



## 9.12 TOWN OF MILAN

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

### 9.12.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Roberta Egan, Deputy Supervisor Wilcox Memorial Town Hall 20 Wilcox Circle, Milan, NY 12571 (845) 758-5133 began.milan@gmail.com	William F. Gallagher, Town Supervisor Wilcox Memorial Town Hall 20 Wilcox Circle, Milan, NY 12571 (845) 758-5133 supervisor@milan-ny.gov

### 9.12.2 Municipal Profile

The Town of Milan is located in the northern section of Dutchess County and borders Columbia County which lies directly to the north. Milan has a total area of 36.3 square miles and is bordered by the Villages of Red Hook and Rhinebeck, and the Towns of Clinton, Stanford, and Pine Plains. There are two major roadways through the Town; the Taconic State Parkway which stretches north to south in the eastern portion of the Town, and New York State Route 199 which runs east to west through the Town. The Town contains several small hamlets including Lafayetteville and Rock City.

The Town was originally part of the Little Nine Partners Patent, a land grant between the State of New York and local Native Americans. Much like the rest of Dutchess County, the Town was settled in the early 1700s (1706) but wasn’t formally incorporated as the Town of Milan by the State until 1818. The Town of Milan is extremely rural and contains mostly wooded land, some agriculture, and a few stores and single family residences. The Town contains a population of 2,370 people and 1,270 housing units according to the 2010 Census, making it one of the least populated municipalities in Dutchess County. The Town lacks a formal downtown or any sort of commercial district or concentration of development. The Town’s critical assets include the Town Hall and three fire stations.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in Section 9.8.8 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.12-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
<b>Recent Development from 2010 to present</b>					
Pasture Rock	Res.	11 lots	Rocky’s Way, Woody Row	None	3 lots developed
Chestnut Mart of Milan	Comm.	1	Route 199 6570-00-536267	No	Gas station and convenience store completed. Lease space vacant.
<b>Known or Anticipated Development in the Next Five (5) Years</b>					





Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Durst Development	Res., Comm.	Unknown	Towns of Milan and Pine Plains	Unknown	On Hold
Verizon Cell Tower	Comm.	2	Academy Hill Road 6572-00-862990	None	Cell Tower and Equipment Shed. Awaiting map sign-off after completion of conditions.

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

### 9.12.3 Natural Hazard Event History Specific to the Municipality

Dutchess County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this Plan, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.12-2. Hazard Event History**

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
December 26-27, 2010	Severe Winter Storm and Snowstorm/ Nor'Easter	DR-1957	Yes	The Town dedicated 146 labor hours to clear roadways to provide access for emergency vehicles. 101 tons of salt and 22 cubic yards of sand were also used to make roadways passable. Reimbursable expenses totaled over \$17,500.
August 26-September 5, 2011	Hurricane Irene	DR-4020	Yes	Excessive runoff damaged multiple roads, shoulders, and culverts. Repairs cost over \$179,000. 5.6 tons of vegetative debris were disposed of, costing over \$2,600.00. Multiple roads were closed. Basements were flooded.

### 9.12.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Town of Milan. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Town of Milan.

**Table 9.12-3. Hazard Risk/Vulnerability Risk Ranking**

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Coastal Storm	100-year MRP: \$658,137.00 500-year MRP: 3564436	Frequent	48	High





Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
	Annualized: \$39,656.00			
Drought	Damage estimate not available	Frequent	42	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$188,138 2,500-Year GBS: \$2,128,185	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	21	Medium
Flood	1% Annual Chance: \$2,591,999	Frequent	36	High
Severe Storm	100-Year MRP: \$658,137 500-year MRP: \$3,564,436 Annualized: \$39,656	Frequent	48	High
Winter Storm	1% GBS: \$7,911,421 5% GBS: \$39,557,104	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$1,093,298,635	Frequent	42	High

Notes:

GBS = General building stock; MRP = Mean return period.

- a. The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- b. High = Total hazard priority risk ranking score of 31 and above  
Medium = Total hazard priority risk ranking of 20-30+  
Low = Total hazard risk ranking below 20
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 2.2 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the wildfire hazard, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Milan.

Table 9.12-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Town of Milan	13	3	\$15,888.73	1	0	2

Source: FEMA Region 2, 2014

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 12/31/2014. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 12/31/14.
- (2) Total building and content losses from the claims file provided by FEMA Region 2.
- (3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.  
A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.  
Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude

### Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.





