9.2 TOWN OF BARTON

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

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
Name: Leon Cary, Supervisor Address Phone Number: 607-343-2261 x2 Email address: barton.code@cyber-quest	Name: William Hotchkiss, Code Officer Address Phone Number: 607-343-5571 Email address: barton.code@cyber-quest

B.) PROFILE

Population

8,858 (estimated 2010 U.S. Census)

Location

The Town of Barton is located in Tioga County, New York. The town situated between the Susquehanna River and the Chemung River and lies in the southwestern corner of Tioga County. The town consists of 59.63 square miles and is bordered Bradford County, Pennsylvania to the south, Chemung County to the west, the Town of Spencer to the north, and the Town of Tioga and Nichols to the east[1].

The Town of Barton includes the Village of Waverly and the hamlets of Barton and Lockwood, as part of the Halsey Valley. The Southern Tier Expressway (New York State Route 17) passes across the town next to the Susquehanna River. New York State Route 17C also follows the river, but on the north side. New York State Route 34 is a north-south highway that intersects NY-17C at Waverly.

Brief History

The Town of Barton was established in 1824 but the region was already settled in 1796 when John Shepard bought 1,000 acres (4.0 km^2) by the current location of Waverly. It is reported that the town was named after Belva Lockwood of Royalton NY (near Lockport), one of the first female lawyers in the country, the first woman to argue a case before the Supreme Court and the first woman to be on an official ballot running for president of the US in 1884 and 1888.

The first church built in the town is 1833 was the Emory Chapel named for John Emory, a Methodist Bishop. It is the second oldest church in the county and still stands today, guarding the graves of many of the early settlers[2].

Governing Body Format

The town is governed by a supervisor and four council members.

[1] Town of Barton, 2012 (www.waverlybarton.com)
[2] Town of Barton, 2012 (www.waverlybarton.com)

Growth/Development Trends

The following table summarizes major residential/commercial development and major infrastructure development that are identified for the next five (5) years in the municipality. Refer to the map in section I.) of this annex which illustrates the hazard areas along with the location of potential new development.

New Development/Potential Development in Municipality						
Property Name	Type (Residential or Commercial)	Number of Structures	Address	Block and Lot	Known Hazard Zone	Description/ Status
Wilcox Estate	Residential	37 Homes proposed	Circle Drive, Waverly, NY		None	

C.) NATURAL HAZARD EVENT HISTORY SINCE 2000

Tioga County has a history of natural hazard events as detailed in Volume I, Section 5 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events affecting the County and its municipalities. Below is presented a summary of events dating from the year 2000 to indicate the range and impact of natural hazard events in this community. Specific damages have been indicated if available from reference or local sources. For details of events prior to 2000, refer to Volume I, Section 5 of this plan.

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Severe Storms / Flash Flood	DR-1335	Yes	May 3 – August 12, 2000	$1.25 M in property damages County-wide.
Wind	N/A	N/A	December 12, 2000	Over $64 K in property damage County-wide.
Drought	N/A	N/A	November 2001 – January 2002	Three month duration with the lowest PDSI of -3.28 in December.
Tornado F1	N/A	N/A	May 31, 2002	There were seven injuries and $600 K in property damage County-wide.
Snowstorm	EM-3173	Yes	December 25, 2002	Snowfall totals in Tioga County ranged from 8.3 to 10.3.
Snowstorm	EM-3173	Yes	January 2-4, 2003	$475 K in property damage County-wide.
Snowstorm	EM-3184	No	February 16-17, 2003	Snowfall totals in Tioga County ranged from 9.5 to 15 inches. The County had over $152 K in property damage.
Severe Storm	N/A	N/A	July 21, 2003	Approximately $50 K in property damage County-wide.
Wind	N/A	N/A	September 19, 2003	Approximately $50 K in property damage County-wide.
Wind	N/A	N/A	October 15, 2003	Over $58 K in property damage County-wide.
Wind	N/A	N/A	November 13, 2003	Over $52 K in property damage County-wide.

