



## 9.10 Town of Southeast

This section presents the jurisdictional annex for the Town of Southeast. 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 Southeast’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.

### 9.10.1 Hazard Mitigation Planning Team

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

Table 9.10-1. Hazard Mitigation Planning Team

| Primary Point of Contact  | Alternate Point of Contact  |
|---|---|
| Laurie Bell<br>1360 Route 22, Brewster, NY 10509<br>(845) 279-7336<br>lbell@southeast-ny.gov      | Chris DuBois<br>1360 Route 22, Brewster, NY 10509<br>(845) 279-5345<br>cdubois@southeast-ny.gov |
| NFIP Floodplain Administrator   |   |
| Michael Levine<br>1 Main Street, Brewster, NY 10509<br>(845) 279-2123<br>mlevine@southeast-ny.gov |   |

### 9.10.2 Municipal Profile

The Town was founded in 1788 and was named after its located relative to Putnam County. The Town is governed by a town board consisting of a supervisor and four councilmen.

The Town of Southeast is located at the crossroads of Interstate highways Route 684 and Route 84, and State Routes 22, 312, 6 and 202. Metro-North Railroad’s Harlem Line has two stops that service the area at Brewster Village and Southeast Station off Route 312. The Town has a total area of 35 square miles, of which 32.1 square miles is land and 2.9 square miles is water.

According to the 2010 U.S. Census, the population of the Town of Southeast was 18,404.

### 9.10.3 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 9.10-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figure 9.10-1 at the end of this annex illustrates the geographically-delineated hazard areas and the location of potential new development, where available.



Table 9.10-2. Recent and Expected Future Development

| Type of Development   | 2015                         |   | 2016         |  | 2017         |   | 2018         |  | 2019         |                    |
|---|------------------------------|---|--------------|--|--------------|---|--------------|--|--------------|--------------------|
| <b>Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)</b> |                              |   |              |  |              |   |              |  |              |                    |
|   | <b>Total</b>                 | <b>Within SFHA</b>  | <b>Total</b> | <b>Within SFHA</b>                               | <b>Total</b> | <b>Within SFHA</b>  | <b>Total</b> | <b>Within SFHA</b>   | <b>Total</b> | <b>Within SFHA</b> |
| Single Family   | 12                           | 0   | 5            | 0  | 9            | 0   | 13           | 0  | 2            | 0                  |
| Multi-Family  | 0                            | 0   | 0            | 0  | 0            | 0   | 0            | 0  | 0            | 0                  |
| Other (commercial, mixed-use, etc.)   | 4                            | 0   | 3            | 0  | 3            | 0   | 1            | 0  | 1            | 0                  |
| <b>Total</b>  | <b>16</b>                    | <b>0</b>  | <b>8</b>     | <b>0</b>   | <b>12</b>    | <b>0</b>  | <b>14</b>    | <b>0</b>   | <b>3</b>     | <b>0</b>           |
| 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                                  |              |                    |
| <b>Recent Major Development and Infrastructure from 2015 to Present</b>   |                              |   |              |  |              |   |              |  |              |                    |
| Crossroads 312  | Non-Residential              | Construction of 186,000 sq. ft. mixed-use commercial, bank, restaurants, personal & professional services |              | -  |              | N/A   |              | No progress – may not even have approvals                            |              |                    |
| Fortune Ridge (aka Meadows at Dean's Corners)   | Residential                  | 103 single family homes   |              | 67.-3-79, 78.-4-78, 78.-3-28, 78.-4-77, 78.-3-29 |              | Wildfire Intermix, 1% Annual Chance Flood, 0.2% Annual Chance Flood |              | 18 done, many remaining (103 sites). 85 remaining                    |              |                    |
| Lyons Development   | Non-Residential              | Construction of 14,000 2-story office/retail building   |              | 68.-2-2  |              | -   |              | Was built; partially occupied  |              |                    |
| Opportunity Park  | Non-Residential              | Site plan for public recreation area  |              | -  |              | N/A   |              | No prog  |              |                    |
| Southeast Plaza, LLC  | Non-Residential              | Construction of 2-story 10,000 sq. ft. business/retail building   |              | 68.-2-58   |              | Wildfire Interface  |              | Nothing since 2013   |              |                    |
| Stateline Retail Center   | Non-Residential              | 184,800 sq. ft. retail center and 14,800 sq. ft. 2-story office building                                  |              | -  |              | N/A   |              | Finalizing approvals for large retail/subdivision                    |              |                    |
| Dykeman's Corporate Park  | Commercial - Warehouse       | 2 warehouses – 20k and 25K sq. ft.  |              | -  |              | N/A   |              | Purchased, no construction. Only 1 bldg. to be built (26,840 sq. ft) |              |                    |
| Barrett Hill  | Residential – Senior Housing | 148 Units   |              | -  |              | N/A   |              | On hold  |              |                    |



|   |                              |   |   |     |  |
|---|------------------------------|---|---|-----|--|
| Terravest Senior Housing  | Residential – Senior Housing | 60 Detached Units                         | - | N/A | Slow progress (moving ahead slowly)          |
| <b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b> |                              |   |   |     |  |
| Ace Endico Expansion  | Commercial-Distribution      | 117,600 sq. ft                            | - | N/A | -  |
| Alfacor   | Commercial-distribution      | 90,000 sq. ft (2 buildings), 9,900 sq. ft | - | N/A | No final approvals yet                       |
| Brewster Corporate Park   | Commercial-office            | 90,000 sq. ft bldg.                       | - | N/A | Re-approval                                  |
| Drew Realty   | Commercial-storage           | 10,500 sq. ft                             | - | N/A | Almost approved                              |
| Medicanix   | Commercial-office            | 10,000 sq. ft                             | - | N/A | Possible in next five years, no construction |
| Northeast Logistics   | Commercial-warehouse         | 1,000,000 sq. ft distribution             | - | N/A | Mid-approvals                                |

SFHA Special Flood Hazard Area (1% flood event)

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

### 9.10.4 Capability Assessment

The Town of Southeast 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 9.10.4). The Town of Southeast 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 Town of Southeast and where hazard mitigation has been integrated.



