wide dune fields reduced damage to buildings and infrastructure landward of the dunes; conversely, low and narrow beaches and dunes were completely eroded in many areas, and buildings and infrastructure landward of low and narrow dunes were subject to damage by waves and inundation.



House in Atlantic Beach Estates – did not receive help in time from the Long Beach Fire Department or the Atlantic Beach Rescue (source: A. Ponte)

<sup>11</sup> FEMA, Mitigation Assessment Team Report: Hurricane Sandy in New Jersey and New York (in press)

- **Erosion control structures:** The effectiveness of erosion control structures (e.g., bulkheads, seawalls, revetments) varied widely, depending on the height, age, and condition of the structures and on the beach condition seaward of the structures. Some buildings within 10 to 20 feet of erosion control structures parallel to the shore were overtopped by floodwaters and damaged by floodwater and/or erosion, even when the erosion control structures survived. A storm tide is the water height above the North American Vertical Datum of 1988.<sup>12</sup> The highest storm surge measured by a National Ocean Service tide gauge in New York was 12.65 feet above normal tide levels at Kings Point on the western end of Long Island Sound.

### 3 Summary of Relevant Existing Plans and Studies and Community Actions since Superstorm Sandy

This section summarizes the Planning Team’s review of plans and studies relevant to the recovery efforts in the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach since Superstorm Sandy.

#### 3.1 Review of Existing Plans and Studies

The Planning Team reviewed available local and regional planning documents for information relevant to the three communities. The documents included pre- and post-Sandy documents and information on local projects in the NYRCR Planning Area in various stages of planning and execution. Table 3 contains a list and summary of the reviewed documents.

**Table 3: Reviewed Plans and Studies Relevant to the Village of Atlantic Beach and East Atlantic Beach**

Reviewed Plan / Study	Date	Relevant Information
Town of Hempstead Building Zone Ordinance	1939, as amended	Provides construction standards and zoning.
Code of the Village of Atlantic Beach	1998	Establishes rules and regulations overseeing beaches, boardwalks, and recreation areas; building construction standards; coastal erosion areas; stormwater management; waterways; and zoning.

<sup>12</sup> National Hurricane Center, NHC AL182012, *Tropical Cyclone Report Hurricane Sandy 22-29 October 2012* (February 12, 2013). Available at [http://www.nhc.noaa.gov/data/tcr/AL182012\\_Sandy.pdf](http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf). Accessed October 2013.



Reviewed Plan / Study	Date	Relevant Information
Long Island South Shore Estuary Reserve: Comprehensive Management Plan	April 2001	The vision of the plan is to preserve, protect, and restore the ecosystem of the Long Island South Shore Estuary Reserve. Goals include reducing both nonpoint and point source pollution, improving the estuarine health of the bay, restoring and protecting coastal habitats, and increasing open space preservation.
Nassau County Hazard Mitigation Plan	2007	Provides historical data on hazard impacts to the communities; identifies long-term erosion projections and flood zones; identifies hazard mitigation opportunities through capital improvements.
Sustainable Strategies for Long Island 2035	2010	Provides a series of policies and strategies to help communities prepare for the changing economic, social, and environmental context. Recommendations include developing a climate change resilience plan that addresses sea level rise, coordinating emergency preparedness across jurisdictions, and revising building codes for East Atlantic Beach to promote flood protection and provide guidance on replacing structures lost as a result of coastal erosion.
Nassau County Master Plan, Draft	2010	Addresses economic development, land use, and infrastructure support. References to the Village of Atlantic Beach include the Water Reclamation District under Municipal Facilities and Capacity.

Two jurisdictions regulate land use within the NYRCR Planning Area: the Village of Atlantic Beach and the Town of Hempstead. The Village of Atlantic Beach regulates land use within its boundaries through the Zoning chapter in its village code. The Town of Hempstead regulates land use elsewhere in the planning area. Neither the Village nor the Town has comprehensive land use or economic development plans.

### 3.2 Community Actions since Superstorm Sandy

Since Superstorm Sandy, the communities have undertaken the following actions to help make the communities more resilient:

- Applied for a FEMA hazard mitigation grant for emergency power generation
- Repaired Putnam and Vernon chair houses and built new chair houses at the Plaza and Dutchess beaches in the Village of Atlantic Beach
- Repaired and rebuilt the Boardwalk and the Plaza ramp in the Village of Atlantic Beach
- Replaced/repaired damaged street lighting and missing street signs



- Replaced damaged sidewalks and repaired roadways within the Village of Atlantic Beach
- Replaced fencing at beach entrances and bulkheads
- Rebuilt beach walkways

## 4 Community Vision Statement

The three communities developed a Vision Statement using a consensus-based approach with the NYRCR Planning Committee. Key words were identified and presented to the public along with the Vision Statement at a Public Engagement Meeting on October 16, 2013 (see Figure 2). Attendees at the Public Engagement Meeting expressed strong support for this Vision Statement:

**Vision Statement  
for the Village of Atlantic Beach,  
Atlantic Beach Estates, and East Atlantic Beach**

We are committed to protecting our natural assets and beach community by strengthening our infrastructure and shoreline along the barrier island to reduce the likelihood of threats to the health and safety of our residents in the event of future storms.



Figure 2: Key words used in developing the Vision Statement



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## 5 Description of Assets and Risks

The assets identified to date and the preliminary risk assessment for the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach are described in this section.

### 5.1 Identification of Assets

Assets are places and things that occur naturally or are built where the community's economic, environmental, and social functions take place. The critical infrastructure required to support these functions is also defined as an asset. Damage to an asset during an emergency would cause harm to the community.

The NYRCR Planning Committee has not finalized the Community Asset Inventory. The inventory is anticipated to be finalized by the December 18, 2013 NYRCR Planning Committee meeting.

The NYRCR Planning Committee has completed a preliminary Community Asset Inventory based on NYRCR Planning Committee input and public feedback. The assets listed below fall under the following Recovery Support Functions: Community Planning and Capacity Building (CPCB), Economic Development (ED), Health and Social Services (HSS), Housing (H), Infrastructure (I), and Natural and Cultural Resources (NCR). See Figure 3 for a map of the assets.