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Flood	N/A	N/A	March 1, 2004	$40 K in property damages County-wide.
Flash Flood	N/A	N/A	July 7, 2004	The Town of Spencer had $150 K in property damages.
Remnants of Hurricane Ivan	DR-1565	Yes	September 16-18, 2004	Approximately $1M in property damage County-wide.
Flash Flood	N/A	N/A	March 28, 2005	Approximately $70K in property damage County-wide.
Severe Storms and Flooding	DR-1589	Yes	April 2-4, 2005	Approximately $500K in property damage County-wide.
Drought	N/A	N/A	Summer 2005	Not available.
Severe Storm	N/A	N/A	June 6, 2005	Approximately $50 K in property damage County-wide.
Flash Flood	N/A	N/A	June 10, 2005	Approximately $20K in property damage County-wide.
Flood	N/A	N/A	October 25, 2005	The Town of Waverly had $20 K in property damages from the flooding event.
Flood	N/A	N/A	November 30 – December 1, 2005	The Town of Waverly had $25 K in property damages from the flooding event.
Flood	N/A	N/A	January 18, 2006	Heavy rainfall caused minor flooding in Tioga County. The Town of Barton had $10 K in property damages from the flooding event.
Severe Storm and Flooding	DR-1650	Yes	June 26-30, 2006	Over $105M in property damage County-wide. A total of 5,000 homes were affected, with 500 homes damaged and 10 destroyed. Hardest hit areas were Tioga, Campville, Owego, Nichols, Barton and Apalachin.
Flash Flood	DR-1670	Yes	November 16-17, 2006	Approximately $35 K in property damages County-wide.
Severe Winter Storm	N/A	N/A	February 13-14, 2007	Snowfall totals in Tioga County ranged from 12 to 18 inches.
Riverine Flood	N/A	N/A	March 15-16, 2007	The Town of Barton had approximately $5 K in property damage.
Riverine Flood	N/A	N/A	March 25-30, 2007	Not available.
Drought	N/A	N/A	October – November 2007	Not available.
Winter Weather	N/A	N/A	November 17, 2007	Not available.
Heavy Snow	N/A	N/A	December 13, 2007	Not available.
Tornado	N/A	N/A	May 16, 2009	Approximately $10 K in property damage County-wide.
Flash Flooding	N/A	N/A	September 30 –	Approximately $75 K in property

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
			October 1, 2010	damage County-wide.
Heavy Snow	N/A	N/A	March 6-7, 2011	In Tioga County, snowfall totals ranged from 13 to 18 inches.
Severe Storm, Flooding, Straight-Line Winds	DR-1993	Yes	April 27-28, 2011	Approximately $3 M in property damages County-wide.
Severe Storms	N/A	N/A	May 26, 2011	Approximately $45 K in property damage County-wide.
Heat Wave	N/A	N/A	July 21-23, 2011	A record high of 100°F occurred.
Remnants of Tropical Storm Lee	DR-4031	Yes	September 7-12, 2011	Over $477 M in property damage County-wide.

Note: N/A = Not applicable

D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

Rank #	Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard [a, c]	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking [b]
5	Drought	Not available	Frequent	18	Low
4	Earthquake	500-Year MRP: $68,694 2,500-Year MRP: $757,501 Annualized Loss: $760	Occasional	20	Low
1	Flood	1% Annual Chance: $191,092,000 0.2% Annual Chance: $197,700,000	Frequent	45	High
3	Severe Storm	100-Year MRP: $0 500-Year MRP: $24,791 Annualized Loss: $656	Frequent	30	Medium
2	Severe Winter Storm	1% of GBS: $2,414,040 5% of GBS: $12,070,200	Frequent	39	High

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

b. High = Total hazard priority risk ranking score of 38 and above
Medium = Total hazard priority risk ranking of 21-37
Low = Total hazard risk ranking 20 or below

c. The valuation of general building stock and loss estimates was based on the default general building stock database provided in HAZUS-MH 2.0 (RSMeans 2006).

d. Loss estimates are structural values only; does not include the value of contents.

e. Loss estimates represent both structure and contents.

f. The HAZUS-MH earthquake model results are reported by Census Tract.

E.) CAPABILITY ASSESSMENT

This section identifies the following capabilities of the local jurisdiction:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification.

The town indicates that it has limited planning, regulatory, administrative, technical, fiscal, and community political capability with a moderately willing political capability to enact policies or programs to reduce hazard vulnerabilities in the community.

