

## SECTION 1: INTRODUCTION

### BACKGROUND

In response to the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), Delaware County, and the towns and villages located in the County have developed this Multi-Jurisdictional All-Hazards Mitigation Plan Update (AHMP), which is an update of the February 2006 AHMP. 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. The New York State Office of Emergency Management (NYSOEM) also supports plan development for jurisdictions in New York State.

Specifically, DMA 2000 requires that States, with support from local governmental agencies, develop hazard mitigation plans 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 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.

### 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 through avoided post-disaster damage repair.

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

DMA 2000 provided 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). This section 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 an All-Hazards

Mitigation Plan (this plan). By regulation, this plan must be formally updated, approved by FEMA, and adopted by all participating jurisdictions every five years.

### BENEFITS OF MITIGATION PLANNING

The planning process will help prepare citizens and government agencies to better respond when disasters occur. Also, mitigation planning allows Delaware County and its towns and villages to remain eligible for mitigation grant funding for mitigation projects that will reduce the impact of future disaster events. The long-term benefits of mitigation planning include:

- An increased understanding of hazards faced by 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 damages to human health and structures and reduced repair costs

### ORGANIZATION OF THE MITIGATION PLANNING EFFORT

In addition to Delaware County, all jurisdictions within the County have participated in the planning process (Table 1-1 and Figure 1-1).

Table 1-1. Participating Jurisdictions in Delaware County

Jurisdiction		
Town of Andes	Town of Kortright	Village of Delhi
Town of Bovina	Town of Masonville	Village of Deposit
Town of Colchester	Town of Meredith	Village of Fleischmanns
Town of Davenport	Town of Middletown	Village of Franklin
Town of Delhi	Town of Sidney	Village of Hancock
Town of Deposit	Town of Stamford	Village of Hobart
Town of Franklin	Town of Tompkins	Village of Margaretville
Town of Hamden	Town of Roxbury	Village of Sidney
Town of Hancock	Town of Walton	Village of Stamford
Town of Harpersfield		Village of Walton

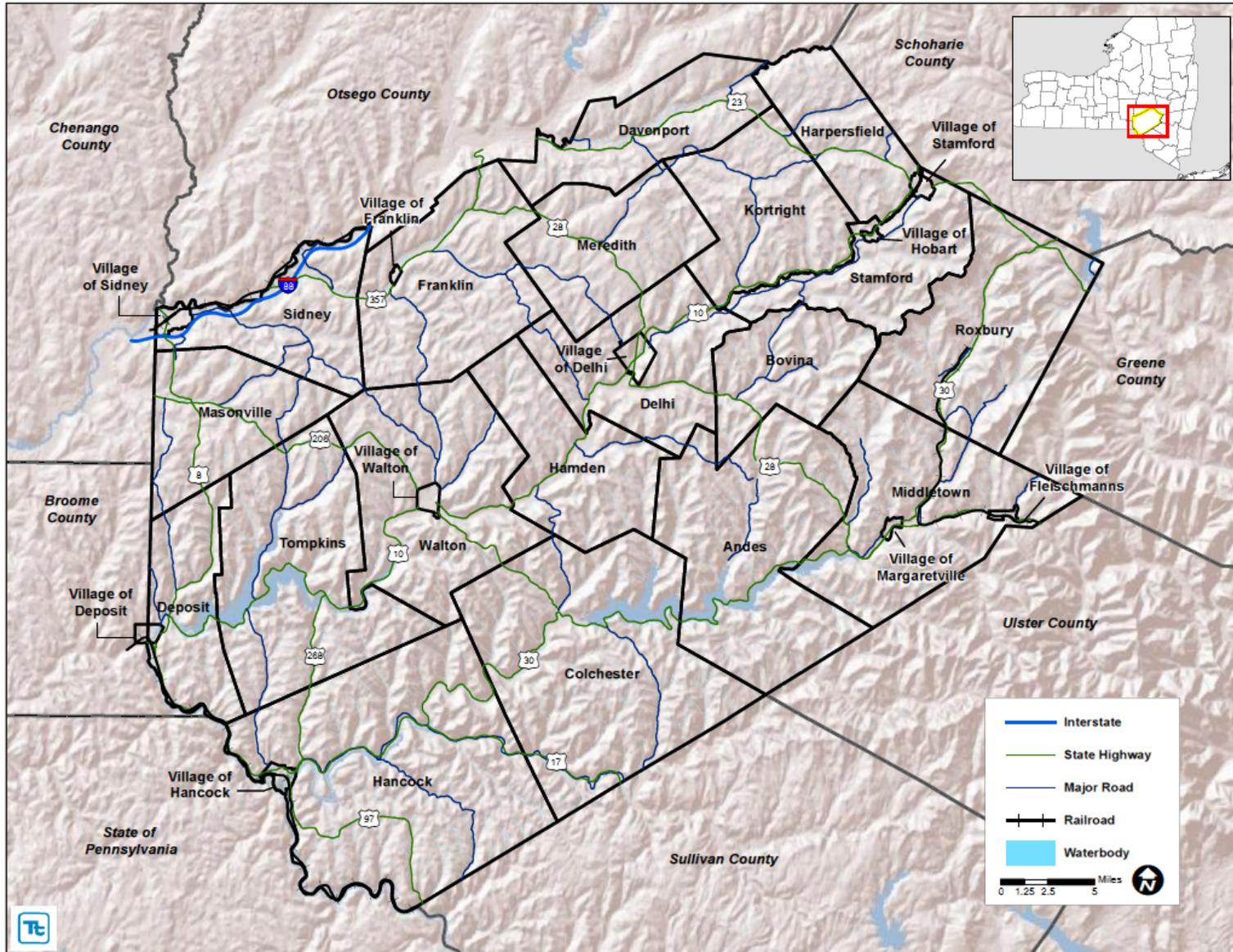
Primary responsibility for the development and implementation of mitigation strategies and policies lies with local governments. However, local governments are not alone; various partners and resources at the regional, state and federal levels are available to assist communities in the development and implementation of mitigation strategies. Within New York State, NYSOEM is the lead agency providing hazard mitigation planning assistance to local jurisdictions. NYSOEM provides guidance to support mitigation planning. In addition, FEMA provides grants, tools, and training to support mitigation planning.

