



9.10 Town of Southeast

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

9.10.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Lynne Eckardt, Councilwoman 1360 Route 22, Brewster, NY 10509 845-661-6349 lynne.eckardt@gmail.com	Laurie Bell, Assessor 1360 Route 22, Brewster, NY 10509 (845) 279-7336 lbell@southeast-ny.gov

9.10.2 Municipal Profile

This section provides a summary of the community.

Population

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

Location

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.

Brief History

The Town was founded in 1788.

Governing Body Format

The Town is governed by a town board.

Growth/Development Trends

The following table summarizes major development that occurred in the municipality over the past five years, as well as known or anticipated future development in the next five (5) years. Refer to the map in section 9.10.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.10-1. Growth and Development

Property Name	Type (Residential or Commercial)	Number of Structures	Parcel ID(s)	Known Hazard Zone*	Description / Status
Crossroads 312	Non-Residential	Construction of 186,000 sq. ft. mixed-use commercial, bank, restaurants, personal & professional services	NYS Rt. 312 & I-84 45.-2-52, 53, 54, 55 & 56	Wildfire: Intermix; Karst: Long 2	Pending Approval, Under Review



Table 9.10-1. Growth and Development

Property Name	Type (Residential or Commercial)	Number of Structures	Parcel ID(s)	Known Hazard Zone*	Description / Status
Fortune Ridge (aka Meadows at Dean's Corners)	Residential	104 single family homes	150 Deans Corner Rd. 67.-3-79, 78.-3-28, 29, 78.-4-77 & 78	Wildfire: Intermix; Karst: Long 1	Approved, Construction started
Lyons Development	Non-Residential	Construction of 14,000 2-story office/retail building	Rt. 6 & Starr Ridge Rd. 68.-2-2	Karst: Long 1	Pending Approval, Under Review
Opportunity Park	Non-Residential	Site plan for public recreation area	85 Independent Way 56.-1-32.112	Wildfire: Intermix; Karst: Long 1	Pending Approval, Under Review
Southeast Plaza, LLC	Non-Residential	Construction of 2-story 10,000 sq. ft. business/retail building	3601 Rt. 6 68.-2-58	Wildfire: Interface; Karst: Long 1	Pending Approval, Under Review
Stateline Retail Center	Non-Residential	184,800 sq. ft. retail center and 14,800 sq. ft. 2-story office building	US Rt. 6/202 to the east of Old Nichols Rd. to the west of Dingle Rd. and immediately north of I-84 68.-2-48	Wildfire: Interface; NEHRP: D; Karst: Long 1	Approved, not built Approvals extended by PN as of 4/10/2014
Dykeman's Corporate Park	Commercial - Warehouse	2 warehouses – 20k and 25K sq. ft.	425Route 312 45.-2-35	Wildfire: Intermix	Approved, not built
Barrett Hill	Residential – Senior Housing	148 Units	41 Mount Ebo Road North	Wildfire: Intermix; Karst: Long 1	Pending Approval
Terravest Senior Housing	Residential – Senior Housing	60 Detached Units	Zimmer Road	TBD	Approved, not built

* Only location-specific hazard zones or vulnerabilities identified.

Source: June 2014 "Large Development Projects Report", Putnam County Department of Planning, Development and Transportation; as amended by municipality

9.10.3 Natural Hazard Event History Specific to the Municipality

Putnam County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2008, refer to Volume I, Section 5.0 of this plan.

Table 9.10-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
August 1990	Flooding	N/A	N/A	Putnam and Westchester Counties had \$5 M in property damage
July 9, 1997	Thunderstorm / Wind	N/A	N/A	\$30K in property damage in Lake Carmel
September 16-	Hurricane Floyd	DR-1296	Yes	Bridge on Guinea Road over Holly Brook



Table 9.10-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
18, 1999	Major Disaster Declarations			washed out, rebuilt. \$1.9 M in property damage Countywide
November 2001 – January 2002	Drought	N/A	N/A	NYC's combined storage in water system reservoir systems was at a low 41% capacity
April - October 2002	Drought	N/A	N/A	Groundwater and water storage facilities were below normal. NYC reservoir system reached a low of 64.5%.
July 9, 2002	Lightning	N/A	N/A	Lightning strike caused several fires in Mahopac Falls; approximately \$500 K in property damage.
August 11, 2008	Lightning	N/A	N/A	Lightning struck and destroyed a barn in Milltown; approximately \$75 K in property damage.
September 30, 2010	Strong Wind	N/A	N/A	Strong winds downed power lines and trees; power outages; approximately \$50 K in property damage
August 26 – September 5, 2011	Hurricane Irene	DR-4020	Yes	Joe's Hill Road washout
October 27 – October 8, 2012	Hurricane Sandy	DR-4085	Yes	Bridge on Minor Road, culvert damage, abuts Bog Brook Reservoir

*Notes:**EM Emergency Declaration (FEMA)**FEMA Federal Emergency Management Agency**DR Major Disaster Declaration (FEMA)**IA Individual Assistance**N/A Not applicable**PA Public Assistance*



9.10.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Town of Southeast. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for Town of Southeast.

