



## 9. TOWN OF MIDDLESEX

This jurisdictional annex to the Yates County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Middlesex with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Middlesex, describes who participated in the planning process, assesses Middlesex's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

### 9.1 HAZARD MITIGATION PLANNING TEAM

The Town of Middlesex identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments. The Town Supervisor represented the community on the Yates County HMP Planning Partnership and supported the local planning process 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.

Table 9-1 summarizes Town officials who participated in the development of the annex and in what capacity. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

**Table 9-1. Hazard Mitigation Planning Team**

Primary Point of Contact	Alternate Point of Contact
Name/Title: David C. Adams, Supervisor Address: 1216 Route 245, Main Street, PO Box 147, Middlesex, NY 14507 Phone Number: 315-694-2392 Email: <a href="mailto:supervisor@middlesexny.org">supervisor@middlesexny.org</a>	Name/Title: Dawn M. Kane, Code Enforcement Officer Address: 1216 Route 245, Main Street, PO Box 147, Middlesex, NY 14507 Phone Number: 585-330-1464 Email: <a href="mailto:middlesexcode@gmail.com">middlesexcode@gmail.com</a>
<b>National Flood Insurance Program Floodplain Administrator</b>	
Name/Title: Dawn M. Kane, Code Enforcement Officer Address: 1216 Route 245, Main Street, PO Box 147, Middlesex, NY 14507 Phone Number: 585-330-1464 Email: <a href="mailto:middlesexcode@gmail.com">middlesexcode@gmail.com</a>	
<b>Additional Contributors</b>	
Name/Title: David C. Adams, Supervisor Method of Participation: Provided key input in the planning process and attended meetings	



Name/Title: Dawn M. Kane, Code Enforcement Officer Method of Participation: Provided key input in the planning process and attended meetings
Name/Title: Alan Williams, Water Superintendent Method of Participation: Provided key input in the planning process
Name/Title: Joshua Burnett, Highway Superintendent Method of Participation: Provided key input in the planning process
Name/Title: Lynnette F. Miller, Town Clerk Method of Participation: Provided key input in the planning process

## 9.2 COMMUNITY PROFILE

The Town of Middlesex lies in the Northwest corner of Yates County in Western New York State. The Town features agricultural lands as well as forest lands. The Town features many areas with very steep, rugged terrain. The Northern central portion of the Town contains gentle slopes, and this is where the bulk of the agricultural land is located. The maximum elevation in the Town is 1,922 feet and it is located Northwest of the intersection of South Hill, Wickham and Wolfanger Hill Roads (Tetra Tech, 2020).

The Town of Middlesex has a total area of 30.9 square miles. Canandaigua Lake forms the Western boundary of the Town. The West River bisects the Town, flowing from the Northeastern corner and exiting in the Southwestern corner. The Town of Middlesex is bordered to the North by the Town of Gorham, Ontario County, to the South by the Town of Italy, to the East by the Town of Potter, and to the West by Canandaigua Lake (Tetra Tech, 2020). According to the U.S. Census, the 2020 population for Middlesex was 1,377, a 7.89 percent decrease from the 2010 Census.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2017-2021 American Community Survey indicates that 3.1-percent of the population is 5 years of age or younger, 21.4-percent is 65 years of age or older, 0.4-percent is non-English speaking, 10.2-percent is below the poverty threshold, and 12.5-percent is considered disabled.

## 9.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Middlesex performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:



- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Middlesex to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

### 9.3.1 Planning and Regulatory Capability and Integration

Table 9-2 summarizes the planning and regulatory tools that are available to Middlesex.

**Table 9-2. Planning and Regulatory Capability and Integration**

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>CODES, ORDINANCES, &amp; REGULATIONS</b>				
<b>Building Code</b>	Yes	Building Code of New York State (2020); Local Law #3 (2007)	State, County, Local	Code Enforcement Officer
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p>The NYS Building Code is intended to establish provisions that adequately protect public health, safety and welfare through the minimum requirements for building systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs. The 2020 edition is an update to the 2018 edition published by the ICC. It is part of the Uniform Fire Prevention and Building Code.</p>				
<b>Zoning/Land Use Code</b>	Yes	The Zoning Law of the Town of Middlesex; Local Law #2, (2014)	Local	Code Enforcement Officer
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p>The purpose of LL#2 is to:</p> <ol style="list-style-type: none"> <li>1. Promote the health and welfare of the community.</li> <li>2. Provide adequate open space for light, air and outdoor uses including public, commercial, and private open space areas.</li> </ol>				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
3. Preserve and protect significant natural features and vegetation. Preventing ecological damage and visual blight that occurs when features are eliminated or substantially altered for development purposes. 4. Assure that structures and land use arrangements are aesthetically harmonious with nearby areas and structures 5. Guide future development to bring gradual conformity of land and building uses with the objectives of the comp. plan. 6. Protect the character and values of residential, institutional and public uses, business, commercial and manufacturing uses to ensure orderly and beneficial development. 7. Preserve the historic and cultural nature of the Town.				
<b>Subdivision Code</b>	Yes	Land Subdivision Regulations; Local Law #2 (2009)	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? In order for efficient and economical development of the Town and keeping with the Town's environmental and rural character (noted in Town's Master Plan of 1992), the Planning Board will have the power/authority to consider, review and approve land subdivision plats within the boundaries of the Town of Middlesex. Competent engineers and planners will: <ol style="list-style-type: none"> <li>1. Review and approve plans and designs and provide recommendations to the Town Board and Planning Board.</li> <li>2. Inspect construction of highways, drainage, sewer, other facilities, and parks to be dedicated to the Town and recommend their acceptance.</li> </ol>				
<b>Site Plan Code</b>	Yes	The Zoning Law of the Town of Middlesex; Local Law #2, Section 700: Site Plan Review (2014)	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? LL #2 defines Site Plans as map(s) or drawn representation of a proposed project or development, sometimes accompanied by written description and/or specifications, containing sufficient information and detail for municipal review and approval. LL #2 requires preliminary site plan review and outlines the requirements for a final site plan.				
<b>Stormwater Management Code</b>	Yes	Stormwater Management and Erosion Control Law; Local Law #2 (2008)	Local	Code Enforcement Officer
How has or will this be integrated with the HMP and how does this reduce risk? The purpose of the Stormwater Management Erosion Control Law: <ol style="list-style-type: none"> <li>1. prevent increases in the magnitude and frequency of stormwater runoff so as to prevent an increase in flood flows and in the hazards and costs associated with flooding.</li> <li>2. prevent decreases in groundwater recharge and stream base flow so as to maintain aquatic life, assimilative capacity, and potential water supplies.</li> <li>3. maintain the integrity of stream geometry so as to sustain the hydrologic functions of streams.</li> <li>4. control erosion and sedimentation so as to prevent its deposition in streams and other receiving water bodies.</li> <li>5. facilitate the removal of pollutants in stormwater runoff so as to perpetuate the natural biological functions of streams.</li> <li>6. to the extent practical, secure multiple community benefits such as groundwater replenishment, open space protection and increased recreational opportunity through integrated land use-stormwater management planning.</li> </ol>				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Post-Disaster Recovery/ Reconstruction Code</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Real Estate Disclosure Requirements</b>	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
How has or will this be integrated with the HMP and how does this reduce risk? In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.				
<b>Growth Management</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Environmental Protection Ordinance(s)</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Flood Damage Prevention Ordinance</b>	Yes	The Zoning Law of the Town of Middlesex; Local Law #2, Section 701: Flood Hazard Area (2014)	Local	Code Enforcement Officer
How has or will this be integrated with the HMP and how does this reduce risk? It is the purpose of this local law to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas.				
<b>Wellhead Protection</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Emergency Management Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Climate Change Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Other: Freeboard</b>	Yes	NYS Residential Code (2010); R324.1.3.3 Freeboard	State	Town Board
How has or will this be integrated with the HMP and how does this reduce risk? A freeboard of two feet shall be added where the design flood elevation or other elevation requirements are specified. A freeboard shall not be required where it is not possible to obtain a design flood elevation from the FIRM or from any method established above and the design flood elevation is three feet above the highest adjacent grade.				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Other: Steep Slopes</b>	Yes	Local Law #2 (2014) Steep Slopes	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The Steep Slopes Law amends the Zoning Law with Steep Slope Regulations. Includes the Construction Execution Plan and Concept Plan in the LL as well as defines development standards, restoration, stormwater runoff, etc.				
<b>PLANNING DOCUMENTS</b>				
<b>General/Comprehensive Plan</b>	Yes	Master Plan, 1992	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The Master Plan highlights the Town's goals and policies, including mitigation efforts, with the intention of guiding decision makers and elected officials.				
<b>Capital Improvement Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Disaster Debris Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Floodplain Management or Watershed Plan</b>	Yes	Floodplain Management Plan, 2009	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The Floodplain Management Plan has the goal to reduce current and future flood risks to the Town.				
<b>Stormwater Management Plan</b>	Yes	Stormwater Management, 1990	Local	Town Board
How has or will this be integrated with the HMP and how does this reduce risk? The Stormwater Management Plan outlines practices for the management and treatment of stormwater runoff within the Town.				
<b>Open Space Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Urban Water Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Habitat Conservation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Economic Development Plan</b>	Yes	Master Plan, 1992	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The Master Plan highlights the Town's goals and policies, including economic development efforts, with the intention of guiding decision makers and elected officials.				



