

Section 5: COORDINATION OF LOCAL MITIGATION PLANNING

2014 SHMP Update

- Meets Requirements §201.4(c)(4)(i), §201.4(c)(4)(ii), §201.4(c)(4)(iii), and §201.4(d)
- Updated review process for Local Hazard Mitigation Plans (LHMPs)
- Integrated goals and hazard rankings from LHMPs
- Updated current process and criteria for potential funding
- Integrated planning and non-planning grant prioritization process

"Roadmap" Activity¹

In addition to the long-term and ongoing multi-hazard and hazard-specific strategies identified in **Section 4**, DHSES will continue to develop this section in key areas, such as integration of vulnerability and loss data from hazard mitigation plans, over the life cycle of the plan.

Requirement §201. (c)(4)(i): *The section on the Coordination of Local Mitigation Planning **must** include a description of the State process to support, through funding and technical assistance, the development of local mitigation plans.*

Requirement §201. (c)(4)(ii): *The section on the Coordination of Local Mitigation Planning **must** include a description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.*

Requirement §201. (c)(4)(iii): *The section on the Coordination of Local Mitigation Planning **must** include] criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which **should** include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants **shall** be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.*

Requirements §201.4(d): *Plan **must** be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and change in priorities.*

¹ Roadmap Activities are action items to be developed further during the life-cycle of the plan, through the monitoring, evaluation and update process. The comprehensive list of action items can be found in **Sections 2 and 4**.



This section focuses on the State's participation in and support of local mitigation planning. The following topics are addressed in the sub-sections:

- 5.1 Local Funding and Technical Assistance
- 5.2 Local Plan Integration
- 5.3 Prioritizing Local Assistance

5.1 Local Funding and Technical Assistance

***Requirement §201.4(c)(4)(i):** The section on the Coordination of Local Mitigation Planning **must** include a description of the State process to support, through funding and technical assistance, the development of local mitigation plans.*

With the enactment of the Disaster Mitigation Act (DMA) of 2000, all jurisdictions must have a hazard mitigation plan approved by FEMA to receive funding from the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), and the Flood Mitigation Assistance (FMA) program. It is the role of the State to provide funding and technical assistance to local governments for plan development and enhancement, and to ultimately support progress in mitigation by implementation of local initiatives through funding assistance.

5.1.1 Background

Starting in 1997, following the passage of the National Flood Insurance Reform Act of 1994 which mandated the preparation of floodplain management plans as a pre-requisite for project implementations funds, the New York State Division of Homeland Security and Emergency Services (DHSES) Mitigation Section has facilitated and supported planning at the local level. At that time, local community mitigation plans were largely unavailable and local hazard and risk information was not consistently maintained. Since that time, local planning and data management has improved significantly, and the process has evolved into a more formal and intentional effort to focus assistance to local governments in the form of funding and technical assistance for planning as well as projects and activities. Previous updates of the SHMP have documented the continual enhancement of this process.

Local plan development has evolved especially during the past two update cycles to focus on multi-jurisdictional plans at the county level. The *New York State Hazard Mitigation Planning Standards* (October 2012) (**Appendix 5, Attachment A**) were developed to provide guidance for the local planning process and plan content. **This process will continue and become even more fully integrated during the next SHMP plan update cycle. Guidance provided by the Planning Standards ensures that counties will continue to:**

- Meet the requirements of DMA 2000 for local hazard mitigation plans



- Include the unincorporated and incorporated parts of the county, regardless of population
- Specifically address natural hazards and mitigation strategies and initiatives for each jurisdiction
- Develop data, risk assessments, and mitigation strategies that are consistent enough to facilitate not only local analysis and action, but also regional and state-wide analysis and collaborations

5.1.2 Process to Support Local Plan Development

The DHSES Mitigation Section provides support for local plan development on an on-going basis during day-to-day operations, during county LHMP update cycles and in the aftermath of disasters.

Depending on the issue in question, the Mitigation Section may respond immediately or, if research is required, provide a response as quickly as possible. **Questions fielded from local jurisdictions as part of day-to-day operations typically consist of the following topics:**

- Hazard Mitigation Plan development and funding
- Planning process and mitigation strategy
- Project development and/or implementation
- Plan monitoring and evaluation
- Potential funding sources
- Grant applications and funding cycles
- DMA 2000 and 44 CFR 201.4

During a local jurisdiction's plan update cycle, technical assistance requests are addressed as they are received, unless there is a time-critical element related to the deadline for FEMA approval or a grant funding period. Technical assistance may be ongoing throughout a local jurisdiction's plan update cycle.

During and immediately after disasters, the Mitigation Section staff monitors hazard conditions that have impacted or may potentially impact current or planned actions and activities. In addition, the Public Assistance (PA) process allows the Mitigation Section to provide input to state and local project development that may create opportunities for mitigation through Section 406 funding. Following each disaster, the Mitigation Section manages the HMGP, as well as other federal mitigation grant programs that provide funding for plan development and projects.

Assistance is provided by phone, email and face-to-face interactions.



5.1.3 Funding Support for Local Plan Development

LHMPs are an integral part of the strategy for the reduction of risk in New York State. Recognizing their value, funding is available to assist jurisdictions in new and updated LHMP development.

Many jurisdictions require some form of funding assistance to develop and update their LHMPs (FEMA requires that local plans be updated every five years, but plans may be updated more frequently if needed—e.g., after a major disaster). The availability of post-disaster mitigation funds in New York as a result of numerous recent disaster declarations has provided further incentive to local jurisdictions to develop and update their mitigation plans.

The primary source of mitigation funding for local plan development is through FEMA's Hazard Mitigation Assistance (HMA) grant programs, which provides funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages. The FEMA-administered HMA includes the specific grant programs described in **Table 5.1a**.

Table 5.1a: FEMA Unified Hazard Mitigation Assistance (HMA) Program

Hazard Mitigation Grant Program (HMGP)
<p>Purpose: To significantly reduce or permanently eliminate future risk to lives and property from natural hazards. HMGP funds mitigation planning, as well as projects consistent with priorities identified in State, Tribal, or local hazard mitigation plans.</p> <p>Available: Post-disaster - tied to disaster and emergency declarations under the HMA</p>
Pre-Disaster Mitigation (PDM)
<p>Purpose: To provide funds for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event, to reduce immediate overall risks to the population and structures, and long-term reliance on funding from disaster declarations.</p> <p>Available: Annually</p>
Flood Mitigation Assistance (FMA)
<p>Purpose: To reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program (NFIP).</p> <p>Available: Annually</p>

In addition to FEMA HMA grants, plan development funding is available through a State legislative pre-disaster mitigation (L-PDM) grant. The Mitigation Section provides information to local governments related to this source of funding when it becomes available.