E.1) Legal and Regulatory Capability

Regulatory Tools (Codes, Ordinances., Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of adoption)
1) Building Code	Y	Local	2010
2) Zoning Ordinance	N	Local	
3) Subdivision Ordinance	Y	Local	7/10/98
4) NFIP Flood Damage Prevention Ordinance	Y	Local	2/2012
4a) Cumulative Substantial Damages	N	Local	
4b) Freeboard	N	Local	
5) Growth Management	N	Local	
6) Floodplain Management / Basin Plan	Y	Local or Watershed	2/2012
7) Stormwater Management Plan/Ordinance	N	Local	
8) Comprehensive Plan / Master Plan/ General Plan	Y	Local	
9) Capital Improvements Plan	N	Local or County	
10) Site Plan Review Requirements	Y	Local	?
11) Open Space Plan	N	Local or County	
12) Stream Corridor Management Plan	N	Local or Watershed	
13) Watershed Management or Protection Plan	N	Local or Watershed	
14) Economic Development Plan	N	County	
15) Comprehensive Emergency Management Plan	N	Local or County	County Emergency Operations Plan
16) Emergency Response Plan	N	Local or County	
17) Post Disaster Recovery Plan	N	Local	
18) Post Disaster Recovery Ordinance	N	Local	
19) Real Estate Disclosure Requirement	N	State	State Requirement
20) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]	N	Local or County	

E.2) Administrative and Technical Capability

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/ Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	N	
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	N	
3) Planners or engineers with an understanding of natural hazards	Y	SWCD
4) NFIP Floodplain Administrator	Y	William Hotchkiss, Code Officer
5) Surveyor(s)	Y	William & Edsell (contract)
6) Personnel skilled or trained in "GIS" applications	N	
7) Scientist familiar with natural hazards	Y	Code Officer
8) Emergency Manager	N	
9) Grant Writer(s)	N	
10) Staff with expertise or training in benefit/cost analysis	N	

E.3) Fiscal Capability

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community Development Block Grants (CDBG)	Yes
2) Capital Improvements Project Funding	Yes
3) Authority to Levy Taxes for specific purposes	Yes
4) User fees for water, sewer, gas or electric service	Yes
5) Impact Fees for homebuyers or developers of new development/homes	Yes – Not Used
6) Incur debt through general obligation bonds	Yes- Not Used
7) Incur debt through special tax bonds	Yes- Not Used
8) Incur debt through private activity bonds	No
9) Withhold public expenditures in hazard-prone areas	Yes
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	Yes
11) Other	

E.4) Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	NA	NA
Building Code Effectiveness Grading Schedule (BCEGS)	NA	NA
Public Protection	NA	NA
Storm Ready	NA	NA
Firewise	NA	NA

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

The classifications listed above relate to the community's effectiveness in providing services that may impact it's vulnerability to the natural 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 one (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/

F.) MITIGATION STRATEGY

F.1) Past Mitigation Actions/Status

As a result of the 2006 flood event, the Town applied for a property acquisition grant offered by NYS and FEMA. Through this program the Town bought out eight homes in the Canon Hole Area. By this action, the area returns forever green, which will reduce the amount of dollars needed to rebuild these homes after every flooding event, and follows the emphasis placed by FEMA mitigation projects.

The Town also works with the Soil and Water Conservation District (SWCD) for assistance with stream restoration projects and all associated activities. The Town has a road ditch maintenance program and the Town Highway Superintendent has attended training held by the SWCD for Environmentally Sensitive Maintenance of Streams as well as utilizes the SWCD's hydroseeder for road bank stabilization projects.

The Town Highway Department also renews yearly a Memorandum of Understanding (MOU) with NYSDEC to conduct routine stream maintenance above and below critical infrastructure (such as culverts and bridges).

Additional projects include the formation of wetlands and retention ponds in the Cayuta Creek in Chemung County. Although this is not in Tioga County, it is retaining water that would be flooding into Tioga County and causing damage in the Town of Barton, as well as, the Village of Waverly. Along with these wetlands, the Upper Susquehanna Coalition has established a collection of rain and stream gauges to collect data to judge the effectiveness of these wetlands.

The following mitigation projects included in the 2006 plan have been completed and have been excluded from the Town Mitigation strategy.

2006 Mitigation Project	Status	Action
Erosion of Old Barton Road – River bank stabilization needed Construction In Progress FEMA and SEMO funding received; permits awarded and worked started in 2007.	Complete	None
Canon Hole Area – buyouts of homes that have frequent flooding. In Progress 8 homes approved in FEMA buyout after June 2006 event	Complete	None
Ellis & Butson Creek – removal of woody debris and gravel. Town received emergency permits after June 2006 flood event to remove gravel from the mouth of Butson Creek; material being used for stabilization project on Old Barton Road, Canon Hole Area.	Complete	None
Cayuta Creek – streambank erosion and gravel deposition are primary concerns. Streambank erosion needed north and south of Main Street in Lockwood.	0% complete	Recommendation: Have area evaluated by SWCD for preliminary design ideas. Potential funding source may include NYS DEC Water Quality Improvement Projects (50-50 cost share)

F.2) Hazard Vulnerabilities Identified

It is estimated that in the Town of Barton, 440 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Of the municipality's total land area, 5% is located within the 1% annual chance flood area. $191,092,000 (47.1%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 36 NFIP policies in the community and there are 20 policies located within the 1% annual chance flood area. FEMA has identified 1 Repetitive Loss (RL) including 0 Severe Repetitive Loss (SRL) properties in the municipality.

NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Polices in 100-year Boundary (3)	# Polices in 500-Boundary (3)	# Policies Outside the 500-year Flood Hazard (3)
Barton (T)	36	74	$1,188,893	1	0	20	20	16

Source:

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, in April 2012 using the "Comm_Name". These statistics are current as of January 31, 2012. Please note the total number of repetitive loss properties includes the severe repetitive loss properties.

(2) Total building and content losses from the claims file provided by FEMA Region 2 (current as of January 31, 2012).

(3) The policy locations used are based on the latitude and longitude provided by FEMA Region 2.

HAZUS-MH estimates that for a 1% annual chance flood, $9,205,000 (2.3%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 460 people may be displaced, 158 people may seek short-term sheltering, and an estimated 2023 tons of debris could be generated. HAZUS-MH estimates the following damage and loss of use to critical facilities in the community as a result of a 1% annual chance flood event:

Name	Type	Exposure		Potential Loss from 1% Flood Event	
		1% Event	0.2% Event	Structure Damage	Content Damages
Lockwood	EOC	X	X	12.16	55.78
Lockwood	Fire	X	X	12.16	55.78
Barton Highway Barn	UDF	X	X	12.15	49.09

Please refer to the Hazard Profiles for additional vulnerability information relevant to this jurisdiction.

F.3) PROPOSED HAZARD MITIGATION INITIATIVES

Note some of the identified mitigation initiatives in Table F 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.

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
1 (Carryover from 2006 Plan)	Cayuta Creek – streambank erosion and gravel deposition are primary concerns. • Streambank erosion mitigation needed north and south of Main Street in **Lockwood.** Recommendation: Have area evaluated by SWCD for preliminary design ideas	NA	Flood	1-1, 4-1, 4-4	Highway Dept with support from SWCD	High	High	NYS DEC Water Quality Improvements Projects 50% cost share	Short	High	NR
2	Canon Hole Area – apply for 20 homes to be bought out.	Existing	Flood	1-2, 1-3, 1-9, 5-1	Town Supervisor	High	$1.5 Million	HMGP	Short	High	PP
3	Mitigate Bridge on Barton Road to improve access to area by school buses, trucks, emergency responders	Existing	Flood	1-1, 6-2	Highway Dept	High	High	HMGP	Short	High	SP
4	Norris Drive Stormwater Project. Install diversion ditch to eliminate flooding to surrounding properties	Existing	Flood	1-1, 1-2	Supervisor & Highway Dept with support from SWCD	Medium	Medium	HMGP	Short; if received funding	Medium	SP
5	Foster Road over Ellis Creek Culvert mitigation. Current culvert pipe is not correct size need to mitigate to hydrologic analysis	Existing	Flood	1-1, 1-2	Highway Dept with support from SWCD	High	High	HMGP	Short	High	SP
6	Foster Road Streambank Stabilization Project	Existing	Flood	1-1, 4-1, 4-4	Highway Dept with Support from NRCS and SWCD	$570,000	High	EWP and ESD Grant	Short	High	NR

