Hazard Mitigation Planning Standards

Dear Hazard Mitigation Partner:

Congratulations on taking the first steps to create or update a multi-hazard mitigation plan for your community! Based on New York State's disaster history, the New York State Department of Homeland Security and Emergency Services (NYS DHSES) recommends your mitigation plan consider incorporating the standards below from the earliest planning phases.

PLEASE NOTE: These will be "required actions" for any hazard mitigation plan developed with funds administered by NYS DHSES and will be part of all contracts executed with grant recipients after October 15, 2012. All grantees are encouraged to include this information in their "Request for Proposals" and to provide it to their consultants before planning begins in earnest.

1. Counties and communities should invite (at a minimum) the following stakeholders when initiating the planning process and identifying strategies and specific projects:

    - County Hazard Mitigation Coordinators and Floodplain Professionals
    - County Emergency Managers
    - County Planners & GIS staff
    - County Soil & Water Conservation Districts
    - Regional & Metropolitan (Transportation) Planning Organizations
    - Delaware and Susquehanna River Basin Commissions (if applicable)
    - Local Hazard Mitigation Coordinators and Floodplain Managers
    - Local Code Enforcement Officials
    - Local Emergency Management (Emergency Manager, Fire & Police Chiefs)
    - Local Planners and planning consultants (if applicable)
    - Local Engineers and engineering consultants (if applicable)
    - Local Public Works or Highway Superintendents

    Inviting and encouraging participation of the local officials noted above is the best way to ensure success in the planning phases that develop a community's mitigation strategies and identify its specific projects. Plans developed without the participation of land use or community planners, and DPW officials, engineers, or others personally familiar with past damages to local infrastructure are less likely to contain viable, innovative or useful projects.

    The goal is to include the widest range of organizations and stakeholders to develop a hazard mitigation plan that best suits your community's unique needs. **Plans developed with NYS DHSES-administered funds must document that the stakeholders above were invited to participate at each phase, and whether they did or not.**

2. As part of the analysis of critical facilities, counties and communities should identify mitigation strategies and projects for any such facility that has ever sustained flooding, even if it is not located in a 100-year floodplain on a current (adopted) or draft FEMA Flood Insurance Rate Map (FIRM). Per FEMA's Part 9 regulations, critical facilities as defined by FEMA should be protected to a 500-year flood event. Identified projects should include the information described in 5a below. If mitigation projects have already been performed to address or reduce previous flooding, with or without FEMA assistance, the plan should also analyze these and document:

    - the original problem and the estimated annual damages;
    - the project, its cost, and the damages avoided since implementation;
    - other option(s) considered, their estimated costs, why they were deemed not feasible;
    - how well the project performed in subsequent events, if your basic assumptions were accurate, and what you'd change if you were doing it again;
    - social, economic or environmental considerations that support/challenge the project.

    Critical public facilities include those for police, fire protection/emergency services, medical care, education, libraries, utilities and other essential community services, the administrative and support facilities essential to their operation (as defined by FEMA), as well as major communication centers and facilities designed for bulk storage of chemicals, petrochemicals, hazardous or toxic substances or floatable materials (as defined by NYS DEC).

    Critical private non-profit (PNP) facilities include those for fire protection/emergency services, medical care, education, utilities, child care facilities, alcohol and drug rehabilitation facilities, custodial care, homeless shelters, libraries and other facilities that provide health and safety services of a governmental nature. Communities may also want to analyze risks to major employers and assess the economic impact of prolonged down-time due to disasters.

    The goal is to ensure that critical facilities remain accessible and functional before, during and after disasters to meet the community's continuity of government (COG) and continuity of operations (COOP) needs, and to support important emergency, response, government and sheltering functions. **Plans developed with NYS DHSES-administered funds must document that proposed (or already implemented) projects will protect critical facilities to a 500-year flood event or the actual worst-damage scenario, whichever is greater.**

3. Counties and communities containing a 100-year floodplain on either a current (adopted) or draft FEMA Flood Insurance Rate Map (FIRM) should identify:

    a. Sites for the placement of temporary housing units to house residents displaced by disaster. This can be an existing mobile home park, public or private land or parkland, or a site easily convertible to accept the temporary housing units, which, per the New York State Uniform Fire Prevention and Building Code, must have floor assemblies placed no less than 2' above the Base Flood Elevation (i.e., of the 100-year flood level). If sites are in a neighboring community, they should be discussed with that community and consistent with its mitigation and emergency plans, evacuation routes, etc.

    b. Potential sites within the community suitable for relocating houses out of the floodplain, or building new houses once properties in the floodplain are razed. The exploration should identify all suitable sites currently owned by the jurisdiction, and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws.