The process for providing funding support for hazard mitigation planning begins with FEMA notification to the NYSDHSES Mitigation Section that funding is available to support hazard mitigation planning grants. The State Hazard Mitigation Office, with input from Mitigation Section staff, makes a determination whether funding is adequate to provide to all counties with scheduled plan expiration within the grant period. Fortunately, in the past New York State has had adequate funding to support all counties that commit to the planning requirements described in the Planning Standards. In the case that funding is insufficient to provide assistance to all counties in a funding cycle, the Mitigation Section has developed general criteria that can guide prioritization of planning grants (see **Section 5.3.1**).

Once the funding amount is confirmed and notification of awards is made to the county emergency management offices, requirements of the Planning Standards are defined in contractual obligations.

During the grant contract period, Mitigation Staff coordinates on a regular basis with local sub-grantee jurisdictions. Coordination during the grant period involves quarterly reports and staff availability for monthly outreach through telephone calls and meetings. Six months prior to the end of the grant period (for planning grants), a draft of the plan is submitted to the DHSES Mitigation Section. Extensions may be granted for special considerations, but are determined on a case-by-case basis. Under the “extraordinary circumstances” provision, the State may request an extension from FEMA if a county has received project grant funding and doesn’t have a current FEMA-approved plan in place. In that situation, the county then has 12 months from the expiration date of the project grant to complete their LHMP and have it approved by FEMA.

5.1.4 Funding Assistance for Local Mitigation Plan Development

Table 5.1b defines the nineteen (19) county multi-jurisdictional plans funded by FEMA between 2011 and 2014 (all funded August 27, 2012). Funding was provided primarily through the HMGP and PDM funding programs. Additional jurisdictions received funding assistance through the L-PDM.

Table 5.1b: Multi-Jurisdictional Planning Grant Applications Approved by FEMA

Applicant	4020 Planning Application #	Population	Total Cost	75% Federal Share	Local Share
Chautauqua County	013-001	161,199	\$ 58,250	\$ 43,688	\$ 14,563
Clinton County	019-001	82,128	\$ 40,000	\$ 30,000	\$ 10,000
Columbia County	021-002	63,096	\$ 79,990	\$ 59,993	\$ 19,998



Applicant	4020 Planning Application #	Population	Total Cost	75% Federal Share	Local Share
Dutchess County	027-001	297,488	\$ 300,000	\$ 225,000	\$ 75,000
Franklin County	033-001	51,599	\$ 40,000	\$ 30,000	\$ 10,000
Livingston County	051-001	64,328	\$ 77,880	\$ 58,410	\$ 19,470
Madison County	053-001	72,500	\$ 43,400	\$ 32,550	\$ 10,850
Montgomery County	057-005	50,219	\$ 62,500	\$ 46,875	\$ 15,625
Nassau County	059-019	1,339,532	\$ 300,000	\$ 225,000	\$ 75,000
New York City (including Bronx, Kings, New York, Queens, & Richmond Counties)	061-023	8,000,000	\$ 1,000,000	\$ 750,000	\$ 250,000
Oneida County	065-001	230,000	\$ 100,000	\$ 75,000	\$ 25,000
Town/Village of Warwick (Orange County)	071-020	32,065	\$ 110,000	\$ 82,500	\$ 27,500
Putnam County	079-002	104,741	\$ 206,250	\$ 154,688	\$ 51,563
Schenectady County	093-004	154,727	\$ 64,800	\$ 48,600	\$ 16,200
Schuyler County	097-001	18,343	\$ 50,000	\$ 37,500	\$ 12,500
Suffolk County	103-001	1,493,350	\$ 533,000	\$ 399,750	\$ 133,250
Ulster County	111-007	182,493	\$ 200,000	\$ 150,000	\$ 50,000
Westchester County	119-007	949,113	\$ 240,000	\$ 180,000	\$ 60,000
Wyoming County	121-001	43,000	\$ 39,500	\$ 29,625	\$ 9,875
TOTALS		13,389,921	\$ 3,545,570	\$ 2,659,178	\$ 886,393

5.1.5 Process for Technical Assistance Support for Local Plan Development

Although funding assistance provides a strong impetus for local mitigation planning efforts, technical assistance from the DHSES Mitigation Section ensures that local plans meet FEMA requirements and support the state's overall mitigation strategy.



Between 2011 and 2014, New York State was impacted by multiple major disasters that reprioritized limited staffing in the Mitigation Section. Although technical assistance was continuously provided during this period, staff resources for local plan review were limited. Despite the impact to Mitigation Section resources, technical assistance has been ongoing through trainings, web-based resources and one-on-one phone and email support. Day-to-day technical assistance support for local plan development is available to all counties. During the LHMP planning update and review cycles, guidance is provided to assist in planning efforts. Additionally, the Mitigation Section promotes FEMA's free online mitigation training courses through the FEMA website, as part of the Independent Study Program (ISP).

The DHSES Mitigation Section provides technical assistance for hazard mitigation planning to any community that requests it. Technical assistance may take the form of guidance documents, regional workshops, one-on-one meetings with the community, or telephone conversations. Mitigation Staff also review and critique draft mitigation plans to ensure they meet the federal requirements prior to submitting the plans to FEMA for review and approval.

In addition, many state agencies and organizations (including colleges and universities) have specialized capabilities (e.g., engineering, scientific) that can provide guidance, technical assistance, and support to communities when faced with disasters, or during the mitigation planning process. These types of services and resources might be cost prohibitive for local jurisdictions to maintain, but state agencies' technical assistance to communities can enhance risk and vulnerability assessments, and help to identify cost-effective and technically feasible mitigation actions.

During the maintenance process for local plan coordination, the DHSES Mitigation Section provides local communities with mitigation planning tools, and guidance. In addition, the Mitigation Section may provide materials by request on a limited basis such as hazard maps, and data including landslide susceptibility, wind zone maps, historical information including disaster declarations, and NFIP report statistics describing both the number of policies and claims. The Mitigation Section has also initiated a process to provide print maps and downloadable PDF and Geographic Information System (GIS) files, hazard maps and data, and a number of planning tools and guidance resources via the DHSES Mitigation web page. During the update process, State mitigation staff also review and critique drafts of local mitigation plans to ensure that they meet the federal mitigation planning requirements prior to submitting the plans to FEMA for review and approval.

The DHSES Planning Section provides support for the use of the state's hazard analysis software (HAZNY) which has become a tool for local communities preparing DMA 2000 LHMPs. During the 2014 SHMP update process, HAZNY was used in a modified format as the State's hazard ranking tool. This process used the general HAZNY criteria in a manner consistent with the local hazard ranking method, but added a mitigation potential weighting factor to determine the final hazard score. (See **Section 3.2.1** for a description of the "HAZNY-Mitigation" ranking process methodology used for the 2014 SHMP.)