Table 9.10-3. 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?<br>If no - can it be a mitigation action?<br>If yes, add Mitigation Action #. |   |
|--|----------------------------|---|---|---------------------------------|----------------|---|---|
| <b>Codes, Ordinances, &amp; Requirements</b>   |                            |   |   |                                 |                |   |   |
| Building Code  | Yes                        | Ch. 54  | State, Local                              | Building Dept.                  | Yes            | No  | - |
| <p>Comment: <i>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.</i></p> <ul style="list-style-type: none"> <li><i>Chapter 54, Building Construction and Fire Prevention, last amended 06-08-2007. There is hereby created in the Town of Southeast a Building and Fire Prevention Department which shall be charged with enforcement of the Uniform Code and with enforcement of Chapters 55, 69, 71, 74, 105, 112, 122, 123 and 138 of the Code of the Town of Southeast.</i></li> <li><i>No land shall be altered and no building or part thereof or any major feature of the equipment shall hereafter be moved, erected, constructed, reconstructed, demolished, extended or altered except in conformity with the Uniform Code, the applicable provisions of the Town Code.</i></li> </ul>   |                            |   |   |                                 |                |   |   |
| Zoning Code  | Yes                        | Ch. 138   | Local                                     | Building Dept.                  | No             | No  | - |
| <p>Comment:</p> <ul style="list-style-type: none"> <li><i>Chapter 138, Zoning. This chapter regulates and restricts the location, construction and use of buildings and structures, the use of land and the area, shape and frontage of building lots in order to promote health, safety, morals and general welfare of the Town; to implement a Comprehensive Plan; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; to promote health and general welfare;</i></li> <li><i>No land, water or building or other structure shall be used and no building or other structure shall be constructed or reconstructed unless it shall conform to this chapter. No lot or land shall be subdivided, sold, encumbered or conveyed so as to create or expand a nonconformity to this Chapter.</i></li> <li><i>An environmental conservation buffer of at least 100 feet shall be provided along any property line between any new residential subdivision and an existing agricultural use.</i></li> <li><i>In addition to any existing federal legislation, development activities within the Town's floodplain will be further governed by any relevant section of this chapter and by Chapter 74, Flood Damage Prevention, for flood damage prevention.</i></li> <li><i>Development shall result in minimal degradation of unique or irreplaceable land types and in minimal adverse impact upon the critical areas such as streams, wetlands, areas of aquifer recharge and discharge, steep slopes, highly erodible soils, areas with a high-water table, mature stands of vegetation an extraordinary wildlife nesting, feeding or breeding grounds.</i></li> <li><i>No site modification or improvement shall result in a net increase in stormwater flow to a neighboring property or to a modification of any existing watercourse.</i></li> </ul>   |                            |   |   |                                 |                |   |   |
| Subdivisions Regulations   | Yes                        | Ch. 123   | Local                                     | Planning                        | No             | No  | - |
| <p>Comment:</p> <ul style="list-style-type: none"> <li><i>Chapter 123, Subdivision of Land. The Planning Board of the Town of Southeast is authorized and empowered to approve plats showing lots, blocks or sites, with or without streets or highways, to approve the development of entirely or partially undeveloped plats already filed in the office of the Clerk of the county and to conditionally approve preliminary plats within the part of the Town of Southeast outside the limits of the Village of Brewster.</i></li> <li><i>It is declared to be the policy of the Planning Board to consider land subdivision plats as part of the plan for the orderly, efficient and economical development of the Town. A. Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace. B. Proper provision shall be made for drainage, water supply, sewerage and other needed improvements. C. All proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties. D. The proposed streets shall compose a convenient system conforming to the Official Map and shall be properly related to the proposals shown on the Comprehensive Plan. E. Safe driveway access shall be provided to each proposed lot. F. Proper provision shall be given to the preservation and potential enhancement of existing natural features and other assets of a community nature. G. A means more rigorous and effective than is presently provided under New York Town Law shall be provided for assuring the satisfactory completion and performance of all proposed public improvements.</i></li> <li><i>Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace. The Subdivision shall be designed in reasonable conformity with existing topography in order to minimize grading, cut and fill and to retain, insofar as possible, the natural contours, to limit stormwater runoff and to conserve the natural vegetative cover and soil.</i></li> <li><i>Land subject to flooding or land deemed by the Planning Board to be uninhabitable by reason of unsuitable soil, topography, ledge rock, high water table or other conditions shall not be platted for residential occupancy nor for such other use as may increase danger to health, life or property or aggravate the flood hazard.</i></li> </ul> |                            |   |   |                                 |                |   |   |
| Stormwater Management Regulations  | Yes                        | Ch. 119   | Local                                     | Town Board                      | Yes            | 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?<br>If no - can it be a mitigation action?<br>If yes, add Mitigation Action #. |   |
|---|----------------------------|--|---|--|---|---|---|
| <p>Comment:</p> <ul style="list-style-type: none"> <li>Chapter 119, Stormwater Management and Erosion and Sediment Control. The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within the Town of Southeast and to address the findings of fact in § 119-1 hereof.</li> <li>This Chapter's purposes can be achieved by implementing the following objectives; A. Meet the requirements of Minimum Measures 4 and 5 of the State Pollutant Discharge Elimination System (SPDES) general permit for stormwater discharges from municipal separate stormwater sewer systems (MS4s). 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 C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels, which would otherwise degrade local water quality. D. Minimize the total annual volume of stormwater runoff that flows from any specific site during and following development. E. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint-source pollution, through stormwater management practices and ensure that these management practices are properly maintained and eliminate threats to public safety.</li> <li>All land development activities subject to review and approval by the Planning Board of the Town of Southeast under subdivision, zoning, wetlands or other requirements or regulations noted herein shall be reviewed subject to the standards contained in this chapter. The review of the erosion and sediment control plans and/or stormwater pollution prevention plan (SWPPP) shall run concurrently with the procedure for review, approval and permitting under the other above-noted regulations. The Town Engineer or a designated representative shall review all stormwater pollution prevention plans.</li> </ul> |                            |  |   |  |   |   |   |
| SWP (MS4) part of Planning Dept   |                            |  |   |  |   |   |   |
| Post-Disaster Recovery Plan or Regulation   | 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  | - |
| <p>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.</p>  |                            |  |   |  |   |   |   |
| Growth Management Regulation  | No                         | -  | Local                                     | -  | No  | -   | - |
| <p>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.</p>  |                            |  |   |  |   |   |   |
| Site Plan Review  | Yes                        | Ch. 123  | Local                                     | Planning                                   | No  | No  | - |
| <p>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.</p>  |                            |  |   |  |   |   |   |
| Environmental Protection  | No                         | -  | State                                     | -  | Yes   | No  | - |
| <p>Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019.</p>   |                            |  |   |  |   |   |   |
| Flood Damage Prevention Law   | Yes                        | Ch. 74 - State mandated BFE+2 for new construction and substantial improvement | Federal, State, Local                     | Building Dept – Building Inspector         | Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential) | No  | - |
| <p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program.</p> <ul style="list-style-type: none"> <li>Chapter 74, Flood Damage Prevention. The Town Board of the Town of Southeast finds that the potential and/ or actual damages from flooding and erosion may be a problem to the residents of the Town of Southeast 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.</li> </ul>  |                            |  |   |  |   |   |   |





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|--|----------------------------|---|---|---------------------------------|----------------|---|
| <ul style="list-style-type: none"> <li>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. Regulate the construction of flood barriers which willunnaturally divert floodwaters or which may increase flood hazards to other lands, and; F. Qualify for and maintain participation in the National Flood Insurance Program.</li> <li>The Building Inspector is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.</li> <li>A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard in this community for the purpose of protecting it citizens from increased flood hazards and ensuring that new development is constructed in a manner that minimizes its exposure to flooding.</li> <li>The following standards apply to all new subdivision proposals and other proposed development in areas of special flood hazard: (1) Proposals shall be consistent with the need to minimize flood damage; (2) Public utilities and facilities, such as sewer, gas, electrical and water systems, shall be located and constructed so as to minimize flood damage; and (3) Adequate drainage shall be provided to reduce exposure to flood damage.</li> <li>On streams with a regulatory floodway, as shown on the Flood Boundary and Floodway Map or the Flood Insurance Rate Map adopted in § 74-6, 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.</li> <li>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.</li> <li>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.</li> </ul> |                            |   |   |                                 |                |   |
| Municipal Separate Storm Sewer System (MS4) Regulation   | Yes                        | Chapter 112   | Federal, State, Local                     | Highway/Planning                | Yes            | No -  |
| <p>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.</p> <ul style="list-style-type: none"> <li>Chapter 112, Sewers and Water. This article sets forth uniform requirements for direct and indirect contributors into the wastewater collection and treatment system for the Town of Southeast and enables the Town to comply with all applicable state and federal laws required by the Clean Water Act of 1977 and the general pretreatment regulations (40 CFR 403). This article also establishes methods for controlling the introduction of pollutants into the Town's storm sewer system in order to comply with requirements of the SPDES general permit for municipal separate storm sewer systems (MS4s).</li> <li>The objectives of this Article include: A. To inform the public as to the technical and administrative procedures to be followed in obtaining connection to the Town of Southeast public sewer system. B. To prevent the introduction of pollutants into the public sewer system which will interfere with the operation of the system or contaminate the resulting sludge. C. To prevent the introduction of pollutants into the public sewer system which will pass through the system, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the system. D. To improve the opportunity to recycle and reclaim wastewaters and sludges from the system. E. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s</li> <li>The stormwater management system operator(s) [SMSO(s)] shall administer, implement, and enforce the provisions of this article. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the SMSO as may authorized by the Town. The SMSO may, without prior notice, suspend discharge access to the Town's storm sewer system to a person when such suspension is necessary to stop an actual or threatened discharge that presents or may present imminent and substantial danger to the environment.</li> </ul>   |                            |   |   |                                 |                |   |
| Emergency Management   | No                         | -   | Local                                     | -                               | Yes            | -   |
| <p>Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. Emergency management is handled through the County BES.</p>  |                            |   |   |                                 |                |   |
| Climate Change   | No                         | -   | Local                                     | -                               | Yes            | -   |
| <p>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.</p>   |                            |   |   |                                 |                |   |
| Disaster Recovery Ordinance  | No                         | -   | Local                                     | -                               | No             | -   |





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|--|----------------------------|---|---|---------------------------------|----------------|---|---|
| Comment:   |                            |   |   |                                 |                |   |   |
| Disaster Reconstruction Ordinance  | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Other  | -                          | -   | -   | -                               | -              | -   | - |
| Comment:<br><ul style="list-style-type: none"> <li>Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas): yes, Ch. 78</li> </ul>   |                            |   |   |                                 |                |   |   |
| <b>Planning Documents</b>  |                            |   |   |                                 |                |   |   |
| Comprehensive Plan   | Yes                        | Adopted in 2010   | State, Local                              | Town Board                      | No             | No  | - |
| Comment:<br><ul style="list-style-type: none"> <li>Town of Southeast Comprehensive Plan Update, adopted 08-21-2014. The Town of Southeast seeks to balance a healthy economic environment with quality residential and commercial character while protecting the integrity of its natural resources and infrastructure.</li> <li>The overarching vision is embodied in the goals and policies of this Comprehensive Plan Update including to: Protect the Town's community character, Protect valuable natural resources, Provide a diversity of housing opportunities, Provide a healthy economic environment, Provide necessary community services; and Maintain the Town's transportation network.</li> <li>The Town of Southeast is also at the center of the Croton Watershed, the source of 10 percent of New York City's drinking water supply. In all, 99 percent of the Town's land area lies within New York City's drinking water supply watershed. The Great Swamp is a significant wetland located partially in Southeast. Southeast's upper northeastern corner encompasses the southern tip of the Great Swamp and its drainage basin. This 4,202-acre wetland located within a 62,343-acre watershed is a valuable resource and one of the State's largest wetlands. The Regional Plan Association (RPA) prepared the Great Swamp Conservation Plan in 1991, which included specific recommendations to the towns that share the benefits and responsibilities to protect the swamp.</li> <li>Actions included in the Natural Resource section of the Plan include to; Establish a zoning overlay district to provide additional protection to the Great Swamp Critical Environmental Area; Continue to rigorously enforce environmental protection regulations in the Town Code, especially stormwater management, wetland, and steep slope protections; Create a natural resource inventory (NRI) and adopt an open space master plan; and Consider designation of new Critical Environmental Areas.</li> <li>Actions included in the Plan's Land Use section include to; Ensure that all local laws, including the zoning code and subdivision regulations, are consistent with the recommendations contained in this Comprehensive Plan and are adequately enforced; and Continue to update the Town Code as necessary to be consistent with federal and state water quality, flood zone, wetland, and natural resources regulations.</li> <li>The Plan's Economic Development section includes a recommendation to Attract "clean" businesses and industries that are appropriate for location in a drinking water supply watershed. Clean businesses would have minimum impervious surface area coverage, and use or generate minimum quantities of waste- or process-water and require little or no use, storage, or transport of hazardous materials.</li> </ul> |                            |   |   |                                 |                |   |   |
| Capital Improvement Plan   | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g. The Highway Department has a schedule of roads to repair and repave.  |                            |   |   |                                 |                |   |   |
| 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   | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities. The Town is part of the East of Hudson Watershed Corporation.  |                            |   |   |                                 |                |   |   |
| Stormwater Plan  | Yes, thru planning/highway | -   | 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                         | -   | Local                                     | Town Board                      | 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.  |                            |   |   |                                 |                |   |   |



