



9.42 Town of Southold

This section presents the jurisdictional annex for the Town of Southold. 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 town participated in the planning process; an assessment of the Town of Southold’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.42.1 Hazard Mitigation Planning Team

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

Table 9.42-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Lloyd Reisenberg, Office of Emergency Management Address: P.O. Box 1175 Southold, NY 11971 Phone Number: 631-765-1891 Email: lloyd.reisenberg@town.southold.ny.us	Name/Title: Chief M. Flatley, Chief/EMO Address: P.O. Box 911 Peconic, NY 11958 Phone Number: 631-765-2600 Email: mflatley@town.southold.ny.us
NFIP Floodplain Administrator	
Name/Title: Michael Verity, Chief Building Inspector Address: 53095 Route 25 Southold, NY 11971 Phone Number: 631-765-1802 Email: mike.verity@town.southold.ny.us	

9.42.2 Municipal Profile

The Town of Southold, site of the oldest English settlement in New York State, has a history going back to 1638 when a group of men landed from Antigua, one of the Leeward Islands, to set up a turpentine distillery, using as a natural resource, the trees of the great pine swamp that lay west of present day Greenport. Two years later another group of settlers arrived from the New Haven colony. That year, 1640, is generally considered to mark the beginning of the Town of Southold, although town records are missing for that early period until 1651.

Much of the original Town of Southold was part of the Aquebogue Purchase, acquired from the Indians in 1648-49. The area contained in that purchase was substantially that more fully outlined and described in Governor Andros’ Patent, executed in 1676. That early town, part of the East Riding of Yorkshire (which became Suffolk County in 1683), stretched along the northern shore of Long Island from Wading River to Orient Point. In 1730, Shelter Island became a separate town, followed by Riverhead in 1792.

The Town of Southold is located at the eastern extreme of Long Island, at the end of the northern peninsula known as the North Fork. It is the eastern-most township on the North Fork and is bordered to the west by the Town of Riverhead and to the south by the Town of Shelter Island. The incorporated Village of Greenport lies within the Town of Southold. The entire Town, including Fishers, Plum and Robins islands, is approximately 54 square miles in size with approximately 163 linear miles of coastline.

It is long and narrow in shape, with the mainland extending 21 miles from the Riverhead town line east to Orient Point. Its greatest width is 5 miles, although generally the western portions of the mainland average 3 miles in width, while to the east of Hashamomuck Pond, the Town is never wider than 1.25 miles.





The Town of Southold is governed by a Town Supervisor and a Board comprised of 5 members, all are elected positions. This body will assume responsibility for the adoption and implementation of this plan.

According to the U.S. Census, the 2010 population for the Town of Southold was 19,771. The estimated 2017 population was 20,202, a 2.2 percent increase from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 3.0 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.

9.42.3 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 9.42-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. 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 9.42-2. 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	60	8	67	1	66	3	73	4	109	3	103	5
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	15	1	47	0	9	0	6	0	7	0	17	0
Total Permits Issued	75	9	114	1	75	3	79	4	116	3	120	5
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.

9.42.4 Capability Assessment

The Town of Southold 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 9.42.4). The Town of Southold 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 Town of Southold and where hazard mitigation has been integrated.

Table 9.42-3. 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?	
						Yes	If no - can it be a mitigation action?
Codes, Ordinances, & Requirements							
Building Code	Yes	Uniform Fire Prevention and Building Code Administration and Enforcement Law, Chapter 144, Town Code	Local	Building Inspector	Yes	Yes	-
Comment: Article 18 of the Executive Law, as added by Chapter 707 of the Laws of 1981, provides for the preparation of a Uniform Fire Prevention and Building Code (Uniform Code), which shall take effect on January 1, 1984, and the State Energy Conservation Construction Code (the Energy Code), which shall take effect on January 1, 2007, and which every local government shall administer and enforce on and after such date. It is the purpose of this chapter to provide for the administration and enforcement of the Uniform Code in the Town of Southold.							
Zoning Code	Yes	Zoning Code, Chapter 280, Town Code	Local	Zoning Board	No	Yes	-
Comment: The Zoning Code was adopted for the following reasons: A. The facilitation of the efficient and adequate provision of public facilities and services. B. The assurance of adequate sites for residence, industry and commerce. C. The provisions of privacy for families. D. The prevention and reduction of traffic congestion so as to promote efficient and safe circulation of vehicles and pedestrians. E. The maximum protection of residential and historic areas. [Amended 1-10-1989 by L.L. No. 1-1989] F. The gradual elimination of nonconforming uses. G. The enhancement of the appearance of the Town of Southold as a whole, particularly its open and rural environment. [Amended 1-10-1989 by L.L. No. 1-1989] H. The encouragement of flexibility in the design and development of land in such a way as to produce the most appropriate use of lands, to facilitate the adequate and economical provision of streets and utilities and to preserve the natural and scenic qualities of open lands.							
Subdivisions	Yes	Subdivision of Land, Chapter	Local	Planning Department	No	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?	
		240, Town Code					
Comment: These regulations are promulgated to provide for the orderly growth and coordinated development of the Town, to protect the comfort, convenience, safety, health and welfare of its people and to insure that the review and approval of subdivisions is based on the following considerations: A. Preservation of certain lands, including farmland, open space and recreational landscapes. B. Preservation of the rural, cultural and historic character of the Town's hamlets and surrounding countryside. C. Preservation and protection of the Town's remaining natural environment. D. Encouragement of a range of housing and business opportunities to support socioeconomically diverse communities. E. Promotion of transportation efficiency, intermodal transportation hubs and attractive alternatives to automobile travel, while preserving the scenic and historic attributes of roadways in the Town. F. Creation of affordable housing opportunities for residents of the Town.							
Stormwater Management	Yes	Stormwater Management, Chapter 236, Town Code	Local	Stormwater Management Officer	Yes	Yes	-
Comment: Chapter 236 was adopted in order to: A. Minimizing soil erosion, sedimentation and stormwater runoff; B. Controlling, restricting or prohibiting activities which alter natural drainage systems, floodplains, stream channels and natural protective features, including, but not limited to, wetlands, bluffs, dunes, beaches, natural protective features, which contribute to the accommodation of floodwaters and retention of sediment; C. Controlling, restricting or prohibiting land use activities which increase nonpoint source pollution due to stormwater runoff and/or which result in discharge onto public lands, neighboring properties or natural protective features; D. Assuring that land and water uses in the Town are designed and/or conducted using best management practices to control flooding, stormwater runoff and minimize stormwater runoff from discharging onto public lands, neighboring properties or natural protective features; E. Promoting the recharge of stormwater into the freshwater aquifer to protect the drinking water supply and minimize saltwater intrusion. F. Meet the requirements of minimum control measures 4 and 5 of the SPDES general permit for stormwater discharges from municipal separate stormwater sewer systems (MS4s), Permit No. GP-02-02, or as amended or revised;							
Post-Disaster Recovery	No	-	Local	Office of Emergency Management	No	No	2020-Southold-009
Comment: To be developed							
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	Town Code Chapter 280 (1957, amended in entirety 1971, amendments added as required)	Local	Planning Department	No	Yes	-
Comment:							
Environmental Protection	Yes	Town Code Chapter 130 Environmental Quality Review (Adopted 1978,	Local	Planning Department	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?	
		amendments noted where applicable)					
Comment:							
Flood Damage Prevention	Yes	Flood Damage Prevention, Chapter 148, Town Code	Local	Floodplain Administrator	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	-
Comment: Chapter 148 was adopted in order to: A. Protect human life and health. B. Minimize expenditure of public money for costly flood-control projects. C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public. D. Minimize prolonged business interruptions. E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines and streets and bridges located in areas of special flood hazard. F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas. G. Provide that developers are notified that property is in an area of special flood hazard. H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.							
Municipal Separate Storm Sewer System (MS4)	Yes	Town Code Chapter 236 Stormwater Management	Local	Stormwater Management Officer	Yes	Yes	-
Comment:							
Emergency Management	Yes	Town Code Chapter 51 Police Department	Local	Police Department	Yes	Yes	-
Comment:							
Climate Change	No	-	-	-	Yes	-	-
Comment:							
Disaster Recovery Ordinance	No	-	-	-	No	-	2020-Southold-009
Comment:							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
Comment:							
Soil Removal	Yes	Soil Removal, Chapter 228, Town Code	Local	Town Clerk	No	Yes	-
Comment: These regulations and controls are intended to prevent the following conditions from occurring: A. The interruption and diversion of natural watersheds and drainage lines, resulting in inadequate and improper surface water drainage. B. The erosion of soil by water and wind. C. The decrease in or destruction of fertility of the land. D. The removal of lateral support of abutting streets, lands and premises. E. The creation of dust storms and mosquito breeding places. F. The creation of dangerous banks, depressions or pits. G. The interruption of suitable access roads to other lands and the disruption of the future road pattern.							



