This hazards mitigation plan encompasses the Town of New Lisbon, New York. This plan was developed through coordination with the Otsego County Planning Department and was funded, in part, by a Pre-Disaster Mitigation program grant from the New York State Emergency Management Office and Federal Emergency Management Agency.
# TABLE OF CONTENTS

## Section 1 – Executive Summary
- Background 1-1
- Planning Process 1-1
- Risk Assessment 1-1
- Mitigation Strategy 1-2
- Action Plan 1-3
- Plan Maintenance 1-6

## Section 2 - Background 2-1

## Section 3 - Planning Process 3-1

## Section 4 - Risk Assessment
- Introduction 4-1
  - Town Historic data 4-2
  - HAZNY results 4-4
  - Hazard Definitions 4-5
  - Moderately High Hazards 4-8
  - Moderately Low Hazards 4-10
  - Critical Building Value, Replacement and Content Cost 4-17
  - Critical Facilities Inventory 4-17
  - Damages assessment 4-18

## Section 5 - Mitigation Goals and Actions
- Introduction 5-1
  - Actions Specific to New and Existing Buildings 5-2
  - Prioritized method of goals and actions 5-5
  - Goals and Action Plan 5-8

## Section 6 - Plan Maintenance
6-1 thru 6-8

### Appendix A – List of Acronyms
A

### Appendix B - All Hazard Mitigation Plan Adoption
- B-1 – Appointment of Members to Planning Committee B-1
- B-2 – Plan Adoption B-2
- B-3 – Resolution of amended plan 2006 B-3

### Appendix C – Notices
- C-1 – Public Notice C-1
C-2 – List of notified agencies
C-2 – Letters to other agencies

Appendix D – Critical Facilities and Vulnerable Sites

Appendix E – Maintenance
E-1 – Sample cover letter for annual maintenance report
E-2 – Sample of Annual Maintenance Report

Appendix F – Maps
F-1 Roads and Parcels
F-2 Water & Forest Resource
F-3 School Districts
F-4 Fire District
F-5 Transportation/Crashes
F-6 Critical Facilities
F-7 2006 Flood
F-8 Potential Hazardous Areas
SECTION 1 – EXECUTIVE SUMMARY

The Town of New Lisbon Hazards Mitigation Plan includes resources and information to assist public and private sectors to reduce the losses from future hazard events. This plan is not a manual of what to do if a disaster occurs. Instead, it concentrates on actions that can be implemented prior to disaster events in order to reduce the damage to property and potential loss of life. The plan includes an assessment of the Town’s risk and vulnerability, a strategy for minimizing those risks (goals and objectives), and an action plan that will be implemented to achieve the objectives.

This plan is intended to fulfill the planning requirements for state and federal assistance programs. It will enable the Town to apply for future hazards mitigation grants that will assist with implementation of the proposed projects identified in this plan.

BACKGROUND

Section 2 of this plan provides background material about the Town of New Lisbon and previous efforts to mitigate hazards.

PLANNING PROCESS

The Town of New Lisbon officially began the development of this multi-jurisdictional all-hazards mitigation plan with an August 10, 2004 meeting held for the town board in New Lisbon, New York. The purpose of these meetings was to introduce the mitigation concept, describe past efforts in the Town, and to get all possible participants together for the multi-jurisdictional planning process. Key players from several organizations in the Town were invited. The meeting was well attended with people representing the County of Otsego, New Lisbon Town Board, New Lisbon Fire Department, as well as the Town Highway Department.

A series of meetings were held to gather information and recommendations for this hazards mitigation plan. Staff support was provided by the Otsego County Planning Department. In addition to the information and recommendations assembled at the planning meetings, numerous agencies, organizations, and members of the public were contacted for additional input.

RISK ASSESSMENT

The recommendations in the New Lisbon All Hazards Mitigation Plan are based on an assessment of the communities’ vulnerability to 8 hazards identified in the New York State Emergency Management Office HAZNY Program. The reasons for omission of certain hazards are explained in Section 4 – Risk Assessment. The priority rankings were prepared based on the scope, frequency, impact, onset and duration of each hazard considered (using the HAZNY interactive spreadsheet program).
Mitigation Strategy

The overall purpose of the Town of New Lisbon All Hazards Mitigation Plan is to protect life and property from natural and human-caused hazards.

The proposed mitigation strategy is represented by the following long range goals, which encompass the highest ranked hazards for New Lisbon Town. The New Lisbon Town Hazards Mitigation Plan identifies specific objectives for achieving each goal.

Multi-Hazards Mitigation Goals
- Continue ongoing efforts and increase public awareness about hazards
- Provide emergency services in a timely and effective manner
- Maintain the viability of all critical facilities and operations
- Maintain support (political and private sector) for hazards mitigation and emergency response

Severe Weather Goals (Severe Storm, Severe Winter Storm, Ice Storm)
- Minimize damage from trees to utilities, structures, and other utilities
- Build and maintain structures to withstand high winds and heavy snow
- Reopen transportation routes as quickly as possible following a severe weather event

Flood Goals
- Raise public awareness about flood hazards, flood safety, and flood damage protection measures.
- Minimize stream bank erosion and improve water quality
- Decrease flooding impact on roads with repetitive events
- Minimize the potential for obstruction of flow by maintaining streams, drainage ways, and drainage structures
- Mitigate flood risks for existing development

Dam Failure Goals
- Provide public awareness by providing information on the potential for dam failure
- Routinely check and maintain dams for safety
- Respond quickly and effectively in the advent of a dam failure
- Prevent new development from occurring in dam failure inundation areas

Action Plan

The Town of New Lisbon Hazards Mitigation Plan recommends implementation of the following actions over the next several years.

Multi-Hazards Mitigation Actions
Public Awareness
- Improve educational programs about hazards and family planning, emergency supplies, evacuation procedures, transportation safety and hazards mitigation.
- Encourage local officials’ participation in hazards related training offered at County, State, and Federal levels.
- Provide municipal officials with periodic training and responsibilities during hazards events.

Emergency Services
- Improve/maintain communication among highway departments to enable coordinated maintenance of emergency routes.
- Improve dissemination of emergency warnings and weather information to residents, businesses, and institutions.

Critical Facilities
- Periodically review and update the list of critical facilities serving the community.
- Develop and implement strategies to mitigate risks to critical facilities.

Support
- Invite elected municipal officials to meetings of the New Lisbon Hazard Mitigation Committee to guide implementation of this plan and revision of the plan.
- Maintain and expand public/private sector coordination through organizations that are actively involved in hazards reduction activities.
- Encourage public/private sector organizations (tourist facilities) to prioritize and implement hazards mitigation actions.

Severe Weather Actions

Minimize Damage from Trees
- Maintain trees along municipal right-of-ways.
- Support/encourage utility companies to maintain trees near telephone and power lines.
- Locate/create educational information about maintenance of trees adjacent to structures.
- Explore providing brush pickup services and/or designated drop off locations to encourage tree maintenance and to discourage improper disposal of yard debris in drainage ways.
- Recommend, encourage, or require underground utilities in new developments through land use regulations. Encourage utility companies to use underground construction methods if feasible.

Buildings Are Able to Withstand High Winds and Snow
- Provide annual training for code enforcement officers in order to effectively enforce the structural standards in the International Building Code.
- Identify vulnerabilities for owners of older buildings that may not conform to the structural standards in the International Building Code.

Transportation Routes are Reopened Quickly
• Improve highway departments’ monitoring of weather conditions and forecasts to enable timely response to snow, ice, and high water conditions by the
• Review and revise highway departments’ plowing schedules and hazardous weather response procedures to minimize time required to restore safe roadways
• Provide emergency service transportation during inclement weather through highway departments and emergency service providers

Flood Mitigation Actions

Public Awareness
• Disseminate and improve flood informational packets.
• Increase flood awareness locally by educating property owners within the floodplains
• Educate property owners adjacent to streams about proper stream maintenance.

Minimize Erosion and Improve Water Quality
• Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development of agricultural resources.
• Periodically check water for contaminates and other foreign material.

Decrease Flooding Impact on Roads
• Increase funding to mitigate damage to flood prone areas

Minimize Obstruction of Flow
• Reduce the potential for flooding caused by debris through routine inspection and maintenance of streams, roadside ditches, and drainage ways
• Develop and implement a strategy for maintenance of privately owned storm water drainage systems and secondary stream channels

Mitigate Flood Risks for Existing Development
• Evaluate opportunities to alleviate flooding problems by retaining water upstream through wetland creation/retention structures during high flow periods(and implement as appropriate)
• Develop and implement a strategy for replacing undersized bridges and culverts on public road ways and on private property

Dam Failure Mitigation Actions

Public Awareness
• Provide informational packets on dam failure.
• Develop an emergency evacuation plan for residents within flood zone of dams

Maintenance
• Provide periodic inspections and maintenance on dams.

Emergency Response Personnel
• Create dam failure emergency procedures for emergency personnel
• Provide training to emergency response personnel on the effects of dam failure.
• Provide an effective emergency evacuation plan to emergency response personnel as well as local residents.
Prevent New Development in Path of Dam

- Encourage local municipalities to create land use laws to reduce the amount of development in the path of dams.

Plan Maintenance

The Town of New Lisbon All Hazards Mitigation Plan is an active document that will be periodically reviewed, updated, and revised. Municipal officials, emergency response personnel, agency staff, and the public will be involved in this on-going planning process.
SECTION 2 – BACKGROUND

The Town of New Lisbon is located in the central western area of Otsego County. There are two hamlets, New Lisbon and Garrettsville.

In 2000 the population was 1,116 which is an increase of 120 people from 1990.

LAND: The topographic quadrangle location is divided between four areas; Edmeston, Morris, Hartwick and Mt. Vision. New Lisbon is 44.7 square miles. The area is very picturesque with an assortment of soils, vegetation, and geological materials.

FLOOD PLAIN: The flood plains in the town of New Lisbon occur all along the Butternut Creek which runs north and south through the western portion of the town.

CLIMATE: The climate of New Lisbon is classified as continental-humid, with cold winters and mild summers with precipitation well distributed throughout the year. The result of this climate is an abundance of flora and fauna throughout the region and a wealth of water resources. The average annual temperature is 45 degrees. Temperatures in January are an average of 11 degrees while temperatures in July are an average of 81 degrees. Annual precipitation averages 46.81 inches. Annual snowfall averages 81 inches, although recent years have seen much less than this. The sun shines an average of 50% of the daylight hours. The climate defines a somewhat limited growing season for
field crops, due to late spring and early fall frosts. The growing season averages 120 days.

**POLITICAL GEOGRAPHY:** New Lisbon has two hamlets of New Lisbon and Garratsville. The population density is 24.9 persons/square mile, one of the lowest population densities in Otsego County.

**TRANSPORTATION:** There are nearly 49 miles of roads within the Town of New Lisbon maintained by Otsego County, the Town of New Lisbon, or private land owners. The Town of New Lisbon is responsible for the vast majority of the roads within the Town limits (30.29 miles, of which 11.4 miles are seasonal) while Otsego County maintains slightly more than 12 miles of roadways. Private roads account for more than 5 miles within the town.

**PEOPLE:** The 2000 census revealed that almost 44% of the Town’s population is between the ages of 25 and 54 with a median age in the Town of 40.2 years. It also revealed that nearly 17% of the population is at or above the retirement age of 62.

**EMPLOYMENT:**

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, professional and related….</td>
<td>173</td>
<td>36</td>
</tr>
<tr>
<td>Service….</td>
<td>74</td>
<td>15</td>
</tr>
<tr>
<td>Sales &amp; office….</td>
<td>99</td>
<td>20</td>
</tr>
<tr>
<td>Farming, fish &amp; forestry….</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Construction, extraction &amp; maintenance….</td>
<td>57</td>
<td>13</td>
</tr>
<tr>
<td>Production, transportation &amp; moving….</td>
<td>71</td>
<td>14</td>
</tr>
</tbody>
</table>

**ECONOMY:** In 1999, the median household income in New Lisbon was $40,125. This figure is higher than the median for Otsego County, which is $33,444.

Like many small communities, New Lisbon does not host a wide variety of centrally located businesses. A recent trend has been the increase in the number of home based businesses in the area. Possibly due to current economy, many residents have decided to establish small, home based businesses rather than the traditional “storefront” establishments in order to reduce overhead as well as to take advantage of recent federal and state tax breaks.

**AGRICULTURE:** Agriculture in the Town of New Lisbon at one time played a vital role in the economy; today it is less than 2.3% of the populations’ occupation. Nearly 3500 acres of land in New Lisbon are currently assessed as actively used for some type of agricultural use: dairy, field crops, cattle/calves/hogs, sheep/wool, and nursery/greenhouse. Twenty years ago almost three times that amount of land was in agricultural.
**LAND USE REGULATION:**

- Dumping Hazardous Waste
- Site Plan Review Subdivision Regulations.

**PUBLIC EDUCATION:** The Town of New Lisbon utilizes the educational services of the following school systems: Cooperstown Central School, Edmeston Central School, Laurens Central School and Morris Central School.

**COMMUNITY SERVICES:** Police protection is provided by both the County and State which patrol on a random or as needed basis.

- County Sheriff Headquarters – Cooperstown.  
- State Police Barracks - Richfield Springs.

**Fire Protection:** Garratsville VFD

**EMS:** Garratsville Emergency Squad.

**NEW LISBON MITIGATION PROJECTS:** All of the mitigation projects undertaken to date in the Town of New Lisbon have been to reduce the impact of disaster.
SECTION 3 - PLANNING PROCESS

The Town of New Lisbon officially began the development of this all-hazards mitigation plan with an August 10, 2004 meeting held at the New Lisbon Town hall. The purpose of this meeting was to introduce the mitigation concept, describe past efforts in the Town and to get all possible participants at the same point for the multi-jurisdictional planning process. Key players from several organizations in the County were invited. The meeting was well attended.