|  | 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 #. |   |
| Urban Water Management Plan  | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Habitat Conservation Plan  | Yes                        | -   | Local                                     | -                               | No             | -   | - |
| Comment: <i>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. The long-eared bat and bog turtle habitats are considered during planning approvals.</i> |                            |   |   |                                 |                |   |   |
| Economic Development Plan  | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment: <i>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.</i>  |                            |   |   |                                 |                |   |   |
| Shoreline Management Plan  | No                         | -   | Local                                     | -                               | Yes            | -   | - |
| Comment: <i>Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas; 6 NYCRR Part 505, Coastal Erosion Management Regulations</i>   |                            |   |   |                                 |                |   |   |
| Community Wildfire Protection Plan   | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Forest Management Plan   | Yes                        | -   | -   | -                               | -              | -   | - |
| Comment: <i>A small number of parcels in the Town have a plan filed with the State of New York.</i>  |                            |   |   |                                 |                |   |   |
| Transportation Plan  | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Agriculture Plan   | No                         | -   | Local                                     | -                               | Yes?           | -   | - |
| Comment: <i>Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.</i>   |                            |   |   |                                 |                |   |   |
| Other  | Yes                        | -   | -   | -                               | -              | -   | - |
| Comment: <i>There is a tourism plan through the Putnam County EDC.</i>   |                            |   |   |                                 |                |   |   |
| <b>Response/Recovery Planning</b>  |                            |   |   |                                 |                |   |   |
| Comprehensive Emergency Management Plan  | County                     | -   | Local                                     | -                               | Yes            | -   | - |
| Comment: <i>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).</i>   |                            |   |   |                                 |                |   |   |
| Strategic Recovery Planning Report   | No                         | -   | -   | -                               | -              | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Threat & Hazard Identification & Risk Assessment (THIRA)   | No                         | -   | Local                                     | -                               | Yes            | -   | - |
| Comment: <i>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.</i>   |                            |   |   |                                 |                |   |   |
| Post-Disaster Recovery Plan  | No                         | -   | Local                                     | -                               | No             | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |





|  | 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 #. |   |
| Continuity of Operations Plan  | No                         | -   | Local                                     | -                               | 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   | County                     | -   | Local                                     | -                               | ?              | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |
| Other  | -                          | -   | -   | -                               | -              | -   | - |
| Comment:   |                            |   |   |                                 |                |   |   |

**Table 9.10-4. 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 and Enforcement   |
| Permits are tracked by hazard area. For example, floodplain development permits.  | No   |
| Buildable land inventory<br>If yes, please describe<br>If no, please quantitatively describe the level of buildout in the jurisdiction. | No- The Town has development spread throughout the Town set among reservoirs and parkland. |

**Administrative and Technical Capability**

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

**Table 9.10-5. Administrative and Technical Capabilities**

| Resources  | Available? (Yes or No) | Department/ Agency/Position   |
|--|------------------------|---|
| <b>Administrative Capability</b>   |                        |   |
| Planning Board   | Yes                    | The Town of Southeast Planning Board office accepts and processes land use applications as follows:<br>Applications for construction, renovation or changes in the use of commercial structures<br>Subdivision of land, both residential and commercial |
| Mitigation Planning Committee  | No                     | -   |
| Environmental Board/Commission   | No                     | -   |
| Open Space Board/Committee   | No                     | -   |
| Economic Development Commission/Committee  | No                     | -   |
| Warning Systems / Services (mass notification system, outdoor warning signals)         | Yes                    | Putnam County BES   |
| Maintenance programs to reduce risk  | Yes                    | Highway Department undertakes proactive maintenance projects  |
| Mutual aid agreements  | Yes                    | County/FD Mutual aid  |
| <b>Technical/Staffing Capability</b>   |                        |   |
| Planners or engineers with knowledge of land development and land management practices | Yes                    | Contract Planner (AKRF)   |





| Resources  | Available?<br>(Yes or No) | Department/ Agency/Position  |
|--|---------------------------|--|
| Engineers or professionals trained in building or infrastructure construction practices                    | Yes                       | Contract Engineer (Tom Fenton, Nathan Jacobsen); Building Department |
| Planners or engineers with an understanding of natural hazards   | Yes                       | Contract Engineer (Tom Fenton, Nathan Jacobsen)                      |
| Staff with expertise or training in benefit/cost analysis  | Yes                       |  |
| Professionals trained in conducting damage assessments   | Yes                       | Building Department  |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes                       | Contracted (AKRF- Town Planning)                                     |
| Scientist familiar with natural hazards  | No                        | -  |
| NFIP Floodplain Administrator (FPA)  | Yes                       | Building Inspector (currently Michael Levine)                        |
| Surveyor(s)  | Yes                       | Contracted   |
| Emergency Manager  | No                        | All through the County   |
| Grant writer(s)  | Yes                       | Several staff  |
| Resilience Officer   | No                        | -  |
| Other  | No                        | -  |

**Fiscal Capability**

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

**Table 9.10-6. Fiscal Capabilities**

| Financial Resources   | Accessible or Eligible to Use<br>(Yes/No) |
|---|---|
| Community development Block Grants (CDBG, CDBG-DR)                | No  |
| Capital improvements project funding                              | Yes                                       |
| Authority to levy taxes for specific purposes                     | Yes                                       |
| User fees for water, sewer, gas or electric service               | Yes                                       |
| 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 (Open space, special tax districts)   |
| 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                           | No-private                                |
| Other   | No  |

**Education and Outreach Capability**

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

**Table 9.10-7. Education and Outreach Capabilities**

| Indicate if your jurisdiction has the following resources                            | Yes/No; Please describe                          |
|--|--|
| Public information officer or communications office?                                 | Town Clerk                                       |
| Personnel skilled or trained in website development?                                 | POC- Planning Department Sec’y (2 or 3 w access) |
| Hazard mitigation information available on your website; if yes, describe            | Yes  |
| Social media for hazard mitigation education and outreach; if yes, briefly describe. | No   |





| Indicate if your jurisdiction has the following resources   | Yes/No; Please describe                |
|---|--|
| Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.               | Yes (Lake Tonetta Advisory Committee), |
| 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.  | Yes-website                            |
| Natural disaster/safety programs in place for schools; if yes, briefly describe.  | N/A                                    |
| Other   | No                                     |

### Community Classifications

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

**Table 9.10-8. 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) | No                      | -                              | -                               |
| NYSDEC Climate Smart Community                          | No                      | -                              | -                               |
| 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 9.10-9. Adaptive Capacity of Climate Change**

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



| 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

### National Flood Insurance Program

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

#### NFIP Floodplain Administrator (FPA)

Michael Levine. Building Inspector

#### National Flood Insurance Program (NFIP) Summary

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

**Table 9.10-10. NFIP Summary**

| Municipality      | # Policies | # Claims (Losses) | Total Loss Payments | # RL Properties |
|-------------------|------------|-------------------|---------------------|-----------------|
| Town of Southeast | 43         | 13                | \$27,544            | 2               |

Source: FEMA 2020

Notes: Policies, claims, and 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

The community FDPO identifies the Building Inspector as the local NFIP Floodplain Administrator, currently Michael Levine, for which floodplain administration is an auxiliary duty. Consultants are used to support the Floodplain Administrator if necessary on projects requiring additional engineering, planning, or architectural expertise.

The Building Inspector is designated to administer the provisions of Chapter 74: Flood Damage Prevention. There are no certified floodplain managers on staff in the Town of Southeast. NFIP requirements are discussed with property owners and/or their consultants and FIRMs are available for review. The Building Department and Town Engineer undertake permit review and inspections. The Town makes substantial improvement determinations. The Building Inspector cites engineering costs to applicants as being a barrier to effective administration and compliance in the NFIP.

#### Compliance History

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The Town of Southeast has completed Community Assistance Visits (CAV), with the most recent visit completed on July 10, 2014.