5.2 Local Plan Integration

Requirement §201. (c)(4)(ii): *The section on the Coordination of Local Mitigation Planning **must** include a description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.*

The local plan review and integration process provides the opportunity for the DHSES Mitigation Section to assess progress in local mitigation planning and projects, as well as trends in development and changes in priorities.

Since 2011, funding and technical assistance support provided by the DHSES Mitigation Section contributed to the successful approval of numerous multi-jurisdictional LHMPs. Of the 62 counties in New York State, 28 currently (as of October 30, 2013) have FEMA-approved LHMPs, and seven (7) have been funded and submitted drafts for review. Also, one (1) county has been funded and submitted a pre-draft; 19 have been funded with no draft yet submitted; one (1) county has a plan approved for county government only. Two (2) county plans need revision and three (3) have expired. During the 2014 SHMP update process, 56 county plans were available for review. **Table 5.2c** provides the current status of all county plans and how to access them.

Table 5.2c: Local Hazard Mitigation Plan Approval Status (2011-2014)

County	Status	Plan Date	Access (Web, Electronic, Hard Copy, or Not Available)
Albany	Approved	2010	E
Allegany	Approved	2011	W
Bronx*	Funded, No Draft Submitted	2009	W
Broome	Approved	2013	W
Cattaraugus	Funded, Draft Submitted	2013	W
Cayuga	Funded, Draft Submitted	2013	W
Chautauqua	Funded, No Draft Submitted	(New)	W
Chemung	Approved	2012	W
Chenango	Expired	2008	W
Clinton	Funded, Draft Submitted	2013	W
Columbia	Funded, Draft Submitted	2008	W
Cortland	Approved	2011	N/A
Delaware	Approved	2013	W
Dutchess	Funded, No Draft	2011	W (hazards only)
Erie	Funded, Draft Submitted	2005	W
Essex	Approved	2011	W
Franklin	Funded, Pre-Draft Submitted	2013	E
Fulton	Approved	2011	W
Genesee	Approved	2011	W



County	Status	Plan Date	Access (Web, Electronic, Hard Copy, or Not Available)
Greene	Approved	2011	E
Hamilton	Needs Revisions	n/a	N/A
Herkimer	Needs Revisions	n/a	N/A
Jefferson	Approved	2011	W
Kings*	Funded, No Draft Submitted	2009	W
Lewis	Approved	2011	W
Livingston	Funded, No Draft Submitted	2008	N/A
Madison	Funded, No Draft Submitted	2008	W
Monroe County	Approved	2011	W
Montgomery	Approved	2009	W
Nassau	Funded, No Draft Submitted	2007	E
New York*	Funded, No Draft Submitted	2009	W
Niagara	Approved	2009	W
Oneida	Funded, No Draft Submitted	2007	W
Onondaga	Approved	2012	W
Ontario	Approved	2010	E
Orange	Approved (for govt. only)	2011	W
Orleans	Expired	2008	W
Oswego	Approved	2013	W
Otsego	Approved, Pending Adoption	2013	W
Putnam	Funded, No Draft Submitted	New	N/A
Queens*	Funded, No Draft Submitted	2009	W
Rensselaer	Approved	2012	W
Richmond*	Funded, No Draft Submitted	2009	W
Rockland	Approved	2011	W
Saratoga	Approved	2011	W
Schenectady	Funded, No Draft Submitted	2008	W
Schoharie	Approved	2013	W
Schuyler	Funded, No Draft Submitted	2008	W
Seneca	Expired	2008	E
St. Lawrence	Funded, No Draft Submitted	New	N/A
Steuben	Approved	2010	W
Suffolk	Funded, No Draft Submitted	2008	W
Sullivan	Approved	2013	W
Tioga	Approved	2013	W
Tompkins	Funded, Draft Submitted	2013	W
Ulster	Funded, No Draft Submitted	2011	W
Warren	Approved	2011	W
Washington	Approved	2010	H/C
Wayne	Funded, No Draft Submitted	2007	W
Westchester	Funded, No Draft Submitted	2005	E, H/C
Wyoming	Funded, Draft Submitted	2008	W
Yates	Approved	2011	W

Source: FEMA and DHSES; *New York City Plan



The State Mitigation Section is responsible for the initial review and coordination of all local mitigation plans within New York State. To ensure consistency in the review process, Mitigation staff use FEMA's Local Mitigation Plan Review Guide (October 1, 2011) and the Local Mitigation Plan Review Tool as review criteria. This guide provides the framework for coordination between the State and FEMA, and describes the process for plan submittals, reviews and revisions.

Prior to 2011, DHSES resources were sufficient to support continuity in review of local mitigation plans. Between 2011 and 2012, repetitive disasters and staffing changes led to challenges in performing local plan reviews. For these reasons, FEMA provided temporary assistance during this period. Since 2013, DHSES Mitigation Section resources have been sufficient to once again assume full responsibility for this function and it is anticipated that this capability can be sustained throughout the implementation period of the 2014 SHMP.

As of October 2012, counties are required to utilize the *New York State Hazard Mitigation Planning Standards (Appendix 5, Attachment A)* for the LHMP planning process, if receiving a state-administered grant to prepare a plan. These standards were developed in close coordination with FEMA Region II hazard mitigation staff. **The state's goal is to make local plans more useful and consistent and to tie them to other non-mitigation planning and activities in disaster management, such as through the following planning recommendations:**

- Communities that convene to prepare a county-wide plan must review flood maps; the state's Planning Standards encourage them to develop or upgrade evacuation routes at the same time.
- The Planning Standards encourage tracking damages at critical facilities in floodplains to document repetitive damage, in order to mitigate at every opportunity, and take full advantage of funding opportunities to mitigate vulnerable facilities through FEMA mitigation funding as well as other potential federal, state and local funding sources.
- Communities are encouraged to prioritize opportunities to mitigate repetitive flood loss properties.
- Communities are encouraged to identify suitable locations to install temporary post-disaster housing and/or relocate flood-damaged homes, keeping people in their communities and near their friends, schools, and places of worship both short-term and long-term.

As of October 30, 2013, 38 of the 62 counties in New York State have FEMA-approved hazard mitigation plans, have submitted drafts, or have plans pending approval or adoption. The other 24 counties were in various stages of plan updates. DHSES works with all counties to provide assistance as well as funding, when available, to counties that are updating plans or do not have a plan in place. In addition, while some counties choose to update their plans without funding assistance, DHSES continues to help in identifying potential funding sources for plan development for counties requiring assistance.



5.2.1 Process and Timeframe to Review Local Plans

The DHSES Mitigation Section has a state review process and timeframe in place for local mitigation plans. The state reviews each of the county plans for applicability to the federal requirements prior to FEMA's formal review. The process and timeframe employed by the state for review is described in **Table 5.2d**.