**Table 9.12-5. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent <sup>(1)</sup>
No critical facilities are located in the FEMA 1% and 0.2% Flood Hazard Area						

Source: Dutchess County, NYGIS

Note (1): HAZUS-MH 2.2 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

Note (2): In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type. Further, HAZUS-MH may estimate potential damage to a facility that is outside the DFIRM because the model generated a depth grid beyond the DFIRM boundaries.

X Facility located within the DFIRM boundary

- Not calculated by HAZUS-MH 2.2

**Other Vulnerabilities Identified**

The municipality has identified the following vulnerabilities within their community:

- Knob Hill Road is vulnerable to flooding.

**9.12.5 Capability Assessment**

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

**Planning and Regulatory Capability**

The table below summarizes the regulatory tools that are available to the Town of Milan.

**Table 9.12-6. Planning and Regulatory Tools**

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
<b>Planning Capability</b>				
Master Plan	Yes – 2007	Local	Town Board	
Capital Improvements Plan	No			
Floodplain Management / Basin Plan	Yes	Federal		
Stormwater Management Plan	No			Stormwater management is included as part of zoning and subdivision requirements
Open Space Plan	No			Open space is address in the Master





Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
				Plan
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No	State	DEC	
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local	Town Board	
Emergency Response Plan	No			
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:				
<b>Regulatory Capability</b>				
Building Code	Yes	State and Local		NYS Building Code Local Chapter 121
Zoning Ordinance	Yes – 1975	Local	Town Board	Chapter 200
Subdivision Ordinance	Yes – 1976	Local	Town Board	Chapter 177
NFIP Flood Damage Prevention Ordinance	Yes	Local		Chapter 127
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local		State mandated BFE+2 for single and two-family residential construction; BFE+1 for all other construction types.
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes – 1975	Local	Planning Board	Chapter 200 Article IX
Stormwater Management Ordinance	No			
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code – Article 14 Sect. 460-467
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	No			

**Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the Town of Milan.

**Table 9.12-7. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
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Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning/Zoning Secretary
Mitigation Planning Committee	Yes	Town Councilman
Environmental Board/Commission	No	
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Dept. of State Code Division
<b>Technical/Staffing Capability</b>		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Consultant
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Consultant
Planners or engineers with an understanding of natural hazards	Yes	Consultant
NFIP Floodplain Administrator	Yes	Building Inspector
Surveyor(s)	Yes	Consultant
Personnel skilled or trained in GIS and/or HAZUS-MH applications	Yes	Building Inspector
Scientist familiar with natural hazards	Yes	Consultant
Emergency Manager	Yes	Town Supervisor
Grant Writer(s)	Yes	Town Councilman
Staff with expertise or training in benefit/cost analysis	No	
Professionals trained in conducting damage assessments	Yes	Building Inspector

### Fiscal Capability

The table below summarizes financial resources available to the Town of Milan.

**Table 9.12-8. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact Fees for homebuyers or developers of new development/homes	Yes
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	N/A
Withhold public expenditures in hazard-prone areas	Unknown
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	



### Community Classifications

The table below summarizes classifications for community program available to the Town of Milan.

**Table 9.12-9. Community Classifications**

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No		
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	9	
Storm Ready	No		
Firewise	No		
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	No		
Public-Private Partnerships	No		

*N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.*

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

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

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

**Table 9.12-10. Self-Assessment Capability for the Municipality**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High





Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and Regulatory Capability	Limited staff		
Administrative and Technical Capability	Limited staff		
Fiscal Capability	Limited staff		
Community Political Capability	Unknown		
Community Resiliency Capability			X
Capability to Integrate Mitigation into Municipal Processes and Activities.	Limited Staff		

### National Flood Insurance Program

#### NFIP Floodplain Administrator (FPA)

The Town’s FPA is Steve Cole, who also serves as the Town’s Building Inspector/Zoning Enforcement Officer.

#### Flood Vulnerability Summary

The Town of Milan suffered substantial damages to one residential structure during Hurricane Irene. The Town has no long-term records of which properties have suffered flood damages. NFIP loss statistics as of March 31, 2015 show only 6 loss payments, for a total of just under \$16,000, since 1978.

#### Resources

Floodplain management is the responsibility of the Town’s FPA. While other Town officials assist in floodplain management, the FPA has not dedicated staff for floodplain management. The Town does not provide flood-specific education and outreach to the community.

#### Compliance History

The Town of Milan is in good standing with the NFIP, but there has not been a Community Assistance Visit (CAV) conducted in the Town.