There were not any properties damaged by floodwaters in Southeast following Hurricanes Irene, Sandy or Tropical Storm Lee. If Substantial Damage estimates were necessary, the NFIP Floodplain Administrator would make those determinations. There were not any declared for the most recent storm events. An elevation inquiry was made by a private cottage owner. This property was elevated using private money and completed in 2011.



## Regulatory

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on January 24, 2013, and is found at Chapter 74 of the local code.

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

Duties and responsibilities of the Building Inspector/NFIP Administrator are permit review, GIS, and education and outreach.

The Town does not maintain a list or inventory of properties that have been flood damaged. However, the Fire Department does maintain a list of properties where basements have been pumped out due to flooding. If Substantial Damage estimates were necessary, the NFIP Floodplain Administrator would make those determinations. There were not any declared for the most recent storm events.

In the Town of Southeast, the following educational and/or outreach activities related to the NFIP: FEMA maps are made readily available for viewing and information regarding flood risks is available on the Town's website.

There were no barriers identified that inhibit the ability of the Town to run an effective floodplain management program. Additional information and training on both floodplain management and the Community Rating System (CRS) would be welcomed. The Town is not currently a member of the CRS program and would consider joining once learning more about the program.

## Additional Areas of Existing Integration

- **Land Use Planning/Comprehensive Planning:** The Town has completed updating the Comprehensive Plan and has include natural hazard zones and referenced the HMP in the Comprehensive Plan. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.
- **Land Use and Development:** The Town has a Planning Board and Zoning Board, as well as contract planner and engineer to support land use decisions and assure compliance with regulations, ordinances and the recently updated Comprehensive Plan.
- **Stormwater Management:** The Town's 5-year MS4 plan includes some 28 infrastructure improvement projects were identified to address both water quality and quantity, with attendant implications to reduce damage resulting from stormwater flooding. The Town completed all Year 1 projects, and is currently being supported by the East of Hudson Watershed Corporation (EOHWC) to complete some of the larger retrofit projects during Years 2/3.
- **Building Local Mitigation Capabilities:** The Town 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.
- **Stormwater:** The Town is completing assessments and upgrades of stormwater conveyance network.

## 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’s evacuation routes include major State Highways: Route 22, Route 312, Route 6, Interstate 684, Interstate 84. In the event of an evacuation, residents would be directed by local law enforcement in conjunction with Putnam County Bureau of Emergency Services.

**Sheltering**

The Town of Southeast has a plan in place with the Brewster School District for the High School Building

Any/all others (i.e. American Red Cross, FEMA) would be coordinated through the Putnam County Emergency Services Department located in Carmel, NY.

The table below presents information about the Town’s available sheltering:

| Shelter Name         | Address       | Capacity | Accommodates Pets? | ADA Compliant? | Backup Power? | Types of Medical Services Provided | Other Services Provided |
|----------------------|---------------|----------|--------------------|----------------|---------------|------------------------------------|-------------------------|
| Brewster High School | 50 Foggintown | -        | -                  | -              | Yes           | None                               | Shelter                 |

**Temporary Housing**

Temporary housing locations in Southeast are described in the table below.

| Site Name                                | Site Address                | Infrastructure / Utilities Available (water, electric, septic, etc.) | Capacity (number of sites) | Type            | Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code |
|--|-----------------------------|--|----------------------------|-----------------|---|
| Brewster School District Athletic Fields | 20-40 Farm to Market Rd     | Water, Electric, Septic within existing buildings                    | -                          | Athletic Fields | -   |
| Volunteer Park                           | 67 Zimmer Rd                | Water, Electric  | -                          | Athletic Fields | -   |
| Southeast Train Station Parking Lot(s)   | 1 & 2 Independent Way       | Electric   | -                          | Parking Lots    | -   |
| Lakeview Plaza                           | 1505-1515 Rt 22             | Water, Electric, Septic  | -                          | Parking Lot     | -   |
| Kohls, Home Depot, Deciccios             | 50, 60 & 80 Independent Way | Water, Electric, Sewer   | -                          | Parking Lot     | -   |

**Permanent Housing**

Potential permanent housing locations in the Town of Southeast are shown in the table below:



| Site Name           | Site Address           | Infrastructure / Utilities Available (water, electric, septic, etc.) | Capacity (number of sites) | Type                              | Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code |
|---------------------|------------------------|--|----------------------------|-----------------------------------|---|
| Putnam Seabury      | Zimmer Road            | -  | -                          | Unbuilt Single Family Subdivision | -   |
| Barrett Hill        | Mount Ebo Rd N         | Water, Electric, Sewer   | -                          | Unbuilt Condo Subdivision         | -   |
| Fortune Ridge Farms | Off Deans Corners Road | Water, Electric, Sewer   | 85                         | Unbuilt Single Family Subdivision | -   |

### 9.10.5 Hazard Event History Specific to the Town of Southeast

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 Town of Southeast’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 9.10-11 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 9.10-11. Hazard Event History**

| Dates of Event               | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event   | Municipal Summary of Damages and Losses  |
|------------------------------|---|--------------------|--|--|
| June 13, 2017                | Thunderstorm Wind                               | No                 | Severe thunderstorms impacted Putnam and Orange Counties.  | Southeast in 60 mph winds and a downed tree near Milltown at the intersection of Routes 312 and 22.    |
| June 19, 2017                | Thunderstorm Wind                               | No                 | A shortwave and surface cold front triggered severe thunderstorms in the region,   | A tree was also reported down along Route 312 in Brewster.   |
| May 15, 2018                 | Severe Thunderstorm; Tornado                    | No                 | A microburst and tornado event caused significant damage throughout Putnam County  | None identified by the community   |
| June 18, 2018                | Severe Thunderstorm                             | No                 | A severe thunderstorm with winds up to 58 mph was reported in southeast New York.  | None identified by the community   |
| March 3-4, 2019              | Heavy Snow                                      | No                 | Over half a foot of snow fell in Putnam County as a low pressure system brought wintry precipitation as it moved up the Eastern Seaboard.                                    | None identified by the community   |
| June 30 <sup>th</sup> , 2019 | Hail  | No                 | One inch hail as reported following a severe thunderstorm.   | None identified by the community   |
| June 18, 2018                | Thunderstorm event                              | No                 | A cold front brought severe weather to the southeastern New York region.   | Trees and wires fell on Peaceable Hill Road.   |
| March 2020-Present           | Pandemic  | Yes                | The COVID-19 (novel coronavirus) pandemic manifested in New York State in early 2020. As of July 14, 2020, there have been 1,376 positive COVID-19 tests and a positive test | The County BES has been actively addressing COVID-19, particularly with distributing supplies and aid. |



| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event                                  | Municipal Summary of Damages and Losses |
|----------------|---|--------------------|---|---|
|                |   |                    | rate of 6.5%. There have been 63 resident deaths. |   |

Notes:

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

### 9.10.6 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 the Town of Southeast’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 9.10-12. Potential Flood Losses to Critical Facilities**

| Name                      | Type          | Exposure |            | Addressed by Proposed Action |
|---------------------------|---------------|----------|------------|------------------------------|
|                           |               | 1% Event | 0.2% Event |                              |
| Village of Brewster Wells | Potable Water | X        | X          | 008                          |
| BOG BROOK DAM #1          | Dam           | X        | X          | 008                          |
| BOG BROOK DAM #2          | Dam           | X        | X          | 008                          |
| NYSEG - Putnam Lake       | Electric      | X        | X          | 008                          |
| SODOM DAM                 | Dam           | X        | X          | 008                          |

Source: Putnam County 2020

#### 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 Town of Southeast. The Town of Southeast 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.

During the review of the hazard/vulnerability risk ranking, the Town of Southeast indicated the following:

- The Town adjust the ranking for wildfire from medium to low based on the limited acreage throughout the municipality and the history of occurrences.

**Table 9.10-13. 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              | Low*     |

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 Town of Southeast, the East Branch Croton River near I-84 floods low-lying floodplain areas in the Town. Tonetta Brook has been the source of flooding along the railroad right-of-way. Holly Stream causes localized flooding in the areas north of I-684 (FEMA FIS 2013).

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

- Worst flooding area is East Branch of the Croton River, parallels Gage Road. Croton will rise and fall 3’
- All corrugated pipe is failing. (Action 004)
- A majority of the existing road system has corrugated metal pipe; roads sink and catch basins collapse. Replacement is complicated by underground utilities. (Action 004)
- Road beds are failing. Some were built substandard with no proper base and poor drainage. Prime example is Harvest Drive where developer abandoned responsibility to maintain. (Action 005)
- Beaver dam issues, such as on East Branch of Croton River. There have been no surveys to determine where the beaver dams and snags exist
- Peach Lake – eutrophication is leading to loss of storage capacity (Action 003)
- Cobb Road – culvert under road is undersized
- Evacuation issues – Private roads have provided only one point of ingress/egress as gates block secondary access. Locations include:
  - Indian Wells, between Indian Wells and Gage road. Emergency access through private driveway.
  - Enoch Crosby Road and Peter Road – Emergency access gate
- Communications and sharing of facilities between the Town and school district are formalized. IMA for sheltering/showering
- Regarding sheltering, although the Town is using Hudson Valley United Cerebral Palsy, it is not centrally located and could be overwhelmed in an emergency situation. Further, current public education programs



regarding preparedness and sheltering are limited on what to pack, but not where to go or what to do. IMA-can use in emergencies. Have handed out water, dry ice, phone chargers, etc.

