9.3 Village of Brewster

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

9.3.1 Hazard Mitigation Planning Team

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

Table 9.3-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Michelle Chiudina, Village Clerk & Treasurer 50 Main Street, Brewster, NY 845-279-3760 mchiudina@brewstervillage-ny.gov	Domenic Consentino, DPW Supervisor 50 Main Street, Brewster, NY 845-279-2456 dconsentino@brewstervillage-ny.gov
NFIP Floodplain Administrator	
Todd Atkinson, Village Engineer of J. Robert Folchetti & Associates, LLC 31 Sodom Road, Brewster, NY 10509 845-363-1560 todd.atkinson@jrfa.com	

9.3.2 Municipal Profile

The Village of Brewster, incorporated in 1894, physically lies within the Town of Southeast. Walter Brewster initially founded the Village in the 1840s. In 1848, Brewster and his brother James purchased a 134-acre farm that comprised much of what is now the Village of Brewster, motivated by the prospect of nearby mines, an abundant water supply, and the certainty that the Harlem Line Railroad had plans to pass through the already incorporated Town of Southeast. At the time the Brewster family purchased the farm, there were only a few houses and a Methodist Church already in the area. A one-room schoolhouse was built soon thereafter. In 1849, Walter Brewster himself laid out Main Street Brewster.

The railroad furthermore helped to foster two local industries, iron mining and dairy. Although neither industry remains in function today, at the height of its operation in 1879, the largest and most prosperous mine in Southeast, two miles north of the Village (Tilly Foster Mine). By the 1870s, the Village was a thriving community and by the later part of the 19th century, the Croton Reservoir System was constructed.

The governance structure of the Village board includes a mayor, deputy mayor, and three board members. The group convenes to vote and act on Village business.

The Village of Brewster is located on the eastern edge of Putnam County, just above Westchester County line and situated within a one-half square mile area. The Village is known as the "Hub of the Hudson Valley". It is home to Metro North commuter station, various faith based institutions, commercial establishments, restaurants, a museum, and library.

The Village has a total land area of 0.5 square miles, all of which is land. According to the 2010 U.S. Census, the population of the Village of Brewster was 2,390.

9.3.3 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 9.3-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figure 9.3-1 at the end of this annex illustrates the geographically-delineated hazard areas and the location of potential new development, where available.

Table 9.3-2. Recent and Expected Future Development

Type of Development	2014		2015		2016		2017		2018	
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**
Single Family	0	0	1	0	0	0	1	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	1	0
Other (commercial, mixed-use, etc.)	0	0	1	0	2	0	0	0	0	0
Total	0	0	2	0	2	0	1	0	1	0

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					
530 North Main Street	Multi-Family Dwelling	12 Units	56.82-1-47	NEHRP Soil D, Wildfire Interface	Steel Frame Up, work stopped due to COVID-19 restrictions.
Carmel Avenue Bridge Reconstruction	Infrastructure	Bridge	N/A	N/A	PCDOH blessed changes to utility lines, construction will begin again soon.
Mill and Pave Major Roads in Village	Infrastructure	Roads	N/A	N/A	Completed, must stripe roads.
Brewster Honda Dealership	Car Dealership	Dealership	67.36-2-17	None	Completed in December 2019.
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Village of Brewster Urban Renewal Project	Mixed	N/A	Main Street	N/A	Early Conceptual Development and begging to obtain properties within the phases.

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.3.4 Capability Assessment

The Village of Brewster performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (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 planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- The municipality's understanding of local capacity for adapting to current and future risks and changing conditions.

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 9.3.4). The Village of Brewster identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability

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

Table 9.3-3. Planning, Legal, and Regulatory Capability

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? If no - can it be a mitigation action? If yes, add Mitigation Action #. (Tetra Tech to complete)	
Codes, Ordinances, & Requirements							
Building Code	Yes	Ch. 103	State, local	Local and State	Yes	No	-
Comments: *NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017). Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.* • *Chapter 103, Construction Codes, Uniform. This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the "Uniform Code") and the State Energy Conservation Construction Code (the "Energy Code") in this Village of Brewster.* • *Except as otherwise provided in Subsection B of this section, a building permit shall be required for any work which must conform to the Uniform Code and/or the Energy Code, including, but not limited to, the construction, enlargement, alteration, improvement, removal, relocation or demolition of any building or structure or any portion thereof,* • *A Flood hazard certification shall be provided to the Code Enforcement Officer prior to the issuance of the certificate of occupancy or certificate of compliance:*							
Zoning Code	Yes	Ch. 263, adopted 6-18-08 Updating, see Comprehensive Plan below	Local	Local Zoning Board of Adjustment	No	No	-
Comment: *Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan" or "in accordance with a comprehensive plan." Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan" requirement.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level* • *Chapter 263, Zoning. Within the Village of Brewster no land, building or other structure shall be used and no building or other structure shall be constructed, reconstructed, enlarged, extended, moved or structurally altered except in conformity with this chapter.* • *It is the purpose of this Chapter; To guide and regulate the orderly growth, development and redevelopment of the Village of Brewster in accordance with the adopted Comprehensive Plan of long-term objectives, principles and standards determined to be beneficial to the welfare of the people and their interests. B. To protect the established character and the social and economic*							

	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? If yes, add Mitigation Action #. (Tetra Tech to complete)	
wellbeing of both private and public property. C. To promote, in the public interest, the most appropriate utilization of land. D. To secure safety from fire, panic and other dangers and to provide adequate light, air and convenience of access. E. To prevent overcrowding of land or buildings and to avoid undue concentration of population. F. To conserve the value of buildings and to enhance the value of land throughout the Village. • *No material that is dangerous due to explosion, extreme fire hazard or radioactivity shall be used, stored or manufactured, except in accordance with applicable codes and regulations of the State of New York.*							
Subdivisions Regulations	Yes	Ch. 263-22	Local	Local Planning Board	No	No	-
Comment: *Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified i a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).*							
Stormwater Management Regulations	Yes	Ch. 209	Federal, State, Local- DPW		Yes	No	-
Comment: *Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System (SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department* • *Chapter 209, Stormwater Management, adopted 08-15-07. The purpose of this Section is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety and welfare of the public residing within the Village of Brewster, New York (hereinafter "Village"), and to address the findings of fact in § 209-1 hereof. It is the intent of this Section to provide for the accomplishment of the following objectives:* *A. Meet the requirements of minimum measures four and five 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;* *B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES)General Permit for Construction Activities GP-02-01, or as amended or revised;* *C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion, and maintain the integrity of stream channels.* • *The Stormwater Management Officer(s) [SMO(s)] shall administer, implement and enforce the provisions of this Part 2. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the SMO as may be authorized by the municipality.*							
Post-Disaster Recovery	No	-	-	-	No	-	-
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	No	-
Comment: *In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of $500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.*							
Growth Management Regulation	No	-	-	-	No	No	-
Comment: *In New York State, virtually all land use regulation, which is the primarily tool for Smart Growth, takes place at the municipal level (i.e., in a city, village or town government). Land use planning is also primarily a municipal function. While State law provides for certain planning functions at the county or regional level, these mechanisms are largely advisory, whereas municipal planning is directly related to land use regulation.*							
Site Plan Review	Yes	Ch. 263-21	Local- Planning Board		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? If yes, add Mitigation Action #. (Tetra Tech to complete)	
Comment: *The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc.*							
Environmental Protection	Yes	Title 6 NYCRR Part 617	State	?	Yes	No	-
Comment: *New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019*							
Flood Damage Prevention	Yes	Ch. 134 State mandated BFE+2 for new construction and substantial improvements	Federal, State, Local	Village Engineer	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	No	-