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>Community Wildfire Protection Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Community Forest Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Transportation Plan</b>	Yes	Master Plan, 1992	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The Master Plan highlights the Town's goals and policies, including transportation plan efforts, with the intention of guiding decision makers and elected officials.				
<b>Agriculture Plan</b>	Yes	Yates County Agricultural Development and Farmland Enhancement Plan (2004)	Local	Yates County Agricultural and Farmland Protection Board
How has or will this be integrated with the HMP and how does this reduce risk? The Agricultural Development and Farmland Enhancement Plan was prepared to help guide local planning board members, agricultural and farmland protection board members and elected officials in their review of development applications that affect farmlands. Land use planning and zoning with regard to agriculture cannot be rigid - the flexibility to adapt based on circumstances is critical. Many large farming operations involve a variety of land uses that may include housing for farm workers, the manufacturing of agricultural products, trucking operations, machinery repair, warehousing, or retail sales of farm products.				
<b>Climate Action/ Resilience/Sustainability Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Tourism Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Business/ Downtown Development Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Other: Watershed Management Plan</b>	Yes	Steep Slope Protection Areas, 2014	Local	Town Board
How has or will this be integrated with the HMP and how does this reduce risk? Established through L.L. #2 and establishes Steep Slope Protection Areas (SSPA) which are mapped out using GIS technology and can be used for watershed management purposes.				





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
<b>RESPONSE/RECOVERY PLANNING</b>				
<b>Emergency Operations Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Continuity of Operations Plan</b>	Yes	Pandemic Continuity of Operations Plan (3/8/2021)	County	Yates County Emergency Management
How has or will this be integrated with the HMP and how does this reduce risk? The purpose of this plan is to protect the health and safety of County employees, contractors, customers, clients, members of the public all while maintaining continuity of County operations. In accordance with amended New York State Labor Law section 27-c and New York State Education Law paragraphs k and l of subdivision 2 of section 2801-a (as amended by section 1 of part B of chapter 56 of the laws of 2016), as applicable.				
<b>Substantial Damage Response Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Threat and Hazard Identification and Risk Assessment</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				
<b>Post-Disaster Recovery Plan</b>	Yes	NYS Long-Term Recovery Plan (March 2023)	State	NYSDHSES
How has or will this be integrated with the HMP and how does this reduce risk? This volume includes the provisions for implementing long-term recovery activities and functions, including mitigation, as provided for under the Federal Robert T. Stafford Disaster Relief and Emergency Assistance Act and a variety of Federal-State programs. Volume 3 also recognizes the primacy of local governments in the implementation of long-term recovery plans and, depending on the nature and impact of the disaster, new programs that might be necessary to implement at the county or local level.				
<b>Public Health Plan</b>	Yes	Yates County Comprehensive Regional Community Health Assessment Plan (2022-2024)	County	Yates County Public Health
How has or will this be integrated with the HMP and how does this reduce risk? The goals of the CHIP are to prevent chronic disease and promote well-being and prevent mental and substance disorders.				
<b>Other</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk? Not applicable				





### 9.3.2 Development and Permitting Capability

Table 9-3 summarizes the capabilities of Middlesex to oversee and track development.

**Table 9-3. Development and Permitting Capability**

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> <li>If you issue development permits, what department is responsible?</li> <li>If you do not issue development permits, what is your process for tracking new development?</li> </ul>	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Floodplain development permits
Do you have a buildable land inventory? <ul style="list-style-type: none"> <li>If you have a buildable land inventory, please describe</li> </ul>	No	-
Describe the level of buildout in your jurisdiction.	N/A	There is available area for buildout within the Town.

### 9.3.3 Administrative and Technical Capability

Table 9-4 summarizes potential staff and personnel resources available to Middlesex and their current responsibilities that contribute to hazard mitigation.

**Table 9-4. Administrative and Technical Capabilities**

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
<b>ADMINISTRATIVE CAPABILITY</b>		
Planning Board	Yes	The Planning Board has both advisory and regulatory responsibilities and oversee comprehensive plan developments and plan amendments.
Zoning Board of Adjustment	Yes	The Zoning Board of Appeals hears and decides appeals from and review any order, requirement, decision, or determination made by the Code Enforcement Officer or other administrative officer in carrying out or enforcing any provisions of the Zoning Law. The Zoning Board has the power to grant variances and conditional approvals.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Public Works/Highway Department	Yes	The Highway Department maintains the Town roads, performs vegetation maintenance as needed, and conducts maintenance on Town fleet vehicles.
Construction/Building/Code Enforcement Department	Yes	Code Enforcement issues permits. Enforces the building code, conducts floodplain management administrative work, and enforces the Town's zoning Law.
Emergency Management/Public Safety Department	No	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Highway Department maintains the Town roads, performs vegetation maintenance as needed, and conducts maintenance on Town fleet vehicles.
Mutual aid agreements	Yes	There is a mutual aid agreement between the Town Board and Highway Department.
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-
<b>TECHNICAL/STAFFING CAPABILITY</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	The Town contracts through Stantec Engineering.
Engineers or professionals trained in building or infrastructure construction practices	Yes	The Town contracts through Stantec Engineering.
Planners or engineers with an understanding of natural hazards	Yes	The Town contracts through Stantec Engineering.
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	No	-
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	No	-
Surveyors	No	-
Emergency manager	No	-
Grant writers	No	-
Resilience Officer	No	-



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

### 9.3.4 Fiscal Capability

Table 9-5 summarizes financial resources available to Middlesex.

**Table 9-5. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	No
User fees for water, sewer, gas, or electric service	No
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	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

### 9.3.5 Education and Outreach Capability

Table 9-6 summarizes the education and outreach resources available to Middlesex.

**Table 9-6. Education and Outreach Capabilities**

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook



Outreach Resources	Available? (Yes/No)	Comment
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Yates County 911 is responsible for monitoring, dispatching, and coordinating a variety of emergency services within Yates County to include fire / rescue, emergency medical services, and law enforcement. Agencies within Yates County directly serviced by the Communications center include 13 fire departments and their associated first responder units, 5 ambulance services, an Advanced Life Support (ALS) unit from Soldiers and Sailors Hospital in Penn Yan, Medical evacuation helicopter services, and several law enforcement agencies to include the Yates County Sheriff's Office, Penn Yan Police Department, New York State Police in Dundee, New York State Environmental Conservation Police, Court Security, and Animal Control.
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No	-
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	No	-

### 9.3.6 Community Classifications

Table 9-7 summarizes classifications for community programs available to Middlesex.

