

9.4 TOWN OF BINGHAMTON

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

A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
Name: Timothy Whitesell, Supervisor Address: 279 Park Ave Binghamton, New York Phone Number: 607-772-6911x11 Email address: supervisor@townofbinghamton.com	Name: Mike Donahue, Highway Superintendent Address: 279 Park Ave Binghamton, New York Phone Number: 607-669-4323 Email address: tob@frontiernet.net

B.) PROFILE

Population

4,942 (estimated 2010 U.S. Census)

Location

The Town of Binghamton is located in Broome County, NY and partly encloses the City of Binghamton on the city’s south side. The town is south of the junction of the Susquehanna River and Chenango River and is in the southern tier of New York State. The town of Binghamton is bordered on the north by the City of Binghamton, on the east by the Town of Conklin, on the south by the state of Pennsylvania and on the West by the Town of Vestal. According to the United States Census Bureau, the town has a total area of 25.5 square miles, of which 25.4 square miles of it is land and 0.04 square mile is water.

Brief History

The town is named after U.S. Senator William Bingham from Pennsylvania, who in 1786 bought 32,620 acres of land from New York State. On December 3, 1855, the Town of Chenango was divided, creating the Town of Binghamton which at the time consisted mostly of the east side of the City of Binghamton and the lands south of the Susquehanna and Chenango confluence.

Governing Body Format

Home rule is strong in New York State and thus, each town and village has its own governing body. Towns are made up of a Town Board and Supervisor. Villages generally have a Mayor, Clerk, and Council. Along with town and village roads, any public water and sewer systems are operated by the local municipality, though they may cooperate with County departments. Each municipality has charge over its own planning and zoning and uses the County personnel as a resource.

Growth/Development Trends

The only proposed new development in the Town is a new ten lot subdivision adjacent to Cynthia Drive that is currently under review by the Town Planning Board. A few new homes have been built since the year 200, mainly in the South Mountain area of Town.

C.) NATURAL HAZARD EVENT HISTORY SINCE 2006

Broome 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 2006 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 2006, refer to Volume I, Section 5 of this plan.

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Severe Storms and Flooding	DR 1650	Yes - IA, PA	June 26 —July 10, 2006	There were damages to roads including eroded roadways, shoulders, culverts, and drainage ditches. Town personnel repaired the damages estimated at \$38,964.*
Severe Storms and Flooding	DR 1670	Yes - IA, PA	November 16-17, 2006	The flood event damaged Town roadways, culverts, and drainage ditches. Hawthorne and Felters Road culverts were heavily damaged. The highway garage was also damaged. Residential properties adjacent were also damages by severe erosion. Estimated damages were \$838,380*
April Nor'easter	DR 1692	No	April 14 - 18, 2007	N/A
Severe Storms and Flooding	DR 1710	No	June 19, 2007	N/A
Severe Winter Storm	EM 3299 DR 1827	No	December 11-31, 2008	N/A
Severe Storms and Flooding	DR 1857	No	August 8-10, 2009	N/A
Severe Winter Storm and Snowstorm	DR 1957	No	December 26-27, 2011	N/A
Severe Storms, Flooding, Tornado and Straight Line Winds	DR 1993	Yes - PA	April 26 — May 8, 2011	Damages included eroded roadways, shoulders and drainage courses. The Cynthia Drive Culvert sustained damage. Town personnel repaired damages estimated at \$68,977.*
Hurricane Irene	EM 3328 DR 4020	Yes - IA, PA	August 26 — September 5, 2011	N/A
Remnants of Tropical Storm Lee	EM 3341 DR 4031	Yes - IA, PA	September 7-11, 2011	The flood event damaged roadways, culverts, and drainage ditches. Cynthia Drive culvert sustained extensive damage. Estimated damages were \$291,042.*