The goal is to provide more immediate short-term and long-term housing options to residents in flood-prone homes, to continue their active involvement in their neighborhoods, schools or places of worship, and to avoid or reduce personal hardship and impacts to the local economy and tax base. **Plans developed with NYS DHSES-administered funds must identify potential sites and any pre-disaster actions required to make them viable, and include a letter from the local floodplain administrator listing any actions required to ensure conformance with the NYS Uniform Fire Prevention and Building Code, the applicable local floodplain law, etc.**

4. Communities with residential neighborhoods or critical facilities (see 2 above) that have been flooded, inundated, or isolated by water, even if they are not located in a 100-year floodplain on a current (adopted) or draft FEMA Flood Insurance Rate Map (FIRM), should develop evacuation routes and procedures (or analyze/update current evacuation routes and shelter procedures based on recent flooding) and identify shelters, including provisions for a range of medical needs, accommodation for pets, and compliance with the Americans with Disabilities Act (see www.ada.gov).

   The goal is to protect residents and minimize stress and personal hardship during disasters. **Plans developed with NYS DHSES-administered funds must identify evacuation routes and shelters (or refer back to such components in an existing valid plan), any pre-disaster actions required to make them viable, evidence of coordination with adjoining communities, and a project lead/point of contact and timetable for implementing new items or revisions.**

5. Counties and communities should incorporate the following items and features in the strategies and projects sections of their plans:

   a. The Plan should include all mitigation projects on the community's wish list, even those that may not meet FEMA eligibility or Benefit-Cost Analysis requirements, since funding should be sought from multiple sources to achieve a community's mitigation goals most quickly. Each project identified should include a brief description of:

      - the problem and the estimated annual damages;
      - the preferred option, its estimate cost, and the estimated annual damages that will be avoided if it is implemented;
      - how the proposal might be eligible under grant criteria other than mitigation (e.g., coastal, sustainability or climate change initiatives, brownfield funds);
      - other option(s) considered, their estimated costs, and their challenges or why they were deemed not feasible;
      - the social, economic or environmental considerations that support/challenge it;
      - any steps that need to be taken (e.g., engineering studies) before the project can be implemented, the person(s) or organization(s) with lead and supporting roles in completing those steps, and an estimated timetable for completion.

      The goal is to have all the community's projects in one place to easily and quickly identify viable candidates when grants are available from FEMA and other private, local, State or Federal agencies. **Plans developed with NYS DHSES-administered funds must use the attached template prepared by FEMA Region II as a starting point for developing a format to describe the projects identified in individual communities.**

b. The Plan should include a list of potential local, State and Federal funding sources that apply to the projects identified as well as public-private partnerships worth pursuing. This should include a brief description of the programs and links to webpages for those opportunities. (N.B.: lack of an identified funding source or program should not prevent a project's inclusion in a community's list of possible mitigation actions.)

   The goal is to link identified projects with viable funding sources, and not to rely solely on the availability of FEMA funding, making implementation that much more likely. **Plans developed with NYS DHSES-administered funds must include this list, which must incorporate active web links to the appropriate agency page.**

c. The Plan should include a section that documents mitigation projects completed by the county or the jurisdiction within its borders, whether funded locally or by private, state or federal agencies and organizations. Each project should include a brief description of:

   - the original problem and the estimated annual damages;
   - the project, its cost, and the damages avoided since implementation;
   - the other option(s) considered, their estimated costs, and their challenges or why they were deemed not feasible;
   - how well the project performed in subsequent events, if your basic assumptions were accurate, and what you'd change if you were doing it again;
   - the social, political or environmental considerations that supported/challenged the proposal, and the stakeholders, approaches and other factors that contributed to its successful implementation.

   The goal is to provide a context for the community's projects, to act as a source of ideas for mitigation projects and evaluate the accuracy of assumptions and engineering solutions to inform future, similar projects, and to support future mitigation planning and its coordination with other planning, zoning and environmental procedures within the community. **Plans developed with NYS DHSES-administered funds must use the attached template prepared by FEMA Region II as a starting point for developing a format to describe its communities' already-completed projects.**

6. Jurisdictions should also take into account how climate change may affect their vulnerability to the following hazards, specifically the increased frequency of occurrence and/or severity for: Flooding, Wildfire, Drought and Extreme Temperatures.

   If it is determined that climate change is likely to increase the frequency or severity of a specific hazard, jurisdictions should identify how they will adapt to or mitigate for these issues. Counties and communities with coastal property should also analyze their vulnerability to sea level rise.