Based on interest generated at the meeting, the Town of New Lisbon, in conjunction with the Otsego County Planning Department, formed a Planning Committee made up of the following members:

Planning Committee:

Robert Taylor- Chair  Town Supervisor, Administration, Resource and Reference
Charlene Wells- Town Clerk  Emergency Responder, Administration, Resource and Reference
Ken Tilley- Councilman  Volunteer Firefighter, Administration, Resource and Reference
Bill Whitake- Hwy Superintendent  Volunteer Fire Fighter Resource and Reference
Glen Broeck-Councilman  local business owner, Administration, Resource and Reference
Charles Storer-Councilman  retired engineer, Administration, Resource and Reference
Ray Harrington- Councilman  DOT, Resource and Reference

Planning Staff:

Diane Carlton, AICP Director, Otsego County Planning Department
Matt VanSlyke Planner, Otsego County Planning Dept.
Ann Williamson Administration, Mapping, Editing, Budgeting,
Matt Munson Intern - State University College at Oneonta-
Research and Development.
Nancy Okkar Administrative Assistant
The County Planning Department, under the guidance of Matt Van Slyke and supervision of Director Diane Carlton was responsible for the coordination of other agencies, scheduling of meeting, presentation of information and development of the plan. Matt Van Slyke acted as the liaison between governing bodies preparing the plan and other agencies. Matt was assisted by college intern Matt Munson, an undergraduate geography student from the State University College at Oneonta. Ann Williamson, Planner assisted with administrating, mapping, budgeting, writing and editing of the plan. On July 20, 2004 the Town Trustees appointed a Hazard Mitigation Committee to work with the Planning Department and a list of other county, regional and state agencies to contact for relevant information. Each committee member’s responsibilities are outlined above.


The committee made a conscious effort to involve the public by advertising each public meeting and or hearing in the official newspaper. Public meetings were held during the formation of the plan: one at the introductory, one when soliciting information to identify hazardous analysis report, and one prior to submitting the final document. Meetings were held in the evenings to allow for individuals to attend during non-working hours. Citizens were also notified through public notice and posted bulletin, of the proposed revisions and were able to comment before August 31, 2006. Copies of the document was available at the Village Clerk’s office and the County Planning Department for review. In addition, the Fire department at Garretsvill, Morris, Laurens, and Edmeston Schools, the Town and County Trees service, the Town hall, were notified by the Town Clerk during the revision phase of the document to allow for additional input. A list and copy of the letter appears in appendix C-2 and C-3.
Meetings of the committee were held on a regular basis and open to the public

**Planning Process**

- **7/20/2004: Resolution of Participation Received from the Town of New Lisbon**

- **8/10/04 Town of New Lisbon Introductory Meetings:** Planning Department staff met with the Town to discuss the All Hazards Mitigation Plan. Mitigation examples, copies of the County Plan, and a sample resolution of participation were handed out to Board members.

- **Town of New Lisbon Hazard Analysis:** In conjunction with other involved agencies, a hazards analysis was created for the Town of New Lisbon. A total of 8 hazards were analyzed for the Town. This analysis was created by using the HAZNY (Hazards New York) computer program supplied by the State Emergency Management Office.

- **Town of New Lisbon HAZNY / Hazard Mitigation Plan Review:** The Hazard Mitigation Planning Committee as well as other involved agencies met to review the compiled HAZNY report. After close review some minor changes were made to the report to better reflect the Town of New Lisbon.

- **January 11, 2005: Town of New Lisbon Hazard Mitigation Plan adoption as Draft Document:** The HMC adopted the plan as a draft document to be presented to the Town Board for its formal adoption. Resolutions will be sent to the County for the Multi Jurisdictional Plan Component.

- **7/17/06: Town of New Lisbon Hazard Mitigation Plan revision and crosswalk review.** County planning representatives Fiona Carbin met with Robert Taylor New Lisbon town supervisor to review crosswalk and address historical data of document. A public notice was drafted by Robert Taylor notifying the public of the revision period and acceptance of any additional comments before amendments would be completed. A deadline of August 31, 2006 was established. In addition, Robert Taylor would send individual letters to the Fire department at Garretsvill, Morris, Laurens, and Edmeston Schools, the Town and County Trees service, the Town hall, inviting their input for the revisions (Appendix C-3).

**Coordination with Agencies:**

Matt Van Slyke, contacted county, regional, and state agencies for relevant information and recommendations about the mitigation planning effort. These agencies were all notified of each meeting and invited to participate. In addition, the State University College at Oneonta provided the County Planning Department with an undergraduate student, Matt Munson who was extremely helpful in assisting Matt Van Slyke by...
attending meetings, gathering information, interviewing various officials and gathering data information. Personnel from these agencies attended planning meetings, provided information, answered questions, reviewed minutes, and reviewed draft sections of documents. Feedback from these agencies helped to develop hazardous areas and concerns not recognized by the committee and aided in the development of the maintenance and mitigation portion of the document. The County Office of Emergency Services was able to provide historical data of hazardous conditions. The planning department was the major sources for population statistics and geographical information. Marybeth Vargha from the county GIS department assisted with mapping and GIS interpretation. Representatives from the Red Cross were able to provide historical data of the county in regards to services rendered during hazardous weather conditions and other county-wide disaster related situations.

The contributions from agencies and organizations that contributed to this planning process are listed below:

- Otsego County Office of Emergency Services
- Otsego County Health Department
- Otsego County Planning Department
- American Red Cross
- New York State Emergency Management Office
- New York State Department of Environmental Conservation
- Otsego County Building and Codes
- Local Business (see appendix C-2)

**Specific Documents incorporated into the plan**

The committee utilized various documents in the preparation of the plan, including historical data provided by County Office of Emergency Services and prior FEMA requests documented through the Town of New Lisbon. These two documents provided the Town of New Lisbon with data to identify prior occurrences of disasters in the Town. Local flood plain maps, and GIS information gathered from the county GIS coordinator Marybeth Vargha, provided the geographical data to apply to the Town boundaries and map accordingly. Land use comprehensive plans were reviewed to identify any existing regulations pertaining to site plan restrictions and building proposals that would be located in identified potentially hazardous areas. The Town has a flood plain restriction to avoid building in high water table areas (See appendix F-7). The town code restricts construction of full basements in areas of high ground water levels. These areas are identified by the flood plain map information. In general, these areas include surrounding River and stream properties. The town operates under the jurisdiction of the NYS building code. Otsego County Building and Codes was able to supply information in regards to building requirements for new construction in high water table areas.
SECTION 4 – RISK ASSESSMENT

Specific locations within the Town of New Lisbon that may be affected by relevant natural hazards were located on a map with the assistance of historical data and the professional knowledge of the street and parks commissioner and the county emergency management director. Appendix F-8 identifies the locations of these areas. The committee then determined the risk assessment for each as well as gathered historical data to support risk assessment. The following is a summary of historical documentation for the Town.
<table>
<thead>
<tr>
<th><strong>Hazard or Event Description</strong></th>
<th><strong>Source of information</strong></th>
<th><strong>Map</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter snow storm- 1990</td>
<td>Members of community</td>
<td>See figure 4.2 and Appendix F-8</td>
</tr>
<tr>
<td>Entire town was affected</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Newspaper</td>
<td></td>
</tr>
<tr>
<td>Blizzard 1993-</td>
<td>Members of the community</td>
<td>See figures 4.2,4.1 and Appendix F-8</td>
</tr>
<tr>
<td>Entire town was affected</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>Major road closures and loss of power.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood-1996</td>
<td>Members of the Community</td>
<td>See appendix F-7 and F-8</td>
</tr>
<tr>
<td>Entire town was affected</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>A culvert on Miller Rd failed and the road was closed for two months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000- Y2K</td>
<td>Members of the Community</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Entire town threatened by the failure of its facilities</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>Summer Storm and Flash Flood- 2001</td>
<td>Members of the Community Emergency Representatives</td>
<td>See Appendix F-7 and F-8 also figure 4.1</td>
</tr>
<tr>
<td>The entire town was affected. Trees were down along with power. A Federally declared disaster.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flooding- 2002</td>
<td>FEMA</td>
<td>See F-7 and F-4</td>
</tr>
<tr>
<td>The culvert on Miller rd broke again and the town had to hire an engineer $20,000 to design one that will be able to stand. The road was closed for 2 years. Assistance from FEMA</td>
<td>Members of the Community Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>Winter Snow Storm- 2002/03</td>
<td>Members of the Community</td>
<td>See figure 4.2 and appendix F-8</td>
</tr>
<tr>
<td>Entire town was affected, people could not go to work due to road closures and holiday plans were either altered or terminated. A Federally declared disaster.</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>Black Out- 2003</td>
<td>Members of the Community</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Entire town had no electricity causing hazards in the roadways, and seriously in convened residents lives</td>
<td>Newspaper</td>
<td></td>
</tr>
<tr>
<td>Flood- 2005</td>
<td>Members of the Community</td>
<td>See Appendix F-7 and F-8</td>
</tr>
<tr>
<td>Heavy rain fall caused washout on some town roads. A Federally declared disaster.</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
<tr>
<td>Ice Storm- April 2005</td>
<td>Members of the Community</td>
<td>See Appendix F-8 and figure 4.2</td>
</tr>
<tr>
<td>Entire town affect. Areas such as Jones Rd. was hit the hardest, with several trees down along</td>
<td>Emergency Representatives</td>
<td></td>
</tr>
</tbody>
</table>
with power residents were without power for 4 days.

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Responsible Party</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire- 2005</td>
<td>Church on Myers Rd. caught fire due to an outside wood fire.</td>
<td>Members of the Community Emergency Representatives</td>
<td>Unavailable</td>
</tr>
<tr>
<td>2006- Flood</td>
<td>Heavy Rains caused major flooding throughout the entire town. Properties were seriously damaged especially agricultural fields, most roads were closed, and residents were out of work for 2-3 days, high cost in repair. Numerous culverts could not stand to the pressure and failed. An estimated $200,000 was in damages</td>
<td>Members of the Community Emergency Representatives FEMA</td>
<td>See F-7 and F-8</td>
</tr>
</tbody>
</table>
SECTION 4 – RISK ASSESSMENT

In order to prepare for and mitigate the consequences of hazardous events, it is necessary to understand the local vulnerability. Vulnerability is based on the natural and man-made factors that determine the probability of an event occurring and community factors that contribute to the severity of the impacts.

A quantitative risk assessment for the **Town of New Lisbon** was conducted using the HAZNY program developed by the New York State Emergency Management Office. HAZNY is an automated interactive spreadsheet that enables a group of local experts to rank hazards based on the scope (area of impact and potential of cascade effect), frequency, impact, onset, (warning time) and duration of each hazard considered. The group evaluated 8 hazards that can potentially impact the Town of **New Lisbon** and rated them as follows. The highlighted hazards were identified by the team to be representative of natural hazards that have occurred and potential hazards that are more likely to occur.

The hazards identified by an “*” are further reviewed for risk assessment. It was decided to determine risk assessments of natural hazards which are the most likely to occur, or have historically occurred in the Town of New Lisbon.

### MODERATELY HIGH HAZARDS:

| *SEVERE STORM  | 282 |
| *DAM FAILURE  | 246 |

### MODERATELY LOW HAZARDS:

| *ICE STORM         | 225 |
| *ICE JAM           | 212 |
| *FLOOD             | 211 |
| *FLASH FLOOD       | 210 |
| *WINTER STORM (SEVERE) | 208 |
| *LANDSLIDE/erosion | 182 |
The Following hazards were eliminated from consideration for the reason stated:

**Air Contamination**
This is pollution caused by atmospheric conditions, (as opposed to chemical spill or a release type of situation) such as a temperature inversion induced smoggy condition sufficiently serious to create some danger to human health. This is not in a location where these conditions normally occur.

**Avalanche**
Avalanches in New York State are mainly confined to the higher peaks of the Adirondacks. Any small avalanche that may occur is likely to be of such small size and power that the damage would be negligible.

**Blight**
Blight was not considered by the Hazard Mitigation Committee to pose a great risk to the Town. Agricultural activities have downsized over the years and most have diversified activities to remain viable, not wholly dependent on any one crop. New Lisbon does contain a substantial amount of woodlands and forested lands but blight was not considered a threat to those lands at this time.

**Civil Unrest**
The committee did not deem this a danger to the community.

**Drought**
Drought was considered a negligible threat to the residents of the town as a whole. Minor droughts affect agriculture and individual water sources routinely but so rarely impact the entire town, it was decided to omit this hazard from review.

**Earthquake**
Being a rare event or one of minor magnitude the committee did not feel this was relevant.

**Epidemic**
Based on Hazard Mitigation Committee review and disaster histories for New Lisbon, Epidemic was determined to be a remote hazard with negligible effects.

**Explosion**
Explosion was considered a negligible hazard by the Hazard Mitigation Committee. There are no known storage facilities or use permits for explosives within the town.