The Delaware County Planning Department (DCPD) and the Delaware County Department of Emergency Services (DCDES) have served as the management team for the implementation and management of the overall plan update process. To facilitate the plan update process, the Delaware County management

team established a Steering Committee to provide guidance and leadership, oversight of the planning process, and act as the point of contact for all partners and the various interest groups in the planning area. The makeup of this committee was selected to provide the best possible cross section of views to enhance the planning effort and to help build support for hazard mitigation, and included representatives from DCPD, DCDES, Delaware County Department of Public Works (DCDPW), Delaware County Board of Supervisors, Delaware County Code Enforcement, Delaware County Watershed Affairs, Delaware County Sheriff's Office, Delaware County Soil and Water Conservation District (DC SWCD), and the supervisors of several of the most flood vulnerable communities in the County.

Additional input and support for this planning effort was obtained from a range of agencies and through public involvement, as discussed in Section 3 (Planning Process). Delaware County and the participating jurisdictions intend to implement this AHMP 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 included in Section 6 and in the Jurisdictional Annexes in Volume II, Section 9.

Figure 1-1. Delaware County, New York



Source: Delaware County Planning Department



## AUTHORITY AND REFERENCE

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

- 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 Local Plan Mitigation Plan Review Guide (October 1, 2011).
- FEMA Mitigation Planning How-to Series (FEMA 386-1 through 4, 2002).

Responsibility for fulfilling the requirements of Section 322 of the Stafford Act and administering the FEMA Hazard Mitigation Program has been delegated to New York State, specifically to NYSOEM. FEMA also provides support through guidance, resources, and plan reviews. Copies of the applicable federal and state regulations are found in Appendix A.