Table 5.2d: DHSES Local Plan Review Process and Timeframe

Step 1:	The initial draft of the county plan is sent to DHSES for review which takes place within a timeframe that is dependent upon current disaster status, Mitigation Section staff availability, and the number of plans pending review. If required, revisions are sent back to the county for correction. If no revisions are required, the draft is submitted to FEMA for review and approval.
Step 2:	The county sends the revised draft to DHSES within the agreed-upon timeframe. If all revisions are corrected, DHSES submits the plan to FEMA for review and approval.
Step 3:	DHSES reviews the revisions. If additional revisions are required, the draft is sent back to the county. If all revisions are addressed, DHSES submits the plan to FEMA for review and approval.
Step 4:	FEMA completes its review within 45 days and forward their comments to DHSES. DHSES reviews FEMA's comments and promptly forwards DHSES and FEMA review comments to the county.
Step 5:	The county addresses any FEMA comments. The county submits the corrected final draft to DHSES.
Step 6:	DHSES checks the corrected final draft and forwards it to FEMA for review of corrections.
Step 7:	FEMA completes its second review within 45 days and if all comments were satisfactorily addressed in the corrected final draft of the plan, a letter stating that the plan is adoptable is mailed to DHSES and DHSES notifies the county. In cases where comments have not been addressed satisfactorily, the county again addresses the comments and repeats the process, thereby delaying the timeframe for approval and adoption.
Step 8:	The plan is then formally adopted by all participating jurisdictions within the county within a reasonable period that allows for local review, public participation, legal notices, public hearings, and governing body adoptions. The local adoption process should be completed within a 30- to 60-day timeframe.
Step 9:	The plan is officially approved. The timeframe from the county's submission of the initial draft plan to adoption of the final approved plan can take up to six (6) months to complete.



Submittal of local plans to FEMA should include the following:

1. Transmittal letter or email from the State Hazard Mitigation Officer, Governor's Authorized Representative, or other delegated State officer.
2. Local Mitigation Plan document to be reviewed.
3. *Plan Review Tool* completed by the State.
4. If the plan is already adopted by one or more of the participating local jurisdictions, copies of any adopting resolution(s) or letter(s) must be included.

Throughout the development, review and update process, DHSES serves as a liaison between FEMA and the local jurisdictions.

5.2.2 Process and Timeframe to Coordinate and Link Local and State Plans

This section provides a description of the State's process and timeframe for coordinating and linking local plans to the state plan. In order to meet the local plan integration requirement, the risk assessment and mitigation strategies of local plans are reviewed to ensure consistency with the state plan.

The review of local plans focuses on consistency with three main areas:

1. Federal requirements for Local Hazard Mitigation Planning
2. New York State's hazards and risks
3. New York State's mitigation strategy, goals, and actions

The purpose of this review is to cross-check the state hazard data with that of the local risk assessments. Further, the review ensures that the State's mitigation strategy is reflective of the local mitigation strategies. DHSES also utilizes this opportunity to identify areas where local plans may be improved during the local plan updates.

The State's methodology for local plan review has evolved over the past several mitigation plan updates. In 2005, fewer local plans had been developed, approved and adopted, so the time required to review and integrate local plan data in the SHMP was minimal. The methodology described in the 2011 plan was built on the increasing demand for on-going plan review, funding, technical assistance and monitoring with local jurisdictions. The process at that time was scheduled to commence two years into the SHMP planning cycle, at which time information in the FEMA-approved local plans was to be reviewed and, as deemed appropriate, and incorporated into the appropriate sections of the SHMP (i.e. hazard profiles, jurisdictions most vulnerable, etc.), in an effort to continually improve the accuracy of the SHMP. Information from the local plans was to be compared at that time to the risk areas defined in the SHMP for each hazard, and the SHMP would be adjusted as needed.

Because staff resources since the adoption of the 2011 have had to be redirected to focus on disaster recovery priorities resulting from multiple major disasters, the intended timing



for initiating the local plan integration in the SHMP update was delayed and did not occur until the 2014 update planning process.

A similar methodology was followed for the 2014 SHMP update; however, due to the time-constrained plan update cycle, review of local plans did not begin until three months prior to expiration of the 2011 plan.

The process used for the 2014 update began with identification of all current FEMA-approved county plans and how to access these, such as whether via the web, electronic copy and/or hard copy. Although most LHMPs are available online (and the 2012 NYS *Hazard Mitigation Planning Standards* now require that counties post plans on their websites once approved) some plans remain available only in hard copy at the DHSES Mitigation Section. During the planning process, 56 of 62 county plans were accessed and reviewed. **Table 5.2c** describes the status of county mitigation plans (as of October 30, 2013.)

Hazard Identification and Profiles

The second step to coordinate and link the 56 reviewed county plans to the SHMP was to develop a hazards matrix, based on the 15 hazards identified by the SHMP (see Section 3.0.) Each county plan was reviewed and all identified and ranked hazards were included in the matrix. Next, using the hazards matrix, a separate hazard table was developed for each hazard indicating the top five counties (or less, if fewer incidents had occurred) by previous occurrences and losses. During this step, all counties ranking that hazard as high or moderately high were also noted in the matrix.

DHSES reviewed the hazards identified in both the state and local plans to ensure that there was consistency between the documents. In the 2014 SHMP, DHSES refined its list of hazards to reflect those hazards commonly found in local plans and those hazards which affect the state (Section 3.0). For example, hazards that have no potential to impact the state, such as volcanoes, were removed from the hazard identification list. This hazard list was also used to review local plans for the 2014 update. The natural hazards addressed in this plan are described in **Section 3**.



Table 5.2e: Local Natural Hazards Ranking Matrix (*RA= Risk Assessment)