**Extreme Temperatures**
The Committee believed there to be negligible impact form this event.
<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>Being such a rural area the New Lisbon Committee did not feel this had any more impact than upon individual structures.</td>
</tr>
<tr>
<td>Food Shortage</td>
<td>Food Shortage was not considered due to the lack of close shopping establishments, residents are more likely to purchase supplies in bulk and/or for extended periods of time on a regular basis.</td>
</tr>
<tr>
<td>Fuel Shortage</td>
<td>The committee determined that if this event were to occur it would be due to a national crisis not to a localized problem with distribution.</td>
</tr>
<tr>
<td>Hazardous Material (Fixed Site)</td>
<td>There were no fixed sites in the community to pose a threat.</td>
</tr>
<tr>
<td>Hazardous Material (In Transit)</td>
<td>A release or threat of release of hazardous material from a transportation vehicle including truck, rail, air, and marine vehicle is highly unlikely in or around New Lisbon.</td>
</tr>
<tr>
<td>Hurricane</td>
<td>Hurricane force winds and accompanying rain were not reviewed separately. The impacts were analyzed as Severe Storm.</td>
</tr>
<tr>
<td>Infestation</td>
<td>Infestation was considered a negligible hazard by the Hazard Mitigation Committee.</td>
</tr>
<tr>
<td>Mine Collapse</td>
<td>There are no underground mines located in the Town of New Lisbon.</td>
</tr>
<tr>
<td>Oil Spill</td>
<td>Oil Spill was considered a negligible hazard by the Hazard Mitigation Committee.</td>
</tr>
<tr>
<td>Radiological (Fixed Site)</td>
<td>There are three electricity generating nuclear power sites in New York State. Of the three the Indian Point site, located in Westchester County, is the closest, located approximately 100 miles from the Town of New Lisbon border. The other sites are in the Towns of Scriba and Ontario along Lake Ontario and are 100+ miles away. The possibility is remote, but New Lisbon could be impacted by low levels of radiation in a major anomaly at one of the six-generating plants. In such a case, considerable time would be available for any necessary actions.</td>
</tr>
<tr>
<td><strong>Radiological (In Transit)</strong></td>
<td>A release or threat of release of radioactive material from a transportation vehicle including truck, rail, air, and marine vehicle is highly unlikely in or around New Lisbon.</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Structural Collapse</strong></td>
<td>It was determined that structural collapse is a possibility in the Town of Decatur since much of the housing stock is greater than 50 years old. Upon further review though, it was decided that the impact would be negligible to the community as a whole. The current building density within the Town is so low that collapse of one structure would not lead to a catastrophic event.</td>
</tr>
<tr>
<td><strong>Terrorism</strong></td>
<td>Due to the rural flavor of this area and lack of dense population centers, terrorism was not considered to be a high level threat.</td>
</tr>
<tr>
<td><strong>Tornado</strong></td>
<td>This town has no record of tornado activity and although there have been wind events in close proximity this threat potential was deemed negligible.</td>
</tr>
<tr>
<td><strong>Trans Accident</strong></td>
<td>The possibility of a transportation accident impacting the area to any large degree has little or no chance of occurring.</td>
</tr>
<tr>
<td><strong>Tsunami/Wave Action</strong></td>
<td>According to the National Weather Service (Philadelphia/Mount Holly), tsunamis have impacted the Atlantic Coast of the Northeastern United States in the past. All tsunami/wave damage was confined to the immediate coast. Due to the geographic location of the Town of New Lisbon, the ability of a tsunami to impact is extremely remote, bearing a catastrophic event in the Atlantic Ocean.</td>
</tr>
<tr>
<td><strong>Utility Failure</strong></td>
<td>Utility Failure was considered a negligible hazard by the Hazard Mitigation Committee. Most utility interruptions are due to secondary effects of a disaster.</td>
</tr>
<tr>
<td><strong>Water Supply Contamination</strong></td>
<td>Water Supply Contamination was considered a negligible hazard by the Hazard Mitigation Committee.</td>
</tr>
<tr>
<td><strong>Wildfire</strong></td>
<td>New Lisbon did not see the potential for an uncontrollable combustion of trees, brush or grass involving a substantial land area which may have the potential for threatening human life and property</td>
</tr>
</tbody>
</table>
The following assessment evaluates the risks associated with each hazard in the Town of New Lisbon. The responses used for the HAZNY assessment are presented, along with additional information about historic occurrences and vulnerabilities.

**MODERATELY HIGH HAZARDS**

**SEVERE STORM And DAM FAILURE.**

**SEVERE STORM**

<table>
<thead>
<tr>
<th>Potential Impact:</th>
<th>Throughout a Large Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascade Effects:</td>
<td>Some Potential</td>
</tr>
<tr>
<td>Frequency:</td>
<td>A Frequent Event</td>
</tr>
<tr>
<td>Onset:</td>
<td>Several Hours Warning</td>
</tr>
<tr>
<td>Hazard Duration:</td>
<td>One Day</td>
</tr>
<tr>
<td>Recovery Time:</td>
<td>Three Days to One Week</td>
</tr>
</tbody>
</table>

**Impact:**

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Severe Structural Damage to Public Facilities

**Definition:** A storm including, but not limited to hail storms, windstorms, and severe thunderstorms (with associated severe wind events such as derechos, dust devils, and downbursts).

**Profile/Vulnerability Assessment:** The Town of New Lisbon experiences many severe storms each year. These storms may include severe thunderstorms and remnants of major hurricanes or tropical storms. These storms have the potential to cause several cascade events including utility failure, flood/flash flood, dam failure, water supply contamination, transportation accident, and landslide. In the event of a severe storm private property as well as public infrastructure could be adversely affected.

It is difficult to place a value on losses of this nature. There are many losses that are not reported to insurance agencies and remain uncounted. The Hazard Mitigation Committee had to use its best judgment to calculate potential loss. According to county estimates, a moderate loss could easily top $500 per occurrence. If this is the case the town could suffer from over $1,000,000 in damages due to this type of event annually. Public losses from this type of disaster include direct expenses to the Towns’ Highway garage. Items such as road clearing, tree removal, sand and salt spreading, items above and beyond the regular allocated budgeting can account for deficits of the highway budget of over 20%. Utilities losses are estimated into the millions of dollars during an event of this nature.
Below is a map showing the wind zones of New York State. Otsego County is identified as mostly zone 3 characteristics which represents wind zones of 200 mph.

**Figure 4.1**

### DAM FAILURE

**Potential Impact:** Throughout a Small Region  
**Cascade Effects:** Some Potential  
**Frequency:** A Regular Event  
**Onset:** No Warning  
**Hazard Duration:** Two to Three Days  
**Recovery Time:** Three Days to One Week  
**Impact:**  
- Serious Injury or Death Unlikely  
- Moderate Damage to Private Property  
- Moderate Structural Damage to Public Facilities

**Definition:** Structural deterioration, ether gradual or sudden, resulting in the facility’s inability to control impounded water as designed, resulting in danger to people and/or property in the potential inundation area. Dams may be either man-made or exist because of natural phenomena, such as landslides or beavers.

**Profile/Vulnerability Assessment:** In the event of a dam failure, the sudden release of enormous amounts of water would cause flash flooding downstream of the dam structure. The damage to private property and infrastructure located within the inundation zone...
could be extensive. The water surge can cause water supply failure, sewer system failure, hazardous material release, power outage, and other cascade effects.

Dam failure can result from many factors such as natural disasters, structural deterioration, or actions caused by man, including terrorism. According to the International Commission of Large Dams (ICOLD), the three major causes of dam failure are overtopping by flood, foundation defects, and piping.

In rural areas another concern is failure of beaver dams. There are many large and significant beaver dams throughout Otsego County. In fact the county has been mapping them for any changes that may be an alert for potential danger to homes or livestock.

**MODERATELY LOW HAZARDS**

**ICE STORM, ICE JAM, FLOOD, FLASH FLOOD, WINTER STORM (SEVERE) And LANDSLIDE/EROSION.**

**ICE STORM**

<table>
<thead>
<tr>
<th>Potential Impact:</th>
<th>Throughout a Large Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascade Effects:</td>
<td>Highly Likely</td>
</tr>
<tr>
<td>Frequency:</td>
<td>A Regular Event</td>
</tr>
<tr>
<td>Onset:</td>
<td>Several Days Warning</td>
</tr>
<tr>
<td>Hazard Duration:</td>
<td>One Day</td>
</tr>
<tr>
<td>Recovery Time:</td>
<td>Three Days to One Week</td>
</tr>
<tr>
<td>Impact:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Serious Injury or Death Unlikely</td>
</tr>
<tr>
<td></td>
<td>Moderate Damage to Private Property</td>
</tr>
<tr>
<td></td>
<td>Severe Structural Damage to Public Facilities</td>
</tr>
</tbody>
</table>

**Definition:** Freezing rain that accumulates in a substantial glaze layer of ice resulting in serious disruptions of normal transportation and possible downed power lines.

**Profile/Vulnerability Assessment:** When ice encases exposed surfaces, hazardous road conditions disrupt transportation. The weight of the ice can knock down trees and power lines, disrupting power and communication for days. Additional hazards that can be triggered by an ice storm include: transportation accidents, power failure, and fuel shortage. Normal emergency operations, such as police, fire and ambulance service can also be impeded. Since the same conditions may occur over a large area, aid from neighboring jurisdictions may not be available. The entire Town of New Lisbon is vulnerable to the impact of ice storms.
Several ice storms have occurred in the Town of New Lisbon throughout the last decade. These storms usually occur two times a year on average, and last no longer than one day. Although there have not been any major storms comparable to the severe ice storms that occurred in the northern counties throughout New York State, a potential still exists.

It is difficult to place a value on losses of this nature. There are many losses that are not reported to insurance agencies and remain uncounted. The Hazard Mitigation Committee had to use its best judgment to calculate potential loss. According to county estimates, a moderate loss could easily top $500 per occurrence. If this is the case the town could suffer from over $1,000,000 in damages due to this type of event annually.

Public losses from this type of disaster include direct expenses to the Towns’ Highway budget. Items such as road clearing, tree removal, sand and salt spreading, items above and beyond the regular allocated budgeting can account for deficits of the highway budget of over 20%. Utilities losses are estimated into the millions of dollars during an event of this nature.

**ICE JAM**

<table>
<thead>
<tr>
<th>Potential Impact:</th>
<th>Several Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascade Effects:</td>
<td>Some Potential</td>
</tr>
<tr>
<td>Frequency:</td>
<td>A Frequent Event</td>
</tr>
<tr>
<td>Onset:</td>
<td>Several Days Warning</td>
</tr>
<tr>
<td>Hazard Duration:</td>
<td>Two to Three Days</td>
</tr>
<tr>
<td>Recovery Time:</td>
<td>One to Two Days</td>
</tr>
</tbody>
</table>

**Impact:**
- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Moderate Structural Damage to Public Facilities

**Definition:** Large accumulation of ice in rivers or streams interrupting the normal flow of water and often leading to flooding conditions and/or damage to structures.

**Profile/Vulnerability Assessment:** An ice jam in a river or stream effectively forms a hanging dam that can block flow and cause water to back up. The flooding caused by an ice jam will persist until the ice breaks up, either naturally or as a result of human intervention. The resulting flood damages would be localized. Areas along streams where debris jams have developed at bridges and culverts could experience similar flooding and erosion problems due to ice jams.

Ice jam flooding in the Town of New Lisbon is not likely to impact more than a few houses. The maximum expected losses would be less than a major flood.
The largest potential impact would be to public facilities such as roads and bridges. The cost of such damage could easily escalate contingent upon the undermining of the infrastructure upon which bridges and roadways are built. Not only the impact of the expense, but also the re-routing of traffic (for an indeterminate amount of time) would cause undue hardship on those using the affected transportation routes.

**FLOOD**

**Potential Impact:** Throughout a Small Region  
**Cascade Effects:** Some Potential  
**Frequency:** A Regular Event  
**Onset:** One Day Warning  
**Hazard Duration:** Two to Three Days  
**Recovery Time:** Three Days to One Week  
**Impact:**  
- Serious Injury or Death Unlikely  
- Moderate Damage to Private Property  
- Moderate Structural Damage to Public Facilities  

**Definition:** Flooding is usually a natural cyclic occurrence in existing water bodies. When a water body overflows its normal banks, a potentially violent and/or destructive waterway can form.

**Profile/Vulnerability Assessment:** Flooding is New York’s most constantly damaging natural disaster. Since 1955, New York has recorded more flood events than any other state in the Northeast. Millions of dollars in flood losses are sustained each year due to private property damage, infrastructure damage, disruption of commerce, unemployment caused by floods, the expense of disaster relief, and other related costs. Annual economic losses are estimated to be as high $100 million.

Flooding is the number one related weather killer, causing an average of three to four deaths per year in New York. Approximately half of those deaths involve people trapped in cars. Floods also damage or destroy buildings, cars, utility poles, gas lines, roads, bridges, etc. Transportation and communication systems can be interrupted. Drinking water can be contaminated. Electric power and sewage treatment can be disrupted. Floodwaters often carry damaging debris, which can pose a risk to both life and property. Erosion of stream banks and road ditches has historically caused significant infrastructure damage in Otsego County.

According to the Flood Insurance Study used to create the FIRMs for Otsego County, flooding is by far the most frequent and damaging disaster in Otsego County. Floods can occur at any time of the year, but the most significant floods are associated with snowmelt or combined precipitation.

With the recent flood of June 2006, it is evident the Town of New Lisbon experienced a moderate level of damage as compared to other parts of the county. The majority of
damage occurred within roadways and culvert areas throughout the county. The town experienced minimal damage to an estimated extent of $200,000. The risk assessment from flooding was calculated using current information from the Town during the recent flood.

Additional hazards that are likely to be triggered by a flood event include: transportation accident, power failure, water supply contamination, landslide and dam failure. The damages and recovery time from a major flood can be extensive.

**FLASH FLOODING**

**Potential Impact:** Several Locations  
**Cascade Effects:** Some Potential  
**Frequency:** A Regular Event  
**Onset:** Several Hours Warning  
**Hazard Duration:** One Day  
**Recovery Time:** Three Days to One Week  
**Impact:**  
- Serious Injury or Death Unlikely  
- Moderate Damage to Private Property  
- Moderate Structural Damage to Public Facilities

**Definition:** A flash flood is a sudden transformation of a small stream into a violent waterway after heavy rain and/or rapid snowmelt.

