Borough of Seaside Park, New Jersey
The Family Resort

Strategic Recovery Planning Report

Adopted February 10, 2015

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1. Executive Summary

Superstorm Sandy was one of the largest storms to ever hit the northeastern United States. Causing an estimated $70 billion in damage, Sandy was the most destructive hurricane of the 2012 Atlantic hurricane season and the second-costliest hurricane in U.S. history. In New Jersey, high winds and precipitation, as well as overflowing ocean, bays and rivers, caused direct damage to homes, businesses and town facilities, including fallen trees, blown off shingles, and flooded critical infrastructure. Tidal surges caused flooding and excessive damage to coastal protective barriers including dunes, bulk heads, and jetties.

The Department of Community Affairs initially allocated $5 million in Community Development Block Grant- Disaster Recovery (CDBG-DR) funds towards the Post Sandy Planning Assistance Grant Program (PSPAG). The goal of the PSPAG is to support municipalities and counties affected by Superstorm Sandy to develop long range plans for community redevelopment and hazard mitigation. The PSPAG program offers grants to municipalities and counties to hire American Institute of Certified Planners/New Jersey Board of Professional Planners (AICP/PP) licensed planners to address the issues caused by the storm, draft plans to rebuild a more sustainable and resilient community that can withstand damage from future storms, and encourage sustainable economic growth. On October 28, 2013, Housing and Urban Development (HUD) announced a second allocation of CDGB-DR funds to Sandy-impacted states. As a result, New Jersey published a Substantial Amendment to its Action Plan and allocated an additional $10 million to the PSPAG and other planning-related programs.

On October 17, 2014, HUD announced a third allocation of $2,504,017,000 of funding for Sandy-related recovery, including $930,000,000 for the new HUD-sponsored Rebuild by Design Competition, which provides a new platform for communities to compete for disaster recovery funding. New Jersey will receive $501,909,000 in total from this allocation, of which $380,000,000 will be reserved for Rebuild by Design activities.

In order for the Borough of Seaside Park to be eligible for grant activities under the PSPAG program, it must complete a comprehensive Strategic Recovery Planning Report (“SRPR” or “Report”). This SRPR has been prepared in accordance with all

applicable requirements of the PSPAG Program. This Report evaluates the impacts of Superstorm Sandy on the community's housing, infrastructure and economic growth and sets forth the goals, strategies, and actions that are urgently needed for the public safety of Seaside Park's citizens and the economic recovery of the Borough. Once the Strategic Recovery Planning Report is completed, the Borough of Seaside Park will be eligible for the following grants under the PSPAG program: re-examination reports for master plans or resiliency plans, master plan elements, community development and neighborhood plans, design standards, capital improvement plans, suburban environmental design, development of codes or ordinances, and other projects that serve the purpose of the grant program.

The Borough of Seaside Park has made efforts to improve its hazard mitigation and resiliency. The recommendations set forth in this Report, along with further funding, will allow the Borough to continue with its efforts. These recommendations focus on improving the resiliency of infrastructure, updating Master Plan elements to improve consistency with hazard mitigation initiatives, economic development, housing, communication and education, capital improvement, and Community Rating System compliance. The goal of these recommendations is to prevent the loss of life and property caused by future storm events.

2. Introduction

2.1 Purpose of Report

Due to the damage caused by Superstorm Sandy, many New Jersey municipalities and counties face a myriad of recovery challenges. Among them is the need for planning support to develop community recovery plans that strategically address the issues that now confront them.

This Strategic Recovery Planning Report (SRPR) will serve as a blueprint to guide the recovery of Seaside Park Borough from the effects of Superstorm Sandy and to reduce vulnerabilities to future storms. Accordingly, the Report:

- Evaluates the impacts on affected community features in Seaside Park and address the conditions created or exacerbated by the storm;

- Articulates the planning goals, strategies, and priority projects and actions that are most urgently needed to improve public safety, increase resistance to damage from future storms, and stimulate economic recovery; and

- Contains detailed descriptions of each proposed action and project; a statement of need that demonstrates how each action or project relates to the impacts of Superstorm Sandy; why the action or project is important to the economic and environmental health of the community; and the major tasks associated with each action or project.

Borough input was consulted during the preparation of this SRPR. CME Associates worked closely with the Borough Administrator, the Planning Board Master Plan Subcommittee and the Planning Board in order to develop relevant and effective recommendations for the Borough. In accordance with the Municipal Land Use Law, the SRPR was publically advertised in local newspapers. The public was given an opportunity to provide input during the Planning Board Meeting prior to the adoption of this Report.

2.2 Seaside Park Borough Profile

Seaside Park Borough is located on the Barnegat Peninsula in northeastern Ocean County, lying between the Barnegat Bay to the west, and the Atlantic Ocean to the east. To the north is the Borough of Seaside Heights, and to the south is a portion of the Township of Berkeley known as South Seaside Park. In addition, Island Beach State Park is located south of South Seaside Park. According to NJDEP's Geoweb mapping tool, the Borough has a total administrative area of 1.08 square miles (including both land and water) and a population of 1,579 persons as of the 2010 U.S. Census (or 1,432 according to American Community Survey Data from 2012), which is a 30% drop from 2,263 persons in the year 2000. The median age of the population in 2013 was 63 years old, and the income per capita was $43,622, which is higher than the rate for the County and the State. Median household income was estimated at $54.583, which is below the State and County medians.

Seaside Park's economy is largely driven by summer beach-goers and visitors to the Borough's Boardwalk, which is currently in severe disrepair due to both Hurricane Sandy and a fire that occurred on the Boardwalk in 2013. The summer economy is so central to the Borough's identity that it identifies itself as "The Family Resort". As a beach community, the Borough's summer population greatly exceeds its year-round population. The Borough's Water Distribution and Sanitary Sewer Improvements report in 2006 estimated that summer population exceeds 20,000 persons. According to American Community Survey data for 2013, the Borough contains 2,615 housing units, of which only 504 are reported as owner-occupied year-round, 207 are renter occupied, and 1,634 are reported as seasonal/recreational/occasional use homes. Additionally, the 2013 American Community Survey estimates that there are only 40 children enrolled in K-12 education.

The Borough straddles the border of two watersheds; the Barnegat Bay Central & Tributaries watershed, and the Atlantic Coast (Manasquan to Barnegat). It has no streams passing through it. Some of the streams that intersect the Barnegat Bay Central and Tributaries watershed include Potter Creek, Maple Creek, Clamming Creek, Cedar Creek, and numerous nameless tributaries.

As a barrier island, the Borough is vulnerable to flooding both from the Atlantic Ocean and from Barnegat Bay. Flooding from the Ocean is less common and far less severe than bayside flooding, which has become more common in recent years. According to the Getting to Resiliency Report prepared in partnership between the Jacques Cousteau National Estuarine Research Reserve and Seaside Park, when water levels in the Bay are high, Bay water seeps up from the ground in areas that are "hydrostatically isolated" from the Bay. As will be discussed later in this Report, storm surge from Superstorm Sandy inundated properties closest to the Bay, while properties closest to the Borough's Atlantic side were not as severely affected.

According to the Borough's 2008 Master Plan Land Use Element, 1.76 acres of the Borough's total 435.27 land acres are vacant and developable. Forty-three percent of the Borough's land area contains residential development (predominantly one- and two-family units). More recent data shows that there are 7.7 acres of vacant parcels as of July 2013, and that 194.1 acres (or 44.6%) of land area consist of one- to four-family residential parcels. It should be noted that there are 51 land acres located in parcels that are unclassified as of the most recent MOD IV parcel data, many of which appear to be located in heavily residential areas. Rights-of-way comprise approximately 36% of land area, and the beach and boardwalk comprise 14%. The remainder of the land area contains a range of multi-family, commercial, institutional, and other urban uses. Generally, the Borough has a typical beach-town form, consisting of mostly 1- to 4-family detached-houses on small lots distributed compactly in a grid layout. Commercial uses general line State Route 35, which bisects the Borough, and Ocean Avenue, which is the easternmost thoroughfare providing access to the beach and Boardwalk. Additional commercial uses, mostly in the form of rides and games, are distributed throughout the boardwalk.

The beach on the Borough's ocean-fronting side spans 1.6 miles, from Fourteenth Avenue to Stockton Avenue. Residents and visitors also make use of the beaches along Barnegat Bay, but the according to the 2008 Master Plan, the Borough is interested in reducing or taming activity on the Bay due to issues relating to poor access. The Borough operates Seaside Park Marina between April 1st and October

31st annually. As of the 2008 Master Plan, the Marina held 188 slips, including dockage for boats up to 50 feet in length, and supplies amenities such as electricity, running water, bathrooms, and motor-vehicle parking.

The Borough is not served by State operated bus or rail services. The nearest NJ Transit bus stations are located in Toms River and Point Pleasant. The nearest NJ Transit rail station is located in Bay Head, 11.4 miles north. As of the writing of the Borough's 2008 Master Plan, NJ Transit provided limited seasonal bus service to the area.

3. Evaluation of Superstorm Sandy's Impact

This Report section discusses the impact of Superstorm Sandy on the Borough's infrastructure, private property, economy and community.

3.1 Damage to Infrastructure

Of every state in the region, New Jersey suffered the most in terms of power outages from Superstorm Sandy. New Jersey had the largest number of customers without power at the peak, 2.6 million. Power outages were caused by damaged substations and power plants as well as fallen utility poles. In Seaside Park, gas service was not reactivated until mid-December of 2012. Efforts to re-stabilize electricity service to Seaside Park began on November 26, 2012 and some homes remained without service until spring of 2013. According to the JC NERR Getting to Resilience Report, damage to sewer and water systems also reduced their capacities by 50%.

Route 35, which bisects the Borough, was significantly damaged by Superstorm Sandy. The State Department of Transportation has undertaken an improvement project to make the highway more resilient. In July of 2013, NJDOT announced that it would begin repairs to Route 35, to address damage that included, "roadway breaches, sink holes, and voids below the roadway foundation, and severe damage to the drainage system such as broken and collapsed pipes and destroyed outfalls." Plans included full reconstruction of the roadway pavement and replacement and installment of drainage infrastructure. Inlet grates will trap debris, and subsurface water quality manufactured treatment devices will purify storm-water prior to discharge into the Bay. The electrical and control equipment for the pump stations will be built on platforms near the pumps. It is being designed to handle 25-year storms.

The storm dispersed significant debris across the Borough, some of which compromised the Borough's stormwater drainage infrastructure. In November, the Borough recruited an outside firm to begin debris removal, and set guidelines for residents to set aside debris on their property for removal.

3.2 Property Damage

The Borough of Seaside Park experienced a severe loss of dunes and major beach erosion during Superstorm Sandy. According to FEMA data on insurance payouts, 440 renter applicants and 620 homeowner applicants in the Borough were awarded totals of $2,373,290 and $4,181,988, respectively, in insurance payouts. FEMA estimated the total assessed damage to properties reported by homeowners in Seaside Park at $5,612,918, with the average inspected damage estimated at $8,729 per property.

In addition to money awarded from FEMA, Seaside Park residents and homeowners were also awarded $2,080,000 through the State's Homeowner Resettlement Program, $4,671,403 through the States Reconstruction, Rehabilitation, Elevation, and Mitigation Program (RREM), and Small Rental Properties / Landlord Rental Repair Program ($870,000). Businesses were awarded $250,000 in Small Business Grants.

According to the Seaside Park Construction Office, 55 properties have been demolished since Sandy, with 30 of those demolitions occurring in 2013. All of the properties were residential, with one being a multi-family use according to State MOD IV data. The costs of demolitions reported up to mid-October 2014 totaled $476,392.00. A map of the demolished properties can be found in Appendix B.

Construction Activity Trends

Building permit data from the New Jersey Department of Community Affairs shows that in 2012 and 2013 the Borough approved 4 building permits in each year for new residential construction. As of June 2014 the Borough approved 7 building permits for new residential construction in 2014. The total cost of approved new residential construction in 2013 was estimated at $1,688,151, almost half the cost for 2012, while the cost for approved residential additions and alterations in 2013 was estimated at $9,435,373.00 or nearly four times that for 2012. As of June 2014, the year-to-date costs of new residential construction and residential additions/alterations are $1,454,308 and $2,135,864, respectively. New commercial development in the first half of 2014 cost a total of $746,815, which according to the data was mostly in

the form of utilities and similar construction. Non-residential additions and alterations totaled at $1,287,511, which is higher than costs for the same over the previous two years. While this cost data is very limited in detail, it can be inferred that the community is in the process of replacing houses that were rendered uninhabitable as a result of the storm, and that public and private property owners have been investing in improvements to their properties, potentially with hazard mitigation in mind.

3.3 Economic Impact

The Borough's Boardwalk sustained significant damage from the storm, and the local and regional tourism industry has been adversely impacted, which has created a more challenging business environment for certain businesses. The images below show the Boardwalk before and immediately after the Storm. The pier was clearly torn by the storm, and both rides and buildings were severely damaged or totally destroyed. Funtown Pier Associates, the owner of the Boardwalk, received approval in 2014 to reconstruct the Boardwalk.

Due in great part to damage incurred on the Borough from Superstorm Sandy, Seaside Park lost approximately $31,312,342 in taxable property value between the years of 2012 and 2013, which constitutes 2.69% of taxable property value in 2012. As a result, the Borough received $175,434 less in municipal purpose tax levies in 2013 than it had in the previous year.

The number of merchant licenses active in the Borough declined from 78 licenses in 2011 to 44 in 2014. License issues declined by 17 between 2012 and 2013, to only 61 licenses issued, and declined by an additional 17 in 2014 according to records updated as recently as October 2014. Additionally, while there were twenty-nine (29) businesses licensed on the Boardwalk in 2012, and twenty-one (21) in 2013, there was only one (1) such license in 2014.

Before

After

In 2013, Seaside Park saw revenues of $1,439,180.90 from beach badge sales, which exceeded the Borough's expectation of $1,223,000.00. It also saw $346,539.86 in parking fees, which includes fees paid by visitors and by mobile vendors. The total cost of maintaining the beach and boardwalk in 2013 came out to $487,872.54, which is less than the beach related expenses in 2012 (estimated at $515,090.12). For 2014, the Borough anticipates $1,250,000.00 in beach revenues, $250,000.00 in parking meter revenues, and $536,150.00 in beach and boardwalk expenses. The 2014 anticipated parking revenue is about $90,000.00 less than what had been anticipated for 2013. Anticipated expenses are similar to those anticipated for 2013, when the Borough came out under budget for much of its beach maintenance expenses. Seaside Park realized $1,623,110.05 in beach badge revenues in 2012, and $453,941.31 in parking meter revenues. Revenues from tourism appear to be continually declining at a rate of hundreds of thousands of

dollars, while beach related expenses have only declined by approximately thirty thousand dollars.

