



9.4 Village of Babylon

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

9.4.1 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
Charles Gardner, DPW 153 West Main Street Babylon, NY 11702 Phone: (631) 669-4878 Email: skipvob@gmail.com	Suzanne Schettino, Administrative Assistant 153 West Main Street Babylon, NY 11702 Phone: 631-669-1212 Email: ssvob@optonline.net

9.4.2 Municipal Profile

This section provides a summary of the community. Additional community profiling information, including geographic area and data, general demographics, income and poverty, employment and housing may be found in the Village’s New York Rising Community Reconstruction Program Conceptual Plan available at: http://stormrecovery.ny.gov/sites/default/files/crp/community/documents/babylon_conceptual_plan_110613.pdf

Population

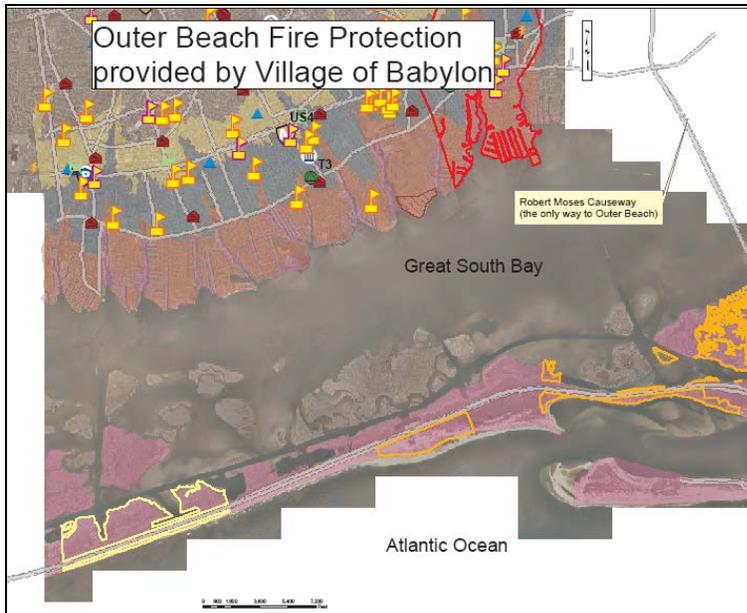
According to the U.S. Census, the 2010 population for the Village of Babylon was 12,166.

Location

The Village of Babylon is the located on the south shore and western border of Suffolk County. The Village is bordered on the south by the Atlantic Ocean. An 8.5-mile-long inhabited barrier island that 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 village is highly developed, primarily with residences, as depicted in the aerial photographs below, showing our frontage along the Great South Bay.



The Village of Babylon contains 12,166 people. Electric service is provided by the Long Island Power Authority (LIPA); water service is supplied by the Suffolk County Water Authority. The entire village is served by SCDPW Sewer District 3. The Village is characterized by many areas of high groundwater, and is served by public water. Most of the Village has predominantly sandy soil. The Village of Babylon’s volunteer fire department provides protection and EMS for village residents, as well as two fire protection districts in the Town of Babylon, on the outer beach (see below):





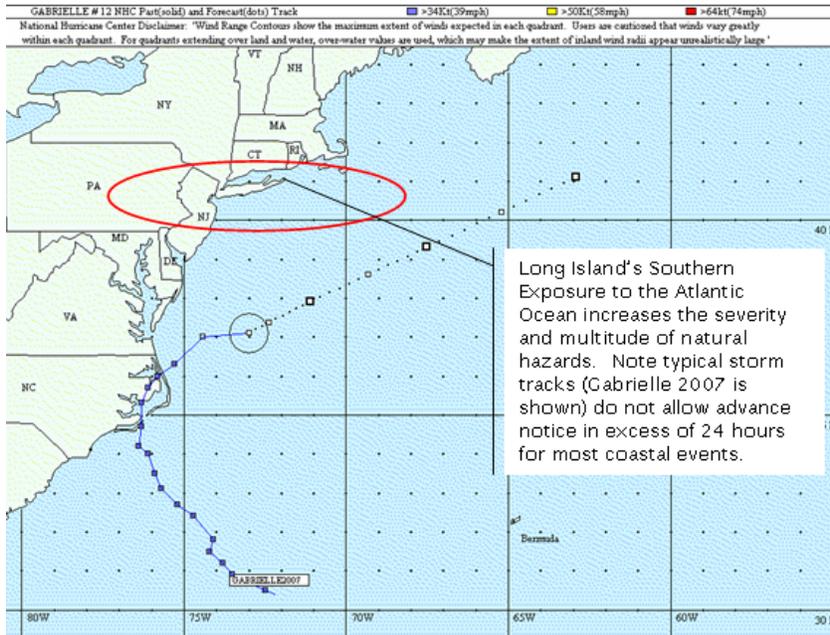
The Village of Babylon’s downtown district is unique for Suffolk County¹. There are waterfront parks, marina, historic structures, and several areas of preserved open space. Following are pictures from the Village of Babylon’s Chamber of Commerce website illustrating this “treasure on the bay”:



The Village’s population has increased little over the past 20 years, as most land in the village was densely developed by 1975. Any growth in population since that time has occurred as a result of undocumented peoples residing without local authorization, yet, under the New York State home rule system, the Village is responsible for this population in case of natural disaster.

Though FEMA may typically consider life and safety issues beyond the jurisdiction of most hazard mitigation plans, the mitigation planning initiative that is most important to the life and safety of our residents could never be accounted for within any other FEMA or DHS response or preparedness plan. Not to stray into the territory of response plans, even with the best possible evacuation plan, and an unlimited amount of personnel to carry it out, the laws of physics still prevail. It is certainly possible, and even probable, based on documented weather patterns, that amount of time to evacuate will far exceed the amount of notice of a significant event. Thus, that is why the Village of Babylon turns to mitigation efforts, because if we do not reduce the exposure and vulnerability of our mainland population and infrastructure by securing our barrier islands, we will sustain unprecedented loss of life, destruction of essential infrastructure, and devastation of our economy from which it will take many years to recover.

¹ New York Rising Community Reconstruction Program. “Conceptual Plan – Village of Babylon/West Babylon”. October 2013.
http://stormrecovery.ny.gov/sites/default/files/crp/community/documents/babylon_conceptual_plan_110613.pdf



Background image is a screenshot from Hurrevac, which is used by Town of Babylon Emergency Preparedness throughout hurricane season for evacuation planning and decision-making.