Comment: *A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program.*

- *Chapter 134, Flood Damage Prevention. The Board of Trustees of the Village of Brewster finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Village of Brewster and that such damages may include destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life.*
- *It is the purpose of this Chapter to: A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters; D. Control filling, grading, dredging and other development which may increase erosion or flood damages; E. Regulatetheconstructionoffloodbarrierswhichwillunnaturallydivert floodwaters or which may increase flood hazards to other lands; and F. Qualify for and maintain participation in the National Flood Insurance Program*
- *The Village Engineer is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.*
- *A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard*
- *The following standards apply to all new subdivision proposals and other proposed development in areas of special flood hazard (including proposals for manufactured home and recreational vehicle parks and subdivisions):*

A. Proposals shall be consistent with the need to minimize flood damage; B. Public utilities and facilities, such as sewer, gas, electrical and water systems, shall be located and constructed so as to minimize flood damage; and C. Adequate drainage shall be provided to reduce exposure to flood damage.

- *On streams with a regulatory floodway, as shown on the Flood Boundary and Floodway Map or the Flood Insurance Rate Map adopted in § 134-6, no new construction, substantial improvements or other development in the floodway (including fill) shall be permitted unless: A technical evaluation by a licensed professional engineer shows that such an encroachment shall not result in any increase in flood levels during occurrence of the base flood.*
- *The following standards apply to new and substantially improved residential structures located in areas of special flood hazard. Within Zones A1-A30, AE and AH and also Zone A if base flood elevation data are available, new construction and substantial improvements shall have the lowest floor (including basement) elevated to or above two feet above the base flood elevation.*
- *The following standards apply to new and substantially improved commercial, industrial and other nonresidential structures located in areas of special flood hazard. Within Zones A1-A30, AE and AH, and also Zone A if base flood elevation data are available, new construction and substantial improvements of any nonresidential structure shall either:*

(1) Have the lowest floor, including basement or cellar, elevated to or above two feet above the base flood elevation; or
(2) Be floodproofed so that the structure is watertight below two feet above the base flood elevation, including attendant utility and sanitary facilities, with walls substantially impermeable to the passage of water.

Municipal Separate Storm Sewer System (MS4) Regulation	Yes	EPA Phase II Stormwater Rule	Federal Local- DPW	?	Yes	No	-
Comment: *This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required. The Village of Brewster is a MS4 community whose program is administrated by the Department of Public Works.*							
Emergency Management	Yes	NYS Executive Law, Article 2B.	Local	Local OEM	Yes	No	-
Comment: *The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.*							

	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? If yes, add Mitigation Action #. (Tetra Tech to complete)	
Climate Adaptation	Yes or No	NYS Executive Law, Article 75	Local	?	Yes	No	-
Comment: *The environmental conservation law was amended by adding ARTICLE 75 - CLIMATE CHANGE under Assembly Bill A. 8429 and Senate Bill S. 6599, dated June 18, 2019.*							
Disaster Recovery Ordinance	No	-	-	-	-	-	-
Comment:							
Disaster Reconstruction Ordinance	No	-	-	-	-	-	-
Comment:							
Other	No	-	-	-	-	-	-
Comment:							
Planning Documents							
Comprehensive Plan	Yes	2015 Comprehensive Plan was completed and is available on the Village website.	County, Local	Clerk	No	No	-

Comment: *Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level.*

- *Village of Brewster 2015 Comprehensive Plan. The 2015 Update to the Comprehensive Plan (the Plan) is intended to provide planning information, guiding principles, goals, objectives, and policy points for future development in the Village of Brewster. The hope is to strengthen and enhance the quality of life for residents through thoughtful, sustainable development.*
- *Plan recommendations include that; The village must consider water quality protection measures to safeguard its own drinking aquifer, as well as NYC's Croton Water Supply System The Village may want consider establishing a groundwater protection overlay district depending upon the delineated limits of the source aquifer; In addition, fire protection within the Village is a concern. The Brewster Fire Department currently utilizes a ladder truck that is 100 feet tall. The ladder truck currently has a limited function with existing power lines throughout the Village, and in particular, along Main Street. Therefore, as a recommendation for this update to the Comprehensive Plan, the overhead power lines on Main Street and Marvin Avenue should be placed underground conduits; and the maximum height of any structure should be limited to 75 feet when considering any revisions to the maximum structure height in the B-1 zoning district.*
- *The Village must consider well head and aquifer protection when implementing any land use or zoning changes as a result of the findings and recommendations of this Comprehensive Plan. As recommended in the Draft Croton Plan, the limits of the source aquifer should be determined and additional safeguards to protect the aquifer should be established as necessary within the framework of the applicable zoning and land use codes and regulations.*
- *The Plan recommends that the Village should continue to pursue the construction of the passive recreation park along the East Branch of the Croton River as funding becomes available.*
- *The implementation of the Comprehensive Plan proposals will require a series of actions by the Village of Brewster. Among the various recommendations, the adoption of the urban renewal plan and the revisions to the Zoning Ordinance and Zoning Map are of the highest priorities*

Capital Improvement Plan	In Progress	Started by prior clerk	Local	Clerk	No	-	-
Comment: *A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.*							
Disaster Debris Management Plan	No	-	Local		No	-	-
Comment: *Based on past experience with disaster management, it is apparent that local municipalities that have an Emergency Debris Management Plan in place are able to manage their emergency response in a more comprehensive and coordinated manner and are able to address recovery and clean up faster and more efficiently than those without plans. With that in mind, the Department developed an Emergency Management Plan Tool Kit. The NYSDEC (Department) strongly urges all municipal officials to conduct pre-disaster planning and prepare emergency debris management plans. The Department recommends that these plans should be reviewed and updated annually.*							
Floodplain or Watershed Plan	Yes	Ch. 134	Local		No	No	-
Comment: *The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities*							