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

- A resident noted in a survey that downed trees on Union Valley Road cause power outages.
- Another resident noted generally that tree growth above or adjacent to power lines (especially major feeders) need to be trimmed. The Town's electric utility (NYSEG) was reported as needing improvement with respect to crew availability and mutual aid.

### 9.10.7 Mitigation Strategy and Prioritization

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

#### Past Mitigation Initiative Status

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The following table indicates progress on the community's mitigation strategy identified in the 2015 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.

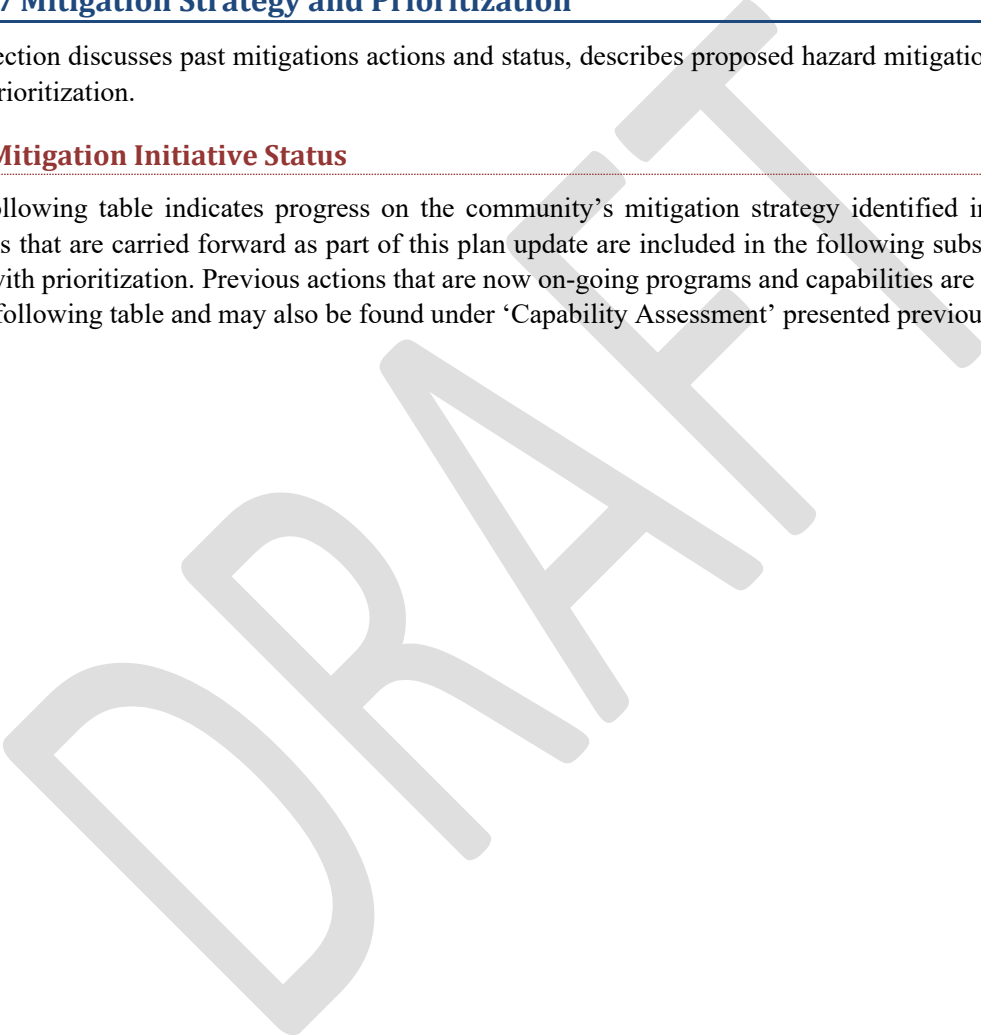






Table 9.10-14. Status of Previous Mitigation Actions

| 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<br>1. Project to be included in 2020 HMP or Discontinue<br>2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|---------------------|---|--|--|--|--|--------------------------------------|-------------------------------|--|
|                     |   |  |  |  |  | Cost                                 | Level of Protection           |  |
| TOS-1<br>(LOI #348) | Welfare Road Culvert Replacement                                | Flood, Severe Storm, Climate Change    | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | Replace the existing corrugated metal pipe with an adequately sized concrete box culvert. Appropriately sized culvert will safely pass storm water runoff from all storm events and eliminate overtopping of the roadway. See Action Worksheet                                 | Complete   | Cost                                 | \$475,000                     | 1. Completed in fall 2020  |
|                     |   |  |  |  |  | Level of Protection                  | Enhanced hydraulic capacity   |  |
|                     |   |  |  |  |  | Damages Avoided; Evidence of Success | Continued functioning of road |  |
| TOS-2<br>(LOI #352) | Maple Road Culvert Replacement                                  | Flood, Severe Storm, Climate Change    | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | The proposed mitigation is to replace the existing pipe and head wall with an adequately sized concrete box culvert. An appropriately sized box culvert would safely pass the storm water runoff from all storm events, eliminating the roadway flooding. See Action Worksheet | No progress  | Cost                                 |                               | 1. Continue  |
|                     |   |  |  |  |  | Level of Protection                  |                               |  |
|                     |   |  |  |  |  | Damages Avoided; Evidence of Success |                               |  |
| TOS-3<br>(LOI #394) | Brewster Hill Road Culvert Replacement                          | Flood, Severe Storm, Climate Change    | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | The proposed mitigation would be to install an adequately sized concrete box culvert that will safely convey the runoff flow from severe storm events without over topping the road and eliminate the potential for future flooding or culvert failure. See Action Worksheet   | No progress  | Cost                                 |                               | 1. Include in the 2020 HMP   |
|                     |   |  |  |  |  | Level of Protection                  |                               |  |
|                     |   |  |  |  |  | Damages Avoided; Evidence of Success |                               |  |
| TOS-4<br>(LOI #396) | Dredging of Peach Lake Outlet Channel                           | Flood, Severe Storm, Climate Change    | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | The mitigation for this condition would be to dredge the outlet channel of accumulated sediment and improve the outlet flow so as to alleviate flooding conditions around the lake. See Action Worksheet   | No progress  | Cost                                 |                               | 1. Include in the 2020 HMP   |
|                     |   |  |  |  |  | Level of Protection                  |                               |  |
|                     |   |  |  |  |  | Damages Avoided; Evidence of Success |                               |  |
| TOS-5               | Continue to work with school district to improve communications | All Hazards, particularly those events | Town (supervisor, assessor) working with School District                     | Continue to work with school district to improve communications and shared services, including sheltering. If appropriate agreements were in place, school   | Complete   | Cost                                 |                               | 1. Discontinue – IMA in place as of 2020   |
|                     |   |  |  |  |  | Level of Protection                  |                               |  |
|                     |   |  |  |  |  | Damages Avoided;                     |                               |  |