3.4 Community Impact

The U.S. Department of Housing and Urban Development (HUD) requests that jurisdictions across the nation conduct a bi-annual, statistically reliable and unduplicated count of the homeless over the course of one day in the last ten (10) days in January. The jurisdictions in NJ conduct an annual count of the homeless on a voluntary basis and report findings in the *Point in Time Count*.

In January of 2012, before Superstorm Sandy hit, the *Point in Time Count* reported that 649 men, women, and children in Ocean County were homeless. The largest contributing factor to homelessness in 2012 was alcohol or drug abuse problems, which affected 58.3 percent of the people surveyed with mental illness at a close second with 47.2 percent of the people surveyed.

The 2013 Point in Time count occurred in late January 2013, only three months after the storm, and reported 682 homeless persons in Ocean County. Of those homeless persons reported, the plurality of respondents (or 28.4%) reported being homeless for between 3 months and 1 day and 6 months. Almost half (327) of the respondents reported living in a motel or hotel at the time of the count. Furthermore, and most importantly, “natural disaster” was reported as the largest contributing factor to homelessness, at 38.7% of all respondents.

In 2014, homeless populations in Ocean County declined to 627 persons. The most reported primary cause of homelessness, at 16.3%, was being asked to leave a shared residence. Natural disaster was only reported by 14 participants, or 2.23%, as being the primary cause of their homelessness.

These counts suggest that the storm was a significant contributor to homelessness in Ocean County during the initial months of 2013. It appears, from the data, that homelessness due to natural disaster in Ocean County was far less significant in 2014 than in 2013. It should also be noted, however, that data was reported

differently in each of the years. While in 2013 it appears that respondents could provide more than one cause of their homeless status, respondents in 2014 only provided a single cause. As a result, data in either of these years could be skewed. However, it can be still be inferred from the data that homelessness due to Sandy in Ocean County was largely resolved by the beginning of 2014.

3.5. Natural Resource Impact

Seaside Park reported that Sandy reduced the width of its dune system by approximately 40%. Dunes were critical to limiting damage to property in the Borough. In the immediate aftermath of Sandy, Seaside Park Department of Public Works carried out emergency reconstruction of beach entrance dunes and other compromised areas using front-end loaders. DPW also took on a major dune grass planting operation, resulting in the planting of over 300,000 American Beach Grass plants, and also replaced several miles of snow fence. In November of 2013, Seaside Park revived its volunteer Dune Grass Planting program to replenish vegetation along its dunes. DPW continued the tradition in November 2014.

The Army Corps of Engineers is carrying out beach repair and restoration which will mitigate the impacts of future storms. The project provides coastal storm risk reduction to highly populated communities and infrastructure located along the shoreline. Protection is provided through the construction of 25-foot high dunes and extension of the beach by about 200 feet. The enlarged beaches and dunes will help to prevent the type of dune breaches that occurred during Superstorm Sandy. It is estimated that the Beach Replenishment project will be completed in 2015.

4. Vulnerability Assessment

4.1 Vulnerability Analysis

By overlaying social and economic data on the same map with sea level rise, a community can perceive the impending impact that sea level rise can have on vulnerable people and businesses. Many parts of New Jersey can be found in hazard-prone areas known as 'vulnerable communities.' Based on the New Jersey Flood Mapper diagrams that can be found online and the CRSSA Resiliency maps, Seaside Park is within this vulnerable category as it is bounded on its east and west sides by the Atlantic Ocean and Barnegat Bay.

The Borough is most at risk of inundation from sea level rise in the areas lying between Route 35 and Barnegat Bay. In the event of 1 foot of sea level rise, there is risk of street level inundation and inundation of a few individual properties along Lake and Bayview Avenues. Rise of two feet results in inundation of many properties as far inland as Route 35, and sea level rise of 3 feet results in moderate inundation of nearly every property west of Route 35 and sections of Route 35 south of J Street. In a severe flooding scenario, evacuation via Route 35 would be impeded due to its location within the impact zone.

Additionally, the former Seaside Park Elementary School building, which houses certain municipal functions, is within the 3-foot sea level rise impact area. Community facilities further east, including the Borough's police and fire stations, would be outside of the area of inundation. The impact of sea level rise on the beach would be limited.

Even the relatively low end scenario of one foot of sea level rise will require adaptation as numerous streets and low lying bayside properties will see fairly regular tidal inundation. Jacques Cousteau National Estuarine Research Reserve's (JCNRR) best estimate is that the arrival of one foot of sea level rise will happen before 2050. As sea level rise is expected to accelerate this century, three feet of sea level rise is likely before 2100 (see table below).

Total sea level rise projections for New Jersey.			
	Total cm	Total inches	Total feet
2050 best	**40**	**16**	**1.3**
2050 low	23	9	0.7
2050 high	60	24	2.0
2100 best	**96**	**38**	**3.1**
2100 low	50	20	1.6
2100 high	147	58	4.8
All values with respect to a year 2000 baseline.			

NJ sea level rise projection ranges and best estimates. Miller AK, Kopp RE, Horton BP, Browning JV and Kemp AC. 2013. A geological perspective on sea-level rise and its impacts along the U.S. mid-Atlantic coast. Earth's Future 1(1):3-18.

Two feet of sea level rise sees regular tidal flooding slowly impacting more and more of the Borough. Three feet of sea level rise will result in regular tidal inundation of almost all properties west of Route 35. A three-foot rise will also begin to impact the evacuation route of Route 35. According to the Ocean County Hazard Mitigation Plan (discussed below), 9% of the community may be permanently inundated under a 1-foot sea level rise scenario, and 39% of the community may be permanently inundated under a 3-foot sea level rise scenario. One critical facility (the former Seaside Park Elementary School Building) would be inundated under the 3-foot scenario. Though the Police and Fire stations are outside of projected sea-level rise range, they are within JC NERR's "Low Confidence" impact area, meaning there is low confidence in the mapping model's accuracy in predicting the extent of inundation from 3-foot sea level rise in this area. Another way to understand this is that if the flooding model was run ten times, the results in Low-Confidence areas would be the same fewer than eight times, while the results in High-Confidence areas would be the same at least eight times.

One-, Two-, and Three- foot SLR Maps are included within Appendix D of this Report.

Ocean County Hazard Mitigation Plan

In 2014, Ocean County adopted a Hazard Mitigation Plan ("HMP") that defines and details the hazards to which its constituent municipalities are vulnerable. The hazards it explores include but are not limited to storm and flood related hazards, wildfire hazards, seismic hazards, and defense related hazards. Some of relevant vulnerabilities affecting Seaside Park include the following:

- **Erosion Susceptibility:**
  Twenty-eight parcels in Seaside Park are identified as being within 200 feet of erodible shoreline and beaches – the improvements on these parcels have a combined replacement value of $2,212,400.
- **Flood Risk:**
  According to the HMP, Seaside Park experienced five flood events between the years 1996 and 1999. Since the year 2000, it has experienced five additional flood events. The Borough has 1,488 NFIP policies currently in force, with 820 closed paid losses totaling $33,293,617, and 120 repetitive loss events paying a total of $4,196,394. There are 52 repetitive loss properties, all of which are residential, and 7 of which are classified as "Severe Repetitive Loss Properties".
- **Special Flood Hazard Areas:**
  The Borough has 1,669 parcels located in Special Flood Hazard Areas (areas in which there is a 1% chance of flood per annum), representing 67.57% of all parcels in the Borough. The total replacement value of all improvements in the Special Flood Hazard Areas is estimated at $246,621,300. There are 7 critical facilities identified in these areas.
- **Vulnerabilities Compared to County:**
  The plan indicates that Seaside Park has above average vulnerability, relative to the County as a whole, in the areas of flood and hurricane hazard, utility interruption, climate change, coastal erosion, nuclear incidents, and tornado / general wind storms.

Social and Economic Vulnerability

JC-NERR's Floodmapper tool includes Social and Economic Vulnerability layers that classify census block groups as having low, medium, or high social or economic vulnerability. Social vulnerability is measured by the number of persons falling within vulnerable demographics (i.e. elderly, in poverty), while economic vulnerability is measured based on the number of businesses, number of employees and aggregate wages of residents in the block group. Seaside Park is found to have a medium level of social vulnerability, but low economic vulnerability. Thirty-one percent of the Borough's residents are ages 65 and older, and 20.7% of residents live in poverty. Meanwhile, according to 2011 Longitudinal Employer-Household Dynamics data from 2011 provided by the census, there are only 115 persons employed in the Borough (of which only 4 also reside in the Borough). There is no data available through this source for more recent years. According to municipal level employment reports provided by the NJ Department of Labor and Workforce Development, the aggregate of wages earned by Borough residents in 2013 was $13,028,228.

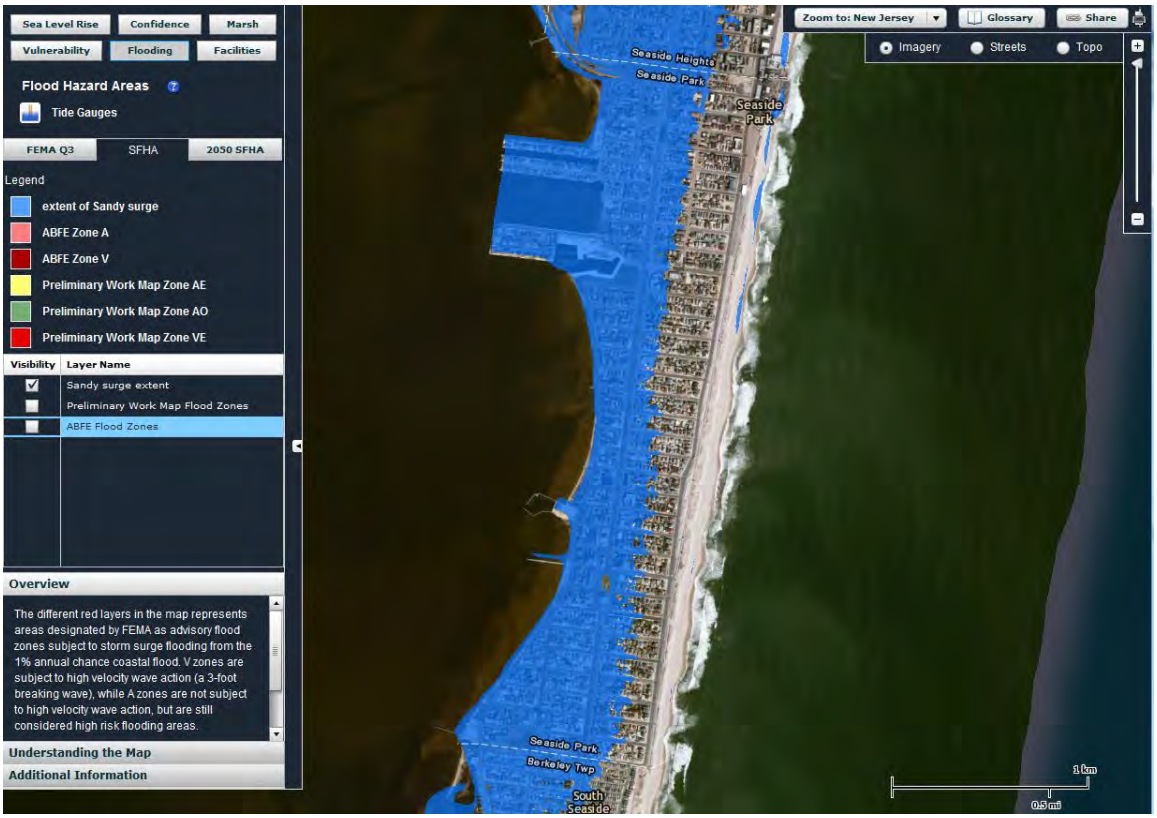
4.2 Adapting for Flood and Sea Level Rise

In order to adapt to potential sea level rise, the Borough and residents may utilize the following strategies:

- Promote shore protection techniques and open space preservation that allows the beach to attenuate wave action as sea level rises.
- Identify alternative evacuation options and realistic improvements to Route 35 to maintain or enhance its strength as the primary evacuation route.
- Elevate homes, and improve drainage and resilience of major roads.
- Promote elevation, wet flood-proofing, dry flood-proofing and other storm protection measures for businesses, as appropriate.
- Limit development in the most flood prone areas.
- Retreat-The Borough or State may buy out homeowners, without the use of eminent domain, in particularly vulnerable locations to turn the areas into parks or rehabilitated ecosystems.

4.3 Vulnerabilities Exacerbated or Highlighted by the Storm

The dune system along the Borough's Atlantic beaches was effective at limiting damage to properties on the Borough's East side. Of the 54 properties demolished as a result of Superstorm Sandy, only eleven (10) were located east of Route 35. Flooding from the Bay was much more devastating. The screenshot, below, from the New Jersey Flood Mapper tool illustrates the extent of Sandy Storm surge in Seaside Park. Properties closest to the Atlantic were minimally affected by storm surge, while nearly every property east of Route 35 was within the surge area. However, the dune system was significantly disturbed and compromised by the storm, resulting in conditions that, if not addressed, could increase the vulnerability of Atlantic-side properties.



The storm also revealed the inadequacy of the utility systems serving the Borough with regards to their abilities to endure major weather events. As mentioned elsewhere in the Report, residents were without gas or power for nearly two months after the storm passed, and the Borough's water and sewer systems were

compromised. The Borough's drainage system is susceptible to being clogged by debris following storm events, as occurred during Sandy. In addition, the outflow pipes tend to be submerged in the Bay, and may be subject to rusting. Damage to these systems increase residents' vulnerabilities to other health risks, such as pathogens and bacteria in untreated sewer and drinking water, severe winter cold against which residents have limited defense without operating electric or gas systems, and increased flood risk resulting from compromised stormwater drainage systems.

4.4 Opportunities Created

The devastation of Superstorm Sandy also presents Seaside Park with opportunities to improve its resiliency in future catastrophic weather events. These include:

- Promoting the public's awareness of their flood risks and mitigation strategies to protect themselves and their community;
- Introducing ordinances and design standards that will better enable homes and businesses to withstand the effects of coastal storms;
- Focusing public agencies on community vulnerabilities to hazards such as flooding;
- Encouraging regional solutions to flood- and storm-related impacts;
- Ensuring that future capital projects are designed and constructed to incorporate features that are resilient to storm- and flood-related impacts; and
- Integrating hazard mitigation into Master Plan elements.
- Focusing on resiliency when rebuilding damaged facilities.
- Greater awareness of environmental protection and stewardship to provide for a more sustainable future.
- Continue to maintain effective emergency services.
- Maintaining and improving stormwater infrastructure to avoid hazardous overflow during major storm events.

