EXECUTIVE SUMMARY

The Onondaga County Multi-Jurisdictional All-Hazards Mitigation Plan was prepared in response to the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires states and local governments to prepare all hazard mitigation plans in order to remain eligible to receive pre-disaster mitigation funds that are made available in the wake of federally-declared disasters. **To restate, by not participating in this process and adopting the resulting plan, municipalities and other local governments will not be eligible to receive future pre-disaster mitigation funding.** It is also important to remember that pre-disaster mitigation funds are separate and distinct from those federal and state funds used in direct post-disaster relief. The availability of those funds remains unchanged; if there is a federally-declared disaster in Onondaga County, the affected municipalities will still receive immediate recovery assistance regardless of their participation in this plan.

> 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.

However, DMA 2000 effectively improves the disaster planning process by increasing hazard mitigation planning requirements for hazard events and requiring participating municipalities to document their hazard mitigation planning process and identify hazards, potential losses, and mitigation needs, goals, and strategies.

Onondaga County Multi-Jurisdictional Planning Process

DMA 2000 requires states to submit comprehensive Hazard Mitigation Plans for approval to the Federal Emergency Management Agency (FEMA) to be eligible for future pre-disaster mitigation funding. Local entities must also develop plans. To comply, Onondaga County and Plan participants (all Towns and Villages in the County) have developed this Multi-Jurisdictional All-Hazards Mitigation Plan (see the table below). In addition, the Onondaga County Water Authority formally participated in the planning process. Once the mitigation plan is completed and approved and each jurisdiction has formally adopted the Plan by resolution, participants will begin to work collaboratively to implement complementary mitigation actions.

City	Marcellus	Elbridge
Syracuse	Onondaga	Fabius
Towns	Otisco	Fayetteville
Camillus	Pompey	Jordan
Cicero	Salina	Liverpool
Clay	Skaneateles	Manlius
DeWitt	Spafford	Marcellus
Elbridge	Tully	Minoa
Fabius	Van Buren	North Syracuse
Geddes	**Villages**	Skaneateles
LaFayette	Baldwinsville	Solvay
Lysander	Camillus	Tully
Manlius	East Syracuse	

To support the planning process for this Hazard Mitigation Plan, Onondaga County and Plan participants accomplished the following:

- Developed a Steering Committee and Planning Committee (planning group);
- Identified hazards of concern;

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- Profiled and prioritized these hazards;
- Estimated inventory at risk and potential losses associated with these hazards;
- Developed mitigation goals, objectives and actions that address the hazards that impact the area;
- Developed mitigation plan maintenance procedures to be executed upon conditional approval of the plan from the New York State Emergency Management Office (NY SEMO) and FEMA.

As required by DMA 2000, the participating municipalities and Onondaga County have informed the public about these efforts and provided opportunities for public comment and input on the planning process. In addition, numerous agencies and stakeholders were contacted and some have participated as core or support members to provide input and expertise to the planning process. This Hazard Mitigation Plan documents the process (Section 3) and outcomes of the participants' mitigation planning efforts.

Onondaga County and the participating municipalities intend to incorporate mitigation planning as an integral component of daily government operations through existing processes and programs. Announcements regarding the planning process were publicized in local newspapers. Additionally, the Plan is and was posted and available for review and comment on the Onondaga County web site (http://www.ongov.net/planning/haz.html) and at locations within each participating jurisdiction. Updates to the plan will be similarly announced after annual plan reviews and 5-year updates. The County HMP Coordinator will be responsible for receiving, tracking, and filing public comments regarding this plan.

Onondaga County Multi-Jurisdictional All-Hazards Mitigation Plan Adoption

This mitigation plan will be reviewed and adopted by Onondaga County and participating jurisdictions. Copies of the resolutions regarding adoption of the plan will be included as Appendix B.

Onondaga County Profile

Onondaga County is located in Central New York State. According to Census, the County's estimated population in 2008 was 452,633. Additionally, the County's area extends approximately 30 miles north and south, and 35 miles east and west, with a total area of about 806 square miles. (U.S. Census Bureau, 2008). The County is located within the eastern portion of the Finger Lakes Region.

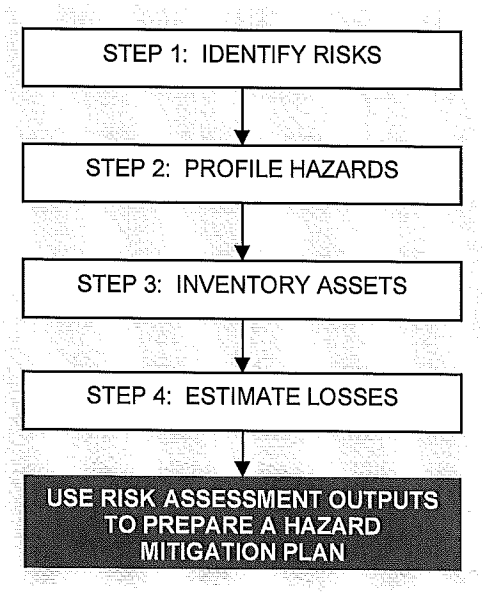
Onondaga County is bordered to the north by Oswego County, to the south by Cortland County, to the east by Madison County, and to the west by Cayuga County. Due to its location within the Finger Lakes Region, Onondaga County either contains or borders five major lakes: Cross Lake, Oneida Lake, Onondaga Lake, Otisco Lake and Skaneateles Lake. The major rivers of Onondaga County include the Seneca River and the Oneida River.

This combination of natural and developed features lays the foundation for Onondaga County's vulnerability to natural hazards, both in terms of exposure to hazard events and the potential impact of hazard events. The Onondaga County Multi-Jurisdictional All-Hazards Mitigation Plan provides a general overview of current and anticipated population and land use within the study area. This information provides a basis for making decisions regarding the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support decisions regarding future development in vulnerable areas. For potential increases in vulnerability, the County can then plan ahead to mitigate those vulnerabilities early in the development process or can direct development to areas of lower risk. The Planning Committee will revisit the mitigation plan regularly to ensure that mitigation actions support sustainability in order to minimize increased risk and to support the implementation and targeting of specific mitigation actions to address the potential impacts of development over time.

Risk Assessment

A key component of a mitigation plan is the accurate identification of risks posed by a hazard and the corresponding impacts to the community. The process of identifying hazards of concern, profiling hazard events, and conducting a vulnerability assessment is known as a risk assessment. The risk assessment portion of the mitigation planning process included the steps shown in Figure ES-1. Each of these steps is summarized below.

Figure ES-1. Risk Assessment Process



Step 1: The first step of the risk assessment process is to identify the hazards of concern. FEMA's current regulations only require an evaluation of natural hazards. Natural hazards are natural events that threaten lives, property, and many other assets. Often, natural hazards can be predicted, where they tend to occur repeatedly in the same geographical locations because they are related to weather patterns or physical characteristics of an area.

Onondaga County focused on considering a full range of natural hazards that could impact the area, and then identified and ranked those hazards that presented the greatest concern. The following list of five (5) hazards of concern, in order of hazard ranking determined by the Planning Committee, was selected for further evaluation in the mitigation plan:

1. Severe Storm (windstorms, thunderstorms, hail, tornadoes and hurricanes/tropical storms)
2. Severe Winter Storm (heavy snow, blizzards, ice storms, Nor'Easters) / Extreme Cold
3. Flood (riverine, flash, ice jam, dam/beaver dam)
4. Ground Failure (land slide, land subsidence, mud-boils)
5. Earthquake

Step 2: The next step of the risk assessment is to prepare a profile for each hazard of concern. These profiles assist communities in evaluating and comparing the hazards that can impact their area. Each type of hazard has unique characteristics that vary from event to event. That is, the impacts associated with a specific hazard can vary depending on the magnitude and location of each event (a hazard event is a specific, uninterrupted occurrence of a particular type of hazard). Further, the probability of occurrence of a hazard in a given location impacts the priority assigned to that hazard. Finally, each hazard will impact different communities in different ways, based on geography, local development, population distribution, age of buildings, and mitigation measures already implemented.

Steps 3 and 4: To understand risk, a community must evaluate what assets they possess and which are exposed or vulnerable to the identified hazards of concern. Hazard profile information combined with data regarding population, demographics, general building stock, and critical facilities at risk prepares the community to develop risk scenarios and estimate potential damages and losses for each hazard.

For this risk assessment, loss estimates and exposure calculations rely on the best available data and methodologies. Uncertainties are inherent in any loss estimation methodology and arise in part from incomplete scientific knowledge concerning natural hazards and their effects on the inventory, or built,

environment. Therefore, potential exposure and loss estimates are approximate and do not predict precise results but rather are used to characterize risk and assign priorities for mitigation efforts.

