

## SECTION 6: MITIGATION STRATEGIES

This section presents mitigation actions for the City of New Rochelle to reduce potential exposure and losses identified as concerns in the Risk Assessment portion of this plan. The Planning Committee reviewed the Risk Assessment to identify and develop these mitigation actions, which are presented herein.

This section includes:

- (1) Background and past mitigation accomplishments
- (2) General mitigation planning approach
- (3) City mitigation goals and objectives
- (4) City capability assessment
- (5) Identification, analysis, and implementation of potential mitigation actions for each hazard
- (6) Proposed hazard mitigation actions

This section addresses both mitigation actions that are specific to particular hazards, as well as those that apply to multiple hazards.

**Hazard mitigation** reduces the potential impacts of, and costs associated with, emergency and disaster-related events.

Mitigation actions address a range of impacts, including impacts on the population, property, the economy, and the environment.

**Mitigation actions** can include activities such as: revisions to and enforcement of building codes, revisions to land-use planning, training and education, and structural and nonstructural safety measures.

### BACKGROUND AND PAST ACCOMPLISHMENTS

Although DMA 2000 does not require a discussion regarding past mitigation efforts, an overview of past efforts is provided as a foundation for understanding the mitigation goals, objectives, and actions outlined in this HMP. The City, through previous and ongoing hazard mitigation actions, has demonstrated that it is pro-active in protecting its physical assets and citizens against losses from natural hazards. Examples of previous and ongoing actions and projects include:

- The City participates in the NFIP, which requires the adoption of FEMA floodplain mapping and certain minimum construction standards for building within the floodplain.
- The City has taken a variety of actions either aimed at or having the ancillary benefit of controlling flooding. These include: Applying a recreation and open space zone to 795 acres of land, adopting stringent storm water and pollution control standards for development to ensure no net increase in run-off, adopting a tree ordinance to preserve trees on private property and to require tree planting in conjunction with impermeable surface expansion, site-specific capital improvements to relieve flood conditions, and adoption of a catch basin cleaning program that addresses all basins on a 3-year rotation, with more frequent attention to catch basins in flood-prone areas. In addition, following extensive community flooding in the Spring of 2007, the City conducted an extensive investigation of the most heavily impacted areas and produced preliminary designs for infrastructure enhancement in the Halcyon Park neighborhood and along the Hutchinson River (GreeNR-The New Rochelle Sustainability Plan 2010-2030).
- New Rochelle has taken a lead role in encouraging formation of a Sound Shore storm water management district to fund capital and operation costs on a regional basis (GreeNR-The New Rochelle Sustainability Plan 2010-2030).

- New Rochelle has fully implemented the Phase II storm water management program as required by EPA. The six program requirements of this Phase II program are: public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and reducing pollutant runoff from municipal operations [GreenR-The New Rochelle Sustainability Plan 2010-2030].
- Under an Administrative Consent Order with the New York State Department of Environmental Conservation (NYSDEC), the City has established a formal program to address inflow and infiltration (I&I) with their sewer systems. Under this I&I program, new development must remove three times the amount of flow to the sanitary sewer in locations selected by the City.
- The City is preparing their own Emergency Action Plans for all dams within the City limits, regardless of ownership.
- The City has tree planting and removal contractors, and responds to reports from the public about damaged and diseased trees.
- Consolidated Edison recently upgraded three electrical substations serving the City.
- The City utilizes a web-based portal (Connect City) to notify and alert residents on emergency issues.

These past and ongoing actions have contributed to the City's understanding of its hazard preparedness and future mitigation action needs, costs, and benefits. These efforts provide a foundation for the Planning Committee to use in developing this HMP.

## GENERAL MITIGATION PLANNING APPROACH

The general mitigation planning approach used to develop this plan is based on the FEMA publication, *Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies* (FEMA 386-3), and input provided by NYSEMO. This guidance includes four steps, which were used to support mitigation planning. These steps are summarized below and presented in more detail in the following sections.

- **Develop mitigation goals and objectives:** Mitigation goals were developed using the hazard characteristics, inventory, and findings of the risk assessment, and through the results of the public outreach program. By reviewing these outputs and other municipal and state policy documents, objectives tying to these overarching goals were identified and characterized into similar themes.
- **Identify and prioritize mitigation actions:** Based on the risk assessment outputs, the mitigation goals and objectives, existing literature and resources, and input from the participating entities, alternative mitigation actions were identified. The potential mitigation actions were qualitatively evaluated against the mitigation goals and objectives and other evaluation criteria. The mitigation capabilities within the City (regulatory, administrative and fiscal) were assessed and considered in the selection and prioritization of appropriate, feasible actions. These actions were then prioritized into three categories: high, medium, and low.

FEMA defines *Goals* as general guidelines that explain what should be achieved. Goals are usually broad, long-term, policy statements, and represent a global vision.

FEMA defines *Objectives* as strategies or implementation steps to attain mitigation goals. Unlike goals, objectives are specific and measurable, where feasible.

FEMA defines *Mitigation Actions* as specific actions that help to achieve the mitigation goals and objectives.

- **Prepare an implementation strategy:** High priority mitigation actions are recommended for first consideration for implementation, as discussed under each hazard description in the following sections. However, based on community-specific needs and goals and available funding and costs, some low or medium priority mitigation actions may also be addressed or could be addressed before some of the high priority actions.
- **Document the mitigation planning process:** The mitigation planning process is documented throughout this plan.

### Guiding Principle, Mitigation Goals and Objectives

This section presents the guiding principle for this Plan, and mitigation goals and objectives identified to reduce or avoid long-term vulnerabilities to the identified hazards.

#### Mission Statement

Per FEMA guidance (386-1), a mission statement or guiding principle describes the overall duty and purpose of the planning process, and serves to identify the principle message of the plan. It focuses or constrains the range of goals and objectives identified. This is not a goal because it does not describe outcomes. The City of New Rochelle’s mission statement is broad in scope, and provides a direction for the Plan.

The mission statement for the City of New Rochelle Plan is as follows:

*Through partnerships and careful planning, identify and reduce the vulnerability to natural hazards in order to protect the general health, safety, welfare, quality of life, environment, and economy of the residents within the City of New Rochelle.*

#### Goals and Objectives

According to CFR 201.6(c)(3)(i): “The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.” The Planning Committee developed mitigation goals and objectives based on the risk assessment results, discussions, research, and input from amongst the committee, existing authorities, polices, programs, resources, stakeholders and the public.

The Planning Committee identified five goals through a facilitated exercise, working from a catalog of goal statements created through review of similar plans and FEMA planning guidance. Once the goals were established, objectives that meet multiple goals were selected through a similar facilitated exercise. For the purposes of this Plan, goals are defined as follows:

**Goals** are general guidelines that explain what is to be achieved. They are usually broad, long-term, policy-type statements and represent global visions. Goals help define the benefits that the Plan is trying to achieve. The success of the Plan, once implemented, should be measured by the degree to which its goals have been met (that is, by the actual benefits in terms of hazard mitigation).

The City of New Rochelle’s goals are compatible with the needs and goals expressed in other available community planning documents as well as the NYS HMP. Each goal has a number of corresponding objectives that further define the specific actions or implementation steps. Achievement of these goals will define the effectiveness of a mitigation strategy. The goals also are used to help establish priorities.

The five mitigation goals with their respective objectives are presented below:

1. Protect Life and Property
2. Increase Public Awareness and Preparedness
3. Enhance Disaster Preparedness, Response and Recovery
4. Protect the Environment and Natural Resources
5. Promote Partnerships

Objectives were then developed and/or selected by the Planning Committee through its knowledge of the local area, review of past efforts, findings of the risk assessment, qualitative evaluations, and identification of mitigation options. The objectives are used to 1) measure the success of the Plan once implemented, and 2) to help prioritize identified mitigation actions. For the purposes of this Plan, objectives are defined as follows:

**Objectives** are short-term aims which, when combined, form a strategy or course of action to meet a goal. Unlike goals, objectives are specific and measurable.

The City and Planning Committee selected objectives that would meet multiple goals, as listed below. The objectives serve as a stand-alone measurement of a mitigation action, rather than as a subset of a goal. Achievement of the objectives will be a measure of the effectiveness of a mitigation strategy. The objectives also are used to help establish priorities.

The following are the mitigation goals and objectives for the City of New Rochelle Plan:

### **Goal 1. Protect Life and Property**

*Objective 1-1:* Protect critical facilities and infrastructure.

*Objective 1-2:* Address repetitive and severe repetitive loss properties in the City.

*Objective 1-3:* Encourage the establishment of policies to help ensure the prioritization and implementation of mitigation actions and/or projects designed to benefit essential facilities, services, and infrastructure.

*Objective 1-4:* Implement mitigation actions that enhance the capabilities of the City to better profile and assess exposure of hazards.

*Objective 1-5:* Better characterize flood/stormwater hazard events by conducting additional hazard studies and identify inadequate stormwater facilities and poorly drained areas.

