### 9.3 CITY OF BINGHAMTON

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

### A.) HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact	Alternate Point of Contact
Name: Tarik Abdelazim; Director of Planning, Housing and Community Development Phone Number: 607-772-7028 Email address: tabdelazim@cityofbinghamton.com	Name: Philip T. Krey, P.E.; City Engineer Phone Number: 607-772-7055 Email address: ptkrey@cityofbinghamton.com

### B.) PROFILE

### **Population**

44,376 (estimated 2010 U.S. Census)

#### Location

The City of Binghamton is in the southern tier of New York State and is the county seat of Broome County.

### **Brief History**

The city was named after William Bingham, a wealthy Philadelphian who bought the surrounding land in 1972. The first known settlers to the area were troops of the Sullivan Expedition in 1779, during the Revolutionary War. Binghamton was first incorporated in 1834 as a village and became a city in 1867.

### **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 Supervisor, 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 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	
Brandywine Brownfield Opportunity Area Project Area	Commercial	TBD	Brandywine Corridor			Project is currently in Step 2 of the BOA process.	

New Development/Potential Development in Municipality							
Property Name	Type (Residential or Commercial)	Number of Structures	Address	Block and Lot	Known Hazard Zone	Description/ Status	
						Recommenda tions developed in study will help inform development and investment strategy for project area.	
Charles Street Business Park	Commercial	TBD	30 Charles Street			A partially constructed business park, owned by the BC IDA. Currently only 1 building has been constructed.	
North Chenango Brownfield Opportunity Area Project Area	Commercial/ Residential	TBD	North Side			Project is currently in Step 2 of the BOA process. Recommenda tions developed in study will help inform development and investment strategy for project area.	
Southern Tier High-Tech Incubator	Commercial/ Educational	1	Intersection of Hawley and Carroll streets			Binghamton University is developing a 54,000 sq ft. high tech incubator.	
Susquehanna Estates Subdivision	Residential	35	115 Gates Street		Partially within Zone AE	A potential senior living subdivision.	
Eagles Crest Subdivision	Residential	4	51 & 57 Ridge Street; 7-23 Loretta Drive & 4 Ellen Drive			Approved in 2009.	
Greater Binghamton Health Center Campus	Community Services	unknown	521 COURT ST			The former New York State Inebriate Asylum will be and turned into a medical and health professional	

New Development/Potential Development in Municipality							
Property Name	Type (Residential or Commercial)	Number of Structures	Address	Block and Lot	Known Hazard Zone	Description/ Status	
						education center.	

### 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	25+ road closures, utility outages-various city-wide, commercial losses. Road damages, debris remove=al, damaged treatment facilities. School flooding (MacArthur-East Middle School), various city buildings.
Severe Storms and Flooding	DR 1670	Yes - IA, PA	November 16-17, 2006	Y – On file with County and FEMA
April Nor'easter	DR 1692	No	April 14 - 18, 2007	
Severe Storms and Flooding	DR 1710	No	June 19, 2007	
Severe Winter Storm	EM 3299 DR 1827	No	December 11-31, 2008	
Severe Storms and Flooding	DR 1857	No	August 8-10, 2009	
Severe Winter Storm and Snowstorm	DR 1957	No	December 26-27, 2011	
Severe Storms, Flooding, Tornado and Straight Line Winds	DR 1993	Yes - PA	April 26 — May 8, 2011	Y – On file with County and FEMA 10 + Road closures-various locations, storm and sanitation line damages. Road damages-pavement, shoulder, road embankments, building damage, stream erosion \$95,000 total damage.
Hurricane Irene	EM 3328 DR 4020	Yes - IA, PA	August 26 — September 5, 2011	

Type of Event	FEMA Disaster # (if applicable)	County Designated?	Date	Approximate Damage Assessment
Remnants of Tropical Storm Lee	EM 3341 DR 4031	Yes - IA, PA	September 7-11, 2011	Y – On file with County and FEMA Evacuation and sheltering, road closures and utility outages and commercial losses. Road damages, bridge and culvert damages, Storm and sanitation lines-pump stations, facilities and structures. Water filtration and sewerage treatment facility damage, city structure damage, public-police and fire. Total FEMA assistance ~\$3 to 3.2 million.

Note: N/A = Not applicable

### D.) NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Flood	1% Annual Chance: \$477,331,705 0.2% Annual Chance: \$711,963,340	Frequent	42	High
Severe Winter Storm	1% of GBS: \$53,127,532 5% of GBS: \$265,637,662	Frequent	39	High
Drought	Not available	Frequent	36	High
Severe Storm	100-Year MRP: \$0 500-Year MRP: \$1,024,189 Annualized Loss: \$10,206	Frequent	30	Medium
Earthquake	500-Year MRP: \$6,090,454 2,500-Year MRP: \$62,961,344 Annualized Loss: \$85,343	Occasional	20	Medium
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 indicates that it has moderate planning, regulatory, administrative, technical, and community resiliency capabilities; limited fiscal and community political capability; with a relatively un-willing political capability to enact policies or programs to reduce hazard vulnerabilities in the community. It also noted that City Council has little awareness and/or willingness to enact such policies and programs.