**Profile/Vulnerability Assessment:** Flooding is New York’s most constantly damaging natural disaster. Since 1955, New York has recorded more flood events than any other state in the Northeast.

Flooding is the number one related weather killer, causing an average of three to four deaths per year in New York. Approximately half of those deaths involve people trapped in cars. Floods also damage or destroy buildings, cars, utility poles, gas lines, roads, bridges, etc. Transportation and communication systems can be interrupted. Drinking water can be contaminated. Electric power and sewage treatment can be disrupted. Floodwaters often carry damaging debris, which can pose a risk to both life and property. Erosion of stream banks and road ditches has historically caused significant infrastructure damage in Otsego County.

Flash Flooding can be caused by excessive precipitation, rapid snowmelt, ice jams, beaver dams, or dam failure. Steep slopes make the area very prone to flash flooding. Slow moving thunderstorms often produce flash floods, particularly during summer months. Remnants of tropical storm systems can produce both flash floods and river flooding.

According to the Flood Insurance Study used to create the FIRMs for Otsego County, flooding is by far the most frequent and damaging disaster in Otsego County. Floods can
occur at any time of the year, but the most significant floods are associated with snowmelt or combined precipitation.

Additional hazards that are likely to be triggered by a flood event include: transportation accident, power failure, fuel shortage, water supply contamination, food shortage, landslide, disease, and dam failure. The damages and recovery time from a major flood can be extensive.

WINTER STORM (SEVERE)

**Potential Impact:** Throughout a Large Region

**Cascade Effects:** Highly Likely

**Frequency:** A Regular Event

**Onset:** One Day Warning

**Hazard Duration:** One Day

**Recovery Time:** One to Two Days

**Impact:**
- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Moderate Structural Damage to Public Facilities

**Definition:** A storm system that develops in the late autumn to early spring and deposits wintry precipitation, such as snow, sleet, or freezing rain, with a significant impact on transportation systems and public safety. Ice Storm is included as a separate hazard. For this analysis, the following could meet this definition:

- **Heavy snow** – Snowfall accumulating to 6 inches in twelve hours or less.
- **Blizzard** – A winter storm characterized by low temperatures, wind speeds of 35 miles per hour or greater, and sufficient falling and/or blowing snow in the air to frequently reduce visibility to ¼ mile or less for a duration of at least three hours.
- **Severe Blizzard** – A winter storm characterized by temperatures near or below 10 degrees Fahrenheit, winds exceeding 45 mph, and visibility reduced by snow to near zero for duration of at least three hours.

**Profile/Vulnerability Assessment:** Limited primarily to the late autumn through early spring, most severe winter storms impact the entire Town of New Lisbon by causing roadway hazards and transportation accidents. In addition, severe winter storms are capable of costing thousands of dollars, due to damage to structures resulting from the weight of large accumulations of ice/snow and the removal of snow accumulations. Significant losses attributed to these weather events have included widespread interruption of electric-power delivery to thousands of customers as a result of down power lines and utility poles.
Severe winter storms occur frequently throughout the Town of New Lisbon, primarily Nor-Easters as well as the occasional blizzard. Although New Lisbon expects to deal with annual snow removal, major snowfall in a short period of time or blizzard conditions can exceed the normal capacity of New Lisbon’s local highway department. Emergency response times can be impeded and the ability for all residents, especially those in the most remote locations of the town, may find fuel and food availability is hindered and utility failures can occur. Many residences in the most rural parts of the town have backup wood heat sources. Access to certain homes can take days to clear, especially dead end roads and residents with long driveways.

*The map below shows the annual snowfall for the state of New York. Otsego county is approximately 75-100” per year.*

**LANDSLIDE/EROSION**

- **Potential Impact:** Several Locations
- **Cascade Effects:** Some Potential
- **Frequency:** An Infrequent Event
- **Onset:** No Warning
- **Hazard Duration:** Less Than One Day
- **Recovery Time:** One to Two Days
- **Impact:**
  - Serious Injury or Death Unlikely
  - Moderate Damage to Private Property
  - Moderate Structural Damage to Public Facilities

![Annual Snowfall Normals 1971-2000](image)
**Definition:** The downward and outward movement of slope-forming materials reacting to the force of gravity. Slide materials may be composed of natural rock, soil, artificial fill, or combinations of these materials. The term landslide is generalized and includes rock falls, rockslides, creep, block glides, debris slides, earth-flow, mudflow, slump, and other similar terms. Erosion is the loss of soils and gravel in reaction to runoff from precipitation events and gravity.

**Profile/Vulnerability Assessment:** Although there have been no major reports of landslides in New Lisbon, several small landslides occur each year. Most landslides are caused by extensive amounts of rain or storm water runoff. Erosion is a major concern due to the rural, agricultural nature of the area. The potential for moderate damage in regard to agricultural endeavors from either event is evident.

The most prevalent damage from such an event would be the clogging of road culverts, sludge or rock debris on the roadways or water damage from the path of rainwater runoff unable to follow a controlled course. The impact to the highway department could cause it to exceed budgeted allowances and cause a deficit for the town. Large and well maintained culvert piping is essential in some of the more hilly, watershed areas.

The landslide hazardous map below identifies the areas in the state of New York and the potential for landslide susceptibility. Otsego County is highlighted as pale green indicating a low incidence of landslide activity. Historically, landslides have not been a significant hazard in the area. Further risk assessment for this hazard was not considered.

![Landslide Susceptibility Map](image)

**Figure 4.3**
Each of the 8 risks was then identified according to their effect on the municipality during the time of year they would normally occur and the fluctuation of population during the different times of year.

The following information is based on “Otsego County Data Book” based on 2000 census information provided by the County planning department, real property tax department aerial and statistical data. The population of New Lisbon according to the 2000 census is 1116. There is no significant change in population during the year. Housing, agricultural, forested and commercial structural values were established by identifying numerous locations throughout the town by utilizing the county GIS mapping system. Calculations were made by samples of assessed value of residential vs. commercial and then establishing a median value to each. The average building replacement cost of $77 per square foot was used for the residential households. The average residential replacement value was established at $119,119 x 50% content value = $178,678. For commercial property an average value of commercial property was established at $326,798 with a replacement value of $67 for retail trade. The average sq. ft of retail space was established to be 2,829 sq. ft. with an average replacement value of $189,543 x 100% content value + 100% (displacement value based on average sq. ft of 2,289 by $30 per sq. ft. for retail operation) equals and average value of $447,756 for commercial space.

A list of critical buildings and infrastructure can be found in Appendix F-6 & D.

The replacement values were established by applying the tables supplied in the State and Local How to Mitigation Guide. The percent damage for structural loss was calculated for each using the available historical data and worksheets from the mitigation planning guide. Where loss values were not available, full value was used.

The following summary identifies the results of the survey for the hazards most likely to occur. Certain hazards are speculative and never occurred historically. These hazards were assessed as being random and having the potential of affecting the entire town.

<table>
<thead>
<tr>
<th>Critical Facilities</th>
<th>Bld. Value</th>
<th>Replacement Value</th>
<th>Content Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Lisbon Fire House</td>
<td>$57,100</td>
<td>$444,600 x 150%</td>
<td>$1.1 million</td>
</tr>
<tr>
<td>Town Hall</td>
<td>$197,400</td>
<td>$413,072 x 100%</td>
<td>$826,144</td>
</tr>
<tr>
<td>Town Highway Garage</td>
<td>$45,100</td>
<td>$766,128 x 100%</td>
<td>$1.5 million</td>
</tr>
<tr>
<td>Co. Highway Garage</td>
<td>$8,700</td>
<td>$765,600 x 100%</td>
<td>$1.5 million</td>
</tr>
<tr>
<td>Garrattsville Fire House</td>
<td>$80,000</td>
<td>$694,460 x 150%</td>
<td>$1.7 million</td>
</tr>
<tr>
<td>Fireman’s Field</td>
<td>$3,000</td>
<td>$ vacant land</td>
<td></td>
</tr>
<tr>
<td>Garrattsville PO</td>
<td>$86,600</td>
<td>$242,528 x 100%</td>
<td>$485,056</td>
</tr>
<tr>
<td>UP Church</td>
<td>$38,400</td>
<td>$232,328 x 100%</td>
<td>$464,656</td>
</tr>
</tbody>
</table>

Replacement values were determined using the Average building replacement value per square foot found the how-to guide for the state and local mitigation planning workbook.
The average agricultural value was determined using an average sq. footage of agricultural buildings multiplied by the building replacement value of $26 per sq. ft. and content value of 100% plus the displacement value of $83 per sq. foot giving an average full value of $506,125 per agricultural structure.

The following summary identifies the results of the survey for the hazards most likely to occur. Certain hazards are speculative and never occurred historically. These hazards were assessed as being random and having the potential of affecting the entire town.

Inventory Totals for the Town of New Lisbon
Moderately High to Moderately Low
M = millions of dollars

<table>
<thead>
<tr>
<th>Occupancy Class</th>
<th>Total Assets</th>
<th>Severe Storm Damage</th>
<th>Dam Failure</th>
<th>Ice Storm</th>
<th>Ice Jam</th>
<th>Flood</th>
<th>Flash Flood</th>
<th>Winter Storm</th>
<th>Landslide Erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>586 (104m)</td>
<td>586 (100%)</td>
<td>13 (3%)</td>
<td>12</td>
<td>125</td>
<td>15</td>
<td>586 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Comm./Tourist</td>
<td>6 (1.9 m)</td>
<td>6 (100%)</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ind./Medical</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Agricultural</td>
<td>41 (20.7 m)</td>
<td>41 (100%)</td>
<td>2 (5%)</td>
<td>5</td>
<td>0</td>
<td>14</td>
<td>41 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Religion/non-profit</td>
<td>1 ($464,656)</td>
<td>1 (100%)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>7 (7.1m)</td>
<td>7 (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7 (100%)</td>
<td>Mostly roads and culverts</td>
<td></td>
</tr>
<tr>
<td>Educational</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Gas Stations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other (State Park And Forest)</td>
<td>2,592 acres (3.0m)</td>
<td>2,592 acres (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>No. of bldgs.</td>
<td>641</td>
<td>641</td>
<td>15</td>
<td>17</td>
<td>129</td>
<td>297</td>
<td>641</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Approx. Value ($M)</td>
<td>137 m</td>
<td>3.3 m (3%)</td>
<td>2.5 m (1%)</td>
<td>$200,000 (2%)</td>
<td>9.6 m (7%)</td>
<td>1.8 m</td>
<td>&lt;1,000 annually</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of People</td>
<td>2397</td>
<td>40 (2%)</td>
<td>50 (2%)</td>
<td>320 (29%)</td>
<td>93 (4%)</td>
<td>2397</td>
<td>n/a</td>
<td></td>
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</tr>
</tbody>
</table>

**Italicizes are random in nature and could affect any portion or the entire community.**

1. Population data for residential households was based on 2.4 individuals per household. Average numbers for Gilbert Lake State Park were 800 individuals per day during the summer peak.
2. Shaded columns represent historical data for approximate values of damage.
3. Estimates of damage due to winter storms are reflective of areas historically designated as having snow accumulation and drifting situations that require constant maintenance.
4. Flood estimates are based on the June 2006 estimates from the municipality.
SECTION 5 – MITIGATION GOALS AND ACTIONS

The table below highlights actions established by the Town of New Lisbon that address new and existing buildings within the community. The committee for the Town of New Lisbon was responsible for identifying actions that would mitigate impacts on both future and existing structures located within all hazard areas. The left column lists all the actions and hazards identified by the community. The actions are abbreviated and can be looked up in the following pages. Those actions that are marked with a XX are those actions that relate to new structures, existing structures or both.
## Mitigation Actions and Projects Addressing New/Existing Buildings and Infrastructure

Addresses the Effect of Hazards on:

<table>
<thead>
<tr>
<th>Action by Hazard</th>
<th>New Buildings and Infrastructure</th>
<th>Existing Buildings and Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Hazards</strong></td>
<td>Requirement 201.6(c)(3)(ii) B</td>
<td>Requirement 201.6(c)(3)(ii) C</td>
</tr>
<tr>
<td>1.1 Improve education program…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Improve dissemination of emergency warnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Make All-Hazards Mitigation Plan available</td>
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<td></td>
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<tr>
<td>1.4 Encourage local official participation in hazard…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 Be available to assist schools with fire drills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Provide municipal officials with periodic training…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Periodically test all emergency communication…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Verify that schools… emergency response plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Improve/maintain communication between Town Highway Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Create a local Emergency Response Plan…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Periodically review and update the list of critical facilities serving the Town and Village</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>3.2 Ensure that critical facilities are able to provide essential services during a power outage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Invite municipal elected officials to meetings…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 Maintain and expand public/private sector…</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Severe Weather</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Maintain trees along municipal right-of-ways</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>1.2 Support/encourage utility companies to maintain trees near telephone and power lines</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>1.3</td>
<td>Locate/create educational information about maintenance of trees adjacent to structures</td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Provide brush pickup services…</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Recommend underground utilities new developments..</td>
<td>XX</td>
</tr>
<tr>
<td>2.1</td>
<td>Encourage Code Officer receives annual training and political support…</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Encourage Code Officer to inspect older buildings…</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Improve monitoring of weather conditions…</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Review plowing schedules and hazardous weather response procedures…</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Highway department and emergency service providers work together…</td>
<td></td>
</tr>
<tr>
<td><strong>Flood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Annually check location of “flood zone regulations…</td>
<td>XX</td>
</tr>
<tr>
<td>1.2</td>
<td>Disseminate and improve flood informational…</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Target property owners with structures in floodplain…</td>
<td>XX</td>
</tr>
<tr>
<td>1.4</td>
<td>Educate property owners adjacent to streams about proper stream maintenance.</td>
<td>XX</td>
</tr>
<tr>
<td>2.1</td>
<td>Study, develop, and implement projects for…</td>
<td>XX</td>
</tr>
<tr>
<td>3.1</td>
<td>Make improvements to roads to help minimize road closure due to hazard</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Routine inspections and maintenance of streams…</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Develop and implement a strategy for maintenance…</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Evaluate opportunities to alleviate flooding problems….</td>
<td>XX</td>
</tr>
<tr>
<td>5.2</td>
<td>Develop and implement a strategy for replacing…</td>
<td>XX</td>
</tr>
<tr>
<td>5.3</td>
<td>Educate/assist owners with mitigation measures from flood risks</td>
<td>XX</td>
</tr>
<tr>
<td>6.1</td>
<td>Improve communication with private dam owners and encourage dam inspection by NYSDEC</td>
<td></td>
</tr>
</tbody>
</table>
6.2 Develop an Emergency Action Plan for water reservoir dams

6.3 Participate in review relation to Emergency Action..

6.4 Develop mapping and inspection procedure for monitoring beaver dams in the Town

| Ground Movement |
|-----------------
| 1.1 Training and political support for Code Officer... |
| 1.2 Ensure that land use projects involving steep slopes are designed with proper measures to reduce landslide and slump potential |
| 1.3 Secure funding and design projects to eliminate existing landslides throughout the Town and Village |

<table>
<thead>
<tr>
<th>Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Identify back up wells in the Village to be used for alternative water supply and arrange...</td>
</tr>
<tr>
<td>1.2 Work with Otsego Co. Farm Bureau to encourage coordination with farmers during...</td>
</tr>
<tr>
<td>1.3 Continue work with NYSEMO to provide water pumps and waterline for emergency use</td>
</tr>
</tbody>
</table>
The purpose of the Town of New Lisbon Multi-Hazard Mitigation Plan is to develop and promote methods of protecting residents, critical facilities, private property, infrastructure, and the environment from the results of a natural hazard.