Note: N/A = Not applicable

*These damage estimates are estimated FEMA disaster reimbursement figures



D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

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
Severe Winter Storm	1% of GBS: \$5,222,166 5% of GBS: \$26,110,831	Frequent	39	High
Drought	Not available	Frequent	36	High
Severe Storm	100-Year MRP: \$0 500-Year MRP: \$203,408 Annualized Loss: \$1,858	Frequent	30	Medium
Flood	1% Annual Chance: \$625,259 0.2% Annual Chance: \$734,087	Frequent	27	Medium
Earthquake	500-Year MRP: \$126,231 2,500-Year MRP: \$1,643,054 Annualized Loss: \$1,581	Occasional	12	Low
Extreme Temperature	Not available	Frequent	18	Low

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30
Low = Total hazard risk ranking below 20
- c. The valuation of general building stock and loss estimates was based on custom inventory for Broome County.
- d. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- e. Loss estimates for the flood and earthquake hazards 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 resiliency
- Community political capability
- Community classification.

The town did not provide information regarding its planning, regulatory, administrative, technical, fiscal, community resiliency and community political capability; nor its 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	Town Clerk certification
2) Zoning Ordinance	Y	Local	Chapter 36 - Zoning
3) Subdivision Ordinance	Y	Local	Chapter 27 – Subdivision of Land
4) NFIP Flood Damage Prevention Ordinance	Y	Local	Chapter 18 – Flood Damage Prevention
4a) Cumulative Substantial Damages	Y	Local	Chapter 18 – Flood Damage Prevention
4b) Freeboard	Y	Local	Chapter 18 – Flood Damage Prevention
5) Growth Management		Local	
6) Floodplain Management / Basin Plan	Y	Local or Watershed	Chapter 18 – Flood Damage Prevention
7) Stormwater Management Plan/Ordinance	Y	State	NYS Stormwater Regulations
8) Comprehensive Plan / Master Plan/ General Plan	Y	Local	Chapter 36 – Zoning Article X
9) Capital Improvements Plan		Local or County	
10) Site Plan Review Requirements	Y	Local	
11) Open Space Plan	Y	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	Y	Local or County	
16) Emergency Response Plan	Y	Local or County	
17) Post Disaster Recovery Plan	N	Local	
18) Post Disaster Recovery Ordinance	N	Local	
19) Real Estate Disclosure Requirement	Y	State	State Requirement

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Regulatory Tools (Codes, Ordinances., Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of adoption)
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	Y	Engineering Services: Clark Patterson Lee 59 Court St. Binghamton, NY 13901
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Clark Patterson Lee 59 Court St. Binghamton, NY 13901
3) Planners or engineers with an understanding of natural hazards	Y	Clark Patterson Lee 59 Court St. Binghamton, NY 13901
4) NFIP Floodplain Administrator	Y	Code Enforcement Officer
5) Surveyor(s)	Y	Clark Patterson Lee 59 Court St. Binghamton, NY 13901
6) Personnel skilled or trained in "GIS" applications	N	
7) Scientist familiar with natural hazards	N	
8) Emergency Manager	Y	Supervisor
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)	No
2) Capital Improvements Project Funding	No
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	No
6) Incur debt through general obligation bonds	Yes
7) Incur debt through special tax bonds	Yes
8) Incur debt through private activity bonds	No
9) Withhold public expenditures in hazard-prone areas	No
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	Yes
11) Other	No

E.4) Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	10	
Building Code Effectiveness Grading Schedule (BCEGS)	NP	
Public Protection	NP	
Storm Ready	NP	
Firewise	NP	

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

The Town of Binghamton has completed five major projects that will contribute to mitigation against future flood damage.

- The existing timber bridge on Maxiam Road has been replaced. Replacement included a new three sided concrete bridge with concrete headwalls and wingwalls. The project also consisted of the installation of heavy stone fill at the inlet and outlet of the bridge and stream channel.
- The existing culvert at Hawthorne Road has been replaced. Replacement included a new aluminized steel pipe arch culvert with concrete invert. The project also installed heavy stone fill at the inlet and outlet of the culvert and stream channel.
- The existing culvert at Felters Road has been replaced. Replacement included a new aluminized steel pipe arch culvert with concrete invert. The project also installed heavy stone fill at the inlet and outlet of the culvert and stream channel.

- The existing culvert at Cynthia Drive has been rehabilitated. Rehabilitation included slip lining of the existing culvert with a new aluminum culvert, installation of new concrete headwalls and wingwalls at the inlet and outlet, and stabilization of the stream banks and channel with heavy fill stone.
- The existing bridge at Hance Road has been rehabilitated. Rehabilitation included replacement of the superstructure, construction of new concrete scour walls to protect the existing elements, and installation of heavy stone fill to stabilize the stream bed.

The Town of Binghamton Highway Department is proactive in performing routine maintenance to prevent damage and obstructions during severe storm events.

The progress of mitigation actions from the 2007 Hazards Mitigation plan is indicated in Section F.3. Actions that are in not yet complete or are ongoing have been carried over to this plan update.

F.2) Hazard Vulnerabilities Identified

It is estimated that in the Town of Binghamton, 1,431 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Of the municipality's total land area, 0.2% is located within the 1% annual chance flood area. \$1,372,886 (0.2%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 16 NFIP policies in the community and there are 1 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.

Further information regarding the community’s participation in the NFIP is provided in the table below.

NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in the 1% Flood Boundary (3)	# Policies in the 0.2% Flood Boundary (3)	# Policies Outside the Combined 1% and 0.2% Flood Boundaries Hazard Areas (3)
Binghamton (T)	16	16	\$924,106	1	0	1	0	15

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, \$625,259 (0.1%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 17 people may be displaced, 0 people may seek short-term sheltering, and an estimated 8 tons of debris could be generated.

HAZUS does not estimate potential losses to the provided critical facility inventory.

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 the table below 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	2007 Action Status
1	Consider submittal of a letter of intent for acquiring repetitive loss property located on Conklin Road. Review potential funding sources for 25% match.	Existing	Flood	1-1, 1-2	Town NFIP Administrator	High	High	FEMA HMA grants	Short	High	PP	New
2	Consider-Analyze Maxian Road Culvert size increase. Existing culvert overtops during heavy rain which can damage the roadway.	Existing	Flood, Severe Storm	1-1,1-5, 1-7, 4-4, 4-5	Town Engineer/NFIP Administrator	Medium	Medium	FEMA HMA grants	Short	High	SP	New
3 (1.)	Continue training in the National Incident Command System (ICS), under the National Incident Management System (NIMS).	Existing	All	4-3, 4-5, 4-8	Town police, fire, EM departments	Medium	N/A	Municipal Budget	Ongoing	Medium	ES	Ongoing
4 (2.)	Assist in the update of flood plain (FIRM) maps – Jurisdictional Level. Specific assistance can be provided in the area of attending map update meetings held by FEMA, NYDEC and USGS; and identification of flood-prone areas outside of currently designated areas	Existing	Flood	1-1, 1-3, 1-8, 2-3	Town FEMA USACE	Medium	N/A	Municipal Budget	Ongoing	Medium	PR	Ongoing
5 (3.)	Continue participation in the National Flood Insurance Program (NFIP).	Existing	Flood	1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 2-1, 2-2, 3-2	Town FEMA	Medium	N/A	Municipal Budget	Ongoing	Medium	PR	Ongoing
6 (4.)	Encourage review of site plans by local fire fighting	New and Existing	All	3-1, 4-3, 4-5	Town	Medium	Low	Municipal Budget	Ongoing	Medium	ES	Ongoing



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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	2007 Action Status
	and emergency service providers to ensure response capability and capacity exists to support development.											
7 (5.)	Continue/expand programs to restore/upgrade stormwater drainage infrastructure (i.e. cobbles and riprap in roadside ditches).	Existing	Flood and Stormwater	1-1, 1-7, 1-8, 4-5	Town	Medium	Medium	Municipal Budget	Ongoing	Medium	SP	Ongoing
8 (6.)	Maintain/enhance comprehensive stormwater drain, catch-basin and culvert clearing programs.	Existing	Flood and Stormwater	1-1, 1-7, 1-8, 4-5	Town	Medium	Medium	Municipal Budget	Ongoing	Medium	SP	Ongoing
9 (7.)	Develop options for repair/replacement of timber bridge at Maxian Road to prevent loss of service.	Existing	Flood and Stormwater	1-1, 1-7, 1-8, 4-5	Town	Medium	Medium	CIP	Complete	High	SP	Ongoing
10 (8.)	Assess Roberts Road near Morgan Road for re-grading or other options to address seasonal flooding and implement alternative identified by the assessment.	Existing	Flood and Stormwater	1-1, 1-7, 1-8, 4-5	Town	Medium	Medium	Municipal Budget	Short Term	Medium	SP	Ongoing
11 (9.)	Continue and/or enhance programs to keep trees from threatening lives, property, and public infrastructure during storm events	Existing	All	1-1, 1-5, 1-7, 4-4	Town	Medium	Medium	Municipal Budget	Ongoing	Medium	PP, PR	Ongoing
12 (10.)	Consider adoption of local ordinances that ensure developments served by private wells have adequate well recharge area.	Existing	All	1-1, 1-4, 1-7	Town	Medium	Medium	Municipal Budget	Short Term	Medium	PR	Ongoing
13 (11.)	Consider non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including	Existing	Flood	1-1, 1-2, 2-1 2-2, 3-2	Town	Medium	Medium	Municipal Budget	Short Term	Medium	PP	Ongoing



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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	2007 Action Status
	those that have been identified as repetitive loss properties, such as acquisition/relocation, or elevation depending on feasibility. The parameters for feasibility for this initiative would be: funding, benefits versus costs and willing participation of property owners.											
Flood-1	Purchase, relocate, or elevate 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. 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.											
	Please see above.	Existing	Flood, Severe Storm	1-1 1-2 2-1 2-2 3-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from DCPD, NYSOEM, FEMA	Medium	Medium	FEMA Mitigation Grants	Long Term DOF	Medium	PP	Ongoing
Flood-2	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. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives (below).											
	Please see above.	N/A	Flood, Severe Storm	1-1 1-2 1-4 1-5 1-6 1-7 2-1 2-2 3-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, FEMA	High	Low-Medium	Municipal Budget	On-going	High	PR, PE	Ongoing
Flood-3	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: <ul style="list-style-type: none"> • 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 											



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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	2007 Action Status
	funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. <ul style="list-style-type: none"> 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.											
	Please see above.	N/A	All Hazards, Or Flood	1-2 1-7 1-9 2-1 2-2 3-2 3-4 4-6	Municipality with support from Planning Partners, DCPD, NYSOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term		PE	Ongoing
Flood-4	Obtain and archive elevation certificates	N/A	Flood, Severe Storm	1-1 1-2 1-4 1-5 4-1	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	On-going	High	PR	Ongoing
Flood-5	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New and Existing	All Hazards	All Goals and Objectives	Municipality with support from Planning Partners, DCPD, NYSOEM, FEMA	High	Low – High (for 5 year update)	Municipal Budget, FEMA planning grants	On-going	High	PR	Ongoing
Flood-6	Complete ongoing updates of Comprehensive Emergency Management Plans	New and Existing	All Hazards	1-1 1-10 4-2	Municipality with support from NYSOEM	Low	Low	Municipal Budget	On-going	High	PR	Ongoing
Flood-7	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	N/A	All Hazards	3-1 3-3 4-5	Municipality with support from County, NYSOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	High	PR, ES	Ongoing
Flood-8	Identify and develop agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities	N/A	All Hazards	1-4 1-5 2-2 3-1 4-1	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short Term	Medium	PR, ES	Ongoing



