

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

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

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

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

### Village of Briarcliff Manor Planning Process

DMA 2000 requires states to submit comprehensive all hazard mitigation plans to the Federal Emergency Management Agency (FEMA) to be eligible for future pre-disaster mitigation funding. Local governments must also develop local plans. To comply, the Village of Briarcliff Manor has developed this All Hazard Mitigation Plan. Once the mitigation plan is approved by FEMA and adopted by the local governing body, the Village will begin to implement the identified mitigation actions.

To support the planning process for this all hazard mitigation plan, Village of Briarcliff Manor accomplished the following:

- Developed a planning group (Planning Committee);
- Identified hazards of concern;
- Profiled and prioritized these hazards;
- Estimated inventory at risk and potential losses associated with these hazards;
- Developed mitigation strategies that address the hazards that impact the area; and
- Developed mitigation plan implementation, maintenance and update procedures to be executed upon approval of the plan by FEMA.

As required by DMA 2000, the Village of Briarcliff Manor has informed the public about these efforts and provided opportunities for public comment and input on the planning process. In addition, various agencies and stakeholders have participated as core or support members to provide input and expertise to the planning process. This All Hazard Mitigation Plan documents the process and outcomes of the Village's mitigation planning efforts.

The Village of Briarcliff Manor intends to incorporate mitigation planning as an integral component of daily government operations through existing processes and programs. A notice regarding the existence of the plan and the location of copies of the mitigation plan has been publicized. Copies of the plan will be posted on the Village web site and made available for review at the Village Town Hall and Library.

Updates to the plan will be similarly announced after annual plan reviews and 5-year updates. The Assistant Village Manager will be responsible for receiving, tracking, and filing public comments regarding this plan.

### Village of Briarcliff Manor Mitigation Plan Adoption

To obtain plan approval, specific prerequisites for plan approval have been met by the Village of Briarcliff Manor. This mitigation plan will be reviewed and adopted by the Village of Briarcliff Manor. Copies of the resolutions regarding adoption of the plan will be included as Appendix B.

### Village Profile and Evaluation of Population and Land Use Trends

The Village is located in the central western part of Westchester County, New York nestled along the Hudson River. With 5.9 square miles of land, the Village is home to 7,696 people (U.S. Census, 2000). The Village offers a rustic residential environment within easy commuting distance to Manhattan. The Study Area is easily accessible via Route 9, Route 9A, Route 100, Saw Mill River Parkway, and Taconic State Parkway. Metro-North railroad makes regular stops at the Village's Scarborough Train Station, providing many residents with the opportunity to commute to New York City by train.

Development increases population and structures and therefore, can increase the impact of hazards on a community. For example, heavy development planned for a flood-prone area would likely increase the impact of the flood event as time progresses.

This mitigation plan provides a general overview of current and anticipated population and land use within the study area. This information provides a basis for making decisions regarding the type of mitigation approaches to consider and the locations in which these approaches should be applied. This information can also be used to support decisions regarding future development in vulnerable areas. For potential increases in vulnerability, the Village can then plan ahead to mitigate those vulnerabilities early in the development process or can direct development to areas of lower risk. The Planning Committee will revisit the mitigation plan regularly to ensure that mitigation strategies support sustainability in order to minimize increased risk and to support the implementation and targeting of specific mitigation actions to address the potential impacts of development over time.