*Objective 1-6:* Develop, maintain, strengthen and promote enforcement of ordinances, regulations and other mechanisms that facilitate hazard mitigation.

*Objective 1-7:* Integrate the recommendations of this plan into existing local programs.

*Objective 1-8:* Ensure that development is done according to modern and appropriate standards, including the consideration of natural hazard risk.

*Objective 1-9:* Identify and pursue funding opportunities to develop and implement local and county mitigation activities.

**Goal 2. Increase Public Awareness and Preparedness**

*Objective 2-1:* Develop and implement program(s) to better understand the public's level of individual and household preparedness.

*Objective 2-2:* Develop and implement additional education and outreach programs to increase public awareness of hazard areas and the risks associated with hazards, and to educate the public on specific, individual preparedness activities.

*Objective 2-3:* Promote awareness among homeowners, renters, and businesses about obtaining insurance coverage available for natural hazards (i.e., flooding).

*Objective 2-4:* Encourage property owners to take preventive actions in areas that are especially vulnerable to hazards.

*Objective 2-5:* Provide information on tools, partnership opportunities, funding resources, and current government initiatives to assist in implementing mitigation activities.

**Goal 3. Enhance Disaster Preparedness, Response and Recovery**

*Objective 3-1:* Encourage the establishment of policies to help ensure the prioritization and implementation of mitigation actions and/or projects designed to benefit essential facilities, services, and infrastructure.

*Objective 3-2:* Where appropriate, coordinate and integrate hazard mitigation actions with existing local emergency operations plans.

*Objective 3-3:* Identify the need for, and acquire, any special emergency services, training, equipment, facilities and infrastructure to enhance response capabilities for specific hazards.

*Objective 3-4:* Review and improve, if necessary, emergency traffic routes; communicate such routes to the public and communities.

*Objective 3-5:* Ensure continuity of governmental operations, emergency services, and essential facilities at the local level during and immediately after disaster and hazard events.

*Objective 3-6:* Maintain and expand shared services in acquiring maintaining and providing emergency services and equipment.

**Goal 4. Protect the Environment and Natural Resources**

*Objective 4-1:* Protect and preserve environmentally sensitive and critical areas and promote sustainable development practices.

*Objective 4-2:* Protect and restore natural lands and features that serve to mitigate losses (including wetlands, floodplains, stream corridors, hillsides and ridge lines). Such lands should be clearly mapped and identified for protection.

*Objective 4-3:* Continue to preserve, protect and acquire open space, particularly in high hazard areas. Include hazard considerations into the prioritization schema for land acquisition.

*Objective 4-4:* Incorporate hazard considerations into land-use planning and natural resource management.

**Goal 5. Promote Partnerships**

*Objective 5-1:* Maintain and expand shared services in acquiring maintaining and providing emergency services and equipment.

*Objective 5-2:* Strengthen inter-jurisdiction and inter-agency communication, coordination, and partnerships to foster hazard mitigation actions and/or projects.

*Objective 5-3:* Promote and enhance coordination and cooperation of local emergency response departments and support teams, including combined training, drills and exercises.

In addition to facilitating the identification of appropriate mitigation actions, the established mitigation planning goals and objectives are used to:

- Define the effectiveness of a mitigation strategy
- Prioritize identified mitigation actions
- Measure the success of the Plan once implemented

Table 6-1 presents an alternate method of presenting the identified objectives that correspond to multiple identified planning goals.

Table 6-1. Objectives with their Corresponding Goals

Objective Statements	Goal Statements				
	1. Protect Life and Property	2. Increase Public Awareness and Preparedness	3. Enhance Disaster Preparedness, Response and Recovery	4. Protect the Environment and Natural Resources	5. Promote Partnerships
1-1: Protect critical facilities and infrastructure.	X		X		
1-2: Address repetitive and severe repetitive loss properties in the City.	X	X			
1-3: Encourage the establishment of policies to help ensure the prioritization and implementation of mitigation actions and/or projects designed to benefit essential facilities, services, and infrastructure.	X		X		
1-4: Implement mitigation actions that enhance the capabilities of the City to better profile and assess exposure of hazards.	X	X	X	X	X
1-5: Better characterize flood/stormwater hazard events by conducting additional hazard studies and identify inadequate stormwater facilities and poorly drained areas.	X	X		X	
1-6: Develop, maintain, strengthen and promote enforcement of ordinances, regulations and other mechanisms that facilitate hazard mitigation.	X	X		X	
1-7: Integrate the recommendations of this plan into existing local programs.	X	X	X	X	X
1-8: Ensure that development is done according to modern and appropriate standards, including the consideration of natural hazard risk.	X	X		X	
1-9: Identify and pursue funding opportunities to develop and implement local and county mitigation activities.	X	X	X	X	X
2-1: Develop and implement program(s) to better understand the public's level of individual and household preparedness.		X			X
2-2: Develop and implement additional education and outreach programs to increase public awareness of hazard areas and the risks associated with hazards, and to educate the public on specific, individual preparedness activities.	X	X			X

Objective Statements	Goal Statements				
	1. Protect Life and Property	2. Increase Public Awareness and Preparedness	3. Enhance Disaster Preparedness, Response and Recovery	4. Protect the Environment and Natural Resources	5. Promote Partnerships
2-3: Promote awareness among homeowners, renters, and businesses about obtaining insurance coverage available for natural hazards (i.e., flooding).		X			X
2-4: Encourage property owners to take preventive actions in areas that are especially vulnerable to hazards.	X	X			
2-5: Provide information on tools, partnership opportunities, funding resources, and current government initiatives to assist in implementing mitigation activities.	X	X	X	X	X
3-1: Encourage the establishment of policies to help ensure the prioritization and implementation of mitigation actions and/or projects designed to benefit essential facilities, services, and infrastructure.	X		X		
3-2: Where appropriate, coordinate and integrate hazard mitigation actions with existing local emergency operations plans.	X		X		
3-3: Identify the need for, and acquire, any special emergency services, training, equipment, facilities and infrastructure to enhance response capabilities for specific hazards.	X		X		
3-4: Review and improve, if necessary, emergency traffic routes; communicate such routes to the public and communities.	X		X		
3-5: Ensure continuity of governmental operations, emergency services, and essential facilities at the local level during and immediately after disaster and hazard events.	X		X		X
3-6: Maintain and expand shared services in acquiring maintaining and providing emergency services and equipment.	X		X		X
4-1: Protect and preserve environmentally sensitive and critical areas and promote sustainable development practices.				X	
4-2: Protect and restore natural lands and features that serve to mitigate losses (including wetlands, floodplains,	X			X	



Objective Statements	Goal Statements				
	1. Protect Life and Property	2. Increase Public Awareness and Preparedness	3. Enhance Disaster Preparedness, Response and Recovery	4. Protect the Environment and Natural Resources	5. Promote Partnerships
stream corridors, hillsides and ridge lines). Such lands should be clearly mapped and identified for protection.					
4-3: Continue to preserve, protect and acquire open space, particularly in high hazard areas. Include hazard considerations into the prioritization schema for land acquisition.	X			X	
4-4: Incorporate hazard considerations into land-use planning and natural resource management.				X	
5-1: Maintain and expand shared services in acquiring maintaining and providing emergency services and equipment.		X	X		X
5-2: Strengthen inter-jurisdiction and inter-agency communication, coordination, and partnerships to foster hazard mitigation actions and/or projects.	X	X	X	X	X
5-3: Promote and enhance coordination and cooperation of local emergency response departments and support teams, including combined training, drills and exercises.		X	X		X

### The City of New Rochelle Capability Assessment

According to FEMA 386-3, a capability assessment is an inventory of a community’s missions, programs and policies; and an analysis of its capacity to carry them out. This assessment is an integral part of the planning process. It identifies, reviews and analyzes local and state programs, policies, regulations, funding and practices currently in place that may either facilitate or hinder mitigation.

A capability assessment was prepared by the City. By completing this assessment, the City learned how or whether they would be able to implement certain mitigation actions by determining the following:

- Types of mitigation actions that may be prohibited by law;
- Limitations that may exist on undertaking actions; and
- The range of local and/or state administrative, programmatic, regulatory, financial and technical resources available to assist in implementing their mitigation actions.
- Action is currently outside the scope of capabilities (e.g. funding)

Table 6-2 presents legal and regulatory capabilities. Table 6-3 presents the administrative and technical capabilities. Table 6-4 presents fiscal capabilities, and Table 6-5 presents the community classifications for the City.

