

MUNICIPAL ANNEX | Village of Windsor





916



Total Land (square miles)

1.2



Total Number of Buildings

435

Percent of Buildings in Regulatory Floodplain

3.4%



Number of National Flood Insurance Program (NFIP) Policies

15

Percent of NFIP Policies in Regulatory Floodplain

20%



Number of Repetitive Loss (RL) Properties

2

Number of Severe Repetitive Loss (SRL) Properties

0



Proposed Project Types Structure and Infrastructure Projects, Education and Awareness Programs, and Local Plans and Regulations



Flood Severe Storm



9.25 Village of Windsor

This section presents the jurisdictional annex for the Village of Windsor. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster in order to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Village participated in the planning process; an assessment of the Village of Windsor's risk and vulnerability; the different capabilities utilized in the Village; and an action plan that will be implemented to achieve a more resilient community.

9.25.1 Hazard Mitigation Planning Team

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

Primary Point of Contact	Alternate Point of Contact
Name: Gary Post Title: Code Enforcement Officer Phone Number: 607-655-2024 Address: 107 Main Street Windsor, NY 13865 Email: gdp904@yahoo.com	Name: Ronald Harting Title: Mayor Phone Number: 607-655-2024 Address: 107 Main Street Windsor, NY 13865 Email: villageofwindsor@echoes.net
Floodplain Administrator	
Name: Gary Post Title: Code Enforcement Officer Phone Number: 607-655-2024	

9.25.2 Municipal Profile

Email: gdp904@yahoo.com

Address: 107 Main Street Windsor, NY 13865

The Village of Windsor is located within the Town of Windsor in Broome County, NY. The Village is situated in the middle of the town and is the principal settlement. For more information on the Town of Windsor, refer to Section 9.24. The Village of Windsor has a total area of 1.2 square miles. The 2016 estimated population was 1,092, a 19.2% increase from the 2010 Census (916).

Data from the 2016 U.S. Census American Community Survey estimates that 5.5% of the town population is five years of age or younger, and 12.6% is 65 years of age or older.

History and Cultural Resources

The Village of Windsor was incorporated in 1897. In 1778 the site of the village was home to a large Iroquois village of Onaquaga that was destroyed by the Continental Army.

The Windsor Village Historic District was listed on the National Register of Historic Places in 1980. The Jedediah Hotchkiss House was listed in 1982.

Growth/Development Trends

Table 9.25-1 summarizes major residential/commercial development that as of 9/28/2018 and any known or anticipated major residential/commercial development and major infrastructure development that is likely to be occur within the municipality in the next five years. Refer to the map in 9.25.9 of this annex which illustrates the hazard areas along with the location of potential new development.





Table 9.25-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development		
Recent Development from 2013 to present							
Dollar General	Commercial	1	599 Kent Street	N/A	Retail Store		
	Known or Anticipated Development in the Next Five (5) Years						
None anticipated							

^{*} Only location-specific hazard zones or vulnerabilities identified.

9.25.3 Hazard Event History Specific to the Village of Windsor

Broome County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Village of Windsor's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Broome County. Table 9.25-2 provides details regarding municipal-specific loss and damages the Village experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.25-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Broome County Designated?	Summary of Event	Municipal Summary of Damages and Losses
October 27- November 8, 2012	Hurricane Sandy (EM- 3351)	Yes	The remnants of Hurricane Sandy moved over the area bringing high winds and precipitation	Although the County was impacted, the Village of Windsor did not report damages.
June 26- July 10, 2013	Severe Storms and Flooding (DR-4219)	Yes	The County was impacted by a series of severe storms and flash flood events.	Although the County was impacted, the Village of Windsor did not report damages.
June 14, 2015	Flash Flood	No	A warm front stalled across New York and northern Pennsylvania, providing the focus for repeating clusters of thunderstorms in the Finger Lakes and Southern Tier NY regions. A tropical-like airmass was in place allowing for a stripe of 2-4 inches of very heavy rain to fall in a narrow band extending from near Watkins Glen to areas north of Binghamton. Severe flash flooding was encountered with numerous roads and culverts destroyed by raging water.	Although the County was impacted, the Village of Windsor did not report damages.
March 14- 15, 2015	Severe Winter Storm and Snowstorm (DR-4322)	Yes	A record snowfall of between 25 and 35 inches of snow fell. Snowfall rates reached up to 5 inches per hour especially during the onset of the storm. The Greater Binghamton Airport broke an all-time daily snowfall record with 32.4 inches and a 2-day snowfall record of 34.9 inches.	The Village applied for assistance for overtime hours and machinery repairs.
July 23- 24, 2017	Flash Flood	No	Heavy rain producing thunderstorms developed during the late afternoon and	Although the County was impacted, the Village of



Dates of Event	Event Type (Disaster Declaration if applicable)	Broome County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			evening hours as an upper level jet stream punched into the area. Widespread thunderstorms produced swaths of 3 to 4 inches of rain in just a few hours' time during the late evening and overnight hours. Rapid rises of area streams and creeks resulted in severe flash flooding.	Windsor did not report damages.
August 2018	Severe Storms and Flooding (DR-4397)	Yes	A slow-moving storm tracked north from New Jersey to northern New York. This system triggered several rounds of heavy rain producing thunderstorms which caused severe flash flooding and major damages in several locations.	Although the County was impacted, the Village of Windsor did not report damages.