	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? If yes, add Mitigation Action #. (Tetra Tech to complete)	
Stormwater Plan	No	-	Local		No	-	-
Comment: *Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects*							
Open Space Plan	No	NYS Constitution - Article 9; Statute of Local Governments. Section 10 (7)	Local	-	Yes	-	-
Comment: *Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses*							
Urban Water Management Plan	No	Some items in code. Stormwater plan run by DEP . Enforcement by state/city	Local	-	No	-	-
Comment:							
Habitat Conservation Plan	No	Pay per unit for fee schedule- taking away green space to update their green space.	Local	-	No	-	-
Comment: *Laws related to habitat protection and biodiversity control the use and application of certain pesticides, demolition projects and clearing of vegetated areas. Identifying certain critical habitat areas could be included in the Comprehensive Plan. Critical Habitat is a part of certain State and Federal Permitting. The State had a Wildlife Action Plan requires to maintain eligibility for the State Wildlife Grant Program.*							
Economic Development Plan	No	Part of urban renewal/comp plan	Local	-	No	-	-
Comment: *An Economic Development Plan may be prepared by a local government and be included or separate from the Comprehensive plan.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones.*							
Shoreline Management Plan	No	Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations	Local	-	Yes	-	-
Comment: *Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas; 6 NYCRR Part 505, Coastal Erosion Management Regulations*							
Community Wildfire Protection Plan	No	-	Local	-	No	-	-
Comment: *Under the federal Farm Bill, every 10 years each state must submit a State Forest Action Plan to the U.S. Forest Service. The Plan must be approved by the State Forester, who in New York is the director of DEC's Division of Lands and Forests. The next update of the Plan must be submitted to the Forest Service by June 2020.*							
Forest Management Plan	No	-	-	-	-	-	-
Comment:							
Transportation Plan	No	-	-	-	-	-	-
Comment:							
Agriculture Plan	No	NYCRR Part 390 Agricultural and Farmland	Local	-	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? If yes, add Mitigation Action #. (Tetra Tech to complete)	
		Protection -					
Comment: *Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers*.							
Other	No	-	Local	-	Yes	-	-
Comment:							
Response/Recovery Planning							
Comprehensive Emergency Management Plan	Yes	NYS Executive Law, Article 2B	Local	-	Yes	-	-
Comment: *The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC).*							
Strategic Recovery Planning Report	No	-	-	-	-	-	-
Comment:							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-	-	-
Comment: *THIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the State's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.*							
Post-Disaster Recovery Plan	No	-	-	-	-	-	-
Comment:							
Continuity of Operations Plan	No	-	-	-	-	-	-
Comment: *According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations.*							
Public Health Plan	No	-	-	-	-	-	-
Comment:							
Other	No	-	-	-	-	-	-
Comment:							

Table 9.3-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes- Code Enforcement Office, Building Inspector. CEO works three days, and the inspector works on weekends as-needed. The staff work with the boards and receive frequent training.
Permits are tracked by hazard area. For example, floodplain development permits.	Yes, the Office is knowledgeable about areas of village. There is review by the building inspector and engineer.
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No- the Village is mostly built up. New development is anticipated to be redevelopment.

Administrative and Technical Capability

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

Table 9.3-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Yes-addresses site plans, subdivision plats, changes in rights-of-way, laying out or abandonment of streets.
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Planning Board and Board of Trustees council on environmental matters.
Open Space Board/Committee	Yes	The Planning Board and Board of Trustees council on environmental matters.
Economic Development Commission/Committee	Yes	The Board of Trustees addresses economic development matters.
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Firehouse sends out alarm for fires. The Village Clerk distributes messages to radio stations and over social media.
Maintenance programs to reduce risk	Yes	East of Hudson Watershed Corporation undertakes work for stormwater collection. The village pays for storm drains. The Village of Southeast's vacuum trucker is used to collect debris.
Mutual aid agreements	Yes	Agreements exist for police and fire protection.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Contractor
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contractor
Planners or engineers with an understanding of natural hazards	Yes	Contractor
Staff with expertise or training in benefit/cost analysis	Yes	Contractor
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Village Engineer
Surveyor(s)	No	-
Emergency Manager	Yes	Contractor
Grant writer(s)	Yes	Contractor
Resilience Officer	No	-
Other	No	-

Fiscal Capability

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

Table 9.3-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes

Financial Resources	Accessible or Eligible to Use (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes (capital reserve accounts for water and sewer)
Impact fees for homebuyers or developers of new development/homes	Yes (Stormwater)
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes, haven't used
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Not a policy
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Shared recreation department with Southeast. Village pays taxes for Town's rec department
Other	No

Education and Outreach Capability

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

Table 9.3-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes- Village Clerk performs duty.
Personnel skilled or trained in website development?	Yes- Village Clerk provides content
Hazard mitigation information available on your website; if yes, describe	Yes- link for info on 2020 plan
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Yes- Facebook and Instagram are available.
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Yes- Planning Board, Board of Trustees
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	No
Warning systems for hazard events; if yes, briefly describe.	No
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Schools communicate with parents.
Other	No

Community Classifications

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

Table 9.3-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Unknown	N/A	N/A
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
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 9.3-9. Adaptive Capacity of Climate Change

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Drought	Medium
Disease Outbreak	High
Earthquake	Medium
Extreme Temp	Medium
Flood	Medium
Harmful Algal Bloom	Low
Severe Storm	Medium
Severe Winter Storm	Medium
Terrorism	High
Wildfire	High

**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*

National Flood Insurance Program

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

NFIP Floodplain Administrator (FPA)

The Village Engineer is the appointed FPA for the Village of Brewster.

National Flood Insurance Program (NFIP) Summary

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

Table 9.3-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of Brewster	1	7	$41,241	0

Source: *FEMA 2020*

Notes: Policies, claims, and repetitive loss statistics provided by FEMA Region 2, and current as of July 28, 2020. The total number of repetitive loss properties does not include severe repetitive loss properties
RL Repetitive Loss;

Resources

None identified

Compliance History

None identified

Regulatory

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on January 10, 2013, and is found at Chapter 134 of the local code.

Floodplain management regulations and ordinances meet the minimum requirements set forth by both FEMA and New York State. There are no additional regulations, ordinances, plans, or program further supporting the implementation of the floodplain management program.

Duties and responsibilities of the NFIP Administrator are permit review, determine base flood date, interpret flood boundaries, and conduct inspections if necessary.

Additional Areas of Existing Integration

- **Land Use Planning/Comprehensive Planning:** The Village is redoing their 2004 Comprehensive Plan, working under an IMA with the County for support, including updates to Comprehensive Plan and land use regulations, Urban Renewal Plan, Zoning Ordinances and Generic Environmental Impact Statement (GIES). The Village is in the process of updating the Comprehensive Plan and amending the zoning ordinance. The Village will include natural hazard zones and reference the HMP in the Comprehensive Plan, and will incorporate the finding and recommendations of the HMP into all relevant aspects of Village re-development.