   The goal is to plan for and accommodate climate change and sea level rise to protect residents, avoid or reduce damage to property and public infrastructure, and reduce personal hardship. **Plans developed with NYS DHSES-administered funds must include this information within their discussion of these hazards and must contain strategies and projects to address them.**

7. Draft plans should be placed on an existing county/community website, or one created for the purpose of soliciting comments, for 30 days or the time prescribed by local law, whichever is greater. The webpage should identify the name, mailing address, day phone and/or e-mail address

for the person responsible for receiving and reviewing comments on the draft hazard mitigation plan. The final plan should also be placed on an existing county/community website, or one created for the purpose of educating the public about the community's mitigation initiatives, and should contain the contact information specified above for the person responsible for maintaining the plan and answering questions about it once it has been adopted.

The goal is to educate the public about how mitigation can both save lives and avoid repetitive property damage in times of diminishing local infrastructure budgets. **Plans developed with NYS DHSES-administered funds must be posted (draft plan during the public comment period, and final adopted versions after adoption) and must include the specified contact information.**

8. **For plans developed with NYS DHSES-administered funds: final payment will occur only after 50% of the participating jurisdictions have adopted the FEMA-approved plan and provided adoption resolutions to NYS DHSES. For county-led hazard mitigation planning efforts, the county must be one of the adopting jurisdictions.**

Some of these standards may be considered Response activities not meeting the traditional definition of Mitigation actions. They also may not be eligible for grant assistance under FEMA's mitigation programs, and they will not "count" toward the strategy development or project identification that's required of participants in the mitigation planning process: communities must still identify projects that meet the traditional definition of mitigation for each natural hazard analyzed in their local plans.

However, these will be "required actions" for any mitigation plan developed with funds administered by NYS DHSES, and part of all contracts executed with our grant recipients after October 15, 2012. Questions? Contact the Hazard Mitigation Section at 518-292-2304 or NYSOEMHazMit@dhses.ny.gov.

Other Resources

The following online resources may also be helpful as you begin the mitigation planning process:

- The 2013 Local Mitigation Planning Handbook is the official guide for local governments to develop, update and implement local mitigation plans - http://www.fema.gov/media-library/assets/documents/31598?id=7209 –
- 2011 Local Mitigation Plan Review Guide - Use this review guide & tool as FEMA will use it to review plans exclusively, beginning October 1, 2012.
- NYS Sea Level Rise Task Force materials and findings: www.dec.ny.gov/energy/75794.html.
- NYS Climate Smart Communities: http://www.dec.ny.gov/energy/50845.html
- NYS Community Sustainability: http://www.dec.ny.gov/energy/76483.html
- Beyond the Basics: Best Practices in Local Mitigation Planning. University of North Carolina. http://mitigationguide.org/about-this-handbook-2/
- NYSERDA Climate Change Report ("Climaid") : www.nyserda.ny.gov/Publications/Research-and-Development/Environmental/EMEP-Publications/Response-to-Climate-Change-in-New-York.aspx
- "Disaster Resilience: A National Imperative" by the Committee on Increasing National Resilience to Hazards and Disasters, the Committee on Science, Engineering, and Public Policy, and The National Academies: www.nap.edu/catalog.php?record_id=13457.

Action Worksheet	
Name of Jurisdiction: **Name of Haz. Mit. Plan:**	
Risk / Vulnerability	
Problem being Mitigated:	
Potential Actions/Projects (not being Implemented at this time)	
Actions/Projects Considered with Summary Evaluation of Each:	
Action or Project Intended for Implementation	
Action/Project Number: **Name of Action or Project:**	
Action or Project Description:	
Summary of Evaluation[1] **Benefits (losses avoided)** **Estimated Cost** **Other Factors Considered**	
Plan for Implementation	
Responsible Organization:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Date of Status Report: **Report of Progress:** **Evaluation of Effectiveness:**	

[1] Summarize the evaluation of potential actions and the action selected for implementation. Always consider the benefits and costs. Other criterion might include: Technical Feasibility, Political Support, Legal Authority, Environmental Impacts, positive and negative Social Impacts, and whether the jurisdiction has a person willing to be the Local Champion for implementation and is this person with the full support of the jurisdiction Administratively Capable of implementing the action selected for implementation.