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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	2007 Action Status
	- damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping											
Flood-9	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).	N/A	All Hazards	1-5 2-2 2-3 3-1 4-1 4-3	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget, FEMA HMA and HLS grant programs	Short-Long Term DOF	Medium	PR	Ongoing
Flood-10	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: <ul style="list-style-type: none"> • 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 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.											
	Please see above.	N/A	All Hazards	1-1 1-3 1-8 2-2 3-1 4-1	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	Medium	PR	Ongoing
Severe Storm-1	Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. "StormReady" communities are better prepared to save lives from the onslaught of severe weather through advanced planning, education and awareness. Participation in the NOAA "StormReady" program shall include providing information on the "StormReady" program, facilitating public outreach and awareness programs, and supporting community storm risk reduction activities as appropriate. Specific actions addressed by "StormReady" participation include establishing a 24 hour Warning Point, increase number of ways EOC receives NWS warnings, increase number of ways to disseminate warnings, monitoring hydrometeorological data, providing annual weather safety talks, train weather spotters, create a formal hazardous weather plan, host annual visits by NWS to communities, etc.											
	Please see above.	N/A	Severe Storm	1-1 1-2 2-1 2-2 2-6	Municipality with support from County, NYSOEM and FEMA	Medium	Low	Municipal Budget	Short Term DOF	Medium	PE	Ongoing
Earthquake-	Obtain training and	N/A	Earthquake	1-1	Municipal	Medium	Medium	Municipal	Long	Low	PR,	Ongoing



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	2007 Action Status
1	conduct rapid screening assessment of critical facilities for earthquake vulnerability.			4-2 4-3	Emergency Management, Fire, PD with support from County, NY SOME			Budget, State and County grant opportunities	Term DOF		ES	
Earthquake-2	Develop a post-earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety.	N/A	Earthquake	1-11 4-5 4-6	Municipal Emergency Management, Fire, PD with support from County, NY SOEM	Medium	Medium	Municipal Budget, State and County grant opportunities	Long Term DOF	Low	ES	Ongoing

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.

() indicates 2007 Broome County HMP mitigation initiative number.

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.

Acronyms

ARC American Red Cross



BCDSS	Broome County Department of Social Services
BCOES	Broome County Office of Emergency Services
BCPD	Broome County Planning Department and Economic Development
BHA	Binghamton Housing Authority
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
HUD	New York Department of Housing and Urban Development
NFIP	National Flood Insurance Program
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSEG	New York State Electric and Gas
NYSFSMA	New York State Floodplain and Stormwater Managers Association
NYSOEM	New York State Office of Emergency Management
USACE	United States Army Corp of Engineers
USGS	United States Geological Survey

Potential FEMA HMA Funding Sources:

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

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. PR=Prevention: Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built Examples of these are acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
2. PP= Property Protection: 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.
3. 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.
4. 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.
5. 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.
6. 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	2	H	H	Y	Y	N	H
2	5	M	M	Y	Y	Y	H
3 (1.)	3	M	N/A	Y	N	Y	M
4 (2.)	4	M	N/A	Y	N	Y	M
5 (3.)	11	M	N/A	Y	N	Y	M
6 (4.)	3	M	L	Y	N	Y	M
7 (5.)	4	M	M	Y	N	Y	M
8 (6.)	4	M	M	Y	N	Y	M
(7.)	4	M	M	Y	N	Y	M
9 (8.)	4	M	M	Y	N	Y	M
10 (9.)	4	M	M	Y	N	Y	M
11 (10.)	3	M	M	Y	N	Y	M
12 (11.)	4	M	M	Y	N	Y	M
Flood-1		M	M	Y	N	Y	M
Flood2	9	H	M	Y	N	Y	H
Flood-3	8	M	M	Y	Y	Y	M
Flood-4	5	M	L	Y	N	Y	H
Flood-5	ALL	H	H	Y	Y	Y	H
Flood-6	3	L	L	Y	N	Y	H
Flood-7	5	M	M	Y	N	Y	M
Flood-8	6	M	M	Y	Y	Y	M
Flood-9	6	M	M	Y	Y	N	M
Flood-10	5	M	L	Y	N	Y	M
Severe Storm-1	3	M	M	Y	N	Y	L
Earthquake-1	3	M	M	Y	N	Y	L
Earthquake-2	9	H	M	Y	N	Y	H

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.
() indicates 2007 Broome County HMP mitigation initiative number.