- **Site Planning/Permitting:** To address the concern of sinkholes, the Village will work towards requiring geo-technical investigations in areas of high probability of sinkholes as part of the site-planning and permitting process

- **Building Local Mitigation Capabilities:** The Village has included an initiative within the proposed mitigation strategy to support and participate in county-led initiatives intended to build local and regional mitigation and risk-reduction capabilities.

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

Route 6 and 22, I-84 and 684 would be the easiest and most accessible roads to get to during a crisis. Brewster High School is a designated reception center in the case of a radioactive incident at the Indian Point Energy Center.

Sheltering

The Village of Brewster follows the same plan as the Town of Southeast as our residents are a part of their community. During larger scale events, the Village would follow the plans of Putnam County. During many of the harsher winter storms, the Village sent residents to the United Cerebral Palsy Association building on Mount Ebo Road South, off of Doansburg Road in the Town of Southeast.

Temporary Housing

A temporary housing location could be set up at the old wastewater treatment plant site located at 25 Marvin Avenue. The building is unused and up to code and can have a capacity for 50 beds.

Permanent Housing

The Garden Street School site has connections to existing infrastructure and may have capacity for 300 units. However, the building requires asbestos remediation.

9.3.5 Hazard Event History Specific to the Village of Brewster

Putnam County has a history of natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Village of Brewster's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Putnam County. Table 9.3-11 provides details regarding municipal-specific loss and damages the Village of Brewster 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 9.3-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
May 5, 2015-February 23, 2016	Drought	N/A	The latter half of 2015 saw abnormally dry conditions, with D1 ("Moderate drought") conditions observed May 19th to June 15th and in September through December.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
April 19, 2016-May 8, 2017	Drought	N/A	Drought and abnormally dry conditions persisted for more than a calendar year between spring 2016 and 2017. Between October 2016 and March 2017, severe drought conditions occurred and between mid-November and January extreme drought conditions occurred for portions of the County.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
October 29-30, 2017	Storm	N/A	A strong Nor'easter impacted much of the Northeast, bringing high winds and widespread power failures.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
March 2 and 7, 2018	Nor'easters Riley and Quinn	N/A	A low-pressure system bringing moderate amount Between 15 and 20 inches of snow was reported to fall in Putnam County following a winter storm that brought down power lines and tree limbs owing to wet snow and wind gusts. s of snow to the region, On March 7.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
May 15, 2018	Tornado	N/A	Severe thunderstorms and tornadoes followed a cold front in the lower Hudson Valley.	While the event was reported in the County, the Village did not identify significant losses or

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
				damages associated with the event.
February 7, 2020	Tree Down/power outage	N/A	Unseasonably warm and humid conditions preceded an area of rapidly deepening low pressure moving through the mid-Atlantic. Wind shifts and temperature gradients led to the intensifying of the regional storm system, which cause tornadoes throughout the Mid-Atlantic.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
April 13, 2020	Winds/Rain	N/A	Strong winds downed trees throughout the region. Wind speeds were recorded at 50 mph.	While the event was reported in the County, the Village did not identify significant losses or damages associated with the event.
March 2020 to Present	Disease Outbreak (DR-4480)	Yes	A novel coronavirus (COVID-19) began spreading in 2019-2020, developing into a worldwide pandemic in 2020. COVID-19 is a highly infectious respiratory illness. The disease severely impacted the New York metropolitan area.	Infection and fatality numbers were included with Southeast's total. As of August 20th, 2020, there were 366 cases in Southeast and Brewster. This is the second highest number of cases in the County.

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

9.3.6 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes Brewster's risk assessment results and data used to determine the hazard ranking.

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

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.3-12. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Brewster Metro North	Rail Facility	X	X	006
Park Street Pump Station	Wastewater	X	X	006

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 Putnam 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 natural hazards for the Village of Brewster. The Village of Brewster has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community. The Village of Brewster did not modify its initial risk ranking.

Table 9.3-13. Hazard Ranking Input

Disease Outbreak	Drought	Earthquake	Extreme Temperature	Flood
Medium	Medium	Low	Medium	Low

Harmful Algal Bloom	Severe Weather	Severe Winter Weather	Terrorism	Wildfire
Low	High	High	Medium	Medium

Note: The scale is based on the following hazard rankings as established in Section 5.3.

**The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality*

Identified Issues

According to the 2013 FEMA Flood Insurance Study (FIS) for Putnam County, in the Village of Brewster, the East Branch Croton River has flooded the Village well fields which are located near I-84. Tonetta Brook has been the source of problem flooding near the Brewster Railroad Station (FEMA FIS 2013).

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

- The Village may need better way of reaching people. Brewster has a large elderly population who generally have limited technical literacy. Alternate methods for outreach are needed besides bills, radio stations, and village-wide newspapers.
- Potable Water System (Well Field and Pump House) – System lacks back up power or even transfer switches. Power comes into area and splits; one leg goes to power the well field pumps, the other leg goes to power the pump house (air stripping, chlorination, booster pumps, and distribution system). The well field itself is prone to flooding and is a concern as it is not a good location for a fixed generator. The Village lost power to the well field for several days due to Superstorm Sandy in 2012. Health Department regulations require at least transfer switches at both locations; however that is not the ideal solution. They have been seeking funding to address the problem for some 7 years. (*Action 001*)
- Intersection of Railroad Avenue & Marvin Avenue – Tonetta Brook is piped under the intersection and is vulnerable to debris blockage vulnerable to getting blocked by debris. The headwall and

wingwall have been reconstructed. A new culvert could not be installed due to location of adjacent utilities.

- Oak Street - Town of Southeast filled in Wells (Park) Pond which provided retention for this area. Downstream water management is complete including phosphorus reduction. Conduits running under Oak Street to Main Street are in need of sizing adjustments and rehabilitation to accommodate high flow events. The Village has reported that this project has been working well. (*Action 002*)
- Carmel Avenue Bridge – The Bridge, built in 1937, was in a state of significant deterioration for a number of years. The bridge is now being reconstructed.
- State Route 6 Retaining Wall – is a retrofit project. Side of Route 6 is raised 12 to 15 feet and the embankment collapsed. There is a potential for this main road not being able to carry truck traffic. State did a temporary fix and is in construction on a more permanent but incomplete solution. The whole wall is vulnerable, and their plan is not to shore up the whole wall. Some sections of wall will still be vulnerable to collapse in the vicinity of Oak Street.
- The following critical or essential facilities in the Village lack back-up power:
    - Putnam Community Foundation – 24 Senior Apartments (above 50 Main Street)
    - Medical Clinic (155 Main) – Federal qualified Health Care Facility
    - United Cerebral Palsy (UCP) – 11 Oak Street, planning to put back in place as a medical facility (*Action 003*)
- Prospect Hill Bridge, also owned by MTA, is also in poor condition. The bridge is located outside of the Village but is a major connecting road to points north.
- Private road property – retaining wall along private road off Merritt Lane – a section of wall collapsed. ~4 houses here would lose access….they already have limited access.
- Sheltering – have some designated locations, but they have capacity issues (septic and sewer). Have two empty schools (Garden Street and St. Lawrence [partially used])
- Marvin Avenue- low point of Village. Typical flooding, private home flood vulnerability. Basements flood out.
- Erosion along river banks from flooding.
- Village is underlain by iron mines in some areas, and thus there is some vulnerability to sinkholes. There is a low degree of concern and there have been no known occurrences of sinkholes due to the mine.

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

- Gabion wall at bottom of Marvin Ave by Wilkes. A 12’ x 200’ gabion wall south of intersect of Marvin and Wilkes is damaged.

9.3.7 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 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own

table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.3-14. 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.
VOB-1	Carmel Avenue Bridge	All hazards requiring emergency response	Village Clerk, working with MTA, NYSDOT	Built by DOT in 1937, is extremely deteriorated. This is the primary access to the Village, and also carries Village water and sewer lines. The bridge is now owned by MTA, who has to date not indicated that they have plans to address. A hazard to motorists, pedestrians and trains, and all access including emergency services, businesses, etc. Project/Initiative: Continue to work to appeal to MTA, NYS representatives, and other levels of government to address the problem.	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	$10,400,000 N/A Continued access to outside of the Village	1. Discontinue
VOB-2 LOI #1862	Water Backup Power Supply	Severe Storm, Severe Winter Storm, Climate Change	Village of Brewster, Michelle Chiudina, Village Clerk & Treasurer	: Provide two emergency power transfer switches, excavation, cabling and labor to enable connection to a generator (alternate power supply). See Action Worksheet.	In progress	Cost Level of Protection Damages Avoided; Evidence of Success		1. Continue - include in the 2020 Update
VOB-3	Intersection of Railroad Avenue & Marvin Avenue Drainage Improvements	Flood, Severe Storm, Climate Change	Village of Brewster, Michelle Chiudina, Village Clerk & Treasurer; with support of NYSDEC, NYCDEP	Problem: 3 - 36" pipes carrying Tonetta Brook that go under Marvin Avenue. These pipes are vulnerable to getting blocked by debris. There are retaining walls on both sides that are vulnerable, one side in poor shape. Project/Initiative: Engineer (John Folchetti) to assess/study and identify a solution. The mitigation could be put on the developer that constructs a parking garage for a multi-modal facility.	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	Unknown N/A Full drainage retrofit and stormwater mitigation	1. Discontinue
VOB-4	Oak Street Stormwater	Flood, Severe	Village of Brewster,	Problem: Town of Southeast filled in Wells (Park) Pond which provided	In Progress	Cost Level of	$950,000	2. Continue- - include in the

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.
	Management Improvements	Storm, Climate Change	Michelle Chiudina, Village Clerk & Treasurer; with support of NYSDEC, NYCDEP	retention for this area. Project/Initiative: Redesign and rehabilitate underground conduit under Oak Street to Main Street See Action Worksheet		Protection Damages Avoided; Evidence of Success		2020 Update
VOB-5	Install Back Up Power at Various Village Critical Facilities	Severe Storm, Severe Winter Storm	Facility/Property Owners working with Village, NYS DHSES	Work with facility owners/operators to install backup power (or appropriate connections and transfer switches to accommodate temporary backup power generators) at the following critical or essential facilities, which may require securing grant funding: • Public Works Garage and Police Department (208 Main Street) • Putnam Community Foundation – 24 Senior Apartments (above 50 Main Street) • Mayor Mitchell Court – 24 Senior Apartments • 9 minor sewer lift stations • Medical Clinic (155 Main) – Federal qualified Health Care Facility • United Cerebral Palsy (UCP) – 11 Oak Street, planning to put back in place as a medical facility	In progress	Cost Level of Protection Damages Avoided; Evidence of Success		3. Continue- include in the 2020 Update
VOB-6	Sheltering – Village-Wide.	All hazards requiring sheltering.	Putnam County, Village of Brewster, working with ARC	The Village lacks proper sheltering facilities. They have been considering some possible locations, but they have capacity issues (septic and sewer), and/or the two empty schools (Garden Street and St. Lawrence) which are currently partially used. Project/Initiative: Continue to explore viable sheltering options within the	In progress	Cost Level of Protection Damages Avoided; Evidence of Success		Continue- include in the 2020 Update

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.
				Village; upgrade viable facilities as needed to support sheltering needs and requirements which may include securing available grant funding				
VOB-7	River Bank Erosion – Village-Wide	Flood, Severe Storm, Climate Change	VOB engineer; support from NYS DHSES, FEMA, NYCDEP, NYCDEC	Problem: Erosion along river banks from high volume water events. Project/Initiative: Regular inspections and mitigation pre-storm events. Review design capacity and determine necessary renovations, which will likely include replacements of gabion walls in certain locations.	In progress	Cost Level of Protection Damages Avoided; Evidence of Success		4. Continue- include in the 2020 Update
VOB-8	Merritt Lane (private road) Retaining Wall	Flood Severe Storm, Earthquake, Climate Change	Private property owners, as supported by the Village for permitting and inspection	Problem: Private road property – retaining wall along private road off Merritt Lane – a section of wall collapsed. ~ 4 houses here would lose access….they already have limited access. Project/Initiative: Village to support property owner efforts to address this issue, which may include grant application administration and permitting and inspection during project implementation.	Complete	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue- project is no longer a priority
VOB-9	Marvin Avenue Basement Flood Vulnerability	Flood, Severe Storm, Climate Change	VOB engineer; support from NYS DHSES and FEMA	Problem: This is a low point of Village. Typical flooding, private home flood vulnerability. Basements floods out. Project/Initiative: Village to support property owner efforts to address this issue, which may include grant application administration and permitting and inspection during project implementation.	In progress	Cost Level of Protection Damages Avoided; Evidence of Success		5. Continue- include in the 2020 Update
VOB-10	Support and participate in county led initiatives	All Hazards	Putnam County, as supported by relevant local department	Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation.	No progress	Cost Level of Protection Damages		6. Continue - include in the 2020 Update

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.
	intended to build local and regional mitigation and risk-reduction capabilities		leads,	(PCBES-1). Workshops and Seminars to build local capabilities in floodplain management and disaster recovery (PCBES-11), potentially to include: NFIP Community Rating System (CRS) Benefit-Cost Analysis (BCA) Substantial Damage Estimating (SDE) NFIP Elevation Certificates (EC) Certified Floodplain Manager (CFM) Training and Certification County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures (PCBES-12)		Avoided; Evidence of Success		