- Atlantic Beach Senior Living Communities (HSS)
- Beach clubs fronting Atlantic Ocean (ED)
- Beach House of East Atlantic Beach (CPCB)
- Blue Point Restaurant and Pub at Beech Street and Troy Avenue (ED)
- Boardwalk (CPCB)
- Drainage outfalls (I)
- Electric substations (I)
- Historic structures (NCR)
- Jewish Center of Atlantic Beach (NCR)
- Nautilus Hotel at Ocean Boulevard and Albany Street (HSS)
- Police Booth on southwest side of Atlantic Beach Bridge (HSS)
- Post office of Atlantic Beach (HSS)
- Pump and lift stations (I)
- Rescue stations of Atlantic Beach (I)
- Rescue squad (I)
- Roads (I)
- Senior center (HSS)
- Sewer substations (I)
- Sewage plant (I)
- Silver County Park (NCR/ED)
- Stormwater management systems (I)
- Plaza shopping mall (ED)
- Tennis Center of Atlantic Beach (HSS)
- Town of Hempstead Cabanas (ED)
- Village Hall of Atlantic Beach (CPCB)
- Water reclamation plant and substations (I)
- Water treatment plant (I)
- Power supply infrastructure (I)



When the Community Asset Inventory has been finalized, more detailed information will be collected for each asset, including vulnerability to flood damage and surrounding features. The final Community Asset Inventory will be prioritized based on importance, probability of flood impact, and reconstruction time.

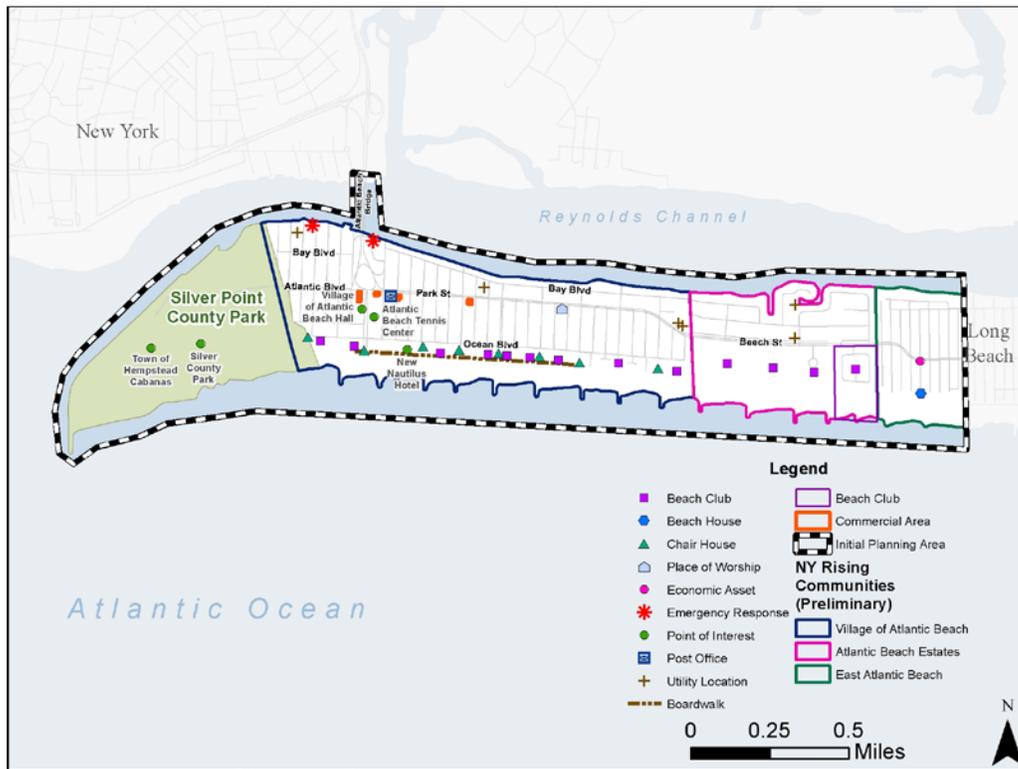


Figure 3: Community Asset Map

## 5.2 Identification and Understanding of Risks

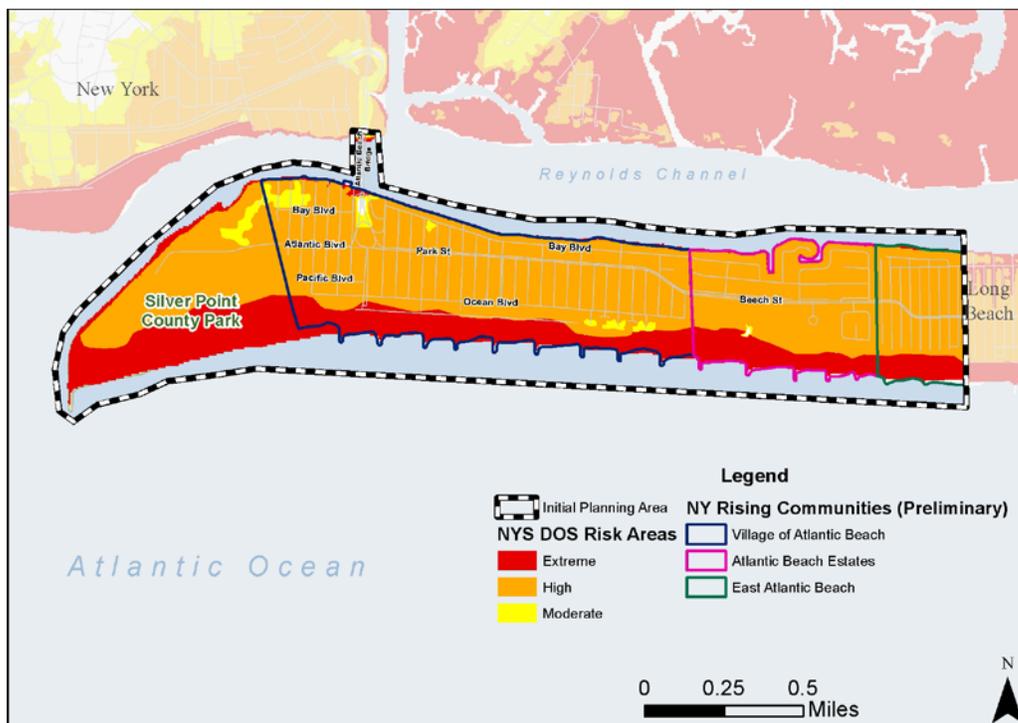
The risk assessment based on NYRCR Planning Committee and public input has not been completed. However, based on information from the State of New York, the three communities are almost entirely located in extreme or high-risk areas for flooding and other impacts from storms (see Figure 4). The New York State Department of State risk areas are defined in Table 4.