Table 9.10-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, b, e}	Probability of Occurrence ^c	Risk Ranking Score (Probability x Impact)	Hazard Ranking
Earthquake	100-Year GBS: \$0 500-Year GBS: \$1,052,806 2,500-Year GBS: \$20,528,822	Occasional	12	Low
Extreme Temperature	Damage estimate not available	Frequent	21	Medium
Flood	1% Annual Chance: \$57,366,378	Frequent	18	Medium
Landslide	RCV Exposed: \$3,022,618,516	Occasional	36	Medium*
Severe Storm	100-Year MRP: \$3,637,802 500-year MRP: \$19,244,718 Annualized: \$237,512	Frequent	48	High
Severe Winter Storm	1% GBS: \$19,057,988 5% GBS: \$95,289,939	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$2,854,607,502	Frequent	42	High

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)

b. The valuation of general building stock and loss estimates was based on the custom inventory developed for Putnam County and probabilistic modeling results and exposure analysis as discussed in Section 5.

c. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages within the Town boundary.

d. Frequent = Hazard event is likely to occur within 25 years.

Occasional = Hazard event is likely to occur within 100 years

Rare = Hazard event is not likely to occur within 100 years

e. The estimated potential losses for Severe Storm are from the HAZUS-MH probabilistic hurricane wind model results. See footnote c.

GBS = General building stock

MRP = Mean return period

RCV = Replacement cost value

*Town identifies their relative landslide risk as "Medium"

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the municipality.

Table 9.10-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Town of Southeast	48	4	\$27,544.31	0	0	10

Source: FEMA Region 2, 2014

(1): Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 2/28/14. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents the number of claims closed by 2/28/14.

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



(3): The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file. FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

Table 9.10-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽²⁾
BOG BROOK DAM #1	Dam	X	X			
BOG BROOK DAM #2	Dam	X	X			
JUENGST DAM	Dam	X	X			
MIDDLE BRANCH DAM	Dam	X	X			
NYSEG - Putnam Lake	Electric	X	X	12	-	
SODOM DAM	Dam	X	X			
Southeast station	Rail Facility	X	X			

Source: HAZUS-MH 2.1

Note: Please note it is assumed the wells and pump stations have electrical equipment and openings are three-feet above grade. If depth of water is less than 3 feet, no estimated damages are calculated.

NP Not provided by HAZUS

x Facility located within the DFIRM boundary.

- No loss calculated by HAZUS

NA Not calculated in HAZUS

NF HAZUS estimate the facility will not be functional

(1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

(2) In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

(3) Dams located in the floodplain are not listed in the table above. HAZUS does not calculate potential losses to a dam as a result of a flood event.

Other Vulnerabilities Identified by Municipality

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.
- The following infrastructure damages have occurred in the Town:
 - Route 6 bridge crossing at North Main and Route 6 over MTA tracks (Village of Brewster)
 - Morninthorpe Avenue Bridge – remains closed, however funding has been allocated by NYS to reopen as a pedestrian bridge
 - Prospect Hill Bridge – remains closed, and causes delays in emergency response times. MTA owned



- Bridge on Minor Road, culvert damage during Sandy, abuts Bog Brook Reservoir – this bridge has been repaired
 - Bridge on Guinea Road over Holly Brook damaged during Floyd. Rebuilt
 - Joe's Hill Road washout - Irene. Rebuilt
- A majority of the existing road system has corrugated metal pipe; roads sink and catch basins collapse. Replacement is complicated by underground utilities.
- 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.
- 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
- 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 not formalized.
- 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.



9.10.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the municipality.