# 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 Building and Code	NYS Code Update, 2010
2) Zoning Ordinance	Y	Local Planning	Chapter 410, 2006 –the stormwater regulations were updated in 2011 including the requirement of an urban runoff reduction plan for certain projects
3) Subdivision Ordinance	Υ	Local Planning	Chapter 360, 1970
4) NFIP Flood Damage Prevention Ordinance	Y	Local Planning and Engineering	Chapter 240, 1987
4a) Cumulative Substantial Damages	N	Local	
4b) Freeboard	Υ	Local	
5) Growth Management	N	Local	
6) Floodplain Management / Basin Plan	Y	Planning & Engineering	Chapter 240, 1987
7) Stormwater Management Plan/Ordinance	Y	Engineering & Planning	Chapter 227 – most recently updated in 2011
8) Comprehensive Plan / Master Plan/ General Plan	Y	Planning	2003 – currently undergoing update to Comprehensive Plan
9) Capital Improvements Plan	N	DPW, Engineering, & Finance	Under development
10) Site Plan Review Requirements	Υ	Planning	Chapter 410-35, 2006
11) Open Space Plan	N	Local or County	None. There exists an informal relationship between the Engineering Dept. and the BC Storm Water Coalition.
12) Stream Corridor Management Plan	N	Local or Watershed	None. There exists an informal relationship between the Engineering Dept. and the BC Storm Water Coalition.
13) Watershed Management or Protection Plan	N	Local or Watershed	
14) Economic Development Plan	Y	County	County
15) Comprehensive Emergency Management Plan	Y	Local or County	County

Regulatory Tools (Codes, Ordinances., Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of adoption)
16) Emergency Response Plan	Y	Local Fire Department	City complies with NIMS.
17) Post Disaster Recovery Plan	N	Local	
18) Post Disaster Recovery Ordinance	N	Local	
19) Real Estate Disclosure Requirement	N	State	State has 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
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Planning, Housing & Community Development Department
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Engineering Department
Planners or engineers with an understanding of natural hazards	Υ	All City staff based upon experience of past 6 years
4) NFIP Floodplain Administrator	Υ	Planning Commission
5) Surveyor(s)	Υ	Engineering Department
6) Personnel skilled or trained in "GIS" applications	Y	Planning, Housing & Community Development Department. City also has shared services agreement with Broome County GIS
7) Scientist familiar with natural hazards	N	
8) Emergency Manager	N	Mayor
9) Grant Writer(s)	N	The Grants Writer position was eliminated in the 2013 budget. Various staff members have experience and success obtaining grants.
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)	Y - Planning, Housing, and Community Development Department
2) Capital Improvements Project Funding	Y – DPW. Needs additional development and support.
3) Authority to Levy Taxes for specific purposes	Y - City Council
4) User fees for water, sewer, gas or electric service	Y - Water & Sewer: Funding and fees are independent of general fund. Intermunicipal relations with other municipalities who use our sewers & water infrastructure.
5) Impact Fees for homebuyers or developers of new development/homes	N
6) Incur debt through general obligation bonds	Y - Finance
7) Incur debt through special tax bonds	Y - Finance
8) Incur debt through private activity bonds	Y - Finance
9) Withhold public expenditures in hazard-prone areas	N
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	Y - DPW/Engineering/Code: FEMA/SEMA – Hazard Mitigation Grant Program for buyouts/elevation post-disaster mitigation.
11) Other	

### **E.4) Community Classifications**

Program	Classification	Date Classified
Community Rating System (CRS)	NP	NP
Building Code Effectiveness Grading Schedule (BCEGS)	4	2012
Public Protection	Unknown	Unknown
Storm Ready	NP	NP
Firewise	NP	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 <a href="http://www.weather.gov/stormready/howto.htm">http://www.weather.gov/stormready/howto.htm</a>
- The National Firewise Communities website at http://firewise.org/

### F. MITIGATION STRATEGY

### F.1) Past Mitigation Actions/Status

Specific mitigation actions that that have been completed or are underway include:

- Working with Broome County to assist in the update of local flood plain (FIRM) maps.
- Preliminary evaluation of the city's participation in the CRS has been completed, and the city anticipates submitting an application in 2013.
- Working with US Army Corps of Engineers (USACE) to analyze and potentially upgrade flood
  protection infrastructure in the First Ward neighborhood. The design for the project has been
  completed, local funding is in place, and the City is currently waiting for USACE permit approval.
- Ongoing storm sewer and sanitary sewer separation to assist with peak storm water flows
  particularly on Vestal Avenue, James Street and Penston Rd. To date, projects at James Street,
  Vestal Avenue, and Penston Rd. have been completed, and separation is ongoing on other streets.
- South Side Interceptor project is under design to replace interceptor/trunk sewer line from the Conklin town line to Jackson Street to assist in managing peak storm water flows.