**Table 4: New York State Department of State Risk Areas**

Extreme Risk Area	High Risk Area	Moderate Risk Area
FEMA Coastal V Zones	FEMA 1% (100-year) annual flood risk (FEMA Zone V and Zone A)	FEMA 0.2% (500-year) annual flood risk
NWS advisory thresholds for shallow coastal flooding	Areas within 3 feet of elevation of NWS advisory thresholds for shallow coastal flooding	Areas within 3 feet of elevation of FEMA 1% annual flood risk (base flood elevations)
Areas within 3 feet of elevation of mean high water shoreline from the National Oceanic and Atmospheric Administration	—	Area bounded by SLOSH Category 3 hurricane inundation zone
Areas prone to erosion	—	—

Source: New York State Department of State  
 FEMA = Federal Emergency Management Agency  
 NWS = National Weather Service  
 SLOSH = Sea, Lake, and Overland Surge from Hurricanes



**Figure 4:** Risk Assessment Map for the Village of Atlantic Beach and East Atlantic Beach, NY

Based on NYRCR Planning Committee and public input, a finalized risk assessment will be used to prioritize community assets for reconstruction, emphasize mitigation efforts, and conduct a cost-benefit analysis for proposed projects.



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## **6 Public Involvement Process**

### **First NYRCR Planning Committee Meeting**

The first meeting of the NYRCR Planning Committee was held on September 18, 2013, at the Village Hall in the Village of Atlantic Beach. The meeting was open to the public, as were all subsequent Committee meetings. The meeting opened with introductions of the NYRCR Planning Committee members, State representatives, and the Planning Team. A presentation was given reviewing the NYRCR Plan process, key elements, and goals along with the methods for developing a community vision and conducting outreach. The NYRCR Planning Committee participated in an interactive exercise to begin developing a Vision Statement and identified community assets and vulnerabilities through a mapping exercise.

### **Second NYRCR Planning Committee Meeting**

The second NYRCR Planning Committee meeting was held on September 25, 2013, at the Village Hall in the Village of Atlantic Beach. At the meeting, the committee discussed key concepts of the NYRCR Plan, boundaries of the NYRCR Planning Area, and key community features. The committee reviewed draft Vision Statements and discussed the public outreach strategy and the format for the public meeting. The committee agreed on an interactive format in which small groups could identify community assets and develop a vision before the draft Conceptual Plan was published.

### **Third NYRCR Planning Committee Meeting**

The third NYRCR Planning Committee meeting was held on October 2, 2013, at the Sunny Atlantic Beach Club in the Village of Atlantic Beach. The meeting provided an opportunity for the committee to review and add to the previously identified assets, examine risk area maps, and discuss resiliency strategies. The Planning Team encouraged the committee to think broadly about community planning, economic vitality, and quality of life. The meeting closed with a review of public outreach methods for the Public Engagement Meeting.

### **Fourth NYRCR Planning Committee Meeting**

The fourth NYRCR Planning Committee meeting was held on October 9, 2013, at the Sunny Atlantic Beach Club in the Village of Atlantic Beach. The meeting opened with a review of the NYRCR Plan process and goals and a recap of accomplishments to date, including asset identification and map updates. The committee reviewed the timeline, noting the quick turnaround time for deliverables and reviews. The committee also discussed the strategies list developed by the Planning Team, prioritized infrastructure



projects, and reviewed roles and responsibilities for the forthcoming Public Engagement Meeting.

### **Fifth NYRCR Planning Committee Meeting**

The fifth NYRCR Planning Committee meeting was held on October 16, 2013, at the Sands Beach Club in Atlantic Beach, New York. The meeting opened with a review of the conceptual plan strategies and projects. The committee also discussed the strategies list developed by the Planning Team, prioritized infrastructure projects. The committee reviewed the activities of the first Public Meeting that followed this committee meeting.

### **First Public Engagement Meeting**

The Public Engagement Meeting was held on October 16, 2013, at the Sands Beach Club in the Village of Atlantic Beach and had approximately 100 attendees. The Public Engagement Meeting was designed to provide an overview of the NYRCR Program, while engaging community members in a



Public Engagement Meeting on October 16, 2013 (source: Sustainable Long Island)

discussion about community assets, vulnerabilities, and strategies for becoming more resilient. NYRCR Planning Committee Co-Chairs opened the meeting with welcoming remarks and an overview of the process to date. The State gave a short presentation on the NYRCR Program.

During an interactive workshop, the Planning Team facilitated small group discussions about planning for resiliency with the attendees.

The Planning Team and the NYRCR Planning Committee used the following methods to notify the public of the Public Engagement Meeting and inform the public about the NYRCR planning process:

- Information and flyers were distributed both manually and electronically to NYRCR Planning Committee members, who subsequently distributed flyers within their residential neighborhoods
- Meeting notices were posted as follows:
  - Website: <http://stormrecovery.ny.gov/nyrcr/contact/village-atlantic-beach-and-east-atlantic-beach>
  - *Nassau Herald* (local community newspaper)



- Posted at various locations accessible for public viewing
- Twitter: @NYStormRecovery
- Facebook: NYStormRecovery
- Fourth NYRCR Planning Committee Meeting

The fifth NYRCR Planning Committee meeting was held on October 16, 2013, at the Sands Beach Club, prior to the Public Engagement Meeting. The meeting opened with a review of the NYRCR Plan meeting schedule for completion of the Conceptual Plan and the review process. The committee reviewed the timeline, noting the quick turnaround time for deliverables and reviews. The committee also discussed the strategies list developed by the Planning Team and agreed to send prioritized infrastructure projects to the Planning Team.

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## **7 Identification of Needs and Opportunities**

This section describes the needs and resilience and revitalization opportunities that have been identified to date primarily from the review of relevant plans and studies, the NYRCR Planning Committee meetings in September and October 2013, and the Public Engagement Meeting on October 16, 2013. The needs and opportunities that have been identified to date on a non-prioritized basis are described in the following sections.