| 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<br>1. Project to be included in 2020 HMP or Discontinue<br>2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|---|---|-------------------------|--|--|--------------------------------------|--|--|
|           |   |   |                         |  |  | Evidence of Success                  |  |  |
|           | and shared services, including sheltering                 | requiring sheltering                              | Board of Education      | could serve as a sheltering facility in the event that current designated shelter is overwhelmed during an emergency situation or catastrophe. The Town has been working with the Board of Education and anticipates agreements to be completed by mid-2015.   |  | Evidence of Success                  |  |  |
| TOS-6     | Assessment and upgrades of stormwater conveyance network: | Flood, Severe Storm, Climate Change               | Town Highway Department | Assessment and upgrades of stormwater conveyance network:<br>Location: Town-wide<br>Problem: All corrugated pipe is failing. A majority of the existing road system has corrugated metal pipe; roads sink and catch basins collapse. Replacement is complicated by underground utilities.<br>Mitigation Project/Initiative: Conduct comprehensive assessment of stormwater conveyance network. Town has a long term plan to replace all corrugated pipe with plastic pipe, related to MS4 program. | In progress  | Cost                                 |  | 1. Include in the 2020 HMP   |
|           |   |   |                         |  |  | Level of Protection                  |  |  |
|           |   |   |                         |  |  | Damages Avoided; Evidence of Success |  |  |
| TOS-7     | Cobb Road Culvert Replacement                             | Flood, Severe Storm, Climate Change               | Town Highway Department | Cobb Road Culvert Replacement: Culvert under road is undersized. Replace pipe under road with larger size. See Action Worksheet  | No progress  | Cost                                 |  | 1. Continue  |
|           |   |   |                         |  |  | Level of Protection                  |  |  |
|           |   |   |                         |  |  | Damages Avoided; Evidence of Success |  |  |
| TOS-8     | Problem: Road beds are failing                            | Severe Storm, Severe Winter Storm, Climate Change | Town Highway Department | Location: Town-wide<br>Problem: Road beds are failing. Some were built substandard with no proper base and poor drainage.<br>Mitigation Project/Initiative: The Town prioritizes roads for maintenance schedule, and will conduct upgrades and mitigation at that time.  | In progress  | Cost                                 |  | 1. Include in the 2020 HMP   |
|           |   |   |                         |  |  | 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<br>1. Project to be included in 2020 HMP or Discontinue<br>2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|---|--|--|--|--|--------------------------------------|--|--|
|           |   |  |  | Resurface and address drainage roads in Brewster Heights Maple Road and Cobb Road Culvert- outstanding fixes   |  |                                      |  |  |
| TOS-9     | Problem: Evacuation issues  | All hazard events requiring emergency access | Town, working with owners of private roadways                  | <p>Problem: Evacuation issues – Private roads have provided only one point of ingress/egress as gates block secondary access. Locations include:</p> <ul style="list-style-type: none"> <li>Indian Wells, between Indian Wells and Gage. Private driveway</li> <li>Enoch Crosby road and Peter Road</li> <li>State Line Road.</li> </ul> <p>Mitigation Project/Initiative: Work with private road owners to remove gates blocking secondary access.</p>  | No progress  | Cost                                 |  | 1. Discontinue- combined with 005  |
| TOS-10    | Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities | All Hazards                                  | Putnam County, as supported by relevant local department leads | <p>Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically:</p> <ul style="list-style-type: none"> <li>Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation.</li> <li>Workshops and Seminars to build local capabilities in floodplain management and disaster recovery (PCBES-11), potentially to include:               <ul style="list-style-type: none"> <li>NFIP Community Rating System (CRS)</li> <li>Benefit-Cost Analysis (BCA)</li> <li>Substantial Damage Estimating (SDE)</li> </ul> </li> </ul> | Ongoing capability                                   | Cost                                 |  | 1. Discontinue – this is an ongoing capability and part of the Town’s municipal operations   |
|           |   |  |  |  |  | Level of Protection                  |  |  |
|           |   |  |  |  |  | Damages Avoided; Evidence of Success |  |  |
|           |   |  |  |  |  | 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<br>1. Project to be included in 2020 HMP or Discontinue<br>2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate).<br>3. If discontinue, explain why. |
|-----------|--------------|---------------------|-------------------|---|--|-------------------------------------|--|--|
|           |              |                     |                   | <ul style="list-style-type: none"> <li>○ NFIP Elevation Certificates (EC)</li> <li>○ Certified Floodplain Manager (CFM) Training and Certification</li> <li>● County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures (PCBES-12)</li> </ul> |  |                                     |  |  |

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### **Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy**

The Town of Southeast did not identify mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy in the 2015 Plan.

### **Proposed Hazard Mitigation Initiatives for the Plan Update**

The Town of Southeast participated in a mitigation action workshop in August 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: Putnam County Mitigation Catalog and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.10-15 summarizes the comprehensive-range of specific mitigation initiatives the Town of Southeast 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 9.10-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.





Table 9.10-15. 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-Southeast-001<br>(Former TOS-2)                   | Maple Road Culvert Replacement         | G-1, G-3, G-5 | Flood, Severe Storm       | <p><b>Problem:</b> The existing 3 foot diameter steel pipe is undersized resulting in flooding and over topping of roadway. Also the rubble stone head walls are deteriorated and in need of replacement. The roadway was over topped during both recent severe storms.</p> <p><b>Solution:</b> The proposed mitigation is to replace the existing pipe and head wall with an adequately sized concrete box culvert. An appropriately sized box culvert would safely pass the storm water runoff from all storm events, eliminating the roadway flooding.</p>            | No                         | Yes        | Long-term DOF      | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | \$550,000       | High – Reduced damage to roadway and road closures; potential life safety | CHIP; HMGP; Town Funds   | Medium   | SIP                 | SP           |
| 2020-Southeast-002<br>(Former TOS-3)<br><br>(LOI #394) | Brewster Hill Road Culvert Replacement | G-1, G-3, G-5 | Flood, Severe Storm       | <p><b>Problem:</b> The problem is an undersized metal culvert under Brewster Hill Road which causes flooding and over topping of roadway in severe storm events. Due to the condition of the culvert and the recent flooding the potential exists for a major failure in the future.</p> <p><b>Solution:</b> The proposed mitigation would be to install an adequately sized concrete box culvert that will safely convey the runoff flow from severe storm events without over topping the road and eliminate the potential for future flooding or culvert failure.</p> | No                         | Yes        | Long-term DOF      | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | \$750,000       | High – Reduced damage to roadway and road closures; potential life safety | Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match | High     | SIP                 | SP           |
| 2020-Southeast-003<br>(Former TOS-4)<br><br>(LOI #396) | Dredging of Peach Lake Outlet Channel  | G-1, G-3, G-5 | Flood, Severe Storm       | <p><b>Problem:</b> Over time the outlet channel from Peach Lake has become filled with soil and vegetation to the extent that flow is restricted. This has caused reported higher water surface elevations in the lake and is particularly problematic during severe storms.</p>   | No                         | Yes        | Long-term          | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | \$1,500,000     | Medium - Reduced flooding to property and structures around the Lake.     | Federal Mitigation grant funding; Town or affected   | High     | NRP                 | NR           |



Table 9.10-15. 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 |
|--------------------------------------|-----------------------------|---------------|-----------------------------------|---|----------------------------|------------|--------------------|-------------------------|-----------------|---|---------------------------|----------|---------------------|--------------|
|                                      |                             |               |                                   | <b>Solution:</b> The mitigation for this condition would be to dredge the outlet channel of accumulated sediment and improve the outlet flow so as to alleviate flooding conditions around the lake.  |                            |            |                    | Superintendent          |                 |   | residents for Local Match |          |                     |              |
| 2020-Southeast-004<br>(Former TOS-6) | Southeast Stormwater Repair | G-1, G-3, G-5 | Flood, Severe Storm               | <p><b>Problem:</b> All corrugated pipe is failing. A majority of the existing road system has corrugated metal pipe; roads sink and catch basins collapse. Replacement is complicated by underground utilities.</p> <p><b>Solution:</b> Assessment and upgrades of stormwater conveyance network:<br/>Location: Town-wide<br/>Mitigation Project/Initiative: Conduct comprehensive assessment of stormwater conveyance network. Town has a long term plan to replace all corrugated pipe with plastic pipe, related to MS4 program.</p>   | No                         | Yes        | Medium-term        | Town Highway Department | High            | Improved stormwater management, reduced damage to transportation infrastructure | Town Budget               | Medium   | SIP                 | SP           |
| 2020-Southeast-005<br>(Former TOS-8) | Southeast Road Repair       | G-1, G-3, G-5 | Severe Storm, Severe Winter Storm | <p><b>Problem:</b> Road beds are failing. Some were built substandard with no proper base and poor drainage. Private roads have provided only one point of ingress/egress as gates block secondary access. Locations include:</p> <ul style="list-style-type: none"> <li>Indian Wells, between Indian Wells and Gage. Private driveway</li> <li>Enoch Crosby road and Peter Road</li> <li>State Line Road.</li> </ul> <p><b>Solution:</b> Location: Town-wide<br/>Mitigation Project/Initiative: The Town prioritizes roads for maintenance schedule, and will conduct upgrades and mitigation at that time. Resurface and address drainage roads in Brewster Heights Maple Road and Cobb Road Culvert- outstanding fixes</p> | No                         | Yes        | Medium-term        | Town Highway Department | High            | Reduced damage to transportation infrastructure; will support MS4 program       | Town Budget               | Medium   | SIP                 | SP           |



Table 9.10-15. 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-Southeast-006<br>(Former TOS-10) | Southeast Risk Reduction | G-2, G-4  | All Hazards               | <p><b>Problem:</b> The Town has identified a need to enhance training for officials and build capacity for emergency response and risk reduction capabilities.</p> <p><b>Solution:</b> Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically:</p> <ul style="list-style-type: none"> <li>• Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation. (PCBES-1).</li> <li>• Workshops and Seminars to build local capabilities in floodplain management and disaster recovery (PCBES-11), potentially to include:               <ul style="list-style-type: none"> <li>○ NFIP Community Rating System (CRS)</li> <li>○ Benefit-Cost Analysis (BCA)</li> <li>○ Substantial Damage Estimating (SDE)</li> <li>○ NFIP Elevation Certificates (EC)</li> <li>○ Certified Floodplain Manager (CFM) Training and Certification</li> <li>○ County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures</li> </ul> </li> </ul> | No                         | No         | Short              | Putnam County, as supported by relevant local department leads | Low-Medium (locally) | High (comprehensive improvements mitigation and risk-reduction capabilities) | HMGP; County funds; existing resources | Medium   | EAP                 | PI           |