Table 6-2. Legal and Regulatory Capabilities

Regulatory Tools (Codes, Ordinances., Plans)	Local Authority (Y or N)	Prohibitions (State or Federal) (Y or N)	Higher Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Code Citation  (Section, Paragraph, Page Number, date of adoption)
1) Building Code	Y	N	N	Y	Chapter 111, Adopted 7/21/87
2) Zoning Ordinance	Y	N	N	N	Chapter 331, Adopted 11/20/01
3) Subdivision Ordinance	Y	Y	N	Y	Chapter A361, Adopted 2/13/57
4) NFIP Protection Ordinance	Y	Y	Y	Y	Chapter 147, Adopted 6/16/87
5) Growth Management	Y	N	N	N	
6) Floodplain Management / Basin Plan	Y	Y	N	N	Chapter 331, Adopted 11/20/01
7) Stormwater Management Plan/Ordinance	Y	Y	Y	Y	Chapter 215, Adopted 5/15/07
8) Comprehensive Plan / Master Plan	Y	Y	N	Y	Comprehensive Plan - 1995
9) Capital Improvements Plan	Y	N	N	N	
10) Site Plan Review Requirements	Y	N	N	N	Chapter 331, Amended 11/21/06
11) Open Space Plan	Y	N	N	N	

Regulatory Tools (Codes, Ordinances., Plans)	Local Authority (Y or N)	Prohibitions (State or Federal) (Y or N)	Higher Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Code Citation  (Section, Paragraph, Page Number, date of adoption)
12) Economic Development Plan	Y	N	N	N	
13) Emergency Response Plan	Y	N	Y	Y	
14) Shoreline Management Plan	Y	Y	Y	N	Chapter 127, Adopted 10/30/89
15) Post Disaster Recovery Plan	Y	N	N	N	
16) Post Disaster Recovery Ordinance	Y	N	N	N	
17) Real Estate Disclosure req.	Y	N	N	N	
18) Steep Slopes Protection Ordinance	Y	N	N	N	
19) Wetlands Protection Ordinance	Y	Y	Y	Y	
20) Mutual Aid	Y	N	N	N	

TBD = To be determined.

Table 6-3. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Bureau of Engineering – Department of Public Works
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Bureau of Engineering – Department of Public Works
3) Planners or engineers with an understanding of natural hazards	Y	Bureau of Engineering – Department of Public Works
4) NFIP Floodplain Administrator	Y	Paul Vacca, Deputy Commissioner – Bureau of Buildings
5) Surveyor(s)		
6) Personnel skilled or trained in “GIS” applications	Y	
7) Scientist(s) familiar with natural hazards in the City of New Rochelle.		
8) Emergency Manager		Charles B. Strome III, City Manager
9) Grant Writer(s)	Y	
10) Staff with expertise or training in benefit/cost analysis		

TBD = To be determined.

Table 6-4. Fiscal Capabilities

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community development Block Grants (CDBG)	YES
2) Capital Improvements Project Funding	YES
3) Authority to Levy Taxes for specific purposes	YES
4) User fees for water, sewer, gas or electric service	YES
5) Impact Fees for homebuyers or developers of new development/homes	TBD
6) Incur debt through general obligation bonds	YES
7) Incur debt through special tax bonds	TBD
8) Incur debt through private activity bonds	TBD
9) Withhold public expenditures in hazard-prone areas	TBD
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	YES
11) Other	

TBD = To be determined.

Table 6-5. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	NP	NA
Building Code Effectiveness Grading Schedule (BCEGS)	TBD	
Public Protection	TBD	
Storm Ready	NP	NA
Firewise	NP	NA

NA = Not applicable. NP = Not participating. TBD = To be determined.

The above referenced classifications can be viewed as a gauge of this community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation). These classifications are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. Classifications range on a scale of 1 to 10 with class one being the best possible classification, and class 10 representing no classification benefit. Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The Fire Suppression Rating Schedule

## Identification, Prioritization, Analysis, and Implementation of Mitigation Actions

This subsection discusses the identification, prioritization, analysis and implementation of mitigation actions for the City of New Rochelle.

### Mitigation Action Identification – Comprehensive Review of Mitigation Activities

On June 1, 2010 a mitigation action screening and identification workshop was conducted with the Planning Committee. The purpose of this session was to review information garnered from the risk assessment and the public involvement strategy to identify strengths, weaknesses, obstacles and opportunities in hazard mitigation within the City through a facilitated brainstorming session on risks, vulnerabilities, and capabilities. All information shared during this session was documented and used to help screen a broad range of potential mitigation activities.

During this workshop, the Planning Committee worked through a comprehensive list of potential mitigation actions, presented in Appendix F. By way of this facilitated session, the Planning Committee was able to develop a mitigation catalog (Appendix F) which includes a comprehensive list of mitigation actions to be considered that met the following objectives:

- Use information obtained from the public involvement strategy;
- Use information provided in the risk and vulnerability assessment;
- Seek mitigation actions consistent with the goals and objectives of this local Plan;
- Identify mitigation actions that are within the capabilities of the City.

The list of potential mitigation actions, organized according to the hazards of concern identified for this planning process, include a range of options in line with the six types of mitigation actions described in FEMA guidance (FEMA 386-3), including:

- 1. Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- 2. Property Protection:** Actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- 3. Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- 4. Natural Resource Protection:** Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

5. **Emergency Services:** Actions that protect people and property, during and immediately following, a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
6. **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, levees, floodwalls, retaining walls, and safe rooms.

Though this exercise, the Planning Committee was able to identify a baseline of appropriate mitigation actions backed by a planning process, consistent with the goals and objectives of the planning area, and within the capabilities of the City. Many of the strategies identified, such as community outreach, could be applied to multiple hazards. Actions that were not selected by the City were not selected based on the following:

- Action is currently outside the scope of capabilities
- Action is not inline with established community goals and vision
- Action is not considered cost-effective
- Action is already being implemented

### Mitigation Actions

The mitigation actions are the key element of the natural hazards mitigation plan. It is through the implementation of these actions that the City can strive to become disaster-resistant through hazard mitigation. For the purposes of this Plan, mitigation actions are defined as follows:

*Mitigation actions* are activities designed to reduce or eliminate losses resulting from natural hazards.

Although one of the driving influences for preparing this Plan was grant funding eligibility, its purpose is more than just access to federal funding. It was important to the Planning Committee to look at mitigation actions that will work through all phases of emergency management. Some of the actions outlined in this Plan may not be grant eligible—grant eligibility was not the focus of the selection. Rather, the focus was the actions’ effectiveness in achieving the goals of the Plan and whether they are within the City’s capabilities.

A series of mitigation actions were identified by the City. These actions are summarized in Table 6-6 along with the hazards mitigated, goals and objectives met, lead agency, estimated cost, potential funding sources and the proposed timeline are identified. The parameters for the timeline are as follows:

- Short Term = To be completed in 1 to 5 years
- Long Term = To be completed in greater than 5 years
- Ongoing = Currently being funded and implemented under existing programs.

As noted above, mitigation actions have been identified as a result of a comprehensive planning process. However, certain actions provided in Table 6-6 are of a general nature and are included to ensure that the City continues to address issues including but not limited to NFIP compliance, plan updates, emergency management and FMA activities (action items 1-5). Location-specific actions are included following these initial inputs in the table.

Table 6-6. Proposed Hazard Mitigation Initiatives

Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
NR-1	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements including regulating all new and substantially improved construction in Special Hazard Flood Areas, floodplain identification and mapping, and flood insurance outreach to the community.  Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives 1a through 1g.	New & Existing	Flood, Coastal Storm	1, 2, 4	1-1, 1-2, 1-3, 1-8, 2-2, 2-3, 2-4, 4-1, 4-2, 4-3, 4-4	City Engineering (NFIP Floodplain Administrator)	Low	City Budget	Short
NR-1a	Consider the adoption of higher regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	New & Existing	Flood, Coastal Storm	1, 4	1-1, 1-2, 1-3, 1-6, 1-8; All of 4	City (likely through NFIP Floodplain Administrator)	Low	City Budget	Short
NR-1b	Develop and implement an enhanced public outreach/education/information program, including: (for example) develop a flood risk management webpage on the City website where information and mapping can be posted, include NFIP information in regular newsletter and mailings, etc	N/A	Flood, Coastal Storm	2, 5	All of 2; 5-2	City (likely through NFIP Floodplain Administrator)	Low - Medium	City Budget; FEMA HMA	DOF
NR-1c	Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	N/A	Flood, Coastal Storm	1, 5	1-4, 1-6, 1-7; 5-2	City (likely through NFIP Floodplain Administrator)	Low - Medium	City Budget	Short