### **7.1 Community Planning and Capacity Building**

#### **Needs**

- Emergency preparedness, response plans, management, or response protocols need to be improved to enhance the NYRCR Planning Area’s resiliency against future disasters.
- The Village of Atlantic Beach governmental records are vulnerable to flood damage and require enhanced protection.
- The Village of Atlantic Beach has limited staff and planning capacity to implement plans. The unincorporated areas of the NYRCR Planning Area must rely on the Town of Hempstead for planning technical assistance and implementation.
- Coordination and communication between East Atlantic Beach and the Town of Hempstead were limited after the storm, and community members needed assistance that was requested and received assistance from the Village of Atlantic Beach, which already had severe capacity limitations.



## **Opportunities**

- Coordinate regional planning, emergency management, and zoning code updates between the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach.
- Designate a trained coordinator for emergencies to increase communication opportunities and serve as a liaison between the communities and surrounding municipalities.
- Identify funding and technical assistance opportunities, such as the Local Government Records Management Improvement Fund Shared Services grant program, to update and improve recordkeeping protection.
- Identify funding and technical assistance opportunities, such as the Local Government Efficiency grant program, that would facilitate additional shared service projects for provision of general government functions and utility services.
- Use the existing zoning and building codes in comprehensive planning strategies that have not been accepted. East Atlantic Beach has the potential to be included in broader planning efforts with the Village of Atlantic Beach.
- Coordinate local zoning code amendments with the Town of Hempstead and the Village of Atlantic Beach to promote regional planning approaches, including adopting best practices related to stormwater management, land use, and hazard mitigation.
- Protect key governmental facilities to maintain continuity of operations after major storms.

## **7.2 Economic Development**

### **Needs**

- The Village of Atlantic Beach and East Atlantic Beach do not have economic development plans.
- Private beach clubs are the primary economic asset and provide seasonal jobs, but they remain vulnerable to storm surge and natural hazards. Beach clubs are located in Zone VE on FEMA Flood Insurance Rate Maps, and current marine recreation zoning does not permit any other commercial use, expansion, or redevelopment.



- Beach club owners tend to resist the idea of new dune construction, fearing the impact of the barriers on viewsheds and beach enjoyment. Consequently, the clubs act as seawalls in many locations. For this reason, approximately four of the clubs sustained substantial damage caused by the ocean storm surge.



The Plaza, Village of Atlantic Beach

## Opportunities

- Encourage and help beach clubs and small businesses to prepare business continuity plans for power outages and other emergencies.
- Implement the Complete Streets Program to improve traffic circulation, traffic calming, bicycle routes, and parking, and to reduce vehicle-pedestrian conflicts.
- Explore green energy generation ideas where feasible.
- Study the potential effects of dune installation on the economic viability of the beach clubs.
- Improve the access and streetscapes of areas surrounding the beach clubs.
- Enhance gateways to the planning area.
- Consider mixed-use zoning and development to expand beach clubs to include diverse commercial opportunities and shift surface-area parking to parking garages.

## 7.3 Housing

### Needs

- FEMA insurance funding for devastated homes does not cover reconstruction costs.
- Numerous residential structures were substantially damaged.
- Numerous residential units with utilities in basements were damaged by flooding.
- The bayside surge in Atlantic Beach Estates caused significant flooding to residences.
- The local flood damage prevention ordinance requires only 2 feet of freeboard, which is insufficient to insulate most of the Village of Atlantic Beach from severe damage during future storm events.



## Opportunities

- Use housing assistance programs such as the Community Development Block Grant, and NY Program Rising Housing Recovery Program to provide assistance with home repair/rehabilitation, mitigation/elevation, and buyouts as they become available. Other programs include the New York Smart Home Repair and Reconstruction Program, New York Smart Home Resilience, Small Multi-Family Repair and Reconstruction, and the Small Multi-Family Mitigation/Large Multi-Family Mitigation programs. Identify or create opportunities to secure funding allocation for floodproofing residential structures.
- Implement stricter requirements than those of the New York State Building Code to ensure the resiliency of homes that are rebuilt or renovated.
- Support homeowners and beach club owners through funding and other resources to implement energy efficiency during reconstruction.

## 7.4 Health and Social Services

### Needs

- The only hospital on Long Beach Barrier Island is located in the adjoining City of Long Beach. It suffered heavy damage during Superstorm Sandy and remains closed. Obtaining health-related items such as pharmaceuticals was an issue after Superstorm Sandy.
- The Village Hall and Tennis Center currently function as the command center during emergencies. Not only are these facilities inadequate to ensure deliveries of critical services during emergencies, but the buildings themselves are vulnerable to storm surge, wave, and wind action. These facilities are not conducive to serving the needs of East Atlantic Beach, Atlantic Beach Estates, and the Water Club.
- Only one facility, a hotel/senior center located near the Plaza beachfront (the former Nautilus Hotel), had an evacuation plan that was implemented before Superstorm Sandy. The Rescue Building, located on the bayside under the Atlantic Beach Bridge, is vulnerable to storms.

### Opportunities

- Coordinate with Nassau County Office of Emergency Management (OEM) and Nassau County Health Department to address health-related issues during emergencies.
- Identify ways to re-open the hospital on Long Beach Barrier Island.



- Coordinate and implement evacuation and emergency preparedness plans for the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach with the Town of Hempstead, Nassau County, and the City of Long Beach.

## 7.5 Infrastructure

### Needs

- The stormwater infrastructure and conveyance system was not able to convey stormwater during flood events and needs to be improved.
- The bayside surge caused significant flooding throughout the affected area.
- Discontinuous dunes, including the East Atlantic Beach dunes, were breached and homes were damaged by Superstorm Sandy. The water flowing through the breaches moved at high velocities during the storm and caused severe damage.
- If dunes were built along the Atlantic Beach and East Atlantic beaches, private property and private beach access rights would need to be evaluated to avoid compromising private beach access. Beach club owners generally oppose the idea of building dunes because of the potential for obscured ocean views.<sup>13</sup>
- The three existing sewage pump stations in the NYRCR Planning Area are vulnerable to storm damage. The Scott Drive substation had minor flooding during Superstorm Sandy but remained operational.
- East Atlantic Beach, Atlantic Beach Estates, and the Water Club have no emergency/community/communication center that is geographically accessible in the event of disaster with similar effects as Sandy.
- A second large diesel generator at the sanitation plant needs to be upgraded for longer performance when emergency power is required and when existing generators must be shut down for maintenance.
- Tidal wave values need to be investigated for improved drainage.
- Village Hall, the Tennis Center, and the sanitation (water reclamation) plant and its three pump stations are key infrastructure.
- The emergency/rescue building needs a stronger structure to protect its generator and requires an alternative power source (solar panels with battery backup).
- Although Village Hall serves as the current emergency/rescue location during storms, it is vulnerable to storm and wind damage.

