9.2 Town of Babylon

This section presents the jurisdictional annex for the Town of Babylon.

9.2.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan's primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Brian Zitani, CFM, Waterways Management Supervisor- Department of Environmental Control 281 Phelps Lane, Annex Room 23, North Babylon, NY 11703 (631) 422-7640 bzitani@townofbabylon.com; bzdec1@gmail.com	Gilbert Hanse 200 E. Sunrise Highway, Lindenhurst, NY 11757 (516) 523-7059 ghanse@townofbabylon.com

9.2.2 Municipal Profile

This section provides a summary of the community.

Population

According to the U.S. Census, the 2010 population for the Town of Babylon was 213,603.

Location

Town of Babylon, including the Village of Amityville and Babylon Village, is the located on the south shore and western border of Suffolk County. The Town and Villages are bordered on the south by the Atlantic Ocean. An 8.5-mile-long inhabited barrier island prevents direct ocean wave impact along Babylon's South Shore lies between the Atlantic Ocean and the Great South Bay. This island, known as Jones Island, was created by the Long Island State Parks Commission from several smaller islands in the early 1900s. The waterfront area of the town is highly developed, primarily with residences, as depicted in the aerial photographs below, showing portions of our frontage along the Great South Bay.

Brief History

The geographical area now known as the Town of Babylon was originally part of the Town of Huntington, and designated "Huntington South" until 1803. In 1872, the Babylon was officially partitioned into an independent Town, responsible for all aspects of government and response under the New York State "home rule" system. It should be noted the Villages maintain zoning and building codes independent of the Town.

Governing Body Format

Both the Town and Villages have boards which will be responsible for the adoption of this Hazard Mitigation Plan. The Town Board consists of an Elected Supervisor, and 4 elected Town Council members.

Growth/Development Trends

The following table summarizes major residential/commercial development and major infrastructure development that are identified for the next five (5) years in the municipality. Refer to the map in section 9.2.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.2-1. Growth and Development

Property Name	Type (Residential or Commercial)	Number of Structures	Parcel ID(s)	Known Hazard Zone*	Description / Status
Harbor View Estates	SCMR	40 12-2 B/R 28-1 B/R	S. Great Neck Road, Copiague, NY 11726	0100-192-01-5,6,7,9,10 & 11	AE (1%) X (0.2%)
Willoughby Commons	MR	300 units	Colonial Springs Road, Wheatley Heights, NY 11798	0100-11-01-6.1 to 6.7 0100-13-02-39.1 to 39.51	Wetlands/Special groundwater protection area
Wyandanch Downtown Revitalization Plan	Mixed Use Res/Comm	100 Acres	Straight Path, Wyandanch, NY 11798	281 tax lots in study area	Brown field, high groundwater
Copiague Vision Plan	Mixed Use Res/Comm	72 acres	Great Neck Road, Copiague, NY 11726	270 tax lots in Downtown District Boundary	High groundwater
Farmingdale Vision Plan	Mixed Use Res/Comm	140 acres	Rte. 110 & Conklin St, Farmingdale, NY	32 tax lots in district boundary	None

* Only location-specific hazard zones or vulnerabilities identified.

Additional community profiling information on several of the Town's communities, including geographic area and data, general demographics, income and poverty, employment and housing may be found in the West Gilgo to Captree New York Rising Community Reconstruction Program Conceptual Plan available at:
http://stormrecovery.ny.gov/sites/default/files/crp/community/documents/west_gilgo_to_captree_conceptual_plan_1112132.pdf.

In addition, the Villages of Amityville, Babylon and Lindenhurst participated in the New York Community Reconstruction program. Additional community profiling may be found in these plans as well – to be finalized early April 2014.

9.2.3 Natural Hazard Event History Specific to the Municipality

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2008, refer to Volume I, Section 5.0 of this plan.

Table 9.2-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 8-9, 2013	Severe Winter Storm and Snowstorm	DR-4111	Yes - PA	Overtime for snow removal costs $456,250.42. Equipment damage, salt and sand costs were not available. 2 Project Worksheets submitted
October 27-November 8, 2012	Hurricane Sandy	DR-4085	Yes – IA and PA	Storm surge flooded hundreds of homes and businesses. Power was out for as long as 30 days. This resulted in a lack of heat and fresh water (pumps required electricity). Massive beach erosion occurred. Evacuation of areas south of Montauk highway and the Barrier Beach communities. Evacuation shelters operated by the Red Cross, Power outages reported, duration up to 30 days. Natural gas service shut down, 2-3 weeks to re-establish service. Ocean Parkway closed, loss of 2 miles of east bound lane. Damage to curbs and sidewalks from uprooted trees, damage to roadway signs and street lights, repair and debris removal from catch basins, damage and erosion of roadways in coastal areas. Town operates 45 separate facilities consisting of Parks, Office and Community Service centers. Damage from wind, wave action/erosion and flooding was reported at 22 facilities. NFIP records were not available on private claims. Approximately 8,000 private structures were inundated by floodwaters (includes Villages of Amityville, Lindenhurst,and Babylon). Wind damage estimates are not available. Using the FEMA SDE program the Town evaluationed 1507 residential structures for potential substantial damage, approximately 300 were identified as substantially damaged. as of October 2013, 178 Substantial Damage Determinations have been released by the Town Building Department. The number is expected to increase as many homes remain unoccupied and have not filed for building permits yet. Debris cleanup costs were $5,814,631.30. 28 Project Worksheets submitted.
August 26 – September 5, 2011	Hurricane Irene	EM 3328 DR 4020	Yes – IA and PA	Evacuation of areas south of Montauk highway and the Barrier Beach communities. Evacuation shelters operated by the Red Cross, storm figures

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
				are not available. Power outages reported, duration up to 5 days. Damage to curbs and sidewalks from uprooted trees (PA-02-NY-4020-PW-07946(0)-$110,047.00), Damage to roadway signs and street lights (PA-02-NY-4020-PW—06942(0)-$17,809.05, Repair and debris removal from Catch Basins (PA-02-NY-4020-PW-07556 (0)- $14,736.00 and PA-02-NY-4020-PW-01214 (0)-$1,247.87).NFIP records list 389 flood insurance claims were filed as a result of this storm for a total of $3,118,580.00 damage to private structures. The Town did not confirm any substantially damaged structures resulting from this storm. Debris cleanup costs were $1,081,788.03. 18 Project Worksheets submitted.
March 13-31, 2010	Severe Storms and Flooding	DR 1899	Yes - PA	Damage to curbs and sidewalks from uprooted trees, PA-02-NY-1899-PW-00812(0) for $20,592.00. Damage to Town Venetian Shores and Bergen Point docking facilities, damage to Town Buildings. Venetian Shores Launching Ramp (PA-02-NY-1899-PW-01151(0)-$96,850.00), Bergen Point Municipal Pier (PA-02-NY-1899-PW-01150(0)-$121,592.00), Town buildings (PA-02-NY-1899-PW-01270(0)-$22,707.12). NFIP records list 76 flood insurance claims were filed as a result of this storm for a total of $1,080,624.00 damage to private structures. Debris cleanup costs were $304,600.48 (PA-02-NY-1899-PW-00697(1)). 7 Project Worksheets submitted.

Notes:
EM *Emergency Declaration (FEMA)*
FEMA *Federal Emergency Management Agency*
DR *Major Disaster Declaration (FEMA)*
IA *Individual Assistance*
N/A *Not applicable*
PA *Public Assistance*

9.2.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Town of Babylon. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

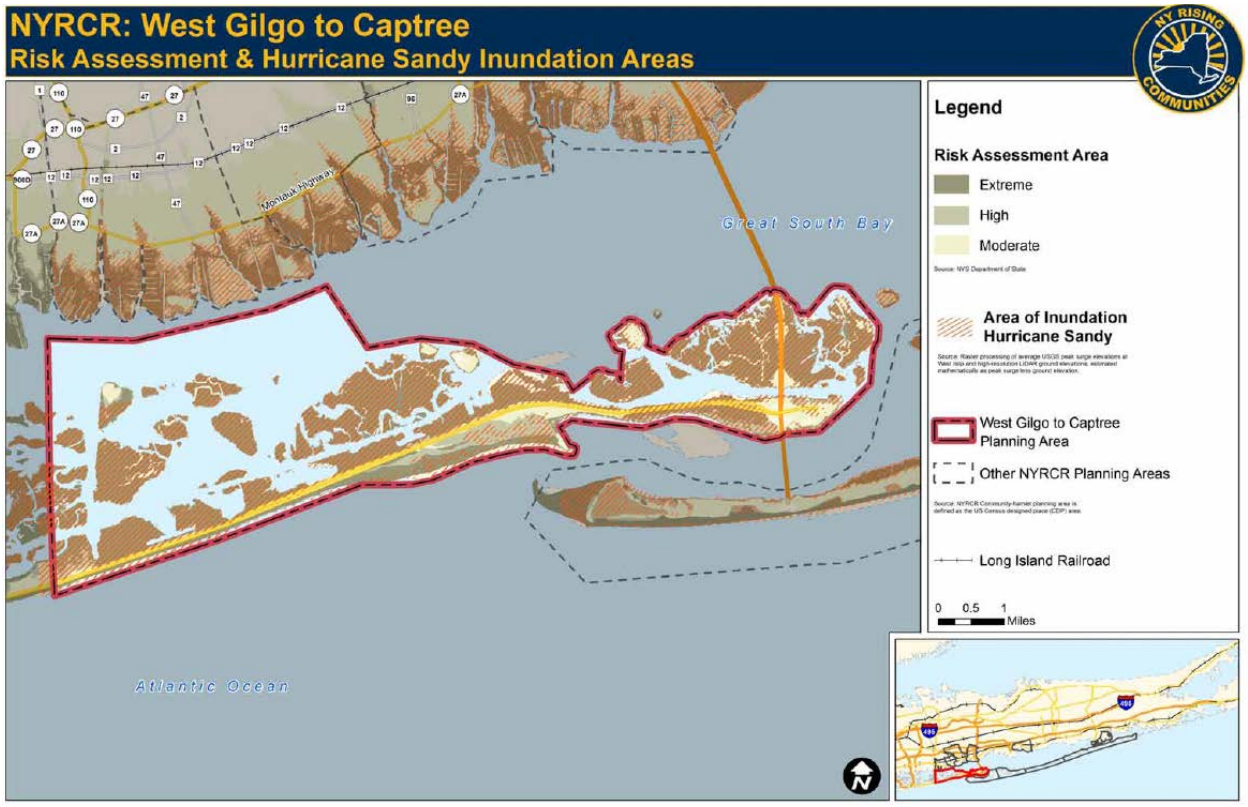
Coastal flooding has and continues to cause damage to private structures in the Hamlets of West Babylon, Lindenhurst, Copiague and Amity Harbor primarily south of Montauk Highway. Also the barrier beach communities of Oak Beach, Oak Beach Association, Oak Island, Captree Island, Gilgo Beach and West Gilgo Beach Association. Town Park and recreational facilities in these areas also suffer damage from coastal flooding and storms. The majority of existing structures are pre-FIRM construction and floods as common as 10-year events can cause damage resulting in flood claims.

Babylon's barrier beach is mapped as a New York State Coastal Erosion Hazard area. The Town operates 4 park facilities located within this designation, Gilgo Beach, Cedar Beach, Overlook Beach and Oak Beach Park. Oak Beach Park was improved with a vinyl sheet pile bulkhead in 2006 to protect the shoreline. An unprotected section was maintained for water access, erosion continues to impact this section. Our 8 miles of beach which includes our 3 ocean front facilities are severely impacted by storm erosion. Semi-annual dredging of the Fire Island Inlet with sand deposition at Gilgo State Park west to the Nassau County border provides temporary relief from the impacts of long term beach erosion. Lack of consistency of maintenance dredging projects has impacted our Gilgo Beach facility. The lack of beach width has reduced the protection to the adjacent Ocean Parkway and residential properties. In the summer of 2013 the beach could not support recreational use as the distance from the Parkway to the high water line was often less than 100 feet. Hurricane Sandy damaged approximately 2.5 miles of Ocean Parkway from Tobay Beach in the Town of Oyster Bay to Gilgo State Park in Babylon.

High groundwater continues to be problematic in several areas in the Town. Past construction of homes with basements or cellars was standard practice. After significant rainfall events or in low lying areas were above average rainfall has temporarily elevated groundwater, basement flooding is a common issue. Many of these homes either have their utilities installed in the basement area or the owners have chosen to "finish" the basement area to increase habitable space. Flooding damages the finished spaces and/or the utilities installed. Its common practice to see temporary sump pumps or even permanent discharge lines leading from homes to adjacent creeks, roads or public drainage systems. Most of the impacted areas fall within the watershed areas of our natural stream channels. Common issues homeowners deal with is damage to their contents and appliances. In many cases mold issues have occurred if the problem persist. Damage to public infrastructure has occurred in several cases where homeowners have attempted to connect a sump drainage line directly to a municipal drainage structure in the roadway. Shoddy construction practices have resulting in road collapsing or drainage structures failing form the illegal sump connection. The County DPW has reported similar occurrences on illegal connections to existing sanitary sewer mains. Safety issues have arisen from sump pumps flooding local streets during winter and ice forming on the roads and sidewalks.

Superstorm Sandy in October 2012 caused massive flooding in the Town. The figure below shows the inundated areas from West Gilgo to Captree (in the Town of Islip). A description of the effects of Superstorm Sandy on the Town can be found in Section C, above. The NYRSCP process has identified relevant vulnerabilities and potential mitigation initiatives within the community, as documented in the NYRCRP planning documents available at http://stormrecovery.ny.gov/community-reconstruction-program. Key projects and initiatives identified in these documents are included in the updated mitigation strategy (Table F3), and elsewhere within this annex as noted.

In addition, the Villages of Amityville, Babylon and Lindenhurst participated in the New York Community Reconstruction program. Additional community profiling may be found in these plans as well which will be finalized early April 2014.



Source: New York Rising Community Reconstruction Program. "Conceptual Plan – West Gilgo to Captree". October 2013.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for Town of Babylon.

Table 9.2-3. Hazard Risk/Vulnerability Risk Ranking

Hazard Ranking	Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard [a, c, e]	Probability of Occurrence[b]	Risk Ranking Score (Probability x Impact)
2	Coastal Erosion	RCV in CEHA: $189,568,376	Frequent	39
10	Drought	Damage estimate not available	Rare	0
7	Earthquake	500-Year MRP: $75,419,706 2,500-Year MRP: $1,332,846,454	Rare	16
9	Expansive Soils	Damage estimate not available	Rare	6
4	Flood	1% Annual Chance: $202,090,599 0.2% Annual Chance: $323,196,644	Frequent	30
8	Groundwater Contamination (natural)	Damage estimate not available	Occasional	14
3	Hurricane	Category 1 SLOSH: $801,564,864 Category 2 SLOSH: $4,399,409,423 Category 3 SLOSH: $6,556,176,678 Category 4 SLOSH: $9,280,628,648	Occasional	36
9	Infestation	No measurable impact to property	Frequent	3
1	Nor'Easter	100-Year RCV: $187,592,283 500-Year RCV: $13,573,962,156	Frequent	45
5	Severe Storm	100-Year RCV: $187,592,283 500-Year RCV: $13,573,962,156	Frequent	27
2	Severe Winter Storm	1% of GBS: $377,437,072 5% of GBS: $1,887,185,360	Frequent	39
6	Shallow Groundwater Flooding	Damage estimate not available	Frequent	18
10	Wildfire	Estimated RCV in Interface/ Intermix: $343,178,963	Rare	0

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)

b. The valuation of general building stock and loss estimates was based on the custom inventory developed for Suffolk County and probabilistic modeling results and exposure analysis as discussed in Section 5.

c. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages and the Tribes within the Town boundary.

d. Frequent = Hazard event that occurs more frequently than once in 10 years; Occasional = Hazard event that occurs from once in 10 years to once in 100 years, Rare = Hazard event that occurs from once in 100 years to once in 1,000 years; None = Hazard event that occurs less frequently than once in 1,000 years

e. The estimated potential losses for Nor'Easter and Severe Storm are from the HAZUS-MH probabilistic hurricane wind model results. See footnote c.

CEHA = Coastal Erosion Hazard Area
GBS = General building stock
MRP = Mean return period
RCV = Replacement cost value

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the municipality.

Table 9.2-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)	# Polices in 500-Boundary (3)	# Policies Outside the 500-year Flood Hazard (3)
Town of Babylon (T)	3,234	4,282	$167,646,793	468	89	1,973	332	929

Source: FEMA Region 2, 2014
(1): Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of January 31, 2014. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents the number of claims closed by January 31, 2014.
(2): Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2.
(3): The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file. FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

Table 9.2-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent[2]	Percent Structure Damage	Percent Content Damage	Days to 100-Percent[2]
Pump Station #10	Wastewater	A	X						

Source: HAZUS-MH 2.1
Note: x = Facility located within the 0.2-percent annual chance flood boundary.
Please note it is assumed that wells have electrical equipment and openings are three-feet above grade.
(1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).
(2) In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Other Vulnerabilities Identified by Municipality

None at this time.

9.2.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the municipality.

Table 9.2-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y			Town adopted International Building Code 2003
Zoning Ordinance	Y	Local and County (1)	Suffolk County Planning Commission; Town Zoning Board	TOB Chapter 213, adopted 1954. Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Town Zoning Board must approve with a greater majority & present findings.
Subdivision Ordinance	Y	Local and County (1) (2)	Suffolk County Planning Commission; Town Zoning Board	TOB Chapter 213, adopted. Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Town Board/ Town Zoning Board/ Town Planning Board must approve with a greater majority & present findings. NYS Subdivision laws provide a general framework, but allow room for local ordinances and interpretation.
Special Purpose Ordinances	Y	Local	Town Department of Environmental Control	Chapter 99 – Coastal Erosion Hazard Areas (1989); Chapter 114 –Environmental Quality Review (1977) updated 1/25/11; Chapter 125 Flood Damage Control (1994) updated 8/4/09; Chapter 128 Freshwater Wetlands (1976); Chapter 137 Preservation of Historic Areas (1987); Chapter 153 Multiple Dwellings (1978)
Growth Management	Y	Local		Incorporated into most local ordinances listed above.
Floodplain Management / Basin Plan	Y	Local	Town Department of Environmental Control; Town Flood Plain Manager	Maintained by TOB Department of Environmental Control; by a designated TOB Flood Plain Manager ASFPM Certified Floodplain Manager – 9/22/09
Floodplain Management Study	Y	Federal	USACE	Fire Island Inlet to Montauk Point (FIMP) Reformulation Study

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Stormwater Management Plan/Ordinance	Y	Local	State; Town	Chapter 189, adopted pursuant to NYS Phase II implementation of the Federal Clean Water Act Chapter 190 Storm Sewers: Illicit discharges, activities and connections, adopted 2010
Comprehensive Plan / Master Plan	Y	Local	Town Board	Completed per state mandate 8/11/98. Town has adopted a Vision Plan for downtown Copiague, downtown Wyandanch. A Vision Plan is being prepared for downtown East Farmingdale.
Capital Improvements Plan	Y	Local	Town Board/DPW	Updated annually
Site Plan Review Requirements	Y	Local and County (1) (2)	Suffolk County Planning Commission; Town Planning Department, Town Board	Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Town Boards must approve with a greater majority & present findings. Town Board Adopted site plan review requirements under Chapter 186. Form based code for Wyandanch Chapter 212. Originally adopted under L.L. no. 1-1977 the Town Site Plan review regulations was last revised in 2005. Form based code adopted for Wyandanch Downtown Revitalization Plan in 2011.
Habitat Conservation Plan	N			
Economic Development Plan	N			
Emergency Response Plan	Y			Developed 1976, updated as needed
Shoreline Management Plan	N			
Post Disaster Recovery Plan	N			
Post Disaster Recovery Ordinance	N			
Real Estate Disclosure req.	N			NYS Mandate
Long Island South Shore Estuary Reserve Comprehensive Management Plan	Y	Local	Long Island South Shore Estuary Reserve Council, NYS Department of State	
Other (e.g. steep slope ordinance, local waterfront revitalization plan)	N			
NFIP Flood Damage Protection Ordinance	Y	Local	Town Planning and Development – Building Division	Chapter 125, amended in its entirety 8/4/09, Flood Damage Control

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
NFIP - Freeboard	Y	Local, State	Town Planning and Development – Building Division	Added to Chapter 125 in 2009 from NYS Building Code. State mandated BFE +2 for single and two-family residential construction, BFE + 1 for all other.
NFIP - Cumulative Substantial Damages	N			
Coastal Erosion Control Districts	Y	Local	Town Department of Environmental Control	Chapter 99, Coastal Erosion Hazard Areas, Adopted in 1989

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Babylon.

Table 9.2-7. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Department of Planning & Development - Planners, Assistant Civil Engineers, Engineering Aides
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Department of Planning & Development – Building Inspectors, Assistant Civil Engineers Contract Engineers
Planners or engineers with an understanding of natural hazards	Y	Department of Planning & Development – Fire Marshall/Assistant Civil Engineer Department of Environmental Control – Waterways Management Supervisor
NFIP Floodplain Administrator	Y	Department of Environmental Control – Waterways Management Supervisor ASFPM –Certified Floodplain Manager 2009
Surveyor(s)	Y	Trained in Surveying (not licensed) -- Department of Planning & Development – Assistant Civil Engineers; Department of Public Works Highway Engineering – Senior Engineering Aides Contract Surveyors
Personnel skilled or trained in “GIS” applications	Y	Department of Planning & Development - Planners, Assistant Civil Engineers, Engineering Aides Department of Environmental Control – Environmental Analysts, Waterways Management Supervisors Department of Public Works Highway Engineering – Senior Engineering Aides Department of Information Technologies – IT Director Contract Application Developers
Scientist familiar with natural hazards in the municipality.	Y	Department of Environmental Control – Environmental Analysts, Waterways Management Supervisors
Emergency Manager	Y	Department of Planning & Development – Fire Marshall
Grant Writer(s)	Y	Department of Finance – Grant Writer Department of Environmental Control, Planning and Development- Down Town Revitalization, Department of Public

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
		Works - Engineering
Staff with expertise or training in benefit/cost analysis	Y	Department of Finance -- Comptroller & Environmental Control
Professionals trained in conducting damage assessments	Y	Town Chief Building Inspector and full time building inspectors are trained for damage assessments.

Fiscal Capability

The table below summarizes financial resources available to the Town of Babylon.

Table 9.2-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	Yes, have utilized in the past Community Reconstruction Program (CRP), CDBG – Home Improvement Program (HIP)
Capital Improvements Project Funding	Yes, have utilized in the past Town Post-Storm facility reconstruction
Authority to Levy Taxes for specific purposes	Yes, have utilized in the past
User fees for water, sewer, gas or electric service	No
Impact Fees for homebuyers or developers of new development/homes	Yes, have utilized for traffic safety measures, optical pre-emption, and roadway improvements
Incur debt through general obligation bonds	Yes, have utilized in the past Updated/ Bonds issued for Irene and Sandy recovery
Incur debt through special tax bonds	Yes, have utilized in the past
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Mitigation grant programs	Yes, have utilized in the past HMGP, EFC
Other	FEMA sponsored grant funding; County sponsored grant funding for roadways improvements and stormwater remediation County Water Quality Program funding for proposed stormwater project.

Community Classifications

The table below summarizes classifications for community program available to the Town of Babylon.

Table 9.2-9. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	10	10/1/1993
Building Code Effectiveness Grading Schedule (BCEGS)	4/4	2003
Public Protection	3/9*	-
Storm Ready	Not Participating	N/A
Firewise	Not Participating	N/A

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at http://www.isomitigation.com/ppc/0000/ppc0001.html
- The National Weather Service Storm Ready website at http://www.weather.gov/stormready/howto.htm
- The National Firewise Communities website at http://firewise.org/

National Flood Insurance Program

The following section provides details on the National Flood Insurance Program (NFIP) as implemented within the municipality:

NFIP Floodplain Administrator: Brian Zitani, CFM, Waterways Management Supervisor- Department of Environmental Control

Program and Compliance History

Town of Babylon joined the NFIP on July 16, 1979 and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009. The community's Flood Damage Prevention Ordinance (FDPO), found at Chapter 125 of the local code, was last updated on August 4, 2009.

As of January 31, 2014 there are 3,234 policies in force, insuring $850,100,000 of property with total annual insurance premiums of $4,221,863. Since January 31, 2014, 4,282 claims have been paid totaling $167,646,793.46. As of January 31, 2014 there are 468 Repetitive Loss and 89 Severe Repetitive Loss properties in the community.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. Town of Babylon has completed Community Assistance Visits (CAV), with the most recent visit completed on August 24, 2011.

Loss History and Mitigation

Since January 31, 2014, 4,282 claims have been paid totaling $167,646,793.46. As of January 31, 2014 there are 468 Repetitive Loss and 89 Severe Repetitive Loss properties in the community.

Hurricane Sandy inundated all structures located in the Town mapped 100-year and in some areas 500-year flood plain. All experienced some damage, 1507 structures were surveyed for substantial damage using FEMA's Substantial Damage Estimate (SDE) program. Approximately 300 were identified as potentially being substantially damaged based on the SDE review, 175 have been confirmed to date. Most of the existing structures are pre-FIRM construction. Most SDE properties were located in the moderate wave action zone, and damage resulted from wave action. A small number of homes were buoyed off the foundations and damage resulted when the flood receded.

For Hurricane Sandy the current programs are being administered by the State through the NY Rising program, figures are approximate. NY Rising reported (December 2013) 128 applications from Babylon were filed for acquisition, (July 2013) 874 requests for repair/elevation funding were received. In December 2013 NY Rising reported over 4000 applications filed in Suffolk County. 387 residents contacted the Town DEC for any funding information. Approximately 150 building permits have been issued, to date, to elevate an existing structure or demo and construct a new residence.

After Tropical Storm Irene 60 residents inquired about 404 elevation funding, 16 filed Letter of Intent, 10 applications were approved and are in the process of elevating.

Funding sources include: HMGP 404, Federal flood insurance Increased Cost of Compliance, Small Business Administration loans, NY Rising (CDBG-DR), and property owners.

Planning and Regulatory Capabilities

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on August 4, 2009, and is found at Chapter 125 of the local code.

Minimum standards set forth by FEMA and New York State have been adopted by Town of Babylon. Following Hurricane Sandy, the Zoning Board suspended height restrictions for structures being elevated to the BFE +2'. Planning Board recognizes elevation requirements on new homes when reviewing "Architectural Review" applications.

Administrative and Technical Capabilities

The community FDPO identifies the Commissioner of Planning and Development as the local NFIP Floodplain Administrator. The Waterways Management Supervisor, currently Brian Zitani, was appointed to the position of floodplain administration, which is an auxiliary duty.

Town of Babylon's NFIP program is administered through the Town departments of Environmental Control and Planning and Development. Town Waterways Manager is the primary contact.

The Department of Environmental Control maintains and updates the Town GIS system, comments on Zoning Board, Planning Board, Town Board and building permit applications, conducts public outreach programs, provides flood map information and flood history to residents, schedules professional training for staff and maintains the Flood Code/Flood Insurance Study/current and Historic FIRM records.
The Department of Planning & Development/Building Division enforces flood construction code, reviews/processes all building permits in the flood plain, conducts building permit and substantial damage/substantial improvement inspections, maintains permit records.

The Town of Babylon requests annual flood claim updates from FEMA for GIS mapping inventory. List does not include damaged properties that do not have flood insurance. The Town started keeping a residential mitigation inventory in 2011.

Substantial Damage Estimates are done by the NFIP Flood Plain Administrator. Hurricane Sandy inundated all structures located in the Town mapped 100-year and in some areas 500-year flood plain. All experienced some damage, 1507 structures were surveyed for substantial damage using FEMA's SDE program. Approximately 300 were identified as potentially being substantially damaged based on the SDE review, 175 have been confirmed to date. Most of the existing structures are pre-FIRM construction. Most SD properties were located in the moderate wave action zone, and damage resulted from wave action.

Brian Zitani feels he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator. Brian Zitani is certified in floodplain management and attends regular continuing education programs.

Public Education and Outreach

Staff from the Department of Environmental Control and Planning and Development speaks at community and Civic Association meetings to discuss local flood risk, mitigation and NFIP regulations and Flood Insurance.

The Department of Environmental Control maintains and updates the Town GIS system, comments on Zoning Board, Planning Board, Town Board and building permit applications, conducts public outreach programs, provides flood map information and flood history to residents, schedules professional training for staff and maintains the Flood Code/Flood Insurance Study/current and Historic FIRM records.
The Department of Planning & Development/Building Division enforces flood construction code, reviews/processes all building permits in the flood plain, conducts building permit and substantial damage/substantial improvement inspections, maintains permit records.

Actions to Strengthen the Program

Barriers to running an effective include the demand for information increasing after a disaster event. This is taxing on existing staff and resources. Training opportunities for professional staff is limited, funds are not always available for travel or paid training opportunities. Limited and inconsistent education outreach to the public and elected policy makers can result in bad policy or code decisions. Town of Babylon is interested in additional information regarding certification in floodplain management and Community Rating System (CRS).

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

It is the intention of this municipality to incorporate hazard mitigation planning and natural hazard risk reduction as an integral component of ongoing municipal operations. The following textual summary and table identify relevant planning mechanisms and programs that have been/will be incorporated into municipal procedures, which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation "capabilities":

- **Lane Use Plans**- Town continues to offer facilities for Agricultural/Market to conduct training and contractor certifications. Certification training classes were offered at the Town Hall Annex in North Babylon in 2008, 2009, 2010 and 2011.
- **Floodplain Management**- Stream clean-up program is administered through the Town DPW, an annual stream inspection survey is conducted every spring to identify problem areas. Individual complaints by residents also identify problem sites. Clean-up actions are coordinated with the NYSDEC Wetland Division to comply with wetland protection regulations. In 2012 the Town automated its complaint and response program with the COGNOS system which added time tracking to complaint response.
- **Building Code, Ordinances, and Enforcement**- The Town participated in or Sponsored several workshops geared to local officials and to residents on Flood Code enforcement and proper residential construction. Town coordinated with the NYSDEC, ASFPM and NYSFSMA.
- **Floodplain Management**- Continue program to Install different types of tidal flaps and valves at ten trial locations to determine the best ways of preventing tidal backflow into municipal drainage systems
- **Infrastructure Protection-** Reconstruction of Maple Avenue and Elm Avenue completed in 2008 and 2009 (Approx. 1 mile roadway). Town DPW identified roadways for elevation in 2012, Town is seeking funding opportunities through the FEMA HMG 404 program and the NYS CRZ program.
- **Floodplain Management-** Encourage applicable agencies to update existing CoastalView program on a yearly basis. (CoastalView is a joint venture of State and Federal agencies which has established benchmarks within erosion data in a GIS format)
- **Infrastructure Protection-** The Town identified which roads constituted as vital or critical for evacuation in 2008. Road elevations are scheduled as funding is available. No critical roadways were elevated in the past 5 years. Funding is being pursued through the FEMA HMG 404 program, NYS CRZ program or other Federal and State sponsored funding sources.
- **Building Code, Ordinance, and Enforcement-** HMG 404 application filed in 2012 to elevate 10 residential properties, Grant due to expire in 2015. Town is working with NY Rising to direct residents to existing funding opportunities to elevate at risk homes. Town will continue to participate in FEMA and State sponsored programs.
- **Public Education and Outreach-** Town will continue to hold public outreach events, provide information on the Town web site and social media sites and participate in public outreach events sponsored by others.
- **Building Code, Ordinance, and Enforcement/Public Education and Outreach-** Implement public education programs that inform the public of local coastal hazard area zone ordinances (TOB Code Chapter 99), why this is important and how the public can help preserve and protect our managed coastal zones (i.e. Jones Island)

9.2.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2008 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.2-10. Past Mitigation Initiative Status

Description	Status	Review Comments
B-1: Continue existing Federal and State – authorized 2-year cycle projects and money for perpetuity to preserve, restore, and nourish Jones Island so that it can be considered for certification as a levee under the National Flood Insurance program.	Continuous	No action over the past 5 years, action is still relevant. Town has and will continue to communicate with Federal and State elected officials to secure funding for this project.
B-2: Encourage Federal and State agencies to identify new reliable and consistent sources of sand for beach nourishment programs, building on recommendations of existing feasibility studies concerning coastal sand budgets.	Continuous	Several emergency actions have taken place over the past 5 years. Continue to study this issue as part of the Fire Island to Montauk Point Study (FIMP).
B-3: Increase structural stability and drainage capacity of culverts spanning tidal tributaries and supporting critical evacuation and response routes	No Progress	This initiative is being removed from the updated mitigation strategy as it refers to activities that are an ongoing and normal part of Town operations.
B-4: Increase structural stability and transport capacity of the bridges in the American Venice section of town. These bridges are cultural and aesthetic features which support critical evacuation and response routes. Their current capacity is 12 tons.	In Progress, 10% Completed	The Town is currently funding design plans for the upgrading of the American Venice Bridges. Over the next 5 years funding for construction is being sought through the HMG 404 program, CRZ Program or other funding opportunity.
B-5: Re-design and re-enforce dams/spillways supporting man-made lakes out of freshwater streams and tidal tributaries to reduce risk of failure, increase stormwater retention, and reduce upstream flooding, and protect critical evacuation and response routes	No Progress	This initiative is being removed from the updated mitigation strategy as it refers to activities that are an ongoing and normal part of Town operations.
B-6: Re-design and re-enforce dam/spillway at Argyle Lake to reduce risk of failure, increase stormwater retention, and reduce upstream flooding, and protect critical evacuation and response routes	Completed	Project is located in Village of Babylon. This does not fall within the jurisdiction of the Town. Removed.
B-7: Dredging of mouths of tidal tributaries, established navigational channels such as Fire Island Inlet (Deposits shall be used to augment mitigation strategy concerning engineered barrier islands mentioned above)	Continuous	Fire Island Inlet dredged 2013/2014, Bay Side Canal Dredging by SC DPW in 2012 and 2013 (Sunny Point Canal & Strongs Creek). Town will continue to work with the USACOE, NYS and Suffolk County to provide technical and logistical support for dredging projects.
B-8: Implement tree management programs and augment existing programs, including containment of the Asian Beetle, and measures	Continuous	A new Asian Beetle infestation was discovered outside the established quarantine zone in the fall of 2013. Town revised municipal contractor's

Description	Status	Review Comments
to improve post-disaster debris management		license to require Asian Beetle State certification in 2010. Town tree planting spec's revised to use non-host species in quarantine areas. Town staff attend regular invasive species training classes. The Town maintains a quarantine certified debris disposal site. All town and private contractors are required to use site for host wood waste. Town quarantine procedures were activated during the post-disaster activity from the 2010 Nor'easter, Irene and Sandy.
B-9: Consider adopting measures to increase the amount of on-site stormwater storage for all new construction, and additions meeting FEMA's Substantial Improvement Criteria	Completed	Not being carried forward as it is completed.
B-10: Adopt a program to increase public participation in maintenance of municipal drainage by reducing roadway/recharge basin litter, dumping yard/household waste into streets, identification of neighborhood inlets, and notifying DPW of drainage problems	Continuous	Town initiated a "Don't dump into drains" placard program in 2008. Placards were installed on all town storm drains over the course of a 4 year period using Volunteer's, Scouting Groups and Town employee's. Areas are re-inspected annually to replace missing or damaged placards. Funding is available for the continuation of the program. A power-point program was produced by the Town DEC targeting civic and youth groups.
B-11: Support/enhance Building and/or Flood code enforcement programs at the local level public education and awareness of current codes	Continuous	The Town participated in or Sponsored several workshops geared to local officials and to residents on Flood Code enforcement and proper residential construction. Town coordinated with the NYSDEC, ASFPM and NYSFSMA.
B-12: Institute a stream-clearing program to restore habitats of tidal tributaries and freshwater rivers by reducing invasive species, trash, excess sediment, etc. to increase natural and municipal drainage capabilities	Continuous	Stream clean-up program is administered through the Town DPW, an annual stream inspection survey is conducted every spring to identify problem areas. Individual complaints by residents also identify problem sites. Clean-up actions are coordinated with the NYSDEC Wetland Division to comply with wetland protection regulations. In 2012 the Town automated its complaint and response program with the COGNOS system which added time tracking to complaint response.TT Recommendation: Move to Capability as this is an ongoing program.
B-13: Install different types of tidal flaps and valves at ten trial locations to determine the best ways of preventing tidal backflow into municipal drainage systems	In Progress, 8 valves installed	Project started in 2009, 4 locations were abandoned as products failed to produce results promised by manufacturer. 4 valves of different design installed in 2013. Project is on bid, excessive delays from supplier/installer is stalling program. Problems with installation locations, new pipe is required to mate the valves with the drainage system. Back flow valves will be monitored for performance over a 6 month period. At some locations a residential monitoring program has been initiated to expand public education on the nature of shallow road flooding in the affected neighborhoods.
B-14: Encourage staff and consultants to learn FEMA-sponsored cost-benefit analysis	Continuous	Town would attend a BCA workshops if offered locally to maintain current levels of training. BCA software installed in 2012, Town DEC staff administering 404 Grants are taking on-line tutorial and attending BCA workshops.
B-15: Reconstruct roadways in Venetian	Continuous	Reconstruction of Maple Avenue and Elm Avenue

Description	Status	Review Comments
Shores area; reconstruction will include raising the maximum amount possible and increase drainage capacity		completed in 2008 and 2009 (Approx. 1 mile roadway). Town DPW identified roadways for elevation in 2012, Town is seeking funding opportunities through the FEMA HMG 404 program and the NYS CRZ program.
B-16: Design or enhance existing municipal drainage systems to provide increased capacity of the drainage system	Continuous	Opportunities for upgrades are made on a case-by-case basis, most projects are in-kind. Drainage system on Jerome Place was connected to positive system on Eastern Concourse (Copiague) to increase drainage capacity.
B-17: Institute a recharge basin reconstruction program, possibly by partnering with local businesses, to restore & increase drainage capacity by reducing invasive species, trash, excess sediment, etc.	Discontinued	This program did not materialize after preliminary assessments were made in 2009. However the Town has entered into multiple Inter Municipal Agreements (IMA) with the NYSDOT and SCDPW for recharge basin maintenance in State and County owned recharge basins. Not carried forward as discontinued
B-18: Encourage applicable agencies to update existing CoastalView program on a yearly basis. (CoastalView is a joint venture of State and Federal agencies which has established benchmarks within erosion data in a GIS format)	Continuous	Carried over as effort is ongoing.
B-19: Based on the results of tidal backflow trials, retro-fit approximately 100 outfall pipes to prevent tidal backflow into drainage systems	No Progress	Testing program is still ongoing. PILOT program has not selected an acceptable backflow device to date. A HMG 404 application was filed in 2012 for installation funding. This application is not being pursued until the PILOT program is completed.
B-20: Continue a program, in cooperation with existing US Ags/Markets programs, to inform and certify contractors for debris removal operations in the quarantine area	Continuous	Town continues to offer facilities for Ags/Market to conduct training and contractor certifications. Certification training classes were offered at the Town Hall Annex in North Babylon in 2008, 2009, 2010 and 2011. Identified as a capability.
B-21: Elevate roads that are vital/critical to evacuation and local community operations	In Progress, 5% Completed	The Town identified which roads constituted as vital or critical for evacuation in 2008. Road elevations are scheduled as funding is available. No critical roadways were elevated in the past 5 years. Funding is being pursued through the FEMA HMG 404 program, NYS CRZ program or other Federal and State sponsored funding sources.
B-22: Participate in homeowner partnership program to elevate vulnerable properties in high risk areas impacted by coastal storms, surface flooding, and/or shallow groundwater. High risk areas include: those properties identified as “repetitive loss” by FEMA and those areas of concern identified by the Town of Babylon.	Continuous	HMG 404 application filed in 2012 to elevate 10 residential properties, Grant due to expire in 2015. Town is working with NY Rising to direct residents to existing funding opportunities to elevate at risk homes. Town will continue to participate in FEMA and State sponsored programs.
B-23: Re-engineer and reconstruct Copiague roadways (for example Coolidge Ave) to eliminate or minimize pronounced low points which capture stormwater runoff and coastal flood waters with no available dissipation outlet	No Progress	Town is seeking funding opportunities for engineering analysis and construction. Issue has been included in the Amityville Village-Copiague Community Reconstruction Zone Plan.
B-24: Develop a post-disaster action plan for coastal storm events that will address the continuity of local government operations, such as operations of the Comptroller, Town	In Progress, 10% Completed	Town created a Chief of Operations Officer in the Town Supervisors office in 2012, preparation of a draft plan is scheduled for 2014.

Description	Status	Review Comments
Clerk, Planning & Development, etc. post disaster		
B-25: Implement a permanent measure to prevent tidal backflow under overpasses along Ocean Parkway, such as at Gilgo Beach, and reduce likelihood of inlet creation at this Jones Island location	In Progress	Town is investigating the availability of portable/deployable backflow devices. No specification has been prepared to date. Town will continue to investigate products and practices that may mitigate this issue.
B-26: Encourage NYS and FEMA to document erosion rates by taking standardized aerial photographs of our shoreline on a yearly basis, and when necessary after severe storms.	Continuous	Carry forward
B-27: Consider low-density land use in high risk coastal, surface water and groundwater zones.	No Progress	
B-28: Continue to develop, enhance and implement existing emergency response plans to utilize new and developing technology/ information as it becomes available.	Continuous	
B-29: Promote the purchase of Flood Insurance	Continuous	Town will continue to work with residents in high risk areas to educate them on Flood Insurance purchases and how to lower increasing insurance premiums.
B-30: Educate the public on ways to protect their property before and during natural events, and what they can acquire to install appropriate property protection measures	Continuous	Town will continue to hold public outreach events, provide information on the Town web site and social media sites and participate in public outreach events sponsored by others.
B-31: Implement public education programs that inform the public of local coastal hazard area zone ordinances (TOB Code Chapter 99), why this is important and how the public can help preserve and protect our managed coastal zones (i.e. Jones Island)	Continuous	Town will continue to provide informational workshops for residents and building professionals on the Coastal Erosion regulations.
B-32: Increase public education and notification concerning Asian Beetle Infestation, including production and distribution of maps of affected areas	Continuous	Town will continue to work with APHIS and Agriculture and Markets to provide education to the Public and Contractors on the Asian Longhorned Beetle infestation and other invasive species.
B-33: Consider participation in incentive-based programs such as CRS and “Storm Ready.”	Continuous	Town would attend a CRS workshop if offered locally. Town will continue to review programs available and consider participation when advantageous to its residents.
B-34: Continue to support the implementation, monitoring, maintenance and updating of this Plan, as defined in Section 7.0		Carried forward.
B-35: Strive to maintain compliance with and good-standing in the National Flood Insurance program.		Carried forward.
B-36: Encourage the International Bldg Codes Council to investigate seismic design provisions for inclusion in the New York State Bldg & Fire Prevention Codes	Continuous	Carried forward.

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

None at this time.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Babylon identified mitigation initiatives they would like to pursue in the future. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Table 9.2-11 identifies the municipality's updated local mitigation strategy.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.2-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.2-11. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
B-1 (Sandy HMGP LOI #144)	Road Dead end flood control project.	Existing	Shallow Groundwater, Flooding, Hurricane, Severe Storm, Severe Winter Storm	2,16	See Action Worksheet (B-1 – LOI 144 – 031214)						
B-2 (Sandy HMGP LOI #240)	Flood Proof Tanner Park Filter room.	Existing Structure	Flooding, Hurricane, Nor'easter, Shallow Groundwater	2, 15, 16	See Action Worksheet (B-2 – LOI 240 – 031214 (2))						
B-3 (Sandy HMGP LOI #360)	Babylon NY P25 Upgrade.	Existing Structure	Hurricane, Severe Storm, Nor'easter, Severe Winter Storm	7, 12, 13, 14, 16	See Action Worksheet (B-3 – LOI 360 – 031214 (2))						
B-4 (Sandy HMGP LOI #939)	Tanner Park Dredge Spoil Stabilization Project.	Existing Structure	Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Severe Winter Storm	3,6,14,15	See Action Worksheet (B-4 – LOI 939 – 031214)						
B-5 (Sandy HMGP LOI #1035)	Oak Beach Community Center Floodproofing Project.	Existing Structure	Flooding, Hurricane, Nor'easter	1,2,3,15,16	See Action Worksheet (B-5 – LOI 1035 – 031214 (2))						
B-6 (Sandy HMGP LOI #1091)	Tanner Park Electric Sub-Station Flood Proofing Project.	Existing Structure	Flooding, Hurricane, Nor'Easter	2, 15, 16	See Action Worksheet (B-6 – LOI 1091 – 031214 (2))						
B-7 (Sandy HMGP LOI	Venetian Shores Emergency generator.	Existing Structure	Flooding, Shallow Groundwater, Hurricane,	2, 15, 16	See Action Worksheet (B-7 – LOI 1678 – 031214 (2))						

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
Sandy HMGP #1678)			Nor'Easter, Severe Storm								
B-8 (Sandy HMGP LOI #2232)	Back-up Power System Wyandanch Nutrition Center.	Existing Structure	Hurricane, Severe Storm	3, 15, 16	See Action Worksheet (B-8 – LOI 2232 – 031214 (2))						
B-9 (NEW B-1)	Address brush fire vulnerability in Outer Beach Communities where no public water supply systems are available. Need to fund drafting wells depth and locations, drafting access points and potential public water supply systems.										
	See Above	New and Existing	Wildfire, Drought	8	Town	$1 Million		Town, HUD CDBG, FEMA HMGP	Short-term	Medium	LPR
B-10 (former B-1)	Continue existing Federal and State –authorized 2-year cycle projects and money for perpetuity to preserve, restore, and nourish Jones Island so that it can be considered for certification as a levee under the National Flood Insurance program.										
	See Above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding	2, 3, 5, 7, 9, 14, 15, 16	Army Corps, NYSDOS, NYSDOT, NYSDEC (existing bi-annual program)	$12 Million bi-annually		Federal & State Budgeted Expenses, Congressionally-approved yearly	Short-term OG	High	NRP
B-11 (former B-2)	Encourage Federal and State agencies to identify new reliable and consistent sources of sand for beach nourishment programs, building on recommendations of existing feasibility studies concerning coastal sand budgets.										
	See Above	NA	Nor'Easters; Coastal Erosion; Hurricane; Flooding	2, 3, 5, 7, 9, 14, 15, 16	Army Corps, NYSDOS	Medium		Army Corps, NYSDOS	Short Term, DOF	Medium	NRP
B-12 (former B-4)	Analyze and investigate options to increase structural stability and transport capacity of the bridges in the American Venice section of town. These bridges are cultural and aesthetic features which support critical evacuation and response routes. Their current capacity is 12 tons. Implement priorities as funding becomes available.										
	See Above	New and Existing	Nor'Easters; Coastal Erosion; Flooding; Shallow Groundwater	2, 5, 7, 12, 13, 14, 15, 16	Town	High		Possible PDM application; Possible State/Federal/ Private Historic Preservation Funds	Long Term DOF	Medium	SIP
B-13 (former B-7[1])	Analyze and implement actions to increase the capacity of the mouths of tidal tributaries, established navigational channels such as Fire Island Inlet (Deposits shall be used to augment mitigation strategy concerning engineered barrier islands mentioned above). Prioritize and implement as funding becomes available.										
	See Above	NA	Nor'Easters; Coastal Erosion;	2, 3, 5, 7, 9, 14, 15, 16	Army Corps, NYSDOS, NYSDOT,	High		Federal & State Budgeted Expenses,	Long term	Medium	SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Hurricane; Flooding; Shallow Groundwater		NYSDEC, US FISH/WILDLIFE			Congressionally-approved yearly			
B-14 (former B-12)	Institute a stream- program to restore habitats of tidal tributaries and freshwater rivers by reducing invasive species, trash, excess sediment, etc. to increase natural and municipal drainage capabilities.										
	See Above	NA	Nor'Easters; Coastal Erosion; Hurricane; Flooding; Severe Storms; Shallow Groundwater	2, 5, 7, 8, 10, 11, 13, 15, 16	NYSDEC, SCDPW Vector Control	Low		Possible PDM, FMA Grant	Long Term DOF	Medium	NRP
B-15 (former B-13)	Investigate the options available and install as funding becomes available tidal flaps and valves at ten prioritized trial locations to determine the best ways of preventing tidal backflow into municipal drainage systems										
	See Above	Existing	Nor'Easters; Coastal Erosion; Hurricane; Flooding; Severe Storms; Shallow Groundwater	2, 3, 5, 7, 13, 15, 16	Town	Low		Town	Short Term	High	SIP
B-16 (former B-15[1])	Investigation design and funding alternatives to reconstruct roadways in Venetian Shores area; reconstruction will include raising the maximum amount possible and increase drainage capacity. Implement as funding becomes available.										
	See Above	Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Severe Storms, Shallow Groundwater	2, 13, 15, 16	Town	Medium		Town; Possible PDM application	Short Term, DOF	Medium	SIP
B-17 (former B-16[1])	Investigate and analyze design and funding options to enhance existing municipal drainage systems to provide increased capacity of the drainage system. Implement as funding becomes available.										
	See Above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding,	2,5, 10, 11, 13, 15, 16	Town	Medium		Town; Possible PDM application	Long Term	Medium	SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Severe Storms, Shallow Groundwater								
B-18 (former B-19	Based on the results of tidal backflow trials, retro-fit approximately 100 outfall pipes to prevent tidal backflow into drainage systems.										
	See Above	Existing	Nor'Easters; Coastal Erosion; Hurricane; Flooding; Severe Storms; Shallow Groundwater	2, 3, 5, 7, 13, 15, 16		Medium		Possible PDM application	Long Term	Low	SIP
B-19 (former B-20)	Continue a program, in cooperation with existing US Ags/Markets programs, to inform and certify contractors for debris removal operations in the quarantine area.										
	See Above	NA	Nor'easters, Severe Winter Storms; Hurricanes, Severe Storms, Asian Beetle Infestation	1, 2, 3, 7, 10, 15, 16	State Agriculture & Markets	Medium		State Agriculture & Markets	Short Term	High	LPR
B-20 (former B-21[1])	Elevate roads that are vital/critical to evacuation and local community operations.										
	See Above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Severe Storms, Shallow Groundwater	2, 13, 14, 15, 16	Town	High		Possible PDM application	Long Term	Low	SIP
B-21 (former B-23)	Re-engineer and reconstruct Copiague roadways (for example Coolidge Ave) to eliminate or minimize pronounced low points which capture stormwater runoff and coastal flood waters with no available dissipation outlet.										
	See Above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Severe Storms, Shallow	2, 13, 15, 16	Town	High		Possible PDM application	Long Term	Low	SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Groundwater								
B-22 (former B-25)	Implement a permanent measure to prevent tidal backflow under overpasses along Ocean Parkway, such as at Gilgo Beach, and reduce likelihood of inlet creation at this Jones Island location.										
	See Above	Existing	Nor'Easters; Coastal Erosion; Hurricane; Flooding	2, 5, 7, 9, 14, 15 16	NYSDOT, Town	High		NYSDOT	Long Term	Medium	LPR, SIP
B-23 (former B-26)	Encourage NYS and FEMA to document erosion rates by taking standardized aerial photographs of our shoreline on a yearly basis, and when necessary after severe storms.										
	See Above	NA	Nor'Easters; Coastal Erosion; Hurricane; Flooding	1,3 5, 6, 7, 9, 14, 15, 16	NYSDOS, NYSDEC, NYSCSIC, NYSEMO, FEMA, and all other agencies currently producing aerial photography	High		Suffolk County, NYSDOS, NYSDEC, NYSCSIC, NYSEMO, FEMA, and all other agencies currently producing aerial photography	Long Term	Medium	LPR
B-24 (former B-27)	Consider low-density land use in high risk coastal, surface water and groundwater zones.										
	See Above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Shallow Groundwater	6, 7	Town	Low		Town	Long term	Low	NRP
B-25 (NEW B-38[1])	Elevate public facilities and/or MEP controls to above the 500-year event and harden to withstand hurricane level wind speeds.										
	See Above	Existing	Flood, Hurricane, Nor'Easter, Severe Storm	2, 9, 16	Town	High		General Fund, FEMA Hazard Mitigation Grant Funding	Long	Medium	SIP
B-26 (NEW B-39[1])	Locate/relocate public facilities to lower risk areas.										
	See Above	Existing	Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	2, 9, 16	County/ Town	High		General Fund, FEMA Hazard Mitigation Grant Funding	Long	Medium	SIP
B-27	Harden/bury telecommunications and power infrastructure.										

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
(NEW B-40[1])	See Above	NA	Earthquake, Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	16	Town	High		General Fund, USDOT, FEMA Hazard Mitigation Grant Funding	Long	High	SIP
B-28 (NEW B-41[1])	Restore and maintain the dunes.										
	See Above	NA	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	5	Town/ NYSDEC	Medium		General Fund, NYSDEC	Short	Medium	NRP
B-29 (NEW B-42[1])	Implement wetlands restoration projects.										
	See Above	NA	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	5	Town/ NYSDEC	Medium		NYSDEC	Long	Medium	NRP
B-30 (NEW B-43[1])	Conduct a study to determine the best, most cost-effective means of enhancing the natural sediment processes of the inlet and beaches with consideration of various strategies, including jetties.										
	See Above	NA	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	5	Town	Low		Town/Village Budget	Short	Medium	LPR, SIP
B-31 (NEW B-44[1])	Assess and prioritize town critical facilities needs and obtain funding to acquire and install back-up power or alternative power on critical assets										
	See Above	New & Existing	Earthquake, Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	16	County/ Town	High		General Fund, FEMA Hazard Mitigation Grant Funding	Short	High	SIP
B-32 (NEW B-45[1])	Investigate options /opportunities to create living shorelines wherever possible to restore natural processes, minimize erosion, and create habitat. Implement as funding becomes available.										
	See Above	NA	Coastal Erosion, Flood,	5	Town/ NYSDEC	Medium		NYSDEC	Long	Medium	NRP, LPR

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Hurricane, Nor'Easter, Severe Storm								
B-33 (NEW B-46[1])	Explore options and feasibility of instituting shoreline stabilization programs where natural restoration is not an option. Implement as funding becomes available.										
	See Above	NA	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	5	Town	Low		Town/Village Budget	Short	Medium	LPR, SIP
B-34 (NEW B-47[1])	Explore options and feasibility where possible, opportunities to create vegetated buffers to protect homes and structures. Implement as funding becomes available.										
	See Above	NA	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	5	Town	Medium		Town/Village Budget	Short	Medium	LPR, NRP
B-35 (NEW B-48[1])	Explore options and feasibility to use streets (including reducing impermeable surfaces), public rights of way, public lands, and green space to implement projects to store, infiltrate, filter, and detain stormwater runoff and reduce on-street flooding. Implement as funding becomes available.										
	See Above	New & Existing	Flood, Hurricane, Nor'Easter, Severe Storm	11	County/ Town/ NYSDOT	High		Town/Village Budget, FEMA Hazard Mitigation Grant Funding	Long	High	LPR, SIP
B-36 (NEW B-49[1])	Assess needs, options and funding to install a public water system in the areas of the Town of Babylon that do not have one with backup generators for all systems. Implement as funding becomes available.										
	See above	New	Flood, Hurricane, Nor'Easter, Severe Storm	16	Town	High		Town/Village Budget	Long	High	LPR, SIP
B-37 (NEW B-50[1])	Explore options, feasibility and funding availability to take measures to protect potable water wells from wastewater contamination with the installation of small package treatment plants. Implement as funding becomes available.										
	See Above	New & Existing	Flood, Hurricane, Nor'Easter, Severe Storm, Groundwater Contamination	16	Town	High		Town/Village Budget	Long	High	LPR
B-38 (former B-8)	Implement tree management programs and augment existing programs, including containment of the Asian Beetle, and measures to improve post-disaster debris management										
	See Above	NA	Nor'Easters, Severe	1, 7, 5, 10, 13, 15, 16	NYS Agriculture & Markets; USDA	Low		Town; NYS Agriculture &	Short Term	Medium	LPR

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Winter Storms, Hurricane, Flooding, Severe Storms, Asian Beetle Infestation		(APHIS)			Markets; USDA (APHIS)			
B-39 (former B-10[1])	Design and implement an on-going public outreach program to increase public participation in maintenance of municipal drainage by reducing roadway/recharge basin litter, dumping yard/household waste into streets, identification of neighborhood inlets, and notifying DPW of drainage problems. Implement as funding becomes available.										
	See Above	NA	Nor'Easters; Coastal Erosion; Severe Winter Storms; Hurricane; Flooding; Severe Storms; Shallow Groundwater	1, 2, 3, 5, 7, 13, 15, 16	TOWN	Low		Town; Community Volunteers; Federal/State Phase II Clean Water Act	Short Term	Medium	EAP
B-40 (former B-11[1])	Work with adjacent communities and the County to support/enhance Building and/or Flood codes and planning regulations, and enforcement programs at the local level.										
	See Above	New and Existing	All	1, 2, 4, 7, 9, 15	TOWN	Low		Town; NYSDOS	Short Term	Medium	LPR
B-41 (former B-14)	Investigate and implement a program to enhance floodplain management capabilities through participation in some or all of the following activities: work with adjacent communities to institute a continuing education program for County and community staff to become certified in benefit cost analysis and floodplain management with the goal to become certified floodplain managers; establish and maintain a schedule of on-going training classes to obtain and maintain these certifications; CRS program workshops and training; BCA training; elevation certificate training; etc.										
	See Above	NA	All	1, 3, 5, 7, 15, 16		Low		Town	Short Term	Medium	LPR
B-42 (former B-18)	Encourage applicable agencies to update existing CoastalView program on a yearly basis. (CoastalView is a joint venture of State and Federal agencies which has established benchmarks within erosion data in a GIS format)										
	See Above	NA	Nor'Easters; Coastal Erosion; Hurricane; Flooding	1, 3, 5, 6, 7, 9, 14, 15, 16	NYSDOS	Medium		NYSDOS	Short Term, DOF	Medium	LPR
B-43 (former B-22[1])	Participate in homeowner partnership program to elevate, retrofit, or acquire vulnerable properties in high risk areas impacted by coastal storms, surface flooding, and/or shallow groundwater. High risk areas include: those properties identified as "repetitive loss" by FEMA and those areas of concern identified by the Town of Babylon.										
	See Above	Existing	Nor'Easters, Coastal Erosion,	1, 2, 3, 4, 7, 9	FEMA	High		FEMA hazard Mitigation grant	Long term	Low	EAP, SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Severe Storms, Hurricane, Flooding, Shallow Groundwater					programs: PDM, FMA, RFC and SRL; Homeowner Cost Share			
B-44 (former B-24)	Develop a post-disaster action plan for coastal storm events that will address the continuity of local government operations, such as operations of the Comptroller, Town Clerk, Planning & Development, etc. post disaster.										
	See Above	NA	All	2, 3, 7, 12, 14, 16	Town	High		NYSDOS, Town	Long Term	Medium	LPR
B-45 (former B-28[1])	Continue to develop, enhance and implement existing emergency response plans, including evacuation plans, to utilize new and developing technology/ information as it becomes available.										
	See Above	NA	All	1, 3, 7, 12, 13, 14, 15, 16	Town	Low		Town	Short Term	High	LPR
B-46 (former B-29)	Promote the purchase of Flood Insurance.										
	See Above	New and Existing	Nor'Easters; Coastal Erosion; Hurricane; Flooding; Severe Storms	1, 7, 9, 15	FEMA NFIS	Low		Town	Short Term	Medium	LPR
B-47 (former B-30)	Educate the public on ways to protect their property before and during natural events, and what they can acquire to install appropriate property protection measures.										
	See Above	Existing	Nor'Easters; Coastal Erosion; Severe Winter Storms; Hurricane; Flooding; Severe Storms	1, 7, 9, 15	FEMA NFIS	Low		Town; partner with community organizations/ businesses	Short Term, DOF	Meidum	EAP
B-48 (former B-31[1])	Implement public education programs that inform the public of local coastal hazard area zone ordinances (TOB Code Chapter 99), why this is important and how the public can help preserve and protect our managed coastal zones (i.e. Jones island)										
	See Above	NA	Nor'Easters; Coastal Erosion; Hurricane; Flooding	1, 2, 3, 4, 5, 7, 9, 15, 16	Town	Low		FEMA NFIS OR POSSIBLE PDM	Long Term	Low	EAP
B-49 (former B-32)	Increase public education and notification concerning Asian Beetle Infestation, including production and distribution of maps of affected areas.										
	See Above	NA	Asian Beetle Infestation	1, 3, 7, 8, 10, 15	US Ags & Markets	Low		Town, Village of Amityville	Short Term	Medium	EAP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
B-50 (former B-33)	Consider participation in incentive-based programs such as CRS and "Storm Ready."										
	See Above	New and Existing	Flood, Nor'Easter, Hurricane, Severe Weather	1, 3, 4, 9	Town	High		Town	Long Term	Low	LPR
B-51 (former B-34)	Continue to support the implementation, monitoring, maintenance and updating of this Plan, as defined in Section 7.0										
	See Above	NA	All Hazards	All Objectives	County/Town/ Village	Low		Town/Village Budget	Long	Medium	LPR
B-52 (former B-35)	Strive to maintain compliance with and good-standing in the National Flood Insurance program.										
	See Above	New & Existing	Flood, Nor'Easter, Hurricane, Severe Storm	1,7,15,16	NFIP Floodplain Administrator	Low		Town/Village Budget	Short	High	LPR
B-53 (former B-36)	Encourage the International Bldg Codes Council to investigate seismic design provisions for inclusion in the New York State Bldg & Fire Prevention Codes.										
	See Above	New & Existing	Earthquake	3,4,15&16	Town	Low		Town & NYSDOS	Short	Medium	LPR
B-54 (former B-37[1])	Increase public outreach, including enhancing connectedness (e.g., social media, text messaging), on emergency preparedness, the importance of health dune systems, and local ecology.										
	See Above	NA	All Hazards	1, 12, 14	Town	Low		Town/Village Budget	Short	Medium	EAP
B-55 (NEW B-51)	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.										
	See Above	Existing	Flood, Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm		Town/Village Engineering via NFIP FPA) with NYSOEM, FEMA support	High	High	Federal and State Mitigation Grant Programs and local budget (or property owner) for cost share	Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation)	Medium	LPR, SIP
B-56 (NEW B-52)	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: • Mitigation Education for Natural Disasters (natural hazard awareness and personal scale risk reduction/mitigation public education and outreach program) • Build Local Floodplain Management and Disaster Recovery Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities) • County-Wide Debris Management Plan • Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners) • Create a Multi-Jurisdictional Seismic Safety Committee in Suffolk County (build regional, county and local capabilities to manage seismic risk, both pre- and post-disaster) • Alignment of Mitigation Initiatives through all levels of Government (effort to build State and Federal level recognition and support of the County and local hazard mitigation planning strategies identified in this plan).										
	See Above	New and Existing	All Hazards	All Objectives	Suffolk County, as supported by	High (comprehensive	Low-Medium	Local (staff resources)	Short	High	All

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
		Structures			relevant local department leads,	improvements mitigation and risk-reduction capabilities)	(locally)				
B-57 (NEW B-53)	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered "critical", and to be the first priority for clearing after an event involving downed power lines.										
	See Above	Existing	Severe Storm; Severe Winter Storm; Hurricane; Nor'Easter	3, 7, 13, 14, 15, 16	PSEG, County	High	Low-Medium	Local	Short	High	LPR
B-58 (LIRPC - 1)	With many Pre-FIRM buildings in the Town, many structures are vulnerable to flooding and are at a greater risk of sustaining damage. This is something the Town would like to minimize in future disasters. Undertake a study to investigate, prioritize issues and develop mitigation options to reduce the Towns risk in future disasters,										
	See Above									High	LPR
B-59 (LIRPC - 2)	Following Hurricane Sandy there was significant damage to utilities, heating units and oil tanks. Many of these were in the flood zone and oil spills resulted. The insurance coverage of an incident like this is uncertain or non-existent. The Town would like to address the vulnerability of these structures.										
	See Above									High	LPR
B-60 (LIRPC - 3)	Long-term electrical power loss was a major issue following Hurricane Sandy. Addressing a quicker way of restoring power is something the Town would like to address in the future.										
	See Above									High	LPR
B-61 (LIRPC - 4)	Future Losses To Avoid: 6,000 residents affected with millions of dollars in damage, Town revenue loss of $9.6 million in Building Permits, and an estimated Town-wide damage of $18,496,560.00.										
	See above									High	

Notes:
**Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.*

Acronyms and Abbreviations:
DPW Department of Public Works
FEMA Federal Emergency Management Agency
FMA Flood Mitigation Assistance grant program
HMA Hazard Mitigation Assistance grant program (including FMA, HMGP, PDM)
HMGP Hazard Mitigation Grant Program
N/A Not applicable
NFIP National Flood Insurance Program
NYSOEM New York State Office of Emergency Management
PDM Pre-Disaster Mitigation grant program
PSEG Public Service Electric and Gas (formerly LIPA)

Costs:
Where actual project costs have been reasonably estimated:

Low = < $10,000
Medium = $10,000 to $100,000
High = > $100,000

Where actual project costs cannot reasonably be established at this time:
Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:
Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:
Low = < $10,000
Medium = $10,000 to $100,000
High = > $100,000

Where numerical project benefits cannot reasonably be established at this time:
Low = Long-term benefits of the project are difficult to quantify in the short term.
Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High = Project will have an immediate impact on the reduction of risk exposure to life and property.

Timeline:
Short = 1 to 5 years
Long Term = 5 years or greater
OG = On-going program
DOF = Depending on funding

Mitigation Category:
- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NRP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.*

Table 9.2-12. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
B-1 (Sandy HMGP LOI #144)	Road Dead end flood control project.	0	1	1	1	1	0	1	0	0	1	1	1	1	1	10	High
B-2 (Sandy HMGP LOI #240)	Flood Proof Tanner Park Filter room.	0	1	1	1	1	0	1	0	0	1	1	1	1	0	9	High
B-3 (Sandy HMGP LOI #360)	Babylon NY P25 Upgrade.	1	0	0	1	1	0	1	0	0	1	1	1	1	1	9	High
B-4 (Sandy HMGP LOI #939)	Tanner Park Dredge Spoil Stabilization Project.	1	0	0	1	1	0	1	0	0	1	1	1	1	1	9	High
B-5 (Sandy HMGP LOI #1035)	Oak Beach Community Center Floodproofing Project.	0	1	0	1	1	0	1	0	0	1	1	1	1	1	9	High
B-6 (Sandy HMGP LOI #1091)	Tanner Park Electric Sub-Station Flood Proofing Project.	0	1	1	1	1	0	1	0	0	1	1	1	1	1	10	High
B-7 (Sandy HMGP LOI Sandy HMGP #1678)	Venetian Shores Emergency generator.	0	1	1	1	1	0	1	0	0	1	1	1	1	1	10	High
B-8 (Sandy HMGP LOI #2232)	Back-up Power System Wyandanch Nutrition Center.	0	0	1	1	1	0	1	0	1	1	1	1	1	1	10	High
B-9 (NEW B-1)	Address brush fire vulnerability in Outer Beach Communities where no public water supply systems are available. Need to fund drafting wells depth and locations, drafting access points and potential public water supply systems.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
B-10 (former B-1)	Continue existing Federal and State –authorized 2-year cycle projects and money for perpetuity to preserve, restore, and nourish Jones Island so that it can be considered for certification as a levee under the National Flood Insurance program.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
B-11 (former B-2)	Encourage Federal and State agencies to identify new reliable and consistent sources of sand for beach nourishment programs, building on recommendations of existing feasibility studies concerning coastal sand budgets.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-12 (former B-4)	Analyze and investigate options to increase structural stability and transport capacity of the bridges in the American Venice section of town. These bridges are cultural and aesthetic features which support critical evacuation and response routes. Their current capacity is 12 tons. Implement priorities as funding becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-13 (former B-7[1])	Analyze and implement actions to increase the capacity of the mouths of tidal tributaries, established navigational channels such as Fire Island Inlet (Deposits shall be used to augment mitigation strategy concerning engineered barrier islands mentioned above). Prioritize and implement as funding becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
B-14 (former B-12)	Institute a stream- program to restore habitats of tidal tributaries and freshwater rivers by reducing invasive species, trash, excess sediment, etc. to increase natural and municipal drainage capabilities.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-15 (former B-13)	Investigate the options available and install as funding becomes available tidal flaps and valves at ten prioritized trial locations to determine the best ways of preventing tidal backflow into municipal drainage systems	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
B-16 (former B-15[1])	Investigation design and funding alternatives to reconstruct roadways in Venetian Shores area; reconstruction will include raising the maximum amount possible and increase drainage capacity. Implement as funding becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-17 (former B-16[1])	Investigate and analyze design and funding options to enhance existing municipal drainage systems to provide increased capacity of the drainage system. Implement as funding becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-18 (former B-19)	Based on the results of tidal backflow trials, retro-fit approximately 100 outfall pipes to prevent tidal backflow into drainage systems.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
B-19 (former B-20)	Continue a program, in cooperation with existing US Ags/Markets programs, to inform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	and certify contractors for debris removal operations in the quarantine area.																
B-20 (former B-21[1])	Elevate roads that are vital/critical to evacuation and local community operations.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
B-21 (former B-23)	Elevate roads that are vital/critical to evacuation and local community operations.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
B-22 (former B-25)	Implement a permanent measure to prevent tidal backflow under overpasses along Ocean Parkway, such as at Gilgo Beach, and reduce likelihood of inlet creation at this Jones Island location.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-23 (former B-26)	Encourage NYS and FEMA to document erosion rates by taking standardized aerial photographs of our shoreline on a yearly basis, and when necessary after severe storms.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-24 (former B-27)	Consider low-density land use in high risk coastal, surface water and groundwater zones.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
B-25 (NEW B-38[1])	Elevate public facilities and/or MEP controls to above the 500-year event and harden to withstand hurricane level wind speeds.	1	1	0	1	0	1	0	1	1	1	1	1	0	1	10	Medium
B-26 (NEW B-39[1])	Locate/relocate public facilities to lower risk areas.	1	1	1	1	0	1	0	1	1	0	1	0	0	1	9	Medium
B-27 (NEW B-40[1])	Harden/bury telecommunications and power infrastructure.	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
B-28 (NEW B-41[1])	Restore and maintain the dunes.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium
B-29 (NEW B-42[1])	Implement wetlands restoration	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	projects.																
B-30 (NEW B-43[1])	Conduct a study to determine the best, most cost-effective means of enhancing the natural sediment processes of the inlet and beaches with consideration of various strategies, including jetties.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium
B-31 (NEW B-44[1])	Assess and prioritize town critical facilities needs and obtain funding to acquire and install back-up power or alternative power on critical assets	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
B-32 (NEW B-45[1])	Investigate options /opportunities to create living shorelines wherever possible to restore natural processes, minimize erosion, and create habitat. Implement as funding becomes available.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium
B-33 (NEW B-46[1])	Explore options and feasibility of instituting shoreline stabilization programs where natural restoration is not an option. Implement as funding becomes available.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium
B-34 (NEW B-47[1])	Explore options and feasibility where possible, opportunities to create vegetated buffers to protect homes and structures. Implement as funding becomes available.	1	1	0	1	0	1	0	1	0	0	0	1	0	1	7	Medium
B-35 (NEW B-48[1])	Explore options and feasibility to use streets (including reducing impermeable surfaces), public rights of way, public lands, and green space to implement projects to store, infiltrate, filter, and	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	detain stormwater runoff and reduce on-street flooding. Implement as funding becomes available.																
B-36 (NEW B-49[1])	Assess needs, options and funding to install a public water system in the areas of the Town of Babylon that do not have one with backup generators for all systems. Implement as funding becomes available.	1	1	1	1	1	1	0	1	0	1	1	1	1	1	12	High
B-37 (NEW B-50[1])	Explore options, feasibility and funding availability to take measures to protect potable water wells from wastewater contamination with the installation of small package treatment plants. Implement as funding becomes available.	1	1	1	1	1	1	0	1	0	1	1	1	1	1	12	High
B-38 (former B-8)	Implement tree management programs and augment existing programs, including containment of the Asian Beetle, and measures to improve post-disaster debris management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-39 (former B-10[1])	Design and implement an on-going public outreach program to increase public participation in maintenance of municipal drainage by reducing roadway/recharge basin litter, dumping yard/household waste into streets, identification of neighborhood inlets, and notifying DPW of drainage problems. Implement as funding becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
B-40 (former B-11[1])	Work with adjacent communities and the County to support/enhance Building and/or Flood codes and planning regulations, and enforcement programs at the local level.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-41 (former B-14)	Investigate and implement a program to enhance floodplain management capabilities through participation in some or all of the following activities: work with adjacent communities to institute a continuing education program for County and community staff to become certified in benefit cost analysis and floodplain management with the goal to become certified floodplain managers; establish and maintain a schedule of on-going training classes to obtain and maintain these certifications; CRS program workshops and training; BCA training; elevation certificate training; etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-42 (former B-18)	Encourage applicable agencies to update existing CoastalView program on a yearly basis. (CoastalView is a joint venture of State and Federal agencies which has established benchmarks within erosion data in a GIS format)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-43 (former B-22[1])	Participate in homeowner partnership program to elevate, retrofit, or acquire vulnerable properties in high risk areas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	impacted by coastal storms, surface flooding, and/or shallow groundwater. High risk areas include: those properties identified as "repetitive loss" by FEMA and those areas of concern identified by the Town of Babylon.																
B-44 (former B-24)	Develop a post-disaster action plan for coastal storm events that will address the continuity of local government operations, such as operations of the Comptroller, Town Clerk, Planning & Development, etc. post disaster.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-45 (former B-28[1])	Continue to develop, enhance and implement existing emergency response plans, including evacuation plans, to utilize new and developing technology/ information as it becomes available.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
B-46 (former B-29)	Promote the purchase of Flood Insurance.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-47 (former B-30)	Educate the public on ways to protect their property before and during natural events, and what they can acquire to install appropriate property protection measures.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-48 (former B-31[1])	Implement public education programs that inform the public of local coastal hazard area zone ordinances (TOB Code Chapter 99), why this is important and how the public can help preserve and protect our managed coastal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	zones (i.e. Jones island)																
B-49 (former B-32)	Increase public education and notification concerning Asian Beetle Infestation, including production and distribution of maps of affected areas.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-50 (former B-33)	Consider participation in incentive-based programs such as CRS and "Storm Ready."	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
B-51 (former B-34)	Continue to support the implementation, monitoring, maintenance and updating of this Plan, as defined in Section 7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-52 (former B-35)	Strive to maintain compliance with and good-standing in the National Flood Insurance program.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
B-53 (former B-36)	Encourage the International Bldg Codes Council to investigate seismic design provisions for inclusion in the New York State Bldg & Fire Prevention Codes.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
B-54 (NEW B-37[1])	Increase public outreach, including enhancing connectedness (e.g., social media, text messaging), on emergency preparedness, the importance of health dune systems, and local ecology.	0	0	0	1	1	1	0	0	1	0	1	1	0	1	7	Medium
B-55 (NEW B-51)	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a	0	1	1	1	1	1	0	0	1	0	1	1	0	1	9	Medium

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	priority when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.																
B-56 (NEW B-52)	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1).	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
B-57 (NEW B-53)	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered "critical", and to be the first priority for clearing after an event involving downed power lines.	1	1	1	1	1	1	1	0	1	1	1	1	1	0	12	High
B-58 (LIRPC- 1)	With many Pre-FIRM buildings in the Town, many structures are vulnerable to flooding and are at a greater risk of sustaining damage. This is something the Town would like to minimize in future disasters. Undertake a study to investigate, prioritize issues and develop mitigation options to reduce the Towns risk in future disasters.	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
B-59 (LIRPC- 2)	Following Hurricane Sandy there was significant damage to utilities, heating units and oil tanks. Many of these were in the	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	flood zone and oil spills resulted. The insurance coverage of an incident like this is uncertain or non-existent. The Town would like to address the vulnerability of these structures.																
B-60 (LIRPC- 3)	Long-term electrical power loss was a major issue following Hurricane Sandy. Addressing a quicker way of restoring power is something the Town would like to address in the future.	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
B-61 (LIRPC- 4)	Future Losses To Avoid: 6,000 residents affected with millions of dollars in damage, Town revenue loss of $9.6 million in Building Permits, and an estimated Town-wide damage of $18,496,560.00.	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.

9.2.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.2.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Babylon that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Babylon has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.2.9 Additional Comments

None at this time.