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
7	Purchase, or relocate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates for relocation based on cost-effectiveness versus retrofitting. Evaluate options to reduce flood vulnerabity of the **Lockwood EOC and the Town Highway Barn .** Phase 2: Where relocation is determined to be a viable option, work with property owners toward implementation of that action based on available funding from FEMA and local match availability.	Existing	Flood, Severe Storm	1-2, 1-9, 3-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, FEMA	High	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Long-term DOF	Medium-High*	PP
8	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community.	New & Existing	Flood, Severe Storms	1-1, 1-2, 1-3, 1-6, 1-7, 1-9	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, ISO FEMA	High	Low - Medium	Local Budget	Ongoing	High	PP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives 9 – 15 (below).										
9	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: • Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. • Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. • Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.										
	See above.	NA	All Hazards	1-5, 1-7, 2-1, 2-2, 3-3, 3-4	Municipality with support from Planning Partners, NYSOEM, FEMA	Low - Medium	Low - Medium	Municipal Budget; HMA programs with local or county match	Short	High	PE
10	Archive elevation certificates	NA	Flood, Severe Storm	1-3, 1-5, 1-6, 1-8, 2-3	NFIP Floodplain Administrator	Low	Low	Local Budget	On-going	High	PP
11	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New & Existing	All Hazards	All	Municipality (via mitigation planning point of contacts) with support from Planning Partners (through their Points of Contact), NYSOEM	High	Low – High (for 5-year update)	Local Budget, possibly FEMA Mitigation Grant Funding for 5-year update	Ongoing	High	PP
12	Complete ongoing updates of Comprehensive Emergency Management	New & Existing	All Hazards	1-1, 1-7, 3-1, 5-1, 6-2, 6-3, 6-4	Municipality with support from	Low	Low	Local Budget	Ongoing	High	PP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	Plans				NYSOEM						
13	Create/enhance/ maintain mutual aid agreements with neighboring communities for continuity of operations.	New & Existing	All Hazards	5-3, 6-4	Municipality with support from Surrounding municipalities and County	Low	Low	Local Budget	Ongoing	High	PP
14	Identify and develop agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping	NA	All Hazards	5-1, 5-2, 5-3	Municipality with support from County, NYSOEM, FEMA	Medium	Medium	Local budget	Short	Medium	PP
15	Work with regional agencies (i.e. County and SOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	NA	All Hazards	5-1, 5-2, 5-3	Municipality with support from County, NYSOEM	Medium	Medium	Local budget, FEMA HMA and HLS grant programs	Short – Long-term DOF	Medium	PP
16	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: • Support the performance of enhanced risk and vulnerability assessments for hazards of concern. • Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based										

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level.										
	See above.	Existing	All Hazards	1-3, 1-6, 1-7, 2-3, 2-5	HMP Coordinator	Medium-High	Medium-High	Mitigation grant programs (PDM or HMGP) with local match	Long term DOF	Medium	PP

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

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.

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.

Potential Funding Sources:
ACOE = US Army Corps of Engineers
CBDG = Community Development Block Grants
DEC = NY Department of Environmental Conservation
DHSES=Department of Homeland Security Emergency Services
EMPG = Emergency Management Planning Grant
EWP = Emergency Watershed Protection Grants (NRCS)
FMA = Flood Mitigation Assistance Grant Program (FEMA)

HLS = Homeland Security Programs
HMGP = Hazard Mitigation Grant Program (FEMA)
HMA = Hazard Mitigation Assistance (FEMA)
NOAA = National Oceanic and Atmospheric Association
PDM = Pre-Disaster Mitigation Grant Program (FEMA)
RFC = Repetitive Flood Claims Grant Program
SHSP = State Homeland Security Program Grant
SRL = Severe Repetitive Loss Grant Program (FEMA)
WQIP = Water Quality Improvement Project Program (NYSDEC)

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

Notes (for Mitigation Type):

1. PP=Prevention and Property Protection: Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also 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 planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations and acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
2. PE=Public Education and Awareness: 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 school-age and adult education programs.
3. NR=Natural Resource Protection: 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.
4. SP=Structural Projects: 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.
5. ES=Emergency Services: 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.

G.) PRIORITIZATION OF MITIGATION INITIATIVES

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
1	3	High	High	Yes	Yes	Yes	High
2	4	High	High	Yes	Yes	Yes	High
3	2	High	High	Yes	Yes	Yes	High
4	2	Medium	Medium	Yes	Yes	Yes	Medium
5	2	High	High	Yes	Yes	Yes	High
6	3	High	High	Yes	Yes	Yes	High
7	3	High	High	Yes	Yes	Yes	High
8	5	High	Low - Medium	Yes	No	Yes	High
9	6	Low - Medium	Low - Medium	Yes	Yes	Yes	High
10	5	Low	Low	Yes	No	Yes	High
11	7	Low – High (for 5-year update)	Low – High (for 5-year update)	Yes	Yes	Yes	High
12	3	Low	Low	Yes	No	Yes	High
13	3	Low	Low	Yes	No	Yes	High
14	2	Medium	Medium	Yes	No	No	Medium
15	3	Medium	Medium	Yes	Yes	Yes	Medium
16	5	Medium-High	Medium-High	Yes	Yes	Yes	Medium

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.

Explanation of Priorities

High Priority = A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an on-going project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.

Low Priority = Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

Prioritization of initiatives was based on above definitions: Yes

Prioritization of initiatives was based on parameters other than stated above: Not applicable.

H.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None at this time.