**Table 9-7. Community Classifications**

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Middlesex Fire Department – 4/4Y Rushville Fire Department – 4/4X	-
National Weather Service StormReady Certification	Yes	Yates Co NOAA Storm Ready	Recertified – August 7, 2018
Firewise Communities classification	No	-	-
New York State Department of Environmental Conservation (NYSDEC) Climate Smart Community	No	-	-



Program	Participating? (Yes/No)	Classification	Date Classified
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

### 9.3.7 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 9-8 summarizes the adaptive capacity for each identified hazard of concern and the Town’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

**Table 9-8. Adaptive Capacity**

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Harmful Algal Bloom	Moderate
Hazardous Materials	High
Landslide	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Transportation Accidents	Moderate
Utility Failure	Moderate



## 9.4 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 2-1 is responsible for maintaining this information.

### 9.4.1 NFIP Statistics

Table 9-9 summarizes the NFIP policy and claim statistics for Middlesex.

**Table 9-9. Middlesex NFIP Summary of Policy and Claim Statistics**

# Policies	7
# Claims (Losses)	5
Total Loss Payments	\$54,537
# Repetitive Loss Properties (NFIP definition) <sup>a</sup>	1
# Repetitive Loss Properties (FMA definition) <sup>b</sup>	0
# Severe Repetitive Loss Properties <sup>c</sup>	0

- a. *NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.*
- b. *FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.*
- c. *Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.*

Source: Yates County, 2023.

### 9.4.2 Flood Vulnerability Summary

Table 9-10 provides a summary of the NFIP program in Middlesex.

**Table 9-10. NFIP Summary**

NFIP Topic	Comments
<b>Flood Vulnerability Summary</b>	
Describe areas prone to flooding in your jurisdiction.	Low-lying areas of the Town are subject to flooding.



NFIP Topic	Comments
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Unknown
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Unknown
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	Unknown, at this time.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Unknown, at this time.
<b>NFIP Compliance</b>	
What local department is responsible for floodplain management?	Code Enforcement
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	No, not at this time.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes, additional resources and training.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Unknown
What are the barriers to running an effective NFIP program in the community, if any?	Training staff and funding
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown





NFIP Topic	Comments
What is the local law number or municipal code of your flood damage prevention ordinance?	Section 701 of the Zoning Law (2014)
What is the date that your flood damage prevention ordinance was last amended?	2014
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	Meet minimum requirements.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Site plan review
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No, not at this time.

## 9.5 GROWTH/DEVELOPMENT TRENDS

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 9-11 through Table 9-13.

**Table 9-11. Number of Building Permits for New Construction Issued Since the Previous HMP**

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
<b>2019</b>				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
<b>2020</b>				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
<b>2021</b>				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
<b>2022</b>				
Total Permits	0	0	0	0



	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA	0	0	0	0
<b>2023</b>				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

SFHA = Special Flood Hazard Area (1% flood event)

**Table 9-12. Recent Major Development and Infrastructure from 2018 to Present**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
None Identified.					

\* Only location-specific hazard zones or vulnerabilities identified.

**Table 9-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
None Anticipated.					

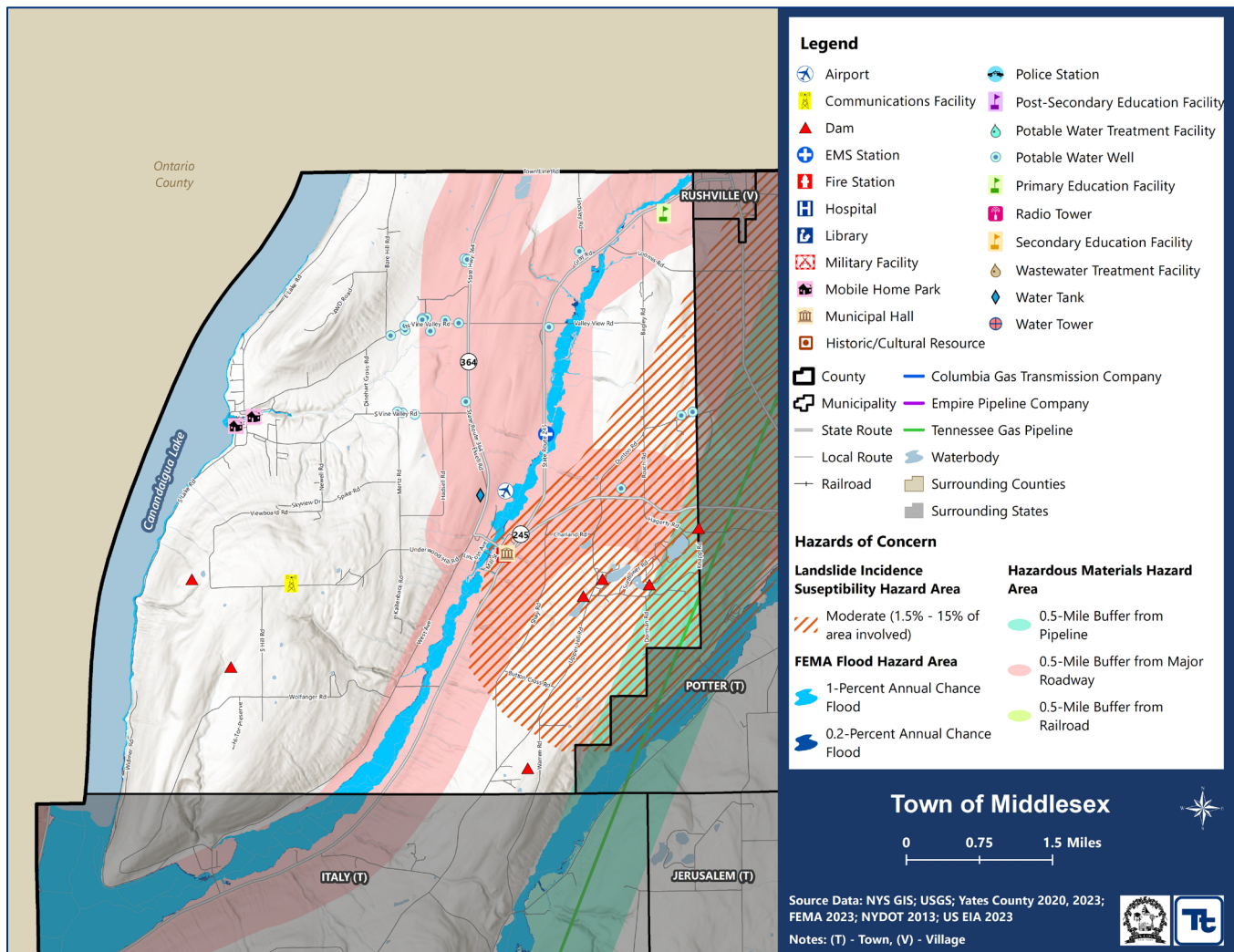
## 9.6 JURISDICTIONAL RISK ASSESSMENT

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Middlesex's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

### 9.6.1 Hazard Area

The hazard area map shown in Figure 9-1 illustrates the probable hazard areas impacted within the Town. This map is based on the best available data at the time of the preparation of this plan and is adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Middlesex has significant exposure. The maps show the location of potential new development, where available.

**Figure 9-1. Middlesex Hazard Area Extent and Location Map**



Note: The shown flood hazard area is limited to the FEMA-defined flood hazard areas. Areas of localized flooding are not reflected in the above Figure.



## 9.6.2 Hazard Event History

The history of natural and non-natural hazard events in Middlesex is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 9-14 provides details on loss and damage in Middlesex during hazard events since the last hazard mitigation plan update.

**Table 9-14. Hazard Event History in Middlesex**

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Middlesex
January 20, 2020 – May 11, 2023	Coronavirus pandemic (EM-3434), (DR-4480)	-	As of July 9, 2023, the New York Department of Health has reported 4,543 reported cases and 45 reported deaths in Yates County.	The Town was subject to closures and social distancing/masking requirements.