Table 9.10-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y	State, Local	Building Dept.	Ch. 54
Zoning Ordinance	Y	Local	Building Dept.	Ch. 138
Subdivision Ordinance	Y	Local	Planning	Ch. 123
Site Plan Review Requirements	Y	Local	Planning	Ch. 123
National Flood Insurance Program (NFIP) Flood Damage Protection Ordinance	Y	Federal, State, Local	Building Dept.	Ch. 74
NFIP - Freeboard	Y	State, Local	Building Dept.	Ch. 74 - State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types.
NFIP - Cumulative Substantial Damages	N	Local		
Comprehensive Plan / Master Plan	Y	State, Local	Town Board	Adopted in 2014
Capital Improvements Plan				
Stormwater Management Plan/Ordinance	Y		Town Board	Ch. 119
Floodplain Management / Basin Plan				
Open Space or Greenway Plan	Y		Town Board	
Emergency Management and/or Response Plan				
Economic Development Plan	N			
Post Disaster Recovery Plan and/or Ordinance	N			
Growth Management	N			
Real Estate Disclosure req.	Y			
Habitat Conservation Plan	N			
Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas)	Y			Ch. 78

(1) NYS Subdivision laws provide a general framework, but allow room for local ordinances and interpretation.



Administrative and Technical Capability

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

Table 9.10-7. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Contract Planner (AKRF)
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Contract Engineer (Tom Fenton, Nathan Jacobsen); Building Department
Planners or engineers with an understanding of natural hazards	Y	Contract Engineer (Tom Fenton, Nathan Jacobsen)
NFIP Floodplain Administrator	Y	Building Inspector (currently Michael Levine)
Surveyor(s)	N	Contracted
Personnel skilled or trained in “GIS” applications	Y	Contracted (AKRF- Town Planning)
Scientist familiar with natural hazards in the County.	N	
Emergency Manager	Y	Kenny Clair -Fire Inspector, E911 and Emergency Services Coordinator (not officially designated)
Grant Writer(s)	Y	Several staff
Staff with expertise or training in benefit/cost analysis	Y	

Fiscal Capability

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

Table 9.10-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	N
Capital Improvements Project Funding	Y
Authority to Levy Taxes for specific purposes	Y
User fees for water, sewer, gas or electric service	Y
Impact Fees for homebuyers or developers of new development/homes	Y
Incur debt through general obligation bonds	Y
Incur debt through special tax bonds	Y (open space, special tax districts)
Incur debt through private activity bonds	N
Withhold public expenditures in hazard-prone areas	N
Mitigation grant programs	Y
Other	

Community Classifications

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

Table 9.10-9. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	N/P	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	TBD	



Program	Classification	Date Classified
Public Protection	TBD	
Storm Ready	N/P	N/A
Firewise	N/P	N/A

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

National Flood Insurance Program

The following section provides details on the National Flood Insurance Program (NFIP) as implemented within the municipality:

NFIP Floodplain Administrator

Michael Levine, Building Inspector

Program and Compliance History

Town of Southeast joined the NFIP on 1987 and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated 3/4/13.

As of July 31, 2014 there were 50 policies in force, insuring \$12.7 million of property with total annual insurance premiums of \$33,328.

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.

Loss History and Mitigation

Since 1978, 4 claims have been paid totaling \$27,544. As of February 28, 2014 there are no Repetitive Loss or Severe Repetitive Loss properties in the Town of Southeast.

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.

Planning and Regulatory Capabilities

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.

Administrative and Technical Capabilities

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.

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.

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

Public Education and Outreach

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.

Actions to Strengthen the Program

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.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that have been/will be incorporated into municipal procedures which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation 'capabilities'.

- **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.



9.10.6 Mitigation Strategy and Prioritization

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

Past Mitigation Activity

The municipality identifies the following mitigation projects and/or initiatives have been completed in the past or are ongoing:

- Per the Town's 5-year MS4 plan, 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's Highway Department completed all projects identified for Year 1, and continues to address those projects identified in Years 2-5 as resources are available.
- The East of Hudson Watershed Corporation (EOHWC) has assumed responsibility for the following Year 2/3 stormwater retrofits – completed as of February 2015 are SE-PA-05, SE-PA-24 and SE-POT-1:

Name	Year	Location	Description	Status	Estimated total Cost
SE-PA-05	2	Brewster Hill/Rt 312	Piping and restoration of eroded swale	Under Construction	\$350,000
SE-PA-24	2	RT 22/Lower Mine Rd.	Grass Swale, Restoration, Infiltration Trench	90% Complete	\$10,000
SE-DI-03	2	Lincoln Road	Hydrodynamic Separator and Channel Stabilization	Separator Installed	\$100,000
SE-EB-05	2	Rockledge Drive	Piping and Restoration of eroded swale	Completed	\$37,500
SE-POT-1	3	Shore Drive	Subsurface Gravel Wetland	Construction Contract Awarded	1,175,000
SE-POT 2	3	Bloomer Rd./Rt. 6	Piping and restoration of eroded swale	Final Design/ Contract Documents	1,200,000

Proposed Hazard Mitigation Initiatives for the Plan

The Town of Southeast identified mitigation initiatives they would like to pursue in the future. Some of these initiatives may be previous actions carried forward for this Plan. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Table 9.10-11 identifies the municipality's updated local mitigation strategy.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.10-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan.