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
NR-1d	Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM, and consider relevant continuing education training such as FEMA Benefit-Cost Analysis.	N/A	Flood, Coastal Storm	1, 3	1-4, 1-7; 3-3	City (NFIP Floodplain Administrator)	Low - Medium	City Budget	Short
NR-1e	Continue to require and archive elevation certificates.	N/A	Flood, Coastal Storm	1, 3	1-3, 1-4, 1-6, 1-7; 3-1	City (likely through NFIP Floodplain Administrator)	Low	City Budget	On-going
NR-1f	Continue to maintain the provisions and procedures of the City's Phase II Stormwater Management program, including the provisions of the ACO with NYSDEC regarding inflow and infiltration.	N/A	Flood, Coastal Storm	1, 3, 5	1-1, 1-6; 3-1, 3-5; 5-2	City with support from NYSDEC	Low - Medium	City Budget	On-going
NR-1g	Consider participation in the Community Rating System (CRS) to further manage flood risk in the City and reduce flood insurance premiums for NFIP policyholders.	New & Existing	Flood, Coastal Storm	1, 2, 5	1-1, 1-3, 1-6, 2-1, 2-2, 2-3, 2-4, 5-2	City Engineering (NFIP Floodplain Administrator)	Low	City Budget	Short
NR-2a	Where appropriate, support retrofitting (e.g. elevation) of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost-effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding.	Existing	Flood, Severe Storm	1, 2, 3, 5	1-1, 1-2; 2-4, 2-5; 3-5; 5-2	Municipality (likely through NFIP Floodplain Administrator); SEMO, FEMA	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Long-term DOF
NR-	Where appropriate, support	Existing	Flood, Severe	1, 2, 3, 5	1-1, 1-2;	Municipality	High	FEMA	Long-term



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
2b	acquisition or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for relocation based on cost-effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding.		Storm		2-4, 2-5; 3-5; 5-2	(likely through NFIP Floodplain Administrator), SEMO, FEMA		Mitigation Grant Programs and local budget (or property owner) for cost share	DOF
NR-3	Continue to support the implementation, monitoring, maintenance and update of this Plan, as defined in Section 7.0	NA	All hazards	All	All	City	Low	City Budget	Long
NR-4	Continue to develop, enhance and implement existing emergency plans. (EOP, COOP/COG, Resources Recovery and Evacuation Plans)	NA	All hazards	1, 3	1-1, 1-7, 3-2, 3-4, 3-5	City Emergency Management	Low	City Budget	Ongoing
NR-5	Create / enhance / maintain mutual aid agreements with surrounding City s, the County and NYSEMO.	NA	All hazards	1, 3	1-1, 3-3, 3-5, 3-6	City	Medium	City Budget	Ongoing
NR-6 through NR-8 are placeholders									
NR-9	Halcyon Park Area – Brookdale Avenue and Brookside Place. Mitigate flooding by rerouting and upgrading the existing stormwater collection system.	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-3, 3-5	DPW with support from Dep't. of Development	\$3-5 MM	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-10	North Avenue from Paine Avenue to Brookside Place. Mitigate flooding on North Avenue at the intersection of Eastchester Road and White Oak	Existing	Flooding; Coastal Storms	1, 3	1-1, 1-2; 3-3, 3-5	DPW with support from Dep't. of Development	\$3-5 MM	FEMA Mitigation Grant Programs;	Short-term



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
	Street by construction of a new storm drain. This area includes a number of properties along White Oak Street with NFIP claims and two NFIP Repetitive Loss properties.							City and property owner match	
NR-11	Hutchinson Boulevard at the crossing over the Hutchinson River. Mitigate flooding to private properties in the vicinity adjacent to the Hutchinson River north of Hutchinson Boulevard by construction of a new culvert.	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-3, 3-5	DPW with support from Dep't. of Development	\$0.5 MM	FEMA Mitigation Grant Programs; City and property owner match	Short-term
NR-12	Wilmot Road and Hutchinson River Drainage Basin Improvements. Mitigate flooding to private properties bordering the Hutchinson River north of the intersection of Old Wilmot Road and New Wilmot Road by construction of a new culvert.	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-3, 3-5	DPW with support from Dep't. of Development and Westchester County	\$1.5 MM	FEMA Mitigation Grant Programs; City and property owner match	Short-term
NR-13	Wilmot Road Culvert-Replace existing 7 foot diameter corrugated metal pipe (CMP) with a 40 foot wide by 8 foot high concrete box culvert. The existing culvert is grossly undersized to convey the 100-year peak discharge. A significant backwater results from the combination of the undersized culvert and the high roadway embankment which does not permit weir flow to begin until the headwater is approximately 5 feet above the crown of the pipe (Improvement #1 from the Hydraulic Analyses of the Hutchinson River and Potential	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-5	NR DPW	\$2,440,000	FEMA Mitigation Grant Programs; City match	DOF



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
	Improvements study, 3/25/2008).								
NR-14	Channelization with a 25 foot bottom width of the Hutchinson River just downstream of Wilmot Road to approximately 700 feet upstream of the upstream face (USF) of Wilmot Road. This improvement would remove 11 homes from the effective 100 year floodplain (Improvement #2 from the Hydraulic Analyses of the Hutchinson River and Potential Improvements study, 3/25/2008).	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-5	NR	\$280,000	FEMA Mitigation Grant Programs; City match	DOF
NR-15	Hutchinson Boulevard Culvert- Replace the existing 11 foot wide by six foot high CMP arch culvert with a 30 foot wide by six foot high concrete box culvert (Improvement #3 from the Hydraulic Analyses of the Hutchinson River and Potential Improvements study, 3/25/2008).	Existing	Flooding; Coastal Storms	1, 3	1-1; 3-5	NR DPW	\$410,000	FEMA Mitigation Grant Programs; City match	DOF
NR-16	Channelization approximately 500 feet downstream of Hutchinson Blvd. to approximately 500 feet upstream of Hutchinson Blvd. station 38155 to 38212-typical channel width varies between 20 to 30 feet. This improvement would remove 6 homes in New Rochelle and an additional 12 +/- homes in Eastchester and Scarsdale from the 100 year floodplain (Improvement #4 from the Hydraulic Analyses of the Hutchinson River and Potential Improvements study, 3/25/2008).	Existing	Flooding; Coastal Storms	1, 3, 5	1-1; 3-5; 5-2	NR	\$347,000	FEMA Mitigation Grant Programs; City match	DOF
NR-17	Channelization from 500 feet upstream of Hutchinson Boulevard to	Existing	Flooding; Coastal	1, 3, 5	1-1; 3-5; 5-2	DPW with support from	\$1,142,000	FEMA Mitigation	Short-term



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
	1480 feet upstream of Grand Blvd. Station 38750 to 41850 with a 40 foot bottom width. This improvement would remove 15 homes from the 100-year floodplain in New Rochelle, mostly on Primrose Road, and an additional 15+/- homes in Scarsdale.		Storms			Dep't. of Development		Grant Programs; City and property owner match	
NR-18	Prioritize and develop an implementation plan for flood and stormwater control projects (NR-9 through NR-17; NR-19 through NR-28). Prioritization shall be based on costs versus benefits and potential availability of funding, and may include benefit-cost analysis using the FEMA BCAR methodology and software. Implementation plans shall identify sources of funding, approximate timeline, and lead and support agencies.	Both	Flood, Severe Storm	1, 4	1-1, 1-4, 1-5, 1-9, 4-1, 4-2	City Department of Public Works	Low - Medium	City Budget	Short
NR-19	Address flooding on Homestead Place (off Palmer Avenue) behind the Tennis Center. This is a low-lying area which floods during high rainfall events due to insufficient storm drain capacity.	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-5; 3-3, 3-5	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-20	Van Guilder Avenue – improve drainage to reduce/eliminate road and property flooding. Work with property owners on south side of street to mitigate ~10 residential structures.	Existing	Coastal Storms, Flooding	1, 2, 5	1-1, 1-2, 1-5, 1-9; 2-4; 5-2	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
NR-21	Valley Road (by Wood Place and Barberry) – address flooding in this area where emergency protective services are routinely needed to rescue residents by boat. This is a low-lying area which floods during high rainfall events due to insufficient storm drain capacity. Valley Road includes a number of properties with NFIP claims and an NFIP Repetitive Loss property.	Existing	Coastal Storms, Flooding	1, 2, 5	1-1, 1-2, 1-9; 2-4; 3-5	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-22	Portman and Fifth Avenues – address flooding in this area. This is a low-lying area which floods during high rainfall events due to insufficient storm drain capacity.	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-5; 3-3, 3-5	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-23	Beechmont Drive - address flooding in this area. This is a low-lying area which floods during high rainfall events due to insufficient storm drain capacity.	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-5; 3-3, 3-5	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-24	Pelham Road, particularly in the area of the apartment building at 666 Pelham Road. Address severe street and property flooding. This is a low-lying area which floods during high rainfall events due to insufficient storm drain capacity.	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-5; 3-3, 3-5	NR Buildings and DPW	High	FEMA Mitigation Grant Programs; City and property owner match	Long-term DOF
NR-	Address severe coastal erosion and	Existing	Coastal	1, 4	1-1, 1-5;	NR Buildings	High	FEMA	Long-term