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<sup>13</sup> NYRCR Planning Committee comments.



- East Atlantic Beach streets are in need of repair; sink holes need to be filled and roads require paving.
- New water lines with return loops are needed.
- Sewer lines are in need of preventative maintenance, repair, or replacement. Tideflex valves are needed on bayside outflows throughout East Atlantic Beach.
- Electrical, cable, and phone service should be installed underground throughout East Atlantic Beach.
- New sidewalks are needed throughout East Atlantic Beach.
- Solar-powered LED street lamps should be installed on all streets throughout East Atlantic Beach.
- Portable emergency generators and flood lights are needed.
- A 6-foot concrete retaining wall should be erected running north to south along the Nevada Ave/Brookline Ave beach/park.
- Flood walls are needed at various locations throughout East Atlantic Beach. They should be purchased and storage and training should be provided.
- New streets signs are needed throughout East Atlantic Beach.

### **Opportunities**

- Identify improvements and alternatives to the existing stormwater drainage system, including bioswales and other low-impact development practices, to improve stormwater drainage and increase stormwater conveyance.
- Reduce impervious surfaces, particularly surface-area parking lots, to allow for increased drainage and green infrastructure practices.
- Consider a regional and Planning Area approach to bulkhead improvement for property owners that could mitigate the risk of damage from storm surge and flooding.
- Coordinate with the U.S. Army Corps of Engineers' (USACE's) Dune and Beach Replenishment Project to assess beach re-nourishment and planning for dune development.
- Develop plans for a floodwall under the Boardwalk as a method of flood protection.
- Consider maintenance that would be conducted by the Village of Atlantic Beach and would include inspections of storm drains, outfalls, and bulkheads to ensure functionality.



- Designate a centralized emergency/rescue building in the NYRCR Planning Area to coordinate supplies, and coordinate between the Planning Area, County and Town of Hempstead, Village of Atlantic Beach and County. The location of the facility must be carefully selected to allow access to supplies for safety and prevention of looting.
- Consider solar generators at the Tennis Center and Rescue Headquarters as an alternative power source for emergencies.
- Study improvements to the power grid, including smart grid infrastructure, for backup power and telecommunications systems in emergency/rescue buildings.
- Harden and convert electric and gas lines to marine-grade power lines to improve resiliency.

## 7.6 Natural and Cultural Resources

### Needs

- Beaches and boardwalks were badly damaged by Superstorm Sandy, exposing the NYRCR Planning Area to storm-related risk.
- The approximately 100-acre Silver Point County Park is owned the Nassau County Parks and Recreation Department. The park is leased by Surf Point Corporation and is operated as a private beach club. A portion of the park is set aside as a bird sanctuary for piping plovers. Coordination is needed between Nassau County and the Surf Point Corporation and the Village of Atlantic Beach to address dune restoration and mitigation.
- Assess the extent of damage from Superstorm Sandy to vegetation, trees, and water ecology.
- East Atlantic Beach dunes were breached at several points and damaged by the storm.
- The East Atlantic Beach Dunes, beaches, and parks/facilities need to be repaired, strengthened, and upgraded. Dune system walk-over/drive-over bridges need to be built, with the proviso that the Town of Hempstead Special Parks District and resident only status remain in full force.
- Trees and miscellaneous landscaping are needed at various locations throughout East Atlantic Beach.



Protected dunes in East Atlantic Beach

## Opportunities

- Consider dune planting and vegetation stabilization programs and improvements to Boardwalk facilities, including beautification and green infrastructure, for the aesthetic benefits and protection of the NYRCR Planning Area from storm damage.
- Incorporate the Silver Point County Park, its leasee, and its beach club into planning efforts for the Village of Atlantic Beach.
- Provide resources and connecting funding for testing water and soil quality and remediation efforts as necessary.
- Work with the USACE to harmonize planning efforts, particularly those related to beach nourishment, dune construction, and any necessary groin reconstruction or boardwalks.
- Promote green infrastructure, increasing the tree canopy, and providing recreational opportunities throughout the Village of Atlantic Beach and the beachfront areas during reconstruction.

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## 8 Key Strategies and Potential Actions to Implement Strategies

### 8.1 Community Planning and Capacity Building

*Strategy: Review/revise municipal procedures to improve emergency preparedness, management, or response protocols.*

- Assess Nassau County’s Intelligent Transportation System (ITS) and coordinate with municipalities to address key traffic locations to inform drivers of lane direction changes. For example, in the event of an evacuation, the reverse 911 call system sends alerts or vital information. Coordinate with adjacent municipalities and Nassau County (County) to identify and confirm the location of key regional assets.
- Conduct a feasibility study for acquiring Blue Point/American Water property for use as a community command center.
- Reverse 911 for East Atlantic Beach, Atlantic Beach Estates, and Water Club should be investigated.
- Coordinate with adjacent community emergency management officials and the County to identify and confirm the location of vital regional assets and vulnerable locations.



- Protect and fortify emergency medical services (EMS) rescue, fire, and police facilities.
- Protect key governmental facilities to maintain continuity of records and operations after major storms.
- Prepare a list of disaster recovery service vendors for the Planning Area and enter into Memorandums of Understanding.
- Explore the possibility of community-based, non-governmental entities receiving funding for approved projects

*Strategy: Improve links between members of the community and the physical environment of the community by identifying locations for urban gardens, plazas, squares, or courtyards.*

- Consider development of an urban plaza, park, or garden within the Planning Area that supports the economic vitality of the community.

## **8.2 Economic Development**

*Strategy: Improve the economic viability of beach clubs.*

- Improve access, parking lots, and streetscape appearance of the areas near the beach clubs.
- Assist beach clubs to improve infrastructure, and support owners' applications for funding assistance offered through loan or grant programs for solar thermal and photovoltaic systems.
- Encourage and help beach clubs and small businesses prepare business continuity plans for power outages and other emergencies.
- Study the effect of installing dunes on the economic viability of beach clubs.
- Determine whether elevation of beach club cabanas would be technically and economically feasible.

