9.4 TOWN OF CHERRY VALLEY

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

9.4.1 Hazard Mitigation Planning Team

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

Primary Point of Contact	Alternate Point of Contact
Name: Tony Miles Title: Highway Supervisor Phone Number: 607-264-8491 Address: 2 Genesee Street, Cherry Valley, NY 13320	Information unavailable at the time of the plan update.
Floodplain Administrator	
Name: Tony Miles Title: Highway Supervisor Phone Number: 607-264-8491 Address: 2 Genesee Street, Cherry Valley, NY 13320	

9.4.2 Municipal Profile

The Town of Cherry Valley lies along the northern border of Otsego County in central New York State. The Town of Cherry Valley borders Schoharie County to the east, Montgomery County to the north, the Town of Springfield (Section 9.31) to the west, the Town of Middlefield (Section 9.15) to the southwest, and the Town of Roseboom (Section 9.30) to the south (Town of Cherry Valley 2007). The Village of Cherry Valley is located on NY-166 and Cherry Valley Creek. Section 9.5 (Village of Cherry Valley) provides the village's individual annex. There are several communities located within the town: Center Valley (hamlet) and Salt Springville (hamlet).

The main routes to Cherry Valley are State Route 20, in the northern portion of the town, which was once the major highway across upstate New York, and State Route 166, which travels south from Rt. 20 through the Village of Cherry Valley (Section 9.5) to the Village of Milford (Section 9.16). The Town of Cherry Valley has a total area of 40.1 square miles. The Cherry Valley Creek, flowing southward through the center of the town, is the northern most tributary of the Susquehanna River.

The estimated 2016 population was 1,292 persons, a 5.6 percent increase in population from 2010 (1,223 persons). Data from the 2016 U.S. Census American Community Survey indicate that 5.9 percent of the town population is 5 years of age or younger and 17.8 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

History and Cultural Resources

The Town of Cherry Valley was settled in the mid-18th Century by Scotch-Irish settlers. The rich natural landscape grew was a considerable attraction to settlers before and after the American Revolution. The Town

of Cherry Valley was incorporated in 1791 from the Town of Canajoharie in Montgomery County. It was later divided to give rise to Middlefield, Springfield, and Worcester in 1797 and Roseboom in 1854. The Tepee, which is a roadside attraction, was listed on the National Register of Historic Places in 2011.

Cherry Valley is a unique community and is treasured for its historical, cultural and scenic qualities. Its uncluttered landscape consists of a blend of forested mountains, agricultural valleys and upland areas along with numerous areas of abandoned farm fields, which have reverted to an attractive mix of wild flowers and other herbaceous plants (Town of Cherry Valley 2007). The natural landscape serves as a major draw for tourism in the area being in close proximity to the Adirondack and Catskill mountains.

Growth/Development Trends

Table 9.4-1 summarizes major residential/commercial development that as of 2013 and any known or anticipated major residential/commercial development and major infrastructure development that is likely to be occur within the municipality in the next five years. The map in 9.4.8 of this annex illustrates the hazard areas, along with the location of potential new development.

Table 9.4-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to present					
None.					
Known or Anticipated Development in the Next Five (5) Years					
Senior Housing	Res.	8-12 Units	58.00-1-4.41	Floodplain	Planning underway

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

9.4.3 Hazard Event History Specific to the Town of Cherry Valley

Otsego County has a history of natural events as detailed in Volume I, Section 5.0 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities. The Town of Cherry Valley's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Otsego County. Table 9.4-2 provides details regarding municipal-specific loss and damages the town experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.4-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Otsego County Designated?	Summary of Event	Municipal Summary of Damages and Losses
June 26-July 11, 2013	Severe Storms and Flooding (DR-4129)	Yes	A series of storms included severe thunderstorms, heavy rain, and flash flooding across central New York State and Otsego County.	Road shoulder erosion took place on Vanderwerker Road and Barringer Road. Public assistance was requested (PA-02-NY-4129-PW-00483, PA-02-NY-4129-PW-00638).
May 13-22, 2014	Severe Storms and Flooding (DR-4180)	Yes	On May 16th, a slow-moving system brought heavy rainfall in the amounts of one to three inches in the region. This led to flash flooding, road washouts, and road	Although Otsego County was impacted, the Town of Cherry Valley did not report losses.