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

## 9.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Middlesex.

### Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Middlesex reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Town indicated the following:

- The Town agreed with the following hazard ranking as identified in the hazard ranking meetings, outlines in Table 9-15.

Table 9-15 shows Middlesex's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

**Table 9-15. Hazard Ranking**

Hazard	Rank
Dam Failure	Low
Disease Outbreak	Medium
Drought	Medium
Extreme Temperatures	Medium
Flood	Low
Harmful Algal Bloom	Medium
Hazardous Materials	Medium
Landslide	Low
Severe Storm	Medium
Severe Winter Storm	Medium
Transportation Accidents	Low
Utility Failure	Medium

*Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction*

## Critical Facilities

Table 9-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

**Table 9-16. Critical Facilities Flood Vulnerability**

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Annual Chance Event	0.2% Annual Chance Event		
None located in the flood zone.					

Source: Yates County 2023.

## 9.6.4 Identified Issues

After review of Middlesex's hazard event history, hazard rankings, hazard location, and current capabilities, Middlesex identified the following vulnerabilities within the community:

- On South Lake Road, the old concrete wall is deteriorating on the lake side and showing signs of future failing due to flooding and erosion from heavy rains and severe storms. Continued impacts from flooding and subsequent erosion will cause the wall to collapse into the lake,



allowing for floodwaters to extend from the lake and impact nearby properties, structures, and infrastructure.

- The highway garage for the Town of Middlesex located at 1240 Mill Street Middlesex NY 14507 is susceptible to power outages during wind events (associated with severe storms) and ice storms (associated with severe winter storms) due to not having a generator. The fuel pumps are operated on site for the highway department and the water district. This facility and lifelines lose power on average 5 times a year for 1 day. This critical facility must maintain its operations during all hazard events, including dam failure, drought, extreme temperatures, flood, hazardous materials, landslide, severe storm, severe winter storm, utility failure.
- The current flood damage prevention ordinance for the Town does not require the minimum freeboard set by NYSDEC in 2007. While the existing ordinance may be compliant with NFIP requirements, State requirements which exceed NFIP requirements must be adhered to.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well. Some of these properties are located in the Special Flood Hazard Area, with development requiring floodproofing.
- Existing floodplain maps may be outdated, but currently recognize the flood threat in the Town. Correctly displaying the areas at risk to the flood hazard is not only critical to visually show the risk, but to support grant applications for funding to mitigate the flood risk at identified locations within or around the floodplain.
- The Town does not have access to updated information, resources, and training for climate change projections. Identifying how climate change may exacerbate all hazards (dam failure, disease outbreak, drought, extreme temperatures, flood, harmful algal bloom, hazardous materials, landslide, severe storm, severe winter storm, transportation accidents, utility failure) and their impacts is crucial in developing solutions or actions to mitigate the potential risks.
- The Town does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Town in identifying and prioritizing properties to mitigate.
- The Town does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.



- The Town does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.
- There are steep slopes around the lakes within the Town which can contribute to lake pollution and runoff. There is a lot of fertilizer runoff from agriculture which impacts the Town's lakes. Excess nitrogen, which is commonly found in agricultural run-off, can exacerbate the occurrence of harmful algal blooms, disrupting the natural environment and water source. Agricultural runoff may occur during heavy rains associated with severe storms or from snow melt from a severe winter storm event. Flood waters may carry excess nutrients from agricultural lands into waterbodies. Oversaturated soils on steep slopes may result in landslide occurrences, which would also carry excess nutrients into waterbodies.\*
- Flooding and high winds from severe storms severely impacts the following roads in the Town: Main St., William St., Water St., Lincoln Ave., Basset Rd., Bagley Rd., South Vine Valley, North Vine Valley, Spike Hill, Hadsell Rd, Mertz Rd, and Townline Rd. It is assumed that some culverts may be undersized and contribute to flooding.\*
- Potter Road experiences very poor road conditions in the winter seasons from severe winter storms, including an increased number of potholes and lines of separation in the asphalt; slippery and icy conditions due to shading from trees; and being a regularly trafficked road makes the number of vehicles and persons on the road at an increased risk of injury from transportation accidents.\*
- Integration of hazard mitigation principles into the regulatory and planning capabilities in the Town is often a separate effort from many other types of planning within the Town. Disregarding mitigation considerations may cause gaps in the ability to fully prepare for hazard events. All hazards of concern should be addressed and integrated, where appropriate, into Town capabilities.

\* This issue was identified as a specific area of concern based on resident response to the Yates County Hazard Mitigation Citizen survey.

## 9.7 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.





### 9.7.1 Past Mitigation Action Status

Table 9-17 indicates progress on the Town's mitigation strategy identified in the 2020 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

### 9.7.2 Additional Mitigation Efforts

Middlesex did not identify any additional mitigation efforts completed since the last HMP. Since the adoption of the County's first HMP, Middlesex has made significant mitigation progress in the following areas:

- Floodplain Management
- Public Outreach through Social Media



Table 9-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
T.Middlesex-1	Critical Facility - Middlesex Valley Volunteer Ambulance Corps	Flood	Floodplain Administrator	<b>Problem:</b> The Middlesex Valley Volunteer Ambulance Corps is located in the 1% annual chance floodplain. It is unknown if the facility is mitigated to be protected to a 500-year event.  <b>Solution:</b> The town will notify the facility owner/operator informing them that the facility is located in the 1% annual chance floodplain and might be susceptible to flood damages. The town will provide a list of mitigation actions that the facility can do to protect themselves from flood damages.	1. Completed 2. N/A	1. Discontinue 2. N/A 3. The facility is no longer located in the floodplain.
T.Middlesex-2	1091 South Lake Rd. retention wall	Flood, Severe Storm	Town of Middlesex Highway Department and Town Board	<b>Problem:</b> On South lake road, the old concrete wall is deteriorating on the lake side & showing signs of future failing due to flooding and erosion and water on the lake side.  <b>Solution:</b> Re-enforce the wall by using the soil nail process.	1. No Progress. 2. N/A	1. Keep in the 2025 HMP. 2. The Town will re-enforce the concrete wall on South Lake Road by using the soil nail process. 3. N/A
T.Middlesex-3	Backup power for highway garage	All Hazards	Highway Department	<b>Problem:</b> The highway garage for the Town of Middlesex located at 1240 Mill Street Middlesex NY 14507 is susceptible to power outages during wind events and ice storms	1. No Progress. 2. N/A	1. Keep in the 2025 HMP. 2. The Town will explore funding options to obtain a generator for the Highway



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				<p>due to not having a generator. The fuel pumps are operated on site for the highway department and the water district. We lose power on average 5 times a year for 1 day. We presently have a portable generator just to run the fuel pumps.</p> <p><b>Solution:</b> Generator to run the whole facility via propane for 7 days' minimum. This would include a pad and barrier for the generator as it runs on propane.</p>		<p>Garage located on 1240 Mill Street.</p> <p>3. N/A</p>
T.Middlesex-4	Update Flood Damage Prevention Ordinance	Flood	Town Board, Code Enforcement Officer	<p><b>Problem:</b> The current flood damage prevention ordinance for the town does not require the minimum freeboard set by NYSDEC in 2007.</p> <p><b>Solution:</b> Update the town's flood damage prevention ordinance to include the 2007 NYSDEC requirements of having the lowest floor elevated to or above the base flood elevation plus two feet for new construction and substantial improvement of residential and non-residential structures.</p>	<p>1. No Progress</p> <p>2. N/A</p>	<p>1. Keep in the 2025 HMP</p> <p>2. The Town will update the flood damage prevention ordinance to include the 2007 NYSDEC requirements of having the lowest floor elevated to or above the base flood elevation plus two feet for new construction and substantial improvement of residential and non-residential structures.</p> <p>3. N/A</p>



### 9.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Middlesex participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 "Selecting Appropriate Mitigation Measures for Floodprone Structures" (March 2007)
- FEMA "Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards" (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Middlesex would like to pursue in the future to reduce the effects of hazards. The actions 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 Town priorities.