SECTION 6: MITIGATION STRATEGY

Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
25	coastal flooding problems in area between Beachfront Lane and Shore Club Drive.		Erosion, Coastal Storms, Flooding,		4-2	and DPW		Mitigation Grant Programs; City and property owner match	DOF
NR-26	Dumont Masonic Home – 676 Pelham Road. Work with the owners of this skilled nursing facility to relocate (elevate) their oxygen system and electrical generator which are currently vulnerable to Category I storm surge.	Existing	Coastal Storms, Flooding	1, 3, 5	1-1; 3-5; 5-2	Dumont Masonic Home with support from NR	Medium - High	FEMA Mitigation Grant Programs; facility owner match	Short-term
NR-27	Bayberry Nursing Home – 40 Keogh Lane. Work with the owners of this nursing facility to relocate (elevate) their utilities and other appropriate mitigation actions to reduce the vulnerability of this facility to Category I storm surge.	Existing	Coastal Storms, Flooding	1, 3, 5	1-1; 3-5; 5-2	Bayberry Nursing Home with support from NR	Medium - High	FEMA Mitigation Grant Programs; facility owner match	Short-term
NR-28	Glen Island Center for Nursing and Rehab – 490 Pelham Road. Work with the owners of this nursing facility to relocate (elevate) their kitchen, boiler and utilities to reduce the vulnerability of this facility to Category I storm surge.	Existing	Coastal Storms, Flooding	1, 3, 5	1-1; 3-5; 5-2	Glen Island Center for Nursing and Rehab with support from NR	Medium - High	FEMA Mitigation Grant Programs; facility owner match	Short-term
NR-29	Install backup power at the New Rochelle High School to supports its function as an ARC-designated shelter.	Existing	Coastal Storms, Flooding, Severe Winter Storms	1, 3, 5	1-1; 3-5; 5-2	New Rochelle High School with support from City	Medium - High	FEMA HMA (5% Initiative); HLS and other Federal or State grant programs	DOF



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
NR-30	Hugh A. Doyle Senior Citizen's Center – 95 Davis Avenue. Install backup power.	Existing	Coastal Storms, Flooding, Severe Winter Storms	1, 3, 5	1-1; 3-5; 5-2	Hugh A. Doyle Senior Citizen's Center with support from NR	Medium - High	FEMA HMA (5% Initiative); HLS and other Federal or State grant programs	DOF
NR-31	Develop and implement a program of standard procedures with forms and templates to facilitate the capture and archiving of natural hazard event loss data to support mitigation Benefit-Cost Analysis and grant applications.	N/A	All Hazards	1, 2	1-3, 1-4, 1-7, 1-9; 2-5	Lead?, with support from Buildings Department, Police, Fire and DPW	Low - Medium	City Budget	1 <sup>st</sup> year
NR-32	Develop and implement an enhanced program of public education and outreach to promote self-sufficiency during natural hazard events (incl. backup power to run sump pumps), flood insurance, and how residents and businesses can mitigate their properties and otherwise manage natural hazard risk.	New	All Hazards	1, 2	1-9; 2-1, 2-2, 2-3, 2-4	Lead?, with support from Buildings Department, Police, Fire and DPW	Low - Medium	City Budget	1 <sup>st</sup> year
NR-33	Work with American Red Cross – Westchester County to help establish a pool of ARC-trained and registered volunteers to assist them during hazard events and disasters.	N/A	All Hazards	3, 5	3-3, 3-5, 3-6; 5-2, 5-3	ARC – Westchester, working with NR and other Westchester communities	Medium - High	City Budget	Short
NR-34	Expand public education on ways to protect property before and during hazard events. Conduct continued public and stakeholder outreach to promote awareness of this Plan and	Existing	All	2, 5	2-2, 2-3, 2-4, 2-5; 5-2	City Manager's Office	Low - Medium	Local Budget, HMA grant	City and other available sources



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
	obtain ongoing public and stakeholder input. Specific activities shall include maintaining the public HMP website, media releases, maintaining copies of the plan in city hall, and may include public meetings, informational flyers, press releases, and public service announcements								
NR-35	Revisit the Watershed Advisory Committee Plans of 1997 and update the inventory of inland water bodies, including measurements of depth and carrying capacity, water quality, conditions of surrounding parkland, and usage patterns, if relevant. Utilize student and neighborhood volunteers to the maximum degree possible for field observations and testing. (“GreeNR Sustainability Plan”, “Initiative 3.16 – Sound, Lake & Stream Water Quality”)	N/A	Coastal Storms, Flooding	1, 5	1-4, 1-5; 5-2	NR Public Works; Parks and Recreation (partners may include neighborhoods, Sheldrake Environmental Center, School District, County, and Upstream and Downstream Municipalities	Med. – High Dependent on initiative	Federal, State, County, Public Voluntary	Complete by year 3
NR-36	Create a multi-year plan for improvements, similar to the City's long-term capital budget, with recommendations for each water body. Recommended actions may include dredging, shoreline stabilization, riparian zone plantings, inlet and outlet modifications, etc. (“GreeNR Sustainability Plan”, “Initiative 3.16 – Sound, Lake & Stream Water Quality”)	N/A	Coastal Storms, Flooding	1, 4	1-1, 1-4, 1-7; 4-1, 4-2	NR Public Works; Parks and Recreation (partners may include neighborhoods, Sheldrake Environmental Center, School District, County, and Upstream and	Low – Med.	Federal, State, County, Public Voluntary	Complete by year 3



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
						Downstream Municipalities			
NR-37	Institute an annual maintenance program for tributaries leading to lakes. Assign priorities based on objective criteria such as potential for flood mitigation, surrounding population density, and potential for access to outside funding. ("GreeNR Sustainability Plan", "Initiative 3.16 – Sound, Lake & Stream Water Quality")	N/A	Coastal Storms, Flooding	1, 4	1-3; 4-1, 4-2	NR Public Works; Parks and Recreation (partners may include neighborhoods, Sheldrake Environmental Center, School District, County, and Upstream and Downstream Municipalities	Med. - High	Federal, State, County, Public Voluntary	Complete by year 3
NR-38	Determine the practical, financial, and ecological feasibility of installing draw-down valves at each lake to facilitate managed lake-level reduction in advance of storms. This could alleviate flooding in the vicinity of Chatsworth Place, Ashland, and Crestview. ("GreeNR Sustainability Plan", "Initiative 3.16 – Sound, Lake & Stream Water Quality")	Existing	Coastal Storms, Flooding	1, 5	1-1, 1-5; 5-2	NR Public Works; Parks and Recreation (partners may include neighborhoods, Sheldrake Environmental Center, School District, County, and Upstream and Downstream Municipalities	Low-Med.	Federal, State, County, Public Voluntary	Complete by year 3
NR-39	Identify potential funding sources for water body improvements. ("GreeNR Sustainability Plan", "Initiative 3.16 – Sound, Lake & Stream Water Quality")	N/A	Coastal Storms, Flooding	1, 4, 5	1-9; 4-1; 5-2	NR Public Works; Parks and Recreation (partners may	Low	Federal, State, County, Public Voluntary	Complete by year 3



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
						include neighborhoods , Sheldrake Environmental Center, School District, County, and Upstream and Downstream Municipalities			
NR-40	Begin phased implementation of water body improvements, as funding permits. ("GreeNR Sustainability Plan", "Initiative 3.16 – Sound, Lake & Stream Water Quality")	Both	Coastal Storms, Flooding	1, 4	1-1, 1-4; 4-1	NR Public Works; Parks and Recreation (partners may include neighborhoods , Sheldrake Environmental Center, School District, County, and Upstream and Downstream Municipalities	High (incl. dredging and disposal, shoreline stabilization)	Federal, State, County, Public Voluntary	Complete by year 10
NR-41	Complete phased implementation of water body improvements. ("GreeNR Sustainability Plan", "Initiative 3.16 – Sound, Lake & Stream Water Quality")	Both	Coastal Storms, Flooding	1, 4, 5	1-1; 4-1; 5-2	NR Public Works; Parks and Recreation (partners may include neighborhoods , Sheldrake Environmental Center, School District, County, and	High (incl. dredging and disposal, shoreline stabilization)	Federal, State, County, Public Voluntary	Complete by year 20



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
						Upstream and Downstream Municipalities			
NR-42	Perform engineering study to eliminate or reduce stormwater infiltration and rehabilitate as necessary of the sanitary sewer drainage system at Halcyon Park, Brookdale Avenue and surrounding and intersecting streets to eliminate or reduce sewer back-up, sewer overflow, and overland flooding.	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-4, 1-5; 3-5	NR DPW	Low	City Budget	Short
NR-43	Evaluate sewer capacity and sources of infiltration in areas vulnerable to sewer back-up, sewer overflow, and overland flooding to eliminate or reduce stormwater infiltration and rehabilitate the drainage system as necessary in the areas for Valley Road, Whitewood Avenue, Victory Blvd, Carlisle Road, Lisenard Avenue,	Existing	Coastal Storms, Flooding	1, 3	1-1, 1-4, 1-5; 3-5	NR DPW	Low	City Budget	DOF
NR-44	Address a multi-jurisdictional problem of due to upstream drainage contributing to the flooding of Inwood Place and Pelham. A possible solution is to increase the freeboard (add a berm) of Greenwood Lake.	New & Existing	Coastal Storms, Flooding	1, 5	1-1, 1-3, 1-5; 5-2	City of New Rochelle, Westchester County	High - Dependent on initiative	Federal, State, County	DOF
NR-45	Perform evaluation or engineering study of the stream in the vicinity of Donald Drive and Winding Brook Road to prevent overtopping of stream banks during storm events.	N/A	Coastal Storms, Flooding	1, 3	1-1, 1-5; 3-5	City of New Rochelle	Medium	Federal, State, County	DOF
NR-46	EOC – Add wind protection to protect Emergency Operations Center including potentially metal	Existing	Coastal Storms, Severe Winter	1, 3	1-1; 3-5	City of New Rochelle	Medium (estimated at \$110,000)	Federal, State, County,	DOF