Table 9.10-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
TOS-1 (LOI #348)	Welfare Road Culvert Replacement	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 over-topping of the roadway. See Action Worksheet									
		Existing	Flood, Severe Storm, Climate Change	G-1, G-2	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent	High – Reduced damage to roadway and road closures; potential life safety	\$500,000	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match	Long term DOF	High	SIP
TOS-2 (LOI #352)	Maple Road Culvert Replacement	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									
		Existing	Flood, Severe Storm, Climate Change	G-1, G-2	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent	High – Reduced damage to roadway and road closures; potential life safety	\$500,000	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match	Long term DOF	High	SIP
TOS-3 (LOI #394)	Brewster Hill Road Culvert Replacement	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									
		Existing	Flood, Severe Storm, Climate Change	G-1, G-2	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent	High – Reduced damage to roadway and road closures; potential life safety	\$750,000	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match	Long term DOF	High	SIP
TOS-4 (LOI #396)	Dredging of Peach Lake Outlet Channel	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									
		Existing	Flood, Severe	G-2, G-4	Town of Southeast, Michael Bruen,	Medium - Reduced	\$1,500,000	Federal Mitigation grant	Long term DOF	Medium	NRP



Section 9.10: Town of Southeast

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
			Storm, Climate Change		Town of Southeast Highway Superintendent	flooding to property and structures around the Lake.		funding; Federal or State Road/Infrastructure grants; Town budget for Local Match			
TOS-5	Continue to work with school district to improve communications and shared services, including sheltering. If appropriate agreements were in place, school 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.										
	See Above.	Existing	All Hazards, particularly those events requiring sheltering	G-1, G-2, G-3	Town (supervisor, assessor) working with School District Board of Education	High – enhanced sheltering capabilities, potential life-safety	Low	Town and District Budgets	Short, Ongoing	High	LPR, EAP
TOS-6	Assessment and upgrades of stormwater conveyance network: Location: Town-wide 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. 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.										
	See Above.	Existing	Flood, Severe Storm, Climate Change	G-2, G-6	Town Highway Department	Improved stormwater management, reduced damage to transportation infrastructure	High	Town Budget	Long term – This is an ongoing program in the Town	Medium	SIP
TOS-7	Cobb Road Culvert Replacement: Culvert under road is undersized. Replace pipe under road with larger size. See Action Worksheet										
	See above.	Existing	Flood, Severe Storm, Climate Change	G-1, G-2	Town Highway Department	Reduced vulnerability of roadway to stormwater damage; potential life-safety	Medium - High	Town Budget; grant funding as available	Long-Term depending on securing funding	Medium	SIP
TOS-8	Location: Town-wide Problem: 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. Mitigation Project/Initiative: The Town prioritizes roads for maintenance schedule, and will conduct upgrades and mitigation at that time.										



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	See above.	Existing	Severe Storm, Severe Winter Storm, Climate Change	G-2, G-6	Town Highway Department	Reduced damage to transportation infrastructure; will support MS4 program	High	Town Budget	Long term – This is an ongoing program in the Town	Medium	SIP
TOS-9	Location: See below. Problem: Evacuation issues – Private roads have provided only one point of ingress/egress as gates block secondary access. Locations include: <ul style="list-style-type: none"> Indian Wells, between Indian Wells and Gage. Private driveway Enoch Crosby road and Peter Road State Line Road. Mitigation Project/Initiative: Work with private road owners to remove gates blocking secondary access.										
	See above.	Existing	All hazard events requiring emergency access	G-1, G-6	Town, working with owners of private roadways	Life-Safety	Low	Town Budget	Short	High	LPR, EAP
TOS-10	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation. (PCBES-1). Workshops and Seminars to build local capabilities in floodplain management and disaster recovery (PCBES-11), potentially to include: <ul style="list-style-type: none"> NFIP Community Rating System (CRS) Benefit-Cost Analysis (BCA) Substantial Damage Estimating (SDE) NFIP Elevation Certificates (EC) Certified Floodplain Manager (CFM) Training and Certification County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures (PCBES-12) 										
	See above	New and Existing	All Hazards	All Objectives	Putnam County, as supported by relevant local department leads,	High (comprehensive improvements mitigation and risk-reduction capabilities)	Low-Medium (locally)	Local (staff resources)	Short	High	LPR, EAP

Notes:

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

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

CAV Community Assistance Visit
 CRS Community Rating System

DPW Department of Public Works
 FEMA Federal Emergency Management Agency
 FPA Floodplain Administrator





HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
NYCDEP New York City Department of Environmental Protection
NYSDEC New York State Department of Environmental Conservation
NYS DHSES New York State Department of Homeland Security and Emergency Services
OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program

HMGP Hazard Mitigation Grant Program
PDM Pre-Disaster Mitigation Grant Program
RFC Repetitive Flood Claims Grant Program
SRL Severe Repetitive Loss Grant Program

Timeline:

Short 1 to 5 years
Long Term 5 years or greater
OG On-going program
DOF Depending on funding

Costs:

Where actual project costs have been reasonably estimated:

Low < \$10,000
Medium \$10,000 to \$100,000
High > \$100,000

Where actual project costs cannot reasonably be established at this time:

Low Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

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

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low= < \$10,000
Medium \$10,000 to \$100,000
High > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low Long-term benefits of the project are difficult to quantify in the short term.
Medium Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High Project will have an immediate impact on the reduction of risk exposure to life and property.



Table 9.10-11. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action / Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
TOS-1 (LOI #348)	Welfare Road Culvert Replacement	1	1	1	1	1	1	-1	1	1	1	1	0	1	1	11	High
TOS-2 (LOI #352)	Maple Road Culvert Replacement	1	1	1	1	1	1	-1	1	1	1	1	0	1	1	11	High
TOS-3 (LOI #394)	Brewster Hill Road Culvert Replacement	1	1	1	1	1	1	-1	1	1	1	1	0	1	1	11	High
TOS-4 (LOI #396)	Dredging of Peach Lake Outlet Channel	1	1	1	1	1	1	-1	1	0	1	1	0	0	0	8	Medium
TOS-5	Continued work with schools to support shared services and sheltering	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
TOS-6	Assessment and upgrades of stormwater conveyance network	0	1	0	-1 (complicated by existing underground utilities)	1	1	0 (funding constraints short term implementation)	1 (supports MS4 program)	1	1	1	0 (funding constraints short term implementation)	1 (Highway Dept.)	1	8	Medium
TOS-7	Cobb Road Culvert Replacement	1	1	0	1	1	1	-1	1	1	1	1	0	1	1	11	Medium
TOS-8	Town-wide Road and Drainage Upgrades	1	1	0	1	1	1	-1 (will require town funds, even for roads)	1	1	1	1	0	1 (Highway Dept.)	0	10	Medium



Section 9.10: Town of Southeast

Mitigation Action / Project Number	Mitigation Action / Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
								that were to be maintained by developers)									
TOS-9	Assure redundant emergency access on private roads	1	0	1	1	1	0 (will require working with private road owners)	1	1	0	1	1	1	1	1	11	High
TOS-10	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities	1	1	1	1	1	1	0 (will require municipality to support staff time)	1	1	0 (will require municipality to support staff time)	1	1	1	1	12	High

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



9.10.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.10.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Southeast that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Southeast has significant exposure. These maps are illustrated below.

9.10.9 Additional Comments

None at this time.



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

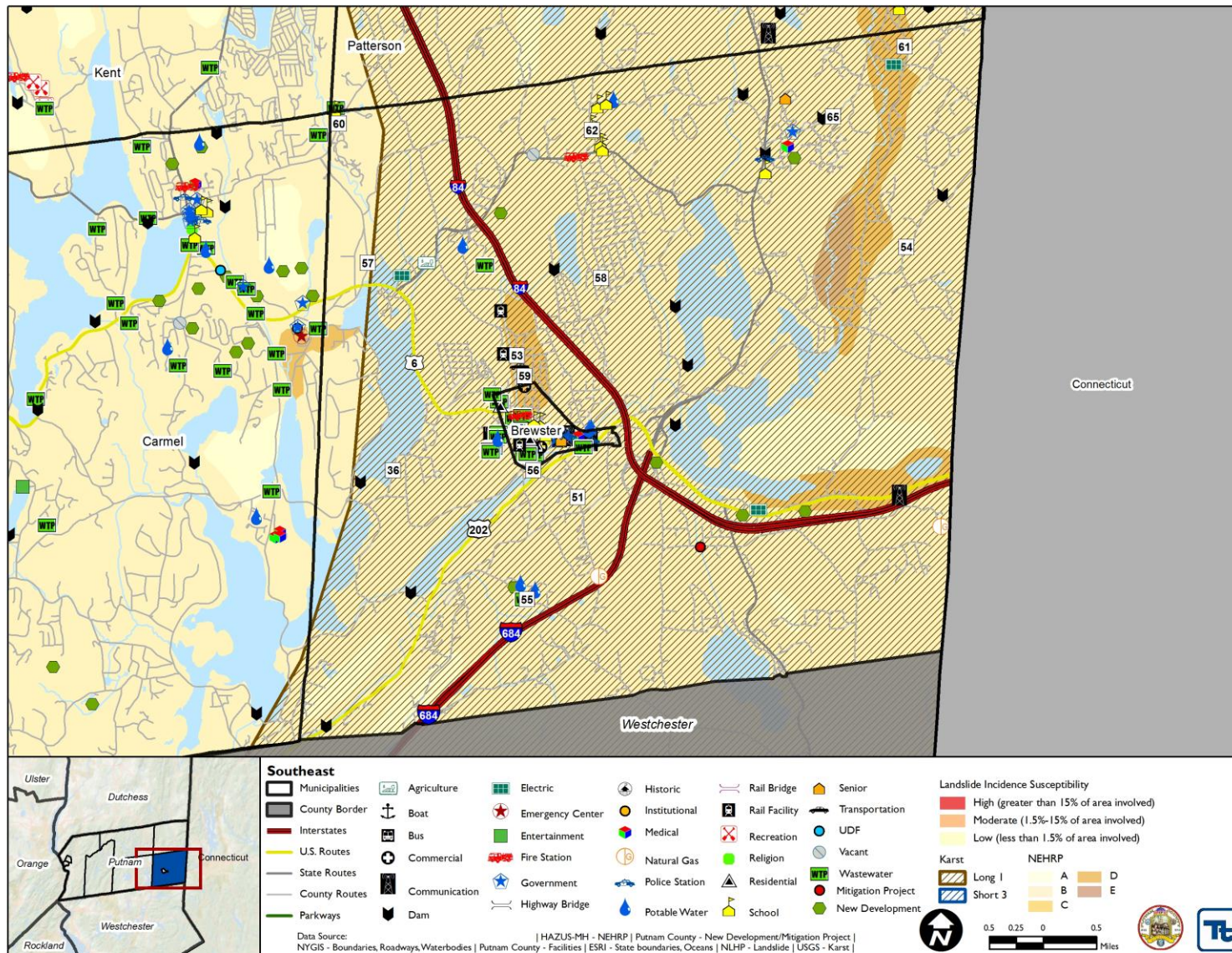
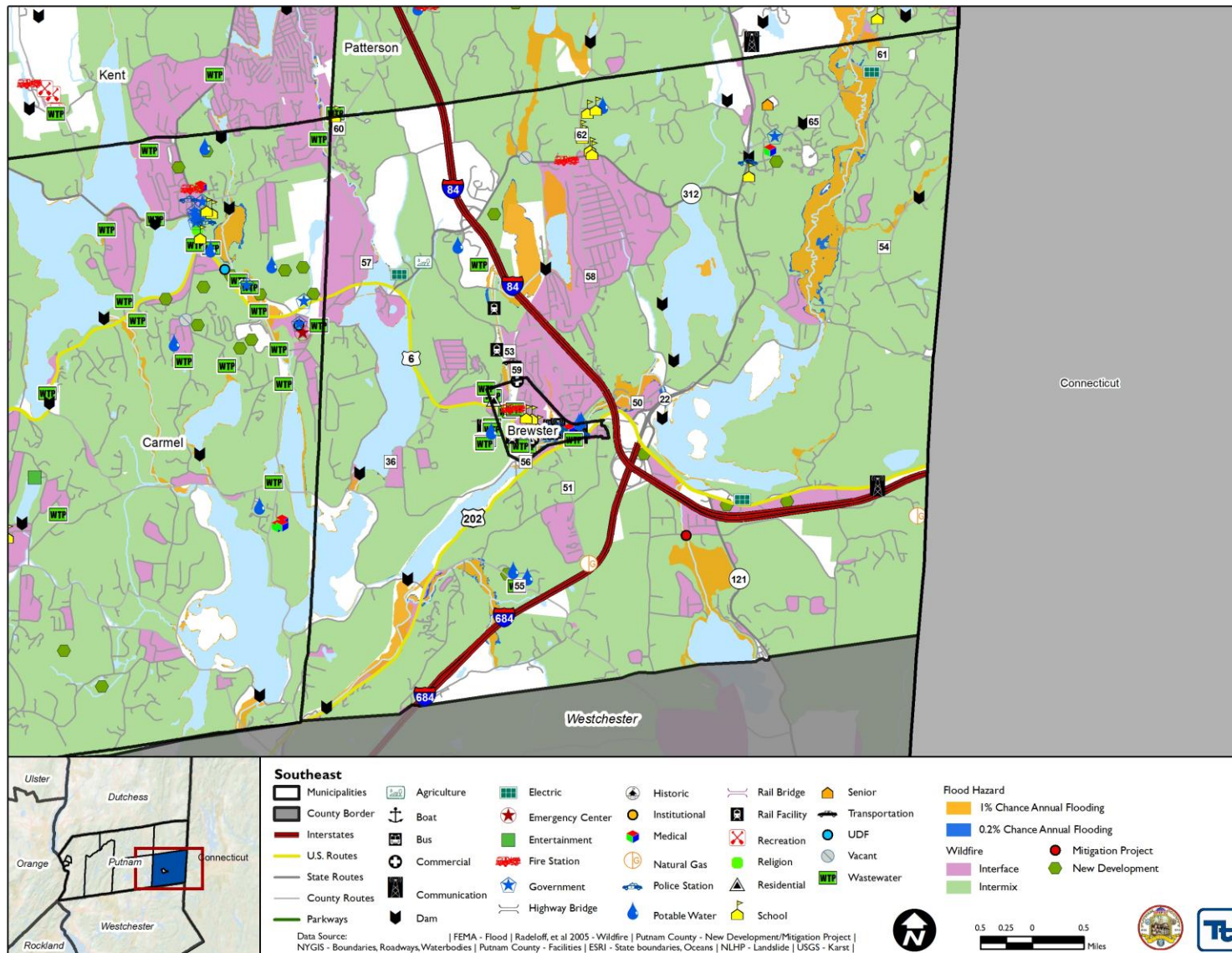