Table 9.10-15. 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-Southeast-007                | Southeast HABS Mitigation       | G-3<br>G-5               | Harmful algal blooms              | <p><b>Problem:</b> Southeast is impacted by harmful algal blooms at its lake caused by a variety of factors.</p> <p><b>Solution:</b> Explore water quality improvements and algal bloom mitigation at Peach Lake and the outlet channel.</p>  | No                         | Yes        | Medium term        | Town of Southeast  | Medium  | Reduced HABS and associated health/ecological risks   | NYSDEC; Town funds; Lake committees | Medium   | NSP                 | NR           |
| 2020-Southeast-008                | Southeast Flood Mitigation      | G-1<br>G-2<br>G-4<br>G-5 | Flood                             | <p><b>Problem:</b> The Town is vulnerable to flooding from the East Branch of the Croton River. There are repetitive flood losses in the Town as well as critical facilities located within the special flood hazard area.</p> <p><b>Solution:</b> Explore non-structural flood mitigation projects to reduce flood damage. Conduct outreach to critical facility owners. Identify drainage “hotspots” and develop mitigation measures like stormwater infrastructure rule changes, new drainage systems, and erosion-arresting measures.</p> | Yes                        | Yes        | Medium term        | Town of Southeast  | Low-outreach; Medium-High-structural flood mitigation | Decreased exposure in the Special Flood Hazard Area; resident/owner/operator awareness of flood hazards | Town funds; FMA; HMGP               | High     | EAP                 | PI           |
| 2020-Southeast-009                | Southeast Vegetation Management | G-1<br>G-4<br>G-5        | Severe Storm; Severe winter Storm | <p><b>Problem:</b> Southeast is vulnerable to electric outages during storms. Electric outages cause individual home water/wastewater systems to fail.</p> <p><b>Solution:</b> Develop a tree trimming/vegetation management program that identifies corridors with high susceptibility to trees that can down wires. Explore opportunities for expanding public water/sewer service to reduce reliance on household pumps.</p>   | No                         | Yes        | Short term         | Town of Southeast  | Low   | Decreased power outages due to downed trees   | Town Funds; HMGP                    | High     | LPR                 | PR           |
| 2020-Southeast-010 (Former TOS-7) | Cobb Road Culvert Replacement   | G-1,<br>G-3,<br>G-5      | Flood; Severe Storm               | <p><b>Problem:</b> The existing culvert pipe is undersized resulting in flooding and over topping of roadway</p> <p><b>Solution:</b> Replace pipe under road with larger size.</p>  | No                         | Yes        | Long-term          | Town of Southeast, Michael Burdick, Town of Southeast Highway Superintendent | Medium  | High – Reduced damage to roadway and road closures; potential life safety                               | CHIP; HMGP; Town Funds              | Medium   | SIP                 | SP           |



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 9.10-16. 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 | Total | High / Medium / Low |
|--------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|-----------------|-------|---------------------|
| 2020-Southeast-001 | Maple Road Culvert Replacement         | 1           | 1                   | 1                  | 1         | 0         | 1     | -1     | 0             | 0      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-002 | Brewster Hill Road Culvert Replacement | 1           | 1                   | 1                  | 1         | 0         | 1     | -1     | 0             | 0      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-003 | Dredging of Peach Lake Outlet Channel  | 1           | 1                   | 1                  | 1         | 1         | 1     | -1     | 1             | 0      | 1              | 1            | 0        | 0               | 0               | 8     | Medium              |
| 2020-Southeast-004 | Southeast Stormwater Repairs           | 0           | 1                   | 0                  | -1        | 1         | 1     | 0      | 1             | 1      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-005 | Southeast Road Repairs                 | 1           | 1                   | 1                  | 1         | 0         | 1     | -1     | 0             | 0      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-006 | Southeast Risk Reduction               | 1           | 1                   | 1                  | 1         | 0         | 0     | 0      | 0             | 0      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-007 | Southeast HABS Mitigation              | 0           | 0                   | 1                  | 1         | 1         | 1     | 0      | 1             | 1      | 0              | 0            | 0        | 1               | 1               | 8     | Medium              |
| 2020-Southeast-008 | Southeast Flood Mitigation             | 1           | 1                   | 1                  | 1         | 1         | 1     | 0      | 1             | 1      | 1              | 0            | 1        | 1               | 1               | 12    | High                |
| 2020-Southeast-009 | Southeast Vegetation Management        | 1           | 1                   | 1                  | 1         | 1         | 1     | 0      | 0             | 1      | 1              | 1            | 1        | 1               | 1               | 12    | High                |
| 2020-Southeast-010 | Cobb Road Culvert Replacement          | 1           | 1                   | 1                  | 1         | 0         | 1     | -1     | 0             | 0      | 1              | 1            | 0        | 1               | 1               | 8     | Medium              |

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





### 9.10.8 Proposed Mitigation Action Types

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

**Table 9.10-17. Analysis of Mitigation Actions by Hazard and Category**

| Hazard              | FEMA |  |     |            | CRS |    |            |     |                                 |    |
|---------------------|------|--|-----|------------|-----|----|------------|-----|---------------------------------|----|
|                     | LPR  | SIP                                    | NSP | EAP        | PR  | PP | PI         | NR  | SP                              | ES |
| Drought             |      |  |     | 006        |     |    | 006        |     |                                 |    |
| Disease Outbreak    |      |  |     | 006        |     |    | 006        |     |                                 |    |
| Earthquake          |      |  |     | 006        |     |    | 006        |     |                                 |    |
| Extreme Temp        |      |  |     | 006        |     |    | 006        |     |                                 |    |
| Flood               |      | 001<br>002<br>003<br>004<br>010        |     | 006<br>008 |     |    | 006<br>008 |     | 001<br>002<br>003<br>004<br>011 |    |
| Harmful Algal Bloom |      |  | 007 | 006        |     |    | 006        | 007 |                                 |    |
| Severe Storm        |      | 001<br>002<br>003<br>004<br>009<br>011 |     | 006        |     |    | 006<br>009 |     | 001<br>002<br>003<br>004<br>011 |    |
| Severe Winter Storm |      | 005                                    |     | 006<br>009 |     |    | 006<br>009 |     | 005                             |    |
| Terrorism           |      |  |     | 006        |     |    | 006        |     |                                 |    |
| Wildfire            |      |  |     | 006        |     |    | 006        |     |                                 |    |

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

### 9.10.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of Southeast 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 Laurie Bell, Michael Levine, Chris Dubois, and Michael Burdick. Laurie Bell 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.

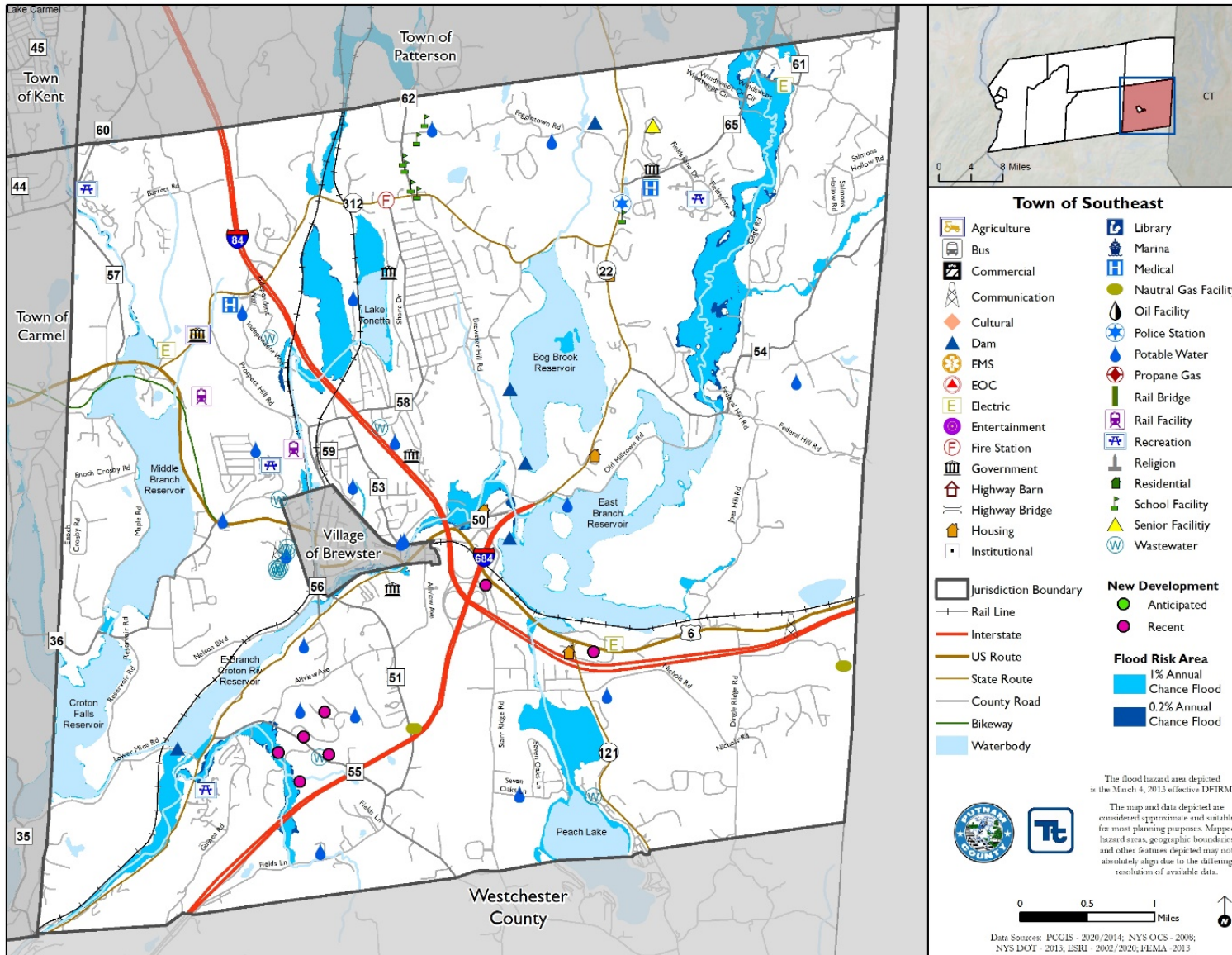
Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

### 9.10.10 Hazard Area Extent and Location

A hazard area extent and location map has been generated for the Town of Southeast 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 Town of Southeast has significant exposure. The map is illustrated below.