Initiative #	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Time-line
	gates over windows to be closed in advance of incoming storms.		Storms						

DHS	Department of Homeland Security		Long	5 years or greater.
DOF	Depending on Funding		NR	City of New Rochelle
DPW	Department of Public Works		Short	1 to 5 years
FEMA	Federal Emergency Management Agency		TBD	To be determined
HMA	Hazard Mitigation Assistance Note			

\*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Table 6-7. Mitigation Actions by Hazard of Concern and Mitigation Type

Hazard of Concern	Mitigation Type					
	1. Prevention	2. Property Protection	3. Public and Education Awareness	4. Natural Resource Protection	5. Emergency Services	6. Structural Projects
Coastal Erosion	NR-4, NR-5, NR-31 to 33, NR-36	NR-25	-	NR-25, NR-40, NR-41	-	-
Coastal Storm	NR-1a to NR-1g, NR-3, NR-4, NR-5, NR-18, NR-31 to 33, NR-36, NR-42 to 45	NR-1, NR-2a, NR-2b, NR-3, NR-9 to 13, NR-15, NR-19 to 25, NR-46	NR-1b, NR-2a, NR-2b, NR-3, NR-35	NR-3, NR-14, NR-16, NR-17, NR-35, NR-38 to 41	NR-3, NR-4, NR-5, NR-21, NR-26 to 30, NR-46	NR-3, NR-10 to NR-13, NR-15 to NR-17
Earthquake	NR-3, NR-4, NR-5, NR-31 to 33	NR-3	NR-3	NR-3	NR-3, NR-4, NR-5,	NR-3
Flood	NR-1, NR-1a to NR-1g, NR-3, NR-4, NR-5, NR-18, NR-31 to 33, NR-36, NR-37, NR-42 to 45	NR-1, NR-2a, NR-2b, NR-3, NR-9 to 13, NR-15, NR-19 to 25	NR-1, NR-1b, NR-2a, NR-2b, NR-3, NR-35	NR-3, NR-14, NR-16, NR-17, NR-25, NR-35, NR-38 to 41	NR-3, NR-4, NR-5, NR-21, NR-26 to 30	NR-3, NR-10 to NR-13, NR-15 to NR-17
Severe Winter Storms / Extreme Cold Temperature	NR-3, NR-4, NR-5, NR-31 to 33	NR-3, NR-46	NR-3	NR-3	NR-3, NR-4, NR-5, NR-46	NR-3

Notes:

- 1. Prevention:** Government, administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- 2. Property Protection:** Actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- 3. Public Education and Awareness:** Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- 4. Natural Resource Protection:** Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- 5. Emergency Services:** Actions that protect people and property, during and immediately following, a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
- 6. Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

## Prioritization

Section 201.c.3.iii of 44 CFR requires an action plan describing how the actions identified will be prioritized. The Planning Committee, along with their contract consultant, developed a prioritization methodology for the Plan that meets the needs of the City while at the same time meeting the requirements of Section 201.6 of 44 CFR. The mitigation actions identified were prioritized according to the criteria defined below.

- **High Priority:** A project that meets multiple plan goals and objectives, benefits exceed cost, has funding secured under existing programs or authorizations, or is grant-eligible, and can be completed in 1 to 5 years (short-term project) once project is funded.
- **Medium Priority:** A project that meets at least one plan goal and objective, benefits exceed costs, funding has not been secured and would require a special funding authorization under existing programs, grant eligibility is questionable, and can be completed in 1 to 5 years once project is funded.
- **Low Priority:** A project that will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, and project is not grant-eligible and/or timeline for completion is considered long-term (5 to 10 years).

It should be noted that these priority definitions are considered to be dynamic and can change from one category to another based on changes to a parameter such as availability of funding. For example, a project might be assigned a medium priority because of the uncertainty of a funding source. This priority could be changed to high once a funding source has been identified such as a grant. The prioritization schedule for this Plan will be reviewed and updated as needed annually through the plan maintenance strategy described in Section 7 of this Plan.

## Benefit/Cost Review

Section 201.6.c.3iii of 44CFR requires the prioritization of the action plan to emphasize the extent to which benefits are maximized according to a cost/benefit review of the proposed projects and their associated costs. The City was asked to weigh the estimated benefits of a project versus the estimated costs to establish a parameter to be used in the prioritization of a project.

This benefit/cost review was qualitative; that is, it did not include the level of detail required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program. This qualitative approach was used because projects may not be implemented for up to 10 years, and the associated costs and benefits could change dramatically in that time. Each project was assessed by assigning subjective ratings (high, medium, and low) to its costs and benefits, described in Table 6-8.

Table 6-8. Project Assessment

Costs	
High	Existing funding levels are not adequate to cover the costs of the proposed project, and implementation would require an increase in revenue through an alternative source (e.g., bonds, grants, and fee increases).
Medium	The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Low	The project could be funded under the existing budget. The project is part of or can be part of an existing, ongoing program.
Benefits	
High	Project will have an immediate impact on the reduction of risk exposure to life and property.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property or will provide an immediate reduction in the risk exposure to property.
Low	Long-term benefits of the project are difficult to quantify in the short term.

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and are prioritized accordingly. For some of the County initiatives identified, the City may seek financial assistance under FEMA’s HMGP or PDM programs. Both of these programs require detailed benefit/cost analysis as part of the application process. These analyses will be performed when funding applications are prepared, using the FEMA BCA model process. The Planning Committee is committed to implementing mitigation strategies with benefits that exceed costs. For projects not seeking financial assistance from grant programs that require this sort of analysis, the Planning Committee reserves the right to define “benefits” according to parameters that meet its needs and the goals and objectives of this plan.

Table 6-9 presents the results of applying the prioritization methodology presented to the set of mitigation actions identified by the City, and includes the following prioritization parameters:

- Number of goals/objectives met by the initiative
- Benefits of the project (high, medium, or low)
- Cost of the project (high, medium, or low)
- Do the benefits equal or exceed the costs?
- Is the project grant-eligible?
- Can the project be funded under existing programs and budgets?
- Priority (high, medium, or low)

The City’s mitigation action implementation strategy includes:

- Mitigation actions for individual and multiple hazards
- Mitigation goals/objectives supported by each action.
- Implementation priority
- Potential funding sources for the mitigation action (grant programs, current operating budgets or funding, or the agency or jurisdiction that will supply the funding; additional potential funding resources are identified).

- Estimated budget for the mitigation action (financial requirements for new funding or indication that the action is addressed under current operating budgets)
- Time estimated to implement and complete the mitigation action
- Existing policies, programs, and resources to support implementation of the mitigation action (additional policies, programs, and resources identified)

Specific mitigation actions were identified to prevent future losses; however, current funding is not identified for all of these actions at present. The City has limited resources to take on new responsibilities or projects. The implementation of these mitigation actions is dependent on the approval of the local elected governing body and the ability of the community to obtain funding from local or outside sources. Where such actions are high priorities, the community will work together with NY SEMO, FEMA and other Federal, State and County agencies to secure funds.

In general, mitigation actions ranked as high priorities will be addressed first. However, medium or even low priority mitigation actions will be considered for concurrent implementation. Therefore, the ranking levels should be considered as a first-cut, preliminary ranking and will evolve based on input from the City departments and representatives, municipal government departments and representatives, the public, municipal government departments and representatives, NYSEMO, and FEMA as the Plan is implemented.

