Section 8 – Draft Action Plan

8.A Introduction

This Draft Action Plan summarizes mitigation strategies applicable to the Village of Mamaroneck's potential hazards identified in Section 4, and the vulnerable properties and populations discussed in Section 5. The Action Plan provides a process for implementing the mitigation activities that were identified in Section 7 (See Tables 7-1 to 7-6) based on the goals and objectives discussed in Section 6. The action items recommended in this plan focus on hazards due to flooding and severe storm events discussed in Sections 4 and 5. This Action Plan proposes mitigation activities that provide interoperability and compatibility among Federal, State and local capabilities and improves coordination and cooperation between public and private entities in a variety of hazardous incident management activities as required by FEMA under the NIMS. The priorities established in Section 7 assure that the most serious problems are addressed first. The Hazard Mitigation Planning Committee also considered several other hazards that are of concern. The recommended actions were reviewed with the Village administration and the Planning Committee and presented to the public.

The proposed mitigation actions in Section 7.B meet FEMA's STAPLEE criteria for developing mitigation actions and priorities. (See Sections 6.A and 7.A.) They are socially acceptable to the community, technically feasible, Protective of or beneficial to the environment and are backed by Legal authority and consistent with current laws, consider Economic benefits and costs and include Environmental considerations. Current community needs were also considered which are acceptable to political decision makers, village representatives, stakeholders, and the public.

The purpose of this Action Plan is to identify which tasks will be implemented first and to outline a strategy for the long-term implementation of each of the items. This Section discusses the following components in this Action Plan:

- Type/ Priority Order
- Action Item
- Relative Cost Benefit/Objectives
- Lead/Administrative Responsibility
- Resources
- Schedule/Duration

• Source of funding

Cost estimates and benefits presented in Section 7 will be considered as each of the priority groups is ordered. The implementation order for each activity item is determined by the potential for reducing risk, costs relative to benefits, availability of village resources and the availability of funding for the project.

Most of the proposed activities are dependent on funding from State or Federal grants. (See Table 8-1.) Some activities may require the involvement of Westchester County, several New York State agencies, various Federal agencies, private stakeholders and civic organizations as discussed in Section 3. Some of these proposed actions require more than a year to complete. Some projects may have already started or are in early planning stages which have been integrated into this plan where applicable.

The proposed items and priorities can change over time as new information or funding becomes available. There may be a change in priorities due to availability of village resources, community sentiment or availability of funding. Some activities may gain or lose political or community support.

This Action Plan, therefore, is a working document, which is expected to change in response to varying conditions and needs. The activities are summarized in Tables 8-2 through 8-4 in the order of their implementation. In the near-term the focus will be on implementation of priority 1 items in Table 8-2. Priority 2 and 3 items will be evaluated each year and implemented as funding and resources become available. Updating the Plan and evaluating priorities will be done as items are completed or priorities change as described in Section 10.

8.B Administrative Responsibility for Action Items

Following review and approval by FEMA, the Village Board of Trustees approves the Multi-Hazard Mitigation Plan before it can be implemented. This approval is documented in Section 9 of this Plan. This Plan will be implemented and administered by the Village of Mamaroneck through the Village Manager who reports to the Board of Trustees. The Village has a staff of officials who will be responsible for administering and implementing the specific proposed

activities. (See Figure 1-3). Depending on the type of project, availability of resources and funding, a specific Village department head or designee such as the Department of Public Works, Building Department or a hired consultant may manage a specific project. In some cases, the Manager may appoint a staff member who will have the authority to administer one or more of the proposed mitigation activities. A management plan consisting of a detailed scope of work, a cost plan, work breakdown, task responsibilities and work schedule will be prepared for each project as an amendment to this Plan.

The designated mitigation action manager will coordinate with village staff participants, stakeholder agencies, community organizations and funding agencies to complete an action item in accordance with the scope of work, regulatory requirements, planned schedule and budget. The Village Manager will have ultimate responsibility for approval and expenditure of project funds. The Multi-Hazard Planning Committee will monitor the progress, accomplishments and budgets of the projects as described in Section 10 of this Plan.

There are six categories of mitigation activities that are included as "Action Type" in Tables 8-2 through 8-4. The type of action will in part define the type of technical and administrative team required to implement and manage a project. These categories were discussed in detail in Section 7.A.2 and include:

- Preventive Measures (PM)
- Public Information Activities (PI)
- Structural Projects (SP)

- Property Protection Measures (PP)
- Emergency Service Activities (ES)
- Natural Resource Protection Measures (NR)

8.C Action Plan Priority Groups

The primary strategy for implementing the plan is to execute it according to the proposed priorities. The activity items in this Plan were organized into three priority groups in Section 7.A.4. The priorities, 1(high), 2 (medium) and 3 (low) were determined in agreement with the Village officers and the Planning Committee. A priority is associated with each action item as shown in Tables 8-2 through 8-4. Group 1 activities are the highest priority. The other groups have a lower priority with Group 3 being the lowest priority. As the Plan is implemented these priorities may change and be reevaluated based on availability of funding, new information,

future community needs and support, stakeholder support, workloads in specific departments, and availability of staff resources.

The implementation of "Priority-Order" in Tables 8-2 through 8-4 is a tentative order for the start and implementation of an activity within a priority group. A Priority-Order of 1-4 for example, represents the fourth item to begin and implement for a priority 1 activity. This order depends on staff availability, funding, other scheduled activities and/or relative importance of completing a task in a given year. It is advisable to spread the work among the different departments so that one group such as the Building Department is not overloaded in a given year.

The schedules listed in Tables 8-2 through 8-4 are general and flexible given the uncertainties in available funding resources. (See Section 8.D below.) The order of implementation of the activity may change depending on the department budgets, shifts in Village priorities, work schedules in specific departments, and availability of staff resources. Thus the year and duration of an activity do not include specific start or end dates. In the text for each activity the general time of year for starting and completion is given. Detailed schedules will be provided when detailed scopes of work or specifications are prepared for each activity.

The STAPLEE criteria for Social, Technical, Administrative, Political, Legal, Economic and Environmental considerations were applied to all of the activity items in Section 7. Therefore, priorities were based on the need for cost-effectiveness, early implementation, dependence on completed activities, economic affordability, availability of administrative resources, and funding. The highest priority activities listed in Table 8-2 were based on the need to be performed before other activities can be implemented or actions already started. Funding and available resources were important considerations for setting implementation order. Actions that can be done using available resources or having identified sources of funds have a higher preference. Action items requiring time for procurement of internal or external funds and staff resources would likely be planned for a future time and have a lower priority of urgency but should not be considered as less important in achieving a goal or objective.