Figure 9.2-1. Town of Babylon Hazard Area Extent and Location Map

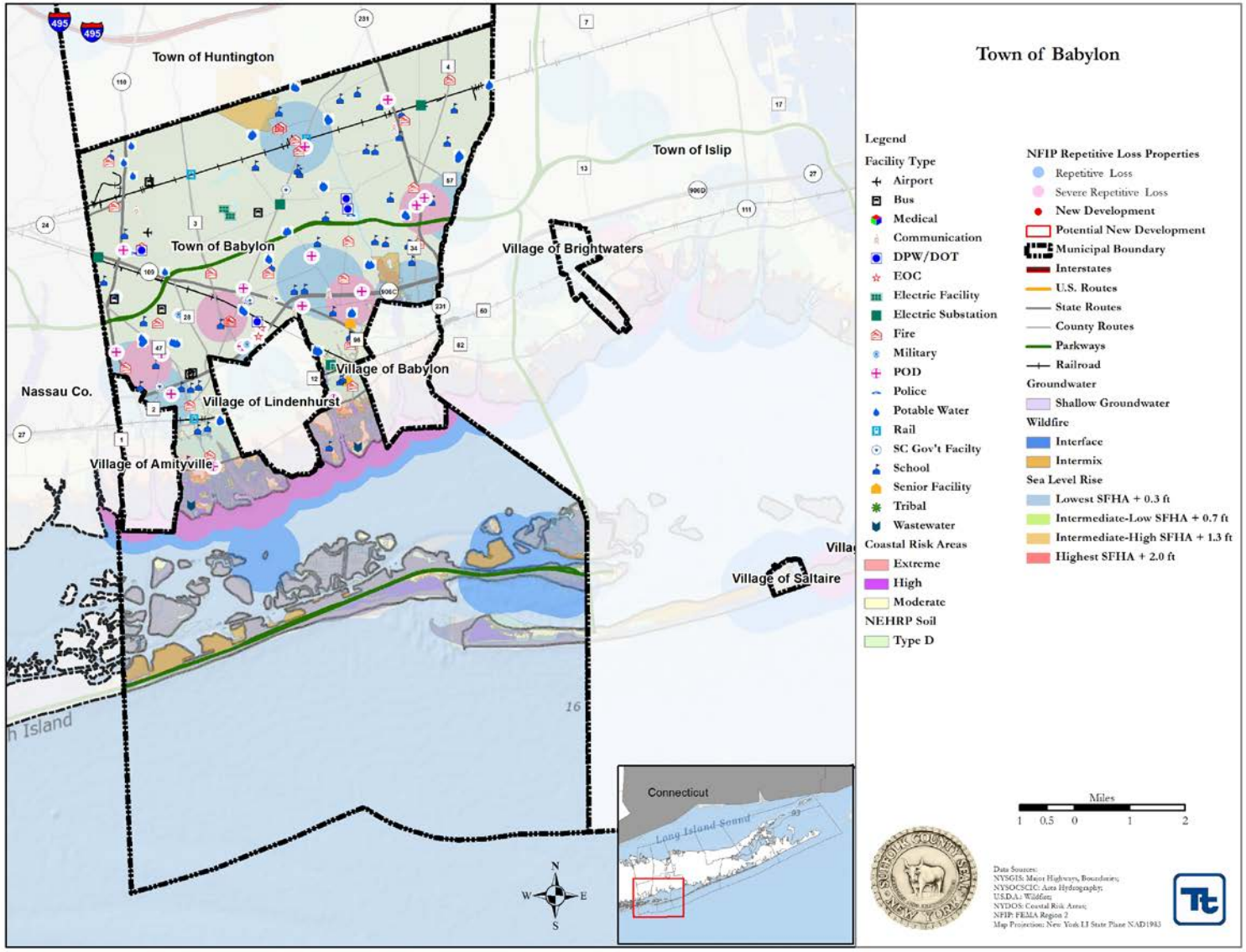
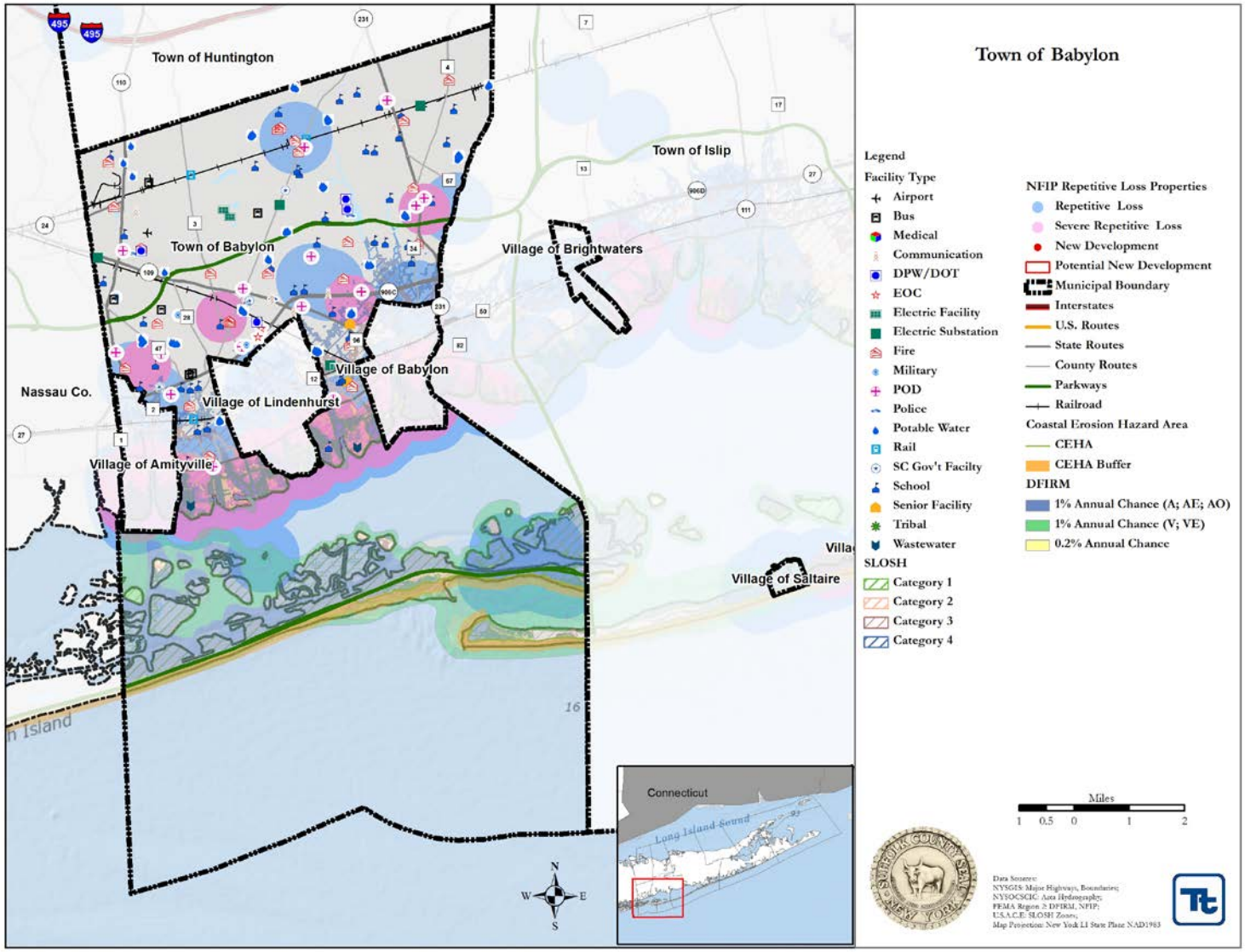


Figure 9.2-2. Town of Babylon Hazard Area Extent and Location Map



Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 144
Mitigation Action/Initiative: Road Dead end flood control project

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	Due to the geographical exposure of Babylon Town's shoreline and the dense development along the Great South Bay, even the slightest natural events can cause disruption to the economy. Shallow flood events, below the predicted 10-year elevation, account for the majority of the private flood damage claims as well as damage to public road infrastructure and disruption of sewer and natural gas service. Over time our waterfront shoreline has been hardened by private development, even pre-FIRM development which was elevated on fill with sea walls or bulk head used to retain the fill material. Consequently many flood events inundate neighborhoods from road ends that terminate at the water, as this is the lowest structual elevation in the area. This problem has impacted our coastal area since widespread development began in the 1920's, rising sea level and an incease in the occurance of Nor'Easters and tropical depressions has inceased the frequesncy of these flooding events. Based on the Suffolk County Multi- Jurisdictional/Hazard Mitigation Plan (The Plan), this is the most frequent type of flood event that impacts Babylon. The Plan states that between 1931 to 2006, 26 Nor'Easter's were documented, 12 caused property, infrastructure and economic damage exceeding 30% of the Town's total replacement costs for the years of the events. Our local Department of Public works estimates that the frequesnt flooding of these roads shortens the predicted life of the pavement by as much as 10 years. Salt water infiltration into the public sewer system occurs when the roads over-top and water infiltrates through damaged or failing seals on man-holes. The County DPW that manages the public sewer system has also acknowledged deliberate acts by frustrated residents to "pry" the man-holes open to drain the road into the sewer system as a recurring problem. The County could not provide a damage cost estimate for these storms. Since the completion of the Plan the Town has been impacted by shallow flooding by a Nor'Easter in 2009, 2010, Tropical Storm Irene in 2011 and 8 events following Hurricane Sandy, 4 of which resulted in street flooding.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	A survey of Town road "dead-ends" was conducted in our coastal flood zone, survey information included the presence of a sea-wall or bulkhead structure, it's condition, dimessions in linear feet and if a storm drain discharge structure protruded through the structure. A total of 27 road

	ends were identified in the Town flood plain that would benefit from this program. The Town plans to construct the new bulkeads using materials and a design with at least a 30 year life expectancy. The height of the bulkheads will be set, at a minimum, at the predicted 10-year flood (10%) elevation based on the current Flood Insurance Study and transect information for Babylon Town. The Town has already initiated a "Check valve" program to control back flowing of water through the existing storm drain system. Streets that are being upgraded with the check valves will be given priority for bulkhead replacement.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: $414,578
Estimated Cost	$567,000
Priority*	
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	
Potential Funding Sources	
Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 144
Mitigation Action/Initiative: Road Dead end flood control project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 240
Mitigation Action/Initiative: Flood Proof Tanner Park Filter room

Assessing the Risk	
Hazard(s) addressed:	Flooding, Hurricane, Nor'easter, Shallow Groundwater
Specific problem being mitigated:	The Town of Babylon maintains a waterfront recreational park at Tanner Park in the Hamlet of Copiague. The Pavillion which was completed in 2009 houses a resturant, spray park and pump/filter room. The pump/filter room extends below grade and is subject to water seepage during exceptionally high tides and storm events. A series of sump-pumps prevents the water from accumulating and inundating the mechanical and electrical equipment used for the spray park. There is no back up power and the entrance to the room is below the BFE and is not watertight.The storm surge from Hurricane Sandy exceeded the BFE and flooded the pump/filter room. Power was not restored at the facility for over 60 days. The flooding destroyed the filter and pumping equipment contained in the building. The replacement costs exceeded $100,000.00 dollars.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Installation of permanent back-up Generator (only) - This alternative was not pursued. Although project cost would be lower, the entrance to the pump room is below the B.F.E. Existing sump pumps can handle seepage but not the water flow if flood heights reach entrance door.
	2. Flood Proof Pump House and install Generator – Project would involve using watertight doors, vents and sealing all conduit and utility points that protrude through building envelope to prevent flood waters from entering facility. This alternative was not pursued as the financial cost were extremely high and the watertight doors require more maintenance.
	3. Purchase temporary mobile flood Barriers – This alternative was rejected as the area around the facility is uneven which would not allow for a proper deployment of the flood barrier system.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The pump/filter room will be flooproofed using a combination of door and vent flood barriers (i.e. FloodBreak automatic floodgate). This will prevent flood waters from inundating the facility through building openings. To provide emergency power to the sump-pump system a permanent generator is proposed. A "Generac" or equivalent self contained system using propane for fuel is proposed. Hurricane Sandy compromised the natural gas system in Babylon and liquid fuels such as gasoline and diesel are not as stable over long periods of storage. The combination of floodproofing and back up power will be designed for the 500-year event.
Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)
Objectives Met	2, 15, 16

Applies to existing structures/infrastructure, future, or not applicable	Existing Structure
Benefits (losses avoided)	Recent Damages: $100,000
Estimated Cost	$114,530
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project will be added to Town annual capital improvement plan
Potential Funding Sources	NYS DR# 4085 HMG funding, Local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 240
Mitigation Action/Initiative: Flood Proof Tanner Park Filter room

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Mitigation improvements are permanent.
Political	1	
Legal	0	
Fiscal	1	Funding anticipated from HMG application and municipal budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	Deputy Supervisor and Parks Commissioner support project
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 360
Mitigation Action/Initiative: Babylon NY P25 Upgrade

Assessing the Risk	
Hazard(s) addressed:	Hurricane, Severe Storms, Nor'easters, Severe Winter Storm
Specific problem being mitigated:	Several years ago, the Town of Babylon was provided with replacement 2-way radio infrastructure through the FCC rebanding initiative. The system is used by our Department of Public Works and Department of Public Safety. The replacement infrastructure utilized used equipment and was based on an older technology. After Hurricane Sandy the loss of land lines and intermitent cell outages made the Town rely heavily on our based 2-way communication system. Recently, the existing system has been running at less than optimal levels, many channels are out of service. Since Hurricane Sandy the entire 2-way communication system has been operating in fail safe mode. In addition, this communication platform is beyond its factory supported lifecycle and is repaired on a "best efforts" basis. The Town put together an implementation team consisting of Town representatives, Suffolk County OEM personel and several private sector representatives from the telecommunication industry. The team released their Contract design Review report in June 2013 recommending a new upgradable system.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Replace system with new "low band" (in-kind) equipment– This alternative was rejected, new equipment would provide a dependable 2-way communication system for day to day use but the system cannot be upgraded to communicate with other agencies or provide the Town with a dependable emergency communication platform.
	2. Upgrade to VHF System – This alternative was rejected. The VHF system is dependable but not in wide spread use in Suffolk County so it would not provide the Interagency capability that is required. The installation and operation of a VHF system has a substantially higher cost than the proposed digital system.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	A new radio communication system is proposed to meet current standards and can interface into the County Core system. New base radios will interface to an established antenna site and antenna system. The new digital base radios are expected to provide coverage equal to the current analog base stations. The ability to interface with the County Core system will allow the Town to have radio interoperability with the other agencies that use the Suffolk County radio system during disaster and non-disaster events.
Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)