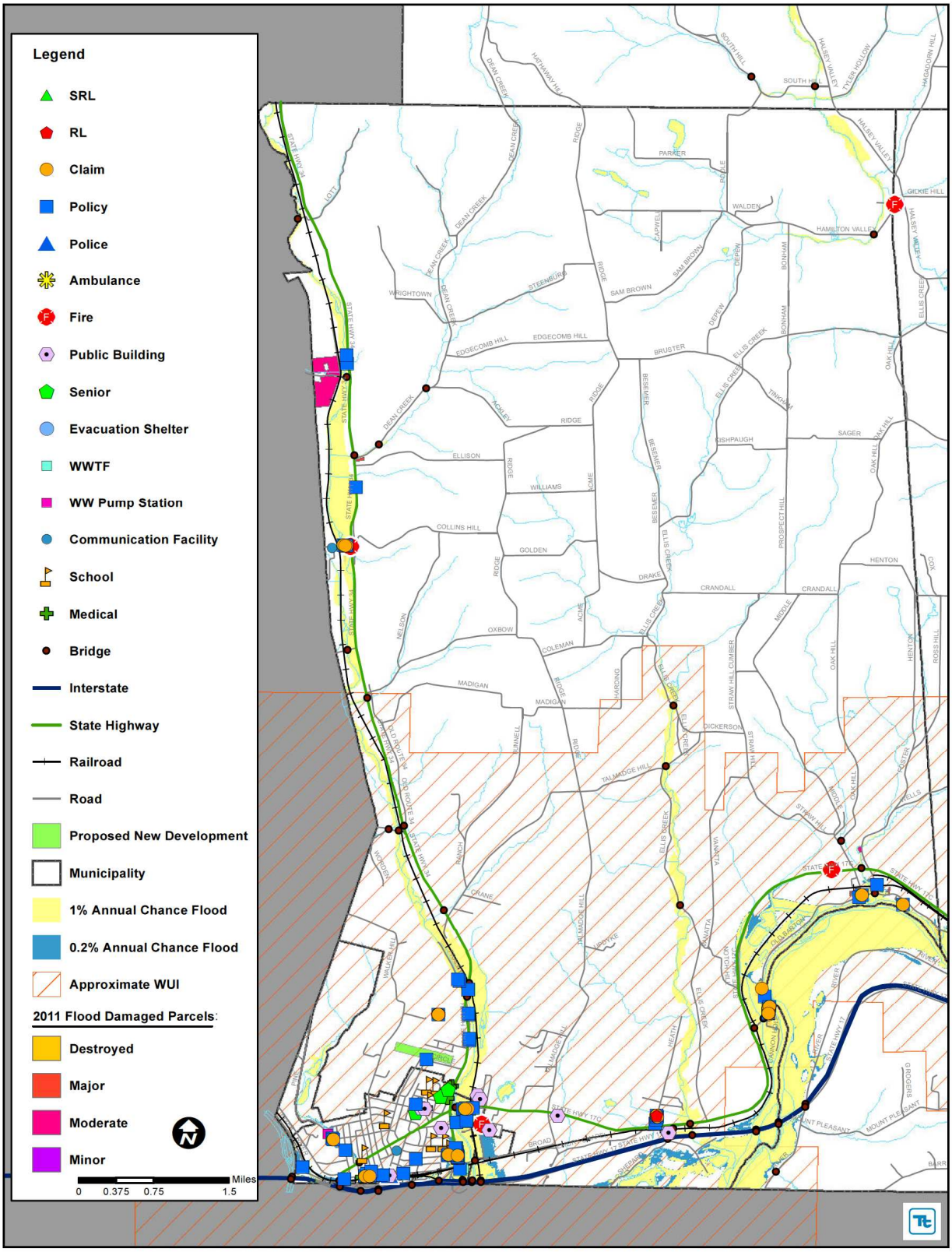
I.) HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map has been generated for the Town of Barton to illustrate the probable areas impacted within the Town of Barton and is provided on the next page. 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. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Barton has significant exposure. The Planning Area maps are provided in the hazard profiles within Section 5.4, Volume I of this Plan.

J.) ADDITIONAL COMMENTS

No additional comments at this time.

Figure 9.2-1. Town of Barton Hazard Area Extent and Location Map



Sources: FEMA, 2011

Notes: NFIP = National Flood Insurance Program. RL = Repetitive Loss. SRL = Severe Repetitive Loss. The entire municipality is vulnerable to the following hazards: drought, earthquake, severe storm, and severe winter storm.