The mitigation approach for the Town of New Lisbon follows the model provided in the FEMA how-go guide *Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies* (FEMA 386-3). Establishing the Town of New Lisbon mitigation actions a series of steps was taken by the local committee such as developing mitigation goals, analyses of all actions influence economically and socially on the community which grouped them based on their outcome, and constructing an implementation strategy.

Town of New Lisbon goals were identified in order to mitigate exposures to each hazard. The goals for the Town of New Lisbon are based on the Risk Assessment including numbers of structures and residents affected by each hazard, and the estimate amount in damage to both public and private properties. Reviewing the possible damages from identified hazards and the availability of resources in the Town of New Lisbon the committee established the goals on the following pages as a method of mitigating the impacts from future mishaps.

The purposes of mitigation actions are to achieve the long–term goal set by the Town of New Lisbon committee. For each identified hazard the committee established possible mitigation actions. The established actions were based on long-term goals, concerns from members of the community, and data provided from the Risk Assessment. Each action has been thoroughly considered and prioritized into three different categories high, medium, or low. The options follow the six types of mitigation actions stated in the FEMA guide (FEMA 386-3), which are found below.

1. **Prevention:** Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.

2. **Property Protection:** 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.

3. **Public Education and Awareness:** 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 school-age and adult education programs.
4. **Natural Resource Protection**: 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.

5. **Emergency Services**: 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.

6. **Structural Projects**: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

Each action produced from the criteria established by FEMA was then evaluated and prioritized under social, technical, administrative, political, legal, economic, and environment (STAPLEE) considerations along with the cost to benefit outcome and time for the community.

- **Social criteria**: The public must support the overall implementation strategy and specific mitigation activities; therefore, community acceptance of the proposed mitigation activities must be considered.

- **Technical criteria**: Such factors as technical feasibility of the proposed mitigation activity to reduce losses in the long term, with minimal secondary impact, must be considered.

- **Administrative criteria**: Anticipated staffing, funding, and maintenance for each mitigation activity must be considered.

- **Political criteria**: The political leadership of the communities must support the overall implementation strategy and specific mitigation activities; therefore, decision-maker acceptance of the proposed mitigation activities must be considered.

- **Legal criteria**: Whether the communities have legal authority to implement the proposed mitigation activities must be considered.

- **Economic criteria**: Funding needs and budget constraints must be considered.

- **Environmental criteria**: Environmental impacts that could be caused by implementing specific mitigation activities must be considered.

Mitigation activity priorities also are based on “the extent to which benefits are maximized according to a cost benefit review” (DMA 2000). For example, low cost activities that support cross-jurisdiction and multi-hazard benefits are assigned a high
priority in some cases, based on the cost/benefit review. Also, a number of high priority mitigation activities focus on public awareness and education programs or integrating the mitigation plan into current programs because these types of mitigation measures are affordable, achievable, can address multiple hazards and have an immediate benefit. Although detailed economic and social analyses for each mitigation action is beyond the scope and intent of this plan, consideration was given to the potential costs incurred and benefits derived from each proposal based in part on the personal and professional experiences of the members of the planning committee. The process then considered whether or not estimating a feasible dollar value could be associated with each action at this time. In instances where reasonable costs could not be associated with an action, estimates would be developed as sufficient information becomes available.

On June 26, 2006 Otsego County experienced a severe storm with unprecedented flooding of the Susquehanna River and many of its tributaries. The county was declared a state of emergency (FEMA 1650 DR NY). Estimated damages were in the $50 million dollar range. The following is taken from the National Environmental Satellite, Data and Information Service (NESDIS).

**Event Record Details**

<table>
<thead>
<tr>
<th>Event: Flash Flood</th>
<th>State: New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin Date: 27 Jun 2006, 02:00:00 PM EST</td>
<td>County: Otsego</td>
</tr>
<tr>
<td>Begin Location: Countywide</td>
<td></td>
</tr>
<tr>
<td>End Date: 28 Jun 2006, 02:00:00 PM EST</td>
<td></td>
</tr>
<tr>
<td>End Location: Countywide</td>
<td></td>
</tr>
<tr>
<td>Magnitude: 0</td>
<td></td>
</tr>
<tr>
<td>Fatalities: 0</td>
<td></td>
</tr>
<tr>
<td>Injuries: 0</td>
<td></td>
</tr>
<tr>
<td>Property Damage: $ 50.0M</td>
<td></td>
</tr>
<tr>
<td>Crop Damage: $ 0.0</td>
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</tr>
</tbody>
</table>

Description:
Widespread heavy rain moved through Otsego County and upstate New York during the day Monday with more heavy rain Monday night and Tuesday morning. This rainfall saturated the soils before another more widespread area of heavy rainfall occurred Tuesday afternoon and night. Tropical moisture combined with a slow-moving front and low-pressure system moving up the eastern seaboard to bring extreme rainfall to Otsego County. The serious flash flooding began in Otsego County during the afternoon of Tuesday the 27th and continued until Wednesday afternoon as a total of 6 to 12 inches of rain fell by Wednesday the 28th. The highest rainfall was near Unadilla where the Susquehanna River reached record levels. No one was killed from the floods in Otsego County. A state of emergency was declared Tuesday afternoon as all roads were closed. The
sewer plant in Oneonta was flooded sending raw sewage into the Susquehanna River. Hardest hit areas were Leonardsville, Cooperstown, Hartwick, Bridgewater and Oneonta. Route 20 was under nearly three feet of water in East Winfield. Total damage is estimated at 50 million dollars. This was described as the worst flooding in at least 45 years. A total of 75 roads were flooded in the county.

As result of the June flood assorted actions are already in progress and others have been proposed. The majority of repairs are to damaged roads and bridges to sustain future events and avoid losses previously experienced. Realistically, considering Otsego County frequent floods, 40 occurrences since 1993, mitigation action potentially will reduce the dollar amount in damages and in return the community would benefit in the future from present costs.

Findings from the Risk Assessment identified natural hazards and their economic damage to the community, including replacement value, content value and displacement value. After detailed evaluation, each action was prioritized high, medium, or low based on effectiveness, importance, and cost results.

* High Priority Actions- reduces vulnerability to damage, eliminate eminent danger, environmentally safe, easy enacted, within standing budget, community support.

* Medium Priority Actions- some extent protect community, obstacles implanting, some community discrepancy

* Low Priority Actions- ineffective mitigation hazard impacts, unaffordable, and unfavorable within the community

SECTION 5 – MITIGATION GOALS AND ACTIONS

Otsego County and the Town of New Lisbon have analyzed natural and human-caused hazards and have devised this plan to protect life and property from such events. Otsego County and the Town of New Lisbon have outlined the following approach to reduce the impact of the highest priority hazards that were identified previously. Lower priority hazards may have additional specific goals and actions, but are primarily covered under the "All Hazards" goals. Actions are prioritized as high or medium depending on the ease of implementation, cost, and overall timeliness/necessity of the action. Time to implement an action is estimated based on; the complexity of the action, amount of preplanning needed to undertake the action, cost, and the likelihood of obtaining funding. Responsibility for an action is indicated as lead and supporting. In some cases, multiple lead agencies/municipalities are identified.

Multi-Hazard Mitigation

All Hazards
GOAL ONE: Continue ongoing efforts to increase public awareness about hazards.

- **ACTION 1.1** - Improve education program about hazards and family disaster planning, emergency supplies, evacuation procedures, transportation safety, and hazard mitigation. Education program can include video, County web site, printed material for general circulation, direct mailing, training sessions, and organized events.
  
  **PRIORITY:** High  
  **TIME:** Ongoing annually  
  **LEAD:** Towns/Villages/Supporting Community Agencies  
  **SUPPORTING:** County OES/County Planning/County Health/County Sheriff  
  **COST:** Minimal

- **ACTION 1.2** - Improve dissemination of emergency warnings and weather information to residents, businesses, and institutions by increasing use of NOAA Weather Radios and increasing use of National Weather Service - Albany web site for latest weather information. If duplication does not exist, work with SEMO on Emergency Alert System.
  
  **PRIORITY:** High  
  **TIME:** Ongoing annually  
  **LEAD:** Towns/Villages  
  **SUPPORTING:** County OES/County Planning  
  **COST:** Minimal

- **ACTION 1.3** - Make the Town of New Lisbon All-Hazards Mitigation Plan available to the public at town offices, public libraries, County Office of Emergency Services, County Planning and County Economic Development Office.
  
  **PRIORITY:** High  
  **TIME:** Immediately after adoption/revision  
  **LEAD:** Towns  
  **SUPPORTING:** County OES/County Planning  
  **COST:** Printing funding provided through Post Disaster Mitigation (PDM) Grant.

- **ACTION 1.4** - Encourage local official participation in hazard related training offered at County, State, Federal levels.
  
  **PRIORITY:** High  
  **TIME:** Ongoing annually  
  **LEAD:** County Planning/County Health/County Sheriff/County OES  
  **SUPPORTING:** Towns/Villages  
  **COST:** Less than $250.00 annually from existing County departments’ budgets
• **ACTION 1.5** - Be available to assist schools with fire and weather hazard drills.

  **PRIORITY:** High  
  **TIME:** Ongoing annually  
  **LEAD:** County Health/County Sheriff/County OES  
  **SUPPORTING:** Fire Departments  
  **COST:** May vary per drill. Funds from existing departments’ budgets

**GOAL TWO:** Provide emergency services in a timely and effective manner

• **Action 2.1** – Provide municipal officials with periodic training and responsibilities during hazard events.

  **PRIORITY:** High  
  **TIME:** Once every two years  
  **LEAD:** County OES/NY SEMO  
  **SUPPORTING:** County Fire Coordinator/County Sheriff/County OES  
  **COST:** $250 per training from existing funds

• **Action 2.2** – Periodically test all emergency communication equipment and upgrade/replace as appropriate.

  **PRIORITY:** High  
  **TIME:** Once annually  
  **LEAD:** County Health/County Sheriff/County OES/Towns/Villages  
  **COST:** May vary depending on necessary upgrades/replacements

• **Action 2.3** – Periodically verify that schools, nursing homes, hospitals and businesses that handle hazardous materials have current emergency response plans in effect.

  **PRIORITY:** High  
  **TIME:** Once every three years  
  **LEAD:** County OES/County Health/Towns/Villages  
  **COST:** Minimal

• **Action 2.4** – Improve/maintain communication among highway departments to enable coordinated maintenance of emergency transportation routes.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** County Highway Department/Towns/Villages/Municipal Highway Superintendents  
  **COST:** Will vary depending on equipment needed.
• **Action 2.5** – Participate in the review of emergency response plans to verify that they are current and consistent with the County Comprehensive Emergency Plan.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** County OES/County Sheriff/County OES  
  **SUPPORTING:** Various County Agencies/Towns/Villages/Local Fire Departments  
  **COST:** Minimal

**GOAL THREE:** Maintain the viability of all critical facilities and operations

• **Action 3.1** – Periodically review and update the list of critical facilities serving the County.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** County OES/County Planning  
  **SUPPORTING:** County Sheriff/County OES/Town  
  **COST:** Minimal

• **Action 3.2** – Ensure that critical facilities are able to provide essential services during a power outage.

  **PRIORITY:** High  
  **TIME:** Within first five years  
  **LEAD:** County OES/County Hazard Mitigation Committee  
  **COST:** May vary depending on necessary equipment.

• **Action 3.3** - Explore the development of an alternate County Emergency Operations Center and County computer server backup in a non-floodplain/non-dam break inundation area.

  **PRIORITY:** High  
  **TIME:** Within first five years  
  **LEAD:** County Hazard Mitigation Committee/County Board of Representatives  
  **Supporting:** County OES/County IT Department  
  **COST:** Exploration –minimal. Actual location may be funded in part by grant funds.