5. Integration of Existing Planning Documents

The following section examines existing municipal and county planning and emergency management documents. These documents describe the changes needed to support and achieve municipal planning goals, to address municipal needs related to post-storm recovery and to mitigate future storm impacts. Each document analysis includes existing goals and objects that are imperative to hazard mitigation and recovery planning and should continue to shape decision-making. Recommendations are provided at the end of this Report to strengthen each document where necessary.

5.1 Borough Documents

Seaside Park Master Plan, 2008

The Seaside Park Borough Master Plan identified the following general goals and objectives that should remain high priorities when planning for future natural disasters.

Land Use and Density

- Direct residential development and infill to respect the existing scale and character of the Borough and maintain light, air, and open space within the community:
  - Protect and improve quality of life within the Borough, reduce pollution, minimize new infrastructure demands, and protect the environment.
- Maintain or increase pervious coverage to address storm water runoff issues.

Circulation

- Encourage improvements to the Borough's road network to increase safety and to promote the free flow of traffic.

Municipal Facilities and services

- Provide effective public safety services through the Police Department, Fire Department, First Aid Squad, and Office of Emergency Services.
- Create effective management procedures to ensure that all municipal activities are performed in an efficient and effective manner.

- Control storm water flow in cooperation with the State and County and consider requiring a storm water management plan as part of all new construction applications.
- Improve the current street cleaning operations to maximize the benefits of reducing Barnegat Bay water pollution and storm drain silting as well as ensuring compliance with state regulations regarding storm water runoff.
- Ensure the water and sewer infrastructure is monitored and maintained to minimize infiltration and prevent system failure.
- Ensure preservation and satisfactory maintenance of the recreational areas (beaches, dunes, marinas, boardwalks, playgrounds, ball fields, and piers) to serve the present and future needs of the Borough.
- Provide for compliance with the Americans with Disabilities Act for all public areas.
- Aggressively pursue every opportunity to obtain grant funding for both current and long term municipal projects.
- Establish a knowledgeable working committee to oversee and direct municipal efforts to identify, develop, and implement beneficial shared services agreements with neighboring communities.

Natural Resources/Environmental Protection

- Protect the natural resources and barrier island environment of the Borough:
  - Preserve environmentally sensitive areas along the Bay and Ocean fronts.
  - Continue to explore alternative solutions to minimize flooding along the Bay front.
  - Encourage efforts to reduce stormwater runoff and flooding.
  - Promote building design principles that minimize the creation of “wind tunnels”.
  - Promote the use of renewable energy sources.
  - Promote the recovery and recycling of materials from solid waste.
  - Ensure effective programs are implemented and monitored to safeguard water quality.
  - Enforce compliance with flood hazard regulations.
  - Comply with Stormwater Management requirements.

Housing

- Maintain the quality of the housing stock by enforcing construction and property maintenance ordinances and code regulations.
- Revise setbacks as needed to ensure light, air, open space, and privacy within the Borough neighborhoods.
- Ensure effective inspection of all code regulations.

Parks, Recreation, and Open space

- Protect existing recreational facilities, parks and open space.
- Preserve additional open space in appropriate locations.
- Implement an effective dune management program that controls height and width without diminishing primary safety objectives or adversely affecting recreational beach areas

Land Use Element

Seaside Park's Land Use Element, found in the general Master Plan, describes the land use and land cover conditions throughout the Borough. It addresses the spatial distribution of land uses across the Borough, including the relation of land uses to flood prone areas of the Borough. The element acknowledges that its beach and dune system is essential for protecting the Borough from coastal weather events. One of the larger themes in the element is the importance of limiting future residential development to single-family uses so as to limit traffic generation and to control the number of dwellings and residents that could be impacted by future storms.

The Element also proposed in the Master Plan to zone for mixed-use development along its primary north-south corridors, as a means of improving the pedestrian friendliness of the Borough and also to address the difficulties faced by commercial property owners in maintain year-round rent streams. In 2009, the Borough adopted its new zoning map and code, which established the MXD or Mixed-Use Zone along the majority of Central Avenue (Route 35). The rezoning also consolidated three residential zones into a single-family residential zone and a Multi-Dwelling Zone, which contains hotel/motel uses and multi-family dwellings. The Master Plan also expresses the Borough's interest in expanding the variety of uses in the Boardwalk

district, also to improve its year-round economy. The previous and current zoning maps can be found in Appendix E.

Housing Element

This piece of the Borough's Master Plan explores the nature of housing in Seaside Park. Seaside Park's housing stock is fairly aged, with the median year of construction estimated at 1952. It also discusses the Borough's Affordable Housing obligation. At the writing of the Master Plan, the Borough had a 57 unit new-construction obligation and a 9 unit rehabilitation obligation. Had they been adopted, the proposed 2014 COAH Regulations (5:98 and 5:99) would have required the Borough to fulfill a rehabilitation obligation of three (3) units.

The Housing Element also includes housing and population projections for the Borough as far into the future as 2018. The plan states employment estimates from December 2006 indicate that 683 persons in the Borough were employed at that time, with employment reaching as high as 1,100 persons that summer. COAH's projected employment for 2018 is 1,008 jobs. Based on Municipally reported numbers, the average number of jobs each year in Seaside Park between the years 2011 and 2013 hovered around 350, and the 2012 American Community Survey estimated the number of employed persons at 651. COAH also projected that the number of residential units in the Borough would grow from 2,805 units in 2004 to 2,830 units in 2018. The estimated number of housing units in 2012 according to the American Community Survey was 2,588 units.

Circulation Element

The Circulation Element addresses issues affecting Route 35, which is the primary evacuation route for the Borough. The element notes a number of issues with the road. At the time of the Plan, NJDOT's Straight Line Diagram for Route 35 classified the area of Seaside Park as rural, though it is classified in other sources as an urban area. This appears to have since been corrected. Route 35 was proposed for a number of improvements, including grading and pavement improvements and improved drainage, as well as a reduction from six to four through-lanes. The element recommends that the Borough attempt to expedite planned improvements to

the route, and to make additional improvements for general traffic and safety purposes.

Municipal Facilities and Services Plan Element

The Borough provides a number of services relating to the maintenance of beaches, water quality, and stormwater runoff. The goals of the element include continued maintenance of the Borough's recreational facilities; reduction of runoff and the requirement of a stormwater management plan as part of future construction applications; reducing Bay water pollution; and minimizing risk of water and sewer system failures. Other relevant services discussed in this element include the volunteer fire and first-aid units. The topics addressed in this element include the following:

Beaches

The element notes that sand dune expansion on the Borough's beaches may overtake the Borough's boardwalk and recreational beach area, and recommends that the Borough work with NJDEP to determine what options are available to contain dune expansion. It also recommends that the Borough avoid any Federal, State, or County beach replenishment programs that restrict the Borough's right to operate and control the beaches; reevaluate the need for dunes located on the west (Ocean Avenue) side of the boardwalk and determine if they can be removed or reduced in size; establish and implement a five- to ten- year capital improvement plan for the boardwalk and an ongoing, well-defined maintenance and repair program; and take available actions to improve the attractiveness of the beach and ensure compliance with State regulations.

Barnegat Bay

The Borough's Barnegat Bay beaches are also addressed in the element. Flooding has reportedly worsened on the Borough's Bay side, and the Borough has made fruitless efforts to address flooding. At the time of the writing, the Borough was attempting to obtain a study conducted by the U.S. Army Corp of Engineers on the Bay, which would inform future flood-prevention strategies. Recommendations listed in the element for bay maintenance include creating foot paths to reduce damage to

vegetation; identifying the proper owner of the Bay-side storm drainage system in order to ensure proper maintenance; and improving street cleaning operations to reduce water pollution in the Bay.

Sewer and Water Utility

Seaside Park also addresses issues with its water and sewer utility services. The water and sewer infrastructure is nearly a century old and at risk of an increasing frequency of failures. The estimated cost of repair at the time of the Plan's writing was $30 million dollars. The resiliency of this infrastructure is important to recovery from major storms, as residents and businesses cannot function under sanitary conditions without stable water or sewer. The element recommends initiating a 3-year water and sewer construction project as soon as possible.

Stormwater Management

This section is heavily concerned with pollutants, and discusses ongoing efforts to address reduction of potential water pollution from residential, non-residential, automobile, and other sources. The Borough reports that it is diligent about eliminating debris, but the element recommends improving the efficiency of street cleaning operations. It also recommends requiring buffer zones on all properties to reduce runoff.

Recreation Plan Element

The Borough has eight (8) public recreation areas, of which three are beaches on the Atlantic Ocean side of the barrier island. The Recreation Plan element identifies a number of recommendations for maintaining and improving these recreational spaces. These include:

- Ongoing maintenance and repair programs;
- Creation of a five-year capital improvement plan that anticipates the long term needs of these spaces and accounts for funding needed to achieve the goals related to recreational spaces;
- Pursuing grant funding for boat ramp improvements relating to bulkhead reconstruction, landscaping and walkway upgrades; and

- Investigating the feasibility of developing a protected beach area on the Bay front.

Economic Plan Element

Borough records, at the time of the Plan's writing, indicated that there were twenty-eight businesses operating year round in Seaside Park, and forty-three seasonal businesses operating in the summer. Twenty-six of the seasonal businesses are located on the Boardwalk, and seventeen are located in street-fronting properties. There are an additional sixteen mobile-vendors in the Borough. The Plan indicates that mobile venders provide the Borough with minimal revenues because they do not pay any taxes – only fees for parking their mobile units. The Plan also stated that Boardwalk and Seasonal merchant licenses had dropped by thirteen and ten percent since 1999.

Emergency Operations Plan

The Emergency Operations Plan (EOP) was compiled to protect life and property in natural disasters, technological disasters and national security crises by coordinating response activities of municipal and volunteer entities to ensure their optimum use. It provides for actions to be taken to mitigate, prepare for, respond to, and recover from the effects of an emergency or disaster occurrence. Although its primary purpose is to outline a strategy of operations in nuclear disasters, terrorist events, and similar situations, many of the procedures it outlines are essential to flood related events.

Borough Ordinances

The Borough has a number of ordinances in place that relate to the protection of its residents and businesses from storm events, as well as the upkeep and improvement of its natural resources.

§135: Beaches

This section establishes the public beaches fronting the Atlantic Ocean and Barnegat Bay. It also establishes the obligation of the Borough to maintain the beach and public boardwalks, and to employ necessary staff; the right of the Borough to charge rates for entry to the beach and the rates at which the Borough will charge

beachgoers; rules and fees for use of public docks, boat ramps, and the Bay front; and rules for public conduct on beach properties.

It also addresses the importance of the Borough's dune system, and the importance of maintaining dunes for public safety. It establishes three dune development districts, delineated based on their distance from the boardwalk; establishes limits to public access of dunes, and outlines activities that are permitted on dune areas.

§144: Boats and Boating and §293: Marina

These sections set restrictions and rules on the use and storage of boats and related equipment / vessels on the Barnegat Bay beaches and marinas. It should be updated to provide a protocol for storage of boats and watercrafts so as to prevent damage to property from boats that are washed away during flood events.

§395: Storm Sewers

This section restricts the release of certain residential and commercial pollutants into sewer drains; sets standards for maintenance of waste disposal bins; and requires that the Borough retrofit storm drain covers to ensure that they can effectively prevent solid waste from infiltrating the sewer system.

§399: Stormwater Runoff

This section requires that natural drainage and stormwater runoff from developed properties must not overwhelm the Borough's drainage system, and requires that property owners obtain permits for the creation or expansion of impervious surfaces.

5.2 Contiguous Municipality Documents

The Borough should coordinate with adjacent municipalities regarding land use goals and objectives, watershed management, evacuation routes and emergency management. The Borough should look to coordinate with contiguous municipalities, Ocean County and the State regarding ongoing and planned infrastructure and land development projects to ensure that infrastructure and land use changes will be reflected in emergency response training, evacuation route planning, etc.

5.3 County Documents

Disaster Mitigation should be considered on a regional level. Therefore, as the Borough looks to update the Master Plan, County-wide documents should be consulted and integrated when emergency planning and recovery policies are developed.

Ocean County Master Plan, 2011

The Ocean County Comprehensive Master Plan is a policy statement, expressed in both written and graphic form, about the future development of the County. The goals and major responsibilities of the Ocean County Planning Board are to prepare and adopt comprehensive objectives embodied in this Plan. The objectives are intended to address issues of regional concern and to provide a regional perspective on land use and other issues facing Ocean County. Historically, the primary responsibility for land use decisions has been entrusted to municipalities through local master planning, zoning and subdivision and site plan controls. The Master Plan's recommendations to the County include:

Economic Planning and Workforce Development Recommendations

- Continue County economic development efforts to reduce unemployment, connect residents to local year-round employment opportunities, and enhance the tax base by encouraging compatible industrial and commercial operations to locate or expand in Ocean County.
- Continue to support the County's $3.35 billion tourism industry, including the many opportunities for environmental tourism.
- Continue to promote business assistance and training programs.

Land Use Recommendations

- Continue to work with the Department of State and other relative agencies on the State Strategic Plan and other State Planning initiatives.
- Continue to work with the County Planners Association, State agencies and applicable municipalities to encourage realistic planning initiatives that can be adopted and maintained.

- Encourage municipalities to grow in a fashion that is true to smart growth principals and Town Center design standards, allowing for a mix of land uses in a singular area to increase accessibility by all residents.
- Work with the Pinelands Commission and applicable towns to preserve and protect the important environs and species located in the Pinelands, while coordinating long range land use and growth management plans.
- Support the tourism amenities and needs of shore towns and continue to facilitate the protection and replenishment of County's beaches and shoreline areas.
- Ensure public access is protected and enhanced where appropriate.
- Track changes in land use and land cover, as well as areas preserved as permanent open space.

Design Recommendations

- Encourage Low Impact Design techniques to minimize the disturbance of natural areas and maximize the recharge of stormwater on-site.

Open Space, Parks and Recreation Recommendations

- Continue to support the Ocean County Natural Lands Trust Fund Advisory Committee and its mission to identify and acquire natural areas that are environmentally sensitive, ecologically important, and/or contiguous to existing preserved open space.
- Maintain an ongoing evaluation of the recreational needs of Ocean County residents and assist in identifying new park and open space areas as necessary.
- Continue to work with all Federal, State, local and non-profit partners to acquire open space and maximize financial resources available for preservation.
- Continue to seek and support donations to the various open space programs in Ocean County.

Stormwater Management Recommendations

- Continue stormwater basin restorations and ongoing partnerships to identify and restore impaired stormwater management facilities to improve infiltration and reduce runoff throughout the watershed.

- Continue to work with the Barnegat Bay Partnership to target research and assessment efforts.
- Coordinate County, State and Federal funding to maximize the effectiveness of stormwater protection and rehabilitation efforts.
- Encourage land use planning strategies such as low impact design to preserve open space and maximize the natural infiltration of stormwater.
- Explore and assess best management practices used by other areas in the country to address stormwater management.
- Continue to take a proactive approach to the NJ Soils Health Legislation by working with the Ocean County Soil Conservation District to promote construction practices to maintain soil health and reduce compaction.
- Encourage and support compliance with the NJ Fertilizer Law.
- Continue to assess structural and nonstructural options for stormwater management to increase infiltration, remove debris and reduce nutrient and pollution loads.
- Work with partners to expand public education programs on stormwater management, targeting property owners, engineers, developers and local officials.
- Encourage compliance with new legislation that requires the NJ Department of Transportation to address stormwater management issues on state highways including Routes 9, 35, 37, 70, 72, 88 and 166.

Ocean County Multi-Jurisdictional Natural Hazard Mitigation Plan, 2014

The Ocean County Multi-Jurisdictional Natural Hazard Mitigation Plan was adopted in 2014 in accordance with the Disaster Mitigation Act of 2000. The HMP was developed for the purpose of:

- Providing a blueprint for saving lives and reducing property damage from the effects of future natural and man-made disaster in Ocean County;
- Qualifying the County for pre-disaster and post-disaster grant funding;
- Complying with state and federal legislative requirements related to local hazard mitigation planning;
- Demonstrating a firm local commitment to hazard mitigation principles; and
- Improving community resiliency following a disaster event.

The Plan represents the collective efforts of citizens, elected and appointed government officials, business leaders, volunteers of non-profit organizations, and other stakeholders. The Plan identifies natural hazards that could affect the County's jurisdictions, evaluates the risks associated with these hazards, identifies the mitigation actions to lessen the impacts of a disaster on Ocean County communities, and prioritizes them based on the municipal master plans and other planning documents.

Any proposed implementation strategies that are undertaken by the Borough should first be presented to the County's Office of Emergency Management and Department of Planning to ensure that the Borough's vision is consistent with that of the County and adjacent municipalities.

The report's appendices outline Mitigation Action Plans for each municipality within the County. Plans vary in cost, expected timelines, social and environmental impacts, and possible legal or political ramifications. Many of the plans specific to Seaside Park yield positive social and environmental benefits in that they improve storm resistance and generally do not harm vulnerable demographic groups. Legal and political complications may arise due to the implications of certain actions for property owners, but these are generally easy to mitigate or negotiate. Seaside Park has 28 Action Plans, which include, but are not limited to, the following:

- Acquire ten (10) homes in high flood risk areas;
- Demolish and reconstruct twenty-two (22) homes to higher standards and elevations;
- Purchase and install three permanent power generators to support continued community services during utility interruptions;
- Elevate 348 homes to compliance with FEMA flood maps;
- Reconstruct parking lots to improve drainage and reduce impervious surfaces;
- Install Bay-front wave energy dissipation structure;
- Dune mitigation – fix breaches in dunes; elevate dune walkways; construct walkways to traverse over dunes;

- Replace, repair, and add new bulkheads;
- Maintain fall and spring dune grass planting activities, with the goal of 100,000 new plants;
- Make regular updates to Borough website;
- Continue outreach through the local radio station;
- Develop and implement shelter management plans and capability, which will identify and plan the operation and maintenance of shelters available to residents who are displaced by storms;
- Participate in StormReady;
- And others.

Ocean County Long Term Recovery Group

The Ocean County Long Term Recovery Group's (OCLTRG) goal is to assist all county residents in recovery from disasters by addressing and prioritizing unmet needs. The Group's priorities include the following:

- Individuals and families who need assistance to maintain or obtain safe, sanitary and secure housing, including: – Those who are not served, or who are underserved, by other existing aid programs, including those who are ineligible for FEMA.
  - Those who are experiencing economic hardship in pursuing a plan for recovery.
  - Those who are isolated or have difficulty accessing services.
  - Those who have begun the recovery process but have encountered a setback and need assistance with their continued recovery.
  - Those who need assistance in order to prevent deterioration in their continued recovery.
- Landlords of owner-occupied residential rental property of four units or less when such assistance will provide safe, sanitary, and secure housing that will be affordable and permanent for the owner-occupant and his or her residential tenants.
- Landlords of owner-occupied residential rental property of three units or less when such assistance will provide safe, sanitary, and secure housing that will be affordable and permanent for residential tenants.

Forms of Assistance include:

- Social services;
- Referral to other private and governmental resources;
- Temporary rental, mortgage, or utility assistance;
- Provision or purchase of essential household appliances, furniture, clothing, or computer equipment;
- Moisture control services and removal of mold and mildew;
- Structural repairs needed to ensure safe, sustainable and stable housing;
- Mitigation and loss prevention goods and services;
- And more.

6. Recovery Efforts

6.1 Ordinance Amendments

In the months following Superstorm Sandy, Seaside Park adopted nine (9) new ordinances setting or enhancing controls on development so as to reduce damage from future storms. The ordinances are as follows:

- **Ordinance number 1622** replaced Chapter 25: "Flood Damage" of the Borough's Code. The ordinance set restrictions and standards for development that occurs within the Borough's Special Flood Hazard Areas, such as stricter standards for development permit applications, and empowering the planning board to reject development applications that may increase the flood risk to community. The ordinance also amended the nature of the Floodplain Manager position.
- **Ordinance number 1623** amended the development permit application standards previously amended in Ordinance No. 1622 above;
- **Ordinance number 1619** established a subsection, entitled "Elevation", outlining a process for obtaining a building permit to elevate non-conforming properties, in Section 25-716 which regulates nonconforming uses, structures, and lots;
- **Ordinance number 1620** amended Section 25-706E of the Borough's land use ordinance, which concerns "Area, Yard, and Bulk Requirements", to:
  1. Permit front and rear yard unroofed-porches while restricting wrap-around and roofed porches
  2. To limit the locations of utility systems to heights compliant with effective FIRM or FEMA advisory base flood elevation requirements; and
  3. Amend height requirements to account for advisory base flood elevation in affected areas;
- **Ordinance number 1637** re-established a two (2) year time period during which a property owner granted a bulk variance must obtain a building permit so as to construct or alter buildings according to the granted variance, and established new provisions for Planning Board meetings, minutes, and hearings;
- **Ordinance number 1642** amended conditional use requirement to outline the rights and obligations of the Borough and of applicants to the Planning Board; requirements for conditional retail and restaurant uses; and buffer requirements;

- **Ordinance number 1646** amended Fence and Wall requirements, including requirements to obtain a permit to erect fencing, setbacks for fences including those constructed along waterfront areas, and fence heights;
- **Ordinance number 1656** further amended the Fences and Walls section;
- **Ordinance number 1632** replaced the definition of "Structure"; and
- **Ordinance number 1633** amended the setback requirements for properties in the Residential Zone.

6.2. Programs enacted

Recovery for Displaced Families

As the Borough prepared for the return of residents to the barrier island, it made several efforts to provide assistance to displaced residents. In early December 2012, the Borough's Police Department sponsored the TZU Chi Foundation's Hurricane Sandy Relief Effort, which aimed to assist displaced residents who had not received FEMA or private insurance assistance. The Borough also coordinated with FEMA that month to make temporary trailers available to displaced households.

General Repairs and Improvements

As previously mentioned, the Borough's Department of Public Works carried out beach replenishment activities in the aftermath of the storm, and continues to operate its volunteer dune planting activities. The Borough has also been repairing and replacing its sewer and water infrastructure, which was greatly damaged by the storm, and making efforts to improve the energy efficiency of buildings and promote energy efficiency to the public.

7. Alternative Assessment

This alternative assessment will be used to determine the potential effects on the human and natural environment should a "no-action" alternative be utilized and the Borough chooses not to plan for future storm events. This analysis, along with other pertinent information will guide the Borough's decision makers about whether or not to implement the proposed action alternatives. The action alternatives are analyzed in comparison to a no-action alternative in order to determine potential side effects.

7.1 No-Action Alternative

Should a "no-action" alternative be chosen, the Borough could see the following potential impacts:

- Seaside Park would lose out on funding at the State and Federal level to complete life- and property- saving hazard mitigation projects;
- Portions of the Borough could continue to see severe flooding during major storm events;
- Another Sandy-like disaster could destroy the Boardwalk and damage businesses, impairing the local economy and resulting in millions of dollars that must be spent to rebuild and recovery;
- Major roadways and evacuation routes could be compromised during storm events if not redesigned to avoid flooding issues;
- Risk to health, safety and welfare of Borough residents;
- Potential loss of tax base due to abandoned and damaged properties;
- Flood Insurance rates under the Biggert-Waters Act will continue to increase for structures that are non-compliant with current flood elevation requirements.

7.2 Action Alternative

Section 8 of this Report outlines implementation strategies to prepare the Borough for future natural hazards. These recommendations are the action alternative to avoid the potential impacts as listed above.

8. Implementation Strategy

Based on the analysis of relevant planning documents, reports and ordinances in addition to recovery work currently underway throughout the Borough, the following actions are recommended.

8.1 General

a. Pursue State and Federal grants, and grants from non-government organizations, to fund recovery and resiliency projects and initiatives.
   - On June 14, 2014, the White House announced the National Disaster Resilience Competition, which makes funding available for communities that were located in a Presidentially declared major disaster area between 2011 and 2013. In October 2014, HUD announced $380 million dollars that would be dedicated to New Jersey Communities under this competition.
   - NJ DEP administers a Municipal Public Access Plan (MPAP) grant program, which funds the preparation of planning documents pertaining to the acquisition or improvement of public lands along beaches, bays, and tidal waterways for recreational purposes.

b. Continue to evaluate the Borough's Code to ensure it reflects the latest requirements for flood-prone areas as regulations change over time in the future.

c. Leverage the Ocean County Long Term Recovery Group and other organizations to assist in the recovery effort. Maintain open communications with these entities in order to facilitate the recovery process.

d. Implement activities included in the Borough's Hazard Mitigation Action Plan found in the Ocean County Hazard Mitigation Plan.

e. Take advantage of grant opportunities available through FEMA's Hazard Mitigation Assistance program. Seaside Park is eligible for assistance through this program as a result of Ocean County updating its county-wide Hazard Mitigation Plan.

f. Pursue Post-Sandy Planning Recovery Assistance Grants from the NJDCA for design standards, ordinances, master plan amendments and related items as described in more detail in the subsections below.

g. Complete a capital improvement program to prepare shovel ready projects.

h. Have Borough officials and community leaders participate in FEMA training courses.
i. Review and update flood/hazard data annually to ensure the most current information is available to residents and decision makers.

8.2 Strengthen Borough's Participation in FEMA's Community Rating System (CRS)

The CRS program was implemented to recognize and encourage community floodplain management activities. Under the CRS, a municipality receives discounts on NFIP flood insurance premiums based on its class rating and its implementation of local mitigation, outreach, and educational activities that go well beyond the minimum NFIP requirements. Participation in the CRS provides a multitude of benefits to the community in addition to the insurance premium discounts. These benefits include:

- Money staying in the community instead of being spent on insurance premiums;
- Better organization of local flood programs;
- Enhanced public education which will build a knowledgeable constituency interested in supporting and improving flood protection measures;
- Reduction of damage to property and public infrastructure and reduction of human suffering should another major storm even occur; and
- Protection of the environment.

Seaside Park participates in the CRS program and is currently a Level 8 Community, which means its SFHA residents receive a 10% discount on their flood insurance, and non SFHA residents receive a 5% discount. Due to the number of structures located within the SFHA, it is recommended that the Borough utilize PSPAG funding to improve its classification in the program. Recommended tasks that will move Seaside Park towards a higher CRS ranking are integrated throughout the following sections and are designated with (CRS) after the project description.

The table below, obtained through the CRS web page, illustrates the premium reductions available by CRS credits and classes:

CREDIT POINTS	CLASS	PREMIUM REDUCTION SFHA*	PREMIUM REDUCTION NON-SFHA**
4,500+	1	45%	10%
4,000 – 4,499	2	40%	10%
3,500 – 3,999	3	35%	10%
3,000 – 3,499	4	30%	10%
2,500 – 2,999	5	25%	10%
2,000 – 2,499	6	20%	10%
1,500 – 1,999	7	15%	5%
1,000 – 1,499	8	10%	5%
500 – 999	9	5%	5%
0 – 499	10	0	0

*Special Flood Hazard Area
**Preferred Risk Policies are available only in B, C and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. The CRS credit for AR and A99 Zones are based on non-Special Flood Hazard Areas (non-SFHAs) (B, C and X Zones). Credits are: classes 1-6, 10% and classes 7-9, 5%. Premium reductions are subject to change.

Source: FEMA National Flood Insurance Program - Community Rating System.

8.3 Master Plan

The Borough should amend its planning documents to adequately address the impacts of Superstorm Sandy on the community and to set goals and recommendations for resilient development, according to the recommendations included in this section of the SRPR. Since the Borough prepared its Master Plan in 2008, it may determine that at this time it is appropriate to prepare a Re-examination Report that addresses the topics and recommendations contained in the SRPR, rather than preparing a Master Plan. The PSPAG program offers funding to cover the

costs of preparing Master Plans, Master Plan Elements, and Re-examination Reports.

Re-Examination

Should the Borough choose to prepare a Re-examination Report, this report should discuss Superstorm Sandy, the Boardwalk fire, and the consequences that these events have had on the Borough. Furthermore, the Report should emphasize the Borough's increased concern for sustainability and resilience following the storm, and plan to amend the general Plan and relevant elements to address planning measures that should be employed to reduce flood risk. The report should also examine land use and zoning regulations and determine where it can and should implement more stringent requirements.

Conservation and Open Space Element

a. The Borough should use the Jacques Cousteau Flood Mapper program to identify suitable areas in the Borough for acquisition or preservation, without the use of eminent domain;
b. Include potential projects for the New Jersey Department of Environmental Protection's Coastal Blue Acres program to acquire lands, without the use of eminent domain, that have been damaged by storms, that may be prone to storm damage, or that buffer or protect other lands from storm damage, for recreation and conservation purposes. As of October 2014, NJ DEP has not expressed intentions of re-opening the Coastal Blue Acres program. However, the Borough should continue to monitor the status of the program; and
c. Open Space Management based on suggestions from the FEMA Community Rating System such as, but not limited to: natural shoreline protection; deed restrictions; natural functions open space; special flood-related hazards open space; and open space incentives.

Economic Development Element

- Create a Plan to promote a stable year round job market;

- Prepare a Post-Disaster Redevelopment Plan that addresses the Borough's goals for restoring the quality of life for its residents, and reviving, and stabilizing, its economy;
- The Boardwalk was severely damaged from both the Storm and the fire that occurred shortly thereafter. The Borough should set out a strategy, in partnership with Funtown Piers, to ensure that the Boardwalk will be reconstructed with resiliency as a primary goal, in order to preserve, protect, and improve the summer-resort economy. This will reduce the risk to life and property from future storms, and preserve jobs and tax revenues associated with continual operability of the Boardwalk;
- Assess the sustainability of the Borough's beach entrance fee schedule. If beach visits have declined, the Borough should consider pricing options that may attract more visitors without resulting in lost revenues; and
- Provide recovery and resiliency strategies for use by local business owners.

Emergency Operations Plan

a. Review EOP and assess whether it had been effective during Sandy. Identify weaknesses and make necessary improvements to ensure that residents are adequately warned of future storms, and that evacuations are organized in a timely and strategic fashion;
b. Adopt a flood warning and response plan, for which the Borough can be awarded CRS credits.

Stormwater Management Plan

a. Discuss the impacts of Superstorm Sandy on all utilities, services, and public spaces addressed in this element;
b. Identify which recommendations in the element have been executed, and whether these improvements allowed Seaside Park to better-weather Sandy;
c. Aged sewer and water infrastructure is a hazard to the health of residents and visitors. Efforts to improve this infrastructure should consider strategies to ensure that systems can be resuscitated quickly from a Sandy-type storm;
d. Seaside Park was without electricity and gas for nearly two months after Sandy passed. Work with gas and power providers, the State, and the County to reduce

the susceptibility of the Borough to power and gas outages. Pursue low-cost options, such as purchasing generators, to ensure that the Borough is prepared in any near-term emergencies;

e. Improve drainage system maintenance. This is CRS creditable;
f. Work with County to achieve both parties' goals of maintaining a clean Barnegat Bay; and

Land Use Element

a. Promote land use strategies that reduce the impact of storms and flooding on the Borough's population, properties, and infrastructure. Balance the need for reducing flood risk with the need to provide for a sustainable economy. Consider zoning for lower density residential uses in the most flood prone parts of the Borough, while zoning for higher densities and mixed use in the least flood prone areas.
b. Increase minimum lot sizes for the most vulnerable properties. There are significant CRS credits available to municipalities that enhance regulatory standards for development in flood prone areas. The CRS System Brochure encourages expanding lot sizes in 100 year flood plains to areas of 1 acre or larger. While increasing lot sizes to 1 acre may not be practical for Seaside Park, given the constraints of the barrier island and the desire to preserve the existing community character, the act of increasing lot sizes provides two benefits. The first such benefit is that larger lot sizes mean fewer properties and residents at risk of damage from flooding. The second benefit is that properties on larger lots tend to have more open, pervious space, which reduces the overall impacts from flooding. CRS also suggests adopting "coastal construction standards in AE Zones", which occupy much of the Borough; and
c. Identify properties on which the Borough should pursue conservation easements.

Housing Element

a. Discuss the impact of Superstorm Sandy on the Borough's housing stock;
b. Examine the Borough's options for providing emergency shelters to residents who are displaced from their homes by future storm events;

c. Ensure that existing and future housing is constructed with storm resilience in mind. Additionally, rehabilitations to satisfy the Borough's affordable housing obligation should be completed with full consideration toward flood resistance; and
d. Sixty-five percent (65%) of housing in Seaside Park was constructed prior to 1960. Assess whether these buildings are in stable enough condition to withstand another Sandy-like storm. Outline a strategy to protect aging homes against future hurricanes. Consider retrofitting programs and buyouts.

Circulation

a. Pursue improvements to Route 35 that include superior drainage technology, more resilient surface material, and general engineering improvements to both enhance the Route's resistance to storm damage and to reduce stormwater runoff exacerbated by the road's impervious surface;
b. Explore the adequacy of the Borough's road-network for evacuation purposes, and identify strategies to ensure that the Borough's transportation infrastructure will continue to be sufficient for any necessary evacuations; and
c. Generally enhance drainage technology on the Borough's road network.

Municipal Facilities

a. Plan for either the relocation of functions from the former elementary school building or retrofit the building and other Borough facilities that lie in highly flood prone areas. The facility is directly within the 3-foot SLR inundation area, and the Borough's emergency service facilities lie a short distance away from the projected extent of inundation. Consider moving these facilities/functions to safer locations or provide a plan to increase their resilience.

Collect Data

a. Collect and map data on coastal erosion to inform planning related to erosion mitigation.
b. Use the NOAA's Community Vulnerability Assessment Tool to evaluate risks across the Borough to various hazards. Similarly, use the Risk and Vulnerability Assessment Tool.

c. Use FEMA's Hazard Assessment Tool and HAZUS-MH software in conjunction with the NOAA tools above to further assess hazard risks.
d. Use Jacques Cousteau National Estuarine Research Reserve's www.prepareyourcommunitynj.org page to conduct mapping and other research that will aid in the development and improvement of planning documents.

Adopt new elements to the Master Plan

a. Develop and adopt a Green Buildings and Sustainability Element of the Master Plan. Set the foundation for the adoption of "green infrastructure" – using natural and sustainable processes to mitigate the impact of storm flooding.
b. Develop and adopt Design Standards to ensure that future development satisfies a minimum level of design-based storm resilience while also maintaining the aesthetic character desired by the community.
c. Develop and adopt a Hazard Mitigation Element into the Master Plan. This Element should focus on hazard mitigation and community resiliency at both the local and regional level and be consistent with the County Hazard Mitigation Plan.
d. Supplement the Hazard Mitigation Element with a Floodplain Management Plan, Emergency Response Plan, Shoreline Restoration Plan, and a Coastal Plan.
e. Develop and adopt a Stormwater Management Element instead of amending the Utilities Element to address stormwater concerns.
f. Prepare a Municipal Public Access Plan (MPAP) and a Community Vulnerability Assessment (CVA) in accordance with NJDEP guidelines to enhance public access to tidal waters in a comprehensive manner. Pursue grants for the preparation of the MPAP and CVA from NJDEP.
g. If none exists, adopt a Continuity of Operations Plan.

Action Plan- Master Plan

Project	Major Tasks	Estimated Cost	Potential Funding Sources	Estimated Impleme-ntation Dates	Estimated Completion Dates *
Prepare Master Plan Re-examination	Plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015
Amend Land Use Element	Plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015

Action Plan- Master Plan					
Project	**Major Tasks**	**Estimated Cost**	**Potential Funding Sources**	**Estimated Impleme-ntation Dates**	**Estimated Completion Dates ***
Amend Conservation and Open Space Element	Plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015
Amend Economic Development Plan	Public input, plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015
Amend Housing Element	Public input, plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015
Amend Emergency Operations Plan Element	Public input, plan preparation, plan adoption	$35,000.00	PSPAG	May 2015	August 2015
Prepare Green Buildings and Sustainability Element	Floodplain study, plan preparation, plan adoption	$20,000.00	PSPAG	May 2015	August 2015
Prepare Hazard Mitigation Element	Public input, plan preparation, plan adoption	$50,000.00	PSPAG	May 2015	August 2015
Amend Municipal Facilities Element	Public input, plan preparation, plan adoption	$20,000.00	PSPAG	May 2015	August 2015
Prepare Municipal Public Access Plan	Community Vulnerability Assessment, plan preparation, plan adoption	$30,000.00	PSPAG, NJDEP Municipal Public Access Planning Grant program	August 2015	December 2015
Prepare Flood Warning & Response Plan (CRS)	Public input, plan preparation, plan adoption	TBD	PSPAG, HMGP	May 2015	August 2015
Prepare Design Standards	Standards Preparation, Standards Adoption	$50,000.00	PSPAG	May 2015	August 2015

8.4 Ordinance Development

a. Prepare ordinances based on the recommendations of the Master Plan Re-examination.

b. The Beach Ordinance should cite State laws regulating and limiting expenditure of beach badge fees, as well as minimum maintenance activities that the

Borough must perform to ensure that the Beach is safe and functional as both a recreational facility and as a flood-mitigation tool.

c. Adjust beach badge fees (Section 135-7) appropriately to ensure that beach revenues are sufficient to fund dune improvements and general maintenance, while also maintaining or increasing beach visitor rates.
d. Supplement Flood Damage Prevention Chapter, the Boating Chapter, or the Marina Chapter with requirements relating to the removal or securing of boats, floating docks, gangways, etc. from water bodies within a specified period from the issuance of an order from Emergency Management personnel.
e. Amend Flood Damage Prevention Ordinance or add regulations to Borough Code prohibiting the construction of occupied structures seaward of the mean high water line or on piers or platforms except for essential structures for "functionally dependent uses" such as marinas or boatyards.
f. Develop design standards to address the visual impact of mitigation measures such as elevating bulkheads, elevating buildings on foundations or pilings, etc.
g. Develop Ordinances to control reduce the amount of damaging non-point source pollution during storm events.
h. Continue to evaluate the Borough Code to ensure it reflects the latest requirements for flood prone areas as regulations change over time.
i. Require disclosure to any potential buyer of real estate in the Borough of a property's vulnerability to coastal hazards.
j. Rezone to increase residential lot sizes and reduce densities in most flood prone area, and to direct mixed use and higher density developments toward least flood prone areas.

Action Plan- Ordinance Development

Project	Major Tasks	Estimated Cost	Potential Funding Sources	Estimated Implementation Dates	Estimated Completion Dates *
Ordinance Development	Prepare and adopt ordinances	$20,000.00	PSPAG	May 2015	August 2015

8.5 Capital Improvement

Develop a Capital Improvement Plan focused on Recovery and Mitigation

a. Develop a five year plan for capital projects that will focus municipal capital investment on public facilities, fleets and equipment to build community recovery and resiliency. Pursue Post-Sandy Planning Recovery Assistance Grant from the NJDCA for this project. Representative Capital Improvement projects are shown below:
   1. Roadway resurfacing and drainage improvements;
   2. Improvements and retrofits to stormwater facilities;
   3. Improvements to wastewater management and sanitary sewer system;
   4. Dune repair and improvement;
   5. Beach Nourishment;
   6. Erosion protection and prevention projects;
   7. Flood mitigation and resiliency projects;
   8. Land restoration projects;
   9. Community facilities and neighborhood revitalization projects;
   10. Purchase of emergency water vehicles; and
   11. Purchase of municipal back-up generators.

b. Complete a Repetitive Loss Area Analysis including a detailed mitigation plan for areas identified from the analysis.

c. The Borough's beach revenues appear to be much greater than its beach related costs. Set the foundation for directing beach revenues toward improvements that will protect the beach from storm related erosion while also saving lives and property.

Action Plan- Capital Improvement					
Project	**Major Tasks**	**Estimated Cost**	**Potential Funding Sources**	**Estimated Implementation Dates**	**Estimated Completion Dates ***
Capital Improvement Plan	Plan preparation and adoption	$30,000.00	PSPAG	May 2015	August 2015
Repetitive Loss Area Analysis (CRS)	Identify and analyze properties, prepare report	$50,000.00	PSPAG	May 2015	July 2015

8.6 Communication and Preparedness

Outreach and Education

a. Continue to monitor recovery and resiliency education and training opportunities for Borough residents, business owners and municipal staff.
b. Consider implementing a Program for Public Information (PPI), which would improve the Borough's outreach capabilities and also increase its eligibility for CRS credits.
c. Remain up to date on disaster preparedness protocol and policies.
d. Maintain open communication with residents and business owners regarding aforementioned information via Borough website, periodic e-mailings, social media, handouts, etc.
e. Coordinate public education sessions at least once a year to discuss flood planning readiness strategies with residents and business owners, as well as other flood-related issues and concerns, to ensure that community members are prepared to respond appropriately even between major storms.
f. Provide a direct link to FIRM maps on the Borough's website. In addition to providing residents with essential information about the flood risk to their property, this action will make the Borough eligible for additional CRS credit.
g. Coordinate with contiguous municipalities, Ocean County and the State regarding ongoing and planned infrastructure and land development projects to ensure that infrastructure and land use changes will be reflected in emergency response training, evacuation route planning, etc.
h. Pursue Post-Sandy Planning Recovery Assistance Grant from the NJDCA for these projects.

Action Plan- Communication and Preparedness

Project	Major Tasks	Estimated Cost	Potential Funding Sources	Estimated Implementation Dates	Estimated Completion Dates *
Public Outreach Program (CRS)	Design and carry out outreach programs	$10,000.00	Sustainable Jersey	Ongoing	Ongoing
Flood Warning and Response (CRS)	Prepare pre-flood plan, develop flood protection website	$10,000.00	FEMA, NJOEM	Ongoing	Ongoing

8.7 Resiliency and Sustainability

Sustainability should provide for, encourage, and promote the efficient use of natural resources and the installation and usage of renewable energy systems; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat storm water on-site; and optimize climatic conditions through site orientation and design.

Improve Resiliency

a. Encourage critical businesses such as supermarkets, gas stations and emergency service centers, to obtain emergency power systems that can continue to operate should the power grid fail. This may include alternative energy such as solar, micro-grid and geothermal.
b. Actively pursue Federal funding on behalf of residents through a Municipal Hazard Mitigation Grant Program.
c. Encourage retrofitting of aged buildings, with emphases on wind and flood resistance as well as stormwater reduction.
d. Identify technologies and strategies for returning residents to the barrier island after an evacuation.
e. Elevate Homes.
f. Reconstruct beach and Bay parking lots to improve drainage.
g. Improve drainage system maintenance overall. This is CRS creditable.
h. Consider using ASCE 24 design and performance standards as guidelines for future ordinance development and housing element recommendations.

Repetitive Loss Properties

a. The New Jersey Department of Environmental Projection Coastal Blue Acres (CBA) program may be used to acquire properties, where appropriate. The CBA program helps municipalities and counties to acquire lands in coastal areas that have been damaged by storms, that may be prone to storm damage, or that buffer or protect other lands from storm damage, for recreation and conservation purposes. Eminent Domain will not be utilized as part of this initiative.

b. Identify repetitive loss properties, and prepare a mitigation plan that includes strategies for addressing these properties, such as buyouts. The Borough could be awarded CRS credits for including a Repetitive Loss Area Analysis section in their mitigation plans.

Vulnerable Facilities

a. Relocate municipal and emergency service functions to areas of the Borough that are not as flood prone OR improve hazard mitigation measures on existing properties. These may be CRS creditable activities.