*Strategy: Improve streetscapes*

- Include pedestrian and bicycle lanes in street reconstruction including along the north side of Park Street.
- Enhance gateways.



### 8.3 Housing

*Strategy: Inform residents about emergency preparedness and emergency shelters. Ensure a unified chain of command to provide up-to-date information to residents.*

- Work with emergency providers, municipal officials, and others to identify/confirm emergency shelter locations and availability off the barrier island.
- Explore support for additional mitigation measures for housing.
- Draft an emergency preparedness guidebook, in coordination with the Town of Hempstead and the County, for distribution to all residents and post online.
- Post emergency shelter information on the municipal website and provide the information in a newsletter or through other typical outreach mediums. Request input.

*Strategy: Repurpose public buildings to create Emergency Meeting Facilities for use during and after major storms.*

- Relocate emergency generators to upper floors in key facilities to maintain power and functionality during hazard events. Add solar systems with backup batteries for power redundancy.

### 8.4 Health and Social Services

*Strategy: Provide information to residents about emergency preparedness and emergency shelter information. Ensure a unified chain of command to provide up-to-date information to residents.*

- Work with emergency providers, municipal officials, and others to identify/confirm emergency shelter locations and availability off the barrier island.
- Draft an emergency preparedness guidebook for distribution to all residents and post online.
- Post emergency shelter information on the municipal website and provide the information in a newsletter or through other typical outreach mediums. Request input.

*Strategy: Repurpose public buildings to create Emergency Meeting Facilities for use during and after major storms*

- Elevate emergency generators to upper floors in key facilities to maintain power and functionality during hazard events.



- Relocate basement mechanical rooms and bathrooms to the first floor and install backup generators and solar panels at the Tennis Center. Remove six tennis courts and install underground drainage structures to accommodate stormwater runoff. Design park/plaza space that includes active and passive recreational elements, including a playground, basketball courts, tables, benches, gazebo/space for entertainment, and gathering, landscaping, and walkways with activity stations.
- Renovate Village Hall as a congregation center with solar power backup, backup generators, and data backup and recovery to provide access to critical data and ensure data availability in the event of a disaster. Elevate or replace the Public Works garage, which is below street level to protect equipment from flooding.
- Conduct a feasibility study for acquiring the Blue Point/American Water property for use as a community command center.

## 8.5 Infrastructure

*Strategy: Identify and implement site-specific systemic remedies and improvements that can be implemented quickly.*

- Harden/fortify the Water Reclamation Plant, including installing redundant generators in the plant and each substation (total of four generators) and bulkhead doors in each substation (total of six doors, two for each substation).
- Improve the EMS rescue squad, fire, and police facilities, including installing or constructing solar panels; relocate the backup generator; and hard wire interoperable communications system in redundant locations.

*Strategy: Expand stormwater infrastructure through a system of conveyance and storage systems.*

- Provide improved drainage infrastructure along Park Street and Beech Street as a single project and conduct a Complete Streets project for additional curbing and sidewalks.
- Implement a storm drain cover project that would involve procuring storm drain covers to prevent debris from entering drains in the event of a storm.
- Conduct a drainage analysis in the Planning Area where curbing/curb and gutters are needed and assess stormwater requirements
- Investigate the possibility of using Tideflex valves throughout the Planning Area.



*Strategy: Improve traffic congestion, traffic circulation, traffic calming, bicycle routes, reduce vehicle-pedestrian conflicts, safety, and parking by implementing a Complete Streets Program.*

- Assess street traffic and safety issues, especially in peak conditions, and dangerous intersections or corridors and coordinate traffic analysis with East Atlantic Beach’s current study, which includes investigation of dangerous curves.
- Consider installing bulb-outs at intersections to shorten walking distance between curbs while also slowing vehicles approaching an intersection. Bulb-outs provide safe refuge for pedestrians and can include low-impact design to improve stormwater and coastal water quality.
- Assess streetscape and stormwater improvements along the north side of Park Avenue, including stormwater mitigation, a fence, a stormwater barrier, bioswales, and water retention areas.
- Assess bioswales and landscaping of large parking lots to include water retention areas and landscaped screening.
- Assess the infrastructure along Park Street and Beech Street as a whole, including the need for additional curbing.
- Assess existing sidewalks for improved safety and consider adding bicycle lanes where feasible.

*Strategy: Implement stormwater management best practices and prioritize areas that need immediate improvements.*

- Update zoning codes to reflect current best practices in stormwater management and hazard mitigation. Design standards for features such as surface parking lots may have both aesthetic and environmental benefits and may enhance property values and preserve community character. Updates can help ensure that the community character is maintained and that future development is responsible and sensitive to risk.
- Create bioswales in landscaped areas with infiltration/holding capacity potential.
- Review underground stormwater retention regulations and determine whether they can be increased to reduce surface water runoff and associated flooding with new development/redeveloped parcels (if feasible).
- Address Park Street and Beech Street corridors to address best management practices to include stormwater, curbing, and complete street improvements.



- Consider installing pervious pavement in future road paving projects, especially in parking lots.
- Investigate the feasibility of underground utilities in areas that are not at extreme risk of flooding.
- Assess the use of the Environmental Protection Agency’s national menu of stormwater best management practices (<http://1.usa.gov/1c0TVLr>). These practices aim to improve stormwater management while improving coastal water quality.

## 8.6 Natural and Cultural Resources

*Strategy: Investigate options for dune restoration and a perimeter system that do not affect or impact resident-only beach access and privately owned beach clubs. These options should include flexibility for beach clubs and explore multiple options for future uses.*

- Determine the cost-effectiveness of a perimeter system and its technical feasibility, and whether it would affect resident beach access or the economic viability of beach clubs. Consider the public safety aspect provided by dunes.
- Investigate dune stabilization through vegetation/dune planting options.
- Protect and enhance beaches and dunes.
- Assess trees and vegetation damaged by Superstorm Sandy and restore trees.
- Assess the feasibility of improvements to Silver Point Park, including dunes and bulkheads.
- Raise and improve dune walkovers to ensure dune stability and vegetation viability. Work with Nassau County to determine whether the natural areas at Silver Point Park could be enhanced to provide additional mitigation benefits.
- Consider whether pervious paving is an option to replacing existing pavement.

*Strategy: Gauge interest in adapting existing open spaces and parks as significant storm floodwater retention areas.*

- Work with Nassau County and its leasee to determine whether natural areas at Silver Point Park could be enhanced to provide additional mitigation benefits.

