



9.38 Village of Quogue

This section presents the jurisdictional annex for the Village of Quogue. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Village participated in the planning process; an assessment of the Village of Quogue’s risk and vulnerability; the different capabilities utilized in the Village; and an action plan that will be implemented to achieve a more resilient community.

9.38.1 Hazard Mitigation Planning Team

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

Table 9.38-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: William Nowak, Chief Building Inspector Address: 7 Village Lane, P.O. Box 926 Quogue, NY 11959 Phone Number: 631-653-4498, Ext. 12 Email: wnowak@villageofquogueny.gov	Name/Title: Chris Osborne, Emergency Preparedness Coordinator Address: 7 Village Lane, P.O. Box 926 Quogue, NY 11959 Phone Number: 631-653-4498 x117 Email: cosborne@villageofquogueny.gov
NFIP Floodplain Administrator	
Name/Title: William Nowak, Chief Building Inspector Address: 7 Village Lane, P.O. Box 926 Quogue, NY 11959 Phone Number: 631-653-4498, Ext. 12 Email: wnowak@villageofquogueny.gov	

9.38.2 Municipal Profile

Settled in 1659, the Village of Quogue became incorporated as an independent Village within the Town of Southampton in 1928. The Village is located on the south shore of Long Island, approximately 90 miles from New York City. Boundary on the south is the Atlantic Ocean. There is a barrier island connected to the mainland by a bridge. Local waters include Quantuck and Shinnecock Bays, various creeks and the Quogue canal. An elected mayor and four elected trustees comprise the Board of Trustees, which is the governing body of the Village.

According to the U.S. Census, the 2010 population for the Village of Quogue was 967. The estimated 2017 population was 803, a 17 percent decrease from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 3.6 percent of the population is 5 years of age or younger and 30.1 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.38.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.38-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Due to the size and nature of the Village it does not expect to see any major new development projects. The Village of Quogue is approximately 5 square miles and is almost fully developed. There has been one 6 lot subdivision approved in the past 5





years. Within that subdivision, 3 of the 6 lots are already developed with dwellings and 4 of the 6 lots are affected by flood zones. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development, where available. The recent and anticipated development depicted on these figures excludes the Suffolk County wastewater upgrades; refer to Section 4 (County Profile) for additional information on this development.

Table 9.38-2. Recent and Expected Future Development

Type of Development	2014		2015		2016		2017		2018		2019	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	14	4	24	9	22	9	11	5	14	11	11	6
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	1	0	0	0	0	0
Total Permits Issued	14	4	27	9	22	9	12	5	14	11	11	6
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None Identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.38.4 Capability Assessment

The Village of Quogue performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.38.4). The Village of



Quogue identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. Appendix G provides the results of the planning/policy document review and the answers to integration survey questions.

Planning, Legal, and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Quogue and where hazard mitigation has been integrated.

Table 9.38-3. Planning, Legal, and Regulatory Capability

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Codes, Ordinances, & Requirements							
Building Code	Yes	Village Code Ch. 73, 2011 – Building Construction and Fire Prevention	State, Local	Building Dep’t. – Code Enforcement Officer	Yes	Yes	-
Comment: This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code). This article is adopted pursuant to § 10 of the Municipal Home Rule Law.							
Zoning Code	Yes	Village Code Ch. 196, 2012 – Zoning Code	State, Local	Building Dep’t.; Zoning Board	No	Yes	-
Comment: The regulations set forth in this chapter have been made in accordance with a Comprehensive Plan and are designed to lessen congestion in the streets; to secure safety from fire, panic, floods and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. Such regulations have been made with reasonable consideration, among other things, to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout the Village of Quogue, New York.							
Subdivisions	Yes	Village Code Ch. 162, 2003 – Subdivision of Land	Local	Planning Board	No	Yes	-
Comment: The purpose of this Chapter is the: <ul style="list-style-type: none"> • Conformance with the various parts of the Master Plan, Chapter 196, Zoning, of the Code of the Village of Quogue, and Official Map, if any. • Recognition of a desirable relationship to the general land form, its topographic and geologic character, to natural drainage, to the recharge of the groundwater reservoir and to floodplain and ecological concerns. • Recognition of desirable standards of subdivision design, for pedestrian and vehicular traffic, surface water runoff, utility services and building sites for the land use contemplated. • Encouragement of flexible subdivision design to promote the planning objectives of the Master Plan and to realize development and maintenance economies. • Provision for such facilities as are desirable adjuncts to the contemplated use, such as parks, recreation areas, school sites, firehouses, fire wells and off-street parking. • Preservation and protection of such natural resources and assets as lakes, ponds, streams, tidal waters, marshes, beaches, dunelands, flora, fauna, general scenic beauty and historic features of the Village. 							
Stormwater Management	Yes	Village Code Ch. 155, 2010 – Stormwater Management and Erosion and Sediment Control	Local	Building Department	Yes	Yes	-
Comment: The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact set forth above. This chapter seeks to meet those purposes by achieving the following objectives: <ol style="list-style-type: none"> (1) Meet the requirements of minimum measures four and five of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems, as defined in § 155-2; 							



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
(2) Require land development activities to conform to the substantive requirements of the SPDES General Permit for Construction Activities as defined in § 155-2; (3) Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels; (4) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; (5) Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and (6) Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.							
Post-Disaster Recovery	No	-	-	-	No	-	-
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	Yes	-
Comment:							
Growth Management	No	-	-	-	No	-	-
Comment:							
Site Plan Review	Yes	Village Code Ch. 162, 2003 – Subdivision of Land	Local	Planning Board	No	Yes	-
Comment: The purpose of this Chapter is the: <ul style="list-style-type: none"> • Conformance with the various parts of the Master Plan, Chapter 196, Zoning, of the Code of the Village of Quogue, and Official Map, if any. • Recognition of a desirable relationship to the general land form, its topographic and geologic character, to natural drainage, to the recharge of the groundwater reservoir and to floodplain and ecological concerns. • Recognition of desirable standards of subdivision design, for pedestrian and vehicular traffic, surface water runoff, utility services and building sites for the land use contemplated. • Encouragement of flexible subdivision design to promote the planning objectives of the Master Plan and to realize development and maintenance economies. • Provision for such facilities as are desirable adjuncts to the contemplated use, such as parks, recreation areas, school sites, firehouses, fire wells and off-street parking. • Preservation and protection of such natural resources and assets as lakes, ponds, streams, tidal waters, marshes, beaches, dunelands, flora, fauna, general scenic beauty and historic features of the Village. 							
Environmental Protection	Yes	Village Code Ch. 87 – Environmental Quality Review	State, Local	Varies Village Agencies	Yes	Yes	-
Comment: All agencies of the village are required to comply with the State Environmental Quality Review Act (SEQRA)[1] and its implementing regulations (6 NYCRR Part 617). The purpose of this chapter is to provide the authority for such additional or modified procedures as may be necessary or appropriate for village agencies to implement SEQRA, consistent with the provisions of said implementing regulations (6 NYCRR Part 617).							
Flood Damage Prevention	Yes	Village Code Ch. 95, 2009 – Flood Damage Prevention	State, Local	Building Department – Building Inspector	Yes - State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other	Yes	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
<p>Comment: The purpose of this Chapter is to:</p> <ul style="list-style-type: none"> A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands. F. Qualify and maintain participation in the National Flood Insurance Program. 							
Municipal Separate Storm Sewer System (MS4)	Yes	Village Code Ch. 154 – Storm Sewer System	State, Local	Stormwater Management Officer (SMO), authorized by the Board of Trustees	Yes	Yes	-
<p>Comment: The primary purpose of this Chapter is the Maintenance of the MS4 system and avoid and/or mitigate illicit discharges. This is accomplished by implementing the following actions:</p> <ul style="list-style-type: none"> A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, as amended or revised; B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; C. To prohibit illicit connections, activities and discharges to the MS4; D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. 							
Emergency Management	No	-	-	-	Yes	-	-
Comment:							
Climate Change	No	-	-	-	Yes	-	-
Comment:							
Disaster Recovery Ordinance	No	-	-	-	No	-	-
Comment:							
Disaster Reconstruction Ordinance	No	--	-	-	No	-	-
Comment:							
Coastal Erosion Ordinance	Yes	Village Code Ch. 80 (1988, 2010) – Coastal Erosion Hazard Areas	Local	Building Department	No	Yes	-
<p>Comment: The Village of Quogue hereby assumes the responsibility and authority to implement and administer a coastal erosion management program within its jurisdiction pursuant to Article 34 of the New York State Environmental Conservation Law. In addition, it is the purpose of this chapter to:</p> <ul style="list-style-type: none"> A. Establish standards and procedures for minimizing and preventing damage to structures from coastal flooding and erosion and to protect natural protective features and other natural resources. B. Regulate, in coastal areas subject to coastal flooding and erosion, land use and development activities so as to minimize or prevent damage or destruction to man-made property, natural protective features and other natural resources and to protect human life. C. Regulate new construction or placement of structures in order to place them a safe distance from areas of active erosion and the impacts of coastal storms to ensure that these structures are not prematurely destroyed or damaged due to improper siting, as well 							



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
<p>as to prevent damage to natural protective features and other natural resources. D. Restrict public investment in services, facilities or activities which are likely to encourage new permanent development in erosion hazard areas. E. Regulate the construction of erosion protection structures in coastal areas subject to serious erosion to assure that when the construction of erosion protection structures is justified, their construction and operation will minimize or prevent damage or destruction to man-made property, private and public property, natural protective features and other natural resources.</p>							
Wetlands	Yes	Village Code Ch. 184 (1985) – Wetlands Preserve Area	Local	Ordinance Inspector	No	Yes	-
<p>Comment: Chapter 184 establishes the Wetlands Preserve Area and recognizes the value of preserving open space.</p>							
Planning Documents							
Comprehensive Plan	No	-	-	-	No	-	-
<p>Comment:</p>							
Capital Improvement Plan	No	-	-	-	No	-	-
<p>Comment:</p>							
Disaster Debris Management Plan	Yes	Suffolk County Multi-Jurisdictional Debris Management Plan	County, Local	Suffolk County FRES	No	Yes	-
<p>Comment: This NYS and FEMA approved comprehensive Multi-Jurisdictional Debris Management Plan was developed through the cooperative efforts of Suffolk County and each of the ten (10) Towns, working together in conjunction with partners from private, state and federal agencies.</p>							
Floodplain or Watershed Plan	No	-	-	-	No	-	-
<p>Comment:</p>							
Stormwater Plan	Yes	Village Code Ch. 155, 2010 – Stormwater Management and Erosion and Sediment Control	Local	Building Department – Building Inspector	No	Yes	-
<p>Comment: The purpose of the Chapter 155 includes the ability to:</p> <ul style="list-style-type: none"> Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels; Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety. <p>This Chapter requires the regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.</p>							
Open Space Plan	No	-	-	-	Yes	-	-
<p>Comment:</p>							
Urban Water Management Plan	No	-	-	-	No	-	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
What other plans or codes refer to the Urban Water Management Plan?							
Habitat Conservation Plan	Yes	Village Code, Ch. 184 – Wetland Preserve	Local	Board of Trustees	No	Yes	-
Comment: The Wetlands Preserve requires that: <ul style="list-style-type: none"> Any and all land in the Village Wetlands Preserve shall be used only for the following uses: passive recreational or educational uses, such as bird and waterfowl watching, nature photography, and educational or research projects; conservational uses, such as open space and wetlands; similar uses which the Village Board of Trustees may determine to be consistent with the purposes of the Preserve Land in the Village Wetlands Preserve shall not be used for active recreational use, such as recreational use involving substantial improvements, structures, impervious surfaces or other alteration of the natural state. Use of land in the Village Wetlands Preserve shall be subject to the following additional restrictions: [Added 4-19-2001 by L.L. No. 2-2001] <ol style="list-style-type: none"> No litter shall be left on site. No fishing or hunting is allowed. Use of such land by persons shall be limited to the boardwalk. All persons must stay on the boardwalk. 							
Economic Development Plan	No	-	-	-	No	-	-
Comment:							
Shoreline Management Plan	Yes	Village Code, Ch. 80 – Coastal Erosion Hazard Areas; Village Code, Ch. 145 – Sand Dunes and Ocean Beach Management Program:	Local	Building Inspector	Yes	Yes	-
Comment: No person may engage in any regulated activity in an erosion hazard area as depicted on the Coastal Erosion Hazard Area Map of the Village of Quogue, as amended, without first obtaining a coastal erosion management permit. No coastal erosion management permit is required for unregulated activities.							
Village Code, Ch. 145 – Sand Dunes and Ocean Beach Management Program: The purpose is to mitigate beach erosion by restricting vehicle and pedestrian traffic and construction that can diminish dunes.							
Community Wildfire Protection Plan	No	-	-	-	No	-	-
Comment:							
Forest Management Plan	No	-	-	-	No	-	-
Comment:							
Transportation Plan	No	-	-	-	No	-	-
Comment:							
Agriculture Plan	No	-	-	-	Yes	-	-
Comment:							
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	-	-	-	-	No	-	-
Comment:							
Response/Recovery Planning							
Comprehensive Emergency	Yes	Suffolk County	Suffolk County	Suffolk FRES	Yes	Yes	-





	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Management Plan		Comprehensive Emergency Management Plan (2018)	and Associated Jurisdictions				
Comment: The County Comprehensive Emergency Management Plan (CEMP) describes the emergency obligations of County government and its capability and capacity to undertake emergency assignments or acquire those resources necessary to support its emergency mission. The Concept of Operations of the CEMP describes the management of emergencies within the National Incident Management System (NIMS) and details emergency management programmatic efforts to accommodate present standards.							
Strategic Recovery Planning Report	No	-	-	-	No	-	-
Comment:							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	Yes	-	-
Comment:							
Post-Disaster Recovery Plan	No	-	-	-	No	-	-
Comment:							
Continuity of Operations Plan	No	-	-	-	No	-	-
Comment:							
Public Health Plan	No	-	-	-	No	-	-
Comment:							
Other	-	-	-	-	No	-	-
Comment:							

Table 9.38-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes, Building Department
Permits are tracked by hazard area. For example, floodplain development permits.	Yes
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No. Most lots have been developed. Vacant lots are less than 1%. Only a few tracts of land can be subdivided.

Administrative and Technical Capability

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

Table 9.38-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	N/A	-





Resources	Available? (Yes or No)	Department/ Agency/Position
Environmental Board/Commission	N/A	N.Y.S.D.E.C.
Open Space Board/Committee	N/A	Town of Southampton
Economic Development Commission/Committee	N/A	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Q.P.D. & Q.F.D. Suffolk County Red Alert
Maintenance programs to reduce risk	Yes	Highway & Beach Maintenance Programs
Mutual aid agreements	Yes	Q.P.D. & Q.F.D. w/ other districts.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Village Engineer (Contracted)
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Inspector, William Nowak
Planners or engineers with an understanding of natural hazards	Yes	Building Inspector, William Nowak
Staff with expertise or training in benefit/cost analysis	Yes	Village Engineer (Contracted)
Professionals trained in conducting damage assessments	Yes	Building Inspector, William Nowak
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	Yes	Ordinance Inspector, Chris Osborne
NFIP Floodplain Administrator (FPA)	No	-
Surveyor(s)	No	-
Emergency Manager	No	-
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

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

Table 9.38-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes (via Town of Southampton)



Financial Resources	Accessible or Eligible to Use (Yes/No)
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Quogue.

Table 9.38-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes. Mayor, P.D. & F.D. Chiefs.
Personnel skilled or trained in website development?	No, consultants.
Hazard mitigation information available on your website; if yes, describe	Yes. Incident specific information is posted and updated via the Mayor.
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	No
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Village electronic sign board. Posted links to govt. resources. Regularly updated web info during events. Resident e-mail blast communications.
Warning systems for hazard events; if yes, briefly describe.	See above.
Natural disaster/safety programs in place for schools; if yes, briefly describe.	The County conducts educational programs in county schools.
Other	No

Community Classifications

The table below summarizes classifications for community programs available to the Village of Quogue.

Table 9.38-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	4/3	2016
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	3	2017
NYSDEC Climate Smart Community	NP	-	-
Storm Ready Certification	NP	-	-
Firewise Communities classification	NP	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other





words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

Table 9.38-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Coastal Erosion	Medium
Cyber Security	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	Medium
Flood	Medium
Groundwater Contamination	Medium
Hurricane	Medium
Infestation and Invasive Species	Medium
Nor’Easter	Medium
Severe Storm	Medium
Severe Winter Storm	Medium
Shallow Groundwater	Medium
Wildfire	Medium

*High Capacity exists and is in use
 Medium Capacity may exist; but is not used or could use some improvement
 Low Capacity does not exist or could use substantial improvement
 Unsure Not enough information is known to assign a rating

The Village does not have information on possible impacts of climate change locally but the Administration is supportive of integrating climate change in policies or actions.

9.38.5 National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

NFIP Floodplain Administrator (FPA)

William Nowak, Chief Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Quogue.

Table 9.38-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of Quogue	540	346	\$8,096,153	45

Source: FEMA 2020
 Notes: According to FEMA statistics as of 7/13/2020
 RL Repetitive Loss





Flood Vulnerability Summary

The community maintains a list of post Superstorm Sandy properties damaged by flooding and a list of repetitive claim properties. The Village does not maintain a list of property owners interested in flood mitigation. It seems most mitigation has occurred voluntarily through post Superstorm Sandy elevations. The mitigation typically occurs following the sale of damaged or noncompliant homes that are then demolished and rebuilt to current standards or through the elevation of existing homes. Quogue is not aware of RiskMAP projects currently underway in the community.

The Village utilizes applicable NY State Codes and FEMA standards to conduct Substantial Damage determinations. To date, only one residential property has been determined to be substantially damaged. A substantial amount of mitigation has occurred voluntarily, without the need for a Substantial Damage determination. The Village reports forty-four compliant new homes constructed in the floodplain and approximately forty elevations above the BFE. All the new home construction and the elevations are believed to have occurred without government funding. Members of N.Y.S. C.E.D.A.R. team. Improved housing stock post Sandy.

The Village feels that flood hazard maps adequately address the flood risk for the Village, although the last update was in 2009 and an update is expected.

Resources

The Building Department is responsible for floodplain management. William Nowak, the Chief Building Inspector, is a certified Floodplain Administrator. The Village does not have access to resources to determine possible future flooding conditions from climate change beyond current FEMA floodplain mapping. The Village is of the opinion that floodplain management staff does not need any assistance or training to support its floodplain management program.

NFIP administration services include providing in person meetings/email/phone calls, plan review and inspections per NY State and local code requirements and the issuing of floodplain determination letters. GIS is provided by the Town of Southampton, although the public can utilize FEMA Mapping Service and/or Suffolk County GIS. Whether a structure is being substantially improved is determined on a case by case basis utilizing applicable code requirements.

Compliance History

The Village of Quogue joined the NFIP on May 16, 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 95 of the local code, was last updated in 2009. The Village participated in a Community Assistance Visit (CAV) by way of telephone conference on February 10, 2020. The community is currently in good standing in the NFIP and has no outstanding compliance issues.

Regulatory

The Village's Flood Damage Prevention Ordinance is found in Chapter 95 of the local Code, dated April 10, 1987 and updated January, 1988. The Village exceeds minimum FEMA requirements for elevations and new building finished floor heights by incorporating the requirement of 2 feet of freeboard applied to all new construction in the floodplain per State and Local Laws.

The Planning Board addresses floodplain issues by incorporating local ordinances, plans and programs into site plan and subdivision review. Zoning Board of Appeals referrals are sent to the Board with reference to flood zone information. Variances are rarely heard/granted for flood height. Full compliance with the code is



encouraged, with the possible exception of a house that complies with FEMA & doesn't "hit the mark" with freeboard.

Community Rating System

The Village does not participate in the Community Rating System (CRS) Program.

9.38.6 Integration with Other Planning Initiatives

As this HMP update is implemented, the Village of Quogue will use information from the plan as the best available science and data for natural hazards. The capability assessment presented in this annex identifies codes, plans, and programs that provide opportunities for integration. The Suffolk County and local action plans developed for this HMP update actions related to plan integration, as well as progress on these actions, will be reported through the progress reporting process described in Volume I. New opportunities for integration also will be identified as part of the annual progress report.

Existing Integration

It is the intention of this municipality to incorporate mitigation planning as an integral component of daily municipal operations. Below is a list of planning mechanisms that have been/will be incorporated into municipal procedures.

- **Quogue Police Department:** The Quogue Village Police Department is composed of a Chief of Police, a Lieutenant who acts as the Department's Executive Officer, a Detective, three Sergeants and seven police officers. Officers are on duty 24 hours per day, every day of the year. The majority of Quogue officers are emergency medical technicians (EMTs) and the remaining officers have emergency training in CPR and first aid. Department patrol vehicles carry emergency medical equipment for use when they are the initial responders to the scene of a medical emergency. In addition to patrolling the streets in Quogue, the Department also maintains a well-equipped marine vessel that patrols the waterways within the Village and its adjacent bays. During the summer season the Department also utilizes a Wave Runner for access to shallow waterways and utilizes four wheel drive vehicles for those situations requiring them.
- **Quogue Fire Department:** With the help of the Village officials and the community the Fire Department has the latest in equipment, is trained in every aspect of firefighting, and has a membership that stands at 54. The Department participated in the wild fires in 1995, are trained in hurricane preparedness, and has dealt with every kind of emergency imaginable, from fires to plane crashed to automobile accidents.
- **Quogue Wildlife Refuge:** The Quogue Wildlife Refuge is a 300 acre non-profit nature preserve that was established in 1934, and is home to diverse wildlife.
- **Job Descriptions:** Mitigation and recovery roles have been defined in Village employee job descriptions.
- **Public Works:** Public Works has ample equipment for plowing. The Department also removes trees damaged by Pine Beetles and those that are at risk for damage during storm events. Dune Road, which has been a flooding concern, has been paved to add additional elevation and reduce flooding impacts.
- **Building Department:** The Village Building Department has worked to reduce non-conforming properties via outreach and enforcement.



Opportunities for Future Integration

- **Pine Beetle Outreach (2020-Quogue-005):** Pine Beetle has led to dead trees and increased the risk of wildfire due to dead trees and branches. The Village plans to conduct outreach to property owners about identification and reporting of Pine Beetle infestations.

9.38.7 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes

The Montauk Highway and Old Riverhead Road are the main arteries to be used for evacuation. The Village follows the guidance of the County for evacuation. Much of the Village’s population is comprised of second homeowners who tend to evacuate well in advance of hazard events, reducing the load on local roadways.

Sheltering

The Village has a sheltering agreement with the Town of Southampton.

Temporary Housing

The Village does not have areas identified for the placement of temporary housing after a disaster event. The Village will work with the County to identify regional locations for temporary housing (2020-Quogue-004).

Permanent Housing

The Village of Quogue does not have available space for the relocation of homes out of the flood zone due to being largely built out.

9.38.8 Hazard Event History Specific to the Village of Quogue

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) 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 Village of Quogue’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Suffolk County. Table 9.38-11 provides details regarding municipal-specific loss and damages the Village experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.38-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 8 – 9, 2013	Severe Winter Storm and Snowstorm (FEMA DR-4111)	Yes	Low pressure that formed along the northern Gulf coast by the morning of Thursday, February 7, 2013 moved northeast to near Cape Hatteras by the morning of Friday, February 8, 2013 . The low then rapidly intensified while moving northeast to a position east of	Although the County was impacted, the Village of Quogue did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			Cape Cod by the morning of Saturday, February 9, 2013, producing very heavy snowfall and blizzard conditions across central and eastern Long Island on February 8th and 9th, and winter storm conditions across the rest of southeast New York.	
March 14 – 15, 2017	Severe Winter Storm and Snowstorm (FEMA DR-4322)	Yes	On Tuesday, March 14th, rapidly deepening low pressure tracked up the eastern seaboard resulting in damaging winds in Suffolk County.	Although the County was impacted, the Village of Quogue did not report any damages.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

9.38.9 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes critical facility and community lifeline flood exposure, and the hazards of greatest concern and risk to the Village of Quogue. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

Critical Facilities

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst



damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities and community lifelines located in the 1-percent and 0.2-percent floodplain. It also summarizes if the facility is already mitigated in compliance with NYS standards (i.e., to the 0.2-percent annual chance event or worse-case scenario), or if a new mitigation action is proposed in the plan update.

Table 9.38-12. Potential Flood Losses to Critical Facilities

Name	Type	Exposure			Complies with NYS Standards	Addressed by Proposed Action
		1% Event		0.2% Event		
		A-Zone	V-Zone			
None identified at this time						

Source: Suffolk County 2020; FEMA 2009

Notes: x = Facility is located in the floodplain boundary.

*Community Lifeline

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Suffolk County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Village of Quogue. The Village of Quogue has reviewed the county hazard risk/vulnerability risk ranking table and provided input to its individual results to reflect the relative risk of the hazards of concern to the community.”

During the review of the hazard/vulnerability risk ranking, the Village of Quogue indicated the following:

- The Village changed the hazard ranking for extreme temperature from medium to low as the ocean moderates extreme temperatures in the Village.
- The Village changed the hazard ranking from low to medium, noting that some low lying streets have issues.
- The Village changed the hazard ranking for wildfire from medium to high, noting an increased fire load due to debris from pine beetles.
- The Village agreed with the remainder of the calculated hazard rankings.

Table 9.38-13. Hazard Ranking

Coastal Erosion	Cyber Security	Disease Outbreak	Drought	Earthquake	Expansive Soils
High	Medium	Medium	Low	Medium	Low
Extreme Temperature	Flood	Groundwater Contamination	Hurricane	Infestation and Invasive Species	Nor’Easter
Low	High	Medium	High	Medium	High





Severe Storm	Severe Winter Storm	Shallow Groundwater	Wildfire
Medium	Medium	Medium	High

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Coastal erosion (ocean)
 - Village’s public beach facility
 - Two private beach clubs
 - Multiple single family residences
 - The eastern end of the Village experiences a greater level of erosion, believed to be associated with the Shinnecock Inlet.
- Flooding may be taking place due to poor drainage and groundwater flooding.

Specific areas of concern based on resident response to the Suffolk County Hazard Mitigation Citizen survey include:

- Above ground power lines are very vulnerable to being knocked down during storms, so the power goes out, along with cable access to vital information.
- Many local streets flood frequently, even in normal rainstorms.
- Coastal erosion and flooding take places along Dune Road.
- Terrible cell service and land line leads to communication problems in emergencies.

9.38.10 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2014 HMP. Actions that are carried forward as part of this plan update are included in the updated mitigation strategy table (Table 9.38-15). 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 9.38-14. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
VQU-1 (Sandy HMGP LOI #505)	Dune Road Elevation	Hurricanes, Tropical Storms, Nor'Easters, Coastal Flooding	Village of Quogue: Peter Sartorius, Mayor		No Progress; The lowest-lying portions of the road have been repaved and their elevation has improved quite a lot. The Town of Southampton took a similar approach on its portion of Dune Road to the east.	Cost		1. Discontinue 2. 3. The elevation of Dune Road via removal of the existing road and bringing in fill and repaving over it was abandoned (because of very strict requirements by the DEC of materials that could be used) in favor of periodic repaving with thick asphalt.
VQU-2	Continue efforts to replenish and maintain dunes with upland or stockpiled sand, snow fencing, grass planting, and beach scraping where conditions permit.	Hurricanes, Tropical Storms, Nor'Easters, Coastal Flooding	Village Engineering and Highway Dept. with private contractors; NYSDEC		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
VQU-3	Continue efforts to institute a beach nourishment program that will pump about 1MM cubic yards of sand from a borrow area about a mile offshore onto the beach in Quogue. Permitting is currently underway, which has been privately funded.	Hurricanes, Tropical Storms, Nor'Easters, Coastal Flooding	NYSDEC and Village of Quogue; working with ACOE and private contractors		No Progress	Cost		1. Include in 2020 HMP 2. Public opposition to a privately funded beach nourishment project made it not feasible at the present time. In any event, the coming implementation of the FIMP project in 2021, which will include beach nourishment in Quogue, should obviate the need for a separate beach nourishment project. 3.
VQU-4	Work with the Town of Southampton to locate and maintain a large sand stockpile between the Village of Quogue and Shinnecock Inlet that could be accessed by municipalities and private parties to restore damage dunes at a reasonable cost. The present requirement to purchase upland sand at a cost	Hurricanes, Tropical Storms, Nor'Easters, Coastal Flooding	Village and Town of Southampton roads and public works; working along with ACOE and its contractors		No Progress	Cost		1. Discontinue 2. 3. Several stockpiles of sand have been made over the years. One was at Cupsogue County Park. Unfortunately, it dissipated over time so as to become unrecognizable. Accordingly, stockpiles have to be utilized fairly promptly.



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	of about \$25/cu.yd. is prohibitively expensive. Since a stockpile is itself vulnerable in a major storm, it would have to be used judiciously on a regular basis and replenished periodically by dredging.							
VQU-5	Work with vulnerable property owners to mitigate their properties, including elevations and acquisitions as appropriate and feasible. Of particular note are vulnerable properties located on the Quogue Canal or elsewhere in bayfront locations. While newer construction has resulted in structures being elevated to meet prevailing requirements, approximately 40 homes are particularly vulnerable and had electrical meters pulled because of unsafe conditions as a result of Sandy flooding.	Flood, Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	Village NFIP FPA, working with willing property owners; support by NYSOEM		In Progress; Houses in vulnerable flood areas have continued to be elevated as they are renovated or, more commonly, demolished and new houses are constructed. Electrical meters have been relocated where required.	Cost		1. Include in 2020 HMP 2. 3.
VQU-6	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/mitigati 	All Hazards	Suffolk County, as supported by relevant local department leads		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing capability



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)	Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	<ul style="list-style-type: none"> on public education and outreach program) • Build Local Floodplain Management and Disaster Recovery Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities) • 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 						



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	State and Federal level recognition and support of the County and local hazard mitigation planning strategies identified in this plan).							
VQU-7	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.	Severe Storm; Severe Winter Storm; Hurricane; Nor' Easter	PSEG, County		Complete; PSEG has developed list	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Complete
VQU-8	Obtain a high axle, military-type vehicle suitable for transporting people in order to insert emergency personnel and transport civilians in the event of an evacuation. Since this vehicle would not be expected to get heavy use, a used truck in good condition should be adequate.	Coastal Flooding	Village		Complete; vehicle obtained through U.S. Military surplus equipment program	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Complete



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Quogue has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 HMP:

- On east end of beach, most vulnerable houses have installed protective geotubes at the foot of the dune.
- The Village has removed trees impacted by Pine Beetle when identified and completes outreach on Pine Beetles.
- The Village has instituted nitrogen reducing system requirements for septic systems through a local law (LL 3/16 of 18)

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Quogue participated in a mitigation action workshop in June 2020 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.38-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of Quogue would like to pursue in the future to reduce the effects of hazards. 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. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6 (Mitigation Strategy), fourteen criteria are used to evaluate and prioritize each proposed mitigation action. A numeric factor is assigned (-1, 0, or 1) to each criterion to provide a relative indication of the opportunities and constraints of each action. A numerical sum of the input provides the basis of the prioritization of actions wherein each action is assigned a category of Low, Medium, or High to indicate an implementation hierarchy. A High priority action indicates the jurisdiction will prioritize its implementation and apply for funding, if needed, as opportunities become available during the plan period of performance. This does not prevent the jurisdiction from implementing other ranked actions; however, this provides a snapshot of implementation priority at the time of this plan update.

Table 9.38-16 provides a summary of the evaluation and prioritization for each proposed mitigation initiative. Refer to the action worksheets at the end of this annex for more details on the high-ranked hazards identified first for implementation.



Table 9.38-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Quogue-001	Beach Replenishment	1, 2, 3, 5	Hurricane, Nor'Easter, Flood, Coastal Erosion	<p>Problem: The Village beaches have been impacted by coastal erosion. Ocean related erosion occurs at the Village's public beach facility, two private beach club and multiple single-family residences. The eastern end of the Village experiences a greater level of erosion, believed to be associated with the Shinnecock Inlet</p> <p>Solution: Implement the USACE FIMP project in 2021, which will include beach nourishment in Quogue.</p>	No	NYS DEC permits required	2 years	USACE	To be determined by USACE FIMP study	Beach rebuilt and engineered to reduce erosion.	USACE, HMGP, BRIC, potential local municipal match	High	NSP	NR
2020-Quogue-002	Repetitive Loss Mitigation	1, 2	Flood, Severe Storm	<p>Problem: The Village has numerous repetitive loss properties. While newer construction has resulted in structures being elevated to meet prevailing requirements, approximately 40 homes are particularly vulnerable to flooding.</p> <p>Solution: Work with vulnerable property owners to mitigate their properties, including elevations and acquisitions as appropriate and feasible. Of particular note are vulnerable properties located on the Quogue Canal or elsewhere in bayfront locations.</p>	No	None	3 years	FPA	\$3 million	Eliminates flood damage to homes and residents	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP
2020-Quogue-003	Stormwater Improvements	1, 2	Flood, Shallow Groundwater Flooding, Severe Storm	<p>Problem: Several areas of the Village have poor drainage. Some of the drainage issues may be attributed to a high water table</p> <p>Solution: The Village will</p>	No	None anticipated	Within 5 years	Engineer	TBD by extent of flood study.	Reduction in flood risk in selected areas	HMGP, BRIC, municipal budget	High	SIP	SP



Table 9.38-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				conduct a drainage study to determine the extent of drainage issues and most cost effective mitigation actions to be taken. The Village will then implement the selected actions identified by the study.										
2020-Quogue-004	Temporary Housing	1, 7	All hazards	<p>Problem: The Village does not have areas identified for the placement of temporary housing after a disaster event.</p> <p>Solution: The Village will work with the County to identify regional locations for temporary housing.</p>	Yes	None	Within 6 months	Administration, Suffolk County	Staff time	Temporary Housing locations identified	Municipal budget	High	LPR	ES
2020-Quogue-005	Pine Beetle Outreach	3, 6	Invasive Species, Wildfire	<p>Problem: Pine Beetle has led to dead trees and increased the risk of wildfire due to dead trees and branches.</p> <p>Solution: Conduct outreach to property owners about identification and reporting of Pine Beetle infestations</p>	No	None	Within 6 months	Administration	\$500	Educated public, reduction in spread of Pine Beetle	Municipal budget	High	EAP	PI

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.





Critical Facility:

Yes  Critical Facility located in 1% floodplain

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 (NSP) – 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*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.38-16. Summary of Prioritization of Actions

Project Number	Project Name	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
2020-Quogue-001	Beach Replenishment	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2020-Quogue-002	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	1	0	1	0	1	1	11	High
2020-Quogue-003	Stormwater Improvements	1	1	0	1	1	1	0	1	1	0	1	0	1	1	10	High
2020-Quogue-004	Temporary Housing	1	0	1	1	1	0	1	1	1	1	1	1	1	1	12	High
2020-Quogue-005	Pine Beetle Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).





9.38.11 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

Table 9.38-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	2020-Quogue-004		2020-Quogue-001					2020-Quogue-001		2020-Quogue-004
Cyber Security	2020-Quogue-004									2020-Quogue-004
Disease Outbreak	2020-Quogue-004									2020-Quogue-004
Drought	2020-Quogue-004									2020-Quogue-004
Earthquake	2020-Quogue-004									2020-Quogue-004
Expansive Soils	2020-Quogue-004									2020-Quogue-004
Extreme Temperature	2020-Quogue-004									2020-Quogue-004
Flood	2020-Quogue-004	2020-Quogue-002, 2020-Quogue-003	2020-Quogue-001			2020-Quogue-002		2020-Quogue-001	2020-Quogue-003	2020-Quogue-004
Groundwater Contamination	2020-Quogue-004									2020-Quogue-004
Hurricane	2020-Quogue-004		2020-Quogue-001					2020-Quogue-001		2020-Quogue-004
Infestation and Invasive Species	2020-Quogue-004			2020-Quogue-005			2020-Quogue-005			2020-Quogue-004
Nor'Easter	2020-Quogue-004		2020-Quogue-001					2020-Quogue-001		2020-Quogue-004



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Severe Storm	2020-Quogue-004	2020-Quogue-002, 2020-Quogue-003				2020-Quogue-002			2020-Quogue-003	2020-Quogue-004
Severe Winter Storm	2020-Quogue-004									2020-Quogue-004
Shallow Groundwater	2020-Quogue-004	2020-Quogue-003							2020-Quogue-003	2020-Quogue-004
Wildfire	2020-Quogue-004			2020-Quogue-005			2020-Quogue-005			2020-Quogue-004

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

9.38.12 Staff and Local Stakeholder Involvement in Annex Development

The Village of Quogue followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: the Building Department, Emergency Preparedness, and Mayor’s Office. The Chief Building Inspector represented the community on the Suffolk County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes who participated and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.38-18. Contributors to the Annex

Name	Title/Entity	Method of Participation
William Nowak, Chief Building Inspector	William Nowak, Chief Building Inspector	Primary Point of Contact, NFIP FPA, attended plan participant meetings, provided impact data, contributed to mitigation strategy
Peter Satorius	Mayor	Attended plan participant meetings, provided impact data, contributed to mitigation strategy
Chris Osborne	Emergency Preparedness Coordinator	Secondary Point of Contact

9.38.13 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Quogue that illustrate the probable areas that may be 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. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Quogue has significant exposure.





Figure 9.38-1. Village of Quogue Hazard Area Extent and Location Map 1

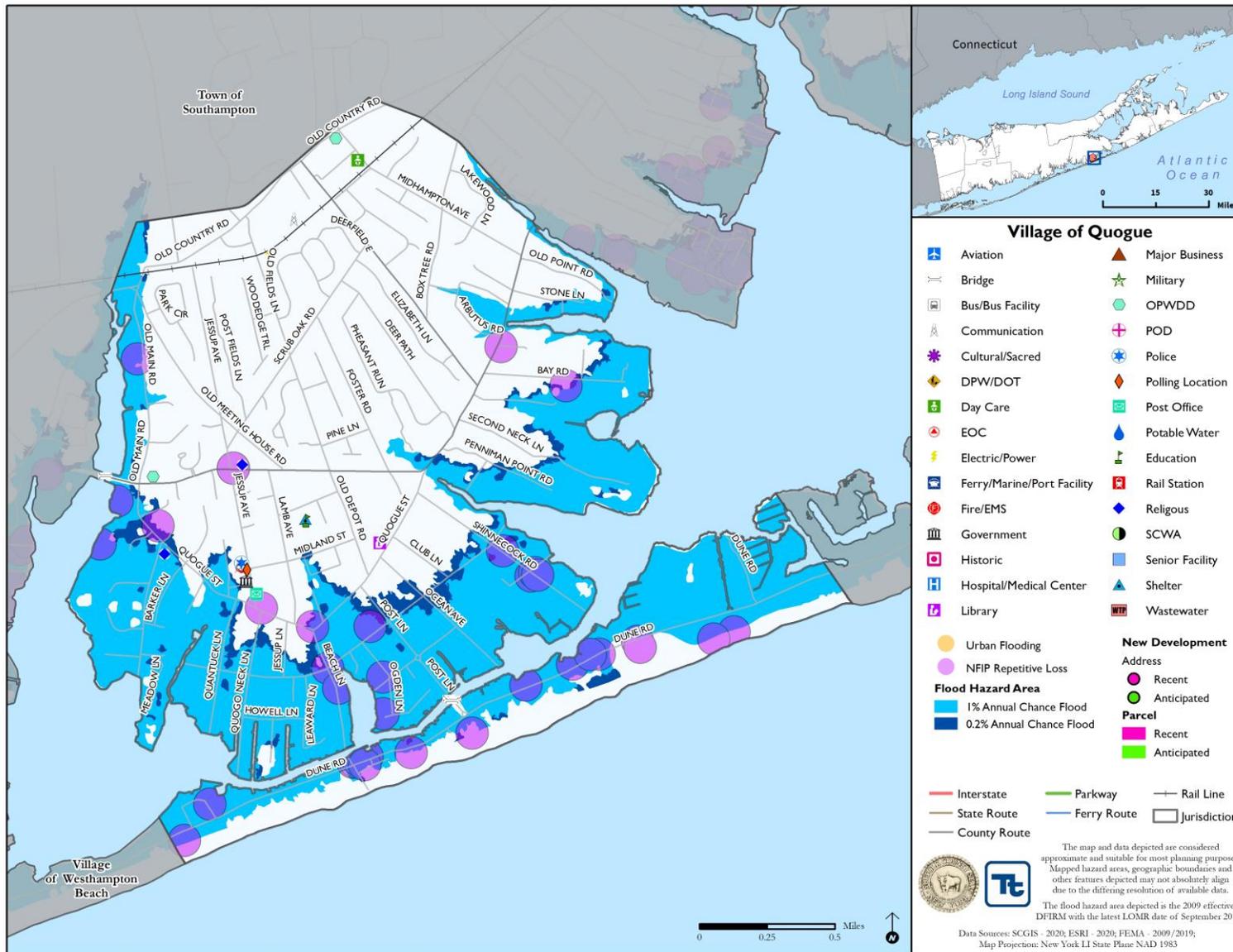




Figure 9.38-2. Village of Quogue Hazard Area Extent and Location Map 2

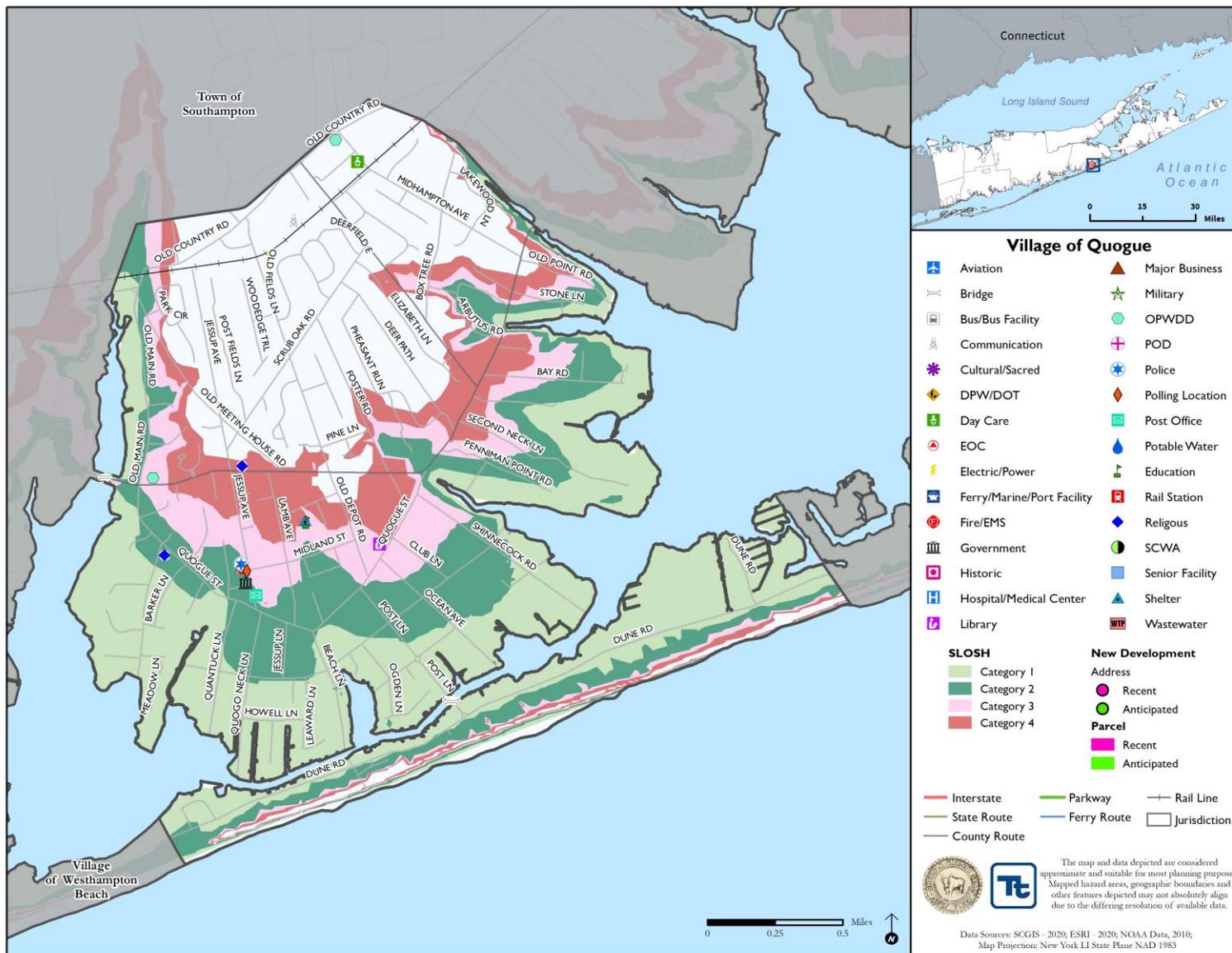




Figure 9.38-3. Village of Quogue Hazard Area Extent and Location Map 3

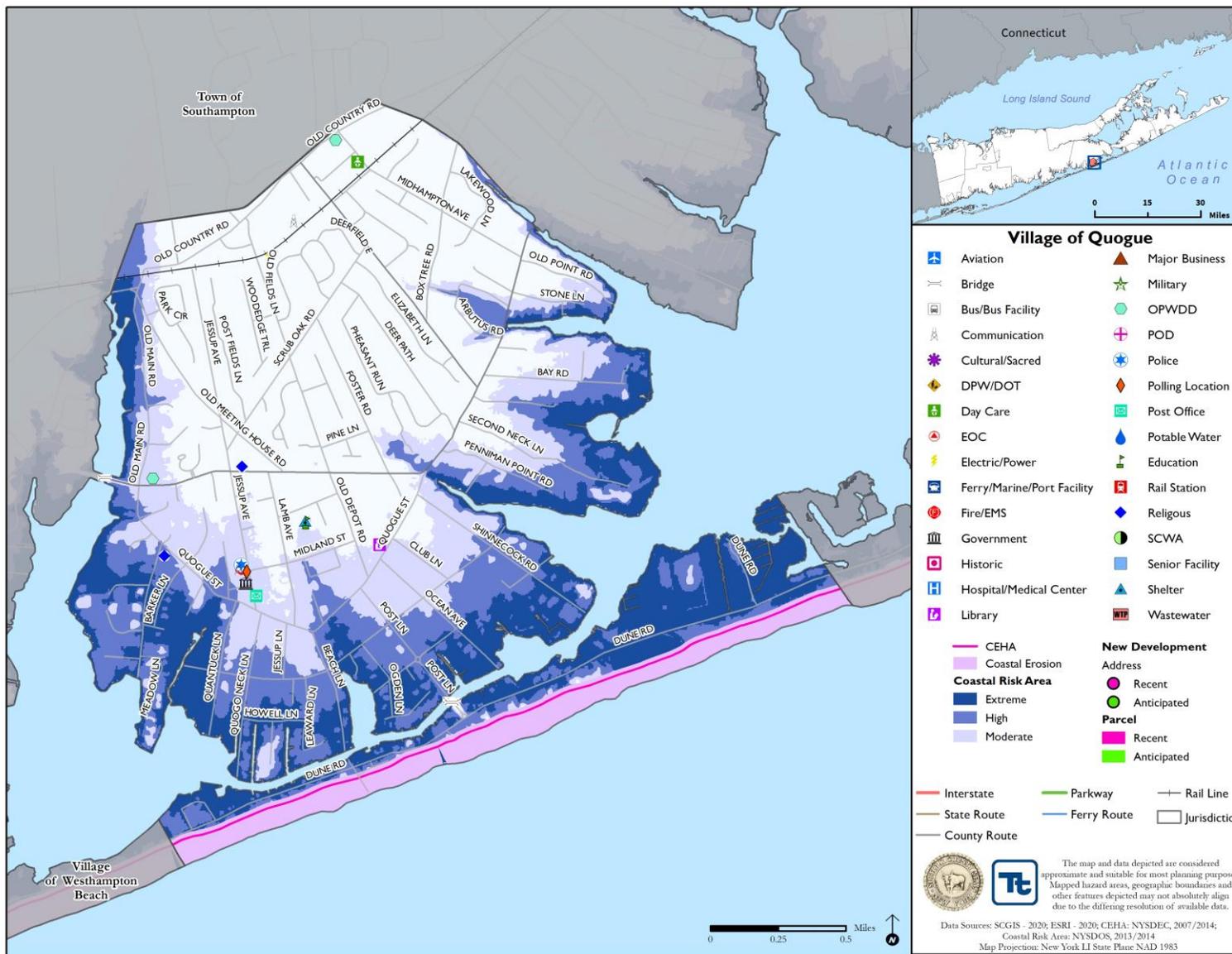




Figure 9.38-4. Village of Quogue Hazard Area Extent and Location Map 4

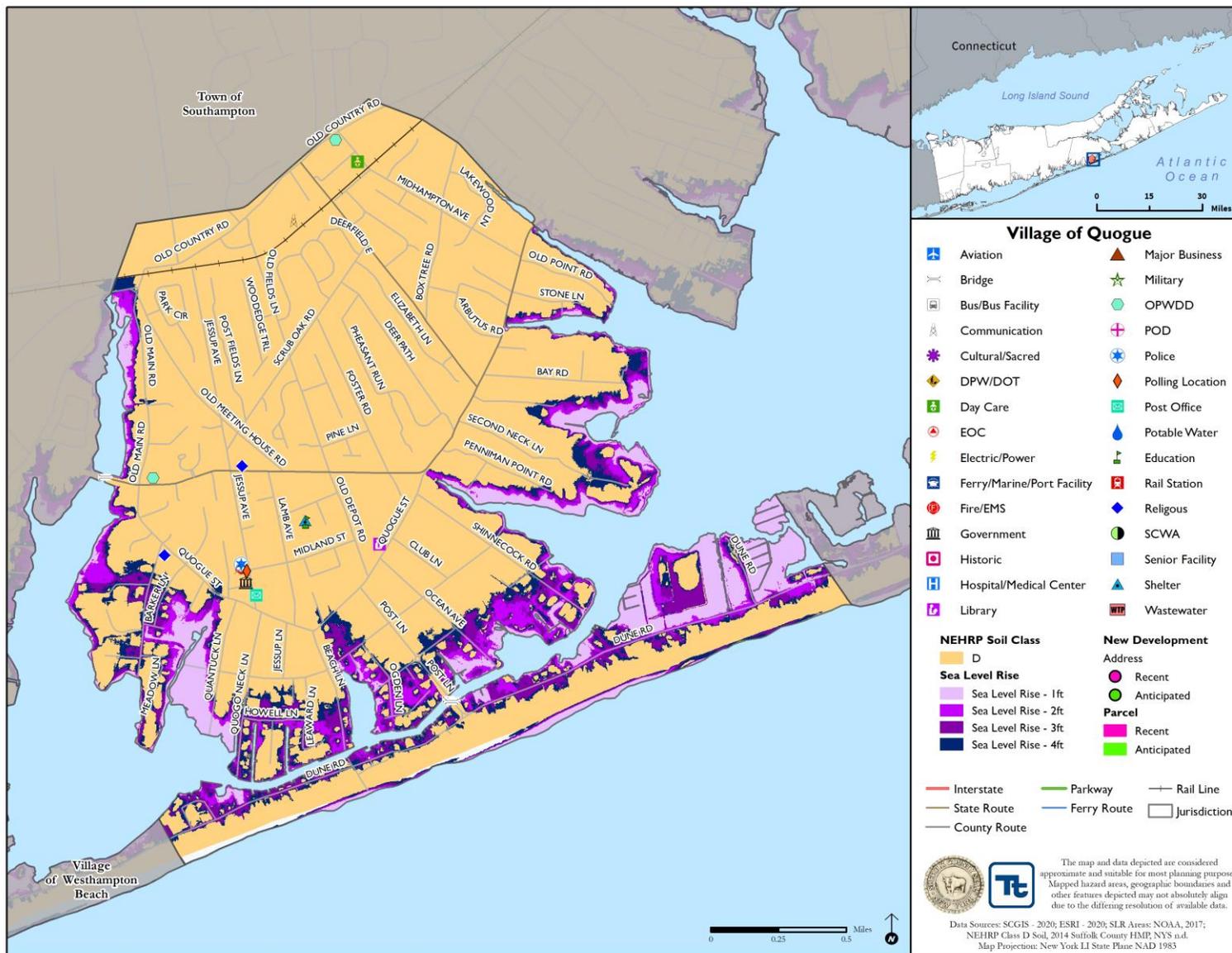
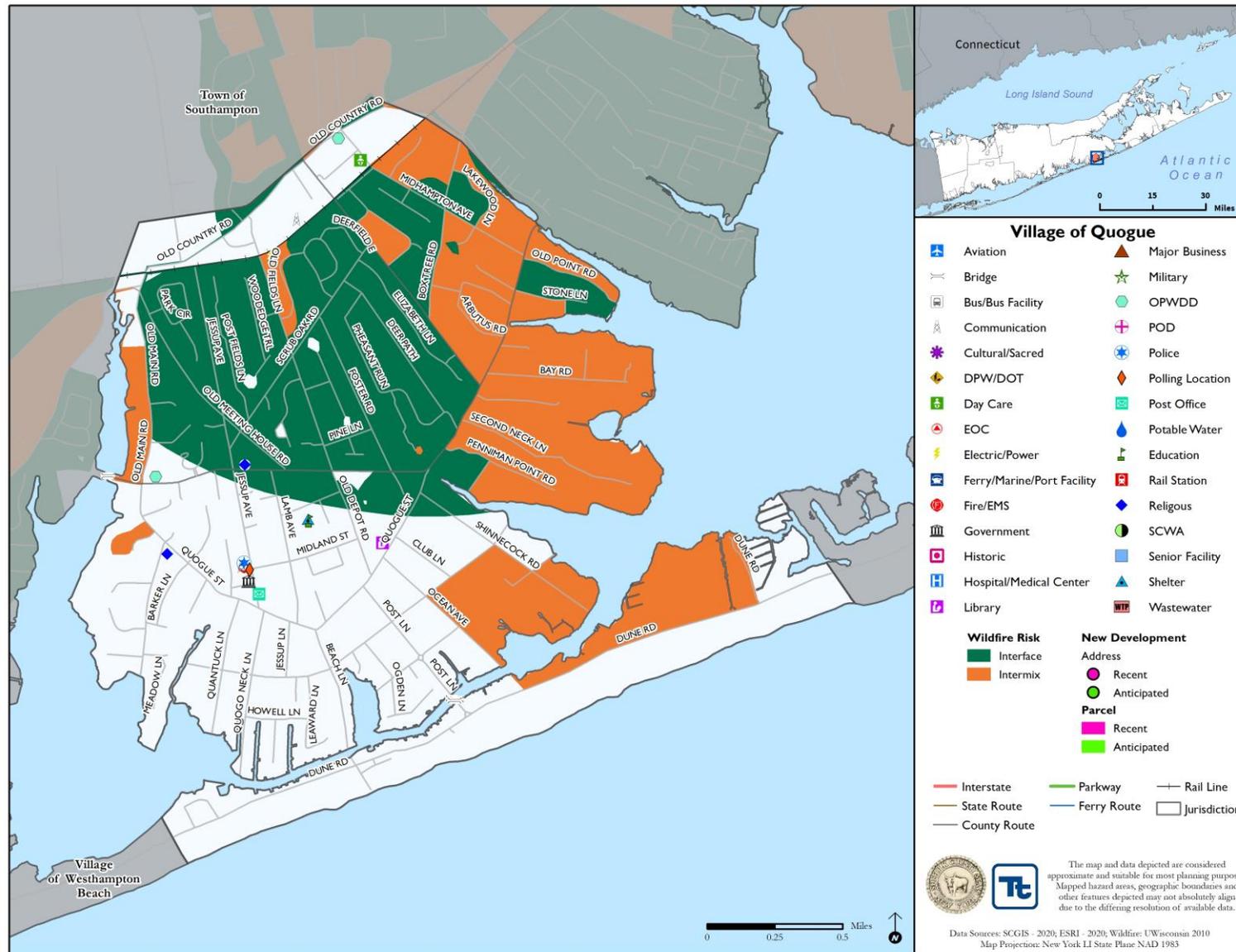




Figure 9.38-5. Village of Quogue Hazard Area Extent and Location Map 5





Action Worksheet			
Project Name:	Repetitive Loss Mitigation		
Project Number:	2020-Quogue-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages in coastal areas and other flood prone regions. This area is residential, and these properties have been repetitively flooded as documented by paid NFIP claims. While newer construction has resulted in structures being elevated to meet prevailing requirements, approximately 40 homes are particularly vulnerable to flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation. The Village will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas). Of particular note are vulnerable properties located on the Quogue Canal or elsewhere in bayfront locations.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	1% annual chance flood event + freeboard (in accordance with flood ordinance)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents
Useful Life:	Elevation: 30 years (residential)	Goals Met:	1, 2
Estimated Cost:	\$3Million	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages
	Buyouts	\$3 million	Not popular among homeowners
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Mitigation	
Project Number:	2020-Quogue-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Properties moved above likely flood elevation.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The Village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Stormwater Improvements		
Project Number:	2020-Quogue-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Shallow Groundwater Flooding, Severe Storm		
Description of the Problem:	Several areas of the Village have poor drainage. Some of the drainage issues may be attributed to a high water table and basement flooding has occurred.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will conduct a drainage study to determine the extent of drainage issues and most cost-effective mitigation actions to be taken. The Village will then implement the selected actions identified by the study.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD	Estimated Benefits (losses avoided):	Reduction in flood risk in selected areas
Useful Life:	TBD by drainage study	Goals Met:	1, 2
Estimated Cost:	TBD by study	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGF, BRIC, Municipal budget
Responsible Organization:	Village Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Stormwater Management, Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Elevate roadways	\$500,000	Costly and may lead to increased drainage issues onto private property
	Relocate roadways	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Stormwater Improvements	
Project Number:	2020-Quogue-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects life from flooding.
Property Protection	1	Protects private properties from flood damage
Cost-Effectiveness	0	
Technical	1	Technically feasible project
Political	1	
Legal	1	The Village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	Project would reduce flooding impacts
Administrative	0	
Multi-Hazard	1	Flood, Shallow Groundwater Flooding, Severe Storm
Timeline	0	Within 2 years
Agency Champion	1	Engineer
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	