

Section 1. Introduction

1.1 BACKGROUND

In response to the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), Monroe County (and its towns and villages) developed this All-Hazard Mitigation Plan (HMP), which is an update of the 2011 Monroe County Multi-Jurisdictional HMP. DMA 2000 amends the Stafford Act and is designed to improve planning for, response to, and recovery from disasters by requiring state and local entities to implement pre-disaster mitigation planning, and develop HMPs. The Federal Emergency Management Agency (FEMA) has issued guidelines for HMPs, and the New York State Division of Homeland Security and Emergency Services (NYS DHSES) also supports plan development for jurisdictions in New York State.

Specifically, DMA 2000 requires that states, with support from local governmental agencies, update HMPs on a 5-year basis to prepare for and reduce the potential impacts of natural hazards. DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. This enhanced planning process will better enable local and state governments to articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

Hazard Mitigation

is any sustained action taken to reduce or eliminate the long-term risk and effects that can result from specific hazards.

FEMA defines a Hazard Mitigation Plan as the documentation of a state or local government evaluation of natural hazards and the strategies to mitigate such hazards.

1.1.1 DMA 2000 Origins -The Robert T. Stafford Disaster Relief and Emergency Assistance Act

The Federal
Emergency
Management
Agency (FEMA)
estimates that for
every dollar spent on
damage prevention
(mitigation), twice
that amount is saved
by not having to
perform post-disaster
repairs.

In the early 1990s, a new federal policy regarding disasters began to evolve. Rather than simply reacting whenever disasters strike communities, the federal government began encouraging communities to first assess their vulnerability to various disasters and proceed to take actions to reduce or eliminate potential risks. The policy is based on the logic that a disaster-resistant community can rebound from a natural disaster with less loss of property or human injury, at much lower cost and, consequently, more quickly. Moreover, other costs associated with disasters are minimized, such as the time lost from productive activity by business and industries.

DMA 2000 provides an opportunity for states, tribes, and local governments to take a new and revitalized approach to mitigation planning. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions (Section 409) and replacing them with a new set of requirements (Section 322). Section 322 sets forth the requirements that communities evaluate natural hazards within their respective jurisdictions and develop an appropriate plan of action to mitigate those hazards, while emphasizing the need for state, tribal, and local governments to closely coordinate mitigation planning and implementation efforts.

The amended Stafford Act requires that each local jurisdiction identify potential natural hazards to the health, safety, and well-being of its residents, and identify and prioritize actions that can be taken by the community to mitigate those hazards before disaster strikes. For communities to remain eligible for hazard mitigation assistance from the federal government, they must first prepare, and then maintain and update an HMP.



Responsibility for fulfilling the requirements of Section 322 of the Stafford Act and administering the FEMA Hazard Mitigation Program has been delegated to the State of New York, specifically to NYS DHSES. FEMA also provides support through guidance, resources, and plan reviews.

1.1.2 Benefits of Mitigation Planning

The planning process will help prepare citizens and government agencies to better respond when disasters occur. In addition, mitigation planning allows Monroe County as a whole (as well as the participating city, towns, and villages) to remain eligible for grant funding for mitigation projects that will reduce the monetary impact of future disaster events. The long-term benefits of mitigation planning include:

- An increased understanding of hazards faced by Monroe County communities
- A more sustainable and disaster-resistant community
- Financial savings through partnerships that support planning and mitigation efforts
- Focused use of limited resources on hazards that have the biggest impact on the community
- Reduced long-term impacts and damage to human health and structures, and, therefore, reduced repair costs

1.1.3 Organizations Involved in the Mitigation Planning Effort

Monroe County and the participating jurisdictions intend to implement this HMP with full coordination and participation of county and local departments, organizations, and groups, as well as by coordinating with relevant state and federal entities. Coordination helps to ensure that stakeholders have established communication channels and relationships necessary to support mitigation planning and mitigation actions described in Section 6 and in the jurisdictional annexes in Section 9. In addition to Monroe County, all 30 local jurisdictions have participated in the planning process. Monroe County jurisdictions are listed in Table 1-1 and presented in Figure 1-1.