High priority activity items emphasize high benefits relative to the costs of the project. Benefits and costs for each of the proposed actions are given in Section 7.B. Due to the preliminary nature of the activity costs and qualitative assessment of benefits, qualitative judgments of costs vs.

benefits were made. For example, the higher priority tasks are those that can be done with low costs relative to high benefits received (e.g. Prepare a Comprehensive Evacuation Plan). Projects having high costs and high benefits (e.g. Storm Drainage Control) would have a lower priority because of the high costs, and length of time to complete the project. Items such as the assisting in a New York City evacuation plan, which have few significant long-term mitigation benefits to the community, would be given a lower priority.

Future updates to this plan will utilize more detailed cost benefit evaluation. These assessments will consider FEMA Guidance 386-5, *Using Benefit Cost Review in Mitigation Planning*. (www.fema.gov/plan/mitplanning/resources.shtm)

8.D Capability and Resources

The Village of Mamaroneck will have the responsibility, jurisdiction, capability and authority to administrate and implement most of the mitigation activities proposed below. In some instances a neighboring community or other agency may have jurisdiction that requires a joint Memorandum of Understanding to implement the activity. The Village official in charge of a project will be responsible for interfacing with the public and appropriate neighboring jurisdictions, the County, USACE, NYSOEM, FEMA or other agencies identified in Section 3. Responsible officials for the village that may administer these projects are shown in Figure 1-3 in Section 1.

In most cases, the village does not have the financial or human resources to prepare the plans, studies, and engineering designs or implement public outreach and construction required for many of the activities proposed. Therefore, external agency funding for consultants, engineers and contractors may be needed to successfully implement this Hazards Mitigation Plan.

8.E Funding Strategy and Sources

Estimating costs for the mitigation actions was discussed in Section 7.A.3. Best professional judgment and experience was used to provide an approximate cost for each action proposed. Some costs can be budgeted in for in the annual village budget. A number of the projects however, will need to be funded through Federal, State or County grants. The cost estimates are

assumed to have a +/- error of 25%. The minimum costs for any project was assigned a cost of \$25,000. Many activities can be done using in-house resources or supported by a consultant.

Available and potential funding sources were reviewed from the State Hazard Mitigation Plan and Web Pages of the various funding agencies. Summaries of major funding sources that are available to the Village of Mamaroneck are listed in Table 8-1. Identifying specific sources of funding for each activity in Table 8-2 through Table 8-4 is tentative and complex. There are numerous agency programs (Table 8-1) and these change each year depending on legislative appropriations, new regulations and laws, competition for funds and agency priorities. The funding sources identified are not a guarantee for that source or for a particular time frame.

Table 8-1 identifies Federal and State agencies that fund activities proposed in mitigation plans. The most significant source of funds is from FEMA. These are obtained through grant applications administered through NYSOEM. Westchester County has a grant bonding program for Hazard Mitigation Assistance grants. Several other agencies are identified that provide funding for related environmental, capital construction, dredging, and engineering projects.

The Village will provide funding support for those projects that are recommended. For example the Village Board may appropriate a capital improvement budget for upgrading or retrofitting village-owned critical facilities. Specific operating budgets such as the Public Works Department or the Building Department can include supply costs, salaries and consultant fees to complete some mitigation activities. Existing staff time can be used as "in-kind" match to Federal or State funding. Community volunteers can contribute effort to certain activities such as serving on committees or review of plans and documents.

Table 8-1. Potential Funding Sources for Mitigation Activities.

Federal, Funding Sources for Mitigation Activities.									
Program	Program Description Agency Reference/Contact*								
Flood Mitigation Assistance (FMA)	Provides grants to States and communities for pre- disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program. Aimed to reduce repetitive losses.	FEMA Through NYS OEM http://www.fema.gov/about/divisions/mitigation/mitigation.shtm http://www.NYS OEM.state.ny.us/programs/mitigation/							
National Flood Insurance Program	Formula grants to States to assist FEMA communities to comply with NFIP floodplain management requirements (Community Assistance Program).	FEMA http://www.fema.gov/business/nfip/							
Hazard Mitigation Grant Program (HMGP)	Provides grants to States and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration. Projects are to reduce risks to lives and properties from natural hazards. Enables mitigation measures to be implemented during recovery form a disaster. Projects may include acquiring, retrofitting or relocating structures; constructing localized flood controls; or constructing safe rooms.	FEMA Through NYS OEM http://www.fema.gov/about/divisions/mitigation/mitigation.shtm http://www.fema.gov/government/grant/hmgp/ http://www.NYS OEM.state.ny.us/programs/mitigation/							
Pre-Disaster Mitigation (PDM) Competitive Grant Program	Grants to States and communities for planning and projects that provide long-term hazard disaster mitigation measures prior to an event.	FEMA Through NYS OEM http://www.fema.gov/about/divisions/mitigation/mitigation.shtm http://www.fema.gov/government/grant/pdm/ http://www.NYS OEM.state.ny.us/programs/mitigation/							
National Dam Safety Program	Technical assistance, training, and grants to help improve State dam safety programs	FEMA http://www.fema.gov/plan/prevent/damfailure/ndsp.shtm							
National Earthquake Hazards Reduction	Training, planning and technical Program assistance under grants to States or local jurisdictions	FEMA; DOI-US Geological Survey (USGS) Earthquake Program Coordinator: (703) 648-6785 http://www.nehrp.gov/							
Disaster Housing Program	Emergency assistance for housing and mortgage and rental assistance. (MRA). Covers disaster-related needs and necessary expenses not covered by insurance. These may include replacement of personal property, and transportation, medical, dental and funeral expenses. Loans are also available for property loss and economic injury.	FEMA http://www.fema.gov/hazard/dproc.shtm							
Public Assistance Program (Infrastructure)	Grants to States and Communities to repair damaged infrastructure and public facilities and help restore services following disasters. Mitigation funding is available for work related to damaged components of the eligible building or structure.	FEMA via NYS OEM http://www.fema.gov/government/grant/pa/index.shtm							
Repetitive Flood Claims (RFC)	Reduction or elimination of flood damage under the NFIP that have one or more claims. Acquisition, demolition or relocation of severe repetitive loss properties.	FEMA Through NYS OEM http://www.fema.gov/government/grant/rfc/							

^{*} Web site addresses as of November 2011. For changed address or additional sources conduct a search on the listed agency's home page, or http://www.grants.gov/ or search http://www.google.com

Table 8-1. (Continued) Potential Funding Sources for Mitigation Activities.