Dates of Event	Event Type (Disaster Declaration if applicable)	Otsego County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			closures in Otsego County.	
November 17-27, 2014	Severe Winter Storm, Snowstorm, and Flooding (DR-4204)	No	A snowstorm developed on November 26. Snowfall amounts ranged from 7-11 inches across the county. The highest amount of 11 inches fell in Cooperstown.	Although Otsego County was impacted, the Town of Cherry Valley did not report losses.
March 14-15, 2017	Severe Winter Storm and Snowstorm (DR-4322)	Yes	Snowfall ranged between 3 and 4 feet in Otsego County. Many municipalities, and counties declared states of emergencies and/or travel bans. New York state also declared a state of emergency.	Although Otsego County was impacted, the Town of Cherry Valley did not report losses.

Notes:
DR Major Disaster Declaration (FEMA)

9.4.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Town of Cherry Valley.

Hazard Risk Ranking

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

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

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

- The town agreed with the calculated hazard risk rankings.

Table 9.4-3. Hazard Risk/Vulnerability Risk Ranking

Hazard of Concern	County Hazard Ranking	Community Hazard Ranking
Drought	Medium	Medium
Earthquake	High	Low
Extreme Temperature	High	High
Flood	Medium	Medium
Landslide	Low	Low
Severe Storm	High	High
Severe Winter Storm	High	High

Hazard of Concern	County Hazard Ranking	Community Hazard Ranking
Wildfire	High	Medium

Notes: The hazard ranking calculation is based on probability of occurrence and impacts on population, property, and the economy. Section 5.3 (Hazard Ranking) provides the hazard ranking methodology.

Critical Facilities Flood Risk

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

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

Table 9.4-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
Cherry Valley Community Center	Community Center	X	X	0	0	T. Cherry Valley 1
2227480	Bridge	X	X	0	0	T. Cherry Valley-3
2227490	Bridge	X	X	0	0	T. Cherry Valley-3
3354250	Bridge	X	X	0	0	T. Cherry Valley-3
3354260	Bridge	X	X	0	0	T. Cherry Valley-3
3354270	Bridge	X	X	0	0	T. Cherry Valley-3
2269380	Bridge	X	X	0	0	T. Cherry Valley-3
Neilson Road Dam	Dam	X	X	0	0	T. Cherry Valley-3

Source: FEMA 2017; Otsego County 2018

Identified Issues

The following vulnerabilities have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available sources:

- Culverts
  - Mill Road – Near County Highway 32 & Keller Road – Double tube culvert – old, headwall giving away.
  - Dietsche Road – Whiteman/Wikoff Road Intersection – Too narrow for the road
- Streambank Erosion
  - Cherry Valley, Canajoharie Creek, tributaries
- Beaver Dams
  - Spring thaw

9.4.5 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 Cherry Valley.

Table 9.4-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Comprehensive Plan	Yes	Local	Information unavailable at the time of the plan update	Master Plan
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	Yes	Local	Information unavailable at the time of the plan update	Flood Damage Prevention Law (1987)
Stormwater Management Plan	No	-	-	-
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	Yes	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Economic Development Plan	Yes	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Operation Plan	No	-	-	County Emergency Operations Plan
Evacuation Plan	Yes	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update

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.)
Post-Disaster Recovery Plan	Yes	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	-	-	-	-
Regulatory Capability				
Building Code	Yes	State & Local	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Zoning Ordinance	Yes	Local	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Subdivision Ordinance	Yes	Local	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Information unavailable at the time of the plan update	LL#3 of 1987
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	State, Local	Information unavailable at the time of the plan update	State mandated BFE+2 for all construction, both residential and non-residential
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes	Local	Information unavailable at the time of the plan update	Information unavailable at the time of the plan update
Stormwater Management Ordinance	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-

Administrative and Technical Capability

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

Table 9.4-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	No	-
Mutual aid agreements	No	Not in writing
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Information unavailable at the time of the plan update
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Information unavailable at the time of the plan update
Planners or engineers with an understanding of natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Highway Supervisor
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Information unavailable at the time of the plan update
Scientist familiar with natural hazards	Yes	Information unavailable at the time of the plan update
Warning systems/services	No	-
Emergency Manager	No	Fire Chief would be closest position
Grant writer(s)	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-

Fiscal Capability

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

Table 9.4-7. Fiscal Capabilities

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

Community Classifications

The table below summarizes classifications for community programs available to the Town of Cherry Valley.