- Some minor projects to enhance stream flow capacity utilizing feasible techniques that include, but are not limited to, channel shaping/resizing, rip rap, grubbing, stream channel relocation are underway.
- Applied for and is currently waiting on grant approval for an emergency backup generator for City Hall.
- Working with Broome County Planning to maintain GIS mapping of existing fire hydrants and water resources throughout the City, to identify needs for enhancements of critical infrastructure.
- Pursuing grants for buyouts and elevation of some residences, as well as exploring many opportunities for additional demolitions outside of current HGMP programs. Have applied for funding through the Substantially Damaged Program for up to 11 residential acquisitions (located on Duke St., Baltimore Ave., Avon Road, Laurel Ave., New St.) through HMGP DR-4031/EM-3341. Additionally applied for funding through the Non-Substantially Damaged Program for 8 properties and for 3 properties through the Elevation Program.

The progress of mitigation actions from the 2007 Broome County Hazard 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 City of Binghamton, 11,387 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Of the municipality's total land area, 18.8% is located within the 1% annual chance flood area. \$1,631,039,145 (17.5%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 469 NFIP policies in the community and there are 246 policies located within the 1% annual chance flood area. FEMA has identified 38 Repetitive Loss (RL) including 2 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)	Rep. Loss Prop.	# Policies in the 1% Flood Boundary (3)	# Policies in the 0.2% Flood Boundary (3)	# Policies Outside the Combined 1% and 0.2% Flood Boundarie s Hazard Areas (3)
Binghamton (C)	469	263	\$15,987,572	38	2	246	44	179

Source: FEMA Region 2, 2012

HAZUS-MH estimates that for a 1% annual chance flood, \$477,331,705 (5.1%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 5,448 people may

<sup>(1)</sup> Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of May 31, 2012. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents the number of claims closed by May 31, 2012.

<sup>(2)</sup> Total building and content losses from the claims file provided by FEMA Region 2.

<sup>(3)</sup> 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.

be displaced, 4,879 people may seek short-term sheltering, and an estimated 33,944 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:

			Expo	sure		tial Loss t Flood Eve			ntial Loss 6 Flood E	
Name	Municipality	Type	1% Even	0.2% Even t	Percent Structure Damage	Percen t Conte nt Damag e	Days to 100- Percent <sup>(</sup>	Percent Structure	Percent Content Damage	Days to 100- Percent <sup>(1)</sup>
Our Lady of Lourdes Hospital	Binghamton (C)	Medical		Х	-	-	-	0.0	0.0	NA
City of Binghamton Headquarter	Binghamton (C)	Fire Station		х	-	-	-	1.9	2.2	480
City of Binghamton Engine 4	Binghamton (C)	Fire Station	Х	Х	10.2	24.4	480	12.7	58.7	630
City Training Center/Mechani cs Facility	Binghamton (C)	Fire Station	Х	Х	24.5	98.8	720	34.2	100.0	720
Macarthur School	Binghamton (C)	School	Х	Х	6.2	33.8	480	9.0	59.8	480
East MS	Binghamton (C)	School	Х	Х	1.1	5.9	480	7.4	41.3	480
American Legion Post 1645	Binghamton (C)	Poll	Х	Х	0.0	0.0	NA	5.8	37.4	NA
Binghamton City Hall	Binghamton (C)	Historic		Х	-		NA	0.0	0.0	NA
Catholic Charities	Binghamton (C)	Poll	X	Х	10.5	66.4	NA	14.0	86.5	NA
Community Center	Binghamton (C)	Poll	Х	Х	0.0	0.0	480	7.9	57.9	NA
Ross Park Carousel	Binghamton (C)	Historic	Х	Х	0.0	0.0	NA	6.7	46.0	NA
South Washington St Parabolic	Binghamton (C)	Historic	Х	Х	80.3	100.0	NA	88.3	100.0	NA
Southview Post Office	Binghamton (C)	Post Office		Х	-	-	NA	1.6	9.6	NA
DOT Facility Govt. Plaza	Binghamton (C)	DOT		Х	-	-	NA	0.0	0.0	NA
DOT Facility Frederick St.	Binghamton (C)	DOT	Х	Х	5.4	4.9	NA	32.5	38.0	NA
BC Veterans Memorial Arena	Binghamton (C)	Shelter		Х	-	-	NA	0.0	0.0	NA