#### Regulatory

The Town’s flood damage prevention ordinance is included in the Town Code as Chapter 127. It regulates development in the floodplain in accordance with the requirements of the NFIP and NYS. Floodplain management is supported by other programs, including the Town’s planning and zoning requirements.

#### Community Rating System

The Town of Milan does not participate in the Community Rating System (CRS) program.

#### Other Capabilities Identified

Previous actions that are now on-going programs and capabilities are described below. Refer to Table 9.12-11 presented later in this annex.

- The Town’s Flood Damage Prevention Ordinance, Chapter 127 of the Town Code, was updated on April 14, 2012. The Town reviews and updates this ordinance when new Flood Insurance Studies and FIRMs are released by FEMA.



## Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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

### Planning

**Land Use Planning:** The Town has a Planning Board and Zoning Board of Appeals which review all applications for development and consider natural hazard risk areas in their review. Many development activities require additional levels of environmental review, specifically NYS SEQR and Federal NEPA requirements.

**Conservation Planning:** The Town does have a Conservation Advisory Committee, however it is currently not active.

### Regulatory and Enforcement (Ordinances)

**Flood Damage Prevention Chapter 127:** It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damages;
- E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands; and
- F. Qualify for and maintain participation in the National Flood Insurance Program.

**Zoning Code Chapter 200:** Milan's zoning code includes districts and standards pertaining to the mitigation of hazards. These sections include the Floodplain regulations, stormwater management & erosion control standards.

**Site Plan/Subdivision Review Chapter 177:** The Town's Planning Board is tasked with site plan/subdivision review. The Planning board pays special attention to ensure that developments mitigate the issues associated with flooding or steep slopes.

**Building Code Chapter 121:** The building codes are strictly enforced to make new and renovated buildings as prepared as possible for hazard related incidents. The chapter includes a provision to allow the building inspector to make emergency repairs to protect the health safety and welfare of the residents.

### Funding

**Operating Budget:** The Town's operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.



### **Education and Outreach**

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The Town does have a link to the “Rebuilding Together, Dutchess County web page which includes information on rebuilding of homes for vulnerable populations in the community. The Planning Department is a member of the Dutchess County Planning Federation and attends trainings and researches best practices that other communities are implementing. DPW takes classes and implements in hazardous reduction techniques in various capital improvements. The Town has planned to budget for training for personal including professional development geared towards health and safety.

### **9.12.6 Mitigation Strategy and Prioritization**

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

#### **Past Mitigation Initiative Status**

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The following table indicates progress on the community’s mitigation strategy identified in the 2010 Plan. Actions that are carried forward as part of this Plan are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



**Table 9.12-11. Past Mitigation Initiative Status**

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Draught Management ordinance to address short and long-term draught events including approx. 3,500 of existing crop and pasturelands.	Town Board Planning/Zoning Boards, Town Supervisor	No progress	Lack of Funds/Personnel	Discontinue	Discontinue due to lack of funds and personnel due to tax cap. We do not believe that will be changing any time soon.
Update Chapter 121 of Milan Town Code to include defensible space mitigation in wildfire risk areas -10,281 acres have been identified as "at risk improved property" in the DC AHMP wildfire profile for Milan or a 28.67D urban- wildfire interface miles.	Town Board Planning/Zoning Boards, Town Supervisor	No progress	Lack of Funds/Personnel	Discontinue	Due to lack of funds and personnel due to tax cap. We do not believe that will be changing any time soon.
Culvert and drainage upgrades and replacements on flood prone roads and [to improve] stormwater management. Specifically, improvements are needed on Salisbury Turnpike, Knob Hill Rd., Fitzsimmons Rd. and Torre Rock Road.	Town Supervisor, Town Board, Highway Superintendent	In progress	Salisbury Turnpike: in progress. 12.5% complete. Replaced one driveway culvert near Cases Corner Road. Progress limited by lack of funds and personnel. Funded by local and FEMA funds.  Knob Hill Road: complete. Replaced one pipe near Route 199. Funded by local and FEMA funds.  Fitzsimmons Road: complete. Replaced two culverts between Turkey Hill Road and Torre Rock Road. Funded by local funds.  Torre Rock Road: no progress. Progress limited by lack of funds and personnel.	Include in 2015 HMP	Include in 2015 HMP with updated wording to reflect completed actions.  Progress limited by lack of funds and personnel.
Update Town Code Chapter 127 (Flood Damage Prevention) ordinance-adopted in 1987	Town Board Planning/Zoning Boards	Complete	Local Law #1 of 2012 was passed on April 14, 2012 by the Town Board.	Discontinue	