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

Table 1-2. FEMA Local Mitigation Plan Review Crosswalk

FEMA Local Mitigation Plan Review Crosswalk	
Plan Criteria	Primary Location in Plan
<b>Prerequisites</b>	
Adoption by the Local Governing Body: §201.6(c)(5)	Volume I, Section 2.0; Appendix B
<b>Planning Process</b>	
Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)	Volume I, Section 3.0
<b>Risk Assessment</b>	
Identifying Hazards: §201.6(c)(2)(i)	Volume I, Sections 5.2 and 5.3
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, Section 4.0
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
<b>Mitigation Strategy</b>	
Local Hazard Mitigation Goals: §201.6(c)(3)(i)	Volume I, Section 6.0; Volume II, Section 9
Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)	Volume I, Section 6.0; Volume II, Section 9
Implementation of Mitigation Actions: §201.6(c)(3)(iii)	Volume I, Section 6.0; Volume II, Section 9
Multi-Jurisdictional Mitigation Actions: : §201.6(c)(3)(iv)	Volume I, Section 6.0; Volume II, Section 9
<b>Plan Maintenance Process</b>	
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
Continued Public Involvement: §201.6(c)(4)(iii)	Volume I, Section 7.0

## IMPLEMENTATION OF THE PLANNING PROCESS

The planning process and findings are to be documented in local AHMPs. To support the planning process to develop this AHMP, Delaware County and the participating jurisdictions have accomplished the following:

- Organized a planning partnership including all jurisdictions within the County
- Developed a Steering Committee
- Identified hazards of concern
- Profiled these hazards
- Estimated the inventory at risk and potential losses associated with these hazards
- Developed mitigation goals and actions that address the various hazards that impact the area
- Developed mitigation plan maintenance procedures to be executed after obtaining approval of the plan from NYSOEM and FEMA

Based on input from all participating jurisdictions and stakeholders and review of available data, the Steering Committee then proceeded to identify, rank and profile those hazards that are of greatest concern to the community (hazards of concern). The hazard profiles include location, extent, previous occurrences and losses, and the probability of future events. The process also included a vulnerability assessment to evaluate what county and municipal assets are exposed or vulnerable to the hazards.

To address the requirements of DMA 2000 and better understand their potential vulnerability to and losses associated with hazards of concern, the Hazards U.S. – Multi-Hazard (HAZUS-MH) software package (discussed in greater detail later in this Plan), supplemented by local data where available, was used to support the risk assessment and vulnerability evaluation. HAZUS-MH assesses risk and estimates potential losses for natural hazards. It produces outputs that will assist state and local governments, communities, and the private sector in implementing emergency response, recovery, and mitigation programs, including the development of HMPs.

As required by DMA 2000, the Delaware County planning partnership 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 Multi-Jurisdictional All-Hazards Mitigation Plan Update documents the process and outcomes of the partnership's efforts. Additional information on the planning 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.

## SUMMARY OF CHANGES IN PLAN UPDATE

This document represents a comprehensive update to the February 2006 Delaware County Multi-Jurisdictional All-Hazards Mitigation Plan (AHMP). Significant changes and areas of update are summarized below.

## ORGANIZATION



One of the benefits of multi-jurisdictional planning is the ability to pool resources and eliminate redundant activities within a planning area that has uniform risk exposure and vulnerabilities. FEMA encourages multi-jurisdictional planning under its guidance for the DMA. This plan update has been set up in two volumes so that elements that are jurisdiction-specific can easily be distinguished from those that apply to the whole planning area:

**Volume 1**—Volume 1 meets the requirements of all elements of Section 201.6 of 44CFR that apply to the entire planning area. This includes the description of the planning process, public involvement strategy, hazard risk assessment, goals and objectives, regional mitigation capabilities and initiatives, and a plan maintenance strategy.

**Volume 2**—Volume 2 includes all jurisdiction-specific elements required by Section 201.6 of 44CFR, presented in annexes for each jurisdiction (the County and each municipality) participating in this process and adopting this plan. Each annex identifies that jurisdiction's specific hazard risks, mitigation capabilities, and updated mitigation strategy. The annexes are intended to provide an expedient resource for each jurisdiction for implementation of mitigation projects and future grant opportunities.

A summary of the overall plan organization is provided at the end of this Section.

## RISK ASSESSMENT

This 2013 update has amended and expanded on the hazard profiling and risk assessment efforts in the 2006 plan. The list of hazards of concern in the 2006 plan were reviewed and amended; adding certain hazards, eliminating those hazards found to pose a low risk and/or their risks are managed through programs other than mitigation, and combining/grouping certain hazards as described in Section 5.2. While the 2006 plan presented the vulnerability assessment for specific natural hazards separately from their profiles, hazard profiling and risk assessment/vulnerability assessment information are provided in a single, unified profile for each hazard of concern addressed in this update. The potential impacts of climate change as an exacerbating factor has been included for each hazard, where applicable.