**GOAL FOUR:** Maintain support (political and private sector) for hazards mitigation and emergency response.
• **Action 4.1** – Invite municipal elected officials to meetings of the Otsego County Hazard Mitigation Committee to guide implementation of this plan and the revision of the plan.

  **PRIORITY:** High  
  **TIME:** Annually  
  **LEAD:** County OES/County Planning  
  **Supporting:** County Sheriff/County OES/Towns/Villages  
  **COST:** Minimal

• **Action 4.2** - Maintain and expand public/private sector coordination through organizations that are actively involved in hazard reduction activities.

  **PRIORITY:** Medium  
  **TIME:** Ongoing  
  **LEAD:** County OES/County Hazard Mitigation Committee  
  **COST:** Minimal

• **Action 4.3** - Encourage public/private sector organizations (tourist facilities) to prioritize and implement hazard Mitigation actions.

  **PRIORITY:** Medium  
  **TIME:** Ongoing  
  **LEAD:** County OES/County Hazard Mitigation Committee  
  **COST:** Minimal

**Severe Weather**  
*(Severe Storm, Severe Winter Storm, Ice Storm)*

**GOAL ONE:** Minimize damage from trees to utilities, structures, and other utilities

• **Action 1.1** - Maintain trees along municipal right-of-ways

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** Town Highway Departments/NYS DOT  
  **COST:** Depends on project scope. Can be handled by existing budgets.

• **Action 1.2** - Support/encourage utility companies to maintain trees near telephone and power lines.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** Town/County OES/County Planning  
  **COST:** Bourne by utility companies.
• **Action 1.3** - Locate/create educational information about maintenance of trees adjacent to structures.

**PRIORITY:** Medium  
**TIME:** Within first five years  
**LEAD:** Town/County OES/County Planning  
**COST:** Handled by existing budgets

• **Action 1.4** - Explore providing brush pickup services and/or designated drop off locations (chip/mulch/compost) to encourage tree maintenance and to discourage improper disposal of yard debris in drainage ways.

**PRIORITY:** Medium  
**TIME:** Within first five years  
**LEAD:** County Board of Representatives  
**SUPPORTING:** County Planning/County OES/Town  
**COST:** Handled by existing budgets

• **Action 1.5** - Recommend, encourage, or require underground utilities in new developments if feasible through land use regulations. Encouraged utility companies to use underground construction methods if feasible.

**PRIORITY:** Medium  
**TIME:** Ongoing Annually  
**LEAD:** County Planning/Town  
**COST:** Minimal

**GOAL TWO:** Ensure that buildings are able to withstand high wind and heavy snow

• **Action 2.1** – Encourage Code Enforcement Officers receive annual training and political support in order to effectively enforce the structural standards in the International Building Code.

**PRIORITY:** High  
**TIME:** Ongoing Annually  
**LEAD:** Town/County Codes Office  
**COST:** Varies

• **Action 2.2** - Encourage Code Enforcement Officers to inspect older buildings that may not conform to the structural standards in the International Building Code so as to identify vulnerabilities for their owners.

**PRIORITY:** High  
**TIME:** Ongoing Annually
LEAD: Town/County Codes Office  
SUPPORTING: County Planning/County Board of Representatives/NYSDOS  
COST: Existing budgeted salaries for CEO.

GOAL THREE: Reopen transportation routes as quickly as possible following a severe weather event

- **Action 3.1** - Improve monitoring of weather conditions and forecasts (on-line information) by highway departments to enable timely response to snow, ice, and high water conditions.
  
  PRIORITY: High  
  TIME: Ongoing Annually  
  LEAD: Town  
  SUPPORTING: County Planning/County OES  
  COST: Varies depending on new equipment needed

- **Action 3.2** - periodic review and revision of plowing schedules and hazardous weather response procedures by highway departments to minimize time required to restore safe roadways.
  
  PRIORITY: High  
  TIME: Ongoing Annually  
  LEAD: Town/County Highway Department  
  SUPPORTING: County Planning/County OES  
  COST: Minimal

- **Action 3.3** – Ensure that highway departments and emergency service providers work together to provide emergency service transportation during inclement weather.
  
  PRIORITY: High  
  TIME: Ongoing Annually  
  LEAD: Town/County Highway Department  
  SUPPORTING: County Planning/County OES  
  COST: Minimal

**Flood**  
*(Flood, Flash Flood, Ice Jam, Dam Failure)*

GOAL ONE: Educate public about flood dynamics, flood hazards, flood safety, and flood mitigation
• **Action 1.1** - Annually check location of "flood zone regulations in effect" signs and keep locations up to date in accordance with existing Special Flood Hazard Areas as indicated on the Flood Insurance Rate Map.

  **PRIORITY:** High  
  **TIME:** Once Annually  
  **LEAD:** County OES/County Planning  
  **SUPPORTING:** Towns/NYSDOT/County Highway Department  
  **COST:** Minimal, NYSDOT will move signs as needed

• **Action 1.2** - Disseminate and improve flood informational pamphlets for new buyers of property and general public.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** County Planning  
  **SUPPORTING:** County OES/ Municipal Flood Plan Administrator  
  **COST:** Minimal

• **Action 1.3** - Target property owners with structures in floodplain with education material and increase flood awareness locally (especially with early warning procedures).

  **PRIORITY:** High  
  **TIME:** Once every two years  
  **LEAD:** County Planning/County OES  
  **SUPPORTING:** Towns  
  **COST:** $1,000 every two years from existing budgets/grants

• **Action 1.4** - Educate property owners adjacent to streams about proper stream maintenance.

  **PRIORITY:** High  
  **TIME:** Ongoing Annually  
  **LEAD:** County Soil and Water Conservation District  
  **SUPPORTING:** County Planning/County OES/Towns  
  **COST:** $1,000 annually from existing budgets/grants

**GOAL TWO:** Minimize stream bank erosion and improve water quality

• **Action 2.1** - Study, develop, and implement projects for stabilizing stream channels in locations where erosion threatens development or agricultural resources.
GOAL THREE: Decrease flooding/ice jam impacts on roads with repetitive events

- **Action 3.1** - Encourage NYSDOT to make improvements to roads and streets to help minimize road closure due to ice jams and flooding.

GOAL FOUR: Maintain streams, drainage ways, and drainage structures to minimize the potential for obstruction of flow.

- **Action 4.1** – Develop routine inspections and maintenance of streams, roadside ditches, and drainage ways in order to reduce the potential for flooding caused by debris obstructions/sedimentation

- **Action 4.2** - Develop and implement a strategy for maintenance of privately owned storm water drainage systems and secondary stream channels.

GOAL FIVE: Mitigate flood risks for existing development

- **Action 5.1** - Evaluate opportunities (and implement as appropriate) to alleviate flooding problems by retaining or retarding water upstream through wetland creation/retention structures during high flow.
• **Action 5.2** - Develop and implement a strategy for replacing undersized bridges and culverts on public roadways and on private property.

PRIORITY: High  
TIME: Within five years of plan adoption  
LEAD: County Highway Department/ Town Highway Department  
SUPPORTING: County Highway/NYSDOT/Private property owners  
COST: Planning- None; Project costs will vary

• **Action 5.3** - Educate/assist property owners with implementation of measures that will protect existing development from flood risks (elevation of utilities, sewer backup protection, flood proofing measures, extension of municipal sewer and water, structure elevation, property acquisition).

PRIORITY: High  
TIME: Ongoing Annually  
LEAD: County Planning/County OES  
SUPPORTING: Municipalities with projects  
COST: Will vary depending on project scope. NYSDOT/Grant funds

• **Action 5.4** - Otsego County has received requests from numerous residents, in the flood prone section of the county, regarding the possibility of a buyout program, due to the flood of 2006. The County has initiated the application process to acquire funds for this purpose. The majority of these residences have suffered from flooding that have damaged their homes greater than 50% of their fair market value. Selling of their property and relocating is financially the ideal solution in preventing this problem from reoccurring. The proposed project consists of a voluntary buyout program located in the 100-year flood plain along the Susquehanna River in the southern section of the planning area. The proposal will eliminate housing units in the 100-year floodplain reducing structural and personal property damages, including repetitive losses for many of the properties located in the project area. The structures, if purchased, will be demolished, existing grades would be established, and re-vegetated. The property would remain in perpetuity. The alternative to the buy-out would include floodwall construction and property elevation. The proposed project was selected after a review of the project costs and the benefits derived, and the permanent protection from a 100-year event. The total estimated cost county wide of the project is
$1,500,000. The Otsego County will take the role as lead agency, and is currently for approval.

Priority: High
Time: Estimated at minimum 1 year
Lead: Otsego County Planning Department
Supporting: SEMO and FEMA
Cost: $1.5 Million, SEMO

GOAL SIX: Check dams routinely and maintain for safety

- **Action 6.1** - Improve communication with private dam owners and encourage dam inspection by NYSDEC.

  PRIORITY: High
  TIME: Within five years of plan adoption
  LEAD: County Planning/County OES
  SUPPORTING: NYSDEC/Private property owners
  COST: Minimal


  PRIORITY: High
  TIME: Within five years of plan adoption
  LEAD: County OES/Town
  COST: Within existing budgets of municipalities

- **Action 6.3** - Participate in review and exercises in relation to Emergency Action Plans in Event of Dam Failure with New York Power Authority.

  PRIORITY: High
  TIME: Ongoing Annually
  LEAD: County OES/County Planning/County Sheriff
  COST: Minimal

- **Action 6.4** - Develop mapping and inspection procedure for monitoring beaver dams in the County.

  PRIORITY: Medium
  TIME: Within five years of plan adoption
  LEAD: Town Highway Department
  COST: Minimal
Ground Movement
(Landslide)

GOAL ONE: Protect people and structures from ground movement events

- Action 1.1 - Offer annual training and political support for Code Enforcement Officers in order to effectively enforce the structural standards in the International Building Code.
  
  PRIORITY: High
  TIME: Once Annually
  LEAD: County Code Enforcement Office
  SUPPORTING: NYSDOS/Town
  RESOURCES: Instructor/Training Location/Advertising
  COST: Less than $250.00

- Action 1.2 - Ensure that land use projects involving steep slopes are designed with proper measures to reduce landslide and slump potential.
  
  PRIORITY: High
  TIME: Once Annually
  LEAD: Town Boards/NYSDOT/Municipal Highway Superintendents
  SUPPORTING: County Planning
  RESOURCES: Proper identification and review of projects/training materials for local officials
  COST: Less than $250.00

- Action 1.3 - Secure funding and design projects to eliminate existing landslides throughout the County
  
  PRIORITY: High
  TIME: Five to ten years after plan adoption
  LEAD: County Soil and Water/NRCS
  SUPPORTING: County OES/County Planning
  COST: Varies depending on project scope.
SECTION 6 – PLAN MAINTENANCE

There will be an annual meeting of the municipality to review and update the local all hazard mitigation plan. Monitoring of the mitigation plan will be the responsibility of the planning group members from each municipality. The planning group members shall consist of a representative from the County Planning Department, the Supervisor or Mayor of the municipality, highway department superintendent, planning board, emergency services and other significant parties as determined. Information will be collected from various departments, highway, streets and park, capital budget, emergency response team and planning boards to identify mitigation measures that were implemented during the year and to document any state of emergency declarations. The annual review will allow the municipality to assess which projects are completed, which is no longer feasible, and what projects may require additional funding. The annual reports provide the foundation for the five-year update. The annual report and summary will be available for public review and input.

The County Planning Department will annually send a reminder with a checklist to each participating municipality in order to update and document hazards and related damages that occurred within the last year. Municipality will be responsible for the annual status report to be submitted to the county planning department in order to document changes, mitigation measures, and future detailed mitigation measures proposed for the upcoming year. During the annual review process non-participating municipalities will be contacted by the county for inclusion in the multi jurisdictional plan. As the reviews are completed annually, therefore the necessary data for the five-year review and update is already complied. A copy of the cover letter and update form is attached in appendix E-1 & F-2

Monitoring and Updating Schedule:

The Town of New Lisbon has developed a method to ensure that the Hazard Mitigation Plan is reviewed and updated annually and every five years. In early November of each year the Planning Department will send a copy of the annual “check list” (appendix E-2) to the town supervisor. At that time it is the responsibility for the local municipality to schedule a meeting with the both returning and new committee members along with knowledgeable members of the community to complete the annual “check list”. At this primary meeting the committee will discuss the following:

- Disasters that have occurred, impacted locations, and amount in damages within the past year.
- Progress status on mitigation actions
- Any relief funding
- Implementation progress and overall success,
- Should strategies be revised or updated.
After the primary meeting, the committee will have three months to gather the needed data to address the concerns stated at the November meeting. Both meetings will be advertised and open to the public to encourage public involvement. On the fourth year of the annual review it is important that the committee is aware that the updating process for the five-year review will begin. The five year update requires that the plan, all maps, data, and risk assessment information required to identify items that should be updated or modified will be reviewed. Any additional vulnerability assessment information that has been assembled since the plan adoption will be incorporated into the plan. In order to meet the deadline for the 5 year review, it will be necessary to coincide the updates beginning with the annual 4th year review in November and continue on during the months of December of the current year thru May of the following year. This will enable the committee to complete the fourth year review, continue onto the 5th year review and have the document completed six months prior to the end of the 5th year. A schedule of the annual process for plan monitoring is shown below. The schedule is based on the assumption of a resolution adopting the final Hazard Mitigation Plan by April 2007 with the need to complete the one year review ending April 2008 within two – three months following the year anniversary. Changes in dates of adoption will be adjusted accordingly.