Table 9-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 9-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

**Table 9-18. Analysis of Mitigation Actions by Hazard and Category**

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X	X		X	X	X	X			X
Disease Outbreak	X			X	X		X			
Drought	X	X		X	X	X	X			
Extreme Temperatures	X	X		X	X	X	X			
Flood	X	X		X	X	X	X		X	X
Harmful Algal Bloom	X			X	X		X			X
Hazardous Materials	X	X		X	X	X	X			X
Landslide	X	X		X	X	X	X			X
Severe Storm	X	X		X	X	X	X		X	X
Severe Winter Storm	X	X		X	X	X	X			X
Transportation Accidents	X	X		X	X	X	X			X
Utility Failure	X	X		X	X	X	X			

*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 structures to reduce the impact of hazards.

*Natural Systems Protection (NSP)*—These are actions that minimize damage and losses and 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

*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 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

**Table 9-19. Summary of Prioritization of Actions**

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-MiddlesexT-01	Upgrades to Flood Wall	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2025-MiddlesexT-02	Generator for Highway Garage and Fuel Pumps	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High
2025-MiddlesexT-03	Flood Damage Prevention Ordinance Update	1	1	1	1	1	1	1	1	1	0	1	1	1	0	12	High
2025-MiddlesexT-04	Repetitive Loss Properties	1	1	1	1	1	0	1	1	1	0	1	1	1	0	11	High
2025-MiddlesexT-05	Update FIRMS	1	1	1	1	1	0	0	1	1	1	1	1	1	0	11	High
2025-MiddlesexT-06	Climate Change Resource Coordination and Training	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2025-MiddlesexT-07	Flood Mitigation List Database	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2025-MiddlesexT-08	Substantial Damage Determination Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-MiddlesexT-09	Certified Floodplain Managers	1	1	1	1	1	1	1	1	1	0	1	1	1	0	12	High
2025-MiddlesexT-10	Agricultural Run-Off	1	0	1	1	1	0	1	1	1	1	1	1	1	0	11	High
2025-MiddlesexT-11	Culvert Management Plan	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-MiddlesexT-12	Feasibility Study on Potter Road	1	0	1	1	1	1	1	1	1	1	1	1	1	0	12	High
2025-MiddlesexT-13	Integration of Mitigation Principles	0	0	1	1	1	1	0	1	1	1	0	1	0	1	9	Medium

Note: Volume I, Section 20 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).

**Action 2025-MiddlesexT-01. Upgrades to Flood Wall**

<b>Action Name:</b>	Upgrades to Flood Wall	
<b>Lead Agency:</b>	Highway Department	
<b>Supporting Agencies:</b>	Town Board	
<b>Hazards of Concern:</b>	Flood, Severe Storm	
<b>Description of the Problem:</b>	On South Lake Road, the old concrete wall is deteriorating on the lake side and showing signs of future failing due to flooding and erosion from heavy rains and severe storms. Continued impacts from flooding and subsequent erosion will cause the wall to collapse into the lake, allowing for floodwaters to extend from the lake and impact nearby properties, structures, and infrastructure.	
<b>Description of the Solution:</b>	The Town will re-enforce the concrete wall on South Lake Road by using the soil nail process.	
<b>Estimated Cost:</b>	High	
<b>Potential Funding Sources:</b>	Local budget tax increase, HMGP, PDM	
<b>Implementation Timeline:</b>	Long Term (5+yrs.)	
<b>Goals Met:</b>	1,2	
<b>Benefits:</b>	Losses avoided include dead end road; residents stranded; and road failure into Canandaigua Lake	
<b>Impact on Socially Vulnerable Populations:</b>	This action will restore a concrete flood wall which protects community members who reside near the lake from erosion and flooding.	
<b>Impact on Future Development:</b>	This action will protect future development that will be located around the lake and/or which will utilize the roadway.	
<b>Impact on Critical Facilities/Lifelines:</b>	South Lake Road is a critical lifeline for evacuation for residents. This action will maintain and protect the road from erosion and flooding.	
<b>Impact on Capabilities:</b>	This action will ensure the standards of operation for EMS and first responders to utilize South Lake Road to access residents in need during hazard events.	
<b>Climate Change Considerations:</b>	This action considers climate change impacts to the severity and frequency of erosion and flooding.	
<b>Mitigation Category</b>	Structure and Infrastructure Project (SIP)	
<b>CRS Category</b>	Property Protection (PP)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Build a levee	Not enough space, costly
	Remove roadway and residents	Not an option, costly



**Action 2025-MiddlesexT-02. Generator for Highway Garage and Fuel Pumps**

<b>Action Name:</b>	Generator for Highway Garage and Fuel Pumps	
<b>Lead Agency:</b>	Engineer	
<b>Supporting Agencies:</b>	Highway Department	
<b>Hazards of Concern:</b>	Dam Failure, Drought, Extreme Temperatures, Flood, Hazardous Materials, Landslide, Severe Storm, Severe Winter Storm, Utility Failure	
<b>Description of the Problem:</b>	The highway garage for the Town of Middlesex located at 1240 Mill Street Middlesex NY 14507 is susceptible to power outages during wind events (associated with severe storms) and ice storms (associated with severe winter storms) due to not having a generator. The fuel pumps are operated on site for the highway department and the water district. This facility and lifelines lose power on average 5 times a year for 1 day. This critical facility must maintain its operations during all hazard events, including dam failure, drought, extreme temperatures, flood, hazardous materials, landslide, severe storm, severe winter storm, utility failure.	
<b>Description of the Solution:</b>	The Town's Engineer will assess the needs of the buildings to determine the capacity required for the generator. Following this determination, the generator and all necessary components and accessories will be installed at the Highway Garage (1240 Mill Street Middlesex NY 14507). The Highway Department will perform the needed maintenance for these generators.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	HMGP, PDM	
<b>Implementation Timeline:</b>	Within 5 years	
<b>Goals Met:</b>	1,2	
<b>Benefits:</b>	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
<b>Impact on Socially Vulnerable Populations:</b>	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
<b>Impact on Future Development:</b>	This action results in protection of a critical facility that could support future development.	
<b>Impact on Critical Facilities/Lifelines:</b>	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.	
<b>Impact on Capabilities:</b>	This action ensures continuity of operations to maintain capabilities.	
<b>Climate Change Considerations:</b>	This action takes into account climate change impacts to the severity and frequency of ice storms, and wind events, which have historically caused many power outages for the facility and fuel pump station.	
<b>Mitigation Category</b>	Structure and Infrastructure Project (SIP)	
<b>CRS Category</b>	Property Protection (PP)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>



	No action	Problem persists
	Obtain additional portable generators	Costly, not feasible.
	Relocate Facility	Problem may persist, costly, not an option.

**Action 2025-MiddlesexT-03. Flood Damage Prevention Ordinance Update**

<b>Action Name:</b>	Flood Damage Prevention Ordinance Update	
<b>Lead Agency:</b>	Floodplain Administrator	
<b>Supporting Agencies:</b>	Code Enforcement, Town Board, NFIP State Coordinator, FEMA Regional Office, Yates County	
<b>Hazards of Concern:</b>	Flood	
<b>Description of the Problem:</b>	The current flood damage prevention ordinance for the Town does not require the minimum freeboard set by NYSDEC in 2007. While the existing ordinance may be compliant with NFIP requirements, State requirements which exceed NFIP requirements must be adhered to.	
<b>Description of the Solution:</b>	The Town will work with Yates County and NYSDEC to ensure its Flood Damage Prevention Ordinance is updated to adhere to NYS requirements. After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the Town will update and adopt the Flood Damage Prevention Ordinance.	
<b>Estimated Cost:</b>	Low	
<b>Potential Funding Sources:</b>	Municipal Budget	
<b>Implementation Timeline:</b>	2 years	
<b>Goals Met:</b>	1, 2	
<b>Benefits:</b>	The updated ordinance will improve floodplain management, meet NFIP and State requirements, and increase resilience of new and substantially improved structures in the floodplain.	
<b>Impact on Socially Vulnerable Populations:</b>	This action will ensure all new construction will include the state freeboard requirement and protect socially vulnerable populations from flood impacts.	
<b>Impact on Future Development:</b>	The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.	
<b>Impact on Critical Facilities/Lifelines:</b>	Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the requirements set forth in the ordinance.	
<b>Impact on Capabilities:</b>	This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.	
<b>Climate Change Considerations:</b>	The updated ordinance includes the State's higher standards that are in place to address heightened flood risk due to climate change such as those for floodway rise and mandatory freeboard.	
<b>Mitigation Category</b>	Local Plans and Regulations (LPR)	
<b>CRS Category</b>	Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Require BFE plus 1ft	Still does not meet NYSDEC freeboard requirements.