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.

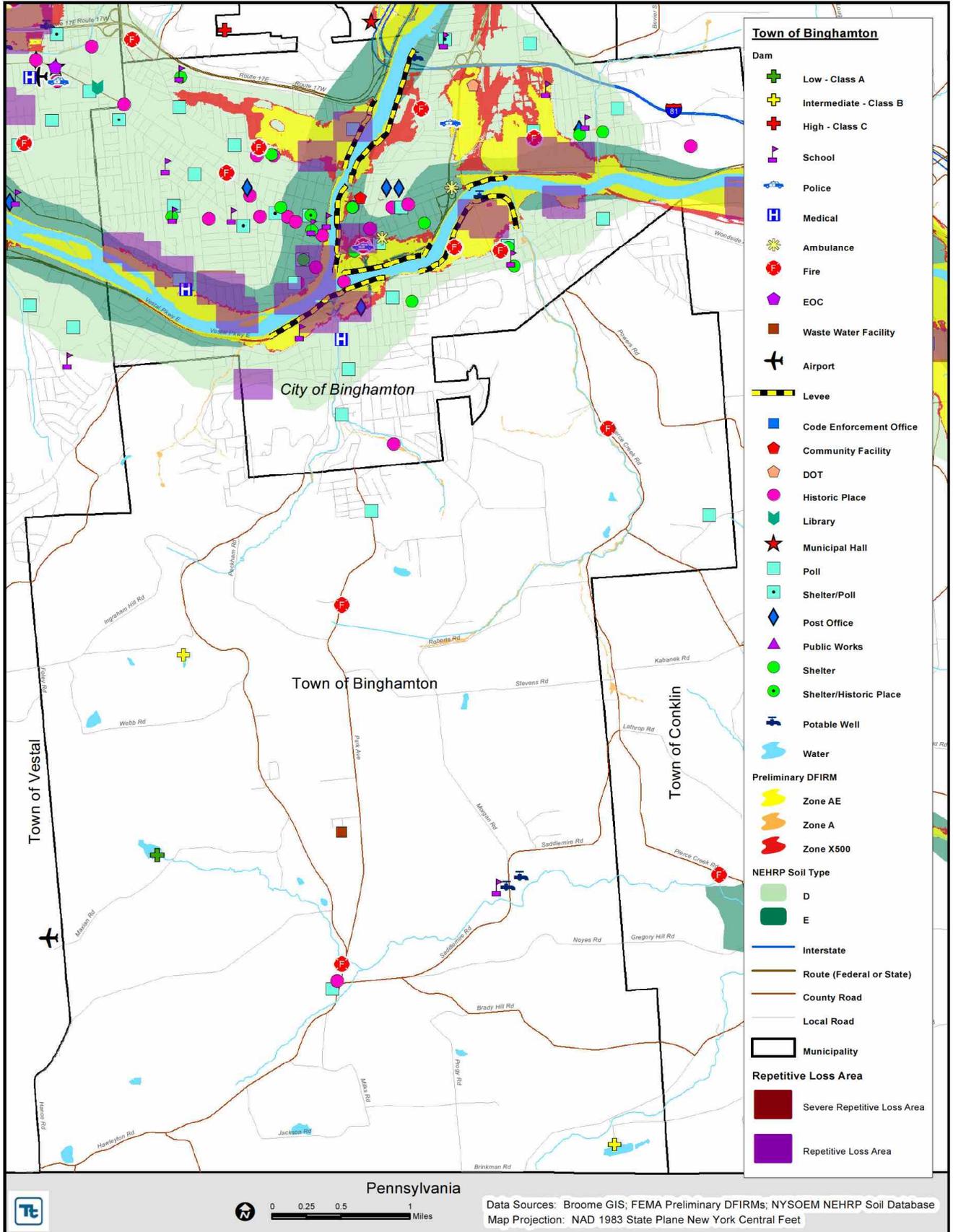
H.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None at this time.