Figure 9.10-1. Town of Southeast Hazard Area Extent and Location Map





| Action Worksheet  |   |   |   |
|---|---|---|---|
| <b>Project Name:</b>  | Southeast Flood Mitigation  |   |   |
| <b>Project Number:</b>  | 2020-Southeast-008  |   |   |
| Risk / Vulnerability  |   |   |   |
| <b>Hazard(s) of Concern:</b>  | Flood   |   |   |
| <b>Description of the Problem:</b>  | The Town is vulnerable to flooding from the East Branch of the Croton River. There are repetitive flood losses in the Town as well as critical facilities located within the special flood hazard area. |   |   |
| Action or Project Intended for Implementation   |   |   |   |
| <b>Description of the Solution:</b>   | Explore non-structural flood mitigation projects to reduce flood damage. Conduct outreach to critical facility owners.  |   |   |
| <b>Is this project related to a Critical Facility?</b>  |   | Yes <input checked="" type="checkbox"/>                               | No <input type="checkbox"/>   |
| <b>Is the critical facility located in the 1% annual chance flood area?</b>   |   | Yes <input checked="" type="checkbox"/>                               | No <input 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) |   |   |   |
| <b>Level of Protection:</b>   | 500-year flood event  | <b>Estimated Benefits (losses avoided):</b>                           | Prevention of future flood losses/damages                             |
| <b>Useful Life:</b>   | Indefinite  | <b>Goals Met:</b>   | 1, 2, 4, 5  |
| <b>Estimated Cost:</b>  | Low- outreach<br>Medium/High- flood structural mitigation   | <b>Mitigation Action Type:</b>  | EAP   |
| Plan for Implementation   |   |   |   |
| <b>Prioritization:</b>  | High  | <b>Desired Timeframe for Implementation:</b>                          | 6 months from determination of flood areas/repetitive loss properties |
| <b>Estimated Time Required for Project Implementation:</b>  | 1 year  | <b>Potential Funding Sources:</b>                                     | Town Funds; HMGP  |
| <b>Responsible Organization:</b>  | Town of Southeast   | <b>Local Planning Mechanisms to be Used in Implementation if any:</b> | Capital Improvement Plan  |
| Three Alternatives Considered (including No Action)   |   |   |   |
| <b>Alternatives:</b>  | <b>Action</b>   | <b>Estimated Cost</b>   | <b>Evaluation</b>   |
|   | No Action   | High  | Continued flood losses  |
|   | Structure Relocation  | High-TBD  | Mitigate flood losses but prohibitive costs and land constraints      |
|   | Outreach/mitigation   | Low/medium  | Awareness of flood risk and flood mitigation technical assistance     |
| Progress Report (for plan maintenance)  |   |   |   |
| <b>Date of Status Report:</b>   |   |   |   |
| <b>Report of Progress:</b>  |   |   |   |
| <b>Update Evaluation of the Problem and/or Solution:</b>  |   |   |   |



| Action Worksheet                  |                            |   |
|-----------------------------------|----------------------------|---|
| <b>Project Name:</b>              | Southeast Flood Mitigation |   |
| <b>Project Number:</b>            | 2020-Southeast-008         |   |
| Criteria                          | Numeric Rank<br>(-1, 0, 1) | Provide brief rationale for numeric rank when appropriate                                     |
| <b>Life Safety</b>                | 1                          | Action will protect life safety through distribution of information about flooding            |
| <b>Property Protection</b>        | 1                          | Property owners will receive information about how to mitigate properties from flood damaging |
| <b>Cost-Effectiveness</b>         | 1                          | Mitigation is cost effective  |
| <b>Technical</b>                  | 1                          |   |
| <b>Political</b>                  | 1                          |   |
| <b>Legal</b>                      | 1                          | Outreach is a component of the NFIP   |
| <b>Fiscal</b>                     | 0                          |   |
| <b>Environmental</b>              | 1                          |   |
| <b>Social</b>                     | 1                          | Prevention social disruption due to flooding  |
| <b>Administrative</b>             | 1                          |   |
| <b>Multi-Hazard</b>               | 0                          | Flood   |
| <b>Timeline</b>                   | 1                          |   |
| <b>Agency Champion</b>            | 1                          |   |
| <b>Other Community Objectives</b> | 1                          |   |
| <b>Total</b>                      | 12                         |   |
| <b>Priority (High/Med/Low)</b>    | High                       |   |



| Action Worksheet  |   |   |   |
|---|---|---|---|
| <b>Project Name:</b>  | Southeast Vegetation Management   |   |   |
| <b>Project Number:</b>  | 2020-Southeast-009  |   |   |
| Risk / Vulnerability  |   |   |   |
| <b>Hazard(s) of Concern:</b>  | Severe Storm; Severe winter Storm   |   |   |
| <b>Description of the Problem:</b>  | Southeast is vulnerable to electric outages during storms. Electric outages cause individual home water/wastewater systems to fail.   |   |   |
| Action or Project Intended for Implementation   |   |   |   |
| <b>Description of the Solution:</b>   | Develop a tree trimming/vegetation management program that identifies corridors with high susceptibility to trees that can down wires.<br>Explore opportunities for expanding public water/sewer service to reduce reliance on household pumps. |   |   |
| <b>Is this project related to a Critical Facility?</b>  | Yes <input type="checkbox"/>  | No <input checked="" type="checkbox"/>                                |   |
| <b>Is the critical facility located in the 1% annual chance flood area?</b>   | 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) |   |   |   |
| <b>Level of Protection:</b>   | N/A   | <b>Estimated Benefits (losses avoided):</b>                           | Decreased power outages due to downed trees                         |
| <b>Useful Life:</b>   | 5 Years   | <b>Goals Met:</b>   | 1, 4, 5   |
| <b>Estimated Cost:</b>  | Medium  | <b>Mitigation Action Type:</b>  | LPR   |
| Plan for Implementation   |   |   |   |
| <b>Prioritization:</b>  | High  | <b>Desired Timeframe for Implementation:</b>                          | 6 Months  |
| <b>Estimated Time Required for Project Implementation:</b>  | 1 Year  | <b>Potential Funding Sources:</b>                                     | Town funds  |
| <b>Responsible Organization:</b>  | Town of Southeast   | <b>Local Planning Mechanisms to be Used in Implementation if any:</b> | Capital improvements plan   |
| Three Alternatives Considered (including No Action)   |   |   |   |
| Alternatives:   | Action  | Estimated Cost  | Evaluation  |
|   | No Action   | Medium  | Continued disruption and damage due to downed trees                 |
|   | Rely upon utilities for vegetation management   | Low   | Limited resources and ability for utilities to manage rights-of-way |
|   | Town Vegetation Management Plan   | Medium  | Proactive management of vegetation to reduce risk                   |
| Progress Report (for plan maintenance)  |   |   |   |
| <b>Date of Status Report:</b>   |   |   |   |
| <b>Report of Progress:</b>  |   |   |   |
| <b>Update Evaluation of the Problem and/or Solution:</b>  |   |   |   |



| Action Worksheet                  |                                 |  |
|-----------------------------------|---------------------------------|--|
| <b>Project Name:</b>              | Southeast Vegetation Management |  |
| <b>Project Number:</b>            | 2020-Southeast-009              |  |
| Criteria                          | Numeric Rank<br>(-1, 0, 1)      | Provide brief rationale for numeric rank when appropriate                            |
| <b>Life Safety</b>                | 1                               | Action will mitigate life safety impacts from downed trees and outages               |
| <b>Property Protection</b>        | 1                               | Action will protect private property such as vehicles as well as appliances in homes |
| <b>Cost-Effectiveness</b>         | 1                               |  |
| <b>Technical</b>                  | 1                               |  |
| <b>Political</b>                  | 1                               |  |
| <b>Legal</b>                      | 1                               |  |
| <b>Fiscal</b>                     | 0                               | Need to secure funding   |
| <b>Environmental</b>              | 0                               |  |
| <b>Social</b>                     | 1                               |  |
| <b>Administrative</b>             | 1                               |  |
| <b>Multi-Hazard</b>               | 1                               | Severe Storm; Severe winter Storm  |
| <b>Timeline</b>                   | 1                               | Completed within 1 year  |
| <b>Agency Champion</b>            | 1                               |  |
| <b>Other Community Objectives</b> | 1                               |  |
| <b>Total</b>                      | 13                              |  |
| <b>Priority (High/Med/Low)</b>    | High                            |  |