Section 6 - Setting Goals and Objectives

6.A Setting Mitigation Goals

Following the identification, profiling and vulnerability assessment of hazards that are likely to cause significant harm to the Village of Mamaroneck (See Sections 4 and 5), the next step is to identify planning goals to guide in proposing mitigative actions. The Hazard Mitigation Planning Committee, with input from the consultant and review by the community, proposed the following goals and objectives for developing mitigative measures that are discussed in Section 7. The goals listed below are a consensus of the committee and the Village administration and were available for review and comment by the public. Six hazard mitigation goals were proposed for implementing the Village mitigation measures. These include:

- 1. Reduce impacts of flooding
- 2. Protect residents from catastrophic disasters
- 3. Involve the community in identifying and implementing mitigation measures
- 4. Become a member of the Community Rating System (CRS) Program
- 5. Heighten preparedness and response efforts for Hazards
- 6. Prepare for climate change impacts on the Mamaroneck community

These goals are derived from primary hazards of concern identified and analyzed previously in Sections 4 and 5. The primary hazard is flooding and damage from severe storms such as thunder storms, heavy rain storms, Nor'easters, tropical storms and hurricanes. The goals however are sufficiently broad to encompass other hazards evaluated previously. These hazards have the potential for serious impact, but would not likely cause the same level of frequent or severe damage or harm to people as major storms and flooding. Goals that were not directly linked to hazard mitigation issues such as purely economic and development goals or capital construction project goals were excluded.

These goals represent the major issues and aims of the community and consider significant hazards and their impacts. Three proposed goals (2, 3, and 5) are broad and inclusive of technological and human caused hazards.

The six goals consider the existing resources and capabilities of Village government and strive to reduce vulnerabilities or mitigate hazards and their risks. All the goals will be evaluated for future updates in the Plan. (See Section 9.)

6.A.1 Reduction of Vulnerabilities

Each goal is intended to reduce hazard vulnerabilities discussed in Section 5 Assess the Impacts. The hazards of concern that were excluded were discussed in Section 4.E. The primary hazards of concern, described in Section 4, included seven natural hazards that were selected for further evaluation. These include:

- Floods
- Tropical Storms
- Thunderstorms
- Coastal storms
- Hurricanes
- Wind storms, and
- Winter storms

Vulnerabilities to these hazards include people, village structures and property. Vulnerabilities to people include Village residents, visitors, commuters, travelers and workers who are potentially exposed to these hazards in the Village. Vulnerabilities of structures include critical facilities, private homes, businesses and infrastructures. Vulnerabilities of property include trees, vehicles and land. (See Section 5 for details.)

The first goal, (Reduce impacts from flooding) is intended to protect lives and prevent injuries of vulnerable people living or working in flood prone areas identified in Sections 4 and 5. This goal focuses on impacts to vulnerable property and structures and human safety.

The second goal (Protect residents from catastrophic disasters) is intended to cover any hazard that has the potential to cause significant damage to property, structures, or injury and death. Protecting the safety of the public is of prime concern. This goal includes protection from natural as well as man caused hazards. This goal is also intended to protect vulnerable

businesses, homes and critical facilities from loss of value from all hazards. Vulnerable government services include emergency operations command, police, fire and emergency response units, Village administration and Village communications center.

The third goal, (Involve the community in identifying and implementing mitigative measures) emphasizes the importance of community involvement in protecting lives, safety and property. Effective communication and action is critical in implementing mitigation measures.

The fourth goal (Become a member of the Community Rating System (CRS) program) involves documenting and implementing Village efforts to reduce flooding hazards that will qualify the Village to lower flood insurance rates.

The fifth goal, (Heighten preparedness and response efforts for Hazards) is intended to improve the Village ability to respond to any natural or human caused hazard.

The sixth goal, (Prepare for climate change impacts on the Mamaroneck community) includes preparing for future impacts from global warming. Some of potential changes may already be beginning as increases in flooding and storm events and damage to shoreline facilities such as homes, parks, open space, marinas, and water quality.

6.A.2 Strategy for Objectives

The community formulated specific objectives for each primary goal. These objectives provide a strategy for identifying and proposing mitigation measures in Section 7 that meet these established goals. The objectives and proposed mitigation activities comply with several relevant criteria that include <u>Social</u>, <u>Technical</u>, <u>Administrative</u>, <u>Political</u>, <u>Legal</u>, <u>Economic and Environmental standards (referred to as STAPLEE criteria).</u>

The objectives proposed are intended to fulfill at a minimum the following STAPLEE criteria:

- Social Improve the quality of life and reduce neighborhood impacts.
 - Include public support and involvement
 - Consider effects on selected segments of the population
 - Compatible with present and future community values