Table 6-9. Prioritization of Mitigation Initiatives

Mitigation Action #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Y/N)	Is project Grant eligible? (Y/N)	Can project be funded under existing programs/budgets? (Y/N)	Priority
NR-1	11	L	L	Y	N	Y	H
NR-1a	9	M	L	Y	N	Y	H
NR-1b	6	M	M-L	Y	Y	N	M
NR-1c	4	M	M-L	Y	N		H
NR-1d	3	M	M-L	Y	N		M
NR-1e	5	L	L	Y	N	Y	H
NR-1f	5	M	M-L	Y	N	Y	H
NR-1g	8	M	L	Y	N	Y	H
NR-2a	6	H	H	Y	Y	N	M-H*
NR-2b	6	H	H	Y	Y	N	M-H*
NR-3	All	M	M	Y	N (Yes for 5 year update)	Y	H
NR-4	5	M	L	Y	N	Y	M
NR-5	4	M	L	Y	N	Y	H
NR-9	3	H	H	Y	Y	N	M
NR-10	4	H	H	Y	Y	N	M
NR-11	3	H	H	Y	Y	N	M
NR-12	3	H	H	Y	Y	N	M
NR-13	2	H	H	Y	Y	N	M
NR-14	2	H	H	Y	Y	N	M
NR-15	2	H	H	Y	Y	N	M
NR-16	3	H	H	Y	Y	N	M
NR-17	3	H	H	Y	Y	N	M
NR-18	6	M	L-M	Y	N	Y	H
NR-19	4	H	H	Y	Y	Y	M
NR-20	6	H	H	Y	Y	Y	M
NR-21	5	H	H	Y	Y	Y	M
NR-22	4	H	H	Y	Y	N	M
NR-23	4	H	H	Y	Y	N	M
NR-24	4	H	H	Y	Y	N	M
NR-25	3	H	H	Y	Y	N	M
NR-26	3	H	M-H	Y	Y	N	M
NR-27	3	H	M-H	Y	Y	N	M
NR-28	3	H	M-H	Y	Y	N	M
NR-29	3	H	M-H	Y	Y	N	M
NR-30	3	H	M-L	Y	Y	TBD	H
NR-31	5	M	L-M	Y	N	Y	H
NR-32	5	M	L-M	Y	Y	Y	H
NR-33	5	H	M-L	Y	Dependent on initiative		M
NR-34	5	M	M-L	Y	Y	N	M
NR-35	3	H	L-H	Y	Dependent on initiative	N	M
NR-36	5	M	L	Y	N		M

Mitigation Action #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Y/N)	Is project Grant eligible? (Y/N)	Can project be funded under existing programs/budgets? (Y/N)	Priority
NR-37	3	M	L-M	Y	N	N	M
NR-38	3	L	L	Y	N		M
NR-39	3	L	L	Y	N	N	L
NR-40	3	H	H	Y	Y	N	M
NR-41	3	H	H	Y	Y	N	M
NR-42	4	M	L	Y	Y	Y	H
NR-43	4	M	L	Y	Y		M
NR-44	4	H	H	Y	Dependent on initiative	N	M
NR-45	3	M	M	Y		N	M
NR-46	2	M	M	Y	Y	N	M

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes. TBD = To Be Determined.

(1) Deemed a high priority emergency management activity to increase local response capability.

## SECTION 7: PLAN MAINTENANCE PROCEDURES

This section describes the system that the City of New Rochelle has established to monitor, evaluate, and update the mitigation plan; implement the mitigation plan through existing programs; and solicit continued public involvement for plan maintenance.

### MONITORING, EVALUATING AND UPDATING THE PLAN

This section presents the procedures for monitoring, evaluating, and updating the plan.

The City of New Rochelle Mitigation Planning Committee (MPC) intends to remain intact as the organization responsible for monitoring; evaluating and updating this Plan (see Table 7-1 identifying the representation of the MPC as of the date of this Plan). Omar T. Small shall be the City's Hazard Mitigation Planning Coordinator and shall continue to act as the coordinator for the MPC.

It is recognized that individual commitments change over time, and it shall be the responsibility of each MPC member to inform the HMP Coordinator of any changes in representation.

Table 7-1. City of New Rochelle Mitigation Planning Committee

Name	Title	Organization
Omar T. Small	Deputy City Manager	City of New Rochelle – Manager's Office
Lt. Barry Nechis	Lieutenant – Fire Department; OEM Coordinator	City of New Rochelle – Fire Department / OEM
Lt. George Marshall	Lieutenant – Police Services Division	City of New Rochelle – Police Department
Joseph Cotroneo	Deputy Commissioner - Operations	City of New Rochelle – Dep't. of Public Works
John P. Clemente. PE	City Engineer / Deputy Commissioner	City of New Rochelle – Dep't. of Public Works
John Gallagher	Director of Buildings & Grounds	City School District of New Rochelle
Paul Vacca	Deputy Commissioner, Building Official; NFIP FPA	City of New Rochelle – Buildings Department
Nick Williams	President	Halcyon Park Homeowner's Association
Capt. Salvatore Gugliara, CHMM	Harbormaster	City of New Rochelle - Marina
TBD		City of New Rochelle – Department of Development

### MONITORING

The MPC shall be responsible for monitoring progress on, and evaluating the effectiveness of, the Plan, and documenting this in an annual progress report. During each year, and prior to the annual meeting of the MPC (detailed below), MPC representatives will collect and process the annual reports from the departments, agencies and organizations involved in implementing mitigation projects or activities identified in Section 6 of this Plan, or conduct phone calls and meetings with persons responsible for initiating and/or overseeing the mitigation projects to obtain progress information.

The MPC shall be expected to document, as needed and appropriate:

- Hazard events and losses occurring in the City and region including their nature and extent and the effects that hazard mitigation actions have had on impacts and losses,
- Progress on the implementation of mitigation actions, including efforts to obtain outside funding for mitigation actions,
- Any obstacles or impediments to the implementation of actions,
- Additional mitigation actions believed to be appropriate and feasible,
- Public and stakeholder input and comment on the Plan.

The MPC may use the progress reporting forms, Worksheets #1 and #3 in the FEMA 386-4 guidance document, to facilitate collection of progress data and information on specific mitigation actions. FEMA guidance worksheets are provided in Appendix D.

## EVALUATING

The evaluation of the mitigation plan is an assessment of whether the planning process and actions have been effective, if the Plan goals are being reached, and whether changes are needed. The Plan will be evaluated on an annual basis to determine the effectiveness of the programs, and to reflect changes that may affect mitigation priorities or available funding.

**The status of the HMP will be discussed and documented at an annual plan review meeting of the Mitigation Planning Committee, to be held in the month of June.** In May, at least one month before the annual plan review meeting, the HMP Coordinator will advise MPC members of the meeting date, agenda and expectations of the members.

The City HMP Coordinator will be responsible for calling and coordinating the annual plan review meeting, and assessing progress toward meeting plan goals and objectives. These evaluations will assess whether:

- Goals and objectives address current and expected conditions.
- The nature or magnitude of the risks has changed.
- Current resources are appropriate for implementing the HMP and if different or additional resources are now available.
- Actions were cost effective.
- Schedules and budgets are feasible.
- Implementation problems, such as technical, political, legal or coordination issues with other agencies exist.
- Outcomes have occurred as expected.
- Changes in municipal resources impacted plan implementation (e.g., funding, personnel, and equipment)
- New agencies/departments/staff should be included, including other local governments as defined under 44 CFR 201.6.
- Documentation for hazards that occurred within the City during the last year

Specifically, the MPC will review the mitigation goals, objectives, and activities/projects using performance based indicators, including:

- New agencies/departments created that have authority to implement mitigation actions or are required to meet goals, objectives, and actions
- Project evaluation based on current needs of the mitigation plan
- Project completion regarding progress of proposed or ongoing actions
- Under/over spending regarding proposed mitigation action budgets
- Achievement of the goals and objectives
- Resource allocation to note if resources are required to implement mitigation activities
- Timeframes comment on whether proposed schedules are sufficient to address actions
- Budgets note if budget basis should be changed or is sufficient
- Lead/support agency commitment note if there is a lack of commitment on the part of lead or support agencies
- Resources regarding whether resources are available to implement actions
- Feasibility comment regarding whether certain goals, objectives, or actions prove to be unfeasible

Finally, the MPC will evaluate how other programs and policies have conflicted or augmented planned or implemented measures, and shall identify policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions (see the “Implementation of Mitigation Plan through Existing Programs” subsection later in this Section). Other programs and policies can include those that address:

- Economic Development
- Environmental Preservation & Permitting
- Historic Preservation
- Redevelopment
- Health and/or safety
- Recreation
- Land use/zoning
- Public Education and Outreach
- Transportation

The MPC may refer to the evaluation forms, Worksheets #2 and #4 in the FEMA 386-4 guidance document (provided in Appendix D), to assist in the evaluation process.

The MPC Coordinator shall be responsible for preparing an Annual HMP Progress Report. These annual reports will provide data for the 5-year update of this HMP and will assist in pinpointing implementation challenges. By monitoring the implementation of the Plan on an annual basis, the MPC will be able to assess which projects are completed, which are no longer feasible, and what projects may require additional funding. During the annual MPC meeting, the planning partners shall establish a schedule for the draft development, review, comment, amendment and submission of the Annual HMP Progress Report to NYSEMO.

The Annual HMP Progress Report shall be posted on the City of New Rochelle Hazard Mitigation Plan website to keep the public apprised of the Plan's implementation.

The Plan will also be evaluated and revised following any major disasters, to determine if the recommended actions remain relevant and appropriate. The risk assessment will also be revisited to see if any changes are necessary based on the pattern of disaster damages or if data listed in the Section 5.4 (Hazard Profiles) of this Plan has been collected to facilitate the risk assessment. This is an opportunity to increase the community's disaster resistance and build a better and stronger community.

## UPDATING

44 CFR 201.6.d.3 requires that local hazard mitigation plans be reviewed, revised as appropriate, and resubmitted for approval in order to remain eligible for benefits awarded under DMA 2000. It is the intent of the City of New Rochelle MPC to update this Plan on a five year cycle from the date of initial plan adoption.