This update has also provided County and local risk rankings, allowing a relative comparison of risk for the natural and non-natural hazards within each county and all participating municipalities, developed using the PEMA risk-factor methodology. Relative risk rankings may be used to focus and prioritize the individual jurisdictional mitigation strategies.

## CAPABILITY ASSESSMENT

This update has updated the regional and local capability assessment provided in the 2006 plan. Regional capabilities are presented in Section 5 (Capability Assessment), along with a summary of local mitigation capabilities. Specific local capabilities are identified in each jurisdiction's annex in Section 9.

## MITIGATION STRATEGIES

Progress on regional, county and local mitigation strategies identified in the 2006 plan are provided in each jurisdiction's annex in Section 9. Those actions and initiatives being carried forward in the 2013 update have been expanded with further information and details to support implementation. Actions being carried forward, as well as new actions identified during this update process, are included each jurisdiction's annex in Section 9.

A major focus of this update effort has been to identify effective, actionable, and well-defined mitigation actions and initiatives at both the county and local level.

## PLAN INTEGRATION WITH OTHER PLANNING MECHANISMS

It is the intention of this planning process that the county and municipalities shall incorporate findings and recommendation of this plan into future local planning efforts and into overall execution of their land-use planning process (e.g. comprehensive planning, site plan review, permitting, and code enforcement).

The integration of hazard mitigation, including the findings and recommendations of this update, into other related planning mechanisms in Delaware County is identified throughout this plan update. The Section 5 Capability Assessment identifies and describes the various plans, programs and mechanisms to support and effect mitigation in the County, including a discussion of those that have been updated or adopted since the 2006 plan. Section 3.6 of the Planning Process discusses how these plans, programs and mechanisms were integrated into the plan update process, and how this integration/coordination will continue as the 2013 update is implemented. Further, each jurisdictional annex identifies those planning and regulatory mechanisms that have been adopted and/or updated in each municipality, and identifies specific actions and initiatives to expand and enhance their local risk management capabilities.

## ORGANIZATION OF THIS MITIGATION PLAN

This Plan was organized in accordance with FEMA and NYSOEM guidance. The structure of this Plan follows the four-phase planning process recommended by FEMA and summarized in Figure 1-2. The Plan is organized into two volumes: Volume I includes all information that applies to the entire planning area (Delaware County); and Volume II includes participating jurisdiction-specific information.

Volume I of this Plan includes the following sections:

**Section 2:** Plan Adoption: Information regarding the adoption of the Plan by Delaware County and each participating jurisdiction.

**Section 3:** Multi-Jurisdictional Planning Process: A description of the Plan methodology and development process, Planning Committee and stakeholder involvement efforts, and a description of how this Plan will be incorporated into existing programs.

**Section 4:** County Profile: An overview of Delaware 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 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). 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 Delaware County in response to priority hazards of concern.