Objectives Met	7, 12, 13,14,16
Applies to existing structures/infrastructure, future, or not applicable	Existing Infrastructure
Benefits (losses avoided)	Recent Damages: $3,000
Estimated Cost	$410,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project will be added to Town Annual capital improvement plan.
Potential Funding Sources	NYS DR# 4085 HMG funding, Local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 360
Mitigation Action/Initiative: Babylon NY P25 Upgrade

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	0	
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	0	State has no jurisdiction in this matter.
Fiscal	1	HMG application filed, local funding is available for project costs.
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	High	

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 939
Mitigation Action/Initiative: Tanner Park Dredge Spoil Stabilization Project

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	The Town maintains a dregding spoil disposal site at it's park facility at Tanner Park in the Hamlet of Copiague. This site is the primary dredge spoil storage area for all public canals, marina's and channels that are within a 4,000 foot radius of this site. The storage facility is available for County and Town sponsored dredging projects. The facility is an earth dyked area of 5.5 acres with a storage capacity of 55,000 cubic yards. The facilty borders the western shoreline of Howells Creek and erosion from Tropical Storm Irene and Hurricane Sandy has impacted the entire eastern dyke wall. The site was evaluated by the Suffolk County Department of Public Works, Bridges and Waterways Division after Hurricane Sandy to access damages. They reported that the eastern perimeter dyke wall was eroded to the point of it being structurally compromised and damage to the dewatering system was noted. Failure of the dyke wall will allow fill to erode into the creek which will impact navigation to a municipal marina, boat launching ramp and private residences. Damages resulting from Hurricane Sandy is estimated at $150,000.00.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The adjacent shoreline was stabilized in 2007 using geotextile under stone rip-rap (500 to 800 pound stone). This proposal will continue the rip-rap along the 700 foot dyke perimeter line to provide a hardened shoreline protecting the storage site. The adjacent project did not breach after both Tropical Storm Irene and Hurricane Sandy.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: $150,000
Estimated Cost	$150,000
Priority*	

Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	
Potential Funding Sources	
Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 939
Mitigation Action/Initiative: Tanner Park Dredge Spoil Stabilization Project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 1035
Mitigation Action/Initiative: Oak Beach Community Center Floodproofing Project

Assessing the Risk	
Hazard(s) addressed:	Flooding, Hurricane, Nor'easters
Specific problem being mitigated:	The Town maintains a Community Building in the Hamlet of Oak Beach, the building is currently used by the residents of our barrier beach communities for public meetings, civic meetings, polling/voting and for informational breifings. The building was constructed prior to the first Town Flood study and is not elevated to the BFE. Part of the original structure dates back the the 1860's and was once used as a United States Life Saving Station which was later transfered to the United States Coast Guard. The building is wood frame construction and the foundation is wood pilings. After Tropical Storm Irene the west side of the building began to settle, an inspection of the foundation posts showed some pilings had failed from the storm surge causing the floor to separate. Initial remediation estimates were placed at $165,000.00 to raise the structure on a new foundation. While an engineeing report was being prepared Hurricane Sandy struck and that storm surge further damaged the structure. A detailed engineering investigation of the foundation found multiple failures of the foundation pilings and the building has been since closed to the public for safety.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action – Building was substantially damaged by Hurricane Sandy and is unsafe for public congregation. There are no other structures available within a reasonable distance from this community for use as a community center. For this reason the alternative was rejected.
	2. Repair building (in-Kind) – This alternative was rejected, NFIP and local building code does not allow for the repair of a substantially damaged structure.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Town has commissioned an egineering report to raise and floodproof the Community Center Building. A new foundation consisting of 34 new concrete piers is proposed, the existing floor system will be removed and a new floor system will be constructed. The structure will then be fastened to new new foundation. The proposed first floor elevation will meet the predicted 500-year elevation as shown in the current Flood Isurance Study.
Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)
Objectives Met	1, 2, 3, 15, 16

Applies to existing structures/infrastructure, future, or not applicable	Existing structure
Benefits (losses avoided)	Recent Damages: $165,000
Estimated Cost	$674,800
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project is on the Town park improvement plan.
Potential Funding Sources	NYS DR# 4085 HMG funding, local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 1035
Mitigation Action/Initiative: Oak Beach Community Center Floodproofing Project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	0	
Technical	1	Building elevation project will protect to the 500-year flood.
Political	1	
Legal	0	
Fiscal	1	Proposed project funding through HMG and local match.
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	High	

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 1091
Mitigation Action/Initiative: Tanner Park Electric Sub-Station Flood Proofing Project

Assessing the Risk	
Hazard(s) addressed:	Flooding, Hurricane, Nor'easters
Specific problem being mitigated:	The Town of Babylon operates a bayfront park facility, Tanner Park in the Hamlet of Copiague. The 93 acre park offers several ameneties including a seasonal water park, beach, marina, 7 sports fields, tennis, basketball, skateboarding, walking trails, concerts, food and beverage concession and a year round senior citizen center. Electric power is supplied to the park through 3 sub-stations, 1 sub-station is located above the BFE and has not sustained damage from flood waters. The remaining 2 were inundated by sea water during the storm surge from Hurricane Sandy. Past flood events at the 10-year frequency or lower caused some damage to the electrical systems but did not reach the sub-stations. Replacement of the sub-station equipment cost $118,000.00 as all electrical components exposed to salt water had to be replaced. The system was energized shortly after, however systems have been failing as the flooding of the sub-stations allowed salt water into the conduit system. Older equipment and repairs that were not sealed are failing from salt water corrosion, an additional $200,000.00 in repairs have been identified. Town electrical engineers in a preliminary assessment concluded the whole park electric grid has been compromised and will require complete replacement. Cost estimates are still being prepared.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Service Elevation Plan – Electric service equipment could be re-mounted in existing power sheds to a higher elevation. This alternative was rejected, existing power sheds did not have adequate room or provide the opportunity to elevate the service equipment above the BFE. Alternative will not provide the level of flood protection required.
	2. Portable linked barricade system – The purchase of a deployable flood barrier wall system was investigated. This alternative was rejected, although the cost was lower a self-deploying system was preferred.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Town proposes to floodproof the 2 sub-stations using poured reinforced concrete flood walls and "FloodBreak" automatic flood gate systems. The floodproofing system will be designed for the 100-year event. The use of permanant flood walls and automatic deploying flood gates will eliminate the need for human intervention. The Town has been re-evaluting its storm response plans as man-power shortages resulted in many plans requiring human intervention before the storm to fail to protect the intended structures or facilities.

Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)
Objectives Met	2, 15, 16
Applies to existing structures/infrastructure, future, or not applicable	Existing infrastructure
Benefits (losses avoided)	Recent Damages: $318,000
Estimated Cost	$207,675
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project is included in Town Annual capital improvement plan.
Potential Funding Sources	NYS DR# 4085 HMG funding, Local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 1091
Mitigation Action/Initiative: Tanner Park Electric Sub-Station Flood Proofing Project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Permanent improvement to facility.
Political	1	
Legal	0	Project is under local jurisdiction.
Fiscal	1	Town submitted HMG application, local match will be provided.
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 1678
Mitigation Action/Initiative: Venetian Shores Emergency generator

Assessing the Risk	
Hazard(s) addressed:	Flooding, Shallow Groundwater, Hurricane, Nor'easters, Severe Storms
Specific problem being mitigated:	The Town of Babylon maintains a waterfront recreational park at Venetian Shores in the Hamlet of Lindenhurst. The pavilion which was completely re-constructed in 2006 houses a resturant, spray park, and pump/filter room. The pump/filter room entrance is elevated above the 100-year flood height, however the room extends below grade and is subject to water seepage during exceptionally high tides and storm events. A series of sump-pumps prevents the water from accumulting and inundating the mechanical and electrical equipment. There is no back up power and damage to the equipement has resulted from extended power outages. Portable generators have been used during short term outages (3 days or less), such as after Tropical Storm Irene and a 2009 Nor'Easter. Annual maintenance costs during these outages include work-force labor, generator and re-fueling. An extended power outage of over 60 days resulted from Hurricane Sandy (10/28/12), water seepage during the storm flooded the pump/filter room and all equipment was lost. Maintenence was delayed as generators were re-tasked to power other equipment used for emergency services. Equipment damage exceeded $100,000.00 dollars.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Portable Power System – Use of a portable power generator to power sump pump during electric outage. This alternative was rejected, although initial costs are lower access issues to the facility after an event, labor to re-fuel generator and generator maintenance did not meet the Town specifications.
	2. Venetian Shores Power Resiliency Project – Storm harden power grid in immediate area around park facility. This alternative is beyond the capability of the Town and falls under the capability of the Regional electric utility provider. Option cannot be pursued by the Town.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	To provide emergency power to the sump-pump system a stationary generator is proposed. A "Generac" or equivalent self contained system using propane is proposed. During Hurricane Sandy the natural gas system was compromised and gas service was terminated for several weeks after the storm which makes propane a dependable fuel source. Propane will not degrade over time as with gasoline or a deisel fuel generator. The generator and propane tank can easily be added to the facilty and placed above the predicted 500-year flood height. As the system is self-starting and the propane tank will be sized for extended outages protection of the pump/filter equipment will be assured. This will reduce the damand for a portable generator and laborer who can be tasked for other emergency

	actions.
Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)
Objectives Met	2,15,16
Applies to existing structures/infrastructure, future, or not applicable	Existing structure
Benefits (losses avoided)	Recent Damages: $100,000
Estimated Cost	$29,570
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project is included in Town Annual Capital Improvement plan
Potential Funding Sources	NYS DR# 4085 HMG funding, Local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 1678
Mitigation Action/Initiative: Venetian Shores Emergency generator

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	Improvements are permanent.
Political	1	
Legal	0	Project is under local authorization only.
Fiscal	1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Town of Babylon
Number: Sandy HMGP LOI #: 2232
Mitigation Action/Initiative: Back up Power System Wyandanch Nutrition Center

Assessing the Risk	
Hazard(s) addressed:	Hurricane, Severe Storms
Specific problem being mitigated:	The Town operates a community facilty in the Hamlet of Wyandanch that provides meals and family services for local residents. United States 2010 census data list Wyandanch as a community of approximately 12,000 residents, over 85% of the households identify themselves as African american or Hispanic/Latino decent, median household income is below the New York State average and 15% of the population is identified as earning below the poverty level. The Town rates this facility as one of our critical facilities providing services to an underserved community. The Facility is not located in the 100-year flood zone however power outages resulting from Hurricanes, Tropical Storms, NorEasters and winter storms has impacted this facility. Most recently Hurricane Sandy caused widespread outages to 90% of Long Island. This facilty was not in service for several days, portable generators were not available which resulted in spoilage of stored food stuffs. In addition power surges damaged compressors and electrical components which delayed the opening of the facility after the building was energized by the local power utility. As the residential population served by this facilty was also without power the loss of the facility over this time period further exacerbated the problems faced by the residents. Electrical upgrades are proposed at the facility including surge protection systems. Damage estimates resulting from Hurricane Sandy has been placed at $32,575.00.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Portable Power generator – Purchase a portable generator to power the facility in the case of an extended power outage. This action was rejected, the power demand of this facility exceeded the capacity of the largest available portable generator.
	2. Wyandanch Power Storm Resiliency Project – Storm harden existing power grid in area of facility. This proposal is not being pursued by the Town. The electric grid is operated and maintained by the regional power utility and this project is beyond the capability of the Town.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Town proposes a permanant back-up power supply system using a "Generac" or equivalent system. The system will be fuled using existing natural gas service. The project area is not known to be suceptable to interuption in gas service and will not require fuel stabilization as compared to a liquid fuel system. The system will be sized to operate the entire facilty if an outage occurs.

Mitigation Action/Project Type	Structure and Infrastructure Project (SIP)
Objectives Met	3, 15, 16
Applies to existing structures/infrastructure, future, or not applicable	Existing structure
Benefits (losses avoided)	Recent Damages: $32,575.00
Estimated Cost	$77,700
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Babylon: Brian Zitani, Waterways Management Supervisor
Local Planning Mechanism	Project is added to annual Town capital improvement plan
Potential Funding Sources	NYS DR# 4085 HMG funding, Local
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Prioritization

Number: Sandy HMGP LOI #: 2232
Mitigation Action/Initiative: Back up Power System Wyandanch Nutrition Center

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	Facility is Town facility under local jurisdiction.
Fiscal	1	HMG funding applied for with local match to complete project.
Environmental	0	
Social	1	Facility services low income/minority neighborhood.
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	