Action Worksheet Instructions	
Name of Jurisdiction: **Name of Haz. Mit. Plan:**	*Give the name of your municipality* *Name of the Hazard Mitigation Plan when it is a Multi-Jurisdictional Plan*
Risk / Vulnerability	
Problem being Mitigated:	*Describe the specific problem or area of concern. Each Action Worksheet should describe a unique problem. A well written problem statement is key to a successful mitigation action.*
Potential Actions/Projects (not being Implemented at this time)	
Actions/Projects Considered with Summary Evaluation of Each:	*For each problem, consider different types of mitigation actions/projects. Document this consideration by naming the potential actions/projects considered and by explaining why each is not being implemented. The documentation of alternatives encourages comprehensive thinking and facilitates the preparation of grant applications.*
Action or Project Intended for Implementation	
Action/Project Number: **Name of Action or Project:**	*Give each action a unique number and name (title) for easy reference. It is recommended that the municipality's initials be part of the action number to avoid confusion in multi-jurisdiction plans. For example, the City of Long Beach might use the number LB-1 for their first action.*
Action or Project Description:	*Describe the work to be done. It should be a unique statement of work, not a generic statement. Sources, such as FEMA's Mitigation Ideas publication, include generic actions to trigger the brainstorming of specific actions that could be taken. These generic actions must be refined into specific actions that address the specific problem at hand.*
Summary of Evaluation **Benefits (losses avoided)** **Estimated Cost** **Other Factors Considered**	*Summarize the evaluation of the action/project. Part of this evaluation must be a consideration of the benefits (losses avoided) and costs for the project. Describe any other factors and how they affected the decision. Factors such as technical, legal, environmental, social, and political considerations. The capacity of the jurisdiction to undertake this work should also be considered.*
Plan for Implementation	
Responsible Organization:	*This should be the name of a department or agency, not the name of the municipality.*
Action/Project Priority:	*Actions may be numbered in priority order or could be assigned a general priority, such as high, medium, or low.*
Timeline for Completion:	*State the target time when the action/project will be completed. Other timeline information might also be provided, such as the estimated start date. All actions must have a point in time when they will be completed in order to be considered a mitigation action as defined by FEMA. Actions which are "ongoing" (e.g. maintenance) reduce risk for the short-term and may be very worthy activities, but they do not meet the definition of mitigation action for this plan. Mitigation action for this plan must reduce risk for the long-term.*
Potential Fund Sources:	*Multiple sources of potential funding should be listed when appropriate.*
Local Planning Mechanisms to be Used in Implementation, if any:	*Other plans (e.g. land use plans) and processes (e.g. capital budgeting process) are often means through which mitigation actions can be more easily implemented. Consider the use of local planning mechanisms and identify any existing planning mechanisms that will be used to implement this action/project.*
Progress Report	
Date of Status Report: **Report of Progress:** **Evaluation of Effectiveness:**	*In the future this space may be used to report on progress. Leave this space blank until it is time to complete a status report.*

Action Worksheet Example	
Name of Jurisdiction: **Name of Haz. Mit. Plan:**	Town of London, Bristol County NY Bristol County Multi-Jurisdictional Hazard Mitigation Plan
Risk / Vulnerability	
Problem being Mitigated:	The Taunton River is subject to ice jams near River Road. On multiple occasions homes in this area have been flooded. Homeowners have incurred high rebuilding costs, over and above insurance claims. Traffic along this thoroughfare is disrupted during flood events.
Potential Actions/Projects (not being Implemented at this time)	
Actions/Projects Considered with Summary Evaluation of Each:	Taunton River Rock Removal – Remove the large rocks from the river that catch ice flows. This alternative is not being pursued because the financial costs would be very high and the effectiveness of this is in doubt. It would also jeopardize the viability of the river as a fishing destination. Acquire Homes – Offer to purchase the affected homes. Upon taking ownership, remove the homes and return the land to its natural state. This alternative is not being pursued because homeowners do not want to leave the community. Removal of these homes would also diminish the town's tax base. Educate River Road Homeowners – Distribute a brochure to River Road homeowners describing the probability of future flooding and suggesting possible mitigation steps they may take. This option is not being pursued because the homeowners are well aware of the risk and the mitigation actions they may take. They have already several smaller / affordable mitigation actions. They cannot afford to do more.
Action or Project Intended for Implementation	
Action/Project Number: **Name of Action or Project:**	L-1: River Road Home Elevations Program
Action or Project Description:	Offer to partially fund the elevation of homes that have been multiple times over the past thirty-years. When homeowners accept this offer, homes will be elevated above base flood evaluation and according to NYS building code.
Summary of Evaluation **Benefits (losses avoided)** **Estimated Cost** **Other Factors Considered**	Partially funding home elevations makes this option affordable to homeowners and avoids a lessening of the town's tax base. The mitigation action would avoid future flood damage of about $750,000. The cost of the elevation program is expected to be just under $500,000. The program would be voluntary, making it more socially and politically acceptable.
Plan for Implementation	
Responsible Organization:	Town Planning Department
Action/Project Priority:	High
Timeline for Completion:	An application for a FEMA grant will be made in year 1and the program should be completed within 3 years.
Potential Fund Sources:	FEMA Hazard Mitigation Grant Program (HMGP) funds FEMA Pre-Disaster Mitigation Program (PDM) funds
Local Planning Mechanisms to be Used in Implementation, if any:	The administration of this activity will be added to Planning Department's annual work plan.
Progress Report	
Date of Status Report: **Report of Progress:** **Evaluation of Effectiveness:**	No report at this time.