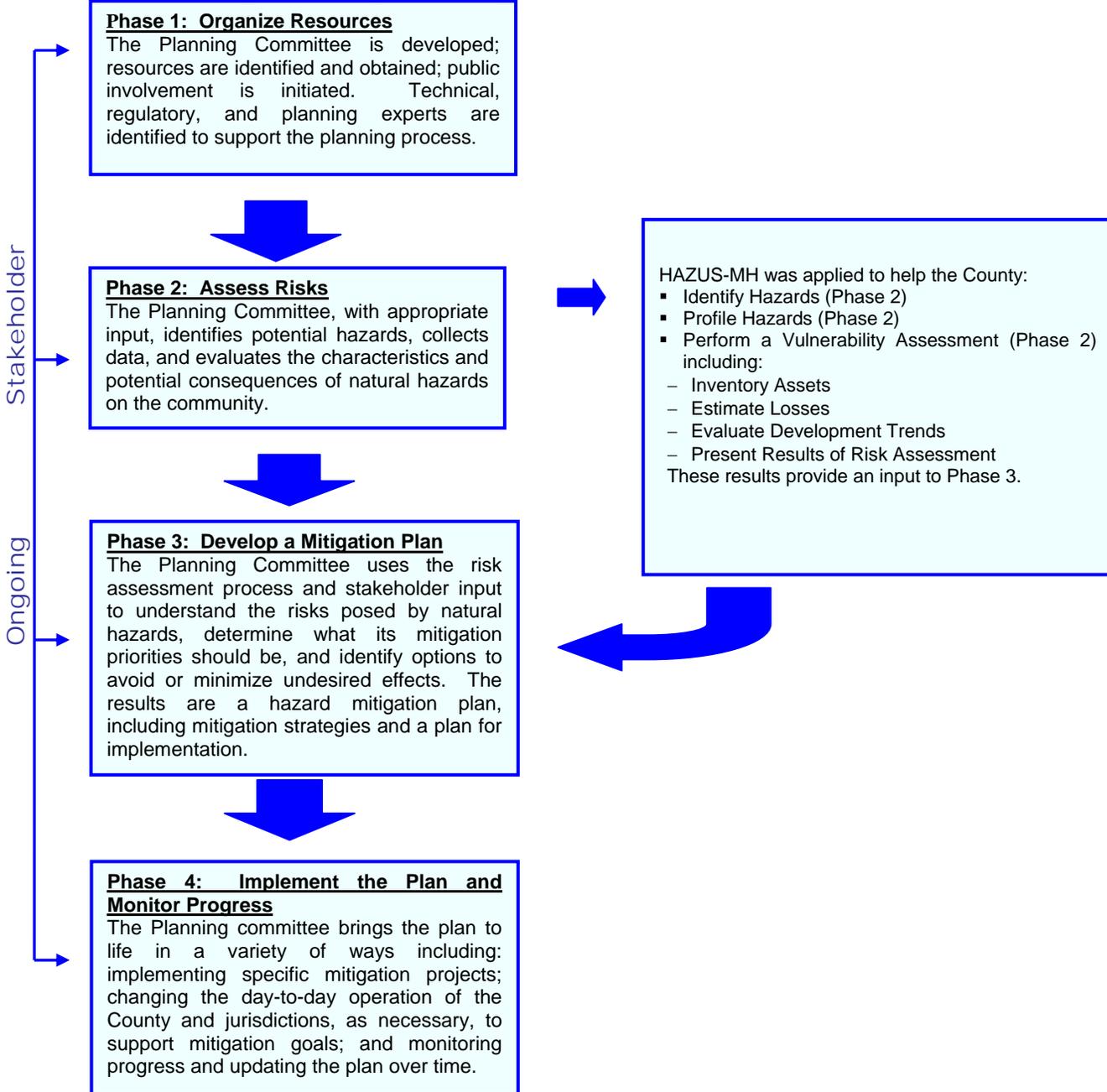
**Section 7:** Plan Maintenance Procedures: The system established by Delaware County to monitor, evaluate, maintain and update the Plan.

Volume II of this Plan includes the following sections:

**Section 8: Planning Partnership:** Description of the planning partnership, jurisdictional annexes and benefit /cost review process.

**Section 9: Jurisdictional Annexes:** A jurisdiction-specific annex for each participating jurisdiction and the County containing their hazards of concern, risk ranking, capability assessments, mitigation actions and action prioritization specific only to the County or that jurisdiction.

Figure 1-2. Delaware County Hazard Mitigation Planning Process



**Appendices –**

**Appendix A**, Resolution of Plan Adoption: documentation that supports the Plan approval signatures included in Section 2 of this Plan.

**Appendix B**, Meeting Documentation: Agendas, attendance sheets, minutes and other documentation (as available and applicable) of planning meetings convened during the development of the Delaware County Multi-Jurisdictional Hazard Mitigation Plan Update.

**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 comment and input to the plan update process.

**Appendix D**, FEMA 386-4 Guidance Worksheets: Sample filled in and blank worksheets to help facilitate plan maintenance and review by the Delaware County planning partnership.

**Appendix E**, Federal Mitigation Programs, Activities, and Initiatives: Summary of federal funding options that could be used to fund mitigation activities.

**Appendix F**, Invitation and Sample Municipal Letter of Intent to Participate