Table 8-1. (Continued) Potential Funding Sources for Mitigation Activities.								
Program	Description	Agency Reference/Contact*						
Clean Water Act Section 319 Grants	Grants to States to implement non-point source programs, including support for non- structural watershed resource restoration activities.	EPA Office of Water Chief, Non-Point Source Control Branch (202) 260-7088. 7100						
Emergency Watershed Protection (EWP)	Provides technical and financial assistance for relief from imminent hazards in small watersheds, and to reduce vulnerability of life and property in small watershed areas damaged by severe natural hazards.	USDA –NRCS National Office -(202) 690-0848 Watersheds and Wetlands Division: (202) 720-3042						
Disaster Mitigation Planning and Technical Assistance	Technical and planning assistance grants for capacity building and mitigation project activities focusing on creating disaster resistant jobs and workplaces.	Department of Commerce (DOC), Economic Development Administration (EDA): (800) 345-1222 www.eda.gov/InvestmentsGrants/Investments.xml						
Disaster Recovery Initiative	Grants to fund gaps in available recovery assistance after disasters (including mitigation)	Housing and Urban Development (HUD) Community Planning and Development Grant Programs Divisions in their respective HUD field offices or HUD Community Planning and Development: 202-708-2605						
Section 108 Loan Guarantee	Enables states and local governments participating in the Community Development Block Grant (CDBG) Program to obtain federally guaranteed loans for disaster distressed areas.	HUD Office of Community Planning and Development Grant Programs 202-708-3587						
Section 205 of the 1948 Flood Control Act	Resources for small flood damage reduction projects	DOD-US Army Corps of Engineers (ACE) Emergency Management contact in USACE field office						
Post Disaster Economic Recovery Grants and Assistance	Grant Funding to assist with the long-term economic recovery of firms, industries and communities adversely affected by disasters.	Department of Commerce (DOC) - Economic Development Administration (EDA), EDA Headquarters, Disaster Recovery Coordinator 202-482-6225						
School Renovation, Idea and Technology Grant	Grant funding for eligible school renovation and emergency response measures.	US Department of Education						
Public Housing Modernization Reserve for Disasters and Emergencies	Funding to Public housing agencies for modernization needs resulting from natural disasters (including elevation, flood proofing and retrofits)	Housing and Urban Development (HUD) Director, Office of Capital Improvements 202-708-1640						
Surface Transportation Program	Funding for safety and transportation enhancements. Enhancements include a broad range of safety education, environmental and historically related activities.	US Department of Transportation (DOT) Federal Highway Administration FHWA						
Wetlands Reserve Program	Financial and technical assistance to protect and restore wetlands through easements and restoration agreement	USDA – NRCS National Policy Coordinator NCRS Watersheds and Wetlands Division 202-720-3042						
Physical Disaster Loans and Economic Injury Disaster Loans	Disaster loans to non-farm, private sector owners of disaster damaged property for uninsured losses.	Small Business Administration (SBA) National Headquarters Associate Administrator for Disaster Assistance: (202 205-6734						
National Estuary Program Long Island Sound Preservation (LIS Stewardship Commission)	Established by Congress in 1987 to improve the quality of estuaries of national importance. For LIS, implementation priorities are habitat restoration, watershed management, disposal of dredged materials, and public education and involvement on Long Island Sound issues.	Environmental Protection Agency (EPA) National Estuary Program						

Table 8-1. (Continued) Potential Funding Sources for Mitigation Activities.

New York State Funding Sources							
Program	Description	Agency Reference/Contact*					
NY State Emergency Management Office (NYS OEM)	Funding for mitigation planning and project activity through FEMA. See items under Federal funding sources.	New York State Office of Emergency Management (OEM) www.dhses.ny.gov/grants/					
Appropriations through the Governor's Office	Funding for mitigation planning and project activity through special appropriations through the Governor's Office	New York State Office of the Governor					
Environmental Protection Fund	Funding to support many of the State's environmental needs. Including development and mitigation related planning initiatives and acquisition projects for conserving open.	New York State Department of State (DOS), Department of Environmental Conservation (DEC), Office of Parks Recreation and Historic Preservation (OPRHP)					
Hudson River Estuary Grants Program	Grants available to municipalities located within the geographic boundaries of the Hudson River Estuary and associated shore lands. Grants for education projects; open space planning, inventory and acquisition, or river access; community conservation and river stewardship; watershed planning.	Hudson River Valley Greenway Albany, 12224 (518) 473-3835 Email: hrvg@hudsongreenway.state.ny.us http://www.hudsongreenway.state.ny.us/funding/funding.htm					
Empire State Flood Recovery Grant Program	Loans for various projects. Discounted Small Business Loans; Small Business Loans/Lines of Credit.	Empire State Development Corporation 633 Third Avenue New York, 10017 (800) 782-8369					
Westchester Co. Flood Task Force Grant Bonding		Westchester Co. Flood Action Task Force planning.westchestergov.com/flood-action-task-force					
New York State Office of Homeland Security Grants	Supports projects for emergency response, terrorism and other Homeland Security activities.	Office of Homeland Security, Albany 518-402-2227 www.security.state.ny.us/grants.html https://grants.security.state.ny.us/AccessNotice.jsp					
New York State Historic Preservation Grant Program	Funds are available from the Environmental Protection Fund of 1993(EPF) for acquisition, development, and improvement of parks, historic properties and Heritage Area resources. Preservation projects may include restoration, preservation, rehabilitation, protection, reconstruction or archeological interpretation of a historic property.	New York State Historic Preservation Office nysparks.state.ny.us/shpo/grants/					
Local Waterfront Revitalization Program	Community improvements through planning, preservation and redevelopment of important waterfront resources and brownfields. Assistance includes Environmental Protection Fund and Quality Communities Grant Program.	New York State Department of State (DOS) Division of Coastal Resources http://nyswaterfronts.com/grantopps.asp					

^{*} Web site addresses as of November 2011. For changed address or additional sources conduct a search on the listed agency's home page, or http://www.grants.gov/ or search http://www.google.com/.