## 8.7 Socially Vulnerable Populations

*Strategy: Provide protection and services for vulnerable populations especially during emergencies.*



- Set up special-needs registration so vulnerable people can identify themselves and receive needed services during emergencies.

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## 9 Potential Key Projects Ready to Go

The NYRCR Planning Committee has not finalized the identification of the potential key projects. Finalization is anticipated by March 31, 2014.

The NYRCR Planning Committee has begun discussions and initial prioritization of projects that are ready to go (securing funding or will start soon), that are planned (initial scope/plan to pursue in the next 6 months), and that may be longer-term projects. The NYRCR Planning Committee will have additional discussions following the second Public Engagement Meeting.

Following a final determination of key projects, project descriptions will be developed and will include the following information:

- Project sponsor
- Project name and location
- Categorization according to the six Recovery Support Functions
- Brief project description
- Community benefits
- Sustainability factors detailed as part of a regional sustainability plan
- Economic impacts
- Environmental benefits
- Health and social benefits
- Support for project (high, medium, and minimal)
- Estimated project cost
- Potential sources of funding
- Initial feasibility assessment
- Status of implementation
- Implementation timeline: immediate (less than 2 years), intermediate (within 2 to 5 years), long-range (more than 5 years)
- Regional coordination
- Coordination with outside agencies
- Project impact
- Alternatives
- Context map

The potential key projects are described in Table 5.



**Table 5: Potential Non-Prioritized Key Projects**

Project Name	Reconstruction Category	Status	Description
Water Reclamation Improvements	 Infrastructure	Ready to go	The Greater Atlantic Beach Water Reclamation District would like to harden/fortify the water reclamation plant, as well as procure redundant generators for the plant and each substation (a total of 4 generators) and bulkhead doors for each substation.  Interconnectedness with other projects/systems: The Greater Atlantic Beach Water Reclamation District has applied for a FEMA Hazard Mitigation grant for Emergency Power Generation.
EMS rescue squad, Fire, and Police Improvements	 Infrastructure	Ready to go	EMS rescue squad, install hard-wired, redundant interoperable communications systems.  Provide improvements for the EMS rescue squad, fire, and police facilities, including solar panels, and relocation of the existing generator to the roof. Install hard-wired, redundant interoperable communications systems (not inclusive of radios and repeaters) at Village Hall or TBD location.  Interconnectedness with other projects/systems: The Atlantic Beach Fire District has applied for local legislative member item grants and a Port Security Grant to upgrade its communications capabilities specifically the purchase of additional radios and repeaters.
Command/Community Center	 Infrastructure	Requires additional study	Conduct a feasibility study of potential acquisition of Blue Point property and a parcel owned by American Water on Beech Street for use as a command/community center for East Atlantic Beach, Atlantic Beach Estates, and Water Club.
Expansion of Stormwater Infrastructure	 Infrastructure	Requires additional study	Conduct stormwater/drainage analysis in the Planning Area, where curbs and gutters are needed, including streetscape and stormwater improvements focusing on Park Street and Beech Street. Assess storm drain covers, stormwater mitigation, bioswales and water retention areas, and best management practices.  Interconnectedness with other projects/systems: Connected to enhancing streetscapes and promoting and installing rain gardens and bioretention basins.
Dune Restoration and Perimeter System	 Natural/Cultural Resources   Infrastructure	Requires additional study	Conduct feasibility study/coordinate dune construction and island protection efforts with the City of Long Beach, the Town of Hempstead, Nassau County, and Village of Atlantic Beach, while giving the highest level of attention to protecting property rights (including those of the residents access, and privately owned beach clubs) to maintain private beach access for residents of the Village of Atlantic Beach and East Atlantic Beach. Assess economic impact on privately owned beach clubs.
Repurposing and Renovation of Tennis Center as an Emergency Meeting Facility Center	 Infrastructure	Needs evaluation and architecture and engineering design	Assess existing building structure to repurpose the Tennis Center for multiple uses, including as a emergency meeting facility. Assess the potential for removing six tennis courts, installing underground drainage structures, and creating/designing a park/plaza space with active and passive recreational elements, including a playground, basketball courts, tables, benches, gazebo/space for entertainment and gathering, landscaping, and walkways with activity stations.



Project Name	Reconstruction Category	Status	Description
Streetscape Enhancements and Complete Streets Program	 Infrastructure	Needs evaluation and assessment	<p>The Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach would like to evaluate a Complete Streets policy/plan that incorporates enhancing streetscapes, promoting traffic safety, and installing drainage improvements. Assessment should focus on Park Street and Beech Street, Bay Blvd (East Atlantic Beach and Village of Atlantic Beach), and Ocean Blvd corridors.</p> <p>Interconnectedness with other projects/systems: Connected to proposed drainage improvements.</p>



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## 10 Regional Perspectives

With the exception of the Village of Atlantic Beach, the communities in the NYRCR Planning Area face a unique challenge with respect to plan implementation. East Atlantic Beach and Atlantic Beach Estates are not empowered units of local government and are unincorporated areas of the Town of Hempstead. They may affirm their capital needs and priorities, but project implementation is possible only with the active support of the Town of Hempstead. Given these constraints, coordination with the Town Supervisors will be required to ensure that the NYRCR Plan offers a realizable path to implementation for these two areas. An iterative engagement process with these stakeholders is underway and will ensure that the NYRCR Plan complements and builds on the goals and vision articulated in the NYRCR planning process.

Coordination should take place with a number of parties, including but not limited to:

- Town of Hempstead
- Lido Beach and Point Lookout
- Long Beach
- Long Island Power Authority (PSEG)
- Long Island Regional Economic Development Council
- New York Department of Environmental Conservation and New York Department of State
- USACE in Nassau County

The Planning Committee has discussed the need for regional coordination and collaboration addressing issues of emergency response and management, drainage infrastructure, and the provision of utility services. The potential projects discussed to date with a regional focus include the following:

- Coordinate with Nassau County to determine the feasibility of implementing improvements at Silver Point County Park, including dune creation and bulkheading and possible enhancements to natural areas that could provide additional mitigation.
- Coordinate drainage infrastructure improvements along Park Street and Beech Street with the City of Long Beach, the Town of Hempstead, and Nassau County.
- Coordinate emergency response and management protocols with Nassau County, including ITSs and other information dissemination systems.