Notes:

EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)

N/A Not applicable

9.25.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Village of Windsor. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk Ranking

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Broome County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Village of Baldwinsville. The Village of Baldwinsville has reviewed the County hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

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

• The Village approved their municipal risk ranking.



Table 9.25-3. Village of Windsor Municipal Hazard Ranking Input

HAZARD	Drought	Earthquake	Extreme Temperature	Invasive Species	Flood	Severe Storm	Severe Winter Storm	Wildfire
RELATIVE RISK FACTOR	Medium	High	Medium	Low	Low	High	Medium	Medium

Notes: The scale is based on the following hazard rankings as established in Section 5.3.

High = Total hazard priority risk ranking score of 5 and above

Medium = Total hazard priority risk ranking of 3.9 - 4.9

Low = Total hazard risk ranking below 3.8

*The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality

Critical Facilities Flood Risk

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood even, or worst damage scenario. For those that do not meet this criteria, the jurisdiction must identify an action to achieve this level of protection.(NYSDHSES 2017)

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.25-4. Potential Flood Losses to Critical Facilities

		Exp	osure	Potential 1 1% Floo		
Name	Туре	1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Addressed by Proposed Action
WELL #1, BEHIND GARAGE	Potable Well	X	X	-	-	V. Windsor-1
WELL #2, ACROSS CREEK	Potable Well	X	X	-	-	V.Windsor-2
Child Care Center	Daycare		X	-	-	-
Family Child Care	Daycare		X	-	-	-
Windsor Central Middle School	Shelter	X	X	-	1	V. Windsor-3
Windsor United Methodist Church	Shelter	X	X	-	-	V. Windsor-4

Source: Hazus 4.2

No estimated damages calculated by HAZUS-MH

The Village of Windsor reviewed the list of critical facilities and determined that day cares were not critical for the purpose of essential services. As a result, the Village of Windsor did not develop mitigation actions to protect those facilities to the 500-year flood level.

Identified Issues

The municipality has identified the following vulnerabilities within their community:





- The Village Community House
- There are two repetitive loss properties within the Village.
- Well #1, behind garage is located within the floodplain which could lead to vulnerabilities or damage during flood events
- Well #2, across creek is located within the floodplain which could lead to vulnerabilities or damage during flood events

9.25.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Windsor.

Table 9.25-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Comprehensive Plan	Yes	Local	Planning and Village	Comprehensive Plan
Capital Improvements Plan	Yes	Local or County	-	Capital Improvements Plan
Floodplain Management / Basin Plan	Yes, 2/2/82	Local or Watershed	-	Floodplain Management / Basin Plan
Stormwater Management Plan	Yes, 2/2/82	Local	-	Stormwater Management Plan
Open Space Plan	No	Local or County	-	-
Stream Corridor Management Plan	No	Local or Watershed	-	-
Watershed Management or Protection Plan	No	Local or Watershed	-	-
Economic Development Plan	Yes	Local	Village Board	Economic Development Vision
Comprehensive Emergency Management Plan	Yes	Local or County; Broome County	Broome County	Comprehensive Emergency Management Plan
Emergency Operation Plan	No	-	-	-
Evacuation Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	No	-	-	-
Regulatory Capability				
Building Code	Yes, 10/2015	State & Local	Building	Chapter 86-120 requires 2 feet freeboard
Zoning Ordinance	Yes	Local	Code	Chapter 200 of the municipal code
Subdivision Ordinance	Yes	State	-	Not available
NFIP Flood Damage Prevention Ordinance	Yes, 2/2/82	Federal, State, Local		Chapter 21 of the municipal code
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	State, Local	-	State mandated BFE+2 for all construction, both residential and non-residential
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes	Local	Code Department	-
Stormwater Management Ordinance	Yes, 2/2/82	Local	Code Department	Chapter 21 of municipal code
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Windsor.

Table 9.25-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability	_	
Planning Board	Yes	Village Planning Board meets as needed
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-





Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	Yes	-
Mutual aid agreements	Yes	Town of Windsor and Broome County
Flood Committee	No	-
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Code Department
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Code Department
Planners or engineers with an understanding of natural hazards	Yes	Code Department
NFIP Floodplain Administrator (FPA)	Yes	Code Department
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Code Department
Scientist familiar with natural hazards	No	-
Warning systems/services	No	Looking into it
Emergency Manager	Yes	Mayor
Grant writer(s)	Yes	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Code Office

Fiscal Capability

The table below summarizes financial resources available to the Village of Windsor.