8.F Implementation of Priority 1 Mitigation Actions

Group 1-priority action items are listed in Table 8-2 and have a high priority. These items have a high benefit relative to costs and a high need to be implemented. Several actions are easily and implemented, have readily obtainable resources and available funding. Some of these activities may need to be completed prior to starting other activities. The "Priority Order" in Table 8-2 is a tentative implementation order for the start of an action. Other information can be found for each activity and goal in Section 7.B in discussions associated with Tables 7-1 through 7-6. The total estimated cost for these 18 priority 1 proposed action items is \$26,450,000.

8.F.1 Channelization and Improvement of the Confluence in the Sheldrake and Mamaroneck Rivers

The principal objective of this mitigation action is to "implement a flood risk management project". This project has a high priority of 1based on the need for reducing the risk of floods in Mamaroneck. There would be long-term benefits for the community by reducing flood risk caused by these two rivers. A number of studies have been conducted as far back as 1976, however an implementation plan is still developing. Several alternatives to address the flood risks are being analyzed and compared -Stream/channel modifications, tunnel, detention basins, bridge modifications, and/or a combination of these – and one will ultimately be selected for implementation (construction). Implementation of the selected plan would improve the efficiency and capacity of the two rivers, especially at the confluence in Columbus Park, where floodwaters back up and create the majority of flood damages. The minimum USACE requirement for a benefits-to-cost ratio is 1:1. Although the cost to complete the project is high, the long-term benefits are high when considering the costs of potential future losses if the project is not constructed. If the project is approved and funding is received, the first constructible element of the project could be completed within 2 years. Depending on the details of a final selected plan, the entire project could take several years to complete. Estimated costs for these alternatives are being developed, and when weighed with the economic benefits and environmental impacts, will be the basis for selecting the plan.

Key participants in the improvements would include the USACE, NYSDEC and Planning Department, Westchester Co. NY. USACE will require Congressional appropriation to construct the project. Although this project is feasible, the ongoing studies, local preferences, and Environmental Impact Statement findings may alter the project's design details. The Village Manager will coordinate with the various government agencies involved.

Table 8-2a. Priority 1 Action Items Implementation - Village of Mamaroneck Hazard Mitigation Plan.

Action Type*	Priority - Order	Action Item	Costs** (\$1,000)	Administrative Responsibility	Schedule/ Duration	Funding Sources
SP	1-1	Channelization and Improvement of Rivers' confluence	\$20,735	USACE / Village DPW	2 Years, starting 2015	USACE, NYSDEC, Westchester, Co.
PM	1-2	Inflow and Infiltration removal	\$2,500	Village DPW	Ongoing	FEMA/NYSOEM/ NYSDEC/Westchester Co.
PM	1-3	River debris and obstruction removal	\$1,000	Village DPW	Ongoing Several times/year	FEMA/NYSOEM/ NYSDEC/Westchester Co.
PP	1-4	Enhance inspections	\$50	Village Bldg Dept	Ongoing	Village Budget
SP	1-5	Continue relining storm and sanitary sewer lines	\$900	Village DPW	Ongoing	FEMA/NYSOEM/ NYSDEC/Westchester Co.
PM	1-6	Install backflow/check valves	\$950	Village DPW	Ongoing	FEMA/NYSOEM/ NYSDEC/Westchester Co., Village DPW, Property Owners
ES	1-7	Update Emergency Plan and Evacuation Plan	\$30	Village Fire Dept	1 Year	Village Budget
ES	1-8	Generators for emergency facilities	\$125	Village Administration	1 Year	FEMA/NYSOEM
PI	1-9	Revise communications for 911 protocols	\$25	Village Administration	Reviewed Annually	Village Budget
PP	1-10	File required CRS documentation	\$25	Village Administration	1 Year	Village Budget
PP	1-11	Develop and manage the CRS program ***	\$25.	Village Manager	Ongoing	Village Budget
PI	1-12	Procure Public Address System	\$40	Village Emergency Services	1 Week	FEMA/NYSOEM
		Subtotal Cost	\$26,405			

Table 8-2b. Priority 1 Action Items (Continued) - Village of Mamaroneck Hazard Mitigation Plan.

Action Type*	Priority - Order	Action Item	Costs** (\$1,000)	Administrative Responsibility	Schedule/ Duration	Funding Sources
ES	1-13	Multi-lingual educational materials	\$35	Village Administration	6 Months	FEMA/NYSOEM
PI	1-14	Multi-lingual flooding preparedness manual	\$35	Village Administration	6 Months	FEMA/NYSOEM
PM	1-15	Trim trees and limbs		Village DPW	Ongoing	Con Edison
PM	1-16	Relocate equipment impacted by floods	\$25	Village DPW	One Time	Village Budget
ES	1-17	Plan for pre-evacuation and equipment staging	\$25	Village Administration	6 Months	Village Budget
PM	1-18	Audit village facilities and resources for strengths and weaknesses	\$25	Village Manager	3 Months	Village Budget
ES	1-19	Purchase emergency response equipment	\$150	Village Manager	6 Months	FEMA/NYSOEM
		Subtotal Cost	\$ 295			
		Priority 1 Total Cost	\$26,700			

Table 8-2 Footnotes: * See Section 8B for definition of Action Type. ** Detailed cost estimates will be prepared for work that will be scoped out or when Plan is periodically updated. *** Costs/year

8.F.2 Inflow and Infiltration Removal

Removing inflow and infiltration problems from storm and sanitary sewer overflow is a Preventative Measure with a high priority order of 1-2. (See Table 8-2a.) Its primary benefit and objective is to prevent sewage infiltration into storm water and to "improve the storm water collection and drainage system."

The Village DPW will take the lead in this project. The work can be managed by the DPW with the assistance of a contractor. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with the NYSOEM and NYSDEC. Key participants would include the NYSDEC and the Planning Department, Westchester Co. NY. This project is expected to take a year to complete. The estimated cost is given in Table 8-2a.

8.F.3 Removal of Debris and Obstructions in Rivers, Dams and Catch Basins

The Village DPW would continue to clean and maintain catch basins as a Preventative Measure and is given a Priority Order of 1-3. This activity is meant to "improve storm water collection and drainage. They would remove debris from the Village streets, streams, dams and rivers. The relative benefits achieved are high compared to the moderate costs.