Action Plan- Resiliency and Sustainability					
Project	**Major Tasks**	**Estimated Cost**	**Potential Funding Sources**	**Estimated Impleme-ntation Dates**	**Estimated Completion Dates ***
Open Space Preservation (CRS)	Acquire properties without eminent domain	TBD	NJDEP	Ongoing	Ongoing
Property Acquisition (CRS)	Acquire land without eminent domain	TBD	NJDEP Blue Acres, HMGP, CDBG	Ongoing	Ongoing
Elevate Homes (CRS)	Provide funding to homeowners to elevate their properties	$30M	HMGP, RFC, FMA, CDBG	Ongoing	Ongoing
Parking Lot Reconstruction	Repave and install infrastructure	$1M	HMGP, CDBG	TBD	TBD
Relocate or Retrofit Vulnerable Community Facilities (CRS)	Locate appropriate facilities, move services and materials to new location. Or, install necessary utilities, reconstruct building elements.	TBD	HMGP	TBD	TBD
Improve Drainage System Maintenance (CRS)	Review current maintenance procedures; identify and implement improvements	TBD	TBD	Ongoing	Ongoing

8.8 Community Development

Affordable and Workforce Housing

a. Continue to implement the Housing Element/Fair Share Plan and maintain compliance with current and future Affordable Housing regulations.
b. Continue to promote a variety of high quality housing to meet the needs of all Borough residents and property owners.
c. COAH-mandated rehabilitation work should include retrofitting to enhance the flood and wind resistance of targeted properties.

Housing Displacement

a. Encourage residents to take advantage of Federal, State, County and Local programs that aid in home rebuilding and supporting distressed households. Make this information readily available to residents.
b. Work with Federal, State and County to improve and streamline the process of returning residents to their homes following major natural disasters.
c. Ensure that the Borough has adequate emergency housing capacity to provide shelter to families that are displaced by storm events – this is one of Seaside Park's Actions according to its Hazard Mitigation Action Plan
d. Actively pursue Federal funding on behalf of residents through a Municipal Hazard Mitigation Grant Program.

Action Plan- Community Development

Project	Major Tasks	Estimated Cost	Potential Funding Sources	Estimated Implementation Dates	Estimated Completion Dates *
Affordable Housing	Maintain compliancy with COAH rules and regulations	TBD	Affordable Housing Trust Fund	Ongoing	Ongoing
Housing Displacement	Continue to work with government and other entities to address housing needs	TBD	HMGP, NJDCA	Ongoing	Ongoing
Hazard Mitigation Grant Program	Continue applying for funding	TBD	HMGP	Ongoing	Ongoing
Maintain or Expand Emergency Shelter	Increase capacity in existing facilities, identify other suitable facilities	TBD	HMGP	Ongoing	Ongoing

8.9 Economic Development

a. Pursue Post-Sandy grants made available by the State and Federal governments, including PSPAG funding for planning projects.
b. Rebuild the Boardwalk with resiliency in mind. The Boardwalk is a key element of the Borough's culture and economy, housing as many as 29 businesses in 2012. The Borough and Funtown Piers should work together to ensure that the Boardwalk – and the jobs that it creates – can withstand another major storm.
c. Accumulate CRS credits – carry out projects that are eligible for credits through CRS so as to reduce the flood insurance burden on Borough community members. In addition to these projects reducing the monetary and social costs of recovering from major storms, the promise of lower insurance rates – especially for the 67% of properties in the Special Flood Hazard Area – will make the Borough a more desirable place to live and do business.
d. Actively pursue Federal funding on behalf of residents through a Municipal Hazard Mitigation Grant Program.
e. Assess options for earning revenues from mobile vendor without disturbing the market.

Strong NJ Business Grant Program

With a focus on the most impacted communities throughout the state, New Jersey is offering aid through grants and forgivable loans to New Jersey small business or non-profit organization which sustained a minimum of $5,000 in physical damage from Superstorm Sandy. Eligible small businesses and non-profits may apply for grants and forgivable loans of up to $50,000 per impacted location. If an entity has multiple locations in New Jersey incorporated under a single federal tax identification or employer identification (EIN) number, it may receive up to $250,000 per entity and it may use one application to seek funds for all incorporated, impacted locations.

Action Plan- Economic Development					
Project	**Major Tasks**	**Estimated Cost**	**Potential Funding Sources**	**Estimated Implementation Dates**	**Estimated Completion Dates ***
Create small business assistance	Determine the needs of small	TBD	NJ Economic Development	Ongoing	Ongoing

Action Plan- Economic Development					
Project	**Major Tasks**	**Estimated Cost**	**Potential Funding Sources**	**Estimated Implementation Dates**	**Estimated Completion Dates ***
programs	businesses		Authority		
Plan for Resilient Boardwalk	Coordinate with Funtown Pier Associates; Revise Ordinances or adopt design standards as appropriate	TBD	PSPAG (depending on type of activity)	TBD	TBD

9. Conclusion

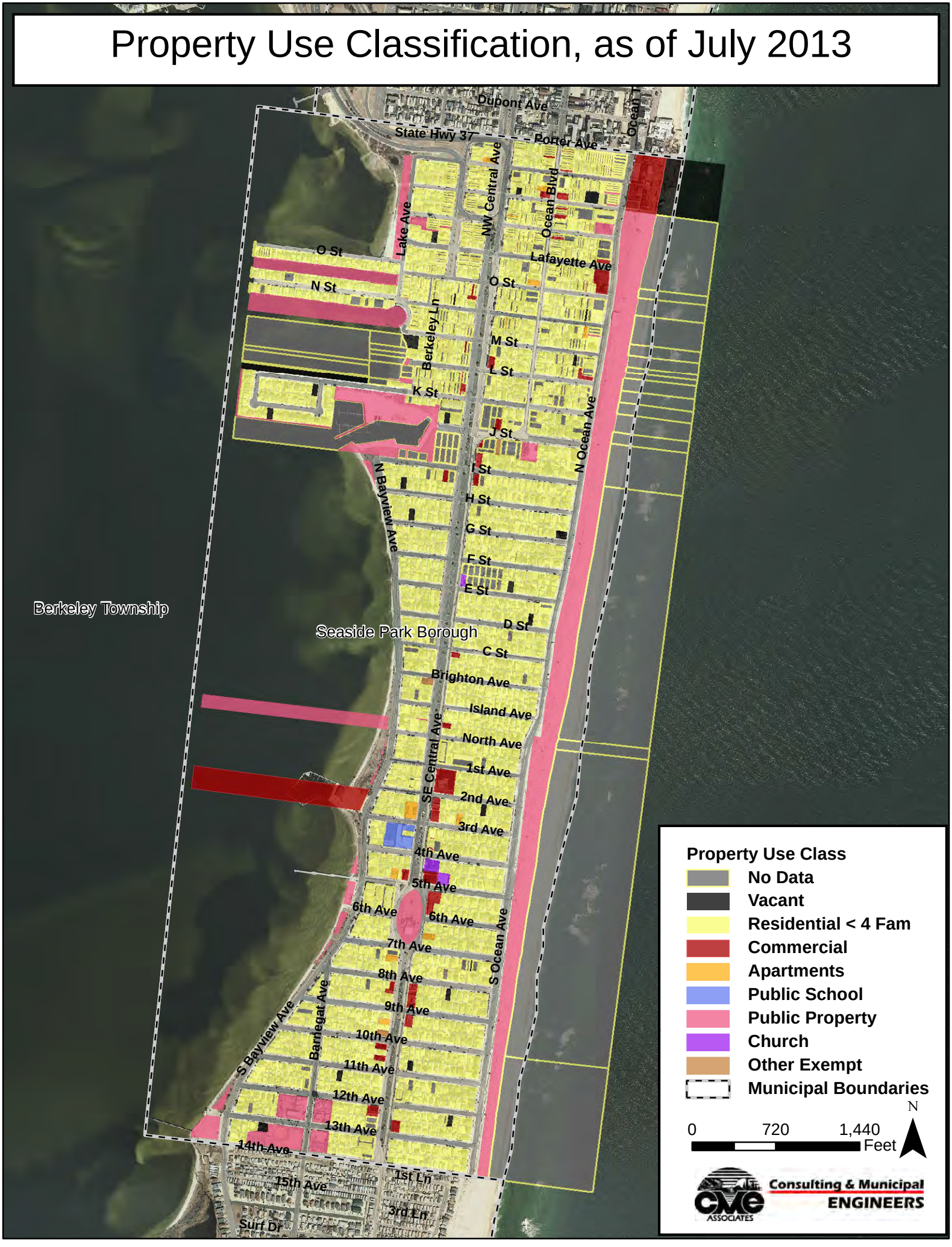
As Seaside Park recovers and rebuilds after Superstorm Sandy, steps must be taken to ensure that impacts of future disasters can be mitigated or avoided. Through the help of available Federal, State and County programs, Seaside Park has many viable resources to continue moving forward. The recommendations outlined in this Strategic Recovery Planning Report will aid the Borough in becoming more resilient to future natural disasters and in expediting recovery.

Appendices

Appendix A:

Property Class Map

Property Use Classification, as of July 2013



Appendix B:

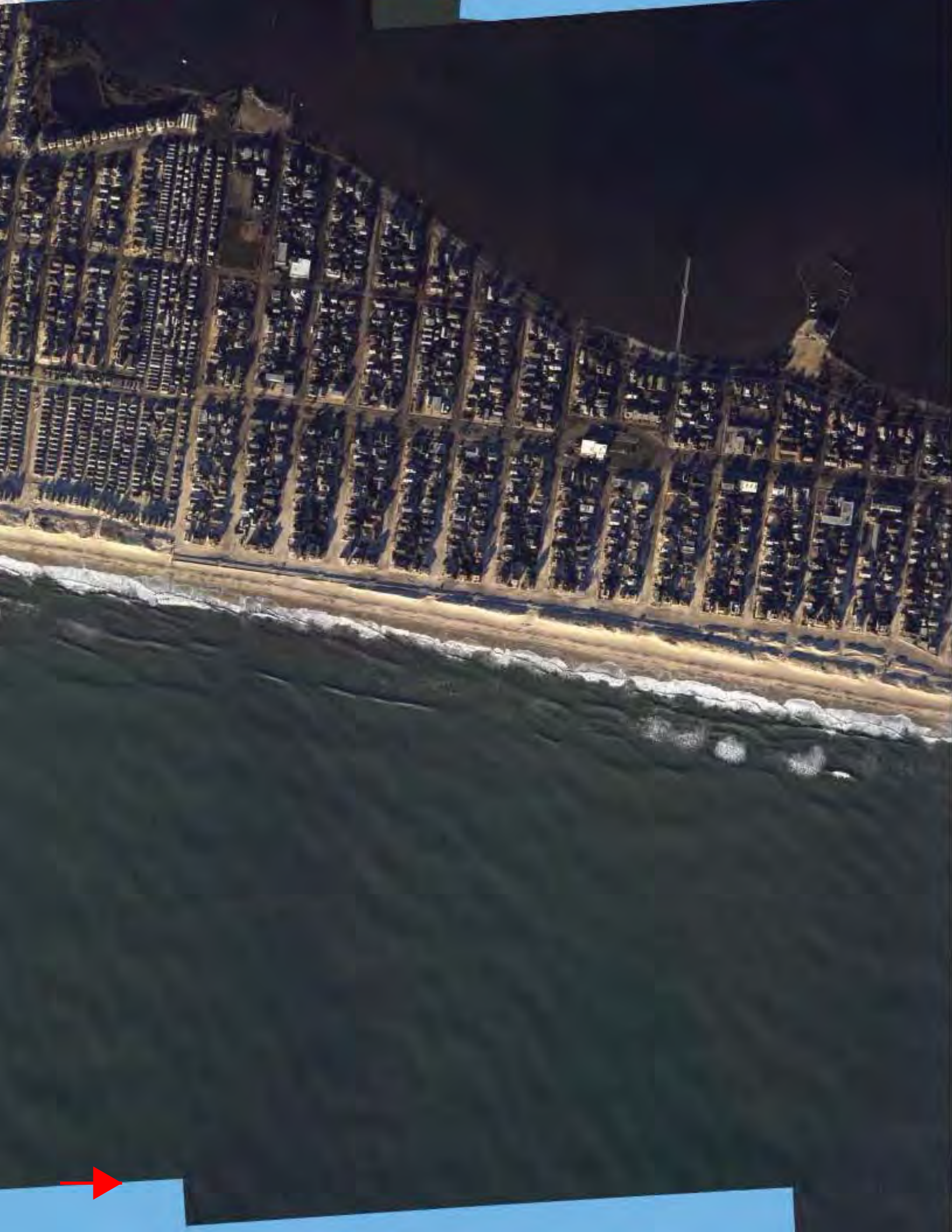
Demolished Properties Map

Properties Demolished Post-Sandy

Appendix C:

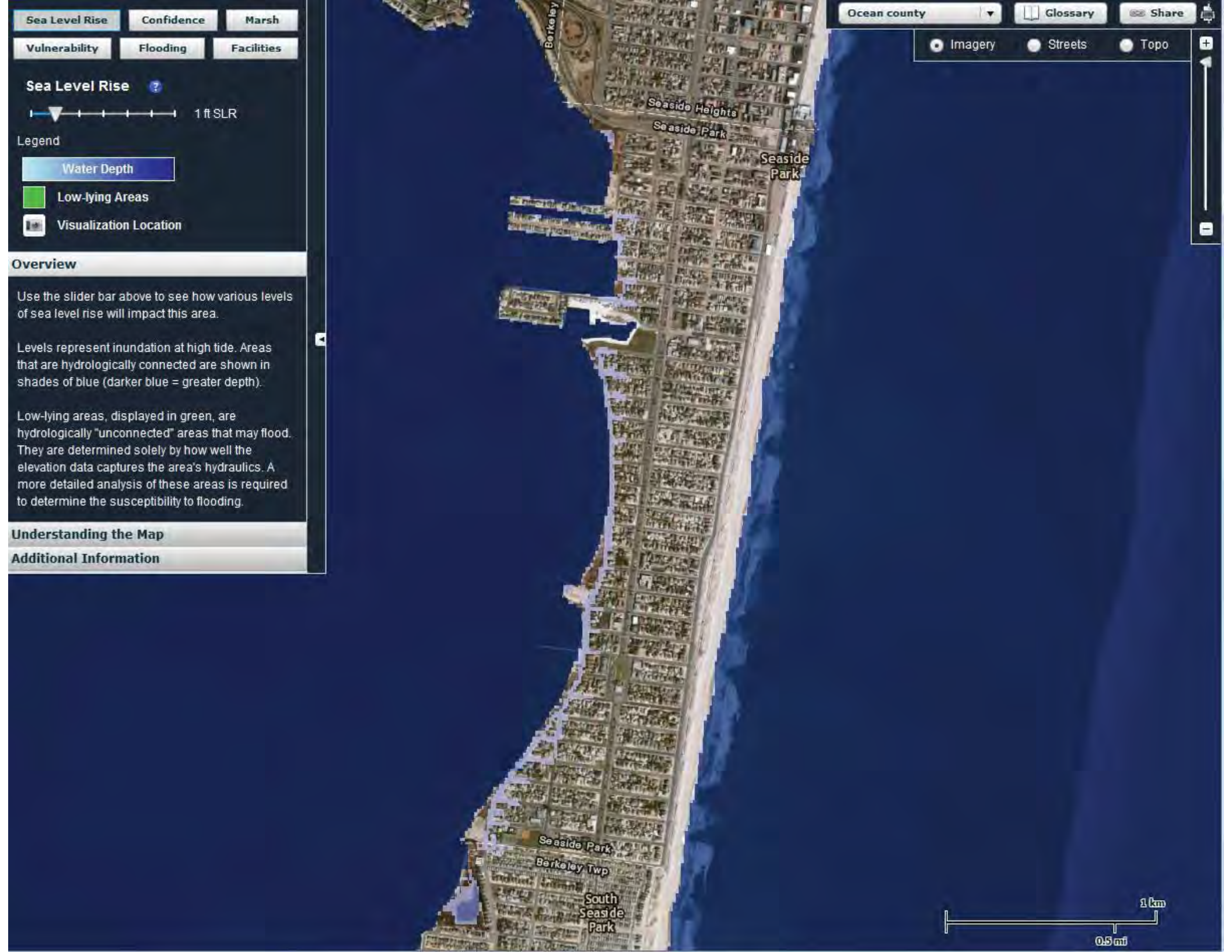
Post-Sandy Aerials Accessed Via NOAA

Hurricane Sandy Imagery Tool

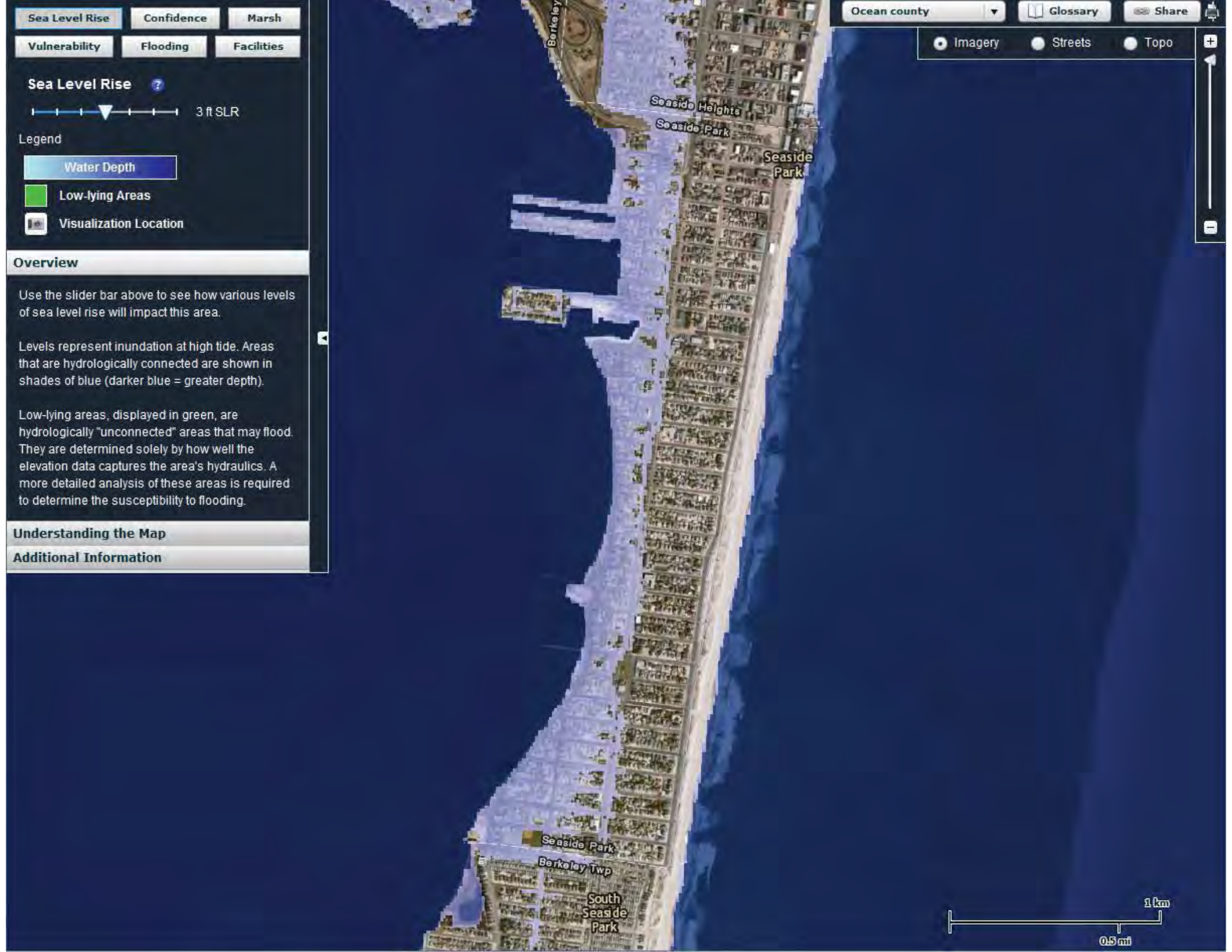


Appendix D:

Sea Level Rise Maps, 1 Foot through 3 Feet


Sea Level Rise
Confidence
Marsh
Vulnerability
Flooding
Facilities
Sea Level Rise
1 ft SLR
Legend
Water Depth
Low-lying Areas
Visualization Location
Overview
Use the slider bar above to see how various levels of sea level rise will impact this area.
Levels represent inundation at high tide. Areas that are hydrologically connected are shown in shades of blue (darker blue = greater depth).
Low-lying areas, displayed in green, are hydrologically "unconnected" areas that may flood. They are determined solely by how well the elevation data captures the area's hydraulics. A more detailed analysis of these areas is required to determine the susceptibility to flooding.
Understanding the Map
Additional Information
Ocean county
Glossary
Share
Imagery
Streets
Topo
Berkeley
Seaside Heights
Seaside Park
Seaside Park
Seaside Park
Berkeley Twp
South Seaside Park
1 km
0.5 mi


Sea Level Rise
Confidence
Marsh
Vulnerability
Flooding
Facilities
Sea Level Rise
2 ft SLR
Legend
Water Depth
Low-lying Areas
Visualization Location
Overview
Use the slider bar above to see how various levels of sea level rise will impact this area.
Levels represent inundation at high tide. Areas that are hydrologically connected are shown in shades of blue (darker blue = greater depth).
Low-lying areas, displayed in green, are hydrologically "unconnected" areas that may flood. They are determined solely by how well the elevation data captures the area's hydraulics. A more detailed analysis of these areas is required to determine the susceptibility to flooding.
Understanding the Map
Additional Information
Ocean county
Glossary
Share
Imagery
Streets
Topo
Berkeley
Seaside Heights
Seaside Park
Seaside Park
Seaside Park
Berkeley Twp
South Seaside Park
1 km
0.5 mi

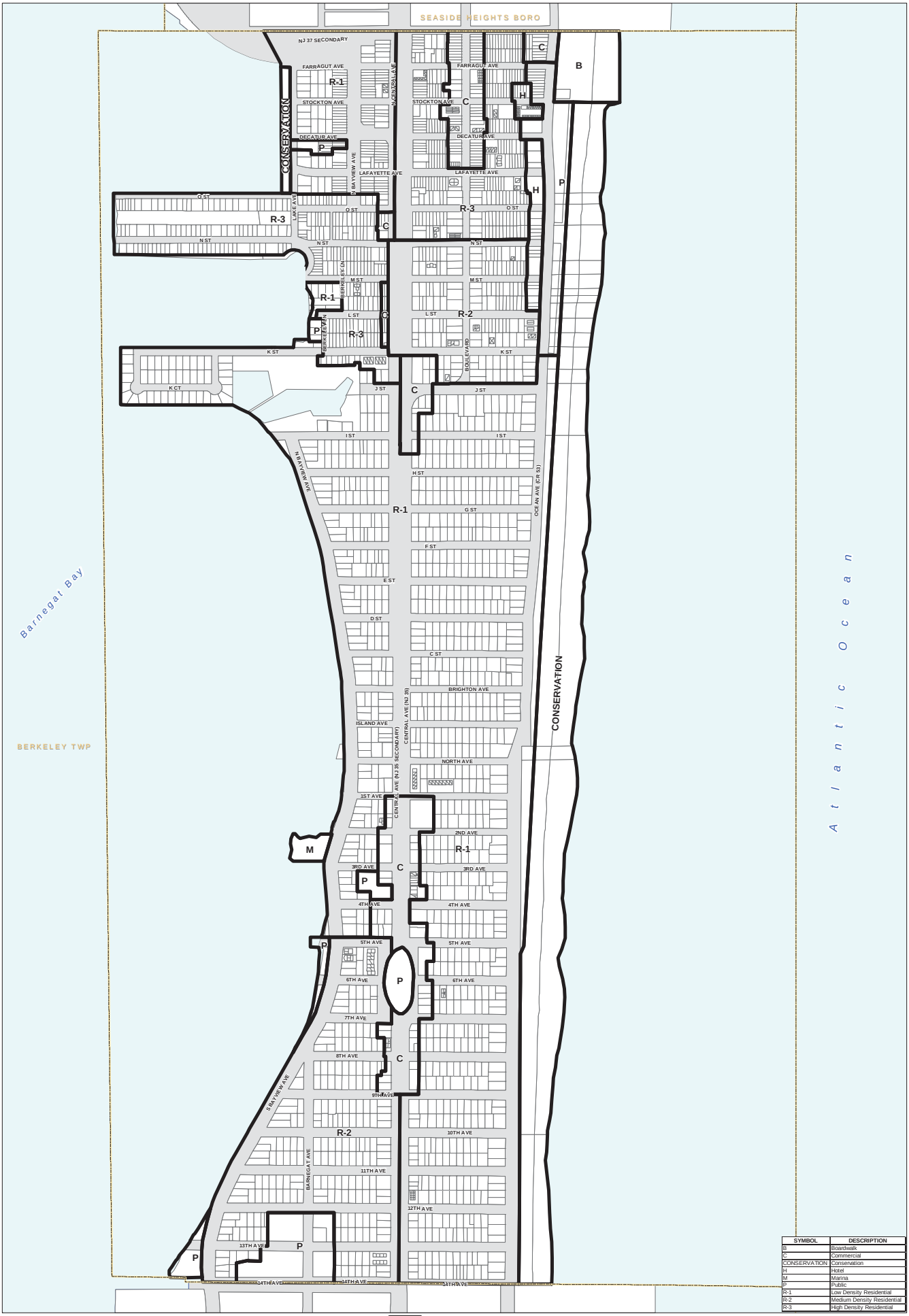

Sea Level Rise
Confidence
Marsh
Vulnerability
Flooding
Facilities
Sea Level Rise
3 ft SLR
Legend
Water Depth
Low-lying Areas
Visualization Location
Overview
Use the slider bar above to see how various levels of sea level rise will impact this area.
Levels represent inundation at high tide. Areas that are hydrologically connected are shown in shades of blue (darker blue = greater depth).
Low-lying areas, displayed in green, are hydrologically "unconnected" areas that may flood. They are determined solely by how well the elevation data captures the area's hydraulics. A more detailed analysis of these areas is required to determine the susceptibility to flooding.
Understanding the Map
Additional Information
Ocean county
Glossary
Share
Imagery
Streets
Topo
Seaside Heights
Seaside Park
Seaside Park
Seaside Park
Berkeley Twp
South Seaside Park
1 km
0.5 mi

Ocean County Hazard Mitigation Plan

Seaside Park Borough Sea Level Rise Vulnerability

Appendix E:

Previous Zoning and Current Zoning



SYMBOL	DESCRIPTION
B	Boardwalk
C	Commercial
CONSERVATION	Conservation
H	Hotel
M	Marina
P	Public
R-1	Low Density Residential
R-2	Medium Density Residential
R-3	High Density Residential

TM ASSOCIATES
11 Tindall Road
Middletown, NJ 07748-2792
Phone: 732-671-6400
Fax: 732-671-7365

0 150 300 600 Feet

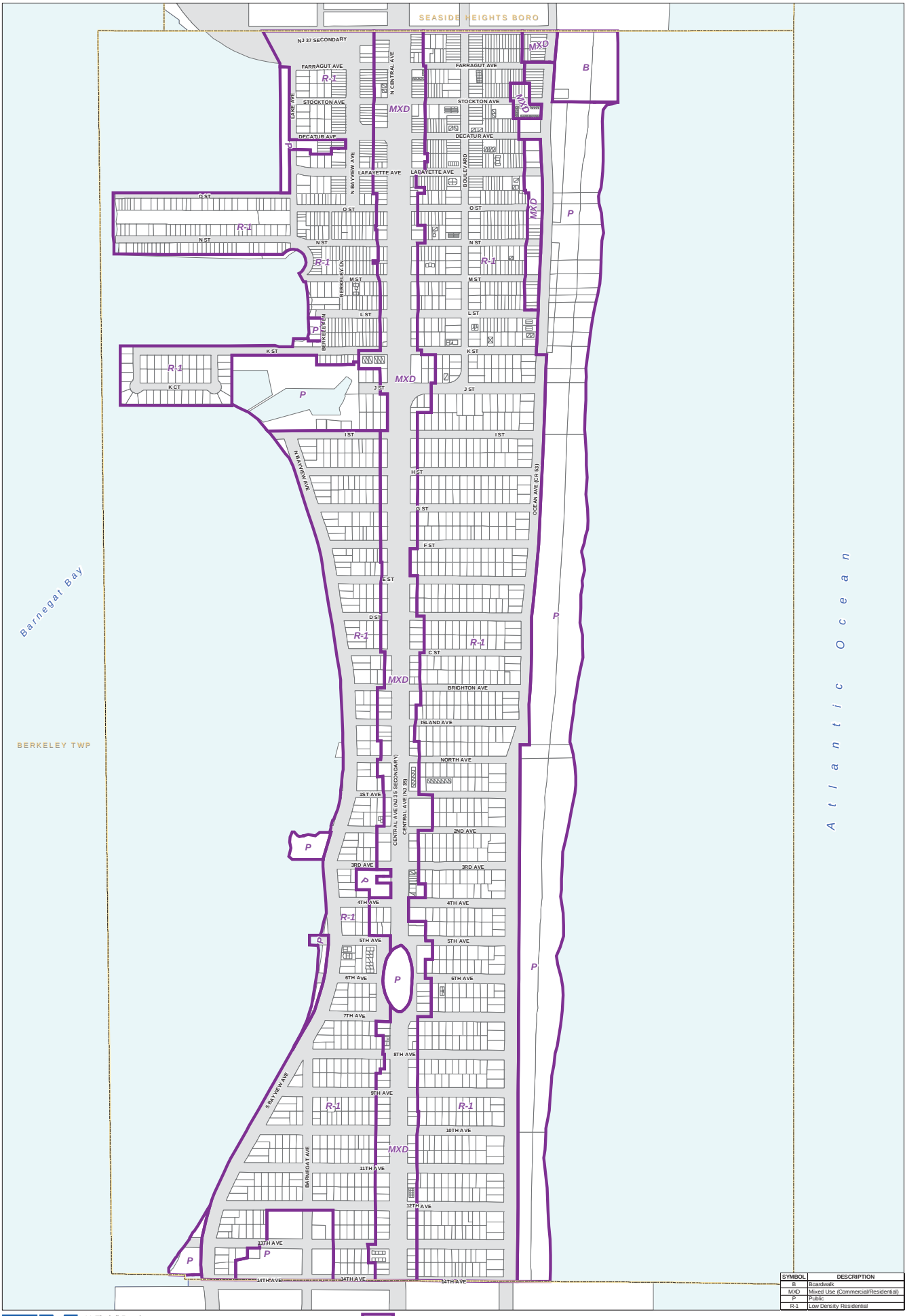
Zone Boundary
Tax Parcel
Roads
Open Water
Municipal Boundary

Figure LU-3: Existing Zoning
Borough of Seaside Park
Ocean County, New Jersey

Prepared by: STK, November 10, 2008
Source: Ocean County GIS Department - Tax Parcels, Rights-of-Way, Municipal Boundary; NJDOT - 2005 Roads; Borough of Seaside Park Zoning Map
File Path: H:\SSPB\00010\GIS\Projects\Final\sspb10_FigureLU-3Zoning.mxd

N

NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.