Onondaga County Mitigation Strategy

The outcomes of the risk assessment, supplemented by Plan participant input, provided a basis to review past mitigation actions, future goals, and appropriate local mitigation actions.

The mitigation strategy portion of the plan includes:

- A summary of past and current mitigation efforts;
- Local hazard mitigation goals and objectives;
- Identification and analysis of mitigation measures and projects being considered;
- Multi-jurisdictional mitigation strategy (goals and objectives);
- Mitigation action plan (summary of specific actions).

Mission Statement and Goals

Per FEMA guidance (386-1), a mission statement describes the overall duty and purpose of the planning process, and serves to identify the principle message of the plan. Onondaga County's mission statement is broad in scope, and provided direction for the Plan:

Mission Statement

The mission of the Onondaga County Multi-Jurisdictional All-Hazards Mitigation Plan is to protect the health, safety, property, environment and economy of the communities within Onondaga County by partnering to identify and reduce our vulnerability to natural hazards in a proactive and efficient manner.

The Steering Committee and planning group identified the following five over-arching mitigation goals that summarize the hazard reduction outcomes that the County and participating jurisdictions want to achieve:

1. Protect Life and Property
2. Increase [Understanding of Hazard Risk, and] Public Awareness and Preparedness
3. Promote Sustainability Throughout the County
4. Protect the Environment and Natural Resources
5. Promote and Support Partnerships
6. Enhance Disaster Preparedness, Response and Recovery

Objectives and Capability Assessment

The Steering Committee and planning group developed numerous objectives that meet multiple goals. The goals, along with their corresponding objectives, then guided the development and evaluation of specific mitigation actions.

A capability assessment was prepared by Onondaga County and each participating jurisdiction. A capability assessment is an inventory of a community's missions, programs and policies; and an analysis of its capacity to carry them out. This assessment is an integral part of the planning process. It identifies, reviews, and analyzes local and state programs, polices, regulations, funding and practices currently in place that may either facilitate or hinder mitigation.

By completing this assessment, Onondaga County and participating jurisdictions learned how or whether they would be able to implement certain mitigation actions by determining the following:

- Types of mitigation actions that may be prohibited by law;
- Limitations that may exist on undertaking actions; and
- The range of local and/or state administrative, programmatic, regulatory, financial and technical resources available to assist in implementing their mitigation actions.

Identification, Prioritization, Analysis, and Implementation of Mitigation Actions

The Steering Committee and planning group reviewed information garnered from the risk assessment and the public involvement strategy to identify strengths, weaknesses, opportunities and obstacles in hazard mitigation within Onondaga County through a facilitated brainstorming session on risks, vulnerabilities, and capabilities. This information was used to prepare a catalog of mitigation alternatives (Appendix E) to be considered by the planning group in preparing their individual jurisdictional annexes.

All proposed mitigation actions were identified in relation to the Plan's goals and objectives. The County and participating jurisdictions identified appropriate local mitigation actions, along with the hazards mitigated, goals and objectives met, lead agency, estimated cost, potential funding sources and the proposed timeline. These actions are identified in Volume II, Section 9 for the County and each participating jurisdiction.

The planning group performed a qualitative benefit/cost review on the identified mitigation actions that weighed the estimated benefits of a project versus the estimated costs to establish a parameter to be used in the prioritization of a project. Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and were prioritized accordingly.

Plan Maintenance Procedures

Hazard mitigation planning is an ongoing process. Section 7 of this plan presents procedures for plan maintenance and updates. Therefore, the Planning Committee will continue ongoing mitigation efforts to implement the mitigation plan and revise and update the plan as necessary.

To monitor implementation of the mitigation plan, the Planning Committee members will meet annually to discuss the status of plan implementation and will prepare a summary report of the plan status and any needed updates. The mitigation evaluation will address changes as new hazard events occur, as the area develops, and as more is learned about hazards and their impacts. The evaluation will include an assessment of whether the planning process and actions have been effective, whether development or other issues warrant changes to the plan or its priorities, if the communities' goals are being reached, and whether changes are warranted. In addition, the mitigation plan will be updated at a minimum within the 5-year cycle specified by DMA 2000.

POINT OF CONTACT

To request information or provide comments regarding this plan, contact Syracuse-Onondaga County Planning Agency.

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