### Risk Assessment to Support Mitigation Plan

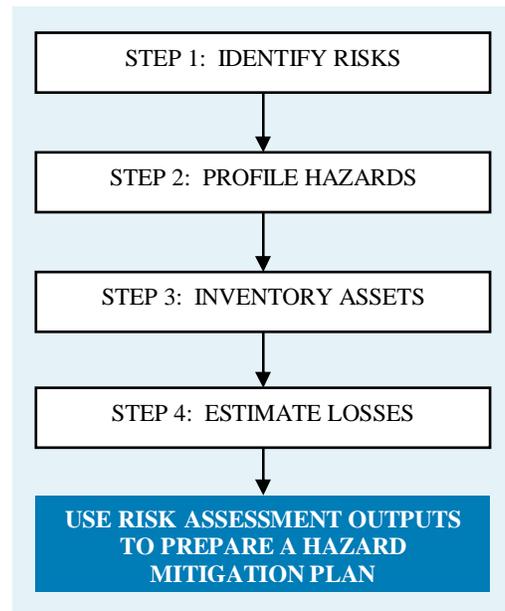
A key component of a mitigation plan is the accurate identification of risks posed by a hazard and the corresponding impacts to the community. The process of identifying hazards of concern, profiling hazard events, and conducting a vulnerability assessment is known as a risk assessment. The risk assessment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

**Step 1:** The first step of the risk assessment process is to identify the hazards of concern. FEMA's current regulations only require an evaluation of natural hazards. Natural hazards are natural events that threaten lives, property, and many other assets. Often, natural hazards can be predicted, where they tend to occur repeatedly in the same geographical locations because they are related to weather patterns or physical characteristics of an area. In addition, the Village is evaluating one man-made hazard (vehicular accidents including hazardous materials in transit).

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

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

Figure ES-1. Risk Assessment Process



The following list of 7 hazards of concern, in order of significance to the community, was selected for further evaluation in the mitigation plan:

- 1) Severe Storm (windstorms, hurricanes, tropical storms, thunderstorms, hail, lightning and tornado)
- 2) Flooding
- 3) Severe Winter Storm (snow, blizzard)
- 4) Vehicular Accident (including hazardous materials in transit)
- 5) Earthquake
- 6) Wildfire
- 7) Drought

Table ES-1. Summary of Risk Assessment Outcomes – Hazards of Concern

Hazard	Village-wide	Areas within the Village Particularly Vulnerable
<b>Natural Hazards</b>		
Severe Storm (wind, including hurricane and tornado)	✓	All
Flood	✓	Residents and Building Stock in and in the vicinity of floodplains including along the Hudson River, Pocantico River, and Hollow Brook
Severe Winter Storm (snow)	✓	All
Earthquake	✓	All
Wildfire	✓	All
Drought	✓	All
<b>Man-Made Hazards</b>		
Hazardous Materials (In Transit)	✓	Along Routes 9, 9A and 100

Table ES-2 presents the exposed value of building stock for the various categories of building stock considered “at risk” and the dollar value of loss associated with the 100- and 500-year MRP flood zones events.

Table ES-2. Total Building Value (Structure and Contents) Exposed and Damaged for the 100- and 500-Year MRP Flood Events in Village of Briarcliff Manor

Category of Building	100-year Flood		500-year Flood	
	Total Building Value Exposed	Total Building Value Loss (Structure/Content)	Total Building Value Exposed	Total Building Value Loss (Structure/Content)
Residential Exposure (Single and Multi-Family Dwellings)	\$67,543,800	\$8,133,300	\$72,384,900	\$9,452,300
Commercial	\$10,472,400	\$1,114,500	\$10,935,000	\$1,245,400
Industrial	\$438,000	\$52,600	\$461,600	\$60,100
Agricultural	\$84,000	\$5,700	\$86,200	\$6,600
Religious	\$177,400	\$32,100	\$190,800	\$36,300
Government	\$1,127,800	\$68,100	\$1,155,800	\$77,900
Education	\$0	\$0	\$0	\$0
<b>TOTAL AT-RISK</b>	<b>\$79,843,400</b>	<b>\$9,406,300</b>	<b>\$85,214,300</b>	<b>\$10,878,600</b>

Source: HAZUS-MH, 2005; US Census Bureau Data, Census 2000. Notes: (1) Estimate includes building structure and content exposure for both Pre- and Post-FIRM buildings; (2) Although HAZUS-MH indicates there are zero (0) agricultural and religious buildings present in the 100-year floodplain and zero (0) industrial and religious buildings present in the 500-year floodplain, it estimates building value exposed in these occupancy classes; this results because HAZUS-MH calculates building count and damage based on square footage and compares these values and building valuation to the average for the Census block. In this case, the building value exposed to the flood event is above average for that Census block and a value is reported by HAZUS-MH. Census Bureau Data, Census 2000.