	Only require BFE	Still does not meet NYSDEC freeboard requirements.
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**Action 2025-MiddlesexT-04. Repetitive Loss Properties**

<b>Action Name:</b>	Repetitive Loss Properties
<b>Lead Agency:</b>	Floodplain Administrator
<b>Supporting Agencies:</b>	Town Board, Property Owners
<b>Hazards of Concern:</b>	Flood
<b>Description of the Problem:</b>	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has one repetitive loss property, but other properties may be impacted by flooding as well. Some of these properties are located in the Special Flood Hazard Area, with development requiring floodproofing.
<b>Description of the Solution:</b>	The Town will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.
<b>Estimated Cost:</b>	Medium
<b>Potential Funding Sources:</b>	FEMA FMA, FMA SWIFT, Municipal Budget, County Budget, Property Owners
<b>Implementation Timeline:</b>	3 years
<b>Goals Met:</b>	1, 2, 3, 4
<b>Benefits:</b>	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.
<b>Impact on Socially Vulnerable Populations:</b>	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.
<b>Impact on Future Development:</b>	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.
<b>Impact on Critical Facilities/Lifelines:</b>	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.
<b>Impact on Capabilities:</b>	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the Township's current NFIP capabilities.



<b>Climate Change Considerations:</b>	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs.	
<b>Mitigation Category</b>	Education and Awareness Programs (EAP); Structure and Infrastructure Project (SIP)	
<b>CRS Category</b>	Property Protection (PP); Structural Flood Control Projects (SP)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

**Action 2025-MiddlesexT-05. Update FIRMS**

<b>Action Name:</b>	Update FIRMS	
<b>Lead Agency:</b>	Floodplain Administrator	
<b>Supporting Agencies:</b>	Town Administration, Yates County, NYSDEC, NYSDHSES, FEMA	
<b>Hazards of Concern:</b>	Flood	
<b>Description of the Problem:</b>	Existing floodplain maps may be outdated, but currently recognize the flood threat in the Town. Correctly displaying the areas at risk to the flood hazard is not only critical to visually show the risk, but to support grant applications for funding to mitigate the flood risk at identified locations within or around the floodplain.	
<b>Description of the Solution:</b>	The Town will actively participate in the remapping process. This participation will include providing data and information to support map revisions, identifying areas of flooding concern, providing review of preliminary maps, and adopting updated flood damage prevention local laws when the FIRMS are finalized.	
<b>Estimated Cost:</b>	Low	
<b>Potential Funding Sources:</b>	HMGP, State Budget, County Budget, Town Budget	
<b>Implementation Timeline:</b>	Within 5 years	
<b>Goals Met:</b>	1, 2, 3, 4	
<b>Benefits:</b>	Updating FIRMS will provide a more complete picture of the floodplain and the overall flood hazard in Yates County. This will inform other sectors of the community, including land use, development, permitting, and codes and standards.	
<b>Impact on Socially Vulnerable Populations:</b>	An analysis of the floodplain will inform future community development and land use and prevent vulnerable populations from residing in areas of heightened flood risk.	
<b>Impact on Future Development:</b>	Updated FIRMS will decide which populations and structures will require flood insurance to be built in areas of flood hazard.	
<b>Impact on Critical Facilities/Lifelines:</b>	Creation of updated floodplain maps will inform efforts to increase the resilience of critical infrastructure that is present in those areas, including transportation routes, water treatment plants, and other utility services. This will also aid in preventing future development of infrastructure in these areas.	
<b>Impact on Capabilities:</b>	An understanding of the floodplain will allow for the development of processes, plans, training and staff placement to address flooding issues in the areas of greatest concern before they occur.	
<b>Climate Change Considerations:</b>	The maps that are developed as a result of this action may not remain current or valid for the length of time that they may have in the past due to changes in floodplains and increases in extreme rainfall events.	
<b>Mitigation Category</b>	Local Plans and Regulation (LPR)	
<b>CRS Category</b>	Public Information (PI); Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>





	No action	Problem persists
	Town creates its own flood maps	Time consuming, cost prohibitive, may not be recognized as official documentation in grant applications
	FEMA updates maps without Town input	Required changes for areas of flooding may not be incorporated

**Action 2025-MiddlesexT-06. Climate Change Resource Coordination and Training**

<b>Action Name:</b>	Climate Change Resource Coordination and Training	
<b>Lead Agency:</b>	Town Board	
<b>Supporting Agencies:</b>	FEMA, NYS, County	
<b>Hazards of Concern:</b>	Dam Failure, Disease Outbreak, Drought, Extreme Temperatures, Flood, Harmful Algal Bloom, Hazardous Materials, Landslide, Severe Storm, Severe Winter Storm, Transportation Accidents, Utility Failure	
<b>Description of the Problem:</b>	The Town does not have access to updated information, resources, and training for climate change projections. Identifying how climate change may exacerbate all hazards (dam failure, disease outbreak, drought, extreme temperatures, flood, harmful algal bloom, hazardous materials, landslide, severe storm, severe winter storm, transportation accidents, utility failure) and their impacts is crucial in developing solutions or actions to mitigate the potential risks.	
<b>Description of the Solution:</b>	The Town will work with the County and academic organizations to determine potential impacts of climate change on future flooding conditions. Incorporate future projections into planning.	
<b>Estimated Cost:</b>	Low	
<b>Potential Funding Sources:</b>	Municipal Budget	
<b>Implementation Timeline:</b>	2 years	
<b>Goals Met:</b>	1, 2, 3, 4, 5	
<b>Benefits:</b>	Current resources and training for staff to be up to date on climate change impacts.	
<b>Impact on Socially Vulnerable Populations:</b>	This action will provide accurate resources to determine the best planning policies that will protect the lives of all community members within the Town.	
<b>Impact on Future Development:</b>	This action will help to provide better planning practices for future development.	
<b>Impact on Critical Facilities/Lifelines:</b>	This action will provide accurate resources and projections to determine how best to protect critical facilities from future flooding concerns.	
<b>Impact on Capabilities:</b>	This action will enhance the Towns capabilities for preparing for and responding to climate change impacts.	
<b>Climate Change Considerations:</b>	This action considers climate change impacts and projections by supplying the most updated information for planners and emergency managers.	
<b>Mitigation Category</b>	Education and Awareness Programs (EAP)	
<b>CRS Category</b>	Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Deny climate change	Problem persists.
	Rely only on only internal information	Lack of resources and collaboration.