Table 9.4-8. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	Yes	Storm Ready County	2015
Firewise Communities classification	No	-	-
Natural 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 partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:
- Unavailable

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery, and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class

applies to flood insurance, while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10, with class 1 being the best possible classification and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within 5 road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

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

Self-Assessment of Capability

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

Table 9.4-9. Self-Assessment Capability for the Municipality

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

National Flood Insurance Program

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

NFIP Floodplain Administrator (FPA)

Tony Miles, Highway Supervisor

National Flood Insurance Program (NFIP) Summary

The Town of Cherry Valley does not maintain lists/inventories of properties that have been flood damaged or identify property owners who are interested mitigation. The town does not make substantial damage determinations.

The following table summarizes the NFIP statistics for the Town of Cherry Valley.

Table 9.4-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of Cherry Valley	6	1	$4,985	0	0	1

Source: FEMA Region 2 2018.
(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.
(2) Total building and content losses from the claims file provided by FEMA Region 2.
(3) Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Otsego County boundary, based on provided latitude and longitude coordinates.
RL Repetitive Loss
SRL Severe Repetitive Loss

Resources

Information on NFIP related resources was unavailable at the time of the plan update.

Compliance History

The Town of Cherry Valley is currently in good standing with the NFIP. According to the NYSDEC, a compliance audit has not been completed for the town.

Regulatory

The Flood Damage Prevention Ordinance (LL#3 of 1987) for the Town of Cherry Valley meets FEMA minimum requirements. The Town of Cherry Valley is not a member of the Community Rating System (CRS).

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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

Planning

Existing Integration

Comprehensive Plan: The Town of Cherry Valley's Comprehensive Plan includes discussion of natural hazard risk and refers to the Countywide Hazard Mitigation Plan. The town is currently updating their Comprehensive Plan, which refers to the Countywide Hazard Mitigation Plan. The Town of Cherry Valley has a Continuity of Operations/Continuity of Government Plan.

The Town of Cherry Valley does not have a Captital Improvements Plan, Stormwater Management Plan, Open Space Plan, Stream Corridor Management Plan, Comprehensive Emergency Management Plan, Emergency Operations Plan, Transportation Plan, and Strategic Recovery Planning Report.

Opportunities for Future Integration

The town could develop additional planning documents and include information on natural hazards.

Regulatory and Enforcement (Ordinances)

Existing Integration

Zoning and subdivision regulations are managed at the County level as well as code enforcement. Site plan reviews consider natural hazard risks.

The Planning Board is supplied with the Comprehensive Plan and Otsego County Codes to guide their decisions with respect to natural hazard risk management.

Opportunities for Future Integration

The town could develop additional ordinances to assist in the mitigation of natural hazards such as a stormwater ordinance.

Operational and Administration

Existing Integration

The Town of Cherry Valley does not have a municipal planner or contract planning firm. Stormwater Management and NFIP Floodplain Management functions are performed by the Highway Superintendent. The Superintendent also participates in other associations, organizations, groups, and committees that support natural hazard risk reduction and build hazard management capabilities. The town does not have any staff or contract firms that have experience with developing Benefit-Cost Analysis, who can perform Substantial Damage Estimates, or have experience in preparing grant applications for mitigation projects. Staff receive training/continuing education which support natural hazard risk reduction. The town has hazard management programs in place.

Planning Board: The Planning Board regulates and plans as needed.

Opportunities for Future Integration

The town could hire staff who have experience with developing Benefit-Cost Analysis, who can perform Substantial Damage Estimates, or have experience in preparing grant applications for mitigation projects.

Funding

Existing Integration

The municipal/operating budget for the Town of Cherry Valley does not include line items for mitigation projects/activities. The town does have a Capital Improvement Budget but does not include budget for mitigation-related projects. The town has not applied for grant funding for mitigation-related projects.

Opportunities for Future Integration

The town could use the Neighbor Helping Neighbor System to help fiscally support hazard mitigation projects. The town could also apply for grant funding and allocate municipal funds to support hazard mitigation.

Education and Outreach

Existing Integration

The Town of Cherry Valley currently does not have any public outreach mechanisms/programs in place to inform citizens on natural hazards.

Opportunities for Future Integration

The town has identified annual mailings regarding natural hazards as a potential opportunity for education. This could include information on beaver dams and spring thaws.

Sheltering, Evacuation, and Temporary Housing

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

Evacuation and Sheltering Needs

The Town of Cherry Valley has not identified any designated emergency shelters, evacuation routes, or evacuation procedures. In the event of an emergency, the town would coordinate with Otsego County for emergency procedures.

Temporary and Permanent Housing

The Town of Cherry Valley has not identified potential sites for the placement of temporary housing for residents displaced by a disaster or potential sites suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired. The town would coordinate with the county to identify suitable locations for housing after a disaster.

9.4.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

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

Table 9.4-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
1	Annually inspect location of "Flood zone regulations in effect" signs in accordance with existing Special Flood Hazard Areas as indicated on the Flood Insurance Rate Map.	Flood	Flood zone regulations should be enforced.	Floodplain Manager	Information unavailable at the time of the plan update	Cost Level of Protection Damages Avoided; Evidence of Success		1. Information unavailable at the time of the plan update 2. 3.
2	Develop, coordinate, and implement a program to identify public or private land to place temporary short-term and long-term housing units for residents displaced by a disaster.	Flood	Temporary housing locations should be identified.	Emergency Services, Public Works, Hazard Mitigation Committee Rep.	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. - 3. This is an ongoing capability and part of the town's day-to-day duties. The 'Integration of Hazard Mitigation into Existing and Future Planning Mechanisms' section provides details.
3	Develop, coordinate, and implement a program to protect critical facilities to the 500-year flood before, during and following a flood event.	Flood	Critical facilities should be protected to the 500-year flood elevation.	Emergency Services, Public Works, Hazard Mitigation Committee Rep.	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. - 3. This is an ongoing capability and part of the town's day-to-day duties. The 'Integration of Hazard Mitigation into Existing and Future Planning Mechanisms' section provides details.
4	Disseminate and improve flood informational pamphlets for new buyers of property and general public in an effort to increase awareness of flooding.	Flood	Flood outreach and education is needed.	Floodplain Manager	Information unavailable at the time of the plan update	Cost Level of Protection Damages Avoided; Evidence of Success		1. Information unavailable at the time of the plan update 2. 3.
5	Study, develop, and implement projects for stabilizing stream channels in locations	Flood, Winter Storm, Landslide,	Stream channels need to be stabilized	Floodplain Manager	Information unavailable at the time of the plan update	Cost Level of Protection		1. Information unavailable at the time of the plan update 2.

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	where erosion threatens development or agricultural resources.	Earthquake	to prevent erosion			Damages Avoided; Evidence of Success		3.

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Cherry Valley did not identify any additional mitigation projects/activities that were completed but were not identified in the previous mitigation strategy in the 2013 Plan.

Proposed Hazard Mitigation Initiatives for the Plan Update

Table 9.4-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Cherry Valley would like to pursue in the future to reduce the effects of hazards. Some of these initiatives might be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and can be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the 4 FEMA mitigation action categories and the 6 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 9.4-13 provides a summary of the prioritization of all proposed mitigation initiatives for the plan update.