Brief History

The Village of Babylon’s website describes the Villages history as follows:

The location of our Village on the Great South Bay and it’s accessibility to the Atlantic Ocean has involved the lives of those who lived here from the beginning to the present. The area known as Village of Babylon was purchased from the Sumpwam Indians in 1670. It was known as Huntington South. The farmers came down from Huntington to the South Bay area to harvest “salt” hay for bedding and feed for their livestock. It was a journey so the farmers would stay a period of time before returning home. Travelers would stop in Babylon on their three day trip to Southampton from New York City, creating the need for stores and services. Flounder, blue fish and shellfish were abundant in the bay providing income and sustenance for the settlers. Fresh streams from the North provided power for mills that produced grain, lumber and paper. By 1800, Babylon became a hub of activity.

Nathaniel Conklin foresaw Babylon as a thriving town He built a home for his mother on the northeast corner of Main Street and Deer Park Avenue in 1803. Legend has it that Nat’s mother was unhappy with her home across from a tavern and compared the town with the biblical Babylon. The house now stands on the Northwest side of Deer Park Avenue where it was moved in 1871 with a cornerstone that reads “New Babylon, This House Built by Nat Conklin, 1803”.

When the railroad arrived in the Village in 1867, it became a thriving resort area. A trolley ran from the depot to the steamship dock where ferries sailed to the beaches. At one time there were eleven hotels in Babylon Village.

The area called Huntington South became Town of Babylon with it own governing board in 1872. The Village of Babylon incorporated in 1893. Following World War II, the area burst with activity providing homes for returning veterans. With convenient train service to New York City, commuters, then and now,





find Babylon a great place to live and raise a family. People of renown who have lived here are Guglielmo Marconi, Robert Moses, and Robert Keeshan.

Governing Body Format

The Village has a board which will be responsible for the adoption of this Hazard Mitigation Plan. The Village Board consists of an elected Mayor and 4 elected Trustees.

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 9.4.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.4-1. Growth and Development

Property Name	Type (Residential or Commercial)	Number of Structures	Parcel ID(s)	Known Hazard Zone*	Description / Status
None identified at this time.					

* Only location-specific hazard zones or vulnerabilities identified.

9.4.3 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.

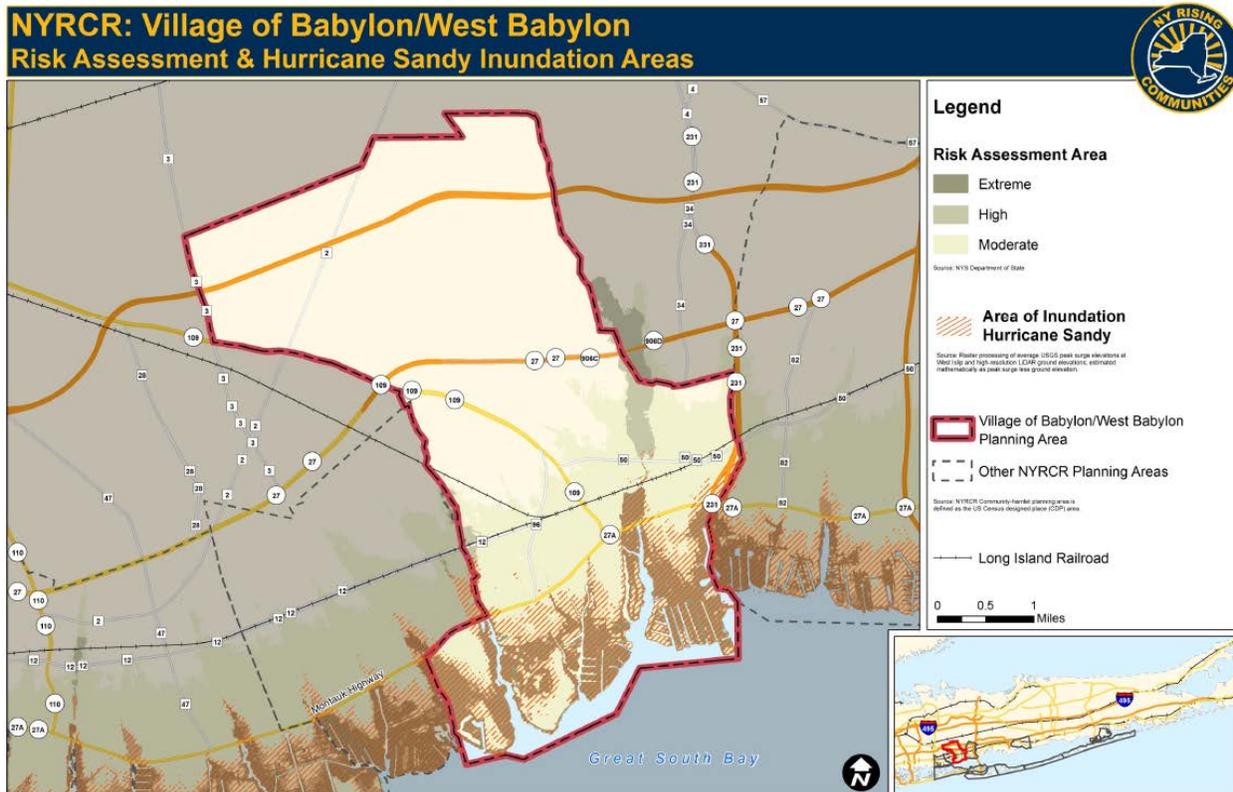
Table 9.4-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
June 6-8, 2013	Record Heavy Rain	N/A	N/A	Road flooding
May 25, 2013	High Winds	N/A	N/A	Trees and tree limbs
April 12, 2013	High Winds	N/A	N/A	Tree and tree limbs
February 8-9, 2013	Severe Winter Storm and Snowstorm	DR-4111	Yes - PA (Public Assistance)	\$73,000 Equipment damage
October 27-November 8, 2012	Hurricane Sandy	DR-4085	Yes – IA (Individual Assistance) and PA	Storm surge amplified by a full-moon high tide reached nearly 6.5 feet. Communications and power outages persisted for weeks. Many structures were damaged or destroyed.

Superstorm Sandy in October 2012 caused massive flooding in the Village. The figure below shows the inundated areas. A description of the effects of Superstorm Sandy on the Village can be found in the



table 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.



Source: New York Rising Community Reconstruction Program. “Conceptual Plan – Village of Babylon/West Babylon”. October 2013.