This activity will be scheduled several times a year and will become part of the Village's ongoing maintenance.

The Village DPW will take the lead in this project. Private contractors may be needed to assist in the initial cleanup. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with the NYSOEM. Key participants would include the NYSDEC and the Planning Department, Westchester Co. NY.

8.F.4 Enhance Inspection

Inspection of buildings, structures, and other properties in the Village should have a focus on flood mitigation. This Property Protection activity includes adding applicable building codes and zoning regulations that enhance flood protection. This item has a priority order of 1-4 and a high

benefit of identifying problems prior to a flood event at a low cost. This activity would become part of the Village ongoing inspection process.

The Village Building Department will take the lead using existing staff from the Building Department, Zoning Board and Flood Mitigation Advisory Committee. Funding of this low cost activity could be authorized by the Village Board of Trustees.

8.F.5 Continue Relining and Refurbishing Sewer Lines

The Village DPW will take the lead in this Structural Project with the assistance of a contractor. The activity has a Priority Order of 1-5. The Village would reline and refurbish storm and sanitary sewer lines to repair leaks and damaged sections which reduce effective drainage. There would be a significant benefit compared to the cost of the project since flow through the sewers would be improved relative to costs thereby mitigating flooding. This would have the added benefit of reducing pollution in the rivers as well as Mamaroneck Harbor, thus enhancing the recreational value of these natural resources.

Upon receipt of funding, this project would require about a year to complete. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with NYSOEM. Key participants would include NYSDEC and the Dept. of Planning, Westchester Co. NY.

8.F.6 Install Backflow/Check Valves in Service Lines of Affected Buildings

The Village proposes to install back flow valves into the service lines of residents thus preventing the sewage from entering buildings during flooding events. The benefit for this project relative to costs is high. This Preventative Measure has a priority order of 1-6.

The Village DPW will take the lead in this project. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications for filing with NYSOEM. Key participants would include NYSDEC and the Westchester Co. NY Department of Planning. The cost for this project will also be borne by the homeowners. If funding is received, the project could be completed in a period of from 6 months to 1 year.

8.F.7 Update Emergency Operation Plan and Evacuation Plan

This Emergency Services action has a priority order of 1-7. The Hazards Mitigation Committee will review the Emergency and Evacuation Plans for updates and revisions. The updates will follow FEMA's NIMS requirements. Good planning leads to better outcomes during emergencies. The Village Fire Department will take the lead in this effort. There will not be a need for outside funding for a consultant because the project will use Village staff and budget. The estimated cost is \$30,000. Completion of this project should take less than a year. This Plan will provide long term benefits to the community in the event of a disaster.

8.F.8 Obtain Permanent Power Generators for Emergency Services and Facilities

This activity is an Emergency Services action with a Priority Order of 1-8. The purchase of a power generator for the EMS facility will prepare the community for any hazard that causes power outages. The Village Administration will take the lead in this acquisition. This project would result in long term benefits to the community by being prepared for an emergency when electrical power is out. The value received from its use in saving lives is worth more than the cost of the generator.

The start of this activity will begin immediately upon receipt of funding from FEMA via NYSOEM. Installation is expected sometime during 2012.

8.F.9 Revise Communication Protocols Including the Reverse 911 Warning System

A Reverse 911 system is a Public Information system that can alert residents in the case of an emergency situation. It can provide an initial warning as well as specific instructions to protect at-risk citizens. This activity has a high priority order of 1-9 and is highly feasible. Revising communication protocols has a low cost.

For those individuals who have cell phone service only or who are not receiving calls, the village will be placing a link on its website or provide manual forms to give residents a means for registering their phone numbers for the Reverse 911 system.

To minimize these problems, communication protocols and procedures need to be specified and a registry system for non-accessible phones implemented. Public information about the system needs to be disseminated to the community. Criteria need to be established to minimize false alarms and what constitutes a serious hazard.

The Village Administration will take the lead in this effort and has the resources to complete the activity. There will not be a need for outside funding. Completion of this activity will take less than a year, but, there will be long term benefits to the community. Since the project does not result in any additional expense, the cost benefit ratio is excellent.

8.F.10 File Required CRS Documentation

The Village does not currently qualify for CRS rating. However, it is already conducting some activities that provide credit points for the rating. Other activities that would generate additional points (such as public information activities) would be easy to implement at a low-cost. The Village should assess its NFIP compliance, to qualify for a CRS rating of at least 7.

This Property Protection activity has a Priority Order of 1-10. Relative benefits for the cost are high. The Village administration will be the lead for this activity. Costs will be in kind services from the Village budget. When the Board authorizes this activity it may require one year to complete.

8.F.11 Procure a Public Address System to Announce Potential Emergencies

This activity requires a public address system (PA system) to announce a potential emergency and warn neighborhoods of flood conditions, a serious storm hazard or downed power lines.

A key objective of this Emergency Services activity is to "Improve receiving communications" and the primary benefits would be improved communication during an emergency and protection of the public from the hazard. The costs are relatively low in relation to the benefits of having an informed community. Based on the ability to inform the community at a low cost and high benefit of protecting the public, this activity is given a high Priority Order of 1-12

The Village Emergency Services will be responsible for procuring and installation of the system. This group has the resources to implement this warning system. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with NYSOEM. The procurement of the PA system can begin upon receipt of funding and can be installed and tested in a week.

8.F.12 Create Multi-Lingual Educational Materials for LMC TV, and Videos to Distribute through Schools

Multi-lingual educational materials are needed to communicate emergency procedures before and during a hazardous event. The primary objective of this Public Information activity is to "heighten public awareness through a multi-level public relations campaign". A key tool to achieve this objective is to create multi-lingual educational materials in English and Spanish for the community's public TV service, LMC TV.

A major benefit will be improved hazard communication with non-English speaking residents which will protect them from the hazards of concern. The benefits relative to costs are high. The Village administration will take the key responsibility for this activity with the assistance of the Village Hispanic Resource Center. A video technician may be required to prepare DVDs. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications for filing with NYSOEM. If funding is received, the project could be completed in a period of 6 months.

8.F.13 Make a Multi-Lingual Flooding Preparedness Procedures Manual for the Community

This Public Information activity is intended to "Enhance residents' awareness of emergency procedures" and is assigned a Priority Order of 1-14. Preparing a multi-lingual manual will aid the community in the event of a serious flood. It will include warning systems and locations of emergency shelters.