**Action 2025-MiddlesexT-07. Flood Mitigation List Database**

<b>Action Name:</b>	Flood Mitigation List Database
<b>Lead Agency:</b>	Floodplain Administrator
<b>Supporting Agencies:</b>	Planning Board, Town Administration
<b>Hazards of Concern:</b>	Flood
<b>Description of the Problem:</b>	The Town does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Town in identifying and prioritizing properties to mitigate.
<b>Description of the Solution:</b>	The Town Floodplain Manager will work with the Town Planning Board to develop a list of properties which have been, or may have been, previously damaged by flooding. Additionally, the Town will also work to develop a list of residents who are interested in flood mitigation.
<b>Estimated Cost:</b>	Low
<b>Potential Funding Sources:</b>	Town budget, Staff time
<b>Implementation Timeline:</b>	Within 2 years
<b>Goals Met:</b>	1, 2, 3
<b>Benefits:</b>	The Town will have access to updated information properties previously damaged by flooding and those who are willing to mitigate against flooding. This will help the Town in providing resources to property owners and also applying for future funds to mitigate flooding.
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations, such as the elderly or disabled, are at a higher risk to flood impacts. Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Removing homes from the floodplain immediately removes the risk to life and property.
<b>Impact on Future Development:</b>	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.
<b>Impact on Critical Facilities/Lifelines:</b>	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.
<b>Impact on Capabilities:</b>	This action will create a new Township capability, while enhancing its current NFIP capabilities.
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Areas experiencing flooding conditions may increase. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.
<b>Mitigation Category</b>	Local Plans and Regulations (LPR)
<b>CRS Category</b>	Preventative Measures (PR)



Priority	High	
Alternatives	Action	Evaluation
	No action	Problem persists
	Only share opportunities when notified of grant funding	May not be enough time to garner interest or write application
	Wait for information from the State on flood-damaged properties	May be a delay in notice

**Action 2025-MiddlesexT-08. Substantial Damage Management Plan**

<b>Action Name:</b>	Substantial Damage Management Plan
<b>Lead Agency:</b>	Floodplain Administer
<b>Supporting Agencies:</b>	Public Works, OEM
<b>Hazards of Concern:</b>	Dam Failure, Flood, Hazardous Materials, Landslide, Severe Storm, Severe Winter Storm, Transportation Accidents
<b>Description of the Problem:</b>	<p>The Town does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations. Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"><li>• Determine where the damage occurred within the community and if the damaged structures are in an SFHA.</li><li>• Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.</li><li>• Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value.</li><li>• Require permits for floodplain development.</li></ul>
<b>Description of the Solution:</b>	<p>The Town will develop a Substantial Damage Management Plan, following the six step planning process in 2021 <i>Developing a Substantial Damage Management Plan</i> (<a href="https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf">https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf</a>). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
<b>Estimated Cost:</b>	Low
<b>Potential Funding Sources:</b>	Town budget
<b>Implementation Timeline:</b>	Within 5 years to develop the plan; ongoing to maintain and update the plan
<b>Goals Met:</b>	2
<b>Benefits:</b>	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.
<b>Impact on Socially Vulnerable Populations:</b>	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.
<b>Impact on Future Development:</b>	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.
<b>Impact on Critical Facilities/Lifelines:</b>	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.
<b>Impact on Capabilities:</b>	This action improves disaster recovery capabilities.



<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.	
<b>Mitigation Category</b>	Local Plans and Regulations (LPR)	
<b>CRS Category</b>	Emergency Services (ES), Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements

**Action 2025-MiddlesexT-09. Certified Floodplain Managers**

<b>Action Name:</b>	Certified Floodplain Managers
<b>Lead Agency:</b>	Floodplain Administrator
<b>Supporting Agencies:</b>	Code Enforcement, Town Board
<b>Hazards of Concern:</b>	Flood
<b>Description of the Problem:</b>	The Town does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.
<b>Description of the Solution:</b>	Where feasible, the Town will have Code staff attend trainings at FEMA's EMI in Emmitsburg Maryland for NFIP Basics and the Intermediate Floodplain management course (E0273). Where not feasible, officials will attend virtual trainings and review available resources from FEMA and ASFPM at the ASFPM ( <a href="https://www.floods.org/">https://www.floods.org/</a> ) website. These staff who attend trainings will work towards completing their floodplain management certification.
<b>Estimated Cost:</b>	Low
<b>Potential Funding Sources:</b>	Town Budget
<b>Implementation Timeline:</b>	Within 5 years
<b>Goals Met:</b>	1, 2
<b>Benefits:</b>	Providing an opportunity for Town staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.
<b>Impact on Socially Vulnerable Populations:</b>	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location.
<b>Impact on Future Development:</b>	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.
<b>Impact on Critical Facilities/Lifelines:</b>	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood.
<b>Impact on Capabilities:</b>	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.
<b>Climate Change Considerations:</b>	Climate change is likely to result in stronger and more frequent rainfall events that will contribute to increased flood risk. Officials that understand best practices in floodplain management have the opportunity to influence future development and prevent unsafe building in hazard areas.
<b>Mitigation Category</b>	Education and Awareness Programs (EAP)



CRS Category	Public Information (PI)	
Priority	High	
Alternatives	Action	Evaluation
	No action	Problem persists
	Hire outside contractors for floodplain administration	Costly
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role



**Action 2025-MiddlesexT-10. Agricultural Run-Off**

<b>Action Name:</b>	Agricultural Run-Off
<b>Lead Agency:</b>	Planning Board
<b>Supporting Agencies:</b>	Yates County Agricultural and Farmland Preservation Board, NYSDEC
<b>Hazards of Concern:</b>	Flood, Harmful Algal Bloom, Hazardous Materials, Landslide, Severe Storm, Severe Winter Storm
<b>Description of the Problem:</b>	There are steep slopes around the lakes within the Town which can contribute to lake pollution and runoff. There is a lot of fertilizer runoff from agriculture which impacts the Town's lakes. Excess nitrogen, which is commonly found in agricultural run-off, can exacerbate the occurrence of harmful algal blooms, disrupting the natural environment and water source. Agricultural runoff may occur during heavy rains associated with severe storms or from snow melt from a severe winter storm event. Flood waters may carry excess nutrients from agricultural lands into waterbodies. Oversaturated soils on steep slopes may result in landslide occurrences, which would also carry excess nutrients into waterbodies.
<b>Description of the Solution:</b>	The Town Planning Board will work with the Yates County Agricultural and Farmland Preservation Board and NYSDEC to identify potential regulatory or planning methods which could be utilized to restrict the use of nitrate-based fertilizer, reduce the steepness of slopes near lakes, and/or clean the lakes of excess nitrates.
<b>Estimated Cost:</b>	Medium
<b>Potential Funding Sources:</b>	Municipal Budget, USGS National Water Quality Program (NWQP), WQIP, NPG
<b>Implementation Timeline:</b>	5 years
<b>Goals Met:</b>	1, 2, 3
<b>Benefits:</b>	This action seeks to reduce the occurrence of harmful algal blooms and remove excess nitrate from lakes in the Town. Agricultural run-off from severe storms, severe winter storms, floods, and landslides move the harmful nitrates into the ground and toward the lakes, where it becomes absorbed. The action will also create a cleaner environment near the Town's lakes, keeping harmful chemicals out of water sources.
<b>Impact on Socially Vulnerable Populations:</b>	This action will assist in providing a clean environment for all populations to use. Furthermore, this action may protect water sources from potentially harmful chemicals.
<b>Impact on Future Development:</b>	This action may lead to regulations which restrict future development within a specified number of feet from waterbodies to prevent run-off from reaching it. This action may also secure safe water sources from harmful chemicals.
<b>Impact on Critical Facilities/Lifelines:</b>	This action will protect the water systems lifeline by seeking to protect water sources from potentially harmful chemicals, which may also introduce harmful algal blooms into the bodies of water.
<b>Impact on Capabilities:</b>	This action will enhance existing regulatory capabilities, and potentially create new regulatory and planning capabilities relating to agricultural impacts on the environment.