Accompanying Nor’Easters, and all other coastal storms, is Coastal Erosion. Due to the southerly-facing coast and the geology of the sand, erosion and accretion occur on a daily basis guided by wind and wave directions. The erosion along Jones Island exceeds the accretion, as man-made structures, erected along our coastline throughout history, have disturbed the littoral drift of necessary sediments that would ensure accretion along Jones Island. General descriptions of this hazard propagated in Volume I are not typical of Jones Island (Gilgo Beach), as we may suffer erosion losses of 5 feet per minor coastal event, including nor’easters. In fact, it is likely that Jones Island experiences one of the highest erosion rates along the entire Eastern seaboard. Erosion of Jones Island is an on-going event which can only be measured by day-to-day weather events. Refer to documentation in USACE projects from 1987 to present for further scientific analysis.

The coastal erosion threatening our barrier island endangers not merely our beaches or residences or a vital New York State Commuter Route. Should the island become structurally unsound, the only sewer outfall pipe for a Suffolk County sewage treatment plant serving over half of our population and commerce will fail, requiring expensive re-routing and reconstruction. But even should the sewer pipe be lost, the safety and welfare of the number of citizens directly physically endangered by any major coastal event, including nor’easters, rises from a few hundred people to our entire population. Depicted below is an example of how quickly erosion can occur. The seaward portion of dunes pictured existed just prior to



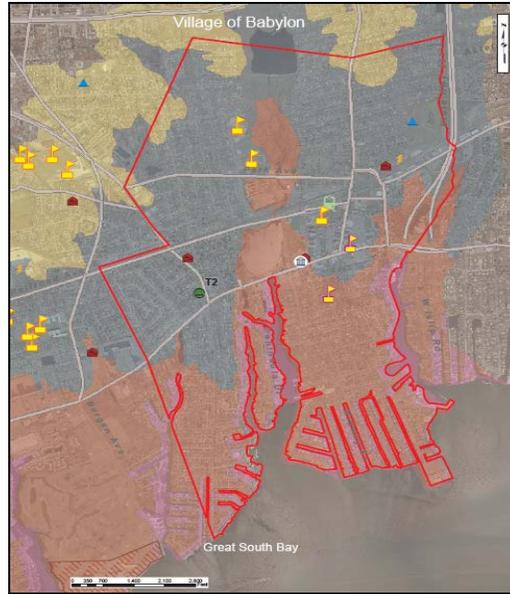
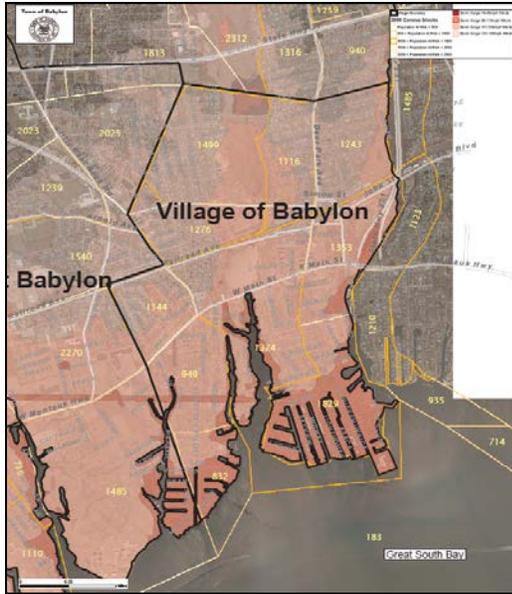
DR-1692. Exposed by the recent erosion is an oil tank left behind by the US Coast Guard when the Gilgo Station was demolished in 1980s.



As Nor'easters and Coastal Erosion occur quite frequently, considering the damage that may be sustained by the violent winds and flooding associated with hurricanes and other tropical cyclones paints an ominous picture of Long Island's future. Long Island, and the Village of Babylon in particular, has experienced only a minor portion of the damage amounts from Presidential Disaster Declarations that affected Long Island since 1954. Many of the worst hurricane events (i.e., 1938) hit well before the majority of development in Babylon, which occurred post- World War II. In the case of Hurricane Gloria, she hit Babylon at low tide, sparing our citizens from widespread coastal flooding.

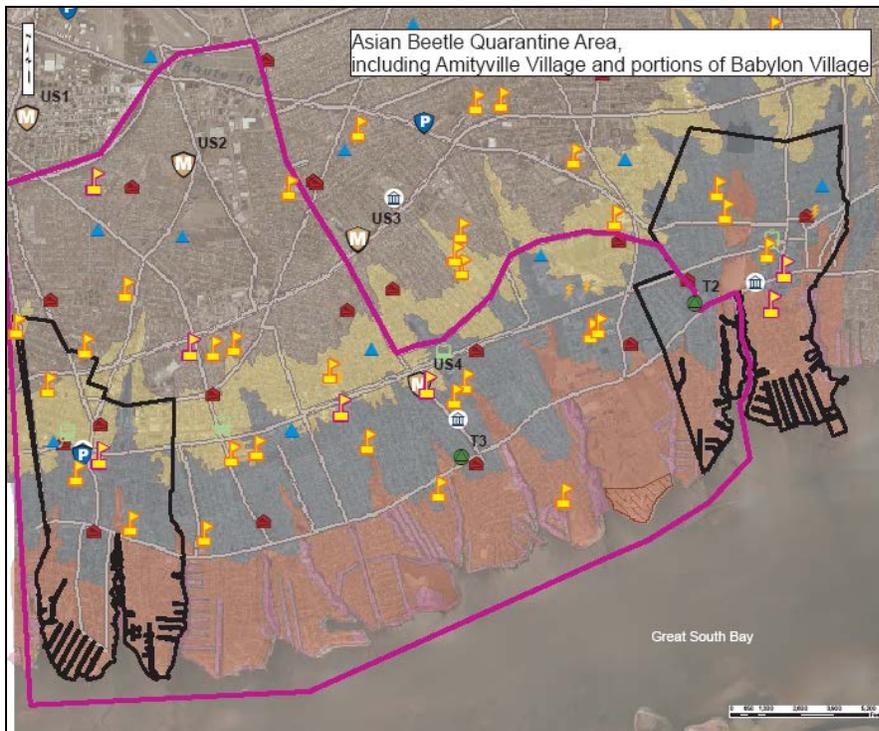
While Volume I contains a complete analysis of the natural hazard for Suffolk County in general, it is important to note the population analyses contained there-in indicate that all of the population within the Village would require evacuation to a jurisdiction north of the Village for a Category 2 or greater Hurricane. Babylon's Fire operations would be very limited during a significant coastal event, and we would have to rely on the Town of Babylon for their support. HAZUS analysis in Volume I supports local knowledge that local emergency operations and fire/rescue efforts will most likely be severely disabled for several days.