County	Flooding	RA Flooding Ranking	Hurricane	RA Hurricane Ranking	High Wind	RA High Wind Ranking	Severe Winter Storm	RA Severe Winter Storm Ranking	Hailstorm	RA Hailstorm Ranking
ALBANY	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
ALLEGANY										
- Northern Region	YES	MODERATE HIGH	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
- Western Region	YES	HIGH	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
- Southern Region	YES	HIGH	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
- Eastern Region	YES	HIGH	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
BRONX	YES		YES		YES		YES		NO	
BROOME	YES	HIGH	YES	MODERATE	YES	MODERATE	YES	HIGH	YES	MODERATE
CATTARAUGUS	YES	MODERATE HIGH	NO		YES	MODERATE LOW	YES	MODERATE HIGH	NO	
CAYUGA	YES	HIGH	YES	MODERATE	YES	MODERATE	YES	HIGH	YES	MODERATE
CHAUTAUQUA	YES	HIGH	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
CHEMUNG	YES		YES		YES		YES		NO	
CHENANGO	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE LOW	NO	
CLINTON	YES		YES		YES		YES		NO	
COLUMBIA	YES	MODERATE LOW	NO		YES	MODERATE LOW	YES	MODERATE LOW	NO	
CORTLAND										
DELAWARE	YES	HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
DUTCHESS	YES		YES		YES		YES		NO	
ERIE	YES	MODERATE LOW	NO		YES	MODERATE LOW	YES	MODERATE LOW	NO	
ESSEX	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	NO	
FRANKLIN	YES	HIGH	YES		YES		YES	HIGH	YES	
FULTON	YES	MODERATE	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH
GENESSE	YES	MODERATE HIGH	NO		YES	MODERATE LOW	YES	MODERATE LOW	NO	
GREENE	YES	HIGH	NO		NO		YES	HIGH	NO	
HAMILTON										
HERKIMER										
JEFFERSON	YES	MODERATE HIGH	NO		YES		YES	MODERATE HIGH	NO	
KINGS	YES		YES		YES		YES		NO	
LEWIS	YES	MODERATE HIGH	YES	MODERATE LOW	YES		YES	MODERATE HIGH	NO	
LIVINGSTON										
MADISON	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW	YES	MODERATE HIGH	NO	
MONROE	YES	HIGH	NO		YES	MODERATE LOW	YES	MODERATE HIGH	NO	
MONTGOMERY	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH
NASSAU	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE LOW	YES	
NEW YORK	YES		YES		YES		YES		NO	
NIAGARA	YES	MODERATE	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	HIGH	YES	
ONEIDA	YES		YES		YES		YES		NO	
ONODAGA	YES	MODERATE HIGH	YES	LOW	YES	MODERATE	YES	MODERATE HIGH	NO	
ONTARIO	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
ORANGE	YES	HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE LOW	NO	
ORLEANS	YES	LOW	YES	MODERATE HIGH	YES	MODERATE LOW	YES	HIGH	NO	
OSWEGO	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH
OTSEGO	YES	HIGH	NO		YES	HIGH	YES	MODERATE HIGH	NO	
PUTMAN										
QUEENS	YES		YES		YES		YES		NO	
RENSSELAER	YES	HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
RICHMOND	YES		YES		YES		YES		NO	
ROCKLAND	YES		YES		YES		YES		NO	
SARATOGA	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH
SCHENECTADY	YES	MODERATE LOW	NO		YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH
SCHOHARIE	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	MODERATE LOW	YES	MODERATE LOW	NO	
SCHUYLER	YES	HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE LOW	YES	HIGH
SENECA	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	NO	
ST. LAWRENCE										
STEUBEN	YES		NO		YES		YES		YES	
SUFFOLK	YES	MODERATE	YES	HIGH	YES	HIGH	YES	HIGH	YES	HIGH
SULLIVAN	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH
TIOGA	YES	HIGH	YES	MODERATE	YES	MODERATE	YES	HIGH	YES	MODERATE
TOMPKINS	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO	
ULSTER	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	NO	
WARREN	YES	MODERATE HIGH	YES		NO		YES	MODERATE HIGH	NO	
WASHINGTON	YES		NO		YES		YES		NO	
WAYNE	YES	MODERATE HIGH	NO		YES	MODERATE LOW	YES	MODERATE HIGH	NO	
WESTCHESTER	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE LOW	YES	
WYOMING	YES	MODERATE HIGH	NO		YES	MODERATE LOW	YES	MODERATE HIGH	NO	
YATES	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO	



County	Wildfire	RA Wildfire Ranking	Drought	RA Drought Ranking	Extreme Temperatures	RA Extreme Temp Ranking	Earthquakes	RA Earthquake Ranking	Landslide	RA Landslide Ranking
ALBANY	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH
ALLEGANY										
- Northern Region	YES	MODERATE LOW	NO		NO		NO		NO	
- Western Region	YES	MODERATE HIGH	NO		NO		YES	MODERATE HIGH	YES	MODERATE HIGH
- Southern Region	NO		NO		NO		NO		NO	
- Eastern Region	NO		NO		NO		NO		YES	MODERATE HIGH
BRONX	NO		YES		YES		YES		NO	
BROOME	NO		YES	MODERATE	YES	LOW	YES	MODERATE	NO	
CATTARAUGUS	YES	MODERATE LOW	YES	MODERATE LOW	NO		YES	MODERATE LOW	YES	LOW
CAYUGA	NO		NO		NO		NO		NO	
CHAUTAQUA	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	LOW	YES	LOW
CHEMUNG	YES		NO		NO		YES		NO	
CHENANGO	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO		NO	
CLINTON	NO		NO		YES		YES		NO	
COLUMBIA	YES	LOW	YES	LOW	NO		YES	MODERATE LOW	YES	LOW
CORTLAND										
DELAWARE	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	YES	LOW	NO	
DUTCHESS	YES		YES		YES		YES		NO	
ERIE	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO	
ESSEX	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH
FRANKLIN	YES	MODERATE	YES	MODERATE	YES		YES		YES	
FULTON	NO		NO		NO		YES	LOW	NO	
GENESSE	NO		YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO	
GREENE	NO		NO		NO		YES	LOW	NO	
HAMILTON										
HERKIMER										
JEFFERSON	YES		YES	MODERATE LOW	YES		YES	MODERATE LOW	YES	
KINGS	NO		YES		YES		YES		NO	
LEWIS	YES	MODERATE HIGH	YES	LOW	YES		YES		YES	
LIVINGSTON										
MADISON	YES	LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	LOW	NO	
MONROE	NO		YES	MODERATE LOW	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW
MONTGOMERY	YES	MODERATE	YES	LOW	NO		NO		NO	
NASSAU	YES	LOW	YES	MODERATE LOW	YES	MODERATE LOW	NO		NO	
NEW YORK	NO		YES		YES		YES		NO	
NIAGARA	NO		YES	MODERATE LOW	NO		YES	MODERATE HIGH	YES	LOW
ONEIDA	YES		YES		YES		YES		YES	
ONODAGA	NO	LOW	YES	LOW	YES	LOW	YES	LOW	YES	LOW
ONTARIO	YES	MODERATE LOW	YES	MODERATE LOW	NO		YES	MODERATE LOW	NO	
ORANGE	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	
ORLEANS	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE LOW
OSWEGO	YES	LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE LOW
OTSEGO	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW
PUTMAN										
QUEENS	NO		YES		YES		YES		NO	
RENSSELAER	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE HIGH
RICHMOND	NO		YES		YES		YES		NO	
ROCKLAND	YES	MODERATE	YES		YES		YES		YES	
SARATOGA	NO		NO		NO		YES	LOW	YES	MODERATE
SCHENECTADY	NO		NO		NO		YES	LOW	YES	MODERATE LOW
SCHOHARIE	YES	LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW
SCHUYLER	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW
SENECA	YES	LOW	YES	LOW	YES	LOW	YES	LOW	NO	
ST. LAWRENCE										
STEBEN	YES		YES		YES		YES		YES	
SUFFOLK	YES	LOW	YES	LOW	NO		YES	LOW	NO	
SULLIVAN	YES		YES		NO		YES		YES	
TIOGA	NO		YES	LOW	NO		YES	LOW	NO	
TOMPKINS	NO		YES	MODERATE LOW	YES	MODERATE LOW	YES	MODERATE LOW	YES	LOW
ULSTER	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE
WARREN	YES	MODERATE HIGH	YES		YES		YES		YES	
WASHINGTON	NO		YES		NO		YES		YES	
WAYNE	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE LOW	YES	LOW	YES	LOW
WESTCHESTER	YES	MODERATE HIGH	YES	MODERATE LOW	YES	MODERATE HIGH	YES	MODERATE HIGH	YES	MODERATE LOW
WYOMING	YES	MODERATE HIGH	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW	YES	LOW
YATES	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW	YES	LOW	YES	MODERATE LOW