<b>Climate Change Considerations:</b>	Climate change projections anticipate an increase in intensity and frequency of heavy rains and severe weather, leading to an increased occurrence of flood events. This excess water has the potential to push agricultural run-off toward lakes and other waterbodies, exacerbating the frequency of harmful algal bloom events.	
<b>Mitigation Category</b>	Local Plans and Regulations (LPR)	
<b>CRS Category</b>	Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Route run-off to drainage basins	Chemicals from run-off may still trickle into groundwater and into water sources
	Stop all agricultural practices	Impractical, would impact jobs and careers in the Town



### Action 2025-MiddlesexT-11. Culvert Management Plan

<b>Action Name:</b>	Culvert Management Plan	
<b>Lead Agency:</b>	Engineer	
<b>Supporting Agencies:</b>	Highway Department	
<b>Hazards of Concern:</b>	Flood, Severe Storm	
<b>Description of the Problem:</b>	Flooding and high winds from severe storms severely impacts the following roads in the Town: Main St., William St., Water St., Lincoln Ave., Basset Rd., Bagley Rd., South Vine Valley, North Vine Valley, Spike Hill, Hadsell Rd, Mertz Rd, and Townline Rd. It is assumed that some culverts may be undersized and contribute to flooding.	
<b>Description of the Solution:</b>	The Town Engineer will complete an engineering survey of culverts on Main St., William St., Water St., Lincoln Ave., Basset Rd., Bagley Rd., South Vine Valley, North Vine Valley, Spike Hill, Hadsell Rd, Mertz Rd, and Townline Rd. that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for those culverts noted to be undersized.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	HMGP, BRIC, Town budget	
<b>Implementation Timeline:</b>	Within 4 years	
<b>Goals Met:</b>	1, 2, 3, 4	
<b>Benefits:</b>	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
<b>Impact on Socially Vulnerable Populations:</b>	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events. Socially vulnerable populations, such as the elderly or disabled, who reside or utilize these roadways will be protected during a severe storm or flood event.	
<b>Impact on Future Development:</b>	Future development in the impacted area will be less likely to be flooded.	
<b>Impact on Critical Facilities/Lifelines:</b>	Evacuation and transportation routes are more likely to remain open during a severe storm or flood event.	
<b>Impact on Capabilities:</b>	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
<b>Climate Change Considerations:</b>	Climate change is likely to result in more frequent and severe rainfall events. This action upsizes culvert sizes to meet changing stormwater needs as the result of climate change.	
<b>Mitigation Category</b>	Structure and Infrastructure Project (SIP)	
<b>CRS Category</b>	Structural Flood Control Projects (SP)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>



	No action	Problem persists
	Remove roadway	Roadway cannot be removed
	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

**Action 2025-MiddlesexT-12. Feasibility Study on Potter Road**

<b>Action Name:</b>	Feasibility Study on Potter Road	
<b>Lead Agency:</b>	Engineer	
<b>Supporting Agencies:</b>	Highway Department	
<b>Hazards of Concern:</b>	Severe Winter Storm, Transportation Accidents	
<b>Description of the Problem:</b>	Potter Road experiences very poor road conditions in the winter seasons from severe winter storms, including an increased number of potholes and lines of separation in the asphalt; slippery and icy conditions due to shading from trees; and being a regularly trafficked road makes the number of vehicles and persons on the road at an increased risk of injury from transportation accidents.	
<b>Description of the Solution:</b>	The Town Engineer will conduct a feasibility study to determine the most feasible and effective mitigation measures to ensure the safety of residents utilizing Potter Road during winter storms. Once the most feasible option is identified, the Town DPW will implement this action to mitigate against winter storm impacts to Potter Road.	
<b>Estimated Cost:</b>	Medium	
<b>Potential Funding Sources:</b>	Town budget, staff time	
<b>Implementation Timeline:</b>	3 years	
<b>Goals Met:</b>	1, 2	
<b>Benefits:</b>	Potter Road will be safely accessible during a severe winter storm event.	
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations such as the elderly or disabled will be protected against severe winter storm impacts when utilizing Potter Road.	
<b>Impact on Future Development:</b>	Future development along or near Potter Road will be supported by this action.	
<b>Impact on Critical Facilities/Lifelines:</b>	Potter Road is a critical lifeline for residents to evacuate during a hazard event. This action will ensure standards of operation are upheld during a severe winter storm event.	
<b>Impact on Capabilities:</b>	This action will ensure EMS and first responders have safe access to respond to residents needs during a severe winter storm by ensuring Potter Road is safely accessible.	
<b>Climate Change Considerations:</b>	Climate change will increase the severity and frequency of natural hazard events such as winter storm events. This action will protect Potter Road from future winter storm impacts.	
<b>Mitigation Category</b>	Structure and Infrastructure Project (SIP)	
<b>CRS Category</b>	Preventative Measures (PR)	
<b>Priority</b>	High	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	No action	Problem persists
	Remove roadway	Not feasible, loss of service for residents.



	Build a second roadway	Very costly and the new roadway may be impacted by the same storm and conditions as Potter Road.
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**Action 2025-MiddlesexT-13. Integration of Mitigation Principles**

<b>Action Name:</b>	Integration of Mitigation Principles
<b>Lead Agency:</b>	Code Enforcement Office
<b>Supporting Agencies:</b>	Town Board
<b>Hazards of Concern:</b>	Dam Failure, Disease Outbreak, Drought, Extreme Temperatures, Flood, Harmful Algal Bloom, Hazardous Materials, Landslide, Severe Storm, Severe Winter Storm, Transportation Accidents, Utility Failure
<b>Description of the Problem:</b>	Integration of hazard mitigation principles into the regulatory and planning capabilities in the Town is often a separate effort from many other types of planning within the Town. Disregarding mitigation considerations may cause gaps in the ability to fully prepare for hazard events. All hazards of concern should be addressed and integrated, where appropriate, into Town capabilities.
<b>Description of the Solution:</b>	During future updates of the Master Plan, Floodplain Management Plan, or Stormwater Management Plan, work with Town agencies to integrate hazard mitigation principles and recommendations into the plans. Additionally, the Town will use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community. The Town will also use available tools and resources from FEMA and other sources to integrate climate adaptation planning such as FEMA's "Climate Adaptation Planning: Guidance for Emergency Managers" document.
<b>Estimated Cost:</b>	Low
<b>Potential Funding Sources:</b>	Municipal Budget
<b>Implementation Timeline:</b>	3 years then ongoing
<b>Goals Met:</b>	1, 2, 3, 4, 5
<b>Benefits:</b>	This action provides an opportunity for coordination amongst agencies and their planning efforts to improve the overall ability to prepare for, respond to, and recover from events. Furthermore, mitigation considerations being taken when developing or updating building and zoning codes can lessen the risk of damage from a hazard event and increase overall community resiliency.
<b>Impact on Socially Vulnerable Populations:</b>	Communities that collaborate and coordinate their planning efforts are more likely to have identified ways to best work with vulnerable populations to increase their level of preparedness.
<b>Impact on Future Development:</b>	This action will result in coordinated planning efforts to provide an opportunity for efficient and safe growth and development. Furthermore, updated building and zoning codes ensure that any new development that does take place is built to the safest standards based upon the best available data.
<b>Impact on Critical Facilities/Lifelines:</b>	Integrating mitigation into building and zoning protects existing infrastructure and guides the safe development of new construction.
<b>Impact on Capabilities:</b>	A consolidated planning process brings together the capabilities of agencies and departments and better identifies what resources are available at any given point in time and where they are needed most.



<b>Climate Change Considerations:</b>	As the climate changes, planning processes will require a more intense focus on plan maintenance and gathering of the best data to remain current and accurate over time. The Town will use available tools and resources from FEMA and other sources to integrate climate adaptation planning such as FEMA's "Climate Adaptation Planning: Guidance for Emergency Managers" document.	
<b>Mitigation Category</b>	Local Plans and Regulations (LPR)	
<b>CRS Category</b>	Preventative Measures (PR)	
<b>Priority</b>	Medium	
<b>Alternatives</b>	<b>Action</b>	<b>Evaluation</b>
	Do nothing.	Problem persists.
	Update only regulatory capabilities	Will not be consistent with Town planning capabilities
	Update only planning capabilities	Will not be consistent with Town regulatory capabilities