Table 1-1. Participating Jurisdictions in Monroe County

Jurisdictions		
Monroe County	Town of Henrietta	Town of Riga
Town of Brighton	Village of Hilton	City of Rochester
Village of Brockport	Village of Honeoye Falls	Town of Rush
Town of Chili	Town of Irondequoit	Village of Scottsville
Village of Churchville	Town of Mendon	Village of Spencerport
Town of Clarkson	Town of Ogden	Town of Sweden
Town/Village of East Rochester	Town of Parma	Town of Webster
Village of Fairport	Town of Penfield	Village of Webster
Town of Gates	Town of Perinton	Town of Wheatland
Town of Greece	Town of Pittsford	
Town of Hamlin	Village of Pittsford	

Multiple Agency Support for Hazard Mitigation

The primary responsibility for the development and implementation of mitigation strategies and policies lies with local governments. However, local governments do not work alone; various partners and resources at the regional, state, and federal levels are available to assist communities in the development and implementation of mitigation strategies. Within New York State, NYS DHSES is the lead agency



providing hazard mitigation planning assistance and guidance to local jurisdictions. In addition, FEMA provides grants, tools, guidance, and training to support mitigation planning.

Additional input and support for this planning effort was obtained from a wide range of agencies as well as through public involvement (as discussed in Section 3). Under the project management of the Monroe County Office of Emergency Management (OEM), the Monroe County Hazard Mitigation Steering Committee and Planning Committee provided oversight for the preparation of this plan. Details regarding the roles and responsibilities of the Steering Committee and Planning Committee are further discussed in Section 3. The Steering Committee includes representatives from the County Office of Emergency Management, Planning Department, Geographic Information System (GIS) Services Division, Department of Environmental Services, and Department of Public Health. The Steering Committee has been formed as a leadership group to plan, guide, expedite, and implement the planning process. A list of Steering Committee and Planning Committee members is provided in Section 3.

Lake Ontario

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Figure 1-1. Monroe County, New York, Mitigation Plan Area

Sources: Monroe County 2015



This HMP was prepared in accordance with the following regulations and guidance:

- NYS DHSES "Hazard Mitigation Planning Standards," June 2014
- FEMA "Local Mitigation Planning Handbook," March 2013
- FEMA "Integrating Hazard Mitigation into Local Planning," March 2013
- Local Mitigation Plan Review Guide, October 1, 2011
- DMA 2000 (Public Law 106-390), October 30, 2000
- 44 Code of Federal Regulations (CFR) Parts 201 and 206 (including: Feb. 26, 2002, Oct. 1, 2002, Oct. 28, 2003, and Sept. 13, 2004 Interim Final Rules)
- FEMA. 2004. "How-To Guide for Using HAZUS-MH for Risk Assessment." FEMA Document No. 433. February
- FEMA Mitigation Planning How-to Series (FEMA 386-1 through 4, 2002)
- FEMA "National Flood Insurance Program Community Rating System Coordinator's Manual." 2013

Table 1-2 summarizes the requirements outlined in the DMA 2000 Interim Final Rule and lists the section in which each of these requirements is addressed in this HMP.

Table 1-2. FEMA Local Mitigation Plan Review Crosswalk

Plan Criteria	Primary Location in Plan	
Prerequisites		
Adoption by the Local Governing Body: §201.6(c)(5)	Volume I, Section 2.0; Appendix A	
Compliance with NYS DHSES Hazard Mitigation Planning Standards	Volume I, Section 1.0	
Planning Process		
Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)	Volume I, Section 3.0	
Risk Assessment		
Identifying Hazards: §201.6(c)(2)(i)	Volume I, Section 5.2	
Profiling Hazards: §201.6(c)(2)(i)	Volume I, Section 5.4	
Assessing Vulnerability: Overview: §201.6(c)(2)(ii)	Volume I, Section 5.4	
Assessing Vulnerability: Identifying Structures: §201.6(c)(2)(ii)(A)	Volume I, Sections 4.0 and 5.4	
Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)	Volume I, Section 5.4	
Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)	Volume I, Section 4.0; Section 9 Annexes	
Mitigation Strategy		
Local Hazard Mitigation Goals: §201.6(c)(3)(i)	Volume I, Section 6.0; Volume II, Section 9 Annexes	
Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)	Volume I, Section 6.0; Volume II, Section 9 Annexes	
Implementation of Mitigation Actions: §201.6(c)(3)(iii)	Volume I, Section 6.0; Volume II, Section 9 Annexes	
Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)	Volume I, Section 6.0; Volume II, Section 9 Annexes	
Plan Maintenance Process		
Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(i)	Volume I, Section 7.0	
Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii)	Volume I, Section 7.0; Volume II, Section 9 Annexes	
Continued Public Involvement: §201.6(c)(4)(iii)	Volume I, Section 7.0	



Organization

The Monroe County Hazard Mitigation Plan Update has been organized into a two-volume plan to facilitate use of this plan as a resource. The plan provides a detailed review and analysis of each hazard of concern, resources, and demographics of Monroe County and participating municipalities.