For this risk assessment, loss estimates and exposure calculations rely on the best available data and methodologies. Uncertainties are inherent in any loss estimation methodology and arise in part from incomplete scientific knowledge concerning natural hazards and their effects on the inventory, or built, environment. Therefore, potential exposure and loss estimates are approximate and do not predict precise results but rather are used to characterize risk and assign priorities for mitigation efforts.

### Village of Briarcliff Manor Mitigation Strategies

The outcomes of the risk assessment, supplemented by community input, provided a basis to review past mitigation actions, future goals, and appropriate local mitigation strategies. The Village of Briarcliff Manor identified the following four over-arching mitigation goals that summarize the hazard reduction outcomes that the county wants to achieve:

1. Protect life and property
2. Increase public awareness
3. Encourage partnerships
4. Provide for emergency services

The mitigation strategy portion of the plan includes:

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

The Village developed several corresponding objectives for each goal that further define the specific strategies or implementation steps that will be needed to attain the identified goals. The goals, along with their corresponding objectives, then guided the development and evaluation of specific mitigation activities. The text below summarizes mitigation activity identification, analysis, and implementation.

### *Identification*

Outputs of the risk assessment combined with significant partner, Planning Committee, and public input helped to identify potential mitigation activities. Potential activities were submitted by Planning Committee members throughout the course of the planning process. Many of the mitigation objectives and action items were identified based on current programs and activities in the Village. The mitigation activities developed for this plan are presented in Section 6.

### *Analysis*

Potential mitigation activities were evaluated throughout the mitigation planning process. At various intervals, members of the planning group met and/or communicated via email and telephone to analyze mitigation activities for the hazards identified in this plan based on the identified mitigation planning goals and objectives, current programs and policies, public considerations, and results of the risk and exposure assessments. Each alternative mitigation activity was evaluated qualitatively using several evaluation criteria, including the Social, Technical, Administrative, Political, Legal, Economic, and Environmental (STAPLEE) opportunities and constraints of implementation.

Particular attention was given to those mitigation activities that addressed existing and new buildings and infrastructure. Few mitigation activities were removed from consideration based on the concept that it is best not to rule out any activity that may help make the communities more disaster resistant (even if funding was not currently available or an action was a lower priority at present). As a result of the analysis, all mitigation actions contemplated were deemed feasible. None of the proposed actions were considered to present prohibitive costs or other concerns based on community priorities and needs as illustrated in the STAPLEE chart.

### *Implementation*

Mitigation actions were prioritized for each hazard of concern and ranked as a high, medium, or low priority. The Planning Committee considered several factors while prioritizing each action including the community's vulnerability to each hazard (as presented in Section 5 of this plan), a review of benefits versus costs, and the feasibility of the mitigation action based on a review of the STAPLEE criteria. This will help ensure that the funds allocated to these mitigation projects are being spent efficiently. For example, many mitigation activities focus on public awareness and education programs or integrating the mitigation plan into current programs. These types of mitigation measures are more affordable and achievable and have an immediate benefit. The Planning Committee also identified specific projects that will prevent direct future losses.

The Village does not have unlimited resources to take on new responsibilities or projects; therefore, mitigation activities that can be implemented through existing programs were considered a high priority. The implementation of new and/or additional mitigation activities is dependent on approval of the local elected governing body as well as obtaining funding from outside sources if funding has not already been secured.

The specific timeframes; responsible parties; and existing policies, programs, and resources to support implementation of each high-priority mitigation activity are identified in Section 6.

### **Village of Briarcliff Manor Plan Maintenance Procedures**

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

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

To request information or provide comments regarding this plan, please contact:

Assistant Village Manager  
Briarcliff Manor Village Hall  
1111 Pleasantville Road  
Briarcliff Manor, NY 10510

Telephone: (914) 944-2782  
Fax: (914) 941-4837