The costs are low and the benefits are high. A major benefit will be improved hazard communication with Spanish and English speaking residents to help protect them from the

hazard of concern. The Village administration will take the key responsibility for this activity with the assistance of the Village Hispanic Resource Center. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications for filing with NYSOEM. If funding is received, the project could be completed in a period of 6 months.

8.F.14 Develop a CRS Program Plan and Manage the Program

See Section 7.B.4 regarding this Community Rating System (CRS) Program. This activity is a Property Protection action with priority order of 1-11. A part-time CRS coordinator on the Village staff is needed to develop and manage a program specifying CRS requirements and procedures. The primary objective is to "reduce insurance premiums for flooding."

This activity has a high priority and high benefits relative to its low cost. The lead responsibility for this activity would be the Village Manager who would appoint a part-time coordinator. The Village has the capabilities and resources required for this activity. The source of funding would be the Village budget with the approval of the Village Board of Trustees. This project can begin as soon as the Village Board authorizes it. This is an ongoing activity using existing staff.

8.F.15 Trim Trees and Limbs that Endanger Utility Lines

This activity is a Preventive Measure with a Priority Order of 1-15. The Village will continue to work with the local utilities to remove and trim trees that are a hazard to utility lines. There will be very little if any additional cost to the Village to accomplish this project, since DPW workers can perform the work on their normal shifts and utility employees are paid by the utilities.

The benefits achieved would be long term and would reduce power outages and damage to properties. This project is ongoing and will continue as locations are found during inspections, where trees need to be trimmed. Since the project does not result in any additional procurement of funds, the cost benefit ratio is excellent.

The Village DPW will be the lead on this activity and has the capability required for the task. The major labor for the tree work will be the Utilities responsibility.

8.F.16 Relocate Equipment Impacted by Floods

The primary objective of this Preventative Measure is to "Identify and move equipment to a safe location". It has a Priority Order of 1-16. DPW and FD staff would be used to identify facilities and equipment affected. This is a cost effective use of Village staff to identify emergency equipment and facilities that are at risk to flooding.

Transferring emergency equipment and supplies to safe facilities will help prepare for any flooding emergency for a low cost and a high benefit. It is assumed these new locations are existing Village facilities. The lead for this activity would be the DPW. The activity could commence immediately since no additional funding source would be required.

8.F.17 Plan for Pre-Evacuation and Staging of Emergency Equipment

This Emergency Services objective is to "Improve preplanning for mitigation of hazards" and has a Priority Order of 1-17. Implementation of this activity will save lives by providing an effective pre-evacuation plan. A benefit of this activity is to improve preparedness for an emergency.

Village staff would be used develop a plan for staging emergency equipment as part of preparation for evacuating an impacted area. This is a cost effective use of Village staff to identify emergency equipment and facilities that are needed to respond to flooding hazards. This preparation will help in any flooding emergency for a low cost and a high benefit using in-house funds. Since no additional funding is being requested, the pre-evacuation measures can be performed at any time by the Village departments who are involved in an emergency response.

8.F.18 Audit Village Facilities, Equipment, and Personnel for Strengths and Weaknesses

A key objective of this Preventative Measure is to "Improve preparedness and response." An audit of the Village's strength and weaknesses will help prepare for any emergency for a low cost and a high benefit. This task is given a Priority Order 1-18.

The lead for this action is the Village Manager. This task will be performed by Village staff. Since additional funding is not requested, the audit can start at any time. It is expected to take 3 months to complete.

8.F.19 Purchase Emergency Response Equipment

The Village Fire Department has developed a list of emergency response equipment needed to be prepared for any hazard impacting the Village. The Village Manager has the lead for this action item. It has a high priority. The estimated costs of \$150,000 will be requested from FEMA/NYSOEM. It is highly feasible and is cost effective.

8.G Implementation of Priority 2 Mitigation Actions

Group 2 priority action items are listed in Table 8-3 and are a moderate (3) priority. Some of these action items have relatively high costs but also have high benefits. Priority group 2 contains tasks that protect property, human health and personal safety. The implementation priority (Priority Order) in Table 8-3 is a tentative order for the start of an activity. Other relevant information can be found for each activity in Section 7.B. Mitigation actions were summarized for each of the six listed goals associated with Tables 7-1 through 7-6. The total estimated cost for the priority 2 proposed action items is \$ 5,675,000.

8.G.1 River Dredging and Silt Removal

The Army Corps of Engineers (USACE) recommended dredging of the Sheldrake and Mamaroneck Rivers as part of a total mitigation effort. This activity is a Preventative Measure to "implement flood control projects". Mitigation of these rivers will contribute to flood reduction. There would be a moderate benefit relative to cost with a Priority Order 2-1.

Time will be required to coordinate and obtain a consensus on the work to be done between the stakeholders, regulatory agencies, Village administration and the public. Actual dredging of the Rivers is expected to last six months to one year and would be under the jurisdiction of the USACE. They would continue dredging the Sheldrake and Mamaroneck Rivers in the Village to remove silt. The Village Manager and DPW will provide oversight. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with

the NYSOEM. Supplemental support may come from the USACE. Key participants would include the USACE, NYSDEC and the Planning Department, Westchester Co. NY.

Table 8-3. Priority 2 Action Items - Village of Mamaroneck Hazard Mitigation Plan.