### ANNUAL AND FIVE YEAR PLAN UPDATE SCHEDULE
Based on resolution of final plan adoption of April 1, 2007

<table>
<thead>
<tr>
<th>TARGET DATE</th>
<th>RESPONSIBLE PARTY</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 2007 – Nov 2007</td>
<td>County Planning Department</td>
<td>Send a reminder letter with a checklist and status report to each jurisdiction. (See Appendix E) In the 4th year post. In the 4th year, indicate the significance and post the meeting schedule for the upcoming 5 year plan update meeting.</td>
</tr>
<tr>
<td>Dec 2007- Jan 2008</td>
<td>Local municipal supervisor or mayor of jurisdiction along with local representatives from the highway department, planning board, emergency squad and fire department as well as County Planning Department</td>
<td>Schedule a meeting or meetings for plan review and Annual Status Report completion. The local hazard Mitigation committee of appropriate officials and members of the public shall be appointed to this task by the supervisor. For the 4th year review, participation should be expanded to include agencies, businesses, academia, the public and non-profits. It is at this time, preparations begin for</td>
</tr>
</tbody>
</table>
The Committee will review each goal and objective in the mitigation strategy (Section 4) to determine the ongoing relevance to changing situations in the Town of New Lisbon. The Committee will evaluate the need to revise, eliminate, or replace each action item. Based on the hazard mitigation successes and failures the goals and objectives in the plan, and changing local circumstances, the committee will also recommend any new action items to be included in the plan.

After the Committee makes their recommendations, the Town Board will schedule a public hearing to solicit comments from town residents. The revised plans will then be submitted to SEMO and FEMA. Revisions will be placed in existing Multi-Hazard Mitigation Plan booklets.

Otsego County and the participating jurisdictions plan to gradually merge the hazard mitigation plan into the daily governmental operations. Both private and public organizations will be encouraged to become an active participant. The local Hazard Mitigation committee will work with local government officials to integrate the newly adopted hazard mitigation goals and actions into the general operations of government and partner organizations. This will allow for diversity of responsibility in order to meet the goals and actions (identified in section 5) of the plan. After which the committee will identify additional policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions. In addition, the municipality will provide a copy of the plan to all officials and department heads; the highway department, zoning officer, planning board, or other groups, to encourage the use of the plan in their decision making process and to merge the Hazard Mitigation Plan into existing plans when
appropriate. Other examples may be, contracting with our local educational facilities to implement educational programs or, involving disasters relief volunteers in order to coordinate immediate response needs during a disaster period. The following table includes existing processes and programs through which the mitigation plan could be implemented.

Also refer to Chart 6.1, at the end of the narrative section of this document.

<table>
<thead>
<tr>
<th>Process</th>
<th>Action</th>
<th>Implementation of Plan in Town of New Lisbon and Otsego County</th>
</tr>
</thead>
</table>
| Administrative| Departmental or organizational work plans, policies, and procedural changes. | • Local Highway Department  
• Otsego County Department of Emergency Response  
• Otsego County Department of Information Technology Services  
• Otsego County Highway Department  
• Otsego County Department of Social Services  
• Otsego County Emergency Planning Committee  
• Otsego County Planning Department  
• Otsego County Solid Waste Management Program |
| Administrative| Other organizations’ plans                                             | • Include reference to this plan in risk reduction section of the Otsego County Comprehensive Emergency management plan.  
• Include reference to this plan in the National Baseball Hall of Fame, both Basset and Fox hospitals, 20 (including the two colleges) countywide schools, Emergency plans.  
• Major Employers such as Wal-mart in Oneonta, New York State Central Mutual, Corning Glass, etc.  
• New York State Department of Agriculture and Markets |
| Administrative| Job/Job Descriptions                                                   | • Unpaid internship to assist in hazard mitigation plan maintenance  
Emergency Relief Coordinator funded through either federal or state grants |
| Budgetary     | Capital and operational budgets                                        | • Review of local budgets to include line item mitigation actions |
| Regulatory    | Executive Orders, ordinances and other directives                      | • Comprehensive Planning -Institutionalize hazard mitigation for new construction and land use.  
• Zoning and Ordinances  
• Building Codes  
• Capital Improvements Plan – Ensure that the person responsible for projects under this plan evaluate if the new construction is in a high hazard area, flood plain, etc. so the construction is designed to mitigate the risk. Revise requirements for this plan to include hazard mitigation in the design of new construction.  
• National Flood Insurance Program – Continue participation in this program and encourage non-participants to join.  
• Community Rating System – Evaluate participation in the plan. Annually update the plan to receive credit for their hazard mitigation plan under this program.  
• Continue to implement County and town storm water management plans.  
• Prior to formal changes (amendments) to comprehensive plans, zoning, ordinances, capital improvement plans, or other mechanisms that control development must be reviewed to ensure they are consistent with the hazard mitigation plan. |
<table>
<thead>
<tr>
<th>Process</th>
<th>Action</th>
<th>Implementation of Plan in Town of New Lisbon and Otsego County</th>
</tr>
</thead>
</table>
| Funding   | Secure traditional sources of financing.                               | • Once plan is approved, initiate process to enable legislation to use fees, taxes, bonds, and loans to finance projects.  
• Apply for grants from federal or state government, nonprofit organizations, foundations, and private sources including Flood Mitigation Assistance Program (FMA), and the Hazard Mitigation Grant Program (HMGP-Stafford Act, Section 404).  
• Research grant opportunities through U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG)  
• Investigate other federal sources of funding, such as but not limited to;  
• Other potential federal funding sources include:  
  o Stafford Act, Section 406 – Public Assistance Program Mitigation Grants  
  o Federal Highway Administration  
  o Catalog of Federal Domestic Assistance  
  o United States Fire Administration – Assistance to Firefighter Grants  
  o United States Small Business Administration Pre and Post Disaster Mitigation loans  
  o United States Department of Economic Development Administration Grants  
  o United States Army Corps of Engineers  
  o United States Department of Interior, Bureau of Land Management |
| Partnerships | Develop creative partnerships, funding and incentives.               | • Public-Private Partnerships  
• Community Volunteers  
• State Cooperation  
• In-kind resources |
| Partnership | Existing Committees and Councils                                      | • Department of Economic Development (SUNY)  
• Community Outreach (SUNY)  
• United Way  
• Otsego County Emergency Planning Committee |
Partnership

Working with other federal, state, and local agencies

- Army Corp. of Engineers (USACE)
- American Red Cross
- Department of Homeland Security (DHS)
- Federal Emergency Management Agency (FEMA)
- National Oceanic and Atmosphere Agency (NOAA)
- National Weather Service (NWS)
- New York State Department of Transportation (NYS DOT)
- State Emergency Management Office – SEMO
- United States Department of Agriculture (USDA)
- United States Department of Transportation (USDOT)
- United States Fish and Wildlife Service (USFWS)
- Otsego County Conservation Association
- Otsego 2000
- Susquehanna Basin
- State of New York University at Oneonta
- Community Volunteers – Habitat for Humanity
- Otsego Lake

Continued Public Involvement

The Town of New Lisbon is committed to the continued involvement of the public in the hazard mitigation process. Copies of the Town of New Lisbon Hazard Mitigation Plan will be kept and made available for review at any time during business hours. If a web site is available for the municipality, efforts will be made to include notices of meetings and the actual document with planned updates posted at the time of review. Copies of the plan will be placed at the following locations:

- Town of New Lisbon Clerks Office
- Otsego County Planning Department
- Otsego County Emergency Services Department
- Otsego County Planning Department Website

Each municipality during their annual reviews will schedule meetings open to the public for input and comments prior to completing their update.

A notice regarding the existence and location of copies of the mitigation plan will be publicized annually in local newspaper(s) and posted on the Otsego County web site. This announcement will follow the Planning Group’s annual review effort.

The public will have the opportunity to comment on the proposed updates to the plan during scheduled public meetings. Completion of the annual planning evaluation process and the 5-year plan update will take place only after considerable time and input from the public and involved departments is gathered and evaluated for inclusion. The Planner and members of the committee will be responsible for coordinating the plan evaluation portion of the meeting, soliciting feedback, collecting and reviewing the comments, and ensuring their incorporation in the 5-year plan update as appropriate. Additional meetings
may also be held as deemed necessary by the committee. The purpose of these meetings would be to provide the public an opportunity to express concerns, opinions, and ideas about the mitigation plan.

**Chart 6.1  Review of Existing Information**

Record of the review and incorporation of existing programs, policies, and technical documents for a single local jurisdiction. Adapted from Draft FEMA 386-8.

**Name of Jurisdiction:** Town of New Lisbon

**Prepared by:** Name: County Planning Dept. Title: Fiona Carbin  Phone: 607-547-4225

<table>
<thead>
<tr>
<th>Existing Program/Policy/Technical Documents</th>
<th>Does the jurisdiction have this program/policy/technical document? (Yes/No)</th>
<th>Reviewed? (Yes/No)</th>
<th>Method of incorporation into the hazard mitigation plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive plan</td>
<td>Yes, they have a Master Plan</td>
<td>No</td>
<td>Used for assessing development trends and future vulnerabilities</td>
</tr>
<tr>
<td>Growth Management plan/</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Capital Improvement plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood Damage Prevention Ordinance</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Floodplain Management plan</td>
<td>Yes</td>
<td>Yes</td>
<td>Incorporated actions</td>
</tr>
<tr>
<td>Open Space program plan</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Flood Insurance Studies, DFIRMs or engineering studies for streams</td>
<td>Yes</td>
<td>Yes</td>
<td>Incorporated expected frequency and extent of flooding</td>
</tr>
<tr>
<td>Hazard Vulnerability Analysis</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(by the local Emergency Management Agency)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Management Plan/</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Emergency Operations Plan</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Zoning Ordinance and/or</td>
<td>Only subdivisions</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>subdivision regulations</td>
<td>regulations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Code</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Drainage Ordinance</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Critical Facilities maps</td>
<td>Yes, all hazard plan</td>
<td>Yes</td>
<td>Assessing vulnerability</td>
</tr>
<tr>
<td>Existing Land Use maps</td>
<td>Yes</td>
<td>No</td>
<td>Used for assessing vulnerability</td>
</tr>
<tr>
<td>Elevation Certificates</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>State plan</td>
<td>Yes</td>
<td>Yes</td>
<td>Incorporated risk assessment data and maps</td>
</tr>
<tr>
<td>Study Type</td>
<td>Yes</td>
<td>Yes</td>
<td>Used for flood potential and other hazard dollar loss estimates</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----</td>
<td>-----</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>HAZUS study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLOSH Studies</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Hurricane Evacuation Plan</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix

Appendix A- List of Acronyms

Appendix B- Town of New Lisbon Resolutions

B-1 2004 Formal Appointment of members of the Town of New Lisbon All- Hazards Mitigation Planning Committee
B-2 2005 Town of New Lisbon All-Hazards Mitigation Plan Adoption
B-3 2007 Town of New Lisbon Resolution adopting the Amended All- Hazard Mitigation Plan

Appendix C- Notification for Public Involvement

C-1 Copy of Public Notice
C-2 List of Other involved agencies
C-3 Copy of letter sent to agencies

Appendix D- List of Critical Facilities and Vulnerable sites in the Town of New Lisbon

Appendix E- Annual Maintenance Report

E-1 Cover Letter
E-2 Annual Check List

Appendix F- Hazard Maps

F-1 Roads and Parcels
F-2 Water & Forest Resources
F-3 School Districts
F-4 Fire Districts
F-5 Transportation/Crashes
F-6 Critical Facilities (T)
F-7 2006 Flood
F-8 Potential Hazardous Areas
APPENDIX A

List of Acronyms

Throughout this plan, the following acronyms are used:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>Code Enforcement Officer</td>
</tr>
<tr>
<td>CWCABA</td>
<td>Clean Water/Clean Air Bond Act</td>
</tr>
<tr>
<td>EAP</td>
<td>Emergency Action Plan</td>
</tr>
<tr>
<td>EAS</td>
<td>Emergency Alert System</td>
</tr>
<tr>
<td>OES</td>
<td>Office of Emergency Services</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Service</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>EPF</td>
<td>Environmental Protection Fund</td>
</tr>
<tr>
<td>FERC</td>
<td>Federal Energy Regulatory Commission</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>FIRM</td>
<td>Flood Insurance Rate Map</td>
</tr>
<tr>
<td>HAZNY</td>
<td>Hazards New York (Hazard Analysis Computer Program)</td>
</tr>
<tr>
<td>HMC</td>
<td>Hazard Mitigation Committee</td>
</tr>
<tr>
<td>HMGP</td>
<td>Hazard Mitigation Grant Program</td>
</tr>
<tr>
<td>ICS</td>
<td>Incident Command System</td>
</tr>
<tr>
<td>NFIP</td>
<td>National Flood Insurance Program</td>
</tr>
<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
</tr>
<tr>
<td>NRCS</td>
<td>Natural Resource Conservation Service</td>
</tr>
<tr>
<td>NWS</td>
<td>National Weather Service</td>
</tr>
<tr>
<td>NYSDEC</td>
<td>New York State Department of Environmental Conservation</td>
</tr>
<tr>
<td>NYSDOS</td>
<td>New York State Department of State</td>
</tr>
<tr>
<td>NYSDOT</td>
<td>New York State Department of Transportation</td>
</tr>
<tr>
<td>NYSEMO</td>
<td>New York State Emergency Management Office</td>
</tr>
<tr>
<td>NYSF</td>
<td>New York State Police</td>
</tr>
<tr>
<td>PDM</td>
<td>Post Disaster Mitigation</td>
</tr>
<tr>
<td>SEMO</td>
<td>State Emergency Management Office</td>
</tr>
<tr>
<td>SFHA</td>
<td>Special Flood Hazard Area</td>
</tr>
<tr>
<td>SUNY</td>
<td>State University of New York (Oneonta)</td>
</tr>
</tbody>
</table>
Appendix B-1