Figure 9.10-2. Town of Southeast Hazard Area Extent and Location Map





Name of Jurisdiction: Town of Southeast
Action Number: TOS-1 (LOI #348)
Action Name: Welfare Road Culvert Replacement

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	The existing corrugated metal pipe is undersized and deteriorated causing roadway flooding and washouts during severe storm events. The problem has existed for an extended period of time, however over-topping of the roadway has occurred more frequently.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. There are no practical or cost-effective alternatives to mitigate this issue other than No-Action.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	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 over-topping of the roadway.
Mitigation Action/Project Type	SIP
Goals/Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damage to roadway and road closures; potential life safety Recent Damages: \$5,000
Estimated Cost	\$500,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent
Local Planning Mechanism	Capital Budget; Comprehensive Emergency Management Plan – Evacuation Planning
Potential Funding Sources	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match
Timeline for Completion	Long-term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Action Number:

TOS-1 (LOI #348)

Action Name:

Welfare Road Culvert Replacement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Damages could result in life-safety issues
Property Protection	1	Protects public infrastructure
Cost-Effectiveness	1	This project is assumed to be cost-effective, however will need to be further evaluated for benefits
Technical	1	Within the technical capabilities of the Town
Political	1	Town Government support this project
Legal	1	Town has full authority to implement
Fiscal	-1	Full funding not established or secured
Environmental	1	No environmental impacts or compliance issues evident
Social	1	Benefits all residents equally
Administrative	1	Within the administrative capabilities of the Town
Multi-Hazard	1	
Timeline	0	Implementation will depend on funding being secured
Agency Champion	1	Highway Department
Other Community Objectives	1	Continue to provide proper and safe public infrastructure
Total	11	
Priority (High/Med/Low)	High	



Name of Jurisdiction: Town of Southeast
Action Number: TOS-2 (LOI #352)
Action Name: Maple Road Culvert Replacement

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	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.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. There are no practical or cost-effective alternatives to mitigate this issue other than No-Action. 2. 3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damage to roadway and road closures; potential life safety Recent Damages: \$5,000
Estimated Cost	\$500,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent
Local Planning Mechanism	Capital Budget; Comprehensive Emergency Management Plan – Evacuation Planning
Potential Funding Sources	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match
Timeline for Completion	Long-term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Action Number:

TOS-2 (LOI #352)

Action Name:

Maple Road Culvert Replacement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Damages could result in life-safety issues
Property Protection	1	Protects public infrastructure
Cost-Effectiveness	1	This project is assumed to be cost-effective, however will need to be further evaluated for benefits
Technical	1	Within the technical capabilities of the Town
Political	1	Town Government supports this project
Legal	1	Town has full legal authority to implement
Fiscal	-1	Full funding not established or secured
Environmental	1	No environmental impacts or compliance issues evident
Social	1	Benefits all residents equally
Administrative	1	Within the administrative capabilities of the Town
Multi-Hazard	1	
Timeline	0	Implementation will depend on funding being secured
Agency Champion	1	Highway Department
Other Community Objectives	1	Continue to provide proper and safe public infrastructure
Total	11	
Priority (High/Med/Low)	High	