It is because of these predictions, and other local emergency planning activities and mapping, that Jones Island is the best protection the Village has to mitigate the effects of hurricanes and tropical cyclones by increasing the amount of time available to transport and shelter residents, and to reduce the amount flood waters inundating streets and critical response facilities. Pictured below is are examples of maps created by Town of Babylon emergency preparedness, on the Village's behalf, to more clearly understand affected population and aid in mitigation efforts:



Asian Beetle Infestation

Though the Asian Beetle infestation has relatively low impacts on the Town and Villages compared to the other hazards, mitigation strategies for any natural hazards involving wind, and hence tree, damage must be modified to account for the infestation. Pictured below is the border (purple) of the Asian Beetle Quarantine Area, with respect to the borders (black) of both Village of Amityville and Village of Babylon.





9.4.4 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 Village of Babylon. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

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

Table 9.4-3. 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: \$0	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: \$70,835,634 0.2% Annual Chance: \$120,103,908	Frequent	30
8	Groundwater Contamination (natural)	Damage estimate not available	Occasional	14
3	Hurricane	Category 1 SLOSH: \$361,283,603 Category 2 SLOSH: \$2,008,832,059 Category 3 SLOSH: \$4,118,920,562 Category 4 SLOSH: \$4,528,673,112	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: \$28,196,033 5% of GBS: \$140,980,167	Frequent	39
6	Shallow Groundwater Flooding	Damage estimate not available	Frequent	18
10	Wildfire	Estimated RCV in Interface/Intermix: \$0	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 9.4-4. 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)	# Policies in 500-Boundary (3)	# Policies Outside the 500-year Flood Hazard (3)
Village of Babylon	1,243	1,757	\$90,906,465	199	41	743	55	445

Source: FEMA Region 2, 2014

Note (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.

Note (2): Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2.

Note (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 9.4-5. 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⁾
None at this time									

Other Vulnerabilities Identified by Municipality

In addition to those identified above, the municipality has identified the following vulnerabilities:

- Village of Babylon Pool Complex – Pool, bulkhead, lighting, bath houses, concrete deck foundation, plumbing systems, pumps.
- East Shore Drive – Bulkhead damage.



- Shore Road – Bulkhead damage.
- Lighthouse Road – Bulkhead damage.
- Lighthouse Marina – Electrical system damage.
- Lewis Pond – Bulkhead, decking, electrical damage.
- Argyle Park Gazebo – Electrical system damage.
- Municipal Dock – Bulkhead, parking lot, building damage.



9.4.5 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 9.4-6. 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			Village has adopted International Building Code
Zoning Ordinance	Y	Local and County (1)	Suffolk County Planning; Village Zoning Board	Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Village Zoning Board must approve with a greater majority & present findings.
Subdivision Ordinance	Y	Local and County (1) (2)	Suffolk County Planning; Village Board/ Village Zoning Board/ Village Planning Board	Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Village Board/ Village Zoning Board/ Village 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	N			
Growth Management	N			
Floodplain Management / Basin Plan	N			
Stormwater Management Plan/Ordinance	Y			adopted pursuant to NYS Phase II implementation of the Federal Clean Water Act
Comprehensive Plan / Master Plan	Y	Local	Town of Babylon	A Plan for the Future of the Town of Babylon, Draft Comprehensive Plan, March 1998
Comprehensive Plan / Master Plan	Y	County	Suffolk County Planning	Suffolk Country Comprehensive Plan 2035, August 2011
Capital Improvements Plan	N			
Site Plan Review Requirements	Y	Local	Suffolk County Planning; Village Board	Suffolk County Planning Commission has review authority on certain actions. If they disapprove an action, Village Boards must approve with a greater majority & present findings



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.)
Habitat Conservation Plan	N			
Economic Development Plan	N			
Emergency Response Plan	Y	Local	Village Board	
Shoreline Management Plan	N			
Post Disaster Recovery Plan	N			
Post Disaster Recovery Ordinance	N			
Real Estate Disclosure req.	N			
Other (e.g. steep slope ordinance, local waterfront revitalization plan)	N			
Reformulation Study	Y	Federal	USACE	Fire Island Inlet to Montauk Point (FIMP) Reformulation Study
Environmental Study	Y	Local	Town of Babylon	Environmental Study of the Barrier and Bay Island Communities, 1994
Long Island South Shore Estuary Reserve Comprehensive Management Plan	Y	Local	Long Island South Shore Estuary Reserve Council, NYS Department of State	
NFIP Flood Damage Protection Ordinance	Y		Building Inspector	Village Code Chapter 171
NFIP - Freeboard	Y			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	N			

Administrative and Technical Capability

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

Table 9.4-7. 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	Contract Planners/Engineers
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Contract Engineers
Planners or engineers with an understanding of natural hazards	Y	Contract Planners/Engineers
NFIP Floodplain Administrator	Y	Building Inspector
Surveyor(s)	Y	Contract Surveyors
Personnel skilled or trained in “GIS” applications	Y	Town supplies GIS Maps on an informal basis for emergency preparedness and fire protection needs Contract GIS available
Scientist familiar with natural hazards in the municipality.	N	
Emergency Manager	Y	Mayor
Grant Writer(s)	Y	Assistant to Mayor



Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Staff with expertise or training in benefit/cost analysis	Y	Assistant to Mayor
Professionals trained in conducting damage assessments		

Fiscal Capability

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

Table 9.4-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for specific purposes	Y
User fees for water, sewer, gas or electric service	
Impact Fees for homebuyers or developers of new development/homes	Y Yes, have utilized for traffic safety measures, optical pre-emption, and roadway improvements
Incur debt through general obligation bonds	Y
Incur debt through special tax bonds	Y
Incur debt through private activity bonds	
Withhold public expenditures in hazard-prone areas	
Mitigation grant programs	Y
Other	FEMA sponsored grant funding County sponsored grant funding for roadways improvements and stormwater remediation

Community Classifications

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

Table 9.4-9. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	Not Participating	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	4/4	2005
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 Steve Fellman, Building Inspector

Program and Compliance History

Village of Babylon joined the NFIP on August 1, 1977, 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 171 of the local code, was last updated on August 11, 2009.