I.) HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map has been generated for the Town of Binghamton to illustrate the probable areas impacted within the Town of Binghamton 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 Binghamton has significant exposure. The Planning Area maps are provided in the hazard profiles within Section 5.4, Volume I of this Plan.

SECTION 9.4: TOWN OF BINGHAMTON



J.) STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of this municipality to incorporate mitigation planning as an integral component of daily municipal operations. Below is a list of planning mechanisms that have been/will be incorporated into municipal procedures.

(Check which apply and add explanation if required)

Planning Mechanisms	Has Been Utilized	Will Be Utilized
Operating Budget When constructing upcoming budgets, Hazard Mitigation Actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the Hazard Mitigation goals and objectives.	X	X
Capital Improvement Budget When constructing upcoming budgets, Hazard Mitigation Actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the Hazard Mitigation goals and objectives.	X	X
Human Resource Manual Employee job descriptions may contain Hazard Mitigation Actions.		X
Building and Zoning Ordinances A variety of building and zoning regulations are used to restrict the uses of land and establish building specifications. Prior to land use, zoning changes or development permitting the city will review the hazard mitigation plan and other hazard analysis to ensure consistent and compatible land use.	X	X
Comprehensive Land Use Plan A land use plan is intended to identify land use issues and to make recommendations on how to address these issues. When applicable the town will incorporate Hazard Mitigation Actions in the development and extent of the regulations.	X	X
Grant Applications Data and maps will be used as supporting documentation in grant applications	X	X
Municipal Ordinances When updating municipal ordinances Hazard Mitigation will be a priority.	X	X
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		X
Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The will incorporate hazard resistant construction standards into the design and location of projects.		X
Day to Day Operations Incorporate Hazard Mitigation Actions in daily operations and all projects will be a goal of the municipality.	X	X
Local School Service Projects The municipality to work closely with the local school district and assist with community service projects for the service organizations. Several of the Town's Hazard Mitigation Actions can be implemented as a joint project with the school district.	X	X
Municipal Budget Adopted annually Municipality will look at Mitigation Actions when allocating funding.	X	X

Planning Mechanisms	Has Been Utilized	Will Be Utilized
Economic Development The local economic development group will utilize the identification of hazard areas when assisting new business in finding a location.	X	X

K.) ADDITIONAL COMMENTS

No additional comments at this time.

NFIP ADMINISTRATOR INPUT SHEET

1. Planning and Regulatory

The Town of Binghamton is currently an active member of the NFIP. Flood Insurance Rate Maps have been in effect for the community since 2-5-2010. The Town of Binghamton is active in floodplain management with ordinances meeting minimum requirements.

The Town of Binghamton has not completed Community Assistance Visits (CAV. As of December 2012 there is no need for a CAV. The Town of Binghamton has no outstanding compliance issues.

2. Administrative and Technical Staff

The Town of Binghamton has identified personnel to manage and uphold the Town of Binghamton's compliance with the NFIP. Dedicated staff include: Manager of Engineering. In addition, the Town of Binghamton has supplementary staff for which NFIP is an auxiliary duty; personnel include Code Enforcement Officer.

3. Financial

As of 2013 there is one policy enforced within the Town of Binghamton. Of 1 insurance policy, 1% are within the Special Flood Hazard Area (SFHA), and 2% are located outside the SFHA. As of 2013 there have been 0 repetitive loss properties and 0 severe repetitive loss properties within the Town of Binghamton