- Consider cultural impacts on the community
- Technical Develop technically feasible mitigation efforts
 - Effective in reduction of long-term losses, impacts and risks
 - Effective in minimizing secondary losses
 - Effective in solving the problem and not only the symptoms
- Administrative Provide resources and staffing to implement proposed actions
 - Jurisdiction and capability necessary to implement an action
 - Ability to accomplish activities in a timely manner
 - Ability to maintain and manage the mitigation measure
- Political Acceptable to and supported by community politicians
 - Have full support of the Village Board and Administration
 - Involve political leaders in the planning process
 - Support and involvement of stakeholders
 - Public support and involvement
- Legal Legal authority to undertake an action
 - Meet all applicable regulatory requirements
 - Define the roles of Village, Town, County, State and Federal governments
 - Provide a legal basis for mitigation actions
 - Assure laws, regulations, ordinances, and resolutions are in place
 - Identify liabilities for an action or lack of an action
 - Consider needs for legal counsel
- Economic Develop affordable and cost effective mitigation efforts
 - Obtain budget and funding for an action
 - Economic costs and benefits of a mitigation action
 - Burden to the tax base or local economy
- Environmental Improve environmental quality.
 - Identify and evaluate environmental impacts
 - Compliance with all environmental laws and regulations
 - Benefit the environment from a mitigation action

The objectives presented below are not mutually exclusive and may apply to one or more goals. For example, objectives under the goal for protecting human life and safety from disasters can also help avoid the loss of property from flood hazards. For simplicity, objectives are listed once under a primary goal. Each of the objectives discussed below form the basis for the mitigative measures presented and discussed in detail in Section 7.

If the nature or magnitude of risks change, goals and objectives will be evaluated to assure that they address current and future conditions. An evaluation process will be implemented to assess whether the current resources are appropriate for implementing the Plan. An assessment will be made of the outcomes of mitigation actions and the roles of participating agencies and other partners identified in this Plan.

6.B Mitigation Objectives by Goal

6.B.1 Reduce Impacts of Flooding

The goal to reduce impacts from flood hazards is a focus of major concern for the community since flooding is so frequent. The Village of Mamaroneck is known to flood in several areas frequently. This goal is aimed to mitigate impacts related to water damage through upgrading drainage and sewage systems, and improvement of roads. The existing sewer and storm drain system is more than 100 years old. Several objectives intended to avoid and reduce impacts from floods include:

- Update applicable codes and development requirements.
- Implement flood control projects. (such as dredging, building retention ponds, freeing up constrictions, etc.)
- Improve efficiency of communications with those in flood areas.
- Improve the storm water collection and drainage system.
- Improve flood-prone streets.
- Correct storm and sanitary sewer backup problems from floods.

Mitigating impacts from flood hazards is needed in areas of high risk such as in the 100year/500-year flood zones. Mamaroneck is located on Long Island Sound and is prone to coastal storms and tidal effects. Flooding is the most significant hazard followed by severe storms in the damage they do in Mamaroneck.

In addition, significant structural defects in the storm and sanitary sewer systems could impact the entire system. Thus, correcting these problems in the storm and sanitary sewer systems would help meet this goal.

Compliance with the storm water regulations could reduce the street flooding in the Village. The major objective of this regulation is to control and largely reduce the flow of storm water into sensitive areas.

6.B.2 Protect Residents From Catastrophic Disasters

Avoiding loss of life and injury from disasters is a major goal for the Village. Protecting residents' property from catastrophic storm disasters is included. This goal is also aimed at mitigating losses through various property protection activities before, during and after a hazardous event occurs. Technological and man-caused hazards discussed in Sections 4 and 5 also apply and may be evaluated in future updates to this plan.

Objectives to protect residents against catastrophic disasters include:

- Enhance residents' awareness of emergency procedures.
- Improve receiving communications from the Village in an emergency.
- Invest in proper emergency and evacuation equipment for the Community.
- Protect Critical Facilities, buildings and infrastructures from damage and loss.
- Heighten public awareness through multi-level public relations campaign.
- Develop specialized outreach programs for people with disabilities.
- Protect vulnerable harbor and shoreline from damage and loss.

Enhancing residents' awareness requires effective communication between the Village officials and the community. Such an action would include receiving communication during a hazard event through a reverse 911 call. The objective for heightened public awareness requires involvement at several levels. It involves using mass media, email, newspapers, churches, community groups and other organizations.

Storm related events such as thunder storms, tropical storms, hurricanes, Nor'easters and winter storms are most likely to happen and cause disasters. (See Section 5.) Strong winds and floods from these storms cause the greatest risks of deaths and injuries and a reduction in quality of life. Although Category 3 hurricanes are rare in the county, less intense storms have occurred recently such as Tropical Storm Irene that was downgraded from a hurricane by the time it struck Mamaroneck.

Storms cause the greatest damage, property loss and economic impact and are likely to have the highest degree of impact. They are costly in the damage they do and in response and cleanup efforts needed. (See Section 5.) They also cause extensive secondary damage such as loss of electrical service and communication systems.

One of the major objectives is to ensure that all efforts are directed at avoiding loss of life or injuries during a major storm or other hazardous event by having a well-prepared emergency response and escape plan. Critical facilities need to be protected from hazards to assure that basic Village and emergency services are not disrupted and that people in need of emergency services get them during a major hazardous event. Preparedness includes having appropriate staff, completed appropriate training and having the necessary equipment and supplies to meet response needs.

6.B.3 Involve the Community in Identifying and Implementing Mitigation Measures

Several mitigation actions require detailed planning, impact and vulnerability analysis or specific engineering studies before they can be implemented. The community needs to identify the mitigation activities that require such planning needs and implement such studies. Several objectives related to this goal are:

- Complete engineering study of the Mamaroneck and Sheldrake Rivers.
- Perform an engineering analysis and study of other rivers and water courses impacting the community.
- Evaluate vulnerability of critical facilities in the Village.
- Review Village infrastructures related to storm water conveyances.
- Identify and eliminate inflow and infiltration problems.
- Coordinate with neighboring communities.

The U. S. Army Corps of Engineers (USACE) is currently preparing an engineering study of the Mamaroneck and Sheldrake Rivers. This study needs to be completed and its recommendations implemented. Other streams such as Beaver Swamp and Guion Creek that are not covered by the USACE which are impacting Mamaroneck also need to be studied and mitigation actions implemented.

The Mamaroneck Harbor and shoreline are highly vulnerable to storms, surges and erosion. Vulnerability studies should be implemented and recommendations made. Several critical facilities in the Village are at risk, such as the Department of Public Works and the Fire Department. Vulnerability studies should be implemented and recommendations made.

Village infrastructures, including storm water conveyances need to be reviewed for expansion and enhancement for control of storm water.

6.B.4 Become a Member of the Community Rating System (CRS) Program

Meeting the criteria of FEMA's Community Rating System Program and becoming certified in it will help meet this goal. Certification in the CRS program can result in reduction of flood insurance premiums from 5% to 50%. The program requires a designated program coordinator, a program plan, public notification, program approval by FEMA and the Insurance Services Organization (ISO).

Several specific objectives reviewed that relate to this goal include:

- Identify personnel to develop CRS program
- Reduce flood insurance premiums.
- Accurately identify the number of Severely Repetitive Loss (SRL) properties
- Reduce the number of Severely Repetitive Loss (SRL) properties

Several criteria have been completed and need to be formally documented and submitted. The Village of Mamaroneck is part of the National Flood Insurance Program (Community Number 360916). The Village's Flood Insurance Rate Map (FIRM) was last revised on September 28, 2007. Its Flood Insurance Study (FIS) is dated September 28, 2007. There may be areas in the village with a history of flooding that are not adequately noted in the current FIRM. Residents are invited to communicate these areas to members of the Village Administration, who will make note of the information, mark-up the maps and communicate the information to FEMA and the NYS DEC Floodplain Administrator for inclusion in future FIRM map updates.

6.B.5 Heighten Preparedness and Response Efforts for Hazards

Being prepared for hazards that may strike the community is essential for minimizing impacts. Several objectives intended to heighten preparedness and response include:

- Improve preplanning for mitigation of hazards.
- Improve communications between the Village staff and the community.
- Improve preparedness and response.
- Invest in appropriate emergency response and evacuation equipment.
- Identify and move materials and equipment to safe locations.
- Improve inter-municipal planning and coordination.

Having a fully compliant and updated National Incident Management System (NIMS) and implementation plans in place is a critical first step. Without a clear definition of roles, available services and resources in the Village, implementation of effective emergency response is limited. Having effective warning systems is a key to communication with the community.

6. B.6 Prepare for Climate Change Impacts on the Mamaroneck Community

Climate change such as global warming is generally accepted as a trend for the future. Expected changes in weather patterns may include more frequent and intense coastal storms, gradual rise in sea levels and more extreme temperatures. Although there is a high degree of uncertainty in forecasting these events, there are several planning efforts that can prepare the community for the future and minimize impacts.

Objectives to determine how climate change can impact the community include:

- Review and update floodplain management codes.
- Improve and upgrade local waterfront properties.
- Educate the community about climate impacts.
- Coordination and communication with government agencies for future planning.
- Amend applicable building and zoning codes to reflect needs of the community

These objectives will help protect environmental resources that are important for preserving shorelines, plants, wildlife, fish, sensitive ecosystems and open space as climate changes.