As of January 31, 2014 there are 1,243 policies in force, insuring \$351,771,600 of property with total annual insurance premiums of \$1,809,939. Since January 31, 2014, 1,757 claims have been paid totaling \$90,906,464.92. As of January 31, 2014 there are 199 Repetitive Loss and 41 Severe Repetitive Loss properties in the community.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The current NFIP Floodplain Administrator has no knowledge of when the last CAV was performed. The municipality sees no specific need for a CAV at this time.

Loss History and Mitigation

Since January 31, 2014, 1,757 claims have been paid totaling \$90,906,464.92. As of January 31, 2014 there are 199 Repetitive Loss and 41 Severe Repetitive Loss properties in the community.

Between 500-800 homes were damaged during Hurricane Sandy. Almost two years later, 5 Substantial Damage Estimates are still being done each week. Homes that are slab on grade make it difficult to prove damage. All who sustained damage following Sandy are interested in mitigation. Funding for projects includes Federal flood insurance Increased Cost of Compliance, flood insurance, New York Rising, and private funds.

Planning and Regulatory Capabilities

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on August 11, 2009, and is found at Chapter 171 of the local code.



FEMA and New York State floodplain management regulations and ordinances are exceeded by requiring elevations to be at least Base Flood Elevation + 3ft. Height restrictions have been reduced as homes can now be up to 30 feet above freeboard. Previously homes could only be a maximum of 35 feet above the crown of the road. This increase allows homeowners across the board to be able to raise their homes without needed approval so long as the home is being built in the same footprint as before.

Administrative and Technical Capabilities

The community FDPO identifies the Building Inspector as the local NFIP Floodplain Administrator, currently Steve Fellman, for which floodplain administration is an auxiliary duty.

In addition to the NFIP FPA, the community has four supplementary staff members for which NFIP is an auxiliary duty. These staff members keep track of ICC and other NFIP components. A new Building Inspector is being brought in using grant money to do a block by block analysis of where flood-damaged homes stand regarding flood mitigation projects.

Duties and responsibilities of the NFIP Administrator are permit review, inspections, damage assessments, and community meetings to disseminate FEMA information.

A list of all ICC letters and building permits is kept to track properties sustaining flood damage. Tracking the progress of these elevations will be the responsibility of the new Building Inspector.

Substantial Damage Estimates are done in the following way: a chart is put together for what the cost would be per square foot, this amount is then compared to the old cost of the house to determine if the house is Substantially Damaged.

Steve Fellman feels he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator. Steve Fellman is not certified in floodplain management, however attends regular continuing education programs for code enforcement.

Public Education and Outreach

In the Village of Babylon, the following educational and/or outreach activities related to the NFIP: community meetings, newsletters, information posted to Village website, permit review, inspections, damage assessments, and community meetings to disseminate FEMA information.

Actions to Strengthen the Program

After Hurricane Sandy a major barrier to running an effective floodplain management program was the inability to get information from FEMA. Expectations from FEMA and now understood. There are no barriers within the community. Additional training and information regarding floodplain management and the Community Rating System (CRS) would be welcomed.



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/ongoing programs and may be considered mitigation “capabilities”:

- **Infrastructure Protection-** Increase structural stability and drainage capacity of culverts spanning tribal tributaries and supporting critical evacuation and response routes
- **Floodplain Management/Infrastructure Protection-** 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
- **Floodplain Management-** Dredging of mouths of tidal tributaries
- **Land Use Plans-** Implement tree management programs and augment existing programs, including containment of Asian Beetle, and measures to improve post-disaster debris management
- **Infrastructure Protection-** Design or enhance existing municipal drainage systems to provide increased capacity of the drainage system
- **Emergency Response Plan-** Develop a post-disaster action plan for coastal storm events that will address the local government operations post disaster.



9.4.6 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 9.4-10. Past Mitigation Initiative Status

Description	Status	Review Comments
VB-1: Increase structural stability and drainage capacity of culverts spanning tidal tributaries and supporting critical evacuation and response routes	Continuous	Carried over
VB-2: 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	Discontinued	Not carried over as discontinued
VB-3: 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	No Progress	Carried over
VB-4: Dredging of mouths of tidal tributaries	Continuous	Carried over
VB-5: Implement tree management programs and augment existing programs, including containment of Asian Beetle, and measures to improve post-disaster debris management	Continuous	Carried over
VB-6: Support/enhance Building and/or Flood code enforcement programs at the local level public education and awareness of current codes	In Progress, 50% Completed	Not carried over
VB-7: 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	Not carried over.
VB-8: Encourage staff and consultants in to learn FEMA-sponsored cost-benefit analysis	No Progress	Carried over
VB-9: Design or enhance existing municipal drainage systems to provide increased capacity of the drainage system	Continuous	Carried over
VB-10: 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	Not carried over



Description	Status	Review Comments
VB-11: Elevate roads that are vital/critical to evacuation and local community operations	Continuous	Carried over
VB-12: Participate in homeowner partnership program to elevate vulnerable properties in high risk areas impacted by coastal storms, surface flooding, and/or shallow groundwater	Continuous	Not carried over
VB-13: Develop a post-disaster action plan for coastal storm events that will address the local government operations post disaster.	No Progress	Carried over
VB-14: Consider low-density land use in high risk coastal, surface water and groundwater zones.	No Progress	Not carried over
VB-15: Continue to develop, enhance and implement existing emergency response plans to utilize new and developing technology/information as it becomes available.	Continuous	Not carried over
VB-16: Promote the purchase of Flood Insurance	No Progress	Carried over
VB-17: 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	No Progress	Not carried over
VB-18: Increase public education and notification concerning Asian Beetle Infestation, including production and distribution of maps of affected areas	Continuous	Not carried over
VB-19: Consider non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss, such as acquisition/relocation, or elevation depending on feasibility. The parameters for feasibility for this initiative would be: funding, benefits versus costs and willing participation of property owners.	Continuous	Carried over
VB-20: Consider participation in incentive-based programs such as CRS and “Storm Ready.”	No Progress	Carried over
VB-21: Develop a post-disaster action plan for coastal storm events that will address the continuity of local government operations, such as operations of the Village Clerk, post disaster	Continuous	Not carried over

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

- Continue to support the implementation, monitoring, maintenance and updating of this Plan as defined in Section 7.0. This is a continuous initiative for the Village but is not included in their mitigation strategy moving forward.
- Strive to maintain compliance with and good-standing in the National Flood Insurance program. This is a continuous initiative for the Village but is not included in their mitigation strategy moving forward.