	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?	
H. The rendering of lands unfit or unsuitable for their most appropriate uses. I. The depreciation of property values.							
Sewers and Sewage Disposal	Yes	Sewers and Sewage Disposal, Chapter 215, Town Code	Local	Administration	No	Yes	-
Comment: The Southold Wastewater Disposal District was established by an order of the Southold Town Board, adopted on February 15, 1983, as amended, by an order of said Board adopted on May 24, 1983, for the purpose of protecting the ground- and surface waters within said District from the disposition of scavenger waste by providing a wastewater pretreatment facility at the site of the sewer treatment plant of the Village of Greenport for the disposal of scavenger waste in the District and providing regulations to protect the health and water quality and to prevent the contamination of the water supply within the District.							
Coastal Erosion Hazard Area	Yes	Coastal Erosion Hazard Area, Chapter 11, Town Code	Local	Southold Town Police Department, the Bay Constables and the Office of Code Enforcement	No	Yes	-
Comment: Mitigates coastal erosion.							
Wetlands and Shoreline	Yes	Wetlands and Shoreline, Chapter 275, Town Code	Local	Administrator	No	Yes	-
Comment: It is the intention of this chapter to ensure for the citizens of the Town of Southold the protection, preservation, proper maintenance and use of its wetlands, giving due consideration to the reasonable economic and social development of the Town. In addition, the Town Board declares that it is the intention of this chapter to regulate the type and placement of fixed and floating piers and docks for the protection, preservation, proper maintenance and use of its waters and wetlands.							
Planning Documents							
Comprehensive Plan	Yes	Master Plan (1985)	Local	Planning Department	No	No	-
Comment: The Comprehensive Plan is currently being updated (Southold 2020) and includes a Natural Hazards chapter drafted in September 2013. Other relevant goals include: <ul style="list-style-type: none"> • Main goals for water resources: a focus on conservation and protection of water, which includes water quantity and groundwater and surface water quality, watershed management, and freshwater and marine habitats. • Main goals for land resources: involve the protection of soils, geologic features, upland habitats and trees, and fish and wildlife resources; monitoring and control of nuisance and invasive species; adaptation to climate change and sea level rise; conservation of energy; protection and improvement of air quality; and continuing to manage solid and hazardous waste. • Mitigate the effects of natural hazards to achieve coastal resiliency. • Protect public safety and reduce economic loss. • Complete a Post Disaster Recovery and Reconstruction Plan. • Provide education to the public relating to natural hazards. 							
Capital Improvement Plan	Yes	Annual Budget	Local	Town Board	No	Yes	-
Comment: Adopted annually							
Disaster Debris Management Plan	Yes	Suffolk County Multi-Jurisdictional Debris Management Plan	County, Local	Suffolk County FRES	No	Yes	-
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.							
Floodplain or Watershed Plan	Yes	Town Code Chapter 148 and LWRP; 148 (1993) LWRP (2004)	Local	LWRP	No	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?	
Comment:							
Stormwater Plan	Yes	Town Code Chapter 236 (2007)	Local	Engineering	No	Yes	-
Comment:							
Open Space Plan	Yes	Town of Southold Community Preservation Project Plan July 2016 Update	Local	Various	Yes	Yes	-
<p>Comment: The plan discusses the following topics:</p> <ul style="list-style-type: none"> a) establishment of parks, nature preserves, or recreation areas; b) preservation of open space, including agricultural lands; c) preservation of lands of exceptional scenic value; d) preservation of fresh and saltwater marshes or other wetlands; e) preservation of aquifer recharge areas; f) preservation of undeveloped beach lands or shoreline including those at significant risk of coastal flooding due to projected sea level rise and future storms; g) establishment of wildlife refuges for the purpose of maintaining native animal species diversity, including the protection of habitat essential to the recovery of rare, threatened or endangered species; h) preservation of pine barrens consisting of such biota as pitch pine, and scrub oak; i) preservation of unique or threatened ecological areas; j) preservation of rivers and river areas in a natural, free-flowing condition; k) preservation of forested land;l) preservation of public access to lands for public use including stream rights and waterways; m) preservation of historic places and properties listed on the New York State register of historic places and/or protected under a municipal historic preservation ordinance or law; and n) undertaking any of the aforementioned in furtherance of the establishment of a greenbelt. <p>In addition, Open Space Preservation is discussed in the Town Code Chapter 185.</p>							
Urban Water Management Plan	No	-	-	-	No	-	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment:							
Economic Development Plan	No	-	-	-	No	-	-
Comment:							
Shoreline Management Plan	Yes	LWRP adopted 11/30/2004	Local	LWRP	Yes	Yes	-
<p>Comment: Waterfront Consistency Review – Town Code Chapter 268. The purpose of this chapter is to provide a framework for agencies of the Town of Southold to incorporate the policies and purposes contained in the Town of Southold Local Waterfront Revitalization Program (LWRP) when reviewing applications for actions or direct agency actions within the coastal area; and to assure that such actions and direct actions by the Town are consistent with the LWRP policies and purposes. It is the intention of the Town of Southold that the preservation, enhancement and utilization of the unique coastal area of the Town take place in a coordinated and comprehensive manner to ensure a proper balance between protection of natural resources and the need to accommodate limited population growth and economic development. Accordingly, this chapter is intended to achieve such a balance, permitting the beneficial use of coastal resources while preventing loss and degradation of living coastal resources and wildlife; diminution of open space areas or public access to the waterfront; disruption of natural coastal processes; impairment of scenic, cultural or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; or permanent adverse changes to ecological systems.</p>							
Community Wildfire Protection 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?	
Comment:							
Forest Management Plan	No	-	-	-	No	-	-
Comment:							
Transportation Plan	Yes	Comprehensive Plan	Local	Planning	No	-	-
Comment: Identified as aspect of the Comprehensive Plan. Various hamlets also have transportation plans.							
Agriculture Plan	No	-	-	-	Yes	-	-
Comment:							
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	No	-	-	-	No	-	-
Comment:							
Response/Recovery Planning							
Comprehensive Emergency Management Plan	Yes	Suffolk County Comprehensive Emergency Management Plan (2018)	Suffolk County and Associated Jurisdictions	Suffolk FRES	Yes	Yes	-
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	-	2020-Southold-011
Comment:							
Continuity of Operations Plan	Yes	Continuity of Operations Plan, 2020	Local	OEM	No	Yes	-
Comment: Updated during coronavirus pandemic.							
Public Health Plan	No	-	-	-	No	-	-
Comment:							
Other	No	-	-	-	No	-	-
Comment:							



Table 9.42-4. 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.	GIS system identifies buildable land

Administrative and Technical Capability

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

Table 9.42-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	Yes	Unofficial, Hazard mitigation team
Environmental Board/Commission	Yes	Conservation Advisory Council
Open Space Board/Committee	Yes	Land Management
Economic Development Commission/Committee	Yes	Economic Development Committee
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	CodeRed, social media, website, television (channel 21), door to door when necessary, working on additional products
Maintenance programs to reduce risk	Yes	Beach replenishment, tree trimming operations, stormwater cleaning
Mutual aid agreements	Yes	County, neighboring towns; MOUs with Mattituck, Southold, Greenport, Orient, and Fishers Island School Districts for sheltering
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Dept. and Town Engineer
Planners or engineers with an understanding of natural hazards	Yes	Planning Dept.
Staff with expertise or training in benefit/cost analysis	Yes	Comptroller/Accounting
Professionals trained in conducting damage assessments	Yes	Emergency Management or Engineer and other staff as needed
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Data Processing
Scientist familiar with natural hazards	Yes	Contractor
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector (Per Town Code Ch. 148) - Currently Michael Verity
Surveyor(s)	Yes	Engineer hires out
Emergency Manager	Yes	Committee



Resources	Available? (Yes or No)	Department/ Agency/Position
Grant writer(s)	Yes	Many Town Departments
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

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

Table 9.42-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
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	Yes
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, Community Preservation Fund, etc.
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) <ul style="list-style-type: none"> Community Preservation Fund 	2% property transfer tax used to support property acquisitions, typically environmentally-sensitive and/or hazard vulnerable land

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Southold.

Table 9.42-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes, handled through Supervisors Office
Personnel skilled or trained in website development?	Yes
Hazard mitigation information available on your website; if yes, describe	Yes, sheltering information, educational information on hazards
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Yes, developing social media
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Many civil associations and town committee
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Variable Message Boards
Warning systems for hazard events; if yes, briefly describe.	CodeRed, social media, website, television (channel 21), door to door when necessary, working on additional products
Natural disaster/safety programs in place for schools; if yes, briefly	Yes



Indicate if your jurisdiction has the following resources describe.	Yes/No; Please describe
Other	-

Community Classifications

The table below summarizes classifications for community programs available to the Town of Southold.

Table 9.42-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3/3	2004
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	5/9*	-
NYSDEC Climate Smart Community	In process of enrolling	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
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 9.42-9. 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	High
Infestation and Invasive Species	Medium
Nor’Easter	High
Severe Storm	Medium
Severe Winter Storm	High
Shallow Groundwater	Medium



Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
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 Town of Southold has access to resources to determine the possible impacts of climate change upon the municipality and is supportive of integrating climate change in policies or actions. At this time, no integration of climate change related policies, plans, or actions have taken place.

9.42.5 National Flood Insurance Program

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

NFIP Floodplain Administrator (FPA)

Michael Verity, Chief Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Southold.

Table 9.42-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Town of Southold	1,596	1,058	\$16,295,306	92

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

Flood Vulnerability Summary

The Town of Southold has many coastal areas that experience flooding. The Town does not maintain a list of properties that have been flood damaged or a list of property owners interested in mitigation. No substantial damage determinations have been made since Superstorm Sandy. At that time for public facilities, determinations were made through a combination of efforts from various town departments.

Resources

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

Compliance History

The Town of Southold joined the NFIP on March 18, 1980 and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009. The communities most recent Community Assistance Visit (CAV) took place on September 20, 2011.

Regulatory

The community’s Flood Damage Prevention Ordinance (FDPO) was last updated on September 8, 2009, and is found at Chapter 148 of the local code. The Southold Town Code as it relates to Subdivisions (Chapter 240) and site plans (Chapter 280) supports floodplain management. The Planning Board reviews all subdivision and





site plans and works to reduce flood risk for proposed residential and commercial developments. The Town's Local Waterfront Revitalization Program also supports floodplain management.

Community Rating System

The Town of Southold does not participate in the Community Rating System. It would be interested in additional information on the program.

9.42.6 Integration with Other Planning Initiatives

As this HMP update is implemented, the Town of Southold 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

- **Building Department:** Southold Town's Building Inspectors are qualified with experience in building construction, fire prevention and code enforcement and regularly participate in continuing education and training classes as required by the State of New York. Building Inspectors are certified by the State Fire Administrator pursuant to New York Executive Law. The Building Department administers and enforces all provisions of the Uniform Code and Energy Code and regulations applicable to the construction, alteration, addition, repair, removal and demolition of buildings and structures, and the installation and use of materials and equipment for that purpose.

The Building Department receives, reviews and approves/disapproves applications, issues permits and performs inspections to ensure compliance with the Uniform Code, Energy Code and other laws, ordinances and regulations governing building construction. The Building Department conducts inspections necessary for the issuance of certificates of occupancy, fire safety and property maintenance, and incidental to the investigation of complaints. These include inspections to maintain updated, accurate records, to carry out the duties of the office, to issue stop-work orders, to pursue legal actions as required to enforce the Uniform Code, Energy Code, and the Town Code.

The Building Department issues appropriate notices/orders to remove illegal or unsafe conditions from a premise and in cases of imminent danger to human life, health or property, may promptly cause a building, structure, or portions thereof to be made safe or removed. The Building Department may require the performance of tests in the field by experienced professionals or accredited and authoritative testing laboratories or service bureaus or agencies. The Building Department is responsible for maintaining permanent, official records and for the collection of fees for all transactions completed by the Department.

- **Community Development:** Annually, the town receives funding from Suffolk County's office of Community Development to address infrastructure improvements, housing rehabilitation, public



services, etc. The amount Southold receives has been drastically reduced within the past five years due to federal funding cuts.

- **Community Development Reviewing Committee:** The Town Board created a reviewing committee to advise the Town Board with recommendations of allocations of its block grant funding from Suffolk County.
- **Engineering Department:** The Engineering Department performs professional design services and administrative work related to the development and maintenance of Town facilities and Public Works projects. The department is responsible for professional design and consulting services on behalf of the Town Board related to the planning, design, construction, and alteration of town facilities and infrastructure.

Department responsibilities also include establishing technical and organizational policies and procedures for the development, design, analysis, preparation of construction documents, and evaluation of construction projects with respect to their feasibility, cost, economic justification and public necessity.

The department also provides engineering services for all town departments related to the formal review of pending applications for proposed construction and/or development projects. The department provides a general review of Planning Board applications and makes recommendations related to Subdivision and Site Plan compliance with Town Code as well as standard engineering practice.

In addition, the Engineering Department plays a major role in the development, implementation, and administration of the Town's Stormwater Management Program. This program has been established to both address stormwater runoff concerns town-wide and meet NYSDEC SPDES permitting requirements within the Town's regulated storm sewersheds.

- **Highway Department:** The Highway Department provides maintenance and improvements to over 200 miles of Town roads. Some responsibilities of the Highway Department include maintenance of town equipment, traffic lanes, installation of catch basins for drainage control, installation of Town and street signs, brush and leaf removal, street sweeping, resurfacing and sealing streets, snow removal and ice control. It is the Highway Department's mission to be effective and efficient while managing the maintenance of the Town's roadways systems and to provide safe and convenient movement of traffic as well as pedestrians. Accomplishing it at the most economical means available for Southold Town's taxpayers.
 - Highway Departments General Services
 - Construction, Repair and reconstruction of roads, bridges and culverts
 - Maintenance of road signs and Markings, as well as traffic paint
 - Maintenance of shoulders and roadside areas
 - Maintenance of department vehicles and equipment
 - Project planning and design new construction and maintenance of existing infrastructure



Public Works using a Military Freightliner procured through the Office of General Services to clear roadways during Winter Storm Grayson in January 2018.