County	Land Subsidence and Expansive Soils	RA Land Subsidence and Expansive Soils Ranking	Coastal Erosion	RA Coastal Erosion Ranking	Avalanche	RA Avalanche Ranking	Tsunami	RA Tsunami Ranking
ALBANY	NO		NO		NO		NO	
ALLEGANY								
- Northern Region	NO		NO		NO		NO	
- Western Region	NO		NO		NO		NO	
- Southern Region	NO		NO		NO		NO	
- Eastern Region	NO		NO		NO		NO	
BRONX	NO		YES		NO		NO	
BROOME	NO		NO		NO		NO	
CATTARAUGUS	YES	LOW	NO		NO		NO	
CAYUGA	NO		NO		NO		NO	
CHAUTAQUA	NO		NO		NO		NO	
CHEMUNG	YES		NO		NO		NO	
CHENANGO	NO		NO		NO		NO	
CLINTON	YES		NO		NO		NO	
COLUMBIA	NO		NO		NO		NO	
CORTLAND								
DELAWARE	NO		NO		NO		NO	
DUTCHESS	NO		NO		NO		NO	
ERIE	NO		NO		NO		YES	MODERATE LOW
ESSEX	NO		NO		YES	MODERATE LOW	NO	
FRANKLIN	YES		YES		NO		NO	
FULTON	NO		NO		NO		NO	
GENESSE	NO		NO		NO		NO	
GREENE	YES	MODERATE	NO		NO		NO	
HAMILTON								
HERKIMER								
JEFFERSON	NO		YES		NO		NO	
KINGS	NO		YES		NO		NO	
LEWIS	NO		NO		NO		NO	
LIVINGSTON								
MADISON	NO		NO		NO		NO	
MONROE	NO		NO		NO		NO	
MONTGOMERY	NO		NO		NO		NO	
NASSAU	NO		YES	MODERATE HIGH	NO		YES	
NEW YORK	NO		YES		NO		NO	
NIAGARA	NO		YES		NO		NO	
ONEIDA	NO		NO		NO		NO	
ONODAGA	YES	LOW	NO		NO		NO	
ONTARIO	NO		NO		NO		NO	
ORANGE	NO		NO		NO		NO	
ORLEANS	NO		NO		NO		NO	
OSWEGO	NO		NO		NO		NO	
OTSEGO	NO		NO		NO		NO	
PUTNAM								
QUEENS	NO		YES		NO		NO	
RENSSELAER	NO		NO		NO		NO	
RICHMOND	NO		YES		NO		NO	
ROCKLAND	NO		NO		NO		YES	LOW
SARATOGA	NO		NO		NO		NO	
SCHENECTADY	NO		NO		NO		NO	
SCHOHARIE	NO		NO		NO		NO	
SCHUYLER	NO		NO		NO		NO	
SENECA	NO		NO		NO		NO	
ST. LAWRENCE								
STEUBEN	NO		NO		NO		NO	
SUFFOLK	NO		YES	MODERATE	NO		NO	
SULLIVAN	NO		NO		NO		NO	
TIOGA	NO		NO		NO		NO	
TOMPKINS	NO		NO		NO		NO	
ULSTER	NO		NO		NO		NO	
WARREN	YES		YES		YES		YES	
WASHINGTON	YES		NO		NO		NO	
WAYNE	NO		NO		NO		NO	
WESTCHESTER	NO		NO		NO		NO	
WYOMING	NO		NO		NO		NO	
YATES	NO		NO		YES	LOW	YES	LOW



Potential Loss Estimates

Following development of the individual hazard matrices, LHMPs were researched for risk, vulnerability and losses. The review conducted for the 2014 update indicated that the local plan developers used a wide range of methodologies to determine these potential loss estimates, including historical data, Geographical Information Systems (GIS), Hazus and others. This information was incorporated throughout the appropriate hazard sections in **Section 3** of the SHMP. In addition, where notable data, tables, and/or maps were identified in county plans to illustrate and quantify vulnerability or losses, that information was integrated into the appropriate SHMP hazard sections to link local risk assessments to the SHMP risk assessment. This information also serves as examples of tools and methodologies that may assist in local plan development.

Mitigation Goals and Actions

The final step of the local plan review involved identifying consistency of LHMP goals (and supporting objectives) with those in the SHMP. Each of the local plans was reviewed to determine if the actions in the local plan met the goals as defined in the SHMP; and conversely, to determine if the SHMP goals were reflective of local goals, objectives and actions. The SHMP hazard mitigation goals are:

Goal 1: Promote a comprehensive state hazard mitigation policy framework for effective mitigation programs that includes coordination between federal, state, and local organizations for planning and programs.

Objective 1.1: Promote integrated land use planning to encourage resilient and sustainable efforts throughout statewide programs that addresses zoning, building codes, capital improvement programs, open space preservation and storm water management regulations.

Objective 1.2: Continue to participate in state and local programs and efforts that focus on practices that support or enhance resiliency.

Objective 1.3: Improve hazard data through studies, research, and mapping to enhance information related to the impacts of hazards and related risks, vulnerability, and losses.

Goal 2: Protect property including public, historic, and private structures, and critical facilities and infrastructure.

Objective 2.1: Encourage homeowners, renters, and businesses to insure property for all hazards, including flood coverage under the National Flood Insurance Program (NFIP).



Objective 2.2: Identify mitigation opportunities to protect, upgrade and strengthen existing structures through acquisition, elevation, relocation and retrofit.

Objective 2.3: Encourage resilient and sustainable structures to reduce vulnerabilities, encouraging the use of green and natural infrastructure.

Objective 2.4: Promote the continued use of natural systems and features, open space preservation, and land use development planning with local jurisdictions.

Objective 2.5: Acquire, retrofit, or relocate repetitive loss properties from flood-prone areas in the state.