- Encourage the International Building Codes Council to investigate seismic design provisions for inclusion in the New York State Building & Fire Prevention codes. This initiative was completed.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village 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 9.4-11 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 9.4-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.4-11. 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
BV-1 (Sandy HMGP LOI # 2005)	Village of Babylon Back-Up Power for Critical Facilities	Existing	All	2,3,15,16	See Action Worksheet (V Babylon – LOI 2005 – 031814)						
BV-2 (NEW VB-1)	Elevation of Lighthouse Road.										
	See above	Existing	Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Flood	2,16	Village of Babylon	High	High	FEMA HMA	Short	High	SIP
BV-3 (NEW VB-2)	Elevation of Kittywake Road.										
	See above	Existing	Hurricane, Nor'Easter, Severe Storm, Flood	2,16	Village of Babylon	High	High	FEMA HMA	Short	High	SIP
BV-4 (Former BV-1 ²)	Increase structural stability and drainage capacity of culverts spanning tidal tributaries and supporting critical evacuation and response routes.										
	See above	New and Existing	Nor'Easters; Coastal Erosion; Flooding; Shallow Groundwater	2, 5, 7, 12, 13, 14, 15, 16	NYS DOT, NYS Parks, SCDPW Highways, NYSDEC	High	High	Possible PDM application	Long Term	Low	SIP
BV-5 (former VB-3)	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										
	See above	New and Existing	Nor'Easters; Coastal Erosion; Hurricane; Flooding; Severe Storm; Shallow Groundwater	2, 5, 7, 8, 10, 11, 13, 14, 15, 16	Village of Babylon, Town, NYS DOT, NYSDEC, SCDPW	High	High	Town, Villages, NYS DOT, NYSDEC, SCDPW, possible PDM application	Long Term	Medium	SIP
BV-6 (former BV-4 Modified)	Coordinate dredging activities at the mouths of tidal tributaries with the both the County and the US Army Corps of Engineers										
	See above	NA	Nor'Easters; Hurricane; Flooding;	2, 3, 5, 7, 9, 14, 15	SCDPW	High	High	Suffolk County	Long term	Medium	NRP

² This mitigation initiative incorporates strategies proposed in the Conceptual Plan.





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
			Shallow Groundwater								
	Design or enhance existing municipal drainage systems to allow for increased carrying capacity of the drainage system										
BV-7 (former BV-9 ² Modified)	See above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Severe Storms, Shallow Groundwater	2, 5, 10, 11, 13, 15, 16	Village	High	Medium	Village; Possible PDM application	Long Term	High	SIP
	Identify and prioritize roads that are vital/critical to evacuation and local community operations and elevate the top 3 in order to allow for safe egress of residents prior to, during and post significant storm events										
BV-8 (former BV-11 Modified)	See above	New and Existing	Nor'Easters, Coastal Erosion, Hurricane, Flooding, Severe Storms, Shallow Groundwater	2, 13, 14, 15, 16	Village	High	High	Possible PDM application	Long Term	Low	SIP
	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.										
BV-9 (NEW)	See above.	Existing	Flood, Coastal Erosion, Hurricane, Nor' Easter, Severe Storm, Wildfire, Winter Storm	1, 2	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)	High	SIP
BV-10 (NEW)	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> 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) 										



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
	<ul style="list-style-type: none"> 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 relevant local department leads,	High (comprehensive improvements mitigation and risk-reduction capabilities)	Low-Medium (locally)	Local (staff resources)	Short	High	
BV-11 (NEW)	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	LRP
BV-12 (former BV-16 Modified)	Investigate the benefits of the Villages participation in the National Flood Insurance (NFIP) and the Community Rating System (CRS) Programs which promote the property owners purchase of flood insurance. Work towards the goal to obtain a CRS rating which allows the purchase of flood insurance at discounted rates.										
	See above	New and Existing	Nor’Easters; Coastal Erosion; Hurricane; Flooding; Severe Storms	1, 7, 9, 15	FEMA NFIS	Low	Low	Village	Short Term	Medium	LRP
BV-13 (former BV-19 Modified)	Support the mitigation of properties within the floodplain, including those that have been identified as repetitive loss, via acquisition/relocation, or elevation depending on feasibility. Prioritize the properties in need of mitigation.										
	See above	Existing	Flood, Nor’Easter, Hurricane, Severe Weather	1, 2, 7, 9, 15	Village	High	High	General Fund, FEMA Hazard Mitigation Grant Funding	Long term, DOF	Low	SIP
BV-14 (former BV-20 Modified)	Work together with the County and others to bring CRS training/workshops into the community where appropriate community officials and staff will actively participate.										
	See above	New and Existing	Flood, Nor’Easter, Hurricane, Severe Weather	1, 3, 4, 9	Village	High	Village	Long Term	DOF	Medium	LRP
BV-15 (former	Augment existing programs by adopting and actively participating in and implementing the Countywide Debris Management Plan with the target to achieve containment of Asian Beetle, and improved post-disaster debris management										



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
BV-5 Modified)	See above	NA	Nor' Easters, Severe Winter Storms, Hurricane, Flooding, Severe Storms	1, 7, 5, 10, 13, 15, 16	NYS Agriculture & Markets; USDA (APHIS)		Low	Village; NYS Agriculture & Markets; USDA (APHIS)	Long Term	Medium	NRP
BV-16 (former BV-8 Modified)	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										
	See above	New and Existing	All Hazards	1, 3, 5, 7, 15, 16			Low	Village	Short Term	Medium	LRP
BV-17 (former VB-13)	Develop a post-disaster action plan for coastal storm events that will address the local government operations post disaster.										
	See above	N/A	All Hazards	4	Village				DOF	Low	LRP

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 reappropriation 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 9.4-12. 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
BV-1 (Sandy HMGP LOI # 2005)	Village of Babylon Back-Up Power for Critical Facilities	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
BV-2 (NEW VB-1)	Elevation of Lighthouse Road.	1	1	0	1	1	0	1	0	0	1	1	1	1	1	10	High
BV-3 (NEW VB-2)	Elevation of Kittywake Road.	1	1	0	1	1	0	1	0	0	1	1	1	1	1	10	High
BV-4 (NEW VB-2)	Increase structural stability and drainage capacity of culverts spanning tidal tributaries and supporting critical evacuation and response routes.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
BV-5 (former VB-3)	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-6 (Former BV-1 ³)	Coordinate dredging activities at the mouths of tidal tributaries with the both the County and the US Army Corps of Engineers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-7 (former BV-9 ² Modified)	Design or enhance existing municipal drainage systems to allow for increased carrying capacity of the drainage system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
BV-8 (former VB-3)	Identify and prioritize roads that are vital/critical to evacuation and local community operations and elevate the top 3 in order to allow for safe egress of residents prior to, during and post significant storm events	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low
BV-9 (NEW)	Support the mitigation of vulnerable structures via retrofit	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High

³ This mitigation initiative incorporates strategies proposed in the Conceptual Plan.