Volume I is intended for use as a resource for ongoing mitigation analysis. Volume II consists of an annex dedicated to each participating jurisdiction. Each annex summarizes the jurisdiction's legal, regulatory, and fiscal capabilities; describes vulnerabilities to natural hazards; presents status of past mitigation actions; and provides an individualized mitigation strategy. The annexes are intended to be used as an expedient resource for each jurisdiction when implementing mitigation projects and exploring future grant opportunities.

Hazards of Concern

Monroe County and participating jurisdictions reviewed the natural and manmade hazards that caused measurable impacts in the planning area, and updated the list of hazards of concern based on events, losses, and information available since the 2011 plan. Monroe County and participating jurisdictions evaluated the risk and vulnerability presented by each of the hazards of concern to the assets of each participating jurisdiction. Although the resulting hazard risk rankings varied for each jurisdiction, the summary risk rankings corresponded with that of Monroe County and are indicated in each jurisdictional annex. The hazard risk rankings were used to focus and prioritize individual jurisdictional mitigation strategies.

Goals and Objectives

The plan has incorporated mitigation goals and objectives as a basis for the planning process, and to guide the selection of appropriate mitigation actions addressing all hazards of concern. This updated plan has revised the 2011 goals and objectives, as identified in Section 6.

Plan Integration into Other Planning Mechanisms

Effective mitigation is achieved when hazard awareness and risk management approaches and strategies become an integral part of public activities and decision-making processes. Within the county, many existing plans and programs support hazard risk management. Therefore, it is critical that this hazard mitigation plan integrates and coordinates with and complements those mechanisms.

The "Capability Assessment" section of Chapter 6 (Mitigation Strategy) provides a summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, county, and local) that support hazard mitigation within the county. Within each jurisdictional annex in Chapter 9, the county and each participating jurisdiction have identified ways in which they have integrated hazard risk management into their existing planning, regulatory, and operational/administrative framework ("integration capabilities"), and provided the means by which they intend to promote this integration ("integration actions").

Section 7 presents additional summaries of these continued efforts to develop and promote a comprehensive and holistic approach to hazard risk management and mitigation.

1.1.4 Implementation of the 2011 Plan

Sections 6 and 9 of this plan update provide the status of the mitigation projects originally outlined in the 2011 plan. Numerous projects and programs have already been implemented that have reduced asset





vulnerability to hazards. The municipal annexes and plan maintenance procedures have been developed to encourage specific activities (such as review of the HMP during update of codes, ordinances, zoning, and development) to ensure that a more thorough integration, with its related benefits, will be completed within the upcoming 5-year planning period.

1.1.5 Implementation of the Planning Process

The planning process and findings are to be documented in local HMPs. To support the planning process in developing this HMP Update, Monroe County and the participating jurisdictions have accomplished the following tasks:

- Developed a Steering Committee and Mitigation Planning Committee (Planning Committee)
- Reviewed the 2011 Monroe County Pre-Disaster Mitigation Plan
- Identified and reviewed hazards of greatest concern to the community (hazards of concern) to be included in the update
- Profiled hazards of concern
- Estimated the inventory at risk and potential losses associated with these hazards
- Reviewed and updated the mitigation goals and objectives
- Reviewed mitigation strategy and actions outlined in the 2011 HMP to indicate progress
- Developed new mitigation actions to reduce the vulnerability of assets from hazards of concern
- Involved a wide range of stakeholders and the public in the plan update process
- Developed mitigation plan maintenance procedures to be executed after obtaining approval of the plan from NYS DHSES and FEMA

As required by DMA 2000, Monroe County and participating jurisdictions have informed the public and provided opportunities for public comment and input. In addition, numerous agencies and stakeholders have participated as core or support members, providing input and expertise throughout the planning process.

This HMP Update documents the process and outcomes of the mitigation efforts of Monroe County and its jurisdictions. Additional information on the plan update process is included in Section 3, Planning Process. Documentation that the prerequisites for plan approval have been met is included in Section 2, Plan Adoption.