Goal 3: **Increase awareness and promote relationships with stakeholders, citizens, elected officials and property owners to develop opportunities for mitigation of natural hazards.**

Objective 3.1: Offer trainings about hazard awareness, mitigation planning and grants, and how to incorporate mitigation into ongoing program functions.

Objective 3.2: Reduce the impact of hazards on vulnerable populations through education and awareness programs.

Objective 3.3: Improve systems that provide warning, awareness, and emergency communication.

Objective 3.4: Conduct education and awareness programs for flood mitigation planning and funding assistance.

Goal 4: **Encourage the development and implementation of long-term, cost-effective, and resilient mitigation projects to preserve or restore the functions of natural systems.**

Objective 4.1: Encourage the use of green and natural infrastructure.

Objective 4.2: Provide financial assistance to communities and stakeholders in the application and implementation of mitigation grants.

Objective 4.3: Maintain and encourage ongoing relationships with state agencies and partners to play an active and vital role in preservation and restoration of vulnerable natural systems.



Goal 5: **Build stronger by promoting mitigation actions that emphasize sustainable construction and design measures to reduce or eliminate the impacts of natural hazards.**

Objective 5.1: Encourage building and rebuilding practices that address resiliency through higher standards and sustainable design to resist impacts of natural hazards

Objective 5.2: Enhance coordination with state and local agencies that promote resiliency and sustainability.

Objective 5.3: Identify sustainable flood and erosion control projects and activities that demonstrate resiliency practices.

Objective 5.4: Provide assistance in the implementation of flood mitigation plans and projects in flood-prone areas, in accordance with federal and state regulatory, funding, and technical assistance programs.

Table 5.2f summarizes the results of this review, indicating the alignment between local and the State mitigation goals.



Table 5.2f: Review and Comparison, State and Local Goals

County	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
Albany		✓		✓	
Allegany	✓	✓	✓	✓	
Bronx	✓	✓	✓	✓	✓
Broome		✓	✓	✓	
Cattaraugus		✓	✓	✓	
Cayuga		✓	✓	✓	
Chautauqua		✓			✓
Chemung		✓	✓	✓	
Chenango		✓	✓	✓	
Clinton		✓	✓		
Columbia	✓	✓	✓		
Cortland*					
Delaware		✓	✓		
Dutchess**					
Erie		✓	✓		
Essex				✓	
Franklin		✓	✓	✓	✓
Fulton		✓	✓	✓	
Genesee			✓	✓	
Greene		✓	✓	✓	
Hamilton*					
Herkimer*					
Jefferson		✓		✓	✓
Kings	✓	✓	✓	✓	✓
Lewis		✓		✓	✓
Livingston*		✓		✓	
Madison		✓	✓	✓	✓
Monroe		✓			
Montgomery	✓	✓	✓		
Nassau		✓	✓	✓	✓
New York	✓	✓	✓	✓	✓
Niagara		✓		✓	
Oneida		✓	✓		✓
Onondaga	✓	✓	✓	✓	✓
Ontario		✓	✓	✓	
Orange			✓	✓	✓
Orleans		✓	✓	✓	✓
Oswego			✓	✓	
Otsego		✓	✓	✓	
Putnam*					



County	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
Queens	✓	✓	✓	✓	✓
Rensselaer		✓		✓	✓
Richmond	✓	✓	✓	✓	✓
Rockland		✓		✓	✓
Saratoga		✓	✓	✓	
Schenectady		✓	✓		
Schoharie	✓	✓	✓		
Schuyler			✓	✓	✓
Seneca		✓	✓		
St. Lawrence*					
Steuben		✓	✓	✓	✓
Suffolk		✓	✓	✓	
Sullivan		✓	✓	✓	
Tioga	✓	✓	✓	✓	
Tompkins		✓	✓	✓	
Ulster		✓	✓	✓	✓
Warren		✓	✓		
Washington		✓	✓	✓	
Wayne		✓	✓	✓	✓
Westchester		✓	✓	✓	✓
Wyoming		✓	✓	✓	✓
Yates		✓	✓	✓	

*Hazard Mitigation Plans in development

**County Hazard Mitigation Plan goals were unavailable for review

This review demonstrates that local mitigation goals, objectives and actions are consistent with the SHMP goals; and conversely that the SHMP hazard mitigation goals are reflective of the local goals, objectives and actions.

Future Local Plan Review and Incorporation

The review and incorporation of local plan information has confirmed that this plan is reflective of local hazards, risks, loss estimates, and goals. However, these elements evolve over time, given that the Disaster Mitigation Act of 2000 and the Interim Final Rule (IFR) require local plans to be updated every five years. As a result, future state plan updates, which will be performed on a three-year cycle, will continue to incorporate the latest information regarding local risk assessment and mitigation strategy. It is anticipated that the multi-step monitoring, evaluation and update process described in full in **Section 6** will be implemented by the DHSES Mitigation Section in subsequent updates of this plan. The LHMP integration component of the multi-year update process is described in **Table 5.2g** below.



Table 5.2g: LHMP Integration Process and Timeline

Timeline	Integration Process
<p style="text-align: center;">May <i>(First year following SHMP approval)</i></p>	<p>DHSES Mitigation Section will conduct an internal review of the local mitigation planning process to:</p> <ul style="list-style-type: none"> • Identify the number of plans approved since January 2014 <p>Identify any disaster events that may have impacted local risks, mitigation goals, and/or activities</p>
<p style="text-align: center;">May <i>(Second year following SHMP approval)</i></p>	<p>DHSES Mitigation Section will review:</p> <ul style="list-style-type: none"> • Hazard rankings and previous occurrences in the LHMPs, to coordinate with the 2014 SHMP hazard rankings <p>Goals identified in LHMPs, to ensure that they align with the state goals</p>
<p style="text-align: center;">January – August <i>(Third year following SHMP approval)</i></p>	<p>DHSES Mitigation Section will review and integrate in the 2017 SHMP:</p> <ul style="list-style-type: none"> • Significant changes in LHMP risk assessments noted during plan review • Significant changes in LHMP goals, especially those that do not fall into one of the identified 2014 SHMP goals <p>Implemented LHMP mitigation goals and activities, and assessment of progress in achieving goals</p>

To ensure ongoing availability of all LHMPs, and to facilitate future integration of local plans into SHMP updates, the Mitigation Section has adopted the following methods:

- The ***Hazard Mitigation Planning Standards (2012)*** require that all local jurisdictions submit electronic versions of their updated plans to the State Hazard Mitigation Officer (SHMO)
- SHMO will maintain an electronic copy by CD or electronic file; and/or maintain a physical copy.