- **Information Technology:** The Town of Southold Information Technology Department serves the technology needs for all of Southold’s municipal offices. The department is responsible for implementing, maintaining, and supporting all of the town’s hardware, software, networks, and telecommunication systems.
- **Land Preservation:** The Land Preservation Department and volunteer Land Preservation Committee make recommendations to the Town Board on all aspects of farmland protection and open space preservation. The Department and Committee review and make recommendations on proposed acquisitions of interests in real property using moneys from the Community Preservation Fund and review proposed uses on properties subject to easements.

Preservation is accomplished under the Town Farmland Program, the Town Open Space Program and under the Community Preservation Fund Program. Partnerships with Suffolk County, New York State, the Federal Government and not-for-profit land preservation groups add to local efforts.

Over 9,000 acres of land have been protected within the Town of Southold. Since 1983, the Town has actively funded land preservation projects through bonds and funds generated through the Peconic Bay Community Preservation Fund Act. From 1983 through March 2019, Southold Town (through its preservation program and partnerships) has protected over 3,400 acres of open space and farmland.

- **Planning Department:** The Planning Board provides both long-range planning and current planning services for the Town of Southold. Long-range planning services include updating and implementing the Town's Comprehensive Plan, as well as more focused planning studies. Current planning services include reviewing commercial and residential site plans and subdivision applications. The Planning Department is staffed with professional planners to support the Planning Board in their work. The department is also trained and equipped to provide researched reports, maps, GIS modeling, and draft code language to the Town Board to support their updates to the town code.



- **Zoning Board of Appeals:** The Zoning Board of Appeals is a quasi-judicial body, consisting of five members appointed by the Southold Town Board. The ZBA is authorized under New York Town Law to hear appeals of applications that have been reviewed and issued a denial (Notice of Disapproval) by the Building Inspector under Chapter 280 (Zoning) of the Town Code. One of the basic powers given by law to a Zoning Board is the “variance power”, whereby the Board may “vary” or modify the strict letter of a zoning ordinance or local law. The Board cannot amend or create zoning regulations; that legislative power resides with the Southold Town Board.
- **Deer Management Task Force:** The Town Board created the Deer Management Taskforce on September 09, 2009 to address the serious health and economic consequences of an unchecked deer population. The committee meets ad hoc to implement programs and services, educate the community on deer-related issues through workshops, forums and written publications. The taskforce also works in conjunction with county and state agencies to co-sponsor programs.
- **Dredging Advisory Committee:** Established in March 13, 2012, the Dredging Advisory Committee was formed to monitor the process of dredging applications by and to other government entities relative to waterways within the Town of Southold and report to the Town Board and Southold Board of Trustees the status of such applications. In addition the Committee considers and explores all dredging options in the Town of Southold.
- **Office of Emergency Management:** Southold Town's Office of Emergency Management's mission is to develop, coordinate, and lead the town emergency management program, enabling effective preparation for, response to and recovery from emergencies and disasters in order to save lives, reduce human suffering and minimize property loss.
- **Fishers Island Harbor Committee:** On May 3, 1994 the Fishers Island Harbor Committee was established to develop a plan for all island harbors and town waters adjacent to Fishers Island, including the assignment of mooring and anchorage areas. In addition, the committee’s harbor management plan may serve as an addendum of its Local Waterfront Revitalization Plan.
- **Stormwater Management Committee:** The Stormwater Management Committee was established to monitor and evaluate the town’s compliance with the New York State Phase II Stormwater Permit and to make recommendations to the Town Board regarding same.
- **Tree Committee:** Established in 1978, the Southold Tree Committee promotes and manages healthy, safe and effective trees along streets and on public grounds to preserve and enhance the beauty of the environment for the benefit of its citizens and future generations. The Committee also works within the community to increase awareness of the importance of trees and their care. The Tree Committee accepts request for new street tree plantings as well as the removal of trees. They do not require donations but do rely on contributions from residents and businesses.
- **Comprehensive/Master Planning:** The Town of Southold is currently in the process of updating its comprehensive plan (Southold 2020) and has included a draft Natural Hazards chapter developed through collaboration with NOAA Coastal Services Center, the Association of State Floodplain Managers (ASFPM) and the Nature Conservancy. Per NOAA’s Digital Coast website, “The result is strengthened connections between Southold’s comprehensive plan and the town’s hazards and climate resilience strategy. These connections and opportunities are being



documented in a comprehensive plan that is focusing more attention on future, as well as present, hazard mitigation strategies.

- Land and Open Space Conservation:** The Town of Southold partnered with private landowners and numerous agencies and organizations to purchase two properties totaling 96 acres. These acquisitions were funded through the Community Preservation Fund, which levies a transfer tax of 2% on each real estate transaction in Southold, and other sources, such as NOAA’s Coastal and Estuarine Land Conservation Program (CELCP), with assistance from the New York State Department of State, the Nature Conservancy (TNC), and the Suffolk County Open Space Program. Both parcels include low-lying flood-prone areas. By conserving these areas, the town avoids future potential losses to homes and property from coastal storms. In fact, the acquisition increases the town’s resilience to hazards, since the land retains its natural capacity to absorb stormwater and lessen flooding. The coastal position of both properties may provide longer-term resilience as well, by allowing natural storm-buffering dunes and coastal marshes to migrate inland with time as more frequent and powerful coastal storms and rising sea levels affect the coast.

Opportunities for Future Integration

Disaster Recovery Ordinance (2020-Southold-009): This action is a goal of the Town of Southold Comprehensive Plan 2020. The Town will develop a disaster recovery ordinance.

Coastal Resilience Plan (2020-Southold-010): This action is a goal of the Town of Southold Comprehensive Plan 2020. The Town will develop a Coastal Resilience Plan

Post Disaster Recovery & Reconstruction Plan (2020-Southold-011): This action is a goal of the Town of Southold Comprehensive Plan 2020. The emergency response plan was reviewed during the Comprehensive Plan Update of the Natural Hazards Chapter. A recommendation for the Town to prepare a Post-disaster plan is included in this chapter, however the plan is not yet adopted and implementation has not yet begun. Limited staff and funds are causing this action to be delayed.

9.42.7 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 Town of Southold’s evacuation routes are State Route 25 and County Route 48.

Sheltering

The Town of Southold has sheltering agreements with the Mattituck, Southold, Greenport, Orient, and Fishers Island School Districts.

Shelter Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Human Resource Center	750 Pacific Street, Mattituck	Unknown	No	Yes	Yes	No	N/A
Community Center	1170 Peconic Lane, Peconic	300	Yes	Yes	Yes	No	N/A
Mattituck H.S.	15125 Main	441	Yes	Yes	No	No	N/A





Shelter Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
	Road, Mattituck						
Southold H.S.	20 Oaklawn Ave, Southold	614	Yes	Yes	Yes	No	N/A
Greenport H.S.	720 Front Street, Greenport	705	Yes	Yes	Yes	No	N/A
Oysterponds School	23405 Main Road, Orient	92	Yes	Yes	No	No	N/A
Fisher Island School	Greenwood St., Fisher Island	Unknown	Yes	Yes	Yes	No	N/A

Temporary Housing

The Town of Southold has identified locations for the placement of temporary housing after a disaster event. The first location is behind the Community Center on 1170 Peconic Lane. This location has opportunities for utility hookups. The Community Center also would be able to provide additional services.

A second location for temporary housing is Strawberry Fields in Mattituck. The site has water access but lacks other utilities at this time.

Permanent Housing

The Town of Southold’s GIS Department would use buildable lands data to identify locations for the placement of permanent housing in the event that homes in the floodplain need to be relocated.

9.42.8 Hazard Event History Specific to the Town of Southold

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 Town of Southold’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 9.42-11 provides details regarding municipal-specific loss and damages the town 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 9.42-11. 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 Cape Cod by the morning of Saturday, February 9, 2013, producing very heavy	While the Town was impacted by the storm, it did not require reimbursement from FEMA.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			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.	
July 1, 2015	Thunderstorm Wind	No	A passing warm front triggered a severe thunderstorm that impacted Northeastern Suffolk County.	Trees were reported down along Bailie Beach Road in Mattituck with \$1.5K in property damage.
July 23, 2015	Thunderstorm Wind	No	A passing cold front triggered widespread severe thunderstorms across Long Island.	A trained spotter in Orient reported snowfall of 30 inches. On Fishers Island, a tree was reported down along Avenue B and another along Madeline Avenue with \$2K in property damage. A telephone pole was reported down and a roof damaged on Plum Island resulting in \$5K in property damage.
August 4, 2015	Thunderstorm Wind	No	An approaching cold front triggered a cluster of severe thunderstorms producing multiple macrobursts that impacted the North Shore of Long Island, from Northwest Nassau County onto the North Fork of Long Island.	Numerous trees and wires were reported down across Southold with \$7.5K in property damage reported. Trees and power lines were reported down throughout the Hamlet of Orient Point with \$7.5K in property damage reported. Trees and widespread large branches were reported down along the East End Road on Fishers Island resulting in \$5K in property damage.
January 10, 2016	High Surf, Coastal Erosion	No	Strong high pressure over Southeast Canada and low pressure drifting off the Mid Atlantic coast resulted in 2 days of persistent northeast winds Jan 8th and 9th. This was followed by 12 to 18 hours of east to southeast winds of 15 to 20 mph with gusts to 30 to 35 mph leading into high tides on Jan 10th.	Orient Beach State Park experienced moderate erosion along the Gardiners Bay shoreline during high tide due to waves and strong east winds.
July 1, 2016	Thunderstorm Wind	No	A passing cold front triggered isolated severe thunderstorms in Orange and Suffolk Counties	Trees were reported down in Mattituck resulting in \$3K in property damage.
August 10, 2016	Tornado, Lightning	No	A trough of low pressure helped trigger isolated severe storms, which impacted Suffolk County. This storm produced a tornado.	An EF-0 tornado in Mattituck resulted in damage concentrated between Main Road and New Suffolk Avenue close to the corridor from Cardinal Drive southeast to Blossom Bend, where the tornado lifted before reaching New Suffolk Avenue. Wind damage was confined mainly to trees,



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				<p>where several trees were snapped in half. Trees were reported down at the intersection of Mill Lane and Route 25, just east of Mattituck resulting in \$4K in property damage. A house was struck by lightning on Poplar Street, between Noyac Road and Benard Place in Noyack, resulting in a fire and \$25K in property damages. A house was struck by lightning on Wells Avenue in Southold, causing a fire which destroyed the house resulting in \$500K in property damage.</p>
September 3-6, 2016	High Surf, Coastal Erosion	No	Slow moving tropical cyclone Hermine caused several days of 8 to 12 feet of surf breaking on Atlantic ocean shorelines. The surf on top of storm tide September 3rd through the 6th caused significant beach erosion on Long Island ocean beaches.	At Orient Point State Park, moderate erosion was experienced along the Gardiners Bay Shoreline, with some loss of boulders.
November 20, 2016	Strong Wind	No	Strong winds occurred behind a deepening area of low pressure.	At 10:00 am, strong winds in Orient knocked down a phone pole on Route 25 near the Oysterponds School and Fire House.
January 23, 2017	Strong Wind	No	Deep low pressure passed south and east of Long Island.	A trained spotter reported a downed large tree in Orient at Old Farm Road and Orchard Street at 7 am on the 24th.
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.	While the Town was impacted by the storm, it did not require reimbursement from FEMA.
September 6, 2017	Thunderstorm Wind	No	A passing cold front triggered an isolated severe thunderstorm which impacted Eastern Suffolk County.	A tree was reported down on Old Main Road, just north of Main Road (25) in Orient resulting in \$1K in property damage.
September 19-20, 2017	High Surf, Coastal Erosion	No	Tropical cyclone Jose tracked north and east along the Mid Atlantic coast Tuesday September 19th, eventually passing about 150 to 200 miles southeast of Montauk Point Tuesday night into Wednesday morning. The elevated water levels combined with incoming energetic swells from Jose, also brought surf of 7 to 13 feet. This caused widespread beachfront flooding, dune erosion, and localized wash overs.	Orient Point State Park had moderate erosion along the Gardiners Bay shoreline due to high wave action during times of high tide Sunday night and Monday morning.
October 29-	High Wind	No	A low pressure system rapidly	At 915 pm on the 29th, a



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
30, 2017			intensified as it moved north, passing west of the local area.	trained spotter observed power lines down, which led to power outages for the town of Orient.
March 2, 2018	High Wind	No	A deep area of low pressure passed off the coast.	A trained spotter measured a 58 mph wind gust in Orient at 525 pm. At 7 pm, a trained spotter reported a tree down causing wires to come down in the town of Orient.
October 29, 2018	Tornado	No	An upper level disturbance associated with an upper level low in Southeastern Canada, along with a surface trough of low pressure approaching from the west resulted in a line of severe thunderstorms which produced a tornado over Fishers Island, NY.	An EF-1 tornado resulted in many downed trees and damages to homes on Fishers Island. \$50K in property damage was reported.

Notes:

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

9.42.9 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 Town of Southold. 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 9.42-12. 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			
Elizabeth Field*	Aviation	X	-	X	Unknown	2020-Southhold-012
Lake House – Peconic Dunes Co Park*	County Building	X	-	X	Unknown	2020-Southhold-012
Infirmary*	County Building	X	-	X	Unknown	2020-Southhold-012
Girls Cabin 1/2*	County Building	X	-	X	Unknown	2020-Southhold-012
Girls Cabin 3/4*	County Building	X	-	X	Unknown	2020-Southhold-012
Girls Cabin 5/6*	County Building	X	-	X	Unknown	2020-Southhold-012
Sports Shed – Peconic Dunes Co Park*	County Building	X	-	X	Unknown	2020-Southhold-012
Camp Store*	County Building	X	-	X	Unknown	2020-Southhold-012
Cook Shed*	County Building	X	-	X	Unknown	2020-Southhold-012
Kitchen Shed*	County Building	X	-	X	Unknown	2020-Southhold-012
Vector Control Storage Garage*	County Building	X	-	X	Unknown	2020-Southhold-012
Fishers Island Community Center	Polling Location	X	-	X	Unknown	2020-Southhold-012
Cutchogue Post Office*	Post Office	X	-	X	Unknown	2020-Southhold-



Name	Type	Exposure			Complies with	Addressed by
						012
New Suffolk Post Office*	Post Office	X	-	X	Unknown	2020-Southhold-012
Jockey Creek Bridge*	Transportation	X	-	X	Yes	-
Grand Avenue Bridge*	Transportation	X	-	X	Yes	-
West Creek Bridge*	Transportation	X	-	X	Yes	-
Mud Creek Bridge*	Transportation	X	-	X	Yes	-
Downs Creek Bridge*	Transportation	X	-	X	Yes	-
Goose Creek Bridge*	Transportation	X	-	X	Yes	-
Orient Point Ferry Dock*	Transportation	X	-	X	Yes	-
Bayview At Mattituck Wtp*	Potable Water	X	-	X	Unknown	2020-Southhold-012
Plum Island Disease Ctr*	Wastewater	X	-	X	Unknown	2020-Southhold-012
Vector Control Storage Garage*	DPW/DOT	X	-	X	Unknown	2020-Southhold-012
Tilcon Minerals, Mattituck Inlet Wharf*	Port Facility	X	-	X	Unknown	2020-Southhold-012
Advanced Track Products Inc*	Transportation	X	-	X	Unknown	2020-Southhold-012
Rose Field	Tier 2	X	-	X	Unknown	2020-Southhold-012
Marine Science Tech Center*	County Building	-	-	X	Unknown	2020-Southhold-012
SMELC Shellfish Hatchery*	County Building	-	-	X	Unknown	2020-Southhold-012
SMELC Spat Garage*	County Building	-	-	X	Unknown	2020-Southhold-012
Electric or Gas Facility*	Electric/Power	-	-	X	Unknown	2020-Southhold-012
Electric or Gas Facility*	Electric/Power	-	-	X	Unknown	2020-Southhold-012



Name	Type	Exposure			Complies with	Addressed by
Southold-8j*	Electric/Power	-	-	X	Unknown	2020-Southold-012
Elizabeth Field	Tier 2	-	X	X	Unknown	2020-Southold-012
Southold Gt Facility	Tier 2	-	-	X	Unknown	2020-Southold-012

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 Town of Southold. The Town of Southold 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 Town of Southold indicated the following:

- The Town changed the hazard ranking for severe winter storm from medium to high, noting frequency of events.
- The Town agreed with the remainder of the calculated hazard rankings.

Table 9.42-13. Hazard Ranking

Coastal Erosion Medium	Cyber Security Medium	Disease Outbreak Medium	Drought Low	Earthquake Medium	Expansive Soils Low
Extreme Temperature Medium	Flood High	Groundwater Contamination Medium	Hurricane High	Infestation and Invasive Species Medium	Nor'Easter High
Severe Storm Medium	Severe Winter Storm High	Shallow Groundwater Low	Wildfire Medium		

Identified Issues

The municipality has identified the following vulnerabilities within their community:





- Coastal erosion along the north shore from storms has threatened the public beaches on Long Island Sound and has threatened County Route 48 in the hamlet of Southold. This would include threatening the water and sewer lines under the roadway.
- Coastal erosion and flooding is a threat to access to Orient Beach State Park.
- Coastal erosion also threatens the Town’s coastal bluffs.
- Mattituk School and Oysterponds School do not have backup power sources. Both are identified as potential sheltering locations.
- The Town’s communication tower support building requires upgraded backup power. The buildings currently only have one hour of battery backup. The communication towers are used for emergency response communications.
- The local hospital (Eastern Long Island Hospital -Stonybrook) is located in an area that is not high above sea level.

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

- Additional stormwater drainage infrastructure located in upland areas, to reduce the stormwater load, in the low lying areas during high rain events to prevent road washout.
- All roads that are close to the sound and the bay are a concern for flooding
- Route 48 by Town beach erodes every year, Peconic Bay Boulevard floods every year. Downtown Greenport Business District floods during storms, Causeway between Orient and East Marion has flooded.

9.42.10 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 9.42-15). 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 9.42-14. 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	
SO-1 (Sandy HMGP LOI #1475)	Primary Emergency Shelter Generator	Hurricane, Nor'Easter, Severe storm, Severe Winter Storm, Earthquake			No Progress	Cost		<ol style="list-style-type: none"> 1. Include in 2020 HMP 2. Mattituck School and Oysterponds School do not have backup power sources. Both are identified as potential sheltering locations. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-2 (former SO-1)	Identify properties, priorities and funding options for property acquisition within the flood plains, thus limiting the amount of development within the wetlands. Acquire prioritized properties as funding becomes available.	Flooding			In Progress	Cost		<ol style="list-style-type: none"> 1. Include in 2020 HMP 2. Repetitive loss action 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-3 (former SO-2)	Implement an ongoing maintenance program for the State Route 25 causeway seawalls, recently retrofitted by NYSDOT, to mitigate flooding to the level afforded by the	Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		<ol style="list-style-type: none"> 1. Discontinue 2.
						Level of Protection		



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.
						Damages Avoided; Evidence of Success		
	current retrofits. This is State-owned infrastructure.					Damages Avoided; Evidence of Success		3. Ongoing Capability
SO-4 (former SO-3)	Investigate need, priorities, design and funding options to establish an on-going erosion control program via beach replenishment and the potential use of hardened structures. Implement / acquire priority properties as funding becomes available.	Coastal Erosion			In Progress	Cost		1. Include in 2020 HMP 2. Erosion monitoring program 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-5 (former SO-4)	Investigate need, priorities, design and funding options to stabilize vulnerable bluffs by introducing natural vegetation and through the use of hardened structures. Implement projects on priority properties as funding becomes available.	Coastal Erosion			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-6 (former)	Support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been	Flooding, Hurricane, Nor'Easter,			Ongoing Capability	Cost		1. Discontinue
						Level of		



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.
						Protection	Damages Avoided; Evidence of Success	
SO-5)	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. Support the Implementation of projects on priority properties as funding becomes available.	Severe Storms				Protection		2. 3. Ongoing Capability
SO-7 (former SO-6)	Construct an Emergency Operations Center within one of the existing Town facilities. Priority is considered very high.	All Hazards			Complete	Cost		1. Discontinue 2. 3. Complete
SO-8 (former SO-7)	In addition to maintaining the critical evacuation routes (non town-owned infrastructure), develop and implement a program to improve signage and other forms of real-time signage and other forms of real-time communication (e.g. call-back systems) with the public regarding evacuation routes. Support this effort through public	Flooding, Hurricane, Nor' Easter, Severe Storms			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
						Level of Protection		
						Damages Avoided; Evidence of Success		



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	education/outreach.							
SO-9 (former SO-8)	Investigate need, priorities, design and funding options to dredge vulnerable seaways. Support the implementation of projects as funding becomes available. These activities are state and federally regulated and controlled.	Coastal Erosion			Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability
SO-10 (former SO-9)	Investigate need, priorities and funding options for property acquisition at feasible points in critical watersheds to establish storm water detention / retention facilities for stormwater management. Implement / acquire priority properties as funding becomes available.	Flooding, Hurricane, Nor'Easter, Severe Storms,			In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
SO-11 (former SO-11)	Develop a post-disaster action plan, including a debris management plan. This to be incorporated into existing emergency management plans. Consider the opportunities and constraints of working together with neighboring communities.	All Hazards			Complete, Debris Management Plan developed at the County level	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of		3. Complete



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						Success		
SO-12 (former SO-12)	Investigate and implement a program to enhance storm preparedness and floodplain management capabilities through participation in some or all of the following activities: work with adjacent communities to institute a continuing education program for County and community staff to become certified in benefit cost analysis and floodplain management with the goal to become certified floodplain managers; establish and maintain a schedule of on-going training classes to obtain and maintain these certifications; CRS program workshops and training; BCA training; elevation certificate training; etc.	Flood, Nor'Easter, Hurricane, Severe Weather			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
SO-13 (former SO-13)	Investigate need, priorities, design and funding options to elevate Town roadways through identified floodplains. Implement priority projects as funding becomes	Flooding, Hurricane, Nor'Easter,			In Progress	Cost		1. Include in 2020 HMP 2.
						Level of Protection		



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.
						Damages Avoided; Evidence of Success		
	available.	Severe Storms,				Damages Avoided; Evidence of Success		3.
SO-14 (former SO-14)	Develop a program to expand and/or enhance the current stormwater management system to be in compliance with federal and state regulations such that there will be a net reduction in the flood risk caused by stormwater impacts.	All except Wildfire, Infestation and Drought			In Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
SO-15	Relocate existing utilities underground. This action is an objective of the Town of Southold Comprehensive Plan 2020.	All Hazards			No Progress	Cost		1. Include in 2020 HMP
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3.
SO-16	Avoid development other than water-dependent uses in coastal	Coastal Erosion, Flooding,			Ongoing Capability	Cost		1. Discontinue



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.
	<p>hazard areas. Locate new development which is not water-dependent as far away from coastal hazard areas as practical.</p> <ul style="list-style-type: none"> Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss. <p>Current regulations at the Federal, State and Town levels do not support the avoiding or relocation of structures in these zones.</p>	Hurricane, Nor'Easter				Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability
SO-17	<p>Avoid reconstruction of structures, other than structures that are part of a water-dependent use, damaged by 50% or more of their value in coastal hazard areas.</p> <ul style="list-style-type: none"> Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation 	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		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.
	<p>strategies to minimize structural loss.</p> <p>Current regulations at the Federal, State and Town levels do not support the avoiding or relocation of structures in these zones.</p>							
SO-18	<p>Move existing development and structures as far away from flooding and erosion hazards as practical. Maintaining existing development and structures in hazard areas may be warranted for:</p> <p>a. structures which functionally require a location on the coast or in coastal waters.</p> <p>b. water-dependent uses which cannot avoid exposure to hazards.</p> <p>c. sites in areas with extensive public investment, public infrastructure, or major public facilities.</p> <p>d. sites where relocation of an existing structure is not practical.</p> <p>Actions/applications are reviewed to the policies of the Town of Southold</p>	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		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.
	<p>Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p> <p>Current regulations at the Federal, State and Town levels do not support the avoiding or relocation of structures in these zones.</p>							
SO-19	<p>Provide public infrastructure in or near identified high velocity flood zones, structural hazard areas, or natural protective features only if the infrastructure:</p> <p>a. will not promote new development or expansion of existing development in: a Coastal Barrier Resource Area, except as provided in the Coastal Barrier Resource System Act; a Coastal Erosion Hazard Area; or a V-zone.</p> <p>b. is designed in a manner which will not impair protective capacities of natural protective features, and;</p> <p>c. is designed to avoid or withstand damage from flooding and erosion</p> <p>Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p>					Cost		<p>1. Discontinue</p> <p>2.</p> <p>3. Ongoing Capability</p>
	See above	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Damages Avoided; Evidence of Success		
SO-20	Manage development in floodplains outside of coastal hazard areas so as	Coastal Erosion, Flooding,			Ongoing Capability	Cost		1. Discontinue



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.
						Level of Protection	Damages Avoided; Evidence of Success	
	to reduce adverse environmental effects, minimize the need for future structural flood protection measures, or expansion of existing protection measures and to meet federal flood insurance program standards. Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.	Hurricane, Nor'Easter				Level of Protection		2. 3. Ongoing Capability
SO-21	Use vegetative non-structural measures to manage flooding and erosion hazards. <ul style="list-style-type: none"> Use vegetative non-structural measures which have a reasonable probability of managing flooding and erosion, based on shoreline characteristics including exposure, geometry, and sediment composition. Use vegetative measures to increase protective capabilities of natural protective features. Discourage clearing of existing, particularly 	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		



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.
	<p>indigenous vegetation during siting, design, construction and re-grading phases of any development project.</p> <ul style="list-style-type: none"> Discourage alteration of existing natural drainage contours and swales and encourage enhancement of those natural drainage features where they exist. <p>Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p>							
SO-22	<p>Enhance existing natural protective features and processes, and use non-structural measures which have a reasonable probability of managing erosion</p> <ol style="list-style-type: none"> Enhance the protective capabilities of beaches by using fill, artificial nourishment, dredge disposal, or by restoring coastal processes. <ol style="list-style-type: none"> Use only clean sand or gravel with a grain size equivalent to or slightly larger than the native material at the project site. Design criteria for enhancing the protective capabilities of beaches should not exceed the level necessary to achieve protection from a 30-year storm, except where there is an overriding public benefit. Provide for sand by-passing at engineered inlets or other shore protection structures to maintain coastal 					Cost		1. Discontinue
						Level of Protection		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.
	<p>processes and protective capabilities of beaches.</p> <p>2. Protect and enhance existing dunes or create new dunes using fill, artificial nourishment, or entrapment of windborne sand.</p> <p style="padding-left: 40px;">a. Use only clean sand with a grain size equivalent or slightly larger than native dune material.</p> <p style="padding-left: 40px;">b. Design criteria for created dunes should not exceed the overtopping height defined by the 30-year storm, except where there is an overriding public benefit.</p> <p style="padding-left: 40px;">c. Enhance existing or created dunes using snow fencing and dune vegetation.</p> <p style="padding-left: 40px;">d. Construct and provide for use of walkovers to prevent pedestrian damage to existing and enhanced dunes.</p> <p>3. Increase protective capacity of natural protective features using practical vegetative measures in association with all other enhancement efforts.</p> <p style="padding-left: 40px;">Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p>				Ongoing Capability	Damages Avoided; Evidence of Success		
SO-23	4.2	Coastal Erosion, Flooding, Hurricane, Nor'Easter		Protect and restore natural protective features.		Cost		1. Discontinue
				Natural protective geologic features provide valuable protection and should be protected, restored and enhanced. Destruction or degradation of these features should be discouraged or prohibited.		Level of Protection		2.
				A. No development is permitted in natural protective feature areas, except as specifically allowed under the relevant portions				



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	of 6 NYCRR 505.8.			<p>B. Maximize the protective capabilities of natural protective features by:</p> <ol style="list-style-type: none"> 1. avoiding alteration or interference with shorelines in a natural condition 2. enhancing existing natural protective features 3. restoring the condition of impaired natural protective features wherever practical 4. using practical vegetative approaches to stabilize natural shoreline features 5. managing activities to limit damage to, or reverse damage which has diminished, the protective capacities of the natural shoreline 6. providing relevant signage or other educational or interpretive material to increase public awareness of the importance of natural protective features <p>C. Minimize interference with natural coastal processes by:</p> <ol style="list-style-type: none"> 1. providing for natural supply and movement of unconsolidated materials and for water and wind transport 2. limiting intrusion of structures into coastal waters <p>D. A limited interference with coastal processes may be allowed where the principal purpose of the structure is necessary to:</p> <ol style="list-style-type: none"> 1. simulate natural processes where existing structures have altered the coast 2. provide necessary public benefits for flooding and erosion protection 3. provide for the efficient operation of water-dependent uses 			<p>3. Ongoing capability</p>

Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that



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.	
	incorporated avoidance and mitigation strategies to minimize structural loss.							
	See above	Coastal Erosion, Flooding, Hurricane, Nor' Easter			Ongoing Capability	Damages Avoided; Evidence of Success		
SO-24	<p>4.3 Protect public lands and public trust lands and use of these lands when undertaking all erosion or flood control projects.</p> <p>A. Retain ownership of public trust lands which have become upland areas due to fill or accretion resulting from erosion control projects. (However, in situations where erosion control projects have created public land updrift, but also resulted in damage or erosion to public lands and public trust lands downdrift of the control structure, the public benefit of that structure or project should be re-examined and appropriate modifications made as conditions suggest.)</p> <p>B. Avoid losses or likely losses of public trust lands or use of these lands, including public access along the shore, which can be reasonably attributed to or anticipated to result from erosion protection structures.</p> <p>C. Provide and maintain compensatory mitigation of unavoidable impacts on public trust lands and their use.</p> <p>Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p>					Cost		<p>1. Discontinue</p> <p>2.</p> <p>3. Ongoing Capability</p>
	See above	Coastal Erosion, Flooding, Hurricane, Nor' Easter			Ongoing Capability	Damages Avoided; Evidence of Success		
So-25	Ensure that expenditure of public funds for flooding and erosion control projects results in a public benefit. Give priority in expenditure of public funds to actions which protect public health and safety; mitigate flooding and erosion problems caused					Cost		1. Discontinue



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	<p>by previous human intervention; protect areas of intensive development; and protect substantial public investment in land, infrastructure, and facilities.</p> <p>A. Expenditure of public funds for flooding or erosion control projects:</p> <ol style="list-style-type: none"> 1. is limited to those circumstances where public benefits exceed public costs 2. is prohibited for the exclusive purpose of flooding or erosion protection for private development, with the exception of work done by an erosion control district, <p>B. Factors to be used in determining public benefit attributable to the proposed flood or erosion control measure include:</p> <ol style="list-style-type: none"> 1. economic benefits derived from protection of public infrastructure and investment and protection of water-dependent commerce, or 2. protection of significant natural resources and maintenance or restoration of coastal processes, or 3. integrity of natural protective features, or 4. extent of public infrastructure investment, or 5. extent of existing or potential public use <p>Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.</p>				Level of Protection		<ol style="list-style-type: none"> 2. 3. Ongoing Capability 	
	See above	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Damages Avoided; Evidence of Success		



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						Cost		
SO-26	The siting and design of projects involving substantial public expenditure should factor in the trend of rising sea levels. Actions/applications are reviewed to the policies of the Town of Southold Local Waterfront Revitalization Program that incorporated avoidance and mitigation strategies to minimize structural loss.	Coastal			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-27	Provide education to the public relating to natural hazards. This action is a goal of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-28	Create a recovery ordinance for Town Code. This action is an objective of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			No Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		



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						Cost		
SO-29	Prepare a coastal resilience plan for Southold Town to identify, plan and address (among other initiatives) vulnerable areas subject to repetitive loss from storm surge and/or flooding. This action is an objective of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			No Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-30	Audit Southold's existing regulations related to coastal resilience. This action is an objective of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-31	Re-examine the location of the Coastal Erosion Hazard Area line. This action is an objective of the Town of Southold Comprehensive Plan 2020	Coastal Erosion, Flooding, Hurricane, Nor'Easter			In Progress; CEHA boundaries being updated by NYS DEC	Cost		1. Discontinue 2. 3. Project underway through NYS DEC
						Level of Protection		
						Damages Avoided; Evidence of Success		



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						Cost		
SO-32	Update the Town of Southold Hurricane/Coastal Storm Emergency Response Plan. This action is an objective of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			No Progress	Cost		<ol style="list-style-type: none"> 1. Include in 2020 HMP 2. Post Disaster Recovery & Reconstruction Plan 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-33	Complete a Post Disaster Recovery & Reconstruction Plan that would include: <ol style="list-style-type: none"> 1. Debris and pollution (HAZMAT) control and removal. This action is a goal of the Town of Southold Comprehensive Plan 2020.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			No Progress	Cost		<ol style="list-style-type: none"> 1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
SO-34	Earth dike repairs to protect vulnerable agricultural lands from flooding from marine waters. This action is a result from breaches in the existing dike due to the felling of trees and erosion.	Coastal Erosion, Flooding, Hurricane, Nor'Easter			No Progress	Cost		<ol style="list-style-type: none"> 1. Discontinue 2. 3. Private property owners responsibility
						Level of Protection		
						Damages Avoided; Evidence of Success		



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						Cost	Level of Protection	
SO-35 (former SO-10)	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) Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners) Create a Multi-Jurisdictional Seismic Safety Committee in Suffolk County (build regional, county and local capabilities to manage seismic risk, both pre- and post-disaster) Alignment of Mitigation Initiatives through all levels of Government (effort to build State and Federal level recognition and support of the County and local hazard mitigation planning strategies identified in this plan). See also specific initiatives below further implementing the above county-led initiatives. 	All Hazards			Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
	See above					Damages Avoided; Evidence of Success		
SO-36	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).	Flood, Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Severe winter Storm, Wildfire, Winter Storm			In Progress	Cost		1. Include in 2020 HMP 2. Repetitive Loss action 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		



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						Cost	Level of Protection	
	Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.							
SO-37	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			Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Southold 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:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Town of Southold 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: 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 9.42-15 summarizes the comprehensive-range of specific mitigation initiatives the Town of Southold 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 9.42-16 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 9.42-15. 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-Southold-001	Repetitive Loss Mitigation	1, 2	Flood, Severe Storm	<p>Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	No	None	3 years	NFIP Floodplain Administrator, supported by homeowners	\$3 Million	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP
2020-Southold-002	Replenishment of Erosion Prone Beaches	3, 4, 5	Coastal Erosion, Flood, Hurricane, Nor'East er	<p>Problem: Coastal erosion is an ongoing issue in the Town at locations such as County Route 48, the access point to Orient Beach State Park, and the Town's coastal bluffs. A study by the USACE has determined that the most appropriate mitigation action is beach replenishment.</p> <p>Solution: The Town will</p>	No	Permitting	Within 5 years	Town Administration, USACE	High	Protection from erosion/flood	HMGP, USACE, Town budget	High	NSP	NR



Table 9.42-15. 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
				seek funding support to complete replenishment actions on Town owned beaches and advocate that the USACE conduct a comprehensive replenishment project by working with private shoreline owners.										
2020-Southold-003	Coastal Erosion Monitoring Program	1, 2, 3, 5	Coastal Erosion	<p>Problem: Coastal erosion is an ongoing issue in the Town.</p> <p>Solution: The Town will participate in the County SWCD's proposed coastal erosion monitoring program to track shoreline retreat and volume loss to better inform mitigation strategy and planning decisions.</p>	No	None	Within 1 year	Suffolk County SWCD, Town Administration	Staff time	Data collection to inform mitigation and planning decisions.	SWCD	High	LPR	PR
2020-Southold-004	Backup Power for Town Shelters	1, 2, 7	All Hazards	<p>Problem: Mattituck School and Oysterponds School do not have backup power sources. Both are identified as potential sheltering locations.</p> <p>Solution: The Town will work with the school districts to purchase and install backup generators and necessary electrical hookups at each school.</p>	Yes	None	Within 2 years	School districts, Town OEM, Engineer	\$50,000	Continuity of operations and safe sheltering	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, School budget, Town budget	High	SIP	ES
2020-Southold-005	Communications Tower Building	1, 2, 7	All Hazards	<p>Problem: The Communications Tower building on Route 25 is responsible for</p>	Yes	None	Within 2 years	Town OEM, Engineer	\$50,000	Continuity of operations	FEMA HMGP and PDM, USDA Community	High	SIP	ES



Table 9.42-15. 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
	Backup Power			communications for police, fire, and rescue operations. The building lacks a permanent backup power supply. Solution: The Town Engineer will research what size generator is necessary to supply backup power to the Communications Tower Building. The Town will then purchase and install backup generators and necessary electrical hookup at the Communications Tower Building.							Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, School budget, Town budget			
2020-Southold-006	Stormwater Detention and Retention	1, 3, 4, 5	Flood, Severe Storm	Problem: Numerous areas of the Town require increased stormwater drainage. Solution: Investigate need, priorities and funding options for property acquisition at feasible points in critical watersheds to establish storm water detention / retention facilities for stormwater management. Implement / acquire priority properties as funding becomes available.	No	None	Within 5 years	Engineer	High	Increased stormwater drainage capacity	HMGP, BRIC, Town budget	High	SIP	SP
2020-Southold-007	Roadway Elevation	1, 2	Flooding, Hurricane, Nor'East er, Severe	Problem: Low lying roadways can be inundated by floodwaters, restricting access and hindering emergency response. Solution: Investigate need, priorities, design and	No	None	Within 5 years	Planning, Engineer	High	Reduction in flooding	HMGP, BRIC, Town budget	High	SIP	PP



Table 9.42-15. 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
			Storm	funding options to elevate Town roadways through identified floodplains. Implement priority projects as funding becomes available.										
2020-Southold-008	Underground Utilities	1, 2	Hurricane, Nor'East, Severe Storm, Severe Winter Storm	Problem: High winds and falling branches can result in falling utility lines and power failure. Solution: The Town will work with utility providers to relocate existing utilities underground.	No	None	Within 5 years	Administration, Utility providers	High	Reduction in power loss	Utility providers	High	SIP	PP
2020-Southold-009	Develop Recovery Ordinance	1, 7	All Hazards	Problem: The Town lacks a recovery ordinance. Solution: Create a recovery ordinance for Town Code.	No	None	Within 2 years	Planning, OEM	Staff time	Increased planning and preparedness	Town budget	High	LPR	ES
2020-Southold-010	Coastal Resilience Plan	3, 4, 5	Flood, Hurricane, Nor'East	Problem: The Town lacks a Coastal Resilience Plan. Solution: Prepare a coastal resilience plan for Southold Town to identify, plan and address (among other initiatives) vulnerable areas subject to repetitive loss from storm surge and/or flooding.	No	None	Within 2 years	Planning, OEM	Staff time	Increased planning and preparedness	Town budget	High	LPR	ES
2020-Southold-011	Post Disaster Recovery & Reconstruction Plan	1, 7	All Hazards	Problem: The Town lacks a Post Disaster Recovery & Reconstruction Plan. Solution: Complete a Post Disaster Recovery & Reconstruction Plan that would include: Debris and pollution (HAZMAT) control and removal.	No	None	Within 2 years	Planning, OEM	Staff time	Increased planning and preparedness	Town budget	Medium	LPR	ES



Table 9.42-15. 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-Southold-012	Critical Facilities Outreach	1, 6	Flood	<p>Problem: The Town has numerous critical facilities that are located in the 100-year floodplain. These facilities are not owned by the Town.</p> <p>Solution: The Town FPA will conduct outreach to facility managers to discuss flood risk and potential mitigation actions.</p>	Yes	None	Within 6 months	FPA	Staff time	Critical facility managers aware of flood risk and potential mitigation actions.	Town 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

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Table 9.42-16. 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-Southold-001	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2020-Southold-002	Replenishment of Erosion Prone Beaches	0	1	1	1	1	0	0	1	1	1	1	0	1	1	10	High
2020-Southold-003	Coastal Erosion Monitoring Program	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-Southold-004	Backup Power for Town Shelters	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2020-Southold-005	Communications Tower Building Backup Power	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2020-Southold-006	Stormwater Detention and Retention	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2020-Southold-007	Roadway Elevation	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-Southold-008	Underground Utilities	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11	High
2020-Southold-009	Develop Recovery Ordinance	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2020-Southold-010	Coastal Resilience Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2020-Southold-011	Post Disaster Recovery & Reconstruction Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2020-Southold-012	Critical Facilities Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High

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



9.42.11 Proposed Mitigation Action Types

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

Table 9.42-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	2020-Southold-003, 2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,	2020-Southold-002		2020-Southold-003			2020-Southold-002		2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Cyber Security	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Disease Outbreak	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Drought	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Earthquake	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Expansive Soils	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Extreme Temperature	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Flood	2020-Southold-009, 2020-Southold-010, 2020-Southold-011	2020-Southold-001, 2020-Southold-004, 2020-Southold-005, 2020-Southold-006, 2020-Southold-007, 2020-Southold-012	2020-Southold-002	2020-Southold-012		2020-Southold-001, 2020-Southold-007, 2020-Southold-012	2020-Southold-012	2020-Southold-002	2020-Southold-006	2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-010, 2020-Southold-011
Groundwater Contamination	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Hurricane	2020-Southold-009, 2020-Southold-010, 2020-Southold-011	2020-Southold-004, 2020-Southold-005, 2020-Southold-007, 2020-Southold-008, 2020-	2020-Southold-002			2020-Southold-007, 2020-Southold-008, 2020-Southold-012		2020-Southold-002		2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-010, 2020-



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Infestation and Invasive Species		Southold-012								Southold-011
	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Nor'easter	2020-Southold-009, 2020-Southold-010, 2020-Southold-011	2020-Southold-004, 2020-Southold-005, 2020-Southold-007, 2020-Southold-008, 2020-Southold-012	2020-Southold-002			2020-Southold-007, 2020-Southold-008, 2020-Southold-012		2020-Southold-002		2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-010, 2020-Southold-011
Severe Storm	2020-Southold-009, 2020-Southold-011	2020-Southold-001, 2020-Southold-004, 2020-Southold-005, 2020-Southold-006, 2020-Southold-007, 2020-Southold-008,				2020-Southold-001, 2020-Southold-007, 2020-Southold-008,			2020-Southold-006	2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Severe Winter Storm	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005, 2020-Southold-008,				2020-Southold-008,				2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011
Shallow Groundwater	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								2020-Southold-004, 2020-Southold-005, 2020-Southold-



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Wildfire	2020-Southold-009, 2020-Southold-011	2020-Southold-004, 2020-Southold-005,								009, 2020-Southold-011 2020-Southold-004, 2020-Southold-005, 2020-Southold-009, 2020-Southold-011

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

9.42.12 Staff and Local Stakeholder Involvement in Annex Development

The Town of Southold 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 town departments, including: the Office of Emergency Management and Police Department. The Office of Emergency Management 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 9.42-18. Contributors to the Annex

Name	Title/Entity	Method of Participation
Lloyd Reisenberg	Office of Emergency Management	Primary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Chief M. Flatley	Chief/EMO	Secondary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Michael Collins	Engineer	Attended plan participant meetings, provided impact data, contributed to the mitigation strategy

9.42.13 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Southold 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 Town of Southold has significant exposure.