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Brewster did not identify mitigation projects completed but not identified in the previous mitigation strategy in the 2015 Plan.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Brewster participated in a mitigation action workshop in August 2020 and was provided the following publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: Putnam County Mitigation Catalog and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

Table 9.3-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of Brewster 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, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.3-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.3-15. 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-Brewster-001 (Former VOB-2)	Water Backup Power Supply	G-1; G-4 G-5	Severe Storm; Severe Winter Storm	**Problem**: The Village's water pump stations lack a backup power source. Brewster has a public water system that serves nearly 2,400 people. Additionally, the well fields have a prior contamination issue and remedial measures included the installation of a pump for treated groundwater. In the case of a power outage, both the water pump station and remediation pump would cease working. **Solution**: Provide two emergency power transfer switches, excavation, cabling and labor to enable connection to a generator (alternate power supply). The two locations are separated by approximately 500 feet. The remote control house manages the well pumps. For emergency transfer switch #1; Install 1 600 AMP Emergency transfer switch outdoors at the pumphouse. Excavate and pour a suitable foundation and structural frame to hold the NEMA 4X lockable cabinet adjacent to the pumphouse.	Yes	No	Short Term once funding is secured	Village of Brewster	$240,000 generator	High – Reduced vulnerability of critical infrastructure; life-safety. Continued water services for residents during outages.	HMGP; BRIC; Local match	High	SIP	PR
2020-Brewster-002 (Former VOB-4)	Oak Street Stormwater Management Improvements	G-1 G-5	Flood; Severe Storm	**Problem**: The neighboring Town of Southeast filled in a detention pond at a park in the Village. When the pond existed, it slowed the velocity of stormwater downstream towards Tonetta Brook. However, with the pond removed, stormwater travels quickly down the culvert and is undermining the conduit under Oak Street and Main Street, which leads to sinkholes and the undermining of property along the culvert. **Solution**: Redesign and rehabilitate the drainage pipe under Oak Street to Main Street.	No	No	Short term	Village of Brewster	$950,000	Avoid undermining roadway and building foundation	BridgeNY, HMGP; Local Match	High	SIP	SP
2020-Brewster-	Install Back Up Power at	G-1 G-4	Severe Storm;	**Problem**: A number of critical and essential facilities within the Village	Yes	No	Short-Medium	Village of Brewster;	Low-Medium	High	BRIC; HMGP; Village Funds	High	SIP	PR

Table 9.3-15. 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
003 (Former VOB-5)	Various Village Critical Facilities	G-5	Severe Winter Storm	are vulnerable to power outages, which are becoming increasingly frequent as storms become more frequent, intense and unseasonal (e.g. early season winter storms where trees still have leaves) **Solution**: Work with facility owners/operators to install backup power (or appropriate connections and transfer switches to accommodate temporary backup power generators) at the following critical or essential facilities, which may require securing grant funding: • Public Works Garage and Police Department (208 Main Street) •Putnam Community Foundation – 24 Senior Apartments (above 50 Main Street) •Mayor Mitchell Court – 24 Senior Apartments • 9 minor sewer lift stations • Medical Clinic (155 Main) – Federal qualified Health Care Facility • United Cerebral Palsy (UCP) – 11 Oak Street, planning to put back in place as a medical facility			Term	PCBES						
2020-Brewster-004 (Former VOB-6)	Sheltering – Village-Wide.	G-1 G-2 G-4	All hazards	**Problem**: The Village lacks proper sheltering facilities. They have been considering some possible locations, but they have capacity issues (septic and sewer), and/or the two empty schools (Garden Street and St. Lawrence) which are currently partially used. **Solution**: Continue to explore viable sheltering options within the Village; upgrade viable facilities as needed to support sheltering needs and requirements which may include securing available grant funding	Yes	No	Medium term	Village of Brewster; Private partners	Medium-need to retrofit to compliant standards	Life safety benefits to sheltered residents	HMGP; Village Funds	Medium	SIP	ES
2020-	River Bank	G-3	Flood;	**Problem**: There is erosion along	No	Yes	Long-Term	Village of	Low	Preserved	NRCS EWP;	Medium	NSP	NR

Table 9.3-15. 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
Brewster-005 (Former VOB-7)	Erosion – Village-Wide		Severe Storm	brooks in the Village due to high water level. **Solution**: Regular inspections and mitigate pre-storm events through vegetation and debris management. Review design capacity and determine necessary renovations, which will likely include replacements of gabion walls in certain locations.				Brewster; NYC DEP; NYS DEC		natural functions of stream, reduced risk of flooding	Village funds; Nature Conservancy: NFWF			
2020-Brewster-006 (Former VOB-9)	Brewster Flood Vulnerability	G-1 G-5	Flood; Severe Storm	**Problem**: Buildings in the vicinity of Marvin Avenue experience basement flooding due to the low elevation and stormwater events. Other portions of the Village are floodprone and include critical facilities. **Solution**: The Village will support property owners efforts to address the flooding issue, including permitting and inspection. For critical facilities in the floodplain, the Village will notify existing owners of the vulnerability and distribute information about mitigation options.	Yes	No	Long Term	Village of Brewster	Minimal	Prevention of flood damages	FMA; Town funds	Medium	SIP	PP
2020-Brewster-007 (Former VOB-10)	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities	G-1 G-2 G-4	All hazards	**Problem**: Putnam County's LEPC is inactive and there is a desire to better integrate capacities and train municipal staff on hazard mitigation and floodplain management. **Solution**: Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: • Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation. • Workshops and Seminars to build local capabilities in floodplain management and	No	No	Medium Term	PCBES; Village of Brewster; NYSDHSES	Minimal	Enhanced training for Village professionals	Existing capacity	High	EAP	PI

Table 9.3-15. 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
				disaster recovery potentially to include: o NFIP Community Rating System (CRS) o Benefit-Cost Analysis (BCA) o Substantial Damage Estimating (SDE) o NFIP Elevation Certificates (EC) o Certified Floodplain Manager (CFM) Training and Certification o County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures									

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:

BRIC	*Building Resilient Infrastructure and Communities*
FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*

Timeline:
The time required for completion of the project upon implementation

Cost:
The estimated cost for implementation.