2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Information on precautions during ice storms developed and disseminated to all Milan households in print and posted to Town of Milan website	Town Board	In progress	Complete	Discontinue	
Public awareness program on Hazards, Prevention, and Mitigation: Assist CPG Chairperson in maintenance of mitigation planning web presence: assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG Chairperson in preparation of hazards survey; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/TV announcements, etc. at the discretion of the jurisdiction (incorporating as much free information as possible from the FEMA Publications Warehouse and other appropriate sources).					
See above.	Town Board	No progress	Lack of funds/personnel	Discontinue	Lack of funds/personnel due to 2% cap
Code update: Review existing local codes and ordinances against the identified hazards to determine whether there need to be any amendments to address identified hazards and, where a need is identified, modify/amend the codes/ ordinances as applicable.	Town Board	No progress	Lack of funds/personnel	Discontinue	Lack of funds/personnel Due to 2% cap – we do not anticipate this changing any time soon
Code enforcement: Enforcement of NYS and Local Building Codes with Continual CEO training.	CEO	Complete	Required training 100% complete	Discontinue	Discontinue – Training requirement met 100% every year
Increase the size of drainage structures and stabilize to reduce erosion	Highway Department, Highway Superintendent	No Progress	Progress limited by lack of funds and personnel.	Include in 2015 HMP	Need to survey and identify specific areas in need of improvements, in order to be able to track progress once corrective action begins.
Increase the size of clear zones along town roads to reduce vulnerability to winter storms and extreme winds.	Highway Department, Highway Superintendent	No Progress	Progress limited by lack of funds and personnel.	Include in 2015 HMP	Need to survey and identify specific areas in need of improvements, in order to be able to track progress once corrective action begins.



2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2015 HMP? or Discontinue)	Describe Next Step
Create a plan to address privately owned dams.	Building Department, ZEO	No Progress	Lack of funding/personnel	Discontinue	Lack of funding/personnel Due to 2% cap
Create a plan to address privately owned lands prone to wildfires.	Building Department, ZEO	No Progress	Lack of funding/personnel	Discontinue	Lack of funding/personnel
Create a plan to reduce risks and protect property from ice jams, lightning, and drought.	Building Department, ZEO	No Progress	Lack of funding/personnel	Discontinue	Lack of funding/personnel
Create a plan to identify or create shelters.	Building Department, ZEO	Complete	The American Red Cross approved the Town Hall to be used as a shelter – 100%	Discontinue	Town Hall has been approved by the Red Cross to be used as a shelter
Create a plan to develop, store, and disseminate information regarding hazards.	Town Board, Supervisor	Complete	Disaster Preparedness Plan 100% complete and filed	Discontinue	100% complete
Update/revise floodplain management ordinances to be consistent with new DFIRMs.	Town Board	Complete	100% complete – Local Law #1 of 2012 was passed and filed	Discontinue	100% complete
Join the Community Rating System (CRS).	Town Board	No Progress	No progress – lack of funds/personnel	Discontinue	Lack of funds/personnel



### **Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy**

The Town of Milan has identified no mitigation projects/activities that have been completed but were not identified in the previous mitigation strategy.

### **Proposed Hazard Mitigation Initiatives for the Plan**

The Town of Milan participated in a mitigation action workshop in May 2015 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013). The Town of Milan was provided the results to the risk assessment to further assist with the identification of mitigation actions.

Table 9.12-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Milan would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this Plan. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.12-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan.



**Table 9.12-12. Proposed Hazard Mitigation Initiatives**

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category	
TM-1	Culvert and drainage upgrades and replacements on flood prone roads and to improve stormwater management. Specifically, improvements are needed on Salisbury Turnpike and Torre Rock Road.	See Action Worksheets									High	SIP	PP; SP
TM-2	Increase the size of drainage structures and stabilize to reduce erosion	Existing	Flooding; severe storms	2, 4	Highway Department, Highway Supt.	High	High	Town budget; PDM; HMGP	5 yrs.	High	SIP; PP	PP; SP	
TM-3	Increase the size of clear zones along town roads to reduce vulnerability to winter storms and extreme winds.	New and existing	Winter storm; severe storm	1, 2	Highway Department, Highway Supt.	Medium	Low	Town Budget	1-2 yrs.	Medium	LPR	PR	
TM-4	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 – 1 currently) and Severe Repetitive Loss (SRL – none currently), such as acquisition/relocation or elevation depending on feasibility. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". The parameters for this initiative would be: funding, benefits versus cost and willing participation of property owners. Specifically identified are properties in the following locations:												
	See above.	Existing	Flooding, Severe Storm	2, 3	Municipal NFIP FPA; support from NYS DHSES and FEMA	High - Reduced or eliminated risk to property damage from flooding	High	FEMA or other mitigation grant funding, NFIP flood insurance and ICC; property owner for local match.	Long-term DOF	High	SIP, EAP	PP, PI	