To facilitate the update process, the City HMP Coordinator, with support of the MPC, shall use the **third annual MPC meeting** (June of 2012 assuming this Plan is approved in 2009) to develop and commence the implementation of a detailed Plan update program. The City HMP Coordinator shall invite representatives from NYSEMO to this meeting to provide guidance on plan update procedures. This program shall, at a minimum, establish who shall be responsible for managing and completing the Plan update effort, what needs to be included in the updated plan, and a detailed timeline with milestones to assure that the update is completed according to regulatory requirements.

At this meeting, the MPC shall determine what resources will be needed to complete the update. The HMP Coordinator shall be responsible for assuring that needed resources are secured.

Following each five year update of the mitigation plan, the updated plan will be distributed for public comment. After all comments are addressed, the HMP will be revised and distributed to all municipal planning committee members, special purpose district participants and the New York State Hazard Mitigation Officer.

## IMPLEMENTATION OF MITIGATION PLAN THROUGH EXISTING PROGRAMS

The City has provided a detailed listing of related programs, through which mitigation planning may be implemented, in the capability assessment in Section 6.

It is the intention of the MPC to incorporate mitigation planning as an integral component of daily government operations. MPC members will work with local government officials to integrate the newly adopted hazard mitigation goals and actions into the general operations of government and partner organizations. Further, the sample adoption resolution (Appendix B) includes a resolution item stating the intent of the City Council to incorporate mitigation planning as an integral component of government and partner operations. By doing so, the MPC anticipates that:

- 1) Hazard mitigation planning will be formally recognized as an integral part of overall emergency management efforts;
- 2) The Hazard Mitigation Plan, Emergency/Disaster Operating Procedures Emergency Plan, and City Development and Master/Comprehensive Plans will become mutually supportive documents that work in concert to meet the goals and needs of residents, and;
- 3) Duplication of effort can be minimized.

The information on hazard, risk, vulnerability and mitigation contained in this Plan is based on the best science and technology available at the time of the Plan's preparation. It is recognized that this information can be invaluable in making decisions under other planning programs, such as comprehensive, capital improvement, and emergency management plans. Table 7-2 below includes existing processes and programs through which the mitigation plan should be implemented.

Table 7-2. Existing Processes and Programs for Mitigation Plan Implementation

Process	Action	Implementation of Plan
Administrative	Departmental or organizational work plans, policies, and procedural changes	<ul style="list-style-type: none"> <li>• Department of Public Works</li> <li>• Building and Planning Departments</li> <li>• Advisory Boards</li> </ul>
Administrative	Other organizations' plans	<ul style="list-style-type: none"> <li>• Include reference to this plan in future updates of the Westchester County Hazard Mitigation.</li> </ul>
Administrative	Job/Job Descriptions	<ul style="list-style-type: none"> <li>• Unpaid internships to assist in hazard mitigation plan maintenance</li> </ul>
Administrative	Training and Certification	<ul style="list-style-type: none"> <li>• Take advantage of professional education, training and certification opportunities of staff (e.g. Certified Floodplain Manager, Benefit-Cost Analysis training).</li> </ul>
Budgetary	Capital and operational budgets	<ul style="list-style-type: none"> <li>• Continue to include mitigation related projects in annual Capital Improvement Program.</li> <li>• Leverage mitigation grant funding to support local funding for such mitigation projects.</li> </ul>
Regulatory	Executive Orders, ordinances and other directives	<ul style="list-style-type: none"> <li>• Comprehensive Planning - Institutionalize hazard mitigation for new construction and land use. Include reference to and cite recommendations of this Plan in future updates to the City Comprehensive plan.</li> <li>• Zoning and Ordinances</li> <li>• Building Codes-enforcement of codes or higher standard in hazard areas</li> <li>• National Flood Insurance Program – Continue participation in this program and consider participation in Community Rating System Program</li> <li>• Continue to implement storm water management plans.</li> </ul>

Process	Action	Implementation of Plan
		<ul style="list-style-type: none"> <li>Prior to formal changes (amendments) to the master plan, zoning, ordinances, capital improvement plans, or other mechanisms that control development, ensure that they are consistent with the hazard mitigation plan</li> </ul>
Funding	Secure traditional sources of financing	<ul style="list-style-type: none"> <li>Apply for grants from federal (including FEMA Hazard Mitigation Assistance (HMA) funding programs), state government, nonprofit organizations, foundations, and private sources.</li> <li>Continue to make use of grant opportunities through U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG)</li> <li>Other potential federal funding sources include: <ul style="list-style-type: none"> <li>Stafford Act, Section 406 – Public Assistance Program Mitigation Grants</li> <li>Federal Highway Administration</li> <li>Catalog of Federal Domestic Assistance</li> <li>United States Fire Administration – Assistance to Firefighter Grants</li> <li>United States Small Business Administration Pre and Post Disaster Mitigation Loans</li> <li>United States Department of Economic Development Administration Grants</li> <li>United States Army Corps of Engineers</li> <li>United States Department of Interior, Bureau of Land Management</li> <li>Other sources as yet to be defined</li> </ul> </li> <li>See Appendix E for additional funding sources</li> </ul>
Partnerships	Develop creative partnerships, funding and incentives	<ul style="list-style-type: none"> <li>Public-Private Partnerships</li> <li>State Cooperation</li> <li>In-kind resources</li> </ul>
Partnership	Existing Committees and Councils	<ul style="list-style-type: none"> <li>Local School Districts</li> <li>Local Government Committees: <ul style="list-style-type: none"> <li>Planning Board</li> <li>Zoning Board of Appeals</li> <li>Conservation Advisory Council</li> <li>Open Space Committee</li> </ul> </li> <li>Commerce and Merchants Association</li> <li>Homeowner Organizations, including Halcyon Park Homeowner's Association</li> <li>County Park Commission</li> </ul>
Partnership	Working with other federal, state, and local agencies	<ul style="list-style-type: none"> <li>Army Corps of Engineers (USACE)</li> <li>American Red Cross</li> <li>Department of Homeland Security (DHS)</li> <li>Federal Emergency Management Agency (FEMA)</li> <li>National Oceanic and Atmosphere Agency (NOAA)</li> <li>National Weather Service (NWS)</li> <li>New York Department of Transportation (NYDOT)</li> <li>New York Department of Environmental Conservation (NYDEC)</li> <li>NY State Emergency Management Office (SEMO)</li> <li>United States Department of Agriculture (USDA)</li> <li>United States Department of Transportation (USDOT)</li> <li>United States Geological Service (USGS)</li> <li>Watershed Associations</li> </ul>

During the annual plan evaluation process, the MPC will identify additional policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions, and include these findings and recommendations in the Annual HMP Progress Report.

## CONTINUED PUBLIC INVOLVEMENT

The City of New Rochelle is committed to the continued involvement of the public in the hazard mitigation process. Therefore, copies of the Plan will be made available for review during normal business hours at City Hall.

The City HMP Coordinator will be responsible for receiving, tracking, and filing public comments regarding this HMP. Contact information is:

Mr. Omar T. Small  
Assistant to the City Manager  
City of New Rochelle  
City Hall  
515 North Ave.  
New Rochelle, NY 10801

Phone: 914-654-2142  
Email: [osmall@newrochelleny.com](mailto:osmall@newrochelleny.com)

The public will have an opportunity to comment on the Plan at the annual review meeting for the HMP and during the 5-year plan update. The annual progress reports will be posted on the City mitigation website in addition to the Hazard Mitigation Plan. The City will maintain this website, posting the annual progress reports and maintaining an active link to collect public comments.

The HMP Coordinator is responsible for coordinating the Plan evaluation portion of the meeting, soliciting feedback, collecting and reviewing the comments, and ensuring their incorporation in the 5-year plan update as appropriate. Additional meetings may also be held as deemed necessary by the planning group. The purpose of these meetings would be to provide the public an opportunity to express concerns, opinions, and ideas about the mitigation plan. Annual progress reports will also be posted to the project web site.

The HMP Coordinator shall be responsible to assure that:

- Public comment and input on the Plan, and hazard mitigation in general, are recorded and addressed, as appropriate. Opportunity to comment on the plan will be provided directly on the project web site. Provisions for public comment in writing will also be made. All public comments shall be addressed to:

Mr. Omar T. Small  
Assistant to the City Manager  
City of New Rochelle  
City Hall  
515 North Ave.  
New Rochelle, NY 10801

Phone: 914-654-2142  
Email: [osmall@newrochelleny.com](mailto:osmall@newrochelleny.com)

- Copies of the latest approved Plan (or draft in the case that the five year update effort is underway) are available for review at City Hall along with instructions to facilitate public input and comment on the Plan.
- Appropriate links to the City of New Rochelle Hazard Mitigation Plan website are maintained.
- Public notices are made as appropriate to inform the public of the availability of the Plan, particularly during Plan update cycles.