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

Critical Facility:
Yes 💧 *Critical Facility located in 1% floodplain*

Mitigation Category:
- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*

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

CRS Category:

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

Table 9.3-16. 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-Brewster-001	Water Backup Power Supply	1	1	1	0	1	1	0	1	1	1	1	1	1	1	12	High
2020-Brewster-002	Oak Street Stormwater Management Improvements	1	1	0	1	1	1	-1	1	0	1	0	1	1	1	9	High
2020-Brewster-003	Install Back Up Power at Various Village Critical Facilities	1	1	1	11	1	1	0	1	1	1	1	1	1	1	13	High
2020-Brewster-004	Sheltering – Village-Wide.	1	0	0	1	1	0	-1	0	1	0	1	0	1	1	6	Medium
2020-Brewster-005	River Bank Erosion – Village-Wide	0	1	0	1	0	0	1	1	1	0	0	1	1	1	8	Medium
2020-Brewster-006	Brewster Flood Vulnerability	1	1	0	1	0	-1	-1	1	1	0	1	-1	1	1	5	Medium
2020-Brewster-007	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities	1	1	1	1	0	1	1	1	1	1	1	0	0	1	12	High

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

9.3.8 Proposed Mitigation Action Types

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

Table 9.3-17. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Drought		004		007			007			004
Disease Outbreak		004		007			007			004
Earthquake		004		007			007			004
Extreme Temp		004		007			007			004
Flood		002 004 006	005	007		006	007	005	002	004
Harmful Algal Bloom		004		007			007			004
Severe Storm		001 002 003 004 006	005	007	001 003	006	007	005	002	004
Severe Winter Storm		001 003 004		007	001 003		007			004
Terrorism		004		007			007			004
Wildfire		004		007			007			004

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

9.3.9 Staff and Local Stakeholder Involvement in Annex Development

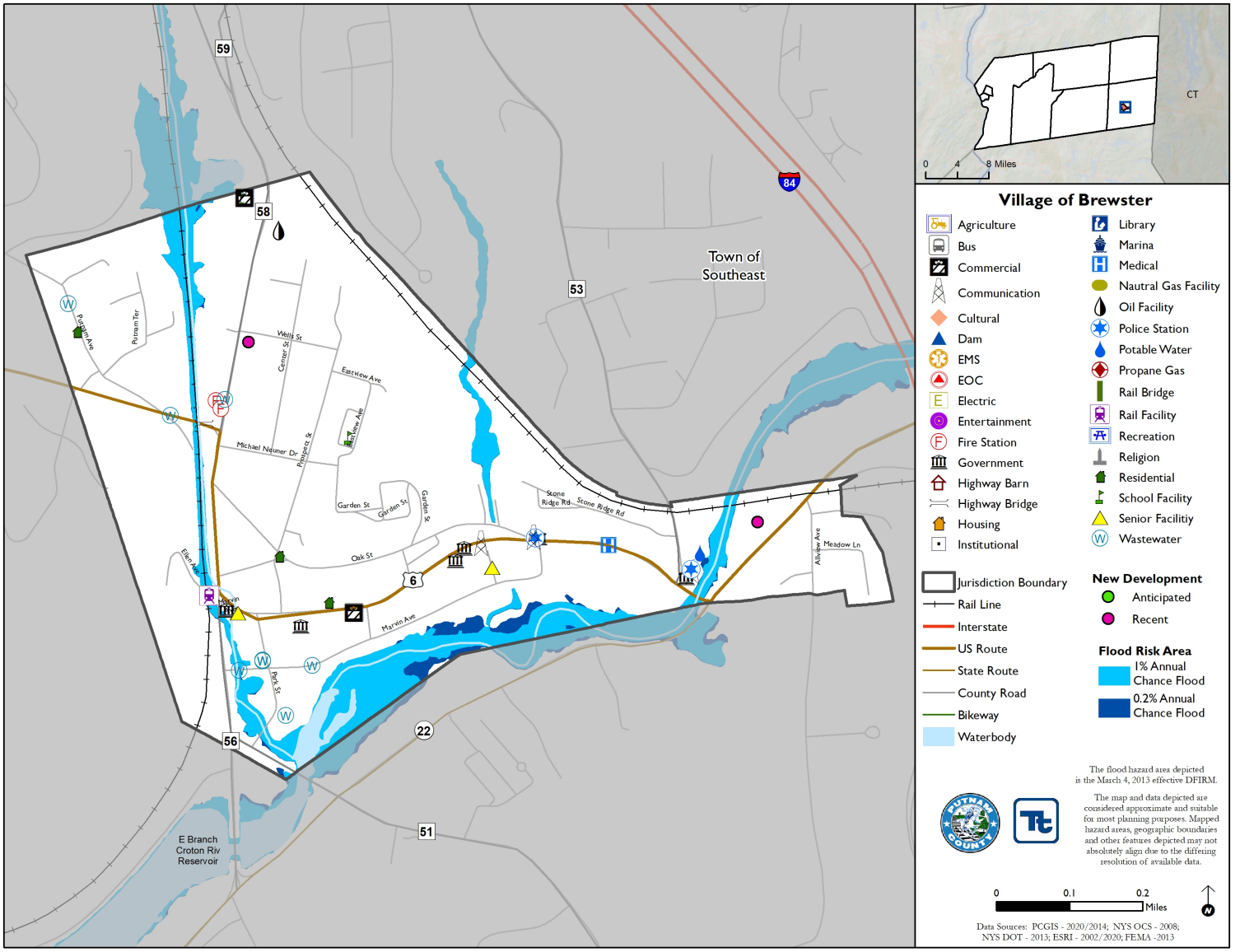
The Village of Brewster followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from the Highway Superintendent, Village Clerk, and Engineer. The Village Clerk represented the community on the Putnam County Hazard Mitigation Plan Planning Partnership, 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.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

9.3.10 Hazard Area Extent and Location

A hazard area extent and location map has been generated for the Village of Brewster that illustrates the probable areas impacted within the municipality. This map is based on the best available data at the time of the preparation of this plan and is considered to be adequate for planning purposes. The map has only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Brewster has significant exposure. The map is illustrated below.

Figure 9.3-1. Village of Brewster Hazard Area Extent and Location Map



Action Worksheet			
Project Name:	Water Backup Power Supply		
Project Number:	2020-Brewster-001 (Former VOB-2)		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm; Severe Winter Storm		
Description of the Problem:	The Village's water pump stations lack a backup power source. Brewster has a public water system that serves nearly 2,400 people. Additionally, the well fields have a prior contamination issue and remedial measures included the installation of a pump for treated groundwater. In the case of a power outage, both the water pump station and remediation pump would cease working		
Action or Project Intended for Implementation			
Description of the Solution:	Provide two emergency power transfer switches, excavation, cabling and labor to enable connection to a generator (alternate power supply). The two locations are separated by approximately 500 feet. The remote control house manages the well pumps. For emergency transfer switch #1; Install 1 600 AMP Emergency transfer switch outdoors at the pumphouse. Excavate and pour a suitable foundation and structural frame to hold the NEMA 4X lockable cabinet adjacent to the pumphouse.		
Is this project related to a Critical Facility?		Yes X	No ☐
Is the critical facility located in the 1% annual chance flood area?		Yes X	No ☐
(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:	100-year flood	**Estimated Benefits (losses avoided):**	High – Reduced vulnerability of critical infrastructure; life-safety. Continued water services for residents during outages.
Useful Life:	20 years	**Goals Met:**	G-1; G-4; G-5
Estimated Cost:	$80,000	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Short Term once funding is secured
Estimated Time Required for Project Implementation:	3 Years	**Potential Funding Sources:**	HMGP; BRIC; Local match
Responsible Organization:	Village of Brewster	**Local Planning Mechanisms to be Used in Implementation if any:**	Comprehensive Emergency Management Plan; Sheltering Plan; Capital Improvements Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	Medium	Continued outages; failure of pumps during storm events
	Microgrid	High	Excessive cost and large scope
	Generator/Switches	$80,000	Mitigates hazard cost effectively