Figure 9.42-1. Town of Southold Hazard Area Extent and Location Map

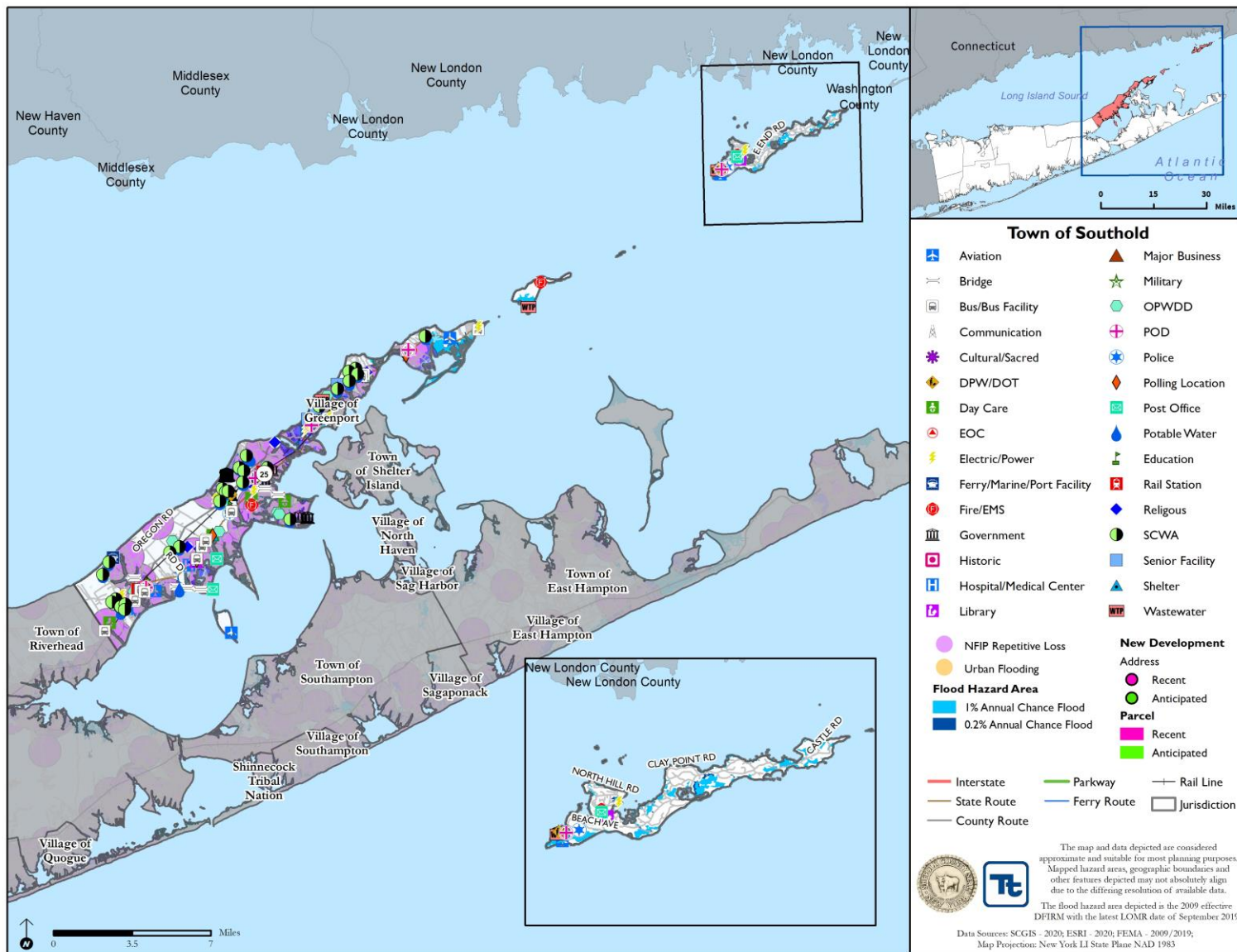




Figure 9.42-2. Town of Southold Hazard Area Extent and Location Map 2

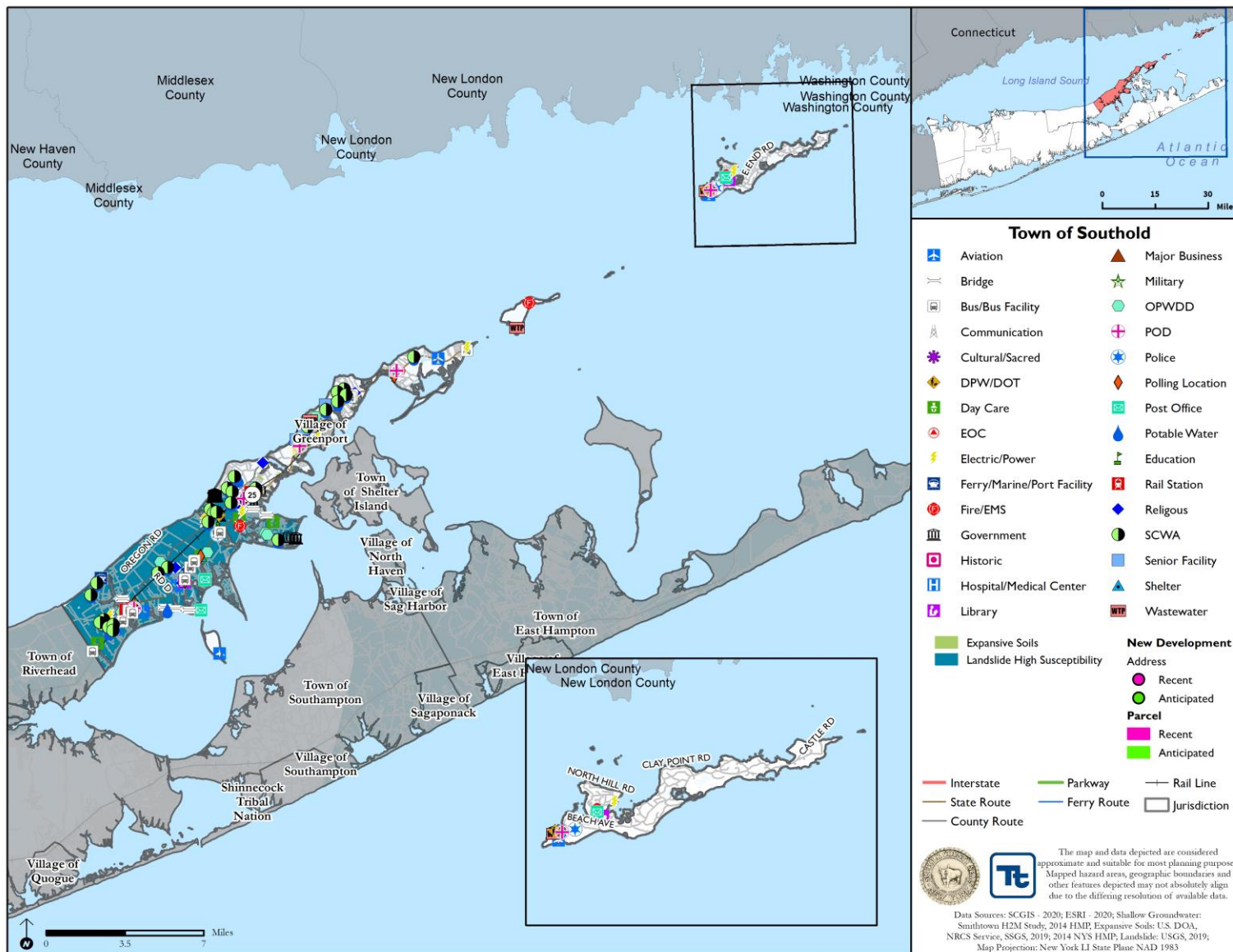




Figure 9.42-3. Town of Southold Hazard Area Extent and Location Map 3

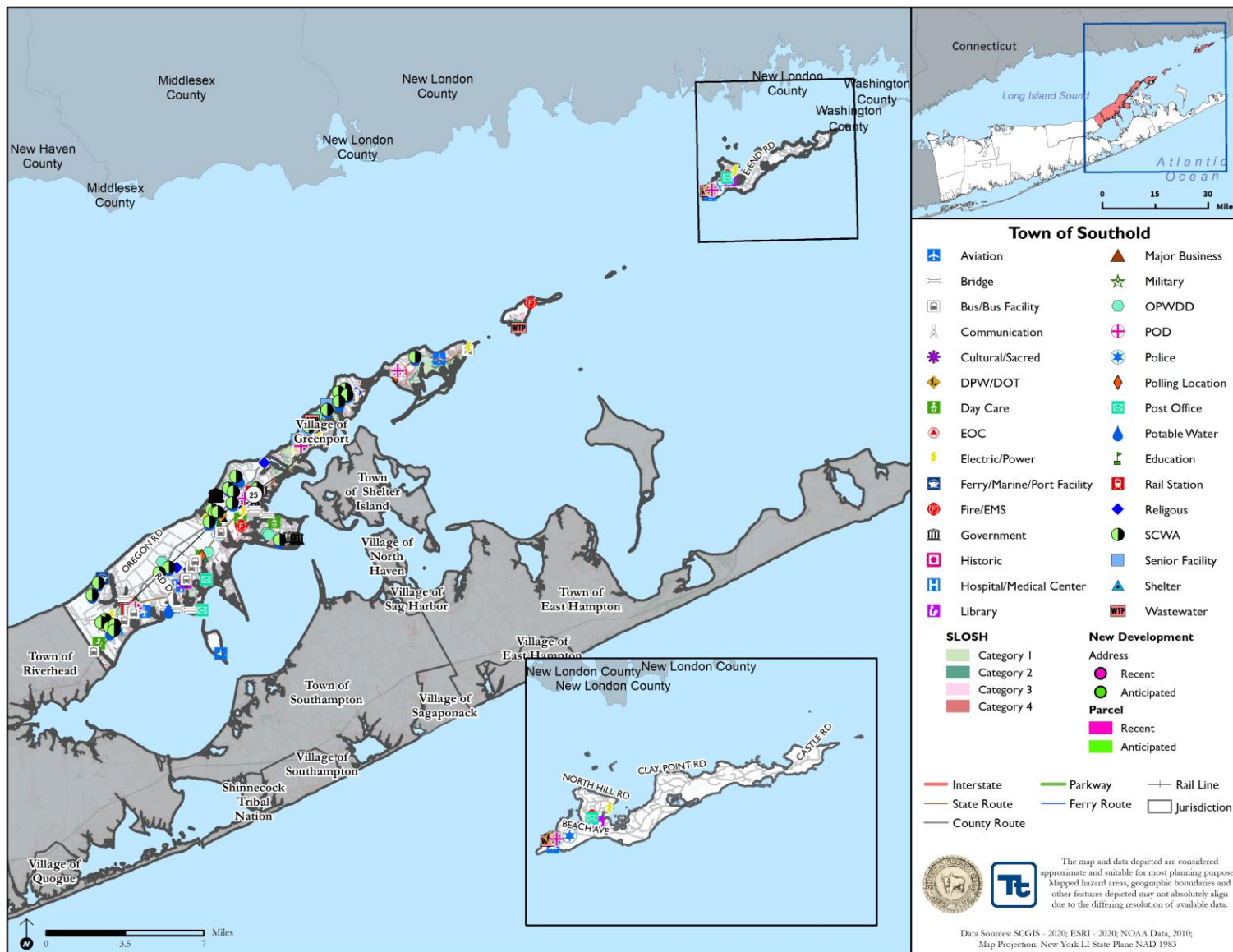




Figure 9.42-4. Town of Southold Hazard Area Extent and Location Map 4

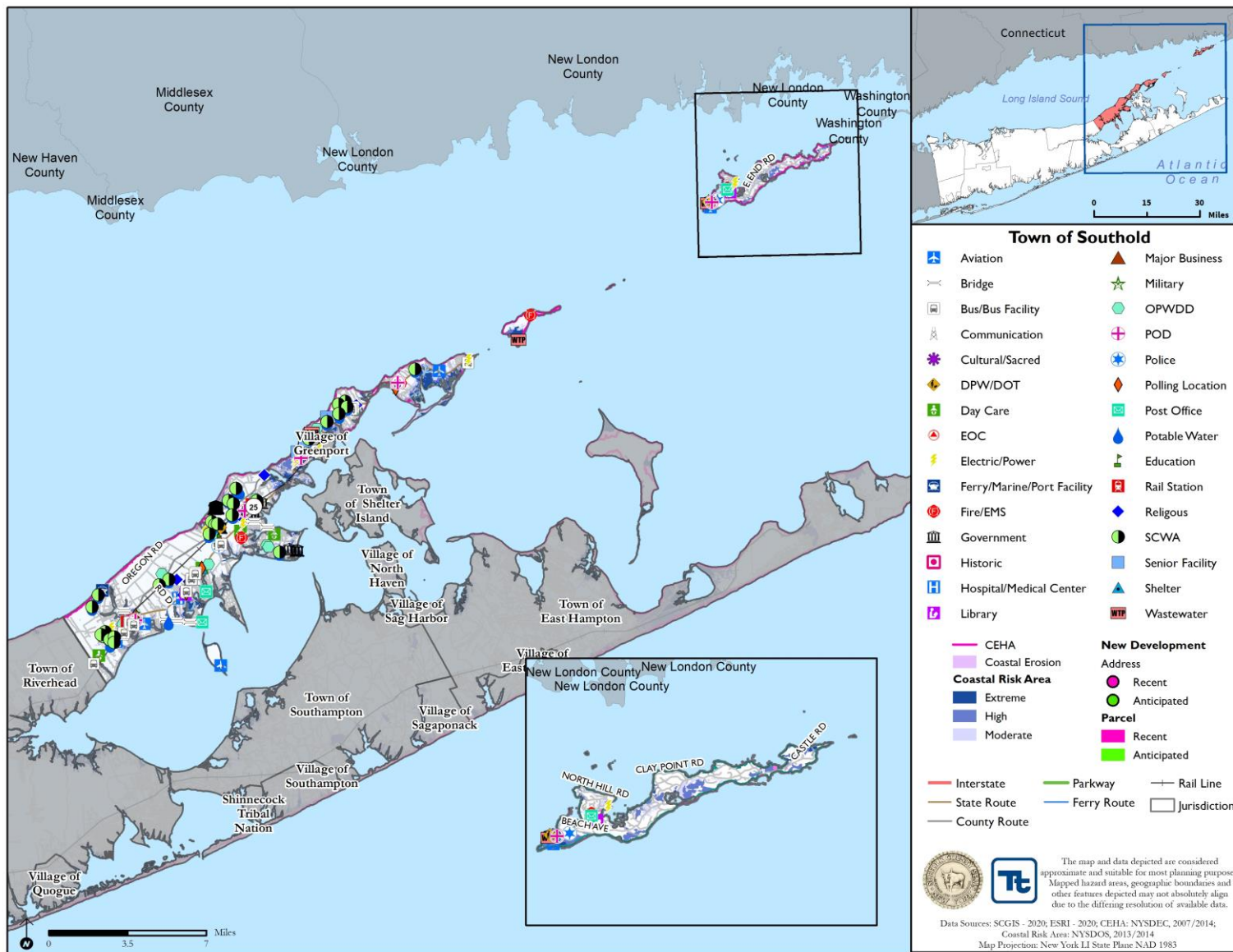




Figure 9.42-5. Town of Southold Hazard Area Extent and Location Map 5

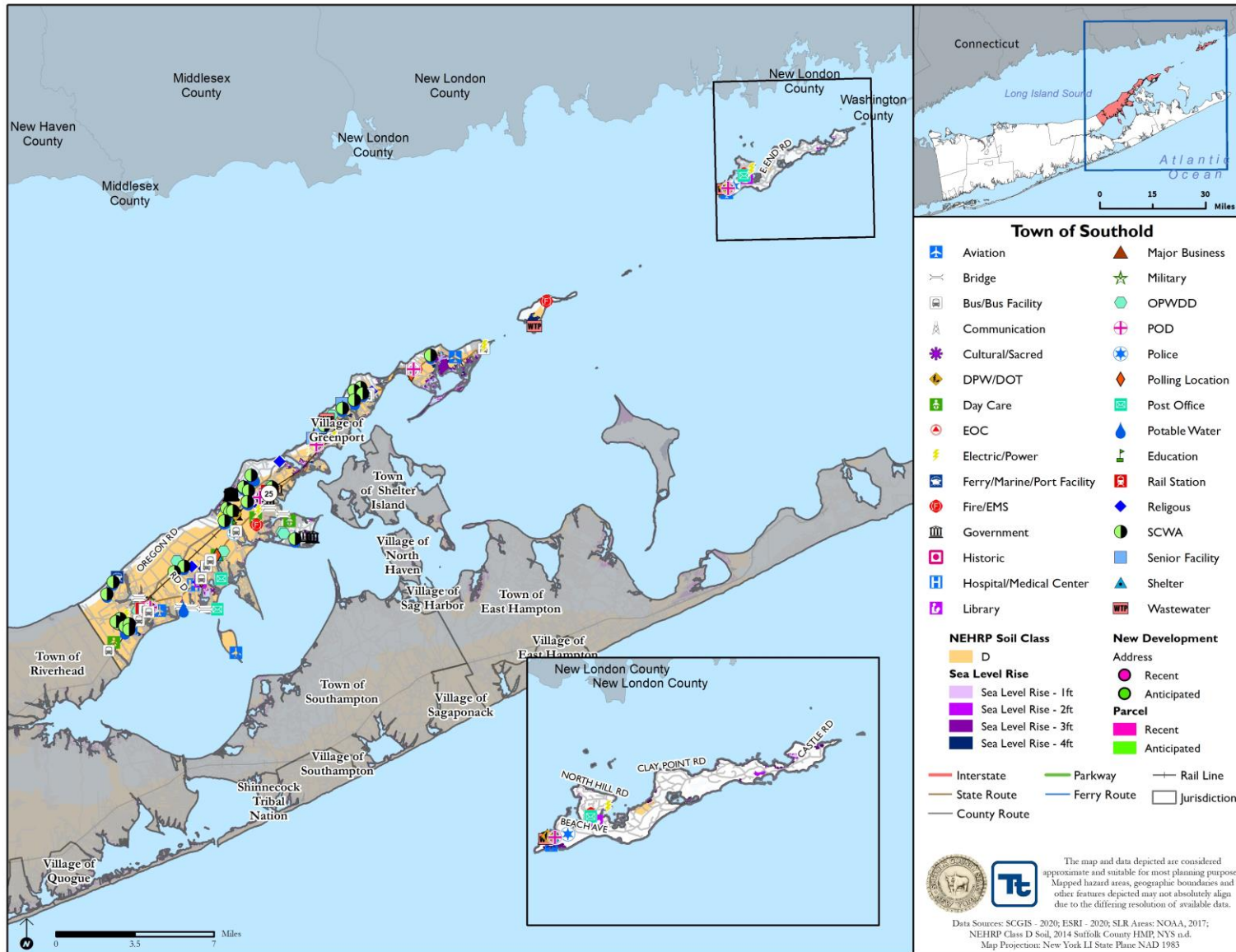
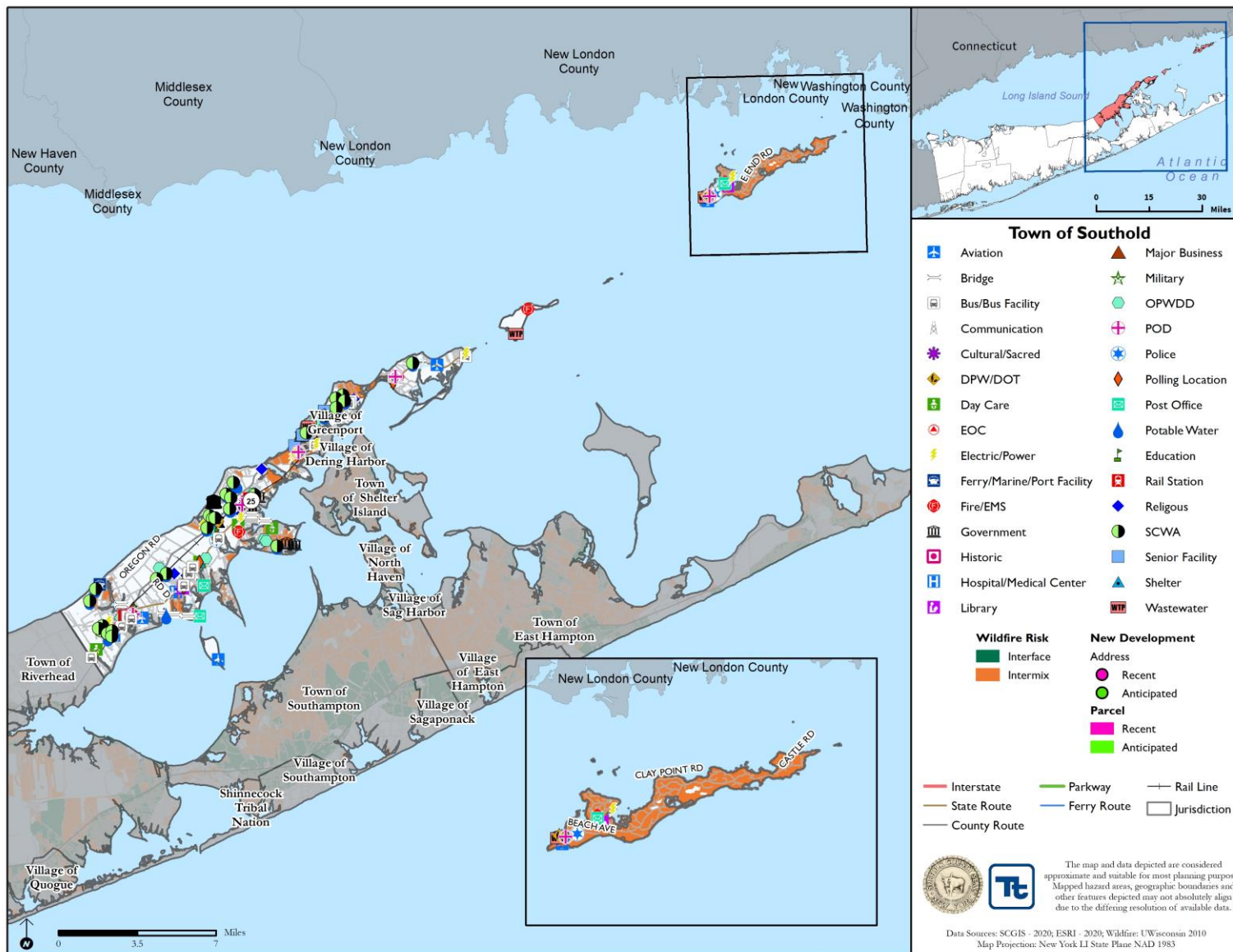




Figure 9.42-6. Town of Southold Hazard Area Extent and Location Map 6





Action Worksheet			
Project Name:	Repetitive Loss Mitigation		
Project Number:	2020-Southold-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims.		
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 alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	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"/>	
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime 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	Current problem continues
	Elevate homes	\$500,000	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages	
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-Southold-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Families moved out of high-risk flood areas.
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The Town has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	0	Project would remove families from the flood prone areas of the Town.
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Backup Power for Town Shelters		
Project Number:	2020-Southold-004		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. Mattituck School and Oysterponds School do not have backup power sources. Both are identified as potential sheltering locations.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Engineer will research what size generators are necessary to supply backup power to the Mattituck School and Oysterponds School. The Town will work with the school districts to purchase and install backup generators and necessary electrical hookups at each school.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input 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:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations
Useful Life:	20 years	Goals Met:	1, 2, 7
Estimated Cost:	\$50,000	Mitigation Action Type:	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 2 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	School districts, Town OEM, Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Backup Power for Town Shelters	
Project Number:	2020-Southold-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Town shelters.
Property Protection	1	Project will protect schools from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	The Town requires the cooperation of the schools to complete the project
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	Within 2 years
Agency Champion	1	School districts, Town OEM, Engineer
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Communications Tower Building Backup Power		
Project Number:	2020-Southold-005		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Communications Tower building on Route 25 is responsible for communications for police, fire, and rescue operations. The building lacks a permanent backup power supply.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town Engineer will research what size generator is necessary to supply backup power to the Communications Tower Building. The Town will then purchase and install backup generators and necessary electrical hookup at the Communications Tower Building.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input 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:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations
Useful Life:	20 years	Goals Met:	1, 2, 7
Estimated Cost:	\$50,000	Mitigation Action Type:	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 2 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Town OEM, Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Communications Tower Building Backup Power	
Project Number:	2020-Southold-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Communications Tower Building.
Property Protection	1	Project will protect Communications Tower Building from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Town has the legal authority to complete the project
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	Within 2 years
Agency Champion	1	Town OEM, Engineer
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	