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
	(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.																
BV-10 (former BV-4 Modified)	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	0	0	0	1	1	1	0	1	10	High
BV-11 (NEW)	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
BV-12 (former BV-9 ² Modified)	Investigate the benefits of the Villages participation in the National Flood Insurance (NFIP) and the Community Rating System (CRS) Programs which promote the property owners purchase of flood insurance. Work towards the goal to obtain a CRS rating which allows the purchase of flood insurance at discounted rates.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-13 (former BV-19 Modified)	Support the mitigation of properties within the floodplain, including those that	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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
	have been identified as repetitive loss, via acquisition/relocation, or elevation depending on feasibility. Prioritize the properties in need of mitigation.																
BV-14 (former BV-11 Modified)	Work together with the County and others to bring CRS training/workshops into the community where appropriate community officials and staff will actively participate.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-15 (former BV-5 Modified)	Augment existing programs by adopting and actively participating in and implementing the Countywide Debris Management Plan with the target to achieve containment of Asian Beetle, and improved post-disaster debris management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-16 (NEW)	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
BV-17 (former VB-13)	Develop a post-disaster action plan for coastal storm events that will address the local government operations post disaster.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low

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



9.4.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.4.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village 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 Village of Babylon has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.4.9 Additional Comments

None at this time.



Figure 9.4-1. Village of Babylon Hazard Area Extent and Location Map 1

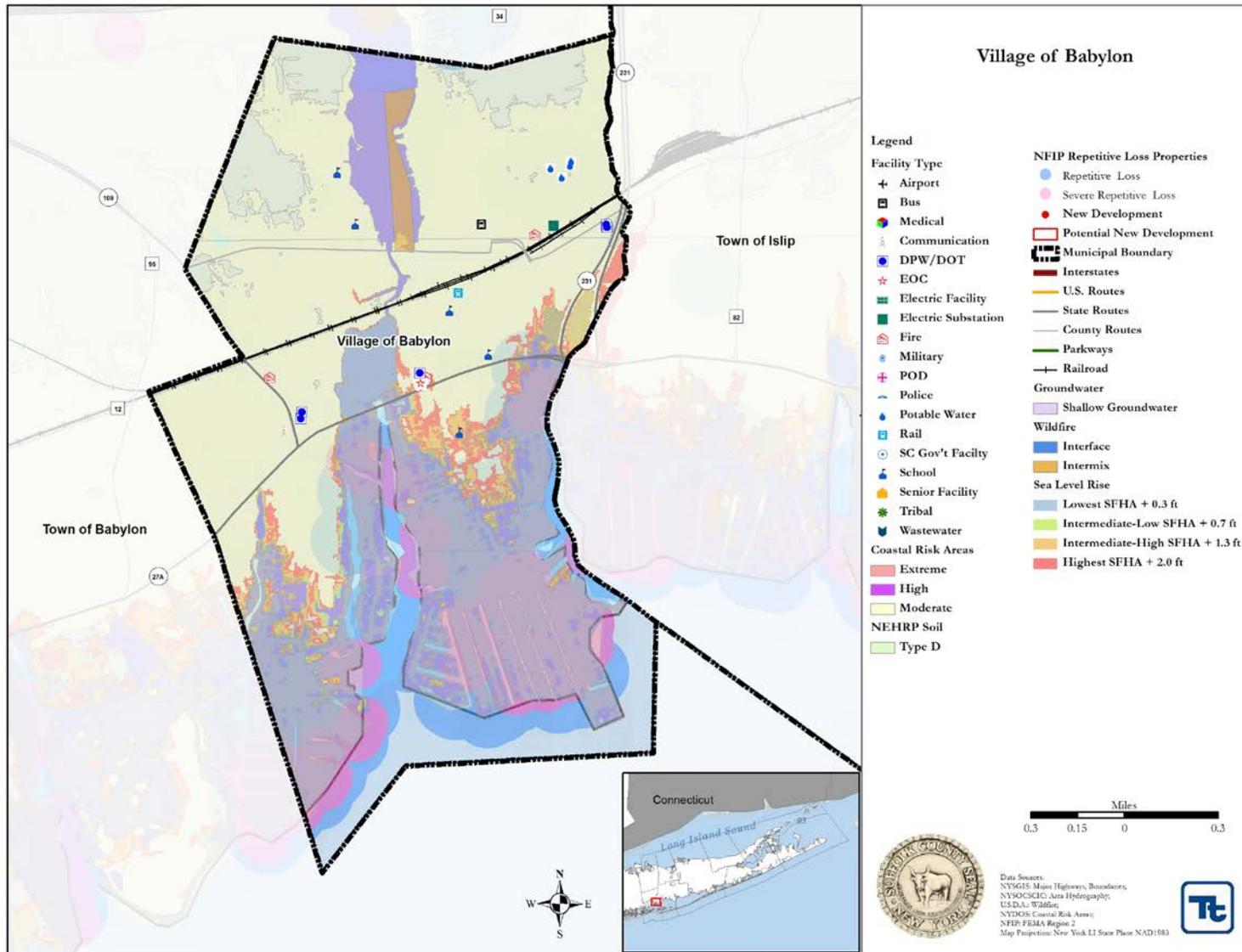
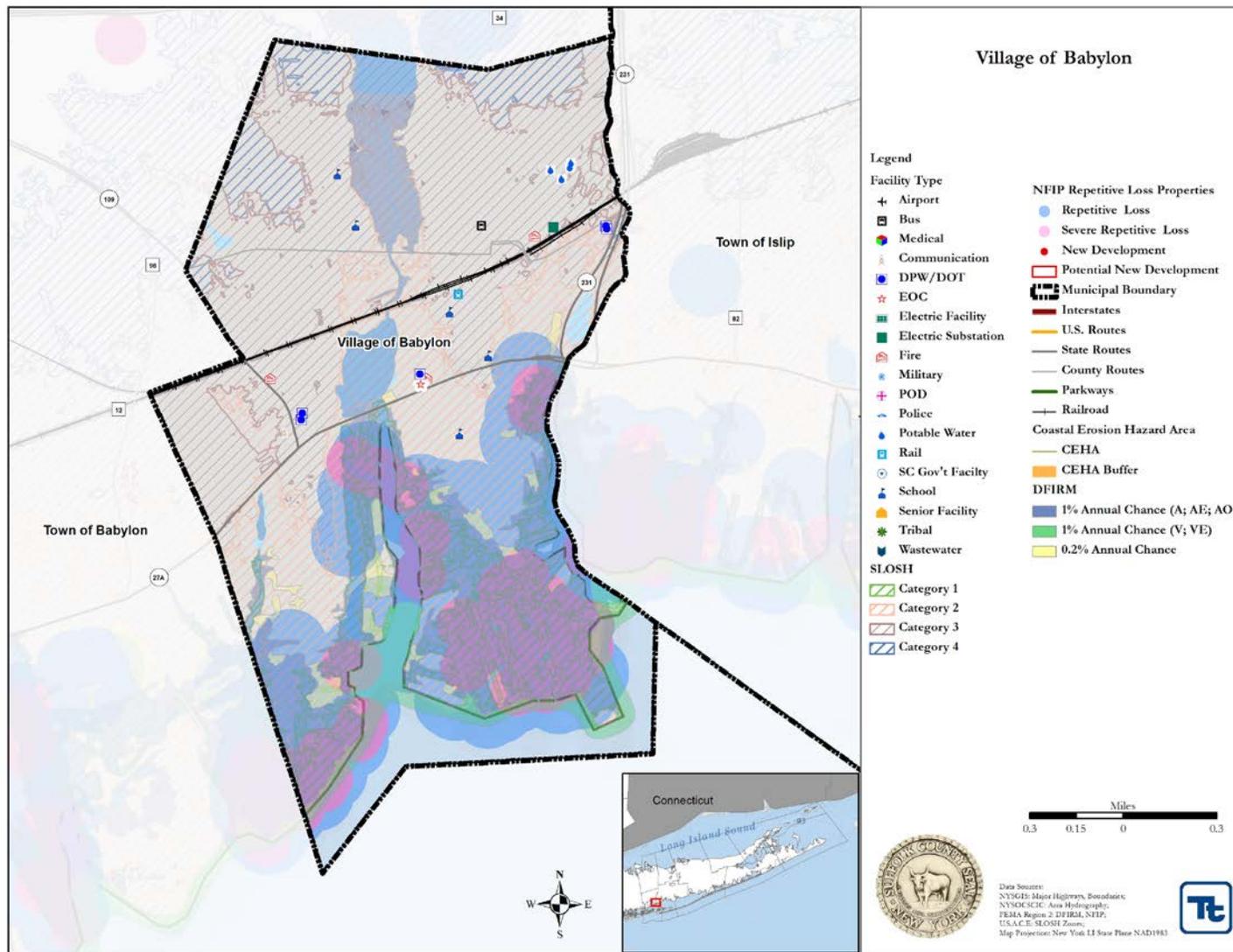




Figure 9.4-2. Village of Babylon Hazard Area Extent and Location Map 2





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: Village of Babylon
Number: Sandy HMGP LOI #: 2005
Mitigation Action/Initiative: Village of Babylon Back-Up Power for Critical Facilities

Assessing the Risk	
Hazard(s) addressed:	Hurricane, Nor'Easter, Severe Storm, Severe Winter Storm, Earthquake
Specific problem being mitigated:	<p>Babylon Village Hall, located at 153 West Main Street, Babylon, houses all Village offices, the Babylon Fire Department/EMS, and the Village DPW/Highway facility. Power outages due to severe storms result in damages including loss of use of all village facilities. Keyspan and LIPA use the facility as an operations center during emergencies and lack of power hampers these operations as well.</p> <p>The frequency of power outages is related to the occurrence of severe storms. Superstorm Sandy resulted in loss of power for five days, which is the longest outage in recent history. The Village was able to bring in small generators from other areas of the Village to provide minimal power for some functions (limited communications) but most employees could not be accommodated at the Village Hall facility.</p> <p>The cost to the community will be captured in the benefit cost analysis that will focus on the operational budgets of the critical facilities that went without power, namely Fire and EMS, DPW/Highway and all Village Hall offices, particularly the Mayor's office and Village Clerk, which are critical for information sharing with residents and other government entities. Residents had no way to call Village Hall for information or assistance during the power outage.</p>
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<ol style="list-style-type: none"> 1. Tree Trimming- Currently being done but does not provide sufficient protection against outages at this critical facility. 2. Bury Power Lines. This option is not being pursued as it is cost prohibitive due to the long run and the Town does not have the legal authority to bury the lines. 3. Urge Special Treatment from Power Company-Meet with the executive team and urge them to take steps necessary to prevent power failures to Village Hall <ul style="list-style-type: none"> This is not the best alternative because it relies on others to address the problem. The solution remains outside the control of the Village. Though we do get priority, the system is complex and does not provide a direct connection to a sub-station.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Village proposes to procure and install a generator that will power the Village Hall facility and allow for critical operations to continue uninterrupted in the case of a power outage. The generator will support essential functions including communications and operations for the Babylon Fire Department and EMS, Highway Department, Department of





	<p>Public Works and Village Hall administrative offices. The generator will also support emergency operations of Keyspan, LIPA and other agencies during emergencies such as was the case during Superstorm Sandy.</p> <p>The requested generator is a 150 kW diesel driver with an estimated cost of \$325,000 which includes the generator, all switching, enclosure, steel dunnage and reinforcing for roof mount installation.</p> <p>Please note that the “recent damages” figure indicated in this form is only a place holder. This figure will be calculated when the benefit cost analysis (BCA) for this project is completed with the assistance of NYS Emergency Management Office personnel. The final BCA will use inputs including project useful life, operational budgets of village offices, fire and EMS, and the Highway/DPW facility, recurrence intervals, duration of outages, population served and other factors.</p>
Mitigation Action/Project Type	Upgrade a permanent generator to be installed at Village Hall. It will have sufficient capacity to allow the Town to quickly respond to the Village’s internal and community’s needs while allowing the business continuity.
Objectives Met	Structure and Infrastructure Project
Applies to existing structures/infrastructure, future, or not applicable	2, 3, 15, 16
Benefits (losses avoided)	Existing
Estimated Cost	\$325,000
Priority*	
Plan for Implementation	
Responsible Organization	Village of Babylon: Jennifer Mesiano Higham, Grants Coordinator
Local Planning Mechanism	
Potential Funding Sources	HMGP; Municipal budget for Local Match
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 #: 2005

Mitigation Action/Initiative: Village of Babylon Back-Up Power for Critical Facilities

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)		