5.3 Prioritizing Local Assistance

***Requirement §201.4(c)(4)(iii):** The section on the Coordination of Local Mitigation Planning **must** include criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.*

***Requirement §201.4(d):** Plan **must** be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities.*

This sub-section discusses the four criteria described above which requires special emphasis placed on:

- Communities with the highest risks
- Repetitive loss properties
- Intense development pressures
- Benefits maximized according to a cost benefit review

The 2011 SHMP identified the development of the mitigation planning and project applications for communities interested in obtaining planning and non-planning (project) grants. **The plan included a sample HMGP application and described the following process for receiving planning and project grant applications:**

- Mitigation Staff receive and review applications
- Mitigation Staff prioritize applications based on the criteria developed for that specific grant cycle, as identified by priorities and objectives in the HMGP application (see **Appendix 5, Attachment B: Sample Letter of Intent for HMGP funding**).

The Mitigation Section continues to enhance the mitigation project application process identified in the 2011 SHMP for communities interested in obtaining planning and non-planning (project) grants. For the 2014 SHMP update, it is acknowledged that the process to develop planning and project applications could be defined in more detail. This has not occurred to date due to the State's preference to remain flexible in response to specific disaster impacts and resulting immediate priorities. As outlined in **Section 5.3.1**, New York State does maintain a more general set of criteria that can be applied to funding cycles with highly competitive applications that exceed the amount of funding to assist in identifying projects that are technically feasible, cost effective and address the highest risks.



New York State depends upon two phases for ranking and prioritization of mitigation-related activities and projects. In the first phase, actions and activities submitted for inclusion on the SHMP activities list go through a multi-step ranking process for the purpose of maintaining a comprehensive list of mitigation activities in approximate order of importance. These activities are assessed against the best available information at the time they are submitted to the activities list. While there is general consideration of cost-benefit at this time, the ranking is conducted only for the purpose of placing the activities on the list in order of priority aligned with the goals and hazards the activities address.

The second phase for prioritization takes place when applications for funding for planning or project grants are submitted to the State, and is primarily associated with FEMA mitigation funding. This process requires formal notification of the availability of funding to prospective applicants, description of the prioritization criteria and process, and completion of an application. A Benefit Cost Analysis (BCA) is conducted during the application and evaluation process to ensure that the project is cost-effective and eligible for funding.

Various resources are available to assist in the mitigation prioritization process, including FEMA's How-to-Guide #5 (386-5): Using Benefit Cost Review in Mitigation Planning. This guide provides methods and examples for reviewing benefits and costs, prioritizing actions, and documenting that the process meets cost-benefit requirements.

The primary steps of the State's Hazard Mitigation Grant Program grant funding process are described below:

- 1. Notice of Funding Availability:** The funding process begins with notification from FEMA to DHSES following a federally-declared disaster of funding availability for planning and project grants, based on requirements and timeframes of the individual funding programs. Information, including funding priorities, eligibility, and a brief description of the prioritization and funding methodology, are then developed and disseminated to prospective applicants, electronically or by mail. In addition, supplemental criteria specific to the disaster may be provided to assist in prioritization and identification of projects.

Announcements about funding availability are then disseminated to prospective grant applicants. Criteria for prioritization must be publicly announced at the time of the notification of funding availability, and provided to the Attorney General and Comptroller as a requirement of the official notification.

(Unified Hazard Mitigation Assistance (HMA): FEMA notifies all states and territories of the program's annual funding cycle, traditionally in June.)



Notifications of funding availability described above are made electronically through the following lists and websites:

- DHSES Regional Offices
 - County Emergency Managers - All New York State
 - County Hazard Mitigation Coordinators
 - County Planners
 - State Agency Liaisons
 - Metropolitan Planning Offices
 - County Soil and Water Conservation Districts
 - Regional Planning Agencies
 - <http://www.dhSES.ny.gov/oem/mitigation/>
 - <http://www.nysandyhelp.ny.gov/content/hazard-mitigation-grant-program-hmGP-0> (specific to Hurricane Sandy mitigation)
2. **Canvass for Applications:** DHSES disseminates program information and solicits Letters of Intent (LOIs) from eligible applicants. (A Sample LOI is included as **Appendix 5, Attachment D.**) LOIs submitted by eligible applicant and describing eligible program activities continue to the application development phase. Those that do not, are notified with the reason (ineligible applicant, ineligible activity, or both) and, where possible, given recommendations to address eligibility issues and make the proposal competitive in future grant rounds.

(Unified HMA: The process is identical.)

Letters of Intent (LOIs), or other indications of interest for other funding sources, are submitted by prospective sub-grantees for federal programs.

3. **Application Development:** Applicants continue to work closely with DHSES and FEMA staff to flesh out the project and address program, environmental, and cost-effectiveness requirements. Information is gathered by correspondence and e-mails, and in phone calls, meetings and site visits. Not all eligible applicants with eligible projects conclude the process: some do not continue due to staffing, timing or funding (sponsor match) issues; occasionally a project initially deemed eligible is found to be ineligible as more information is gathered (one example is a road project that may be eligible for Federal Highway Administration (FHWA) funding); and some applicants do not meet the requirement of a FEMA-approved mitigation plan in effect at the time of application submission (Unified HMA) or award (HMGP).



In general, the following information is provided during the application process for planning and non-planning grants, and addresses special considerations required by the State:

- a. Community's exposure and vulnerability to hazards, emphasizing those with increased risks
- b. GIS analysis of project locations and risk exposure
- c. Number or claims history of repetitive loss properties (NFIP)
- d. Community's disaster loss history by disaster type, with repetitive loss properties identified, as appropriate
- e. Status of an All-Hazard Local Mitigation plan
- f. Indications of intense development pressure
- g. Community-initiated, or -completed, mitigation measures/projects relative to the identified hazards, with or without FEMA and State assistance
- h. Opportunity for, and current experience with, private sector interest and involvement in hazard risk reduction activities for the community
- i. A description of how long-term mitigation planning is supported by local elected officials, including the commitment to programmatic, policy and legislative remedies in addition to fiscal and other local government resources
 - a. Benefits maximized according to the Benefit Cost Analysis, including the benefits resulting from the mitigation action versus the cost of that action.
 - b. (Unified HMA: The interaction among applicant, State and FEMA is similar, but application materials must be submitted online using FEMA's eGrants system.)

Upon receipt of grant applications, Mitigation staff reviews each application and reviews it for completeness, based on the criteria described in **Section 5.3.1**, and hazard- or disaster-specific priorities developed for the specific grant application period. In addition, a special emphasis is placed on the Benefit Cost Analysis and Benefit Cost Ratio in consideration of funding for projects.

4. **Project Ranking:** If the requests for funding exceed the available monies, a Project Review Board (PRB) is convened to rank all eligible projects based on the State priorities. (If all eligible planning and project activities can be funded, there is no need for a PRB.)

In general, project grants are awarded based on the information provided for, but not limited to, the following:

- Criteria developed during each grant application period which takