

Part I: Executive Summary:

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This section provides an overview of Hazard Mitigation Planning as well as Oneida County's hazard history. This section also summarizes the main elements of the Hazard Mitigation Plan including Outreach, Hazards of Concern and Mitigation Strategies.



*The purpose of **hazard mitigation** is to reduce potential losses from future disasters. The intent of mitigation planning, therefore, is to maintain a process that leads to hazard mitigation actions. Mitigation plans identify the natural hazards that impact communities, identify actions to reduce losses from those hazards, and establish a coordinated process to implement the plan. (44 CFR §201.1(b))*

Purpose of the Plan

Hazard mitigation is a series of sustained actions taken to reduce or eliminate long-term risk to people and their property from hazards. Per the New York State Department of Homeland Security and Emergency Services (DHSES), a community's multi-hazard mitigation plan is a highly valuable resource. A well written HMP indicates that the community has completed the following tasks:

- Identified the hazards to which it is exposed,
- Assessed the risks and vulnerabilities to the identified hazards,
- Prepared mitigation strategies to reduce to eliminate those risks and vulnerabilities,
- Developed an action plan to ensure the implementation of the mitigation strategies.

In addition, the Hazard Mitigation Planning team must involve public input and participation by all relevant stakeholders throughout the planning process. This item, in particular, is imperative to the Plan's long term relevance and success.

FEMA summarizes the purpose of Hazard Mitigation Planning as such: to identify policies and actions that can be implemented over the long term in order to reduce risk and future losses. Mitigation Plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. The planning process is as important as the plan itself. It creates a framework for risk-based decision making to reduce damages to lives, property, and the economy from future disasters.

As of November 1, 2004, all local governments were required to have a FEMA-approved all-hazard mitigation plan in order to receive project funding from the Hazard Mitigation Grant Program (HMGP). The Pre-Disaster Mitigation Program (PDM) and the Flood Mitigation Assistance Program (FMA) continue to require communities to have a FEMA-approved multi-hazard mitigation plan prior to requesting project implementation funds. A mitigation plan prepared under the all-hazard mitigation guidelines outlines in 44 CFR Part 201.6 should satisfy the planning requirements of the HMGP, PDM and FMA. The plan could also satisfy the mitigation planning requirements of other programs, e.g., the Community Rating System (CRS) planning requirements of the National Flood Insurance Program (NFIP). The CRS provides for a reduction in NFIP premiums when participating communities implement actions beyond the minimum requirements of the NFIP.

How Local communities benefit from Hazard Mitigation

- Identifying community supported, cost effective actions for risk reduction
- Focusing resources on the greatest risks and vulnerabilities
- Building partnerships
- Increasing education and awareness of hazards and risk
- Communicating priorities to state and federal officials
- Aligning risk reduction with other community objectives

Disaster Mitigation Act:

The federal **Disaster Mitigation Act of 2000** is the legislation that outlines the Hazard Mitigation Planning requirements for states and local and tribal governments. The presence of a FEMA-approved Hazard Mitigation Plan enables a municipality (or group of municipalities) to remain eligible for federal post-disaster funding. According to the Disaster Mitigation Act, all Hazard Mitigation Plans must fulfill the following basic requirements:

- identify the hazards that impact local communities,
- identify actions and activities to reduce any losses from those hazards,
- establish a coordinated process to implement the plan, and
- Take advantage of a wide range of resources.

Oneida County Hazard Mitigation Plan Synopsis:

The original Oneida County Hazard Mitigation Plan was approved by FEMA in June of 2008. The Hazard Mitigation Plan for Oneida County is a multi-jurisdictional, natural hazard mitigation plan that addresses natural hazards of concern throughout Oneida County. At this point, the Plan is due for its 5 year update. The Hazard Mitigation Planning Committee has re-convened to aid in the effort of updating the plan. Participants in the committee include representatives from all 48 municipalities and an extensive list of partnering agencies and entities. Like the original plan, **the**

main purpose of the updated plan is to engage local communities in the processes of hazard identification, risk assessment, and identification and prioritization of potential mitigation strategies. This update provides an opportunity to revisit and re-assess previous priorities and to document progress on our to-do list from 2008.

To be sure, the past 5 years have brought challenges to hazard planning in Oneida County. Widespread financial woes combined with aggressive storm events have created fresh challenges for residents, planners and disaster responders. In April of 2011, a heavy rain event caused devastation on Roosevelt Drive downstream of Halleck's Ravine in the City of Utica. Residents had to be evacuated from their homes and thousands of dollars of damages were quickly realized. In August of 2011, Hurricane Irene brought heavy rains and high winds to the area. Flooding and utility failure caused damages to private and public property alike. Days later, Tropical Storm Lee delivered more rain on already saturated soil. The combined effects of Irene and Lee are still evident at this writing. In 2012, our area was mostly spared from the damages of Super Storm Sandy. However, the destruction suffered by our neighbors was a sobering reminder and inspiration for the entire HMP committee. Finally, in early Summer of 2013, the Southern portion of Oneida County from Vernon to Bridgewater sustained heavy damages from a devastating storm. While the area didn't rank a Presidential Declaration, New York State initiated a recovery program designed to assist residents and business owners hurt by the storms. As a result, many of the mitigation strategies that have been included on the accompanying list address streambank erosion, stormwater and improvements to undersized infrastructure.

In this iteration of the plan, we have created a comprehensive list of necessary projects to address natural hazards of concern. The final list of mitigation strategies includes many structural projects that are meant to be preventative solutions to future impacts. However, we also took care to include strategies such as public outreach to vulnerable residents, natural resource protection in environmentally sensitive areas, and improvements to emergency services. We sought to ensure that our Hazard Mitigation Planning Committee involved participation and input from all sectors including public, private, faith based, not for profit, municipal, business, academic, agricultural and technical representatives.

Oneida County Facts:

Land Area: 1212.4 square miles

Population: over 234,000 based on the 2010 Census

Municipalities: 48 total: 26 Towns, 19 Villages and 3 Cities

County Seat: City of Utica

Highest Elevation: 1940 feet MSL on Tassel Hill, Town of Marshall

Lowest Elevation: 400 feet MSL, Oneida Lake, Town of Verona,

Major Watersheds:

Black River,

Mohawk River,

Great Lakes,

Upper Susquehanna River

Planning Process:

In hazard mitigation planning, as with most other planning efforts, the actual process of planning is as important as the plan itself. Said another way, the plan is only as good as the planning process that people chose to develop it. Bringing together local officials, stakeholders and the public in a community-driven planning process to develop the plan also helps build the

community’s overall hazard mitigation program. Therefore, FEMA considers the plan as the written record, or documentation, of the planning process.

The planning process is as important as the plan itself. Any successful planning activity, such as developing a comprehensive plan or local land use plan, involves a cross-section of stakeholders and the public to reach consensus on desired outcomes or to resolve a community problem. The result is a common set of community values and widespread support for directing financial, technical, and human resources to an agreed upon course of action, usually identified in a plan. The same is true for mitigation planning. An effective and open planning process helps ensure that citizens understand risks and vulnerability, and they can work with the jurisdiction to support policies, actions, and tools that over the long-term will lead to a reduction in future losses.

The updated Oneida County Hazard Mitigation Plan followed the planning process outlined by FEMA and described in Table I-1. Specifically, the planning process included

- o Organization of resources: Outreach to partner agencies, entities and the public.
- o Risk assessment: Identification and profiling of hazards of concern.
- o Mitigation planning: Creation of a list of projects to improve disaster preparedness.
- o Implementation: Completion of mitigation strategies and updating the Plan.

Organize Resources	Assess Community Support
	Build the Planning Team
	Engage the Public
Complete a Risk Assessment	Identify Hazards
	Profile Hazard Events
	Assess Vulnerability
	Estimate Potential Losses
Develop a Mitigation Plan	Develop project "wish list"
	Complete a Capability Assessment
	Formulate Hazard Mitigation Goals and Objectives
	Prioritize Mitigation Actions
	Prepare an Implementation Strategy
Implement and Monitor Progress	Adopt the Plan
	Implementation of Mitigation Measures
	Monitoring, Evaluation and Updating the Plan
	Continued Public Involvement

Table I-1

The Hazard Mitigation Planning Committee: All 48 municipalities in Oneida County participated in the development of the multi-jurisdictional all hazards Hazard Mitigation Planning update effort from 2012 to 2013. Each municipality designated one representative and one alternate to serve on

the Hazard Mitigation Planning Committee. In rural areas, the representatives from a local municipality may wear several hats so to speak. For example, the Town Supervisor may also be the local Fire Chief. The DPW Superintendent may also maintain the local wastewater treatment plant. Therefore, we were very fortunate to have a wide variety of qualifications within the membership of the Hazard Mitigation Planning Committee. Representatives included professionals from the Highway and DPW sector as well as municipal board or council members, codes officers (who are also frequently the local floodplain managers), members of planning and zoning boards, first responders, private citizens and chief elected officials. The HMPC also included a wide variety of membership from county and state agencies and organizations including Emergency Services, Soil and Water Conservation, Health, Public Works, Planning, Water Quality and Pollution Control, and the Herkimer-Oneida Organizations Active in Disaster. This is a brief summary of the membership of the committee. The full committee is described in detail in Section II, Part B.2 of the HMP.

Summary of Public Input:

Public involvement is a vital component for the overall effectiveness of the plan. However, it is frequently challenging to gage the success of public outreach in a planning effort. Simply stated, people are busy living their lives and may not have time to attend a meeting or they may not see brochures in the sea of other printed materials. Therefore, we made a concerted effort to take a multi-tiered approach to public outreach for the update of the Hazard Mitigation Plan. Our efforts to involve the public included the following tasks:

- Online Access to Planning activities via the SWCD website,
- Brochures and fliers distributed in public buildings and at public meetings,
- Presentations at public meetings,
- Presentations to groups who provide direct services to the public,
- Displays at public events such as Farmers' Markets, and
- Surveys distributed via electronic and paper media including distribution via school districts to parents.

Hazards of Concern:

A key element of the Hazard Mitigation Plan is the process of identifying and profiling hazards of concern within the community. A Hazard of Concern is a source of potential danger or adverse conditions. Profiling the hazards of concern is the process of determining how much damage could occur for any given event. The hazard profile includes

- o an assessment of the geographic area impacted,
- o the effects on the population,
- o the frequency of recurrence, and
- o the extent of damage to private and public properties.



For the Oneida County Hazard Mitigation Plan, three separate hazard profiling exercises were conducted. First, in May of 2011, County officials participated in a HAZNY (Hazards of New York computer program) exercise for the County's Comprehensive Emergency Management Plan (CEMP). Next, in January and February of 2013, each of the 48 municipalities within the County were led through a modified HAZNY process to identify and profile localized hazards of concern. Finally, in the late winter of 2013, the public was engaged via surveys to determine their hazards of concern.

Summary of HAZNY results for Oneida County

2008 HAZNY: Severe Storms

2011 HAZNY: Hazardous materials in Transit

2013 Modified HAZNY: Water Supply Contamination and Severe Storms

Major Events since 2008

September, 2010: Approximately 4 inches of rain caused flooding and erosion damages in several area streams including Big Creek in the Town of Marshall.

April, 2011: Severe storms caused widespread flooding damages especially to the City of Utica's Roosevelt Drive where residents were displaced as a result of debris blockage at Halleck's Ravine.

August, 2011: Hurricane Irene caused widespread wind and flooding damages.

September, 2011: Tropical Storm Lee followed on within 1 week of Irene. Damages were pronounced because soils were already saturated and water levels were above normal. Widespread damages throughout the County were reported.

June, 2013: an exceptionally wet and stormy late spring saturated soils and caused damages throughout the month. Then, in the early morning hours of June 28th, a severe storm brought 6 inches of water in less than 24 hours to Central New York. Unprecedented flooding and damages were reported in many communities including Vernon, Kirkland, New Hartford, Whitestown, Whitesboro, New York Mills, Paris, Marshall, Waterville and Sangerfield and Bridgewater town and village. The area has not recovered yet and is actively seeking financial assistance from federal, state and local sources to mitigate the damages.

Damages from the 6.28.13 Storm Event in Oneida County: The following is a summary of damages from the 6.28.13 storm events. Information compiled from Gerald Pederson, Donna Purdy, John Peters of Vernon, and Robert Comis of Sherrill.

From Oneida County Emergency Services:

The following estimates were provided to summarize damages in the days following the June and early July severe storms and flooding events:

- City of Utica - \$1.2 million dollars in PDA
- Oneida County DPW - \$488 thousand dollars – this is from one of three DPW districts
- Village of Oriskany Falls - \$10 thousand dollars
- Town of Sangerfield - \$87,500 dollars
- We did speak with an official from the Clinton School District and \$2 million dollars is a good estimate at this time
- The Hamilton College Water District (HCWD) and the water main break on the single transmission line from the Mohawk Valley Water Authority to the HCWD. The break occurred somewhere under the Oriskany Creek which has been flooded out during recent storm events.

- HCWD isolated the break but is unable to repair due to high water conditions. A water conservation order was issued and is being followed (noted reduction in flows). The million gallon tank is able to provide ~10 days of water for the district. Average use is ~50,000 gallons per day. With summer camps beginning operation next week, it is expected the use will go to ~70,000 gpd. Therefore, the system will need to find a source of water to make up for the usage. Fire officials have been notified of the limited availability of the water for fire fighting activities
- Governor Cuomo has activated today that will provide information related to the series of floods we have been experiencing here in the Mohawk Valley region. The New York State Flood Helpline at 1-888-769-7243 will provide callers with contact numbers and information related to oil spills or power outages; shelters and feeding centers; organizations providing flood recovery help such as the Red Cross or the Salvation Army; health care services such as tetanus shots; safety tips; mental health assistance; and for road closing information, among other things.
- New Hartford is reporting approx \$1.8 dollars in damages.
- Town of Kirkland - \$1.5 million in PA estimates – includes a couple of bridges, numerous roads, etc
- Town of Augusta - \$65 thousand in damages to town infrastructure and other costs
- I have not heard directly from the Clinton School district but in speaking with Town officials' Clinton School district is reporting \$2 million in damages
- Village of Clinton DPW garage and equipment damages \$75 thousand – that is just the garage and equipment, does not include any infrastructure at this time
- County Water Quality and Water Pollution Control – at least \$100K right now and may go up to \$300-\$400K after inspecting the interceptor system for debris.
- Village of Vernon – damage to a public park - \$1.2 million
- Village of Whitesboro - \$75 thousand
- We are still waiting for information from other towns/villages that were affected.
- The following report no damage to their infrastructure – although there may be damages to county and/or state roads in these areas;
 - Western
 - Camden
 - Deerfield
 - Florence
 - Lee
 - Marcy
 - Verona
 - Vienna
 - Westmoreland

From the USDA Farm Service Agency: FSA reports significant crop damage. Flooded corn fields, fields that are prevented from being planted and hay fields that have standing hay that is rotting. Strawberry crops took a hard hit as well.

No reports of structure damage or personal injury as a result of the floods. My producers are resilient and they will figure this out, but every producer in the county will feel the effects of all of this rain.

From the Town of Vernon: Norton Road starts at the circle in Vernon Center. About 1/2 mile West of Vernon Center on Norton road it is washed out. The Town has orange barrels out and the road is closed. The water washed 1/2 of the North side of the road away and the town is quickly trying to fill in the 15-20 foot drop off where the road used to be.

From the City of Sherrill: There was a significant washout on the side of an elevation dam in our City. We assume the dam is owned by the State possibly DEC.

Mitigation Strategies:

Mitigation strategies comprise the essence of a Hazard Mitigation Plan and are detailed in Part IV of this Plan. In this iteration of the Plan, we were able to receive valuable contributions from the Sauquoit Creek Basin Commission, Cornell Cooperative Extension and the Oneida County Department of Health as well as projects from each of the 48 municipalities in the County. These mitigation strategies reflect the project to-do lists or wish lists for each community and each member of the Hazard Mitigation Planning Committee in Oneida County. Strategies can cover a broad range of categories including:

- Prevention
- Property Protection
- Structural
- Public Education
- Emergency Services
- Natural Resource Protection

Of course, many mitigation strategies cover multiple categories. For example, upgrading the Lewis Road culvert in the Town of Steuben is Preventative and Structural. Since the design for the new structure was completed in conformance with DEC's stream crossing standards, this strategy is also facilitating Natural Resource Protection.

The most common mitigation strategies in the updated Hazard Mitigation Plan dealt with flooding and stormwater runoff. These were prominent issues for our communities, particularly in light of the intense storms experienced in 2011. However, the HMP strategies also addressed needs for improved outreach to vulnerable residents, improved cooperation among local disaster preparedness and response organizations, and upgrades to emergency response equipment.



A streambank on the Mad River in Camden eroding the foundation of a barn.



Stabilizing the barn with rip rap to prevent further loss in the Spring 2014 melt. The project will also entail rootwads and soil lifts upstream of the rip rap to reduce erosion, protect property and enhance habitat.

Mitigation Strategy Prioritization: Projects were prioritized based on the STAPLEE ranking criteria. STAPLEE is FEMA's method of assessing the merits of a project from the following perspectives:

- Social: Community Acceptance
- Technical: Project feasibility

- Administrative: Staff workload considerations
- Political: Project support
- Legal: Considerations about long term liabilities
- Environmental: Long term impacts on natural resources
- Economic: Availability of funding to complete the work.

Two examples of **Very High Priority** projects included the following:

- Installation of a trash rack on a tributary in New Hartford, and
- Property acquisition for the Dixon Trailer Park in the Town of Vernon.

Projects may seem to be very high priorities but may lack key elements like readily available funding, or, they may have design limitations or challenges from landowners. However, if these details are addressed, the project priority would likely increase.

In most cases, the mitigation strategies that are prioritized as High or Very High should have estimated completion dates of 1-2 years. Again, projects with low scores are not necessarily impossible to complete. However, these projects have weaknesses that need to be resolved in order to be viable. Weaknesses may be attributed to a lack of community support or funding, a low benefit:cost ratio, or the likelihood of long term liability issues. Should the conditions change for any of these items, the list will be modified to reflect an improved situation. Likewise, if the conditions for a high priority project change, these will also be incorporated into the HMP. For example, if obtaining permits for a project requires years not months, the score of the project may need to be modified.

Key Accomplishments Since 2008

The following is a summary of the status of selected projects from the County Hazard Mitigation Plan originally approved in June of 2008 by FEMA. The comprehensive list of new mitigation strategies for Oneida County's HMP are listed in Part IV. Each community's mitigation strategies are also described in Part III in the Community Profiles.

City of Utica: Halleck's Ravine reconstruction of headwall and constant maintenance of debris at the dam. The City has put in several hundred thousand dollars and completed the project in the Summer of 2013.

New York Mills: Manholes mapped; pipe replacement projects underway;

Whitestown and Whitesboro: Redo the bridge at the CSX railroad to prevent flooding.

Marcy: CSX culverts may be undersized and the company is difficult to reach.

New Hartford Village: Dam is silted in on Route 8 near the 840 cloverleaf; find out why sugar maples are dying.

Brookline washout on the Sauquoit: Stone wall washed out in storm event;

Tree pruning by utilities is too extensive and kills the trees that the municipalities have to later take down. If the pruning was more controlled, the trees wouldn't die.

Hydrofracking: The single greatest threat to the Tug Hill Aquifer that should be protected. Make sure any potential hydrofracking activities are controlled and don't contribute to environmental degradation.

Emergency Shelters: Make sure that FDs can function as emergency shelters. This is especially applicable in North Bay as the elementary school is closing and the school is the primary shelter for the community.

Invasive Species: Get a good handle on invasives, especially the impacts of the EAB; conduct community tree assessments to determine the extent of the problem.

Cell phone towers: improve coverage for cellular service in the County.

Culvert cleanouts: Ensure that culverts are free flowing;

Generators: Create an inventory of tow-behind generators that are available. Some may be available from the military; Assess needs at municipal buildings in DF, Prospect, B'Veld;

Dam rehabilitation and removal: Clayville dam needs to be removed per DEC's requirements and the contaminated soils need to be remediated. Waterville is seeking to decommission the dam and is seeking DEC's approval in the Summer of 2013.

Emergency Alert Education: Call 911 first not family. Keep Meals on Wheels in the loop with the Fire Department to make sure that people with special needs are checked in a disaster.

Agricultural safety: Grain bin safety

Alternate Energy Sources: Investigate solar power options;

Ditching: Improve ditch maintenance practices to prevent future erosion and sedimentation but still contain flooding if possible.

Grants: Investigate grant options for private residents from NYSERDA.

Holland Patent flooding: Overflow pipe in the park recently installed with DEC and USACE approval to alleviate flooding in the village.

Broadacres: Demolished.

Sand bagging machine: Deerfield may have an adaptor on a new truck that can fill sand bags and they're willing to share their equipment.

Berkshire Drive: Property acquisition of flooded homes in Westmoreland completed.

Plan Adoption:

Each municipality within the County will formally adopt the updated County Hazard Mitigation Plan. The adoption will formalize the process of integrating mitigation strategies into their daily decision making processes. Local governments will remain eligible for federal disaster funding by:

Participating in the monitoring and maintenance of the HMP,

Updating the local mitigation strategy list,

Officially adopting the HMP.

Adoption resolutions are included in Appendix I of this Plan.

Plan Maintenance:

The Oneida County Hazard Mitigation Plan will be maintained in accordance with Federal and State guidelines and regulations. Committee members will submit an annual report and meet at least annually to discuss revisions and re-writes. On a 5 year cycle, the plan will be completely re-written in order to meet requirements set forth in the Disaster Mitigation Act of 2000. The procedure for maintaining the plan is outlined in Part V.



Sediment left over from the June storms on the Whitesboro school district's grounds.