Action Type*	Priority - Order	Action Item	Costs** (\$1,000)	Administrative Responsibility	Schedule / Duration	Funding Sources
PM	2-1	River dredging and silt removal	\$1,000	USACE/Village Manager	Ongoing	FEMA/NYSOEM/ USACE/NYSDEC/ Westchester Co.
SP	2-2	Repair, raise, remove and replace bridges	\$15,000	Village Manager	10 Years	FEMA/NYSOEM/ NYSDOT
PM	2-3	Change code for BFE	\$25	Village Bldg Dept., NYSDEC	1 – 3 Years	Village Budget/ NYSDEC
PM	2-4	Improve zoning and codes	\$25	Village Administration	6 Months – 1 Year	Village Budget
SP	2-5	Check vulnerability of waterfront structures	\$50	Harbor Master	3 – 6 Months	FEMA/NYSOEM
PP	2-6	Maintain an accurate inventory of (SRL) properties ***		Village Administration	Ongoing	Village Budget/ CRS Program Cost
ES	2-7	Evaluate safety and relocation of waterborne equipment	\$25	Harbor Master	3 – 6 Months	Village Budget
PM	2-8	Prepare for more severe storms	\$25	Village Administration	Ongoing	FEMA/ Village Budget
SP	2-9	Reinforce existing structures to ensure they are flood safe	\$400	Village Manager	2 Years	FEMA/ Village Budget
PP	2-10	Establish long-term plan to protect coastal and Riverine residential areas	\$50	Village Manager	1 Year	FEMA/NYSOEM
		Subtotal Cost	\$16,600			

Table 8-2 Footnotes: * See Section 8B for definition of Action Type. ** Detailed cost estimates will be prepared for work that will be scoped out or when Plan is periodically updated. ***Costs/year

8.G.2 Repair, Raise, Remove and Replace Bridges

The Village should replace the Jefferson Avenue Bridge, located in the center of the Village. Debris flowing downstream during a heavy rain event often gets stuck in this area and reduces the normal flow capacity of the river.. This activity is Structural Project has a high cost but will benefit the Village by reducing street flooding in the long term. The project has a Priority Order 2-2.

The Village Manager's Office will take the lead in this project. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with the NYSOEM. Additional support may come from NYSDOT. Key participants would include the USACE, NYSDEC and Westchester Co. NY. If funding is received, the project could be completed in a period of from 18 months to 2 years.

8.G.3 Develop a Plan and Change Code to Base Flood Elevation (BFE)

One solution for mitigating flood damage to homes is to elevate them above the flood level. Residential construction must have the lowest floor including the basement elevated to more than +2 feet above the BFE. Relative costs to change existing building codes are low but the actual cost of elevating buildings above BFE is high. Due to predicted rising sea levels, the Village of Mamaroneck may want additional provisions above BFE in excess of state minimum requirements.

The Village Building Department will take the lead using existing staff with assistance from the Zoning Board and Flood Mitigation Advisory Committee. Since additional funding is not requested, the planning activity can start at any time. It is expected to take 6 months to a year to complete since the planning and approval process takes time and requires public involvement.

8.G.4 Improve Zoning, Storm Water, Erosion and Sediment Control Codes

This Preventative Measure activity should include reviewing and revising all applicable codes and zoning regulations that enhance flood protection. This mitigation action has a Priority Order of 2-4 and a high benefit of protecting property prior to a flood event at a low cost.

The Village administration will take the lead using existing staff from the Building Department, Zoning Board and Flood Mitigation Advisory Committee. Any new or revised requirements will require Board of Trustees review and approval and incorporation as Village law. Since additional funding is not requested, the planning activity can start at any time. It is expected to take 6 months to a year to complete since the planning and approval process takes time and requires public involvement.

8.G.5 Check Vulnerability and Stability of Waterfront Sea Wall, Docks, Pilings and Gas Tanks

Waterfront structures such as seawalls, piers, docks and service buildings are at risk of damage from storms, ice jams, and tidal surges. These shoreline structures in the Mamaroneck Harbor and Long Island Sound need to be checked for vulnerability and stability. This Structural Project has a priority order of 2-5.

The Harbor Master would be the lead agent on this activity. This activity is highly feasible using Village staff resources and a waterfront building consultant. The benefit is to "prevent damage to piers, docks and buildings." These benefits are high relative to the estimated cost. The activity can start at any time after receipt of funding. It is expected to take three to six months to complete the inspection and the report. Funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with the NYSOEM.

8.G.6 Maintain an Accurate Inventory of Severely Repetitive Loss (SRL)

Properties

See Sections 7.B.4 and 8.F.14 above regarding this CRS Program. This program will require a part time CRS coordinator on the Village staff to record and manage the inventory. This activity has a Priority Order of 2-6 and high benefits relative to its low cost.

The Village administration will take the lead using existing in-house staff. Since additional funding is not requested, the planning activity can start at any time. It is expected to take 6 months to a year to complete the inventory of SRL properties

8.G.7 Evaluate Safety and Possible Relocation of Waterborne Equipment (Police, Fire, and Harbor Master Boats)

This Emergency Services activity will "Identify and move equipment to a safe location". A benefit of this activity is to protect boats and other associated emergency equipment during storms.

The Harbor Master with the assistance of Village staff would develop a plan for protecting water-borne equipment from major storms and storm surges. This preparation will help protect equipment from any flooding emergency for a low cost and a high benefit. This task is given a Priority Order of 2-7. The implementation of this activity can be performed by the departments who utilize this equipment.

Since additional funding is not requested for this activity, it can start at any time. It is expected to take three to six months to complete the inventory of equipment and recommendations.

8.G.8 Prepare for More Severe Storms

The Village will need to review and update floodplain management codes for future building projects. This is a Preventative Measure with a Priority Order of 2-8. The cost-benefit assessment is high for future residents.

Additional funding would be requested from FEMA for a consultant. Additional in-kind costs would be incorporated into the Village budget. The planning activity can start when funding is approved. It is expected to take 6 months to a year to complete the model runs and make code recommendations.

8.G.9 Reinforce Existing Structures to Ensure They are Flood Safe

This activity is a Structural Project with a moderate priority. The Village Manager will be the lead agency. Residences and businesses in flood zones will need to be identified and inspected for structural problems which need mitigation. The duration of this activity may require two years. The Village plans to request funding FEMA.

8.G.10 Establish Long Term Plan to Protect Coastal and Riverine Residential Areas

Flooding and erosion from coastal storms may likely become more severe as an impact of future climate change. The Village Manager will have the administrative responsibility for establishing a long term plan to protect coastal residential areas. The estimated cost for this Priority 2 Property Protection measure is \$50,000. This activity is highly feasible and would require the assistance of a planning consultant.

8.H Implementation of Priority 3 Mitigation Actions

Group 3 Priority items are listed in Table 8-4. The total estimated cost for these six (6) items is \$850,000.

8.H.1 Redirect Wing Wall and refurbish bridge at Anita Lane and Valley Place

Wing walls provide additional support and retention of stream banks and bridges. Damaged walls can impede water flow and increase erosion. A key objective is to improve storm water collection and drainage. A benefit is improvement of storm water flow that will reduce flooding. The bridge at Anita Lane and Valley Place also has a center abutment that needs to be removed. If funding is received, the project can be completed in 18 months at a preliminary estimated cost of \$750,000. Westchester Co. has the primary responsibility for this activity.

This Structural Project has a low Priority Order of 3-1. It would benefit flood control at a moderate cost. Westchester Co. will take the lead in this project with cooperation from the Village DPW. A contractor will be needed to perform the excavation work. Funding for the activity would be through Westchester County DEF and Westchester County Budget.

Table 8-4. Priority 3 Action Items Implementation - Village of Mamaroneck Hazard Mitigation Plan.

Item Type	Priority- Order	Action Item	Costs (\$1,000)	Administrative Responsibility	Schedule / Duration	Funding Sources
SP	3-1	Redirect wing wall and refurbish bridge at Anita Lane and Valley Place	\$750	Westchester Co.	18 Months	Westchester Co. DEF/ Westchester Co. Budget.
PP	3-2	Raise vulnerable properties above BFE or utilize other protective measures, and amend zoning codes***	\$250 /Bldg	Village Building Dept. & Property Owners	18 Months – 2 Years	FEMA/NYSOEM/ NYSDOT/USACE/ Westchester Co./ Individual Property Owners
PM	3-3	Develop a coordination plan between neighboring municipalities	\$25	Village Administration	3 – 6 Months	Village Budget
ES	3-4	Work with county and transit authority to assist in NYC evacuation	\$30	Village Fire Department Emergency Services	3 – 6 Months	Village Budget
NR	3-5	Review documents of NOAA and organizations on coastal impacts	\$25	Village Committee for the Environment	6 Months – 1 Year	Village Budget
PM	3-6	Participate in programs to lower carbon footprint	\$25	Village Manager	Ongoing	Village Budget
		Subtotal Costs	\$1,105			

Table 8-2 Footnotes: * See Section 8B for definition of Action Type. ** Detailed cost estimates will be prepared for work that will be scoped out or when Plan is periodically updated. *** Costs/ Building

8.H.2 Raise Homes Above BFE or Utilize Other Protective Measures

See Section 7.B.1.10 above for changing BFE Code. Raising homes in the flood plain will require revisions to the Village Zoning Code, Floodplain Management requirements, subdivision regulations, housing standards or other relevant Village Code Chapters or planning documents. Buildings that are impacted by flooding need to be identified and funding obtained to elevate these structures more than +2 feet above the BFE.

This is a Structural Project with a Priority Order of 3-2. Raising homes to meet BFE requirements would be costly but effective. This project would meet the objective to protect Critical Facilities, buildings and infrastructure for damage and loss.

The Village Building Department will take the lead in this project. Property owners will contribute to funding improvements to their properties. Additional funding for the activity would be requested from FEMA through Hazard Mitigation Program Grant applications, for filing with the NYSOEM. Additional support may come from NYSDOT. Key participants would include the USACE, NYDOT and Westchester Co. NY. If funding is received, the project could be completed in a period of from 18 months to 2 years.

Raising homes or buildings may not always be a pragmatic solution, especially for major commercial or industrial buildings. Alternative flood proofing measures should be investigated. For example, flood mitigation doors, dams, or barriers have been deployed across the United States, and if these are structurally and economically feasible, then they certainly can be utilized.

8.H.3 Develop a Coordination Plan Between Neighboring Municipalities

This Preventative Measure key objective is to "coordinate with neighboring communities with a Priority order of 3-3. Different municipalities and jurisdictions may have different procedures that may delay assistance of a neighboring community. This remedial activity is intended to develop a coordination plan that will be consistent between municipalities and include NIMS approach to hazard incidents. NIMS encompasses incidents as diverse as wildfires, floods, hazardous materials releases, nuclear accidents, earthquakes, hurricanes and tornadoes. The emergency response uses the same management methods, language and organization.

The cost of this activity is low and the benefits are limited to a small group of people.

8.H.4 Work with County and Transit Authority to Assist in NYC Evacuation

Mamaroneck officials will need to plan and coordinate with Westchester Co. officials, neighboring communities and the MTA and prepare procedures pertaining to the Village's role in the evacuation. This is a Emergency Services activity with a Priority Order of 3-4

The most common hazard that is likely to trigger an evacuation is a sizable hurricane. The cost for generating the plan for Mamaroneck's role is low relative to the potential impact of doing nothing. The lead administrative responsibility would be the MTA with the participation of the emergency services group in the Police Department. Since additional funding is not requested to complete the Coordination Plan, it can start at any time. It is expected to take three to six months to complete.

8.H.5 Review Documents of NOAA and Organizations on Coastal Impacts

This Natural Resource activity has a primary objective to "Educate the community about climate impacts". The benefit of improved planning which considers potential future changes, the objectives would largely be achieved over the long term.

The lead administrative responsibility would be the Village Committee for the Environment. Since additional funding is not requested to complete activity, it can start at any time. It is expected to take six to 12 months to complete. The activity does not result in any additional Village expense. The cost benefit ratio is limited. This activity has a Priority Order of 3-5

8.H.6 Participate in Programs to Lower Carbon Footprint

This Preventative Measures activity has a primary objective to "Educate the community about climate impacts". The benefit of reduced greenhouse gasses considers potential changes over time. Therefore, the objectives would largely be achieved over the long term.

The lead administrative responsibility would be the Village Manager's Office. Since additional funding is not requested to complete activity, it can start at any time. The activity does not result in any additional Village expense, the cost benefit ratio is uncertain. It is expected that any changes in the carbon footprint would be over a long time period. Costs for this activity could be incorporated into the Village budget. This activity is given a Priority Order of 3-6.

8.I Next Steps

The above action plan emphasizes implementation of the proposed mitigation activities based on priorities that consider costs and benefits as well as Social, Technical, Administrative, Political, Legal, Economic and Environmental (STAPLEE) considerations. Once the Village officials review and accept this Action Plan, there are two additional steps needed to complete this Flood Plain Management & Hazard Mitigation Plan. They are:

- Section 9 Adopt the Plan; and
- Section 10 Implement, Maintain, Evaluate, and Revise the Plan

Prior to the official adoption of the plan, the Village will submit the plan to NYSOEM for review and comment. NYSOEM will forward the plan to FEMA for their comments. Upon receipt of the agencies' comments, the plan will be revised; incorporate all required changes and resubmitted for final review and approval by NYSOEM and FEMA.