			Expo	sure		tial Loss t Flood Eve			ntial Loss 6 Flood E	
Name	Municipality	Туре	1% Even t	0.2% Even t	Percent Structure Damage	Percen t Conte nt Damag e	Days to 100- Percent <sup>(</sup>	Structure		Days to 100- Percent <sup>(1)</sup>
SUSQUEHANN A RIVER INTAKE	Binghamton (C)	Potable Water	×	×	40.0	-	NA	40.0	-	NA
Valley Street Park Storm Pump Station	Binghamton (C)	Storm Sewer	Х	Х						
Jackson Street Storm Pump Station	Binghamton (C)	Storm Sewer	Х	Х						
Brandywine Ave Storm Pump Station	Binghamton (C)	Storm Sewer	Х	Х						
Brandywine Street Storm Pump Station	Binghamton (C)	Storm Sewer	Х	Х						
Rush Ave Storm Pump Station	Binghamton (C)	Storm Sewer	Х	Х						
Frederick Street Sanitary Pump Station	Binghamton (C)	Sanitary Sewers	Х	Х						
Bevier Street Sanitary Pump Station	Binghamton (C)	Sanitary Sewers	Х	Х						
Penn Ave. Sanitary Pump Station	Binghamton (C)	Sanitary Sewers	Х	Х						
Front Street Sanitary Pump Station	Binghamton (C)	Sanitary Sewers	Х	Х						
Elm Street Sanitary Pump Station	Binghamton (C)	Sanitary Sewers	Х	Х						
CSO #1, 3, 4, 9, 13	Binghamton (C)	Sewers	Х	Х						
Woodburn Court II	Binghamton (C)	Low- income HUD Housing	Х	Х	>50%	>50%	365	10- 20%	10- 20%	180
Woodburn Court I	Binghamton (C)	Low- income HUD Senior Housing	Х	Х	>50%	>50%	240	10- 20%	10- 20%	120
Binghamton Housing Authority	Binghamton (C)	Low- income HUD Housing	Х	Х	>50%	>50%	240	10- 20%	10- 20%	120
YWCA	Binghamton (C)	Shelter		Х	10-20%	10-20%	120	<5%	<5%	60

			Expo	osure		tial Loss t Flood Eve			ntial Loss % Flood E	
Name	Municipality	Type	1% Even t	0.2% Even t	Percent Structure Damage	nt Damag	Days to 100- Percent <sup>(</sup>	Percent Structure	Content	Days to 100- Percent <sup>(1)</sup>
Street and Traffic Lighting – Ground Wire	Binghamton	Electric System s							,	

Source: HAZUS-MH 2.1

Note: NA = Not available; T = Town

- = No loss calculated by HAZUS-MH 2.1
- X = Facility located within the DFIRM boundary.
- (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).

Please note 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.

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

### F.3) PROPOSED HAZARD MITIGATION INITIATIVES

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
1.	Continue training in the National Incident Command System (ICS), under the National Incident Management System (NIMS).	New and Existing	ALL	4-3, 4-5, 4-8	Required of Police, Fire, DPW, and Code.	High	Low	Insufficien t resources available, Municipal General Fund	Continuous	High	ES	Ongoing
2.	Continue support of the Local Emergency Planning Committee (LEPC) and coordinate the hazard mitigation plan update with efforts of the LEPC.	New and Existing	Flood, Drought, Severe Storm	1-7, 1- 10, 4-2, 4-4, 4-5	Police, Fire, DPW, and Code.	High	Low	Municipal General Fund	Short No Progress / Unknown	High	ES	No Progress
3.	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	New and Existing	Flood	1-1, 1-3, 1-8, 2-3	Working with Broome County.	High	Low	Municipal General Fund, County General Fund	Short Continuous	High	PR	Ongoing
4.	Continue participation in the National Flood Insurance Program (NFIP).	New and Existing	Flood	1-1, 1-2, 1-3,1-4, 1-5, 1-6, 1-7, 1-8, 2-1, 2-2, 3-2	City Planning, Code Enforcemen t	High	Low	Municipal General Fund, County General Fund	Short Continuous	High	P R	Ongoing
5	Evaluate participation in the CRS.											In Progress/antici pate completion in 2013
5 (6a.)	Upgrade flood protection infrastructure in First		Flood	1-1, 1- 11, 4-5,	City	Medium	High	Local funding	Short	High	SP	In Progress Design is complete.

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
	Ward neighborhood including upgrading McDonald Avenue pump station, piping changes and increased drain lines.											Waiting for ACOE permit approval.
6 (7.)	Continue and enhance ongoing storm sewer and sanitary sewer separation to assist with peak storm water flows; currently focusing on Westside Sewer Separation project – Bennett Ave, Laurel, Lathrop, Johnson, Millard.	Existing	Flood	1-1, 1- 11, 4-5,	City	Medium	Medium	User Fees	Short	High	SP	Ongoing. Completed 4 out of 6 phases.
7 (8.)	Research funding and consider replacing interceptor/trunk sewer line from the Conklin town line to Jackson Street to assist in managing peak storm water flows.	Existing	Flood	1-1, 1- 11, 4-5,	City	Medium	Medium	User Fees	Short	High	SP	In Progress / Not Yet Complete: South Side Interceptor project under design. Funded and in process of obtaining permits. Construction in 2013.
8	Research and secure funding to conduct feasibility study of mitigating all three low-income HUD housing in center city neighborhood (Binghamton Housing Authority (BHA), Woodburn Court I, and Woodburn Court II). by moving critical	Existing	Flood	1-1, 1- 11, 4-5,	City of Binghamton , BHA, HUD	HIGH	HIGH	Multiple HMA Sources, HUD	Short	High	SP	Will initiate discussions with building owners and HUD in 2013, and explore funding options in 2014 if parties are interested.



Initiative		Applies to New and/or Existing Structur	Hazard(s	Goals and Objectiv	Lead and Support	Estimat ed Benefit	Estimate	Sources of	Timeline/Comm	Priori	Mitigation Category	2007
	Mitigation Initiative facility systems and utilities to roof or building safe rooms.	es*	Mitigated	es Met	Agencies	S	d Cost	Funding	ents	ty		Action Status
8a	If BCA analysis is favorable, and project is feasible, work with appropriate agencies to secure funds and implement.	Existing	Flood	1-1, 1- 11, 4-5,	City of Binghamton , BHA, HUD	HIGH	HIGH	Multiple HMA Sources, HUD	Short	High	SP	Begin in 2016 and complete by 2017
9	Develop and implement the City's Stormwater Green Infrastructure 50/50 Fund, which will cover a portion of eligible installation costs on private property of green infrastructure that assists with stormwater management goals.	New and Existing	Flood	1-1, 1-2, 1-8, 1- 11, 2-2, 3-2	City of Binghamton	HIGH	HIGH	Chesapea ke Bay Foundatio n, NYS EFC, NYS DEC, US EPA	Short	High	PP	Launch pilot project in 2013 with \$200,000 grant award from Chesapeake Bay Foundation, and expand in following years
10	Conduct engineering feasibility study to explore mitigation efforts for State Street Neighborhood off Brandywine Highway	New and Existing	Flood	1-1, 1- 11, 4-5	City; NYS DOT; County; Town of Dickinson; Village of Port Dickinson	Low	Low	County	Short	High	SP	
11	Integrate Hazard Mitigation Plan Goals and vulnerability mapping into Comprehensive Plan update and Implement Comp Plan Recommendations	New and Existing	ALL	1-4, 1-5, 1-7, 1-11	City	Medium	Low	Local; HUD	Short	Mediu m	P R	On-going
12	Community Outreach Programs including development and	New and Existing	Flood; Fire; Earthqua ke	1-2, 1-7, 1-9, 2-1, 2-2, 2-5, 2-6, 3-2,	City; County; State	Medium	Low	Local	Short	High	PE	On-going



Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
	distribution of Fact sheets in municipal mailings and at public events.			3-4, 4-6								
13 (9.)	Enhance stream flow capacity utilizing feasible techniques that include, but are not limited to, channel shaping/resizing, rip rap, grubbing, stream channel relocation.	Existing	Flood	1-1, 1-8	City; BC Soil & Water Conservatio n	Medium	HIGH	Local; State; County	Long	Mediu m	SP	No Progress / Unknown: No program in place. Some minor projects underway.
14 (10.)	Work with Army Corp to ensure regular maintenance and inspections on the local flood control structures that currently protect downtown Binghamton, the First Ward, the south side and east side neighborhoods.	Existing	Flood	1-1, 1- 11, 3-1	City; ACOE; DEC	Low	Low	Local	Short	High	PP	Continuous: City participates in annual inspections
15 (11.)	Maintain and enforce alternate side of the street parking ordinance to facilitate snow removal.	Existing	Winter storm	1-1, 1-4	City	Low	Low	Local	Short	High	PP P R	Continuous: City exploring expansion of date range. Enhanced enforcement is needed.
16 (12.)	Pursue funding to retrofit vulnerable critical facilities, including sewer lift stations and storm water pumping stations, to include backup and redundant power sources to maintain facility operations during hazard events for which	Existing	ALL	1-1, 1-5, 4-1	City	Medium	HIGH	Grant	Short	High	SP	In Progress / Not Yet Complete: Waiting for grant approval for an emergency backup generator for City Hall

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
17 (13.)	they are exposed.  Work with Broome County Planning to maintain GIS mapping of existing fire hydrants and water resources throughout the City, to identify needs for enhancements of critical infrastructure.	New and Existing	ALL including Drought	1-1, 1-8, 1-11	City; County	Low	Low	Local	Short	High	P R	Continuous: Have some data & platform for mechanism of capturing city assets through Cartegraphic software. Need additional support for data collections
18 (13.1)	Cartographic Implementation	New and Existing	ALL	1-1, 1-3, 1-8, 2-3	City	Medium	Medium	Local	Short	High	P R	Modules implemented; Fleet Mgmt, City Traffic and Road Signs, Streets and Roads
19 (14.)	Consider non- structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss properties, such as acquisition/relocatio n, or elevation depending on feasibility. The parameters for feasibility for this initiative would be: funding, benefits versus costs and willing participation of property owners.	New and Existing	Flood, Severe Storm	1-1, 1-2, 2-1, 2-2, 3-2	City; NY OES; FEMA, (via Municipal Engineer/N FIP Floodplain Administrat or) with support from BCPD, NYSOEM, FEMA	Medium- High	High	HGMP grants	Short	High	PP	Continuous: Received funding for 10 residential buyouts. Pursuing grants for buyouts & elevations of some residences. Many opportunities for additional demolitions outside of current programs but struggle with insufficient funding
20 (17.)	Change Floodplain Administrator from Planning Commission to Director of Planning, Housing, and	New and Existing	Flood	4-1, 1-5	City	Low	Low	Local	Short	High	P R	



Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
	Community Development											
21 (18).	Collaborate with JSTP on implementation of I/I offset program.	New and Existing	Flood	3-1	City/JC/JST P	Medium	Low/Medi um	User fees	Short	High	P R	Ongoing
22 (19.)	Continue and enhance ongoing storm sewer and sanitary sewer separation to assist with peak storm water flows; currently focusing on Conklin Avenue, North Street, Genesee Street, Euclid Avenue, Riverside Drive	Existing	Flood	1-1, 1-5, 1-7	City	Medium	High	Local (User Fees)	Short	High	SP	
23 (20)	Continue to repair flood control structures, currently focusing on Park Creek Channel, Phase I	Existing	Flood	1-1, 1- 11, 4-5,	City; DEC; ACOE	High	High	Local (Bonding)	Short	High	SP	Ongoing
24 (21)	DPW Emergency Equipment Staging Planning	New and Existing	Flood	1-1, 3-1, 4-5	City	Medium	Low	Local	Short	High	PP , ES	Continuous: planning for the emergency staging of heavy equipment throughout the City during a City wide emergency event.
25 (22)	CEDAR training for Code Enforcement officials		ALL	1-1, 1-4, 1-5	City; NYS	Low	Low	Local	Short	High	P R	
26 (23)	Install emergency generators in four Fire Stations	Existing	Flood, Severe Winter storm, Earthqua ke,	1-1, 4-1, 4-5	City	High	Medium	FEMA Grant	Short	High	ES	

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
			Severe storm									
27 (24)	Upgrade West St Fire Station (currently closed) for Emergency Operations Center, Emergency Training Center & Emergency Mechanics Shop (facility was used for these purposes during 2011 flood)	Existing	Flood	1-1, 4-1, 4-5	City	Medium	Medium	Local	Ongoing	High	ES	Ongoing
28	Install one-way valve in the floor drain of mechanics shop to prevent floor water from entering shop and damaging equipment and vehicles at Sullivan Fire Training Facility	Existing	Flood	1-1, 4-1, 4-5	City	Medium	Medium	FEMA HMA, NYS	Short	High	ES	New
29	Purchas two door dams to minimize flood water entry to F.D. classroom preventing damage to classroom contents at Sullivan Fire Training Facility	Existing	Flood	1-1, 4-1, 4-5	City	Medium	Medium	FEMA HMA, NYS	Short	High	ES	New
30	Relocate Fire Dept. Mechanic's office to second floor. This will prevent future flooding events from damaging mechanics office.	Existing	Flood	1-1, 4-1, 4-5	City	Medium	Medium	FEMA HMA, NYS	Short	High	ES	New
Flood-1	Purchase, relocate, or repetitive loss property  Phase 1: Identify appropers Phase 2: Where determined from FEMA and the relocation of the relation of the relocation of the relation of the r	as priority. opriate candion	dates based o	of cost-effecti	veness versus	retrofitting.					ilable	

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
	Please see above.	Existing	Flood, Severe Storm	1-1 1-2 2-1 2-2 3-2	Municipality (via Municipal Engineer/NF IP Floodplain Administrato r) with support from BCPD, NYSOEM, FEMA	High	High	FEMA Mitigation Grants	Long Term DOF	Med	PP	New
	Maintain compliance vall new and substantia the community. Further, continue to midentified as Initiatives	lly improved oneet and/or e	construction in	n Special Ha	zard Flood Area	as), floodpla	n identificatio	n and mappin	g, and flood insurance	ce outread	h to	
Flood-2	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/N FIP Floodplain Administrat or) with support from NYSOEM, FEMA	High	Low- Medium	Municipal Budget	Ongoing	High	P R, PE	New
Flood-3	<ul> <li>Prepare and distribe mitigation grant fur</li> </ul>	tural hazard rain links to the bute information ding to mitigation systems a bazard risk red	isk reduction: e HMP websional letters to ate their propand newslette luction measu	te, and regulate, and regulate the food vulner erties, and in the food of the	larly post notice cable property on structing them educate the pub	es on the Cou wners and n on how they blic on flood i	unty/municipa eighborhood can learn mo nsurance, the	I homepage(s associations, ore and implen availability of	) referencing the HM explaining the availal nent mitigation. mitigation grant func	P webpage bility of sing, and		
	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, BCPD, NYSOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term		PE	New

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
Flood-4	Obtain and archive elevation certificates	N/A	Flood, Severe Storm	1-1 1-2 1-4 1-5 4-1	NFIP Floodplain Administrat or	Medium	Low	Municipal Budget	On-going	High	PR	New
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 Objective s	Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA	High	Low – High (for 5 year update)	Municipal Budget, FEMA planning grants	On-going	High	PR	New
Flood-6	Support ongoing updates of Comprehensive Emergency Management Plans	New and Existing	All Hazards	1-1 1-10 4-2	County with support from City	Low	Low	Municipal Budget	On-going	High	P R	New
Flood-7	Create/Enhance/Mai ntain 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 communitie s	Medium	Low	Municipal Budget	Short Term	High	P R, ES	New
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 – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping	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	Mediu m	P R, ES	New

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
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	Mediu m	P R	New
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:  • 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									hese		
	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	Mediu m	P R	New
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 hydrometerological data, providing annual weather safety talks, train weather spotters, create a formal hazardous weather plan, host annual visits by NWS to communities, etc.											
Storr	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	Mediu m	PE	New

Initiative	Mitigation Initiative	Applies to New and/or Existing Structur es*	Hazard(s ) Mitigated	Goals and Objectiv es Met	Lead and Support Agencies	Estimat ed Benefit s	Estimate d Cost	Sources of Funding	Timeline/Comm ents	Priori ty	Mitigation Category	2007 Action Status
Earthqua ke-1	Obtain training and conduct rapid screening assessment of critical facilities for earthquake vulnerability.	N/A	Earthqua ke	1-1 4-2 4-3	Municipal Emergency Manageme nt, Fire, PD with support from County, NYSOEM	Medium	Medium	Municipal Budget, State and County grant opportuniti es	Long Term DOF	Low	P R, S	New
Earthqua ke-2	Develop a post- earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety.	N/A	Earthqua ke	1-11 4-5 4-6	Municipal Emergency Manageme nt, Fire, PD with support from County, NYSOEM	Medium	Medium	Municipal Budget, State and County grant opportuniti es	Long Term DOF	Low	ES	New

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.

#### Notes

() indicates 2007 Broome County HMP mitigation initiative number.

\*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.

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

JC Johnson City

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 Unites 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.	3	Н	L	Y	N	Y	Н
2.	5	Н	L	Y	N	Y	Н
3.	4	Н	L	Y	N	Y	Н
4.	11	Н	L	Y	N	Y	Н
6a.)	4	M	Н	Y	Υ	N	Н
5 (6a.) 6 (7.) 7 (8.)	4	М	М	Y	N	Y	Н
7 (8.)	4	M	M	Y	N	Υ	Н
8	4	Н	Н	Y	Υ	N	Н
8a	4	Н	Н	Y	Υ	N	Н
9	6	Н	Н	Y	Υ	N	Н
10	4	L	L	Y	N	Y	М
11	4	M	L	Y	N	Y	Н
12	10	M	L	Y	N	Y	Н
(9.)	2	М	Н	Υ	N	Y	М
14 (10.)	3	L	L	Y	N	Y	Н
15 (11.)	2	L	L	Y	N	Y	Н
16 (12.)	3	М	Н	N	Y	N	Н
13 (9.) 14 (10.) 15 (11.) 16 (12.) 17 (13.) 18 (13.1)	3	L	L	Y	N	Y	Н
18 (13.1)	3	М	М	Y	N	Υ	Н
19 (14.)	5	Н	Н	Y	Y	Υ	Н
20 (17.)	2	L	L	Y	Ν	Υ	Н
21 (18).	1	М	L/M	Y	Ν	Y	Н
22 (19.)	3	М	Н	N	N	Y	Н
23 (20)	4	Н	Н	Y	N	Y	Н
24 (21)	3	М	L	Y	N	Y	Н
25 (22)	3	L	L	Υ	N	Υ	Н
26 (23)	3	Н	M	Υ	Υ	N	Н

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)
27 (24)	3	М	М	Υ	N	Υ	Н
28	3	М	М	Y	Υ	Y	Н
29	3	М	М	Y	Υ	Y	Н
30	3	М	М	Y	Υ	Y	Н
Flood2	9	Н	М	Y	N	Y	Н
Flood-3	8	М	М	Y	Υ	Y	М
Flood-4	5	М	L	Y	N	Y	Н
Flood-5	ALL	Н	Н	Y	Υ	Y	Н
Flood-6	3	L	L	Y	N	Y	Н
Flood-7	5	М	М	Υ	N	Υ	М
Flood-8	6	М	М	Υ	Υ	Υ	М
Flood-9	6	М	М	Υ	Υ	N	М
Flood-10	5	М	L	Y	N	Y	М
Severe Storm-1	3	М	М	Y	N	Υ	L
Earthquake- 1	3	М	М	Y	N	Υ	L
Earthquake- 2	9	Н	М	Υ	N	Υ	Н