**Notes:**

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

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

Acronyms and Abbreviations:

CAV Community Assistance Visit  
 CRS Community Rating System  
 DPW Department of Public Works  
 FEMA Federal Emergency Management Agency

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program  
 HMGP Hazard Mitigation Grant Program  
 PDM Pre-Disaster Mitigation Grant Program  
 RFC Repetitive Flood Claims Grant Program (discontinued)

Timeline:

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





Acronyms and Abbreviations:

FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

SRL	Severe Repetitive Loss Grant Program (discontinued)
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Timeline:

Costs:

Where actual project costs have been reasonably estimated:

Low	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where actual project costs cannot reasonably be established at this time:

Low	Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium	Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High	Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low=	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low	Long-term benefits of the project are difficult to quantify in the short term.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High	Project will have an immediate impact on the reduction of risk exposure to life and property.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

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





Table 9.12-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
TM-1	Culvert and drainage upgrades and replacements on flood prone roads and to improve stormwater management. Specifically, improvements are needed on Salisbury Turnpike and Torre Rock Road.	See Action Worksheets															
TM-2	Increase the size of drainage structures and stabilize to reduce erosion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
TM-3	Increase the size of clear zones along town roads to reduce vulnerability to winter storms and extreme winds.	1	1	1	1	1	-1	1	1	-1	-1	1	-1	1	1	6	Medium
TM-4	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 – 1 currently) and Severe Repetitive Loss (SRL – none currently), 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. Specifically identified are properties in the following locations: <ul style="list-style-type: none"> <li>Residential property on Becker Hill Road</li> </ul>																
	See Above	1	1	1	1	1	1	1	0	0	0	0	1	1	1	10	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



### **9.12.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

### **9.12.8 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Town of Milan that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Milan has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

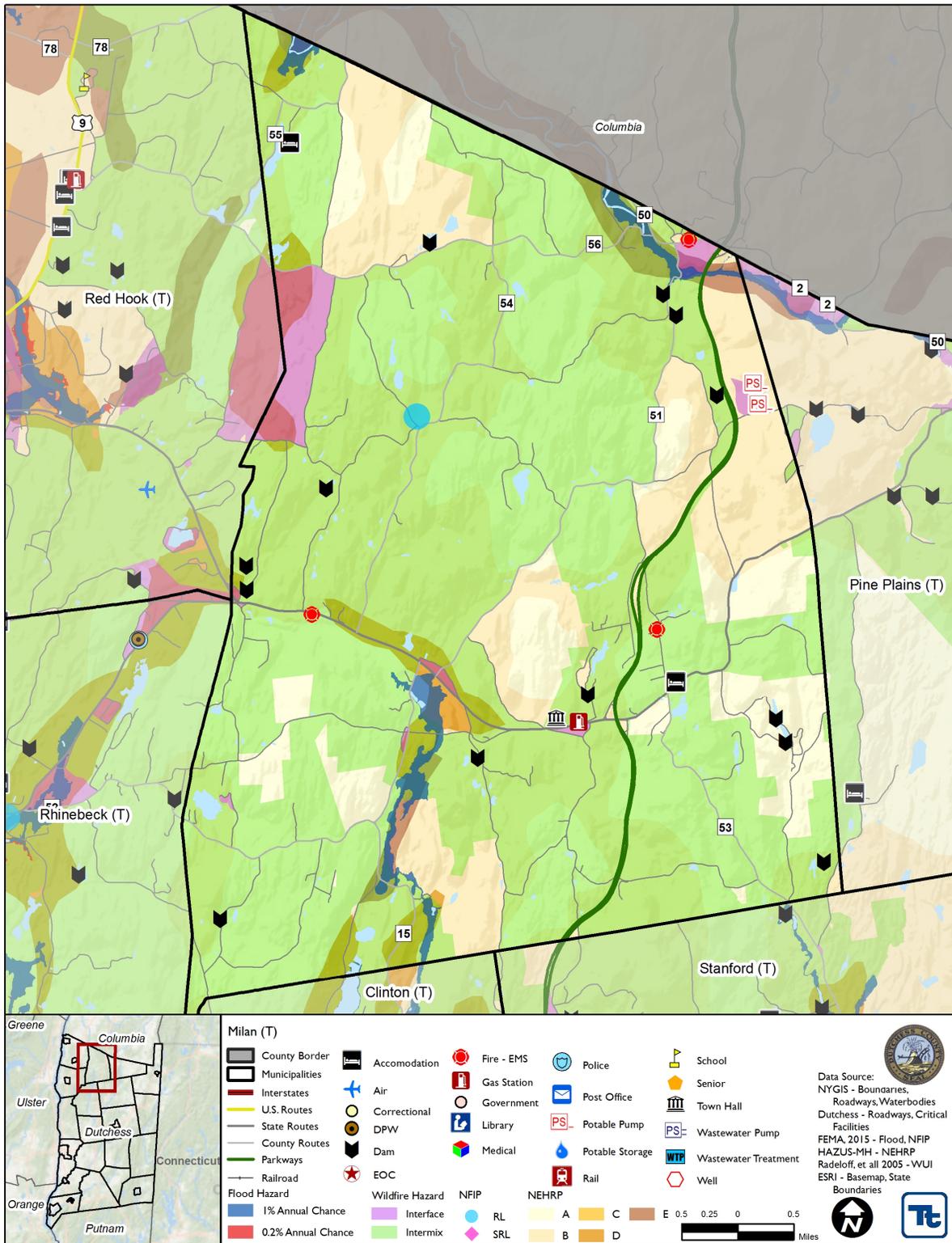
### **9.12.9 Additional Comments**

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None at this time.



Figure 9.12-1. Town of Milan Hazard Area Extent and Location Map





**Action Number:** TM-1  
**Mitigation Action Name:** Culvert and drainage upgrades and replacements – Salisbury Turnpike

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Flooding of the Salisbury Turnpike, which limits the ability vehicles, including emergency responders, to reach their destinations.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. Do nothing (does not solve the flooding problem on the roadway)</li> <li>2. Close the roadway (limits the ability of emergency response vehicles and regular traffic to reach their destinations)</li> <li>3. Upgrade the roadway's stormwater infrastructure.</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Replace a 30"x40' pipe with a 36"x40' CMP; replace three 24"x20' driveway pipes with 36"x30' CMP; replace a 24"x40' pipe with a 36"x40' CMP; replace a 24"x40' pipe with a 36"x40' CMP; replace a 18"x40' pipe with a 24"x40' CPP (HPDE); replace asphalt
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	2
<b>Applies to existing and or new development, or not applicable</b>	New and existing
<b>Benefits (losses avoided)</b>	Lessen costly damage repairs and frequency of flooded roadway; maximize ability of emergency responders to operate during a flood event
<b>Estimated Cost</b>	\$20,514.73
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Highway Department
<b>Local Planning Mechanism</b>	
<b>Potential Funding Sources</b>	Town Budget; PDM; HMGP; FMA
<b>Timeline for Completion</b>	3-5 years
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:



Action Number:

TM-1

Mitigation Action Name:

Culvert and drainage upgrades and replacements – Salisbury Turnpike

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	-1	
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	<b>6</b>	
<b>Priority</b>	<b>High</b>	



**Action Number:** TM-1  
**Mitigation Action Name:** Culvert and drainage upgrades and replacements – Torre Rock Road

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Flooding of Torre Rock Road, which limits the ability vehicles, including emergency responders, to reach their destinations.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. Do nothing (does not solve the flooding problem on the roadway)</li> <li>2. Close the roadway (limits the ability of emergency response vehicles and regular traffic to reach their destinations)</li> <li>3. Replace the existing arched CMP with a larger one</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Replace a 5’x3’x40’ arched CMP with a 9’x6’x60’ arched CMP
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	2
<b>Applies to existing and or new development, or not applicable</b>	New and existing
<b>Benefits (losses avoided)</b>	Lessen costly damage repairs and frequency of flooded roadway; maximize ability of emergency responders to operate during a flood event
<b>Estimated Cost</b>	\$23,425.10
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Highway Department
<b>Local Planning Mechanism</b>	
<b>Potential Funding Sources</b>	Town Budget; PDM; HMGP; FMA
<b>Timeline for Completion</b>	3-5 years
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:



Action Number:

TM-1

Mitigation Action Name:

Culvert and drainage upgrades and replacements – Torre Rock Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	-1	
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	6	
<b>Priority</b>	High	