Table 9.4-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation /CRS Category
T. Cherry Valley-1	Critical Facility in Floodplain – Cherry Valley Community Center	2	Flood	**Problem:** The Cherry Valley Community Center is located within the 100-year floodplain. The facility needs to be protected to the 500-year flood level.	**Solution:** Notify the facility owner, informing them the facility is located in the 100-year floodplain and may be susceptible to flood damage. Provide a list of mitigation activities the facility owner can do to protect the facility to the 500-year flood event or worst-case scenario.	Yes	None	Within 1 year	Town Board, Floodplain Administrator	<$10,000	Educate property owner of benefits of mitigating property	HMGP, PDM, Municipal Budget	High	SIP/ PP
T Cherry Valley-2	Streambank Stabilization	1	Flood, Severe Storm	**Problem:** The Town of Cherry Valley has streams (Cherry Valley, Canajoharie Creek, tributaries) which are affected by erosion and beaver dams which poses a threat to development and natural resources.	**Solution:** Engage with community stakeholders to identify, study, and implement streambank stabilization projects and beaver dam mitigation projects.	No	May require permitting	Within 5 years	Highway Department	<$10,000	Reduce erosion impact on development and natural resources adjacent to stream.	HMGP, PDM, Municipal Budget	High	NSP, EAP/ NR, PI
T. Cherry Valley-3	Critical Facility in Floodplain – bridges and Neilson Road Dam	2	Flood	**Problem:** Several bridges and the Neilson Road Dam are located within the 100-year floodplain.	**Solution:** The town will conduct a study to determine the flood exposure of bridges and the Neilson Road Dam at the 500-year flood level. The town will then conduct actions to protect the bridges and dam to the 500-year flood level if necessary.	Yes	None	Within 5 years	Town Board, Floodplain Administrator	Surveying: <$10,000	Protect critical facilities to the 500-year flood level	HMGP, PDM, Municipal Budget	High	SIP/ PP
T. Cherry Valley-	Mill Road culvert	2	Severe Storm, Flood	**Problem:** The Mill Road culvert near County Highway 32 & Keller Road is a double tube culvert. The		No	None	Within 5 years	Highway Department	$5,000	Culvert restored. Flood	HMGP, PDM, Municipal	High	SIP/ PP

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem	Description of Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation /CRS Category
4				old, headwall is giving away and can lead to road closures and flood damages.	**Solution:** The town will replace the headwall to protect the roadway.						damage risk reduced.	Budget		
T. Cherry Valley-5	Dietsche Road culvert	2	Severe Storm, Flood	**Problem:** The Dietsche Road culvert at the Whiteman/ Wikoff Road Intersection is too narrow for the roadway. This can lead to flooding problems.	**Solution:** The town will conduct a feasibility study to determine the proper sized culvert. The town will then upsize the Dietsche Road culvert with an appropriate size.	No	None	Within 5 years	Highway Department	To be determined by feasibility study.	Culvert upsized. Flood risk reduced.	HMGP, PDM, Municipal Budget	High	SIP/ PP

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
EHP Environmental and Historic Preservation
FEMA Federal Emergency Management Agency
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:
FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
PDM Pre-Disaster Mitigation Grant Program

Timeline:
The time required for completion of the project upon implementation.

Cost:
The estimated cost for implementation.

Benefits:
A description of the estimated benefits, either quantitative and/or qualitative.

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.*

Critical Facility:

- Yes 💧 - *Critical Facility is located in the 1% floodplain.*

Table 9.4-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
T. Cherry Valley-1	Critical Facility in Floodplain – Cherry Valley Community Center	1	1	1	1	1	1	0	0	1	1	0	1	1	1	11	High
T Cherry Valley-2	Streambank Stabilization	1	1	1	1	1	0	0	0	1	0	1	1	1	0	9	Medium
T. Cherry Valley-3	Critical Facility in Floodplain – Cherry Valley Community Center	1	1	1	0	1	1	0	0	1	1	0	1	1	1	10	High
T. Cherry Valley-4	Mill Road culvert	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
T. Cherry Valley-5	Dietsche Road culvert	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High

Note: Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions.

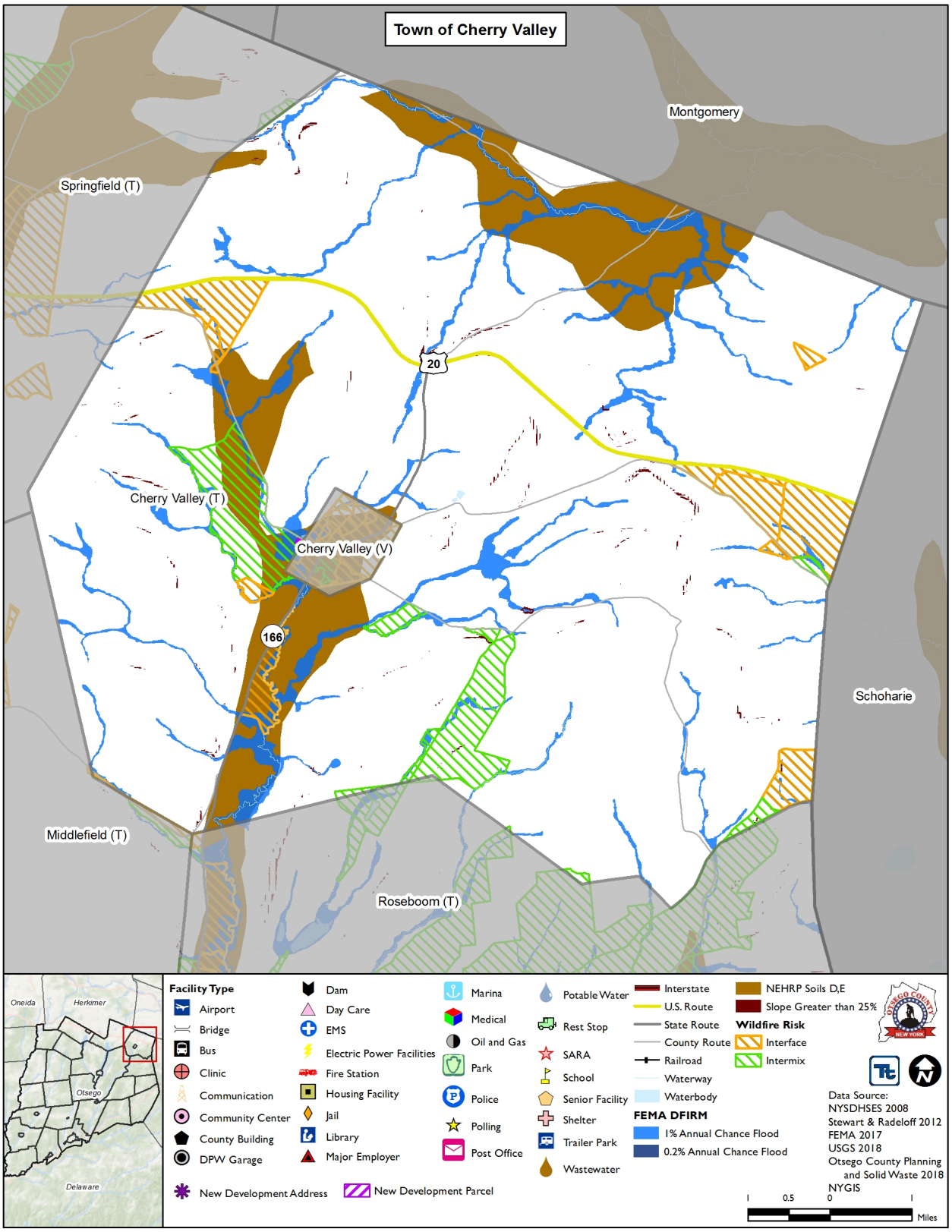
9.4.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.4.8 Hazard Area Extent and Location

A hazard area extent and location map has been generated for the Town of Cherry Valley that illustrates the probable areas impacted within the municipality. The map is based on the best available data at the time of the preparation of this plan and is adequate for planning purposes. The map has been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Cherry Valley has significant exposure. The map is illustrated below.

Figure 9.4-1. Town of Cherry Valley Hazard Area Extent and Location Map



9.4.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of Cherry Valley followed the planning process described in Section 3 (Planning Process). This annex was developed over the course of several months with input from many town departments, including: the Highway Supervisor. The Highway Supervisor represented the community on the Otsego County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

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

Town of Cherry Valley Action Worksheet			
Project Name:	Critical Facility in Floodplain – Cherry Valley Community Center		
Project Number:	T. Cherry Valley-1		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Cherry Valley Community Center is located within the 100-year floodplain. The facility needs to be protected to the 500-year flood level.		
Action or Project Intended for Implementation			
Description of the Solution:	Notify the facility owner, informing them the facility is located in the 100-year floodplain and might be susceptible to flood damage. Provide a list of mitigation activities the facility owner can do to protect the facility to the 500-year flood event or worst-case scenario.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 Year	**Estimated Benefits (losses avoided):**	Educate property owner of benefits of mitigating property
Useful Life:	20 Years	**Goals Met:**	2
Estimated Cost:	<$10,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	Within 1 year	**Potential Funding Sources:**	Municipal budget
Responsible Organization:	Town Board, Floodplain Administrator	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Elevate structure	$1 million	Facility cannot be elevated; elevation may impact the operation of the facility
	Build new facility outside of the floodplain	$5 million	Too costly; not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Critical Facility in Floodplain – Cherry Valley Community Center	
Project Number:	T. Cherry Valley-1	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Provide emergency services to community during a flood event
Property Protection	1	Protection of equipment and supplies that provides essential services to the town
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	Town has jurisdiction over this project; owns the land on which the building could be constructed
Fiscal	0	Need to seek grant funding to fund this project
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Town of Cherry Valley Action Worksheet			
Project Name:	Streambank Stabilization		
Project Number:	T. Cherry Valley-2		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Town of Cherry Valley has streams that are affected by erosion (Cherry Valley, Canajoharie Creek, tributaries) and beaver dams, which pose a threat to development and natural resources.		
Action or Project Intended for Implementation			
Description of the Solution:	Engage with community stakeholders to identify, study, and implement streambank stabilization and beaver dam mitigation projects.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 Year	**Estimated Benefits (losses avoided):**	Reduce erosion impact on development and natural resources adjacent to stream.
Useful Life:	20 Years	**Goals Met:**	1
Estimated Cost:	<$10,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	Medium	**Desired Timeframe for Implementation:**	6 months
Estimated Time Required for Project Implementation:	Within 1 year	**Potential Funding Sources:**	Municipal budget
Responsible Organization:	Town Board, Floodplain Administrator	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Dam stream and line bed with concrete to prevent further erosion.	$1 million	Extremely expensive and this would interrupt biological processes.
	Re-zone areas near stream to prevent development	$100,000+	Not feasible; potentially significant losses by preventing development.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Streambank Stabilization	
Project Number:	T. Cherry Valley-2	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Provide emergency services to community during a flood event
Property Protection	1	Protection of equipment and supplies that provides essential services to the town
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	0	Need to seek grant funding to fund this project
Environmental	0	
Social	1	
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	Medium	

Town of Cherry Valley Action Worksheet			
Project Name:	Mill Road culvert		
Project Number:	T. Cherry Valley-4		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The Mill Road culvert near County Highway 32 & Keller Road is a double tube culvert. The old, headwall is giving away and can lead to road closures and flood damages.		
Action or Project Intended for Implementation			
Description of the Solution:	The town will replace the headwall to protect the roadway.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Headwall replaced on culvert	**Estimated Benefits (losses avoided):**	Culvert upsized. Flood risk reduced.
Useful Life:	30 years	**Goals Met:**	2
Estimated Cost:	$5,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, PDM, municipal budget
Responsible Organization:	Highway Superintendent	**Local Planning Mechanisms to be Used in Implementation if any:**	N.A

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Close Mill Road permanently	$200	Detour routes will be lengthy, increase emergency response times. May lower property values.
	Repair existing culvert after each flood event	$5,000	Solution.

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Mill Road culvert	
Project Number:	T. Cherry Valley-4	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project preserves low emergency response times.
Property Protection	1	Project protects Mill Road.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	Town has the legal authority to complete the project.
Fiscal	0	Project requires funding assistance
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flooding
Timeline	1	2 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Town of Cherry Valley Action Worksheet			
Project Name:	Dietsche Road culvert		
Project Number:	T. Cherry Valley-5		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The Dietsche Road culvert at the Whiteman/ Wikoff Road Intersection is too narrow for the roadway. This can lead to flooding problems		
Action or Project Intended for Implementation			
Description of the Solution:	The town will conduct a feasibility study to determine the proper sized culvert. The town will then upsize the Dietsche Road culvert with an appropriate size.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	To be determined by feasibility study	**Estimated Benefits (losses avoided):**	Culvert upsized. Flood risk reduced.
Useful Life:	30 years	**Goals Met:**	2
Estimated Cost:	To be determined by feasibility study	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, PDM, municipal budget
Responsible Organization:	Highway Superintendent	**Local Planning Mechanisms to be Used in Implementation if any:**	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Close Dietsche Road permanently	$200	Detour routes will be lengthy, increase emergency response times. May lower property values.
	Repair existing culvert after each flood event	$5,000	Temporary solution.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Dietsche Road culvert	
Project Number:	T. Cherry Valley-5	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project preserves low emergency response times.
Property Protection	1	Project protects Dietsche Road.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	Town has the legal authority to complete the project.
Fiscal	0	Project requires funding assistance
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Storm, Flooding
Timeline	1	2 years
Agency Champion	1	
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	