Name of Jurisdiction: Town of Southeast
Action Number: TOS-3 (LOI #394)
Action Name: Brewster Hill Road Culvert Replacement

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	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.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. There are no practical or cost-effective alternatives to mitigate this issue other than No-Action. 2. 3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damage to roadway and road closures; potential life safety Recent Damages: \$5,000
Estimated Cost	\$750,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent
Local Planning Mechanism	Capital Budget; Comprehensive Emergency Management Plan – Evacuation Planning
Potential Funding Sources	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match
Timeline for Completion	Long-term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Action Number:

TOS-3 (LOI #394)

Action Name:

Brewster Hill Road Culvert Replacement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Damages could result in life-safety issues
Property Protection	1	Protects public infrastructure
Cost-Effectiveness	1	This project is assumed to be cost-effective, however will need to be further evaluated for benefits
Technical	1	Within the technical capabilities of the Town
Political	1	Town Government supports this project
Legal	1	Town has full legal authority to implement
Fiscal	-1	Full funding not established or secured
Environmental	1	No environmental impacts or compliance issues evident
Social	1	Benefits all residents equally
Administrative	1	Within the administrative capabilities of the Town
Multi-Hazard	1	
Timeline	0	Implementation will depend on funding being secured
Agency Champion	1	Highway Department
Other Community Objectives	1	Continue to provide proper and safe public infrastructure
Total	11	
Priority (High/Med/Low)	High	



Name of Jurisdiction: Town of Southeast, Brewster
Action Number: TOS-4 (LOI #396)
Action Name: Dredging of Peach Lake Outlet Channel

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	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.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action – damages continue to public and private structures and infrastructure 2. Mitigate structures and infrastructures in the area – not cost-effective or technically practical 3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action/Project Type	NRP
Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Medium - Reduced flooding to property and structures around the Lake. Recent Damages: \$10,000
Estimated Cost	\$1,500,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent
Local Planning Mechanism	Emergency Action Plan (for dam safety)
Potential Funding Sources	Federal Mitigation grant funding; Town or affected residents for Local Match
Timeline for Completion	Long-term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Action Number:

TOS-4 (LOI #396)

Action Name:

Dredging of Peach Lake Outlet Channel

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Potential life safety
Property Protection	1	
Cost-Effectiveness	1	Assumed cost-effective; would need formal BCA
Technical	1	Within local and contract capabilities
Political	1	Local government supports project
Legal	1	
Fiscal	-1	Would require local community fiscal support
Environmental	1	Would work towards restoring natural conditions
Social	0	Affects limited population
Administrative	1	Town has capabilities to support grant management
Multi-Hazard	1	
Timeline	0	Dependent on funding and lake community initiative
Agency Champion	0	Would need local lake community support
Other Community Objectives	0	
Total	8	
Priority (High/Med/Low)	Medium	



Name of Jurisdiction: Town of Southeast
Action Number: TOS-7
Action Name: Cobb Road Culvert Replacement

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	The existing culvert pipe is undersized resulting in flooding and over topping of roadway.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. There are no practical or cost-effective alternatives to mitigate this issue other than No-Action.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Replace pipe under road with larger size.
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damage to roadway and road closures; potential life safety Recent Damages:
Estimated Cost	Medium - High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town of Southeast, Michael Bruen, Town of Southeast Highway Superintendent
Local Planning Mechanism	Capital Budget; Comprehensive Emergency Management Plan – Evacuation Planning
Potential Funding Sources	Federal Mitigation grant funding; Federal or State Road/Infrastructure grants; Town budget for Local Match
Timeline for Completion	Long-term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Action Number:

TOS-7

Action Name:

Cobb Road Culvert Replacement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Damages could result in life-safety issues
Property Protection	1	Protects public infrastructure
Cost-Effectiveness	0	This project is assumed to be cost-effective, however will need to be further evaluated for benefits
Technical	1	Within the technical capabilities of the Town
Political	1	Town Government supports this project
Legal	1	Town has full legal authority to implement
Fiscal	-1	Full funding not established or secured
Environmental	1	No environmental impacts or compliance issues evident
Social	1	Benefits all residents equally
Administrative	1	Within the administrative capabilities of the Town
Multi-Hazard	1	
Timeline	0	Implementation will depend on funding being secured
Agency Champion	1	Highway Department
Other Community Objectives	1	Continue to provide proper and safe public infrastructure
Total	10	
Priority (High/Med/Low)	Medium	