Table 9.25-7. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes, Village Board
User fees for water, sewer, gas or electric service	Yes, Water Department
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	No
Other	No





Community Classifications

The table below summarizes classifications for community programs available to the Village of Windsor.

Table 9.25-8. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	ISO 6 (1-2 family), ISO 5 (commercial)	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	Yes	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-
Public-private partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:

N/A Not applicable
NP Not participating
- Unavailable

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

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule (https://www.isomitigation.com/bcegs/)
- The ISO Mitigation online ISO's Public Protection website at https://www.isomitigation.com/ppc/
- New York State Climate Smart Communities (http://www.dec.ny.gov/energy/56876.html)
- The National Weather Service Storm Ready website at https://www.weather.gov/stormready/communities
- The National Firewise Communities website at http://firewise.org/





Self-Assessment of Capability

The table below provides an approximate measure of the Village of Windsor's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.25-9. Self-Assessment Capability for the Municipality

	Degree of	Hazard Mitigation Cap	ability
Area	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and regulatory capability		X	
Administrative and technical capability	X – limited staff and funding		
Fiscal capability	X – limited staff and funding		
Community political capability	X – limited staff and funding		
Community resiliency capability		X	
Capability to integrate mitigation into municipal processes and activities	X – limited staff and funding		

National Flood Insurance Program

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

NFIP Floodplain Administrator (FPA)

Gary Post, Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Windsor. The Village is finalizing an NFIP flood buyout of one flood prone residence.

Table 9.25-10. NFIP Summary

		# Claims	Total Loss	# RL	# SRL	# Policies in the 1% Flood
Municipality	# Policies	(Losses)	Payments	Properties	Properties	Boundary
Windsor (V)	15	10	\$112,819	2.	0	3

Source: FEMA 2018

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of May 31, 2018. The

total number of repetitive loss properties does not include severe repetitive loss properties

RL Repetitive Loss; SRL Severe Repetitive Loss

Resources

The Village of Windsor is assisting in the update of flood plain (FIRM) maps at the Jurisdictional Level. Specific assistance is being provided by attending map update meetings held by FEMA, NYSDEC, and USGS; and by identifying flood-prone areas outside of currently designated flood areas.

Compliance History

The Village's last compliance audit (community assistance visit [CAV]) took place on August 21, 2017. The Village of Windsor maintains 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.

Regulatory

Floodplain Ordinance: The Floodplain Ordinance (Chapter 98 of the municipal code) was adopted to minimize the potential loss of life and property during periods of flooding by regulating the alteration and/or the development of those areas within the Floodplain Management District delineated on the Village of Windsor Zoning Map, as defined on the Flood Insurance Rate Map and in the Flood Insurance Study for the Village of Windsor. In promoting the general purpose and intent of these regulations, the specific intent of this chapter is to:

- Control floodplain uses, such as clean fill (including rubble), storage of materials, structures, mining, dredging, filling, grading, paving, excavation or drilling and any other works which, acting alone or in combination with other existing or future uses, will cause damaging flood heights and velocities by obstruction flows and reducing floodwater storage.
- Protect human life and health.
- Minimize public and private property damages.
- Minimize surface and ground water pollution which may affect human, animal or plant life.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.

Planning

Existing Integration

Comprehensive Plan: The Village of Windsor has a Comprehensive Plan. The Plan does not consider areas of natural hazard risk or refer to the Countywide Hazard Mitigation Plan.

Post-Earthquake Disaster Planning: The Village is developing a post-earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety.

The Village of Windsor is not an MS4 Regulated Community. The Village of Windsor does not have a Re-Development Plan, Growth Plan, Economic Development Plan, Open Space Plan, Watershed/Stream Corridor Management Plan, Continuity of Operations/Continuity of Government (COOP/COG) plan(s), Post-Disaster Recovery Plan, Post-Disaster Redevelopment Plan, Strategic Recovery Plan, Resilience Plan/strategy, or Climate Adaptation Plan/strategy. The Village has a Local Waterfront Revitalization Plan. The Village is developing a Comprehensive Emergency Management Plan.

Opportunities for Future Integration

Updates to planning documents and future plans could include discussion of hazards and connections to the Countywide Hazard Mitigation Plan.





Regulatory and Enforcement (Ordinances)

Existing Integration

Municipal zoning, subdivision regulations, and the site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazard risk.

Zoning Ordinance: The Zoning Ordinance for the Town of Windsor (Chapter 200 of the municipal code) established zoning districts, the zoning map, nonconforming uses, special permits, the Board of Appeals, and the Planning Board.

Operational and Administration

Existing Integration

The Village of Windsor does not have a municipal planner or contract planning firm. The Village Board also manages natural hazard risk. NFIP Floodplain Administration and Stormwater Management functions are performed by the Code Enforcement Officer. The Village does not have staff or contract with firms that have experience with developing Benefit-Cost Analysis. The Building Code Officer can perform Substantial Damage Estimates. The Mayor and Village grant writer have experience in preparing grant applications for mitigation projects.

No Village staff have job descriptions that include mitigation, but staff receive training/continuing professional education which supports natural hazard risk reduction and participate in associations, organizations, groups, and other committees that support natural hazard risk reduction and building hazard management capabilities.

Planning Board: The Planning Board for the Village of Windsor is comprised of five members, each serving a term of five years. The Board is established by the Zoning Ordinance (Chapter 200 of the municipal code). The Board insures that the natural hazard risk regulations are in compliance with DEC and the U.S. Army Corps of Engineers.

Zoning Board of Appeals: The Village of Windsor Zoning Board of Appeals is a five-member board whose members serve five-year terms. The Board is responsible for the granting of variance and issuance of special use permits. The Board is established by the Zoning Ordinance (Chapter 200 of the municipal code). The Board insures that the natural hazard risk regulations are in compliance with DEC and the U.S. Army Corps of Engineers.

Well Water Pump House Mitigation: The Village maintains a backup generator at the well water pump house. The pump house and the controls were elevated above the flood of record.

Culvert Feasibility Study: The Village is performing a feasibility study to identify the best alternative to upgrade the Hotchkiss Creek box culvert and other areas impacted by flood events.

Water Reservoir Feasibility Study: The Village is performing a feasibility study to identify the best alternative for the development of second reservoir tank to function as a redundant water supply to back up existing 225,000-gallon tank.

Non-Structural Flood Mitigation: The Village is considering 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/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. 37 River Terrace and other repetitive loss properties are being specifically considered.





Retrofitting/Removal of Structures from Hazard Prone Areas: Where appropriate, the Village of Windsor supports the retrofitting, purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. The Village works to identify facilities that are viable candidates for each strategy based on cost-effectiveness. Implementation of these actions are based on available funding.

Archive Elevation Certificates: The Village will continue to obtain and archive elevation certificates.

Mutual Aid Agreements: The Village is creating, enhancing, and maintaining Mutual Aid agreements with neighboring communities for continuity of operations.

Post-Disaster Procedures: The Village is identifying and developing 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.

Damage Assessment Training: The Village of Windsor works 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).

Structure/Facility Inventories/Datasets: The Village of Endicott participates in regional, 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 including flooding, earthquake, wind, and land failure.
- Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use.

Critical Facilities Assessment: The Village of Windsor continues to train personnel and conduct rapid screening of critical facilities for earthquake vulnerability.

Storm Ready Certification: The Village is enhancing 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.

Opportunities for Future Integration

The Village could hire staff or contract with firms that have experience with developing Benefit-Cost Analysis and establish hazard management programs.





Funding

Existing Integration

The municipal/operating budget for the Village of Windsor does not include a line item for mitigation projects/activities but the Capital Improvements budget includes funding for mitigation-related projects. The Village has been awarded grant funding for well head protection and stand by generators for Community House. The Village has not identified other mechanisms to fiscally support hazard mitigation projects.

Opportunities for Future Integration

The Village could work to identify additional funding opportunities for mitigation projects.

Education and Outreach

Existing Integration

The Village of Windsor operates a municipal website (http://www.villageofwindsor.org/) which includes community news and information. The Village is working to implement a reverse call system to warn the community during hazard events. The Village conducts and facilitates community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:

- Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages.
- Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.
- Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.
- Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.

Opportunities for Future Integration

The Village could enhance the discussion of natural hazards on the municipal website.

Sheltering, Evacuation, and Temporary Housing

Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Refer to Section 4.6.5 of Volume 1 of this plan for a description of resources identified by the county to support municipalities with the identification of evacuation, sheltering, and temporary and permanent housing.

Temporary and Permanent Housing

The Village of Windsor has not identified potential sites for the placement of temporary housing for residents displaced by a disaster.

The Village has identified the following sites as suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired.





• Worden Plot: 235 Main Street. The Warden Plot has a capacity of 12. All new construction would be required to meet all NY Building and Fire Codes.

Evacuation and Sheltering Needs

The Village of Windsor has not designated emergency shelters, evacuation routes, or evacuation procedures.

9.25.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.25-11. Status of Previous Mitigation Actions

# #			Brief		Status (In Progress, Ongoing,	Evaluation of	1.	t Steps Project to be included in 2018 HMP or Discontinue If including action in the 2018 HMP,
Project #	Project	Hazard(s) Addressed	Summary of the Original Problem	Responsible Party	No Progress, Complete)	Success (if project statu is <u>complete</u>)		revise/reword to be more specific (as appropriate). If discontinue, explain why.
(1)	Complete reinstallation of rip rap on Occanum Creek to enhance stream flow	Flood		Village DPW	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	1. 2. 3.	Discontinue
(2)	Maintain backup generator at well water pump house.	All		Village DPW	Ongoing Capability	Cost Level of Protection Damages Avoided;	1. 2. 3.	Discontinue Always maintaining and keeping it operating for any emergency. That occurs so that we can provide potable water and fire protection. Ongoing capability
	Assist in the update of flood plain (FIRM) maps – Jurisdictional Level.					Evidence of Success Cost Level of Protection	1. 2.	Discontinue Always ongoing
1 (3.)	Specific assistance can be provided in the area of attending map update meetings held by FEMA, NYDEC and USGS; and identification of floodprone areas outside of currently designated areas	Flood		Village of Windsor Code Office	Ongoing Capability	Damages Avoided; Evidence of Success	3.	Ongoing capability
2 * (4.)	Continue participation in the National Flood Insurance Program (NFIP).	Flood		Village of Windsor Code Office	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	1. 2. 3.	Discontinue Ongoing capability
3 (5.)	Finalize NFIP flood buyout of one flood prone residence and consider non-structural flood hazard mitigation	Flood		Village of Windsor Code Office	Ongoing Capability	Cost Level of Protection Damages Avoided;	1. 2. 3.	Discontinue Ongoing capability



Project#	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is <u>complete</u>)	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss properties, such as acquisition/relocation, or elevation depending on feasibility. The parameters of feasibility would be: funding, benefits versus costs and willing participation of property owners. Advocate for approval of pending flood buyouts.					Evidence of Success	
(6)	6. Complete raising of well water pump house and controls to mitigate	Flood		Village DPW	Ongoing Capability	Cost Level of Protection Damages	Discontinue Controls are moved above flood of record, pumphouse remains unchanged
	against flooding.				Gapasmey	Avoided; Evidence of Success	3. Ongoing capability
4 (7)	Raise well vault structures to maintain 2- foot freeboard above 500- year flood level	Flood		Village of Windsor	In Progress	Cost Level of Protection Damages Avoided; Evidence of Success	Include in 2018 HMP Awaiting grant money to complete project, engineering is complete, planning is complete.
(8)	Complete design and installation of upgraded river crossing for public water supply	Wildfire Drought		Village DPW, Fire Dept.	Complete	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue "Completion and design of river crossing for public water supply" Complete
5	Raise electrical controls and equipment above the anticipated 500-year flood level by installing a	Flood		Village of Windsor Water Dept	Complete	Cost Level of Protection Damages Avoided;	Discontinue Elevated electrical controls above 100-year flood levels Second story was never done.



Project#	Project second story on portions	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluatio Succes (if project s is comple Evidence	s status	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	of the pump house. Located at 30 Main ST. Windsor					of Success		
6 (9)	Perform a feasibility study to identify the best alternative to upgrade the Hotchkiss Creek box culvert and other areas impacted by flood events.	Flood		Village of Windsor Street Dept.	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		Discontinue Currently involved with Bridge NY and Broome County Ongoing capability
7 (11.)	Perform feasibility study to identify the best alternative for the development of second reservoir tank to function as a redundant water supply to back up existing 225,000-gallon tank.	Flood		Village of Windsor Water Dept.	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		 Discontinue Still searching for funding via our grant writer. Ongoing capability
Flood-1	Purchase, or relocate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Phase 1: Identify appropriate candidates based on costeffectiveness versus retrofitting. Evaluate options to reduce flood vulnerability. Phase 2: Where determined to be a viable option, work with property owners toward implementation of that action based on available	Flood		Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from BCPD, NYSOEM, FEMA	Ongoing Capability	Damages Avoided; Evidence of Success		Discontinue Ongoing capability



Project #	Project funding from FEMA and	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is <u>complete</u>)	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Flood-2*	local match availability. 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.	Flood		Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, FEMA	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue Ongoing capabilities – remove from list. 3. Ongoing capability
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: Provide and maintain links to the HMP website, and regularly post notices on the	Flood		Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue Ongoing capabilities – remove from list. 3. Ongoing capability



Project#	Project	Hazard(s)	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why
	Project County/municipal homepage(s) referencing the HMP webpages. Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.	Addressed	Problem	Party	Complete)	is complete)	3. If discontinue, explain why.
	Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.						
Flood-4*	Obtain and archive elevation certificates	Flood		NFIP Floodplain Administrator	Ongoing Capability	Cost Level of Protection	Discontinue Ongoing capabilities – remove from list



Project#	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is <u>complete</u>)	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Damages Avoided; Evidence of Success	3. Ongoing capability
Flood-5	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	Flood		Municipality with support from Planning Partners, BCPD, NYSOEM, FEMA	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	 Discontinue Ongoing capability
Flood-6*	Complete ongoing updates of Comprehensive Emergency Management Plans	Flood		Municipality with support from NYSOEM	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue Ongoing capabilities – remove from list Ongoing capability
Flood-7*	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	All Hazards		Municipality with support from County, NYSOEM, FEMA and surrounding communities	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue Ongoing – remove from list Ongoing capability
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	Flood		Municipality with support from County, NYSOEM and FEMA	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	 Discontinue Ongoing capability
Flood-9*	Work with regional agencies (i.e. County and SOEM) to help develop	Flood		Municipality with support from County,	Ongoing Capability	Cost Level of Protection	Discontinue Ongoing – remove from list



Project#	Project damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party NYSOEM and FEMA	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation Success (if project statis complete Damages Avoided; Evidence of Success	atus	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. 3. Ongoing capability
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.	Flood		Hazard Mitigation Plan Coordinator	Ongoing Capability	Damages Avoided; Evidence of Success		 Discontinue Ongoing – remove from list 3. Ongoing capability



Project#	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation o Success (if project stat is <u>complete</u>)	of tus	Iext Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	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.							
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	Severe Storm		Municipality with support from County, NYSOEM and FEMA	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	3	



Project#	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)	Next Steps 1. Project to be included in 2018 HMP or Discontinue 2. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	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.						
Earthquake- 1	Obtain training and conduct rapid screening assessment of critical facilities for earthquake vulnerability.	Earthquake		Municipal Emergency Management, Fire, PD with support from County, NYSOEM	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	 Discontinue Ongoing capability
Earthquake- 2*	Develop a post- earthquake management plan to address building safety inspections, gas leaks, and other elements to protect public safety.	Earthquake		Municipal Emergency Management, Fire, PD with support from County, NYSOEM	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success	Discontinue Ongoing capabilities – remove from list Ongoing capability



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Windsor has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- The Village of Windsor has improved river crossings and enlarged culverts for better drainage.
- **Building Resiliency (2016):** The Broome County Department of Planning prepared Building Resiliency to document resiliency projects municipalities have completed. The Village of Windsor identified the following completed projects (as of 2016):
 - The Broome County Department of Public Works repaired county-owned bridges and culverts in the Village of Windsor.
 - The Broome County Soil and Water Conservation District performed streambank stabilization and stream/field debris removal in the Village of Windsor.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Windsor participated in a mitigation action workshop on October 17, 2018 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

Table 9.25-12 summarizes the comprehensive-range of specific mitigation initiatives the Village of Windsor would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.25-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.25-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
V. Windsor- 1 (former 4)	Protect the Well #1, behind garage to the 500- year flood level	1, 3, 5	Flood	The Well is located in the 100-year floodplain	Awaiting grant money to complete project, engineering is complete, planning is complete.	Yes •	None		Facility manager, Village		Well vault structures will be protected to the 500-year flood level.	Municipal budget	High	SIP	PP
V. Windsor- 2 (former 4)	Protect the Well #2, behind garage to the 500- year flood level	1, 3,	Flood	The Well is located in the 100-year floodplain	Awaiting grant money to complete project, engineering is complete, planning is complete.	Yes •	None		Facility manager, Village		Well vault structures will be protected to the 500-year flood level.	Municipal budget	High	SIP	PP
V. Windsor- 3	Protect the Windsor Central Middle School behind garage to the 500- year flood level	1,3,	Flood	The school is a shelter and is located in the 100-year floodplain. The Village does not have jurisdiction over the facility and cannot mitigate themselves.	The Village will contact the facilities manager and discuss options for protecting the facility to the 500- year flood level	Yes 🌢	None	Within 6 months	Village Floodplain Administrator working with facility operators / owners	<\$100	Provide outreach to the property owner and informing them of potential flood damage and possible solutions	Municipal Budget	Medium	EAP, SIP	PI, PP
V. Windsor- 4	Protect the Windsor United Methodist Church behind garage to the 500- year flood level	1, 3, 5	Flood	The Church is a shelter and is located in the 100-year floodplain. The Village does not have jurisdiction over the	The Village will contact the facilities manager and discuss options for protecting the facility to the 500- year flood level	Yes •	None	Within 6 months	Village Floodplain Administrator working with facility operators / owners	<\$100	Provide outreach to the property owner and informing them of potential flood damage and possible solutions	Municipal Budget	Medium	EAP, SIP	PI, PP



Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution?	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				facility and cannot mitigate themselves.											
V. Windsor- 5	Repetitive Loss Properties	1	Flood, Severe Storm	Two properties are identified as repetitive loss properties.	Inform homeowners of the different options to mitigate their home (acquisition or elevation). If homeowner decides to mitigate property, Village will submit a grant application.	No	No	Within 5 years	Village Floodplain Administrator working with homeowner	\$200,000 per property	Reduce or eliminate flood damages; protect homeowners	FEMA HMGP or FMA with homeowner local match	Medium	SIP	PP
V. Windsor- 6	Update the NFIP Flood Damage Prevention Ordinance	1	Flood	The current flood damage prevention ordinance (1987) does not include NYS freeboard requirements.	Flood Damage Prevention Ordinance will be updated to	No	None	Within 6 months	Floodplain Administrator	<\$100	Higher building standards and lower flood exposure	Municipal budget	High	LPR	PR

Notes:

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

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:

CAV Community Assistance Visit CRS Community Rating System FMA Flood Mitigation Assistance Grant Program HMGP Hazard Mitigation Grant Program The time required for completion of the project upon implementation



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



DPW Department of Public Works PDM Pre-Disaster Mitigation Grant Program <u>Cost</u>

FEMA Federal Emergency Management Agency The estimated cost for implementation.

FPA Floodplain Administrator

Benefits:

HMA Hazard Mitigation Assistance A description of the estimated benefits, either quantitative

N/A Not applicable and/or qualitative.

NFIP National Flood Insurance Program

Office of Emergency Management

Mitigation Category: • Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

- Structure and Infrastructure Project (SIP) These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area.

 This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

OEM

- Preventative Measures (PR) Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Critical Facility:

• Yes ♦ - Critical Facility located in 1% floodplain



Table 9.25-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost- Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
V. Windsor 1 (former 4)	Protect the Well #1, behind garage to the 500-year flood level	0	1	1	1	1	1	1	1	1	1	0	0	1	1	11	High
V. Windsor 2 (former 4)	Protect the Well #2, behind garage to the 500-year flood level	0	1	1	1	1	1	1	1	1	1	0	0	1	1	11	High
V. Windsor 3	Protect the Windsor Central Middle School behind garage to the 500-year flood level	0	1	1	0	0	0	1	1	0	0	0	1	1	1	7	Medium
V. Windsor 4	Protect the Windsor United Methodist Church behind garage to the 500-year flood level	0	1	1	0	0	0	1	1	0	0	0	1	1	1	7	Medium
V. Windsor 5	Repetitive Loss Properties	1	1	1	1	0	1	0	1	0	1	0	0	1	0	8	Medium
V. Windsor 6	Update the NFIP Flood Damage Prevention Ordinance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

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



9.25.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.25.8 Staff and Local Stakeholder Involvement in Annex Development

The Village of Windsor followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Village Code Enforcement, and the Mayor. The Code Enforcement Officer represented the community on the Broome County Hazard Mitigation Plan Planning Partnership, Steering Committee, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

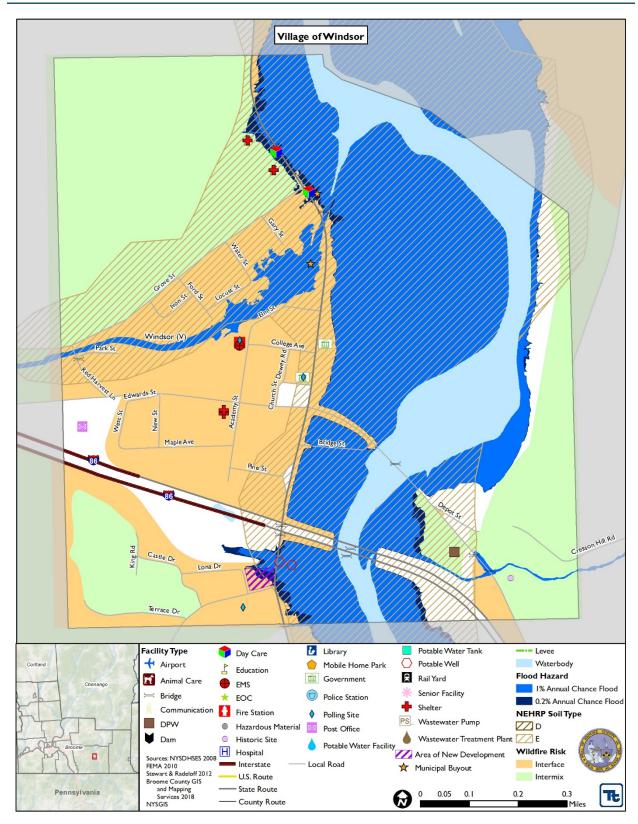
Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

9.25.9 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Windsor that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Windsor has significant exposure. A map of the Village of Windsor hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain as well as identified critical facilities within the municipality.



Figure 9.25-1. Village of Windsor Hazard Area Extent and Location Map





Village of Windsor Action Worksheet									
Project Name:	Protect the Well #1, behind garage to the 500-year flood level								
Project Number:	V. Windsor-1								
Risk / Vulnerability									
Hazard(s) of Concern:	Flood, Severe Storm								
Description of the Problem:	Well # 1 is in the 100-year floodplain. The facility needs to be protected to the 500-year flood level. The Village of Windsor does not have jurisdiction over this facility.								
Action or Project Intended									
Description of the Solution:	Notify the facility owner, informing them the facility is located in the 100-year floodplain and may be susceptible to flood damage. Provide a list of mitigation activities the facility owner can do to protect the facility to the 500-year flood event or worst-case scenario.								
Is this project related to a	Critical Facility?	Yes	\boxtimes	No					
Is this project related to a located within the 100-y		Yes	\boxtimes	No					
(If yes, this project must intend t	o protect the 500-year	flood even	t or th	e actual	worse case damage sc	enario, whichever is greater)			
Level of Protection:	500 Year			nated ses avo	Benefits pided):	Educate property owner of benefits of mitigating property			
Useful Life:	20 Years	1							
Estimated Cost:	<\$10,000		Miti	gation	Action Type:	Structure and Infrastructure Project			
Plan for Implementation						,			
Prioritization:	High		Desired Timeframe for Implementation:			6 months			
Estimated Time Required for Project Implementation:	Within 1 year					Municipal budget			
Responsible Organization:	Village Board, Floodplain Local Planning Mechanisms Administrator to be Head in				Used in	Hazard Mitigation			
Three Alternatives Conside	ered (including No	Action)							
	Action			Esti	mated Cost	Evaluation			
Alternatives:	No Action Elevate structu	ıre		\$	\$0 1 million	Problem continues. Facility cannot be elevated; elevation may impact the operation of the facility			
	Build new facility ou the floodplain			\$:	5 million	Too costly; not feasible			
Progress Report (for plan i									
Date of Status Report:									
Report of Progress:									
Update Evaluation of the Problem and/or Solution:									



Action Worksheet							
Project Name:	Protect the Vestal Fire Company 1 to the 500-year flood level						
Project Number:	T. Vestal-1						
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate					
Life Safety	0	Flood protection would allow for continued operation of emergency service during severe weather events.					
Property Protection	1	Flood protection would reduce damage sustained to structure during severe weather.					
Cost-Effectiveness	1	Flood protection would be cost effective than repeated repairs from flood damage.					
Technical	1						
Political	1						
Legal	1						
Fiscal	1						
Environmental	1						
Social	1						
Administrative	0						
Multi-Hazard	0						
Timeline	1						
Agency Champion	1						
Other Community Objectives	1						
Total	11						
Priority (High/Med/Low)	High						



Village of Windsor Action Worksheet									
Project Name:	Protect the Well #2, behind garage to the 500-year flood level								
Project Number:	V. Windsor-2								
Risk / Vulnerability									
Hazard(s) of Concern:	Flood, Severe Storm								
Description of the Problem:	Well #2 is in the 100-year floodplain. The facility needs to be protected to the 500-year flood level. The Village of Windsor does not have jurisdiction over this facility.								
Action or Project Intended									
Description of the Solution:	Notify the facility owner, informing them the facility is located in the 100-year floodplain and may be susceptible to flood damage. Provide a list of mitigation activities the facility owner can do to protect the facility to the 500-year flood event or worst-case scenario.								
Is this project related to a	Critical Facility?	Yes	\boxtimes	No					
Is this project related to a located within the 100-y		Yes	\boxtimes	No					
(If yes, this project must intend t	to protect the 500-year	flood even	t or th	e actual	worse case damage sc	enario, whichever is greater)			
Level of Protection:	500 Year				Benefits pided):	Educate property owner of benefits of mitigating property			
Useful Life:	20 Years Goals Met:					1			
Estimated Cost:	<\$10,000		Miti	gation	Action Type:	Structure and Infrastructure Project			
Plan for Implementation									
Prioritization:	High		Desi Impl		Timeframe for tation:	6 months			
Estimated Time Required for Project Implementation:	Project Potential Funding Sources:				Municipal budget				
Responsible Organization:	ponsible Village Board, Floodplain Local Planning Mechan				Used in	Hazard Mitigation			
Three Alternatives Conside	ered (including No	Action)							
	Action			Esti	mated Cost	Evaluation			
Alternatives:	No Action Elevate structu	ıre		\$	\$0 1 million	Problem continues. Facility cannot be elevated; elevation may impact the operation of the facility			
	Build new facility or the floodplain			\$:	5 million	Too costly; not feasible			
Progress Report (for plan i									
Date of Status Report:									
Report of Progress:									
Update Evaluation of the Problem and/or Solution:									



Action Worksheet							
Project Name:	Protect the Vestal Fire Company 1 to the 500-year flood level						
Project Number:	T. Vestal-1						
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate					
Life Safety	0	Flood protection would allow for continued operation of emergency service during severe weather events.					
Property Protection	1	Flood protection would reduce damage sustained to structure during severe weather.					
Cost-Effectiveness	1	Flood protection would be cost effective than repeated repairs from flood damage.					
Technical	1	·					
Political	1						
Legal	1						
Fiscal	1						
Environmental	1						
Social	1						
Administrative	0						
Multi-Hazard	0						
Timeline	1						
Agency Champion	1						
Other Community Objectives	1						
Total	11						
Priority (High/Med/Low)	High						