2004 Formal Appointment of members of the Town of New Lisbon
All- Hazards Mitigation Planning Committee

TOWN OF NEW LISBON---RESOLUTION #02-04

RESOLUTION AUTHORIZING PARTICIPATION IN THE OTSEGO COUNTY
MULTI-JURISDICTIONAL ALL HAZARD MITIGATION PLAN & CREATING A
LOCAL ALL HAZARD MITIGATION PLANNING COMMITTEE

WHEREAS, the federal Disaster Mitigation Act of 2000 amended the Robert T. Stafford Disaster
Relief and Emergency Assistance Act to require that all local governments have an approved All-
Hazard Mitigation Plan in place by November 1, 2004 to be eligible for Hazard Mitigation Grant
Program funding and other pre-disaster funding, and

WHEREAS, the Hazard Mitigation Grant Program provides grants to States and local governments
to implement long-term hazard mitigation measures after a major disaster declaration to reduce the
loss of life and property due to natural disasters and to enable mitigation measures to be
implemented, and

WHEREAS, The Otsego County Board of Representatives has determined that the County will
prepare a multi-jurisdictional All Hazard Mitigation Plan that includes all Otsego County
municipalities that want to participate, and

WHEREAS, The County has requested that municipalities wishing to participate maintain records
of their hours spent working on this effort so that “in-kind service” figures can be provided to meet
the requirements of the grant;

NOW THEREFORE BE IT

RESOLVED, That the TOWN OF NEW LISBON has determined that it shall participate
in the multi-jurisdictional All Hazard Mitigation Plan to be prepared by the County, and further

RESOLVED, That all persons working on this plan will provide in-kind hours to the county
planning department so the parameters of the grant can be met, and further

RESOLVED, That a Local Hazard Mitigation Committee is hereby created for purposes of
preparing the multi-jurisdictional all hazard mitigation plan, and further

RESOLVED, That such Local Hazard Mitigation Committee shall be comprised of the following
individuals and/or agencies:

NEW LISBON TOWN BOARD MEMBERS


and further

RESOLVED, That such Local All Hazard Mitigation Committee shall have a Chairman and
Secretary, as follows:

Chairman -- ROBERT TAYLOR, PO BOX 152, GARRATTSVILLE, NY 13342
Secretary -- CHARLENE WELLS, PO BOX 162, GARRATTSVILLE, NY 13342

And further

RESOLVED, That the Clerk of this Board shall send a copy of this resolution to the County
Planning Department, 197 Main Street, Cooperstown, NY 13326.

PASSED IN REGULAR SESSION OF THE NEW LISBON TOWN BOARD ON 7/13/2004

[Signature]
New Lisbon Town Clerk
Appendix B-2
2005 Town of New Lisbon All-Hazards Mitigation Plan Adoption

TOWN OF NEW LISBON
RESOLUTION #01-2005

WHEREAS the New Lisbon Town Board voted previously to participate in the Otsego County Multi-Jurisdictional All Hazard Mitigation Plan, and

WHEREAS the New Lisbon Town Board, New Lisbon Supervisor, and New Lisbon Town Clerk were selected to serve as the Local Hazard Mitigation Committee, and

WHEREAS the Otsego County Planning Department has submitted the first draft, dated December 2004, of the Town of New Lisbon’s All-Hazards Mitigation Plan for the New Lisbon Town Board to review, now therefore

BE IT RESOLVED that the New Lisbon Town Board does hereby approve and adopt the December 2004 Draft of the Town of New Lisbon All-Hazards Mitigation Plan.

[Signatures]

Passed in regular session of the New Lisbon Town Board on January 11, 2005.
Appendix B-3
RESOLUTION AUTHORIZING ADOPTION
OF THE AMENDED 2006 COPY OF THE
ALL HAZARDS MITIGATION PLAN

WHEREAS, The Otsego County Board of Representatives has determined that the County will prepare a multi-jurisdictional All Hazard Mitigation Plan that includes all Otsego County municipalities that want to participate;

WHEREAS, The County has requested that municipalities wishing to participate maintain records of their hours spent working on this effort so that “in-kind service” figures can be provided to meet the requirements of the grant;

WHEREAS, the Town of New Lisbon Hazard Mitigation Committee has worked with the County Planning Department to prepare an All Hazard Mitigation Plan

WHEREAS, the Hazard Mitigation Committee has presented said plan to the Town;

Now Therefore Be It
RESOLVED, That the Town of New Lisbon has determined that it shall accept the All Hazard Mitigation Plan and further

RESOLVED, That all persons working on this plan have provided in-kind hours to the county planning department so the parameters of the grant can be met, and further

RESOLVED, That the Clerk of this Board shall maintain on file, a copy of the All Hazard Mitigation Plan in the office of the clerk, located at Town Hall, 908 County Highway 16, garratville, New York, 13342, and further

RESOLVED, That the Clerk of this Board shall send a copy of this resolution to the County Planning Department, 197 Main Street, Cooperstown, NY 13326.

________________________________________
Town Clerk

________________________________________
Board Representative
Appendix C-1
Copy of Public Notice

STATE OF NEW YORK
COUNTY OF OTSEGO, SS

LEGAL NOTICE
TOWN OF NEW LISBON
NOTICE IS HEREBY GIVEN THAT THE DEPUTY RESEARCH
BOARD OF THE NEW LISBON TOWN BOARD WITH ASSISTANCE
FROM THE OTSEGO COUNTY PLANNING DEPARTMENT IS
APPROACHING A PUBLIC HEARING ON AUGUST 3, 2006
AT THE NEW LISBON TOWN CLERK'S OFFICE IN
NEW LISBON TOWN CLERK
AUGUST 1, 2006

Diane Belsky, of West Laurens NY, in said County, being duly sworn,
deposes and says that she is the
Account Clerk for the newspaper
called The Daily Star, printed and
published in Oneonta NY aforesaid,
and that the advertisement of which
the annexed is a printed copy, has
been published in the said newspaper
on the

3rd
Day of August
2006

Diane Belsky

Sworn to before me the __8th
Day of August 2006

NOTARY PUBLIC

DEBRA A. BALANTIC
Notary Public, State of New York
No. 091-A-0561
Qualified in Otsego County
During the revision period the following organizations received an informative letter about the All-Hazard Mitigation Plan for the Town of New Lisbon.

- The Garretsville Fire Department
- The Morris Fire Department
- The Laurens Fire Department
- Edmeston Schools District
- Town and County Trees service
- The New Lisbon Town hall
Appendix C-3
Copy of letter sent to agencies

TOWN OF NEW LISBON

New Lisbon Town Clerk
Charlene R. Wells
PO Box 162
Garrattsville, NY 13342
607-965-8508

August 1, 2006

Morris Central School
PO Box
Morris, NY 13808

To Whom It May Concern:

This letter is to inform you that the Town of New Lisbon has adopted a draft version of an All Hazards Mitigation Plan which is available for review in my office and in the Otsego County Planning Department. This notification is a requirement of the adoption process. We are awaiting final approval of our plan from the State Emergency Management Office (SEMO) and Federal Emergency Management Agency (FEMA).

The Town began working on this when we were notified in 2004 that a change in the federal law required all local governments to have an approved All Hazard Mitigation Plan in place to be eligible for disaster funding. The purpose of this plan is to identify possible future hazards and strategies for minimizing those risks. The overall goal of the Town of New Lisbon All Hazards Mitigation Plan is to protect life and property from natural and human-caused hazards.

If you desire to review the document, you may contact me at the phone number above to set up a convenient time.

Sincerely,

Charlene R. Wells
New Lisbon Town Clerk

Cc:
Laurens Central School
Edmeston Central School
Garrattsville Fire Company
Garrattsville Country Store/Post Office
Garrattsville United Presbyterian Church
Garrattsville Methodist Church
APPENDIX D
List of Critical Facilities and Vulnerable sites

Town of New Lisbon

<table>
<thead>
<tr>
<th>Facility</th>
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* Located in general store
APPENDIX E

Annual Maintenance Report
The Hazard Mitigation Plan is updated annually by the established committee regarding natural hazards that have affected local communities within the past year. The purpose of this is to make the appropriate changes to the communities’ individual plan so that the information included is not outdated, and historical documentation is recorded.

The local Hazard Mitigation committee needs to withstand even if members are no longer active. The most useful way of maintaining an involved and helpful committee is having one representative from each of the following local branches:

- local fire department
- local highway department
- knowledgeable resident
- town/village administrator
- emergency squad

The committee is welcomed to add other members of the community that are reliable resources will be an asset in completing the annual survey.

The local Hazard Mitigation committee is responsible to complete the survey in the most detailed manor. Hazards listed already include; ice storms, severe storms (including wind storms), winter storms, flood, erosion, hazardous material in transit, Fire (including wild fire), tornado, flash flood, ice jams, and hurricane. Space is provided to include non-listed hazards that have affected a community or another occurrence of a particular hazard from that year.
Below is an example of how the survey should be filled out.

**Flood**

**When**
April 14-16 2007

**Detailed Location of Hazard**
Flooding occurred along Hill creek, the Florence River, Town stream, from Rose avenue to Baseball hill.

**Detailed Description of Damages**
45% of our community was affected due to washed out roads and flood damage. 12 houses along the Florence river basements were flooded, resulting in damage to personal belongings, major repairs such as repairing pumps, and drainage systems.

**Estimate amount in damages**
$20,000

**Amount rewarded from FEMA (if any)**
No FEMA assistance applied but not rewarded

**Actions taken to mitigate impacts on community**
Replaced Culvert from 8’ to 12’ on Rose avenue. Scheduled cleaning of drainage ditches along highway 22.

**Cost of mitigation measures**
34,000 for improvements
The Hazard Mitigation Plan requires that the local Committee review, update, and make necessary changes to the plan that has occurred within the last year. In doing so the established committee must do the following:

- Identify which natural hazards have affected the community
- Exact locations where community were affected and for how long
- Cost in damages
- Amount if any received from FEMA
- Mitigation measures that were taken throughout the year in prevention of future destruction
- Provide signatures from each committee member

Below are potential hazards that may occur. Please fill in the needed information with the most detail. There is available space for those hazards that have not been listed but have affected your community and would like to include.

Potential hazards:

**Ice Storms**

When-

_________________________________________________________________

Detailed Location-

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Detailed Description of Damages-

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Estimate amount in damages-

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Amount rewarded from FEMA (if any)-

_________________________________________________________________
Severe Storms-

When-

Detailed Location-

Detailed Description of Damages-

Estimate amount in damages-

Amount rewarded from FEMA (if any)-

Actions taken to mitigate impacts on community-

Winter Storms-

When-

Detailed Location-

Detailed Description of Damages-
Flood -
When -

Detailed Location -

Detailed Description of Damages -

Estimate amount in damages -

Amount rewarded from FEMA (if any) -

Actions taken to mitigate impacts on community -

Hurricane -
When -
Detailed Location-

Detailed Description of Damages-

Estimate amount in damages-

Amount rewarded from FEMA (if any)-

Actions taken to mitigate impacts on community-

**Erosion/Landslide**-

When-

Detailed Location-

Detailed Description of Damages-

Estimate amount in damages-

Amount rewarded from FEMA (if any)-
Actions taken to mitigate impacts on community-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Haz Mat (in transit)-

When-

__________________________________________________________________

Detailed Location-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Detailed Description of Damages-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Estimate amount in damages-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Amount rewarded from FEMA (if any)-

__________________________________________________________________

Actions taken to mitigate impacts on community-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Fire/ Wide Fire-

When-

__________________________________________________________________

Detailed Location-

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Detailed Description of Damages-

__________________________________________________________________
Estimate amount in damages-

Amount rewarded from FEMA (if any)-

Actions taken to mitigate impacts on community-

Tornado-

When-

Detailed Location-

Detailed Description of Damages-

Estimate amount in damages-

Amount rewarded from FEMA (if any)-

Actions taken to mitigate impacts on community-

Flash Flood-

When-
Detailed Location-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Detailed Description of Damages-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Estimate amount in damages-
__________________________________________________________________
__________________________________________________________________

Amount rewarded from FEMA (if any)-
__________________________________________________________________

Actions taken to mitigate impacts on community-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

**Ice Jams**-

When-
__________________________________________________________________

Detailed Location-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Detailed Description of Damages-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Estimate amount in damages-
__________________________________________________________________

Amount rewarded from FEMA (if any)-
__________________________________________________________________

Actions taken to mitigate impacts on community-
Hazard

When-

Detailed Location-

Detailed Description of Damages-

Estimate amount in damages-

Amount rewarded from FEMA (if any)-

Actions taken to mitigate impacts on community-

Hazard

When-

Detailed Location-

Detailed Description of Damages-
Estimate amount in damages-
__________________________________________________________________
__________________________________________________________________

Amount rewarded from FEMA (if any)-
__________________________________________________________________

Actions taken to mitigate impacts on community-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Hazard___________________________________ -

When-
__________________________________________________________________

Detailed Location-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Detailed Description of Damages-
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

Estimate amount in damages-
__________________________________________________________________
__________________________________________________________________

Amount rewarded from FEMA (if any)-
__________________________________________________________________

Actions taken to mitigate impacts on community-
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__________________________________________________________________
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Hazard___________________________________

When-
__________________________________________________________________
Detailed Location-
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Detailed Description of Damages-
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Estimate amount in damages-
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________________________________________________________________________
________________________________________________________________________

Amount rewarded from FEMA (if any)-
________________________________________________________________________
________________________________________________________________________

Actions taken to mitigate impacts on community-
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX F
Hazard Maps

F-1    Roads and Parcels
F-2    Water & Forest Resources
F-3    School Districts
F-4    Fire Districts
F-5    Transportation/Crashes
F-6    Critical Facilities
F-7    2006 Flood
F-8    Potential Hazardous Areas
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Parcels with critical facilities are identified by Tax ID and referenced in the chart below.
*Located in General Store