1.1.6 Organization of This Mitigation Plan

This HMP was organized in accordance with FEMA and NYS DHSES guidance. The structure of this plan follows the four-phase planning process recommended by FEMA, which is summarized in Figure 1-2.



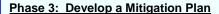
Figure 1-2. Monroe County Hazard Mitigation Planning Process

Phase 1: Organize Resources

The Planning Committee is developed; resources are identified and obtained; public involvement is initiated. Technical, regulatory, and planning experts are identified to support the planning process.

Phase 2: Assess Risks

The Planning Committee, with appropriate input, identifies potential hazards, collects data, and evaluates the characteristics and potential consequences of natural and manmade hazards on the community.



The Planning Committee uses the risk assessment process and stakeholder input to (1) understand the risks posed by natural and manmade hazards, (2) determine what its mitigation priorities should be, and (3) identify options to avoid or minimize undesired effects. The results are a hazard mitigation plan update, including revised mitigation strategies and a plan for implementation.

Phase 4: Implement the Plan and Monitor Progress

The Planning Committee brings the plan update to life in a variety of ways including (1) implementing specific mitigation projects; (2) changing the day-to-day operation of Monroe County and jurisdictions, as necessary, to support mitigation goals; (3) monitoring mitigation action progress; and (4) updating the plan over time.

HAZUS-MH was applied to help Monroe County:

- Identify hazards (Phase 2)
- Profile hazards (Phase 2)
- Perform a vulnerability assessment (Phase 2), including:
- Inventory assets
- Estimate losses
- Evaluate development trends
- Present results of risk assessment

These results provide input to Phase 3.





This HMP is organized into two volumes: Volume I includes all information that applies to the entire planning area (Monroe County); and Volume II includes information specific to the participating jurisdictions within the County.

Volume I of this HMP includes the sections listed below.

Section 1: Introduction: Overview of participants and planning process

Section 2: Plan Adoption: Information regarding the adoption of the plan by Monroe County and each participating jurisdiction

Section 3: Planning Process: A description of the plan methodology and development process, Planning Committee and stakeholder involvement efforts, and the methods used to incorporate these this HMP into existing programs

Section 4: County Profile: An overview of Monroe County, including (1) general information, (2) economy, (3) land-use trends, (4) population and demographics, (5) general building stock inventory, and (6) critical facilities

Section 5: Risk Assessment: Documentation of the hazard identification and hazard risk ranking process, hazard profiles, and findings of the vulnerability assessment (estimates of the impact of hazard events on life, safety, and health; general building stock; critical facilities; and the economy). Also included in this section is a description of the status of local data and planned steps to improve local data to support mitigation planning.

Section 6: Mitigation Strategies: Information regarding the mitigation goals and objectives identified by Monroe County in response to priority hazards of concern

Section 7: Plan Maintenance Procedures: The system established by Monroe County to continue to monitor, evaluate, maintain, and update the HMP

Appendix A: Sample Resolution of Plan Adoption: Documentation that supports the plan approval signatures included in Section 2 of this plan

Appendix B: Meeting Documentation: Includes agendas, attendance sheets, minutes, and other documentation (as available and applicable) of planning meetings convened during the development of the plan

Appendix C: Public and Stakeholder Outreach Documentation: Documentation of the public and stakeholder outreach effort including webpages, informational materials, public and stakeholder meetings and presentations, surveys, and other methods used to receive and incorporate public and stakeholder comments, and use those comments in the plan update process

Appendix D: Action Worksheet Template and Instructions

Appendix E: Plan Review Tools: Includes examples of plan review templates available to support annual plan review, including the plan review document used for the 2011 Monroe County HMP review process, and example FEMA Guidance Worksheets (FEMA 386-4)

Appendix F: Participation Matrix





Appendix G: CRS Crosswalk: Includes a crosswalk of the HMP to the CRS requirements for Floodplain Management Plans under Activity 510

Appendix H: Critical Facilities

Volume II of this plan includes the following sections:

Section 8: Planning Partnership: Description of the planning partnership and jurisdictional annexes

Section 9: Jurisdictional Annexes: Includes a jurisdiction-specific annex for each participating jurisdiction, and Monroe County, containing their hazards of concern, hazard risk ranking, capability assessments, mitigation actions, action prioritization specific only to Monroe County or that jurisdiction, progress on 2011 mitigation actions, and an overview of 2011 plan integration into local planning processes