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Water Backup Power Supply	
Project Number:	2020-Brewster-001 (Former VOB-2)	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Maintain municipal water supply and remediation pump during power outages – drinking water supply
Property Protection	1	Maintain municipal water supply during power outages – fire-fighting
Cost-Effectiveness	0	Very cost-effective
Technical	1	Technically feasible
Political	1	Project is supported by the Village government and residents
Legal	1	No legal impediments
Fiscal	0	Grant funding sought to support project implementation
Environmental	1	No environmental impediments, minimal permitting required
Social	1	Project benefits entire Village
Administrative	1	Project can be administered within existing Village resources
Multi-Hazard	1	Protects against all hazards that result in power outages
Timeline	1	Project can be implemented in the short term once funding is secured
Agency Champion	1	The Village is the lead for the project
Other Community Objectives	1	Supports overall emergency management and continuity of operations
Total	12	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Oak Street Stormwater Management Improvements		
Project Number:	2020-Brewster-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood; Severe Storm		
Description of the Problem:	The neighboring Town of Southeast filled in a detention pond at a park in the Village. When the pond existed, it slowed the velocity of stormwater downstream towards Tonetta Brook. However, with the pond removed, stormwater travels quickly down the culvert and is undermining the conduit under Oak Street and Main Street, which leads to sinkholes and the undermining of property along the culvert.		
Action or Project Intended for Implementation			
Description of the Solution:	Redesign and rehabilitate the drainage pipe under Oak Street to Main Street.		
Is this project related to a Critical Facility?		Yes ☐	No X
Is the critical facility located in the 1% annual chance flood area?		Yes ☐	No X
(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:	Protection from rainstorms that typically occur in the Village	**Estimated Benefits (losses avoided):**	Prevention of damage to foundations and roadways along the culvert
Useful Life:	25 years	**Goals Met:**	G-1; G-5
Estimated Cost:	$950,000	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Design within one year; Construction in two years
Estimated Time Required for Project Implementation:	5 Years	**Potential Funding Sources:**	BridgeNY, HMGP; Local Match
Responsible Organization:	Village of Brewster	**Local Planning Mechanisms to be Used in Implementation if any:**	Stormwater Management Plan; Capital Improvements Planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	N/A	Continued undermining of stormwater culvert; causes property damage
	Redirect drainage to different outfall	N/A	Likely cost prohibitive and legally complicated
	Rehabilitation	$950,000	Mitigate future damage

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Oak Street Stormwater Management Improvements	
Project Number:	2020-Brewster-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevents undermining of adjacent roads
Property Protection	1	Protects roadway and building foundations
Cost-Effectiveness	0	Cost-effectiveness not fully evaluated
Technical	1	Technically feasible
Political	1	Project would be supported by the Village government and residents
Legal	1	No legal impediments
Fiscal	0	Grant funding would be needed to implement project
Environmental	0	Stormwater permitting likely required
Social	0	Project area is limited but underlies major streets
Administrative	1	Projects can be administered within existing Village resources
Multi-Hazard	0	Protects against stormwater flooding in a limited area
Timeline	1	Project can be implemented in the short term once funding is secured
Agency Champion	1	Village
Other Community Objectives	1	Supports stormwater management program
Total	9	
Priority (High/Med/Low)	Medium	

Action Worksheet			
Project Name:	Install Back Up Power at Various Village Critical Facilities		
Project Number:	2020-Brewster-003 (Former VOB-5)		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm; Severe Winter Storm		
Description of the Problem:	A number of critical and essential facilities within the Village are vulnerable to power outages, which are becoming increasingly frequent as storms become more frequent, intense and unseasonal (e.g. early season winter storms where trees still have leaves.		
Action or Project Intended for Implementation			
Description of the Solution:	Solution: Work with facility owners/operators to install backup power (or appropriate connections and transfer switches to accommodate temporary backup power generators) at the following critical or essential facilities, which may require securing grant funding: • Public Works Garage and Police Department (208 Main Street) •Putnam Community Foundation – 24 Senior Apartments (above 50 Main Street) •Mayor Mitchell Court – 24 Senior Apartments • 9 minor sewer lift stations • Medical Clinic (155 Main) – Federal qualified Health Care Facility • United Cerebral Palsy (UCP) – 11 Oak Street, planning to put back in place as a medical facility		
Is this project related to a Critical Facility?	Yes X	No ☐	
Is the critical facility located in the 1% annual chance flood area?	Yes X	No ☐	
(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:	Offers protection to critical facilities against power outages	**Estimated Benefits (losses avoided):**	Avoid loss of municipal services
Useful Life:	20	**Goals Met:**	G-1; G-2; G-4
Estimated Cost:	Medium- entails generator procurements and installations	**Mitigation Action Type:**	SIP
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	If funding available, within two years
Estimated Time Required for Project Implementation:	4 Years	**Potential Funding Sources:**	HMGP; Village Funds
Responsible Organization:	Village of Brewster	**Local Planning Mechanisms to be Used in Implementation if any:**	Comprehensive Emergency Management Plan; Sheltering Plan; Capital Improvements Planning; Continuity of Operations/Continuity of Government

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	Unknown	Loss of services during outages
	Microgrid	Unknown	Complex project with high costs
	Generators	>$1m	More cost effective and flexible option

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Install Back Up Power at Various Village Critical Facilities	
Project Number:	2020-Brewster-003 (Former VOB-5)	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Maintain operation of critical facilities during power outages
Property Protection	1	Several facilities support services that protect property
Cost-Effectiveness	1	Generators are typically cost-effective
Technical	1	Highly technically feasible
Political	1	Projects are supported by the Village government and residents
Legal	1	No legal impediments
Fiscal	0	Grant funding sought to support project implementation
Environmental	1	No environmental impediments, minimal permitting required
Social	1	Projects benefit entire Village
Administrative	1	Projects can be administered within existing Village resources
Multi-Hazard	1	Protects against all hazards that result in power outages
Timeline	1	Project can be implemented in the short term once funding is secured
Agency Champion	1	The Village will support facility owners/operators in project implementation
Other Community Objectives	1	Supports overall public health and safety, emergency management and continuity of operations
Total	13	
Priority (High/Med/Low)	High	