- Ensure the resiliency of the Far Rockaway PSEG substation during a future storm. This substation has been temporarily hardened by trap bagging. PSEG has not provided information on the methods that were used for long-term hardening of the facility, but typical mitigation measures used for hardening substations include the installation of a mobile unit, a 69-kilovolt (kv) bus bypass, a 69kv GT#2 bypass and capacitor bank, 33kv bypasses, trap bags, flood sensors, and temporary generator connections.
- Install utilities associated with new construction underground.
- Coordinate dune construction and island protection efforts with the City of Long Beach and the Town of Hempstead, while giving the highest level of attention to protecting property rights, including those of the private beach clubs to ensure private beach access.
- Maintain and enhance the existing five intergovernmental agreements or Memorandums of Understanding that are in place with neighboring jurisdictions.
- Coordinate necessary zoning code amendments with the Town of Hempstead and the Village of Atlantic Beach to promote current best practices related to stormwater management, land use, and hazard mitigation.
- Work with PSEG to install smart meters on homes and businesses to better monitor energy usage and build toward a smart grid.
- Evaluate barrier-island-wide initiatives, including coordination with Long Beach in its Green Infrastructure Study.

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## 11 Process for Evaluating Potential Actions and Projects to Implement Strategies

The methods that will be used to implement the strategies are continuing to be developed. These methods will be finalized by March 31, 2014.

Methods of implementation will be gleaned from the visioning process, asset and risk inventory, needs and opportunities assessment, and metrics, such as cost and time frame. The NYRCR Planning Committee will prioritize the methods and identify projects that may include infrastructure tasks, political/policy-based opportunities, or regional coordination. Actions will be discussed in terms of the following:

- Reconstruction category



- Community benefits
- Project support
- Estimated project cost
- Funding
- Feasibility
- Implementation
- Project impact
- Alternatives
- Regional and outside agency coordination

The process will also include a cost-benefit analysis for recommended capital projects and a suitable equivalent analysis for non-capital projects.

The result will be a prioritized list of projects, investments, and initiatives, including detailed project descriptions, a list of potential funding sources, and rankings for implementation.

Implementation of the strategies will follow the three-step process shown in Figure 5.

### Strategy Implementation

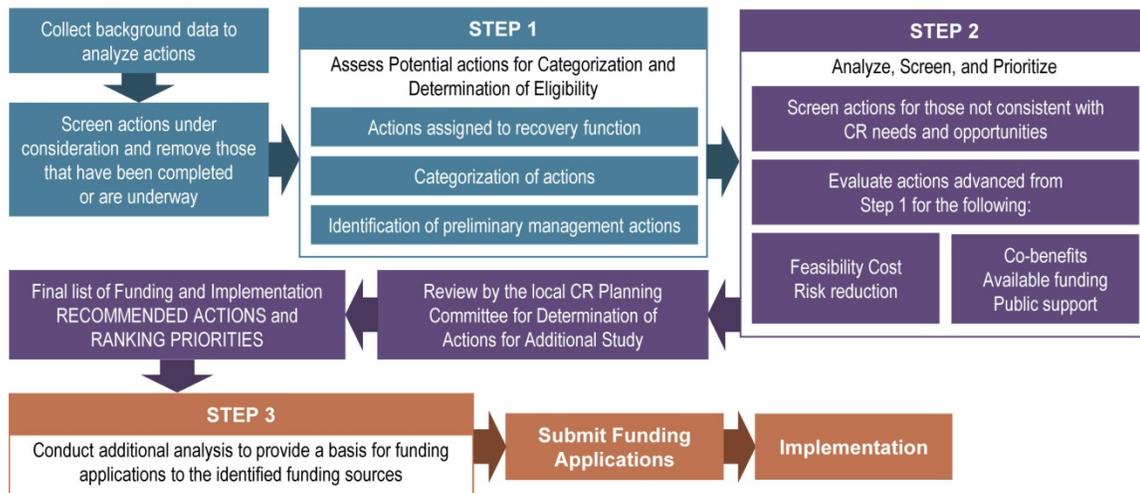


Figure 5: Strategy implementation



## 12 Implementation Structure

The NYRCR Plan will include an implementation schedule that will summarize the strategies and actions. The schedule will also list the target dates for implementation, responsible parties (individuals or organizations), and potential funding sources. Table 6 is a sample schedule.

**Table 6: Sample Implementation Schedule**

Reconstruction Category	Strategy	Action	Target Date	Responsible Parties	Potential Funding
Community Planning and Capacity Building					
Economic Development					
Housing					
Health and Social Services					
Infrastructure					
Natural and Cultural Resources					

## 13 Next Steps

The planning process will include three more Public Meetings and several more meetings of the NYRCR Planning Committee. The next Public Meeting for the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach is scheduled for November 13, 2013. On November 13, the public will review this Conceptual Plan, determine whether the key strategies and potential projects and actions are consistent with community sentiment, suggest additional projects and actions, and provide additional information about damages and vulnerabilities.

The planning process defined by the NYRCR Program consists of seven steps. At this point, Step 1: Organize for Action has been completed with the establishment of the NYRCR Planning Committee.

Step 2: Inventory Assets is well underway as illustrated in Figure 3.

Step 3: Assess Risk will occur as geographic information system (GIS) data about the exact location of assets relative to the shoreline, presence of shore defenses, and of protective vegetation is further developed to assign a hazard, exposure, and vulnerability score and calculate a risk score.



**Step 4: Determine Needs and Opportunities** is well underway as illustrated in Section 7 of this document.

**Step 5: Engage in Regional Planning Process** to examine challenges that cut across political jurisdictions and must be considered on a regional basis began with the examination of existing planning documents and will continue over the next several months.

**Step 6: Develop Strategies for Investment and Action** began with the work of the NYRCR Planning Committee during September and October 2013 and will continue as the plan is developed. Section 8 of this document summarizes the key strategies and suggested projects and actions that may be effective in realizing the strategies. The list of alternative projects and actions will expand as the process continues and project and actions that are most appropriate for increasing resiliency in the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach will be identified through quantitative and qualitative analyses.

**Step 7: Complete the NYRCR Plan** will be accomplished by March 31, 2014. The NYRCR Plan will propose projects and actions that the communities of the Village of Atlantic Beach, Atlantic Beach Estates, and East Atlantic Beach have determined will most effectively enhance resilience.