SYMBOL	DESCRIPTION
B	Boardwalk
MXD	Mixed Use (Commercial/Residential)
P	Public
R-1	Low Density Residential

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0 150 300 600 Feet

Proposed Zoning
Tax Parcels
Roads
Open Water
Municipal Boundary

Figure LU-4: Proposed Zoning
Borough of Seaside Park
Ocean County, New Jersey

Prepared by: STK, November 10, 2008
Source: Ocean County GIS Department - Tax Parcels, Rights-of-Way, Municipal Boundary; NJDOT - 2005 Roads
File Path: H:\SSPB\00010\GIS\Projects\Final\sspb10_FigureLU-4FutureZoning.mxd

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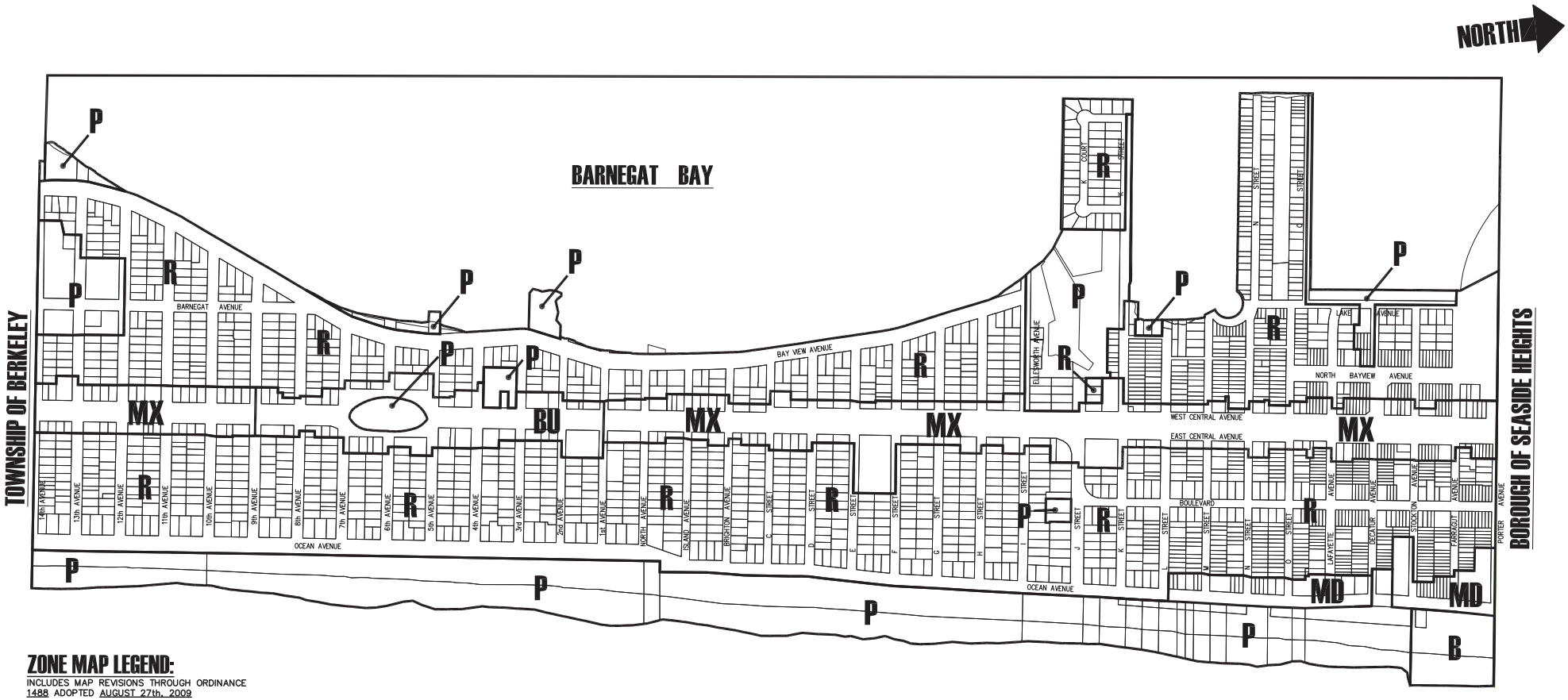
NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.



ZONE MAP LEGEND:

INCLUDES MAP REVISIONS THROUGH ORDINANCE
1488 ADOPTED AUGUST 27th, 2009

BASE MAP SOURCES:
OCEAN COUNTY GIS DEPARTMENT, LAST REVISED DECEMBER 2008.
ZONE BOUNDARIES DEVELOPED WITH REFERENCE TO BOROUGH
TAX MAPS CURRENT THROUGH JULY 2009.

R	RESIDENTIAL ZONE
BU	BUSINESS ZONE
MX	MIXED USE ZONE
MD	MULTI DWELLING ZONE
B	BOARDWALK ZONE
P	PUBLIC ZONE

600 0 300 600

GRAPHIC SCALE
1 inch = 600 ft.

ZONE MAP BOROUGH OF SEASIDE PARK
OCEAN COUNTY, NEW JERSEY

CME ASSOCIATES
CONSULTING AND MUNICIPAL ENGINEERS
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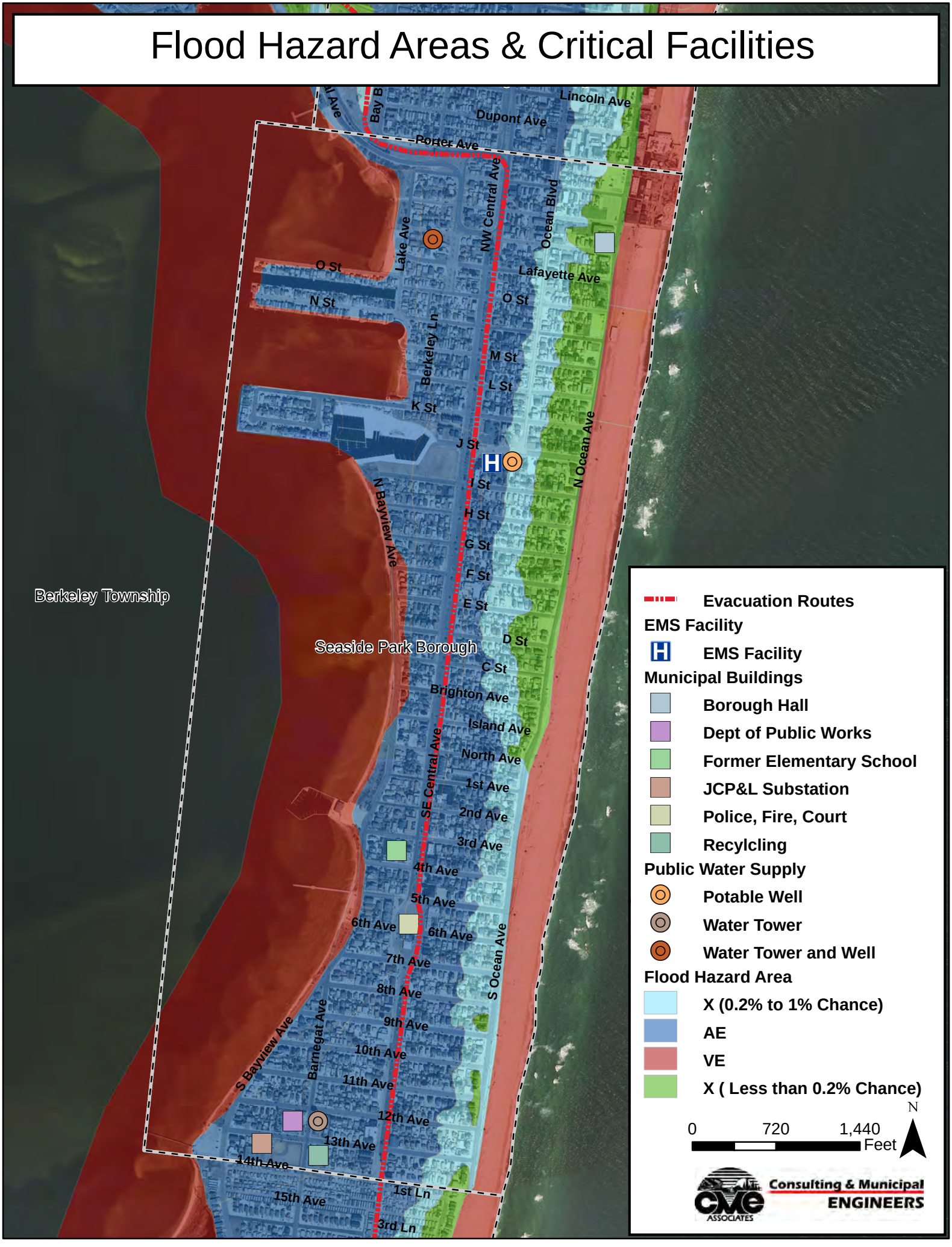
JOHN J. STEFANI P.E., L.S., P.P.
NEW JERSEY PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. 24271

DATED: SEPTEMBER 1, 2009

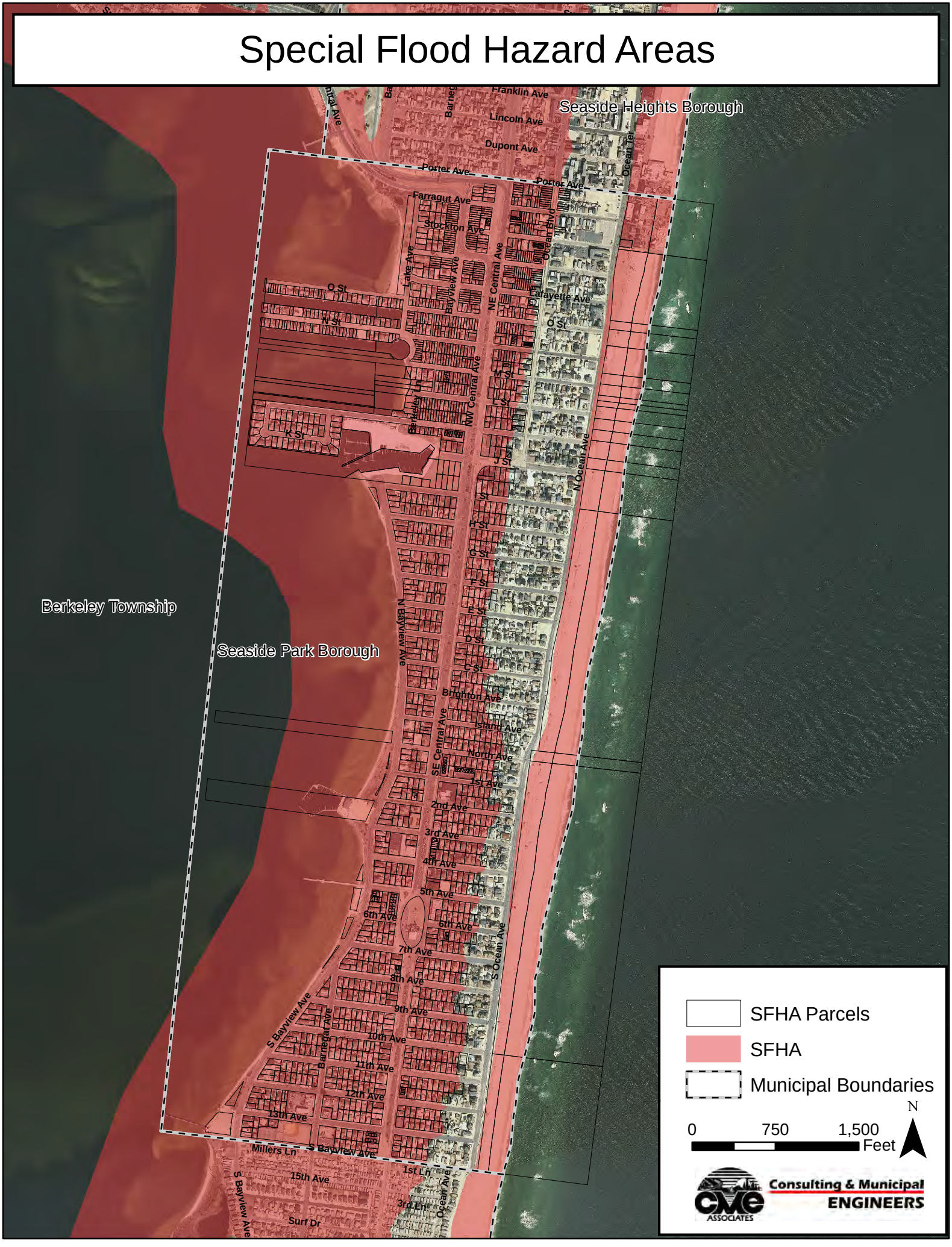
Appendix F

FEMA Flood Hazard Maps

Flood Hazard Areas & Critical Facilities



Special Flood Hazard Areas



Preliminary FIRM Base Flood Elevation