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

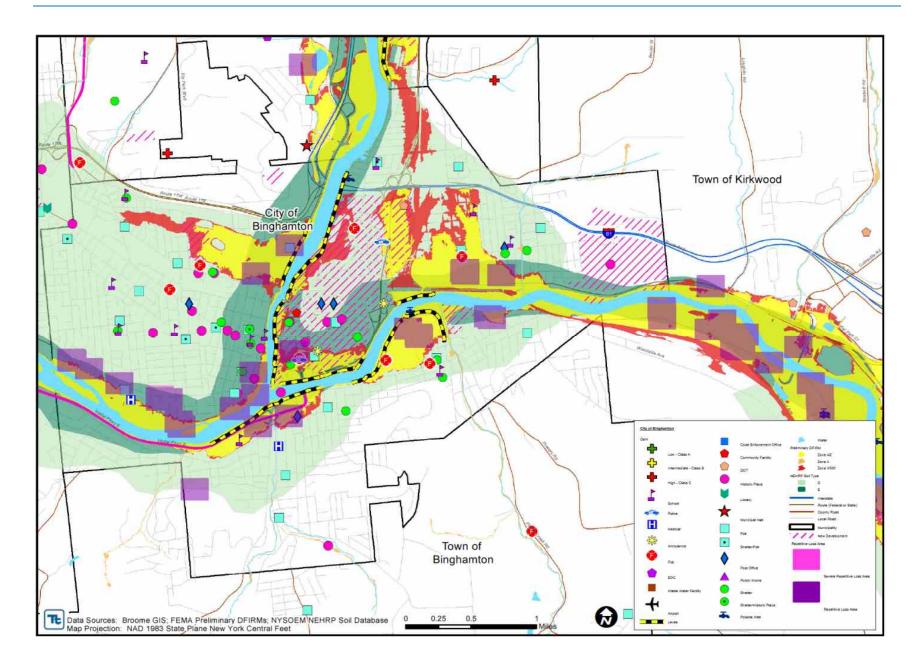
Prioritization of initiatives was based on parameters other than stated above: Not applicable.

### H.) FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None identified at this time.

### I.) HAZARD AREA EXTENT AND LOCATION

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



# 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)

	Has	
Planning Mechanisms	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.	Х	Х
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.	Х	Х
Human Resource Manual Employee job descriptions may contain Hazard Mitigation Actions.		Х
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.	х	Х
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 city will incorporate Hazard Mitigation Actions in the development and extent of the regulations.	Х	Х
Grant Applications Data and maps will be used as supporting documentation in grant applications	X	Х
Municipal Ordinances When updating municipal ordinances Hazard Mitigation will be a priority.	Х	Х
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		Х
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.		Х
Day to Day Operations Incorporate Hazard Mitigation Actions in daily operations and all projects will be a goal of the municipality.	Х	Х
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 City's Hazard Mitigation Actions can be implemented as a joint project with the school district.		Х
<b>Municipal Budget-</b> Adopted annually Municipality will look at Mitigation Actions when allocating funding.	Х	Х
<b>Economic Development-</b> The local economic development group will utilize the identification of hazard areas when assisting new business in finding a location.	Х	Х

### **K.) ADDITIONAL COMMENTS**

No additional comments at this time.

# NFIP ADMINISTRATOR INPUT SHEET

### 1. Planning and Regulatory

City of Binghamton joined the NFIP on August 1, 1977 and is currently an <u>active</u> member of the NFIP. Flood Insurance Rate Maps <u>have been</u> in effect for the community since June 1, 1977. City of Binghamton is <u>proactive</u> in floodplain management with ordinances <u>meeting</u>. The current Flood Damage Prevention Ordinance meets the requirements of the NFIP program.

City of Binghamton <u>has not</u> completed Community Assistance Visits (CAV). As of December 2012 there is <u>need</u> for a CAV. City of Binghamton <u>has no</u> outstanding compliance issues.

### 2. Administrative and Technical Staff

City of Binghamton has identified personnel to manage and uphold the City of Binghamton's compliance with the NFIP. Dedicated staff include: the Planning Commission is the official Floodplain Administrator. In addition, City of Binghamton has supplementary staff for which NFIP is an auxiliary duty; personnel include: City Engineer, Supervisor of Building and Code, staff from Planning Department. Staff members (both dedicated and supplementary) complete numerous tasks in order for City of Binghamton to be in compliance of NFIP standards. Tasks include permit reviews, building inspections, administration of floodplain development permits, project review for compliance with Chapter 240, FLOOD DAMAGE PREVENTION.(

### 3. Financial

As of January 2013there are 469 of policies enforced within *City of Binghamton*. Of the 469 insurance policies, 246 are within the Special Flood Hazard Area (SFHA), and 223are located outside the SFHA. Repetitive loss insurance claims have been reported in several areas within *City of Binghamton*. As of January 2013 there have been 38 of repetitive loss properties and 2 of severe repetitive loss properties within *City of Binghamton*.

### 4. Educational

City of Binghamton conducts numerous educational and/or outreach activities related to the NFIP. Activities include flood safe building practices as part of the Public Information program in the Code Department.

### 5. Actions to Strengthen the Program

*City of Binghamton* has taken numerous steps to strengthen the NFIP program and its administration. Actions include <u>developing an application for the Community Rating System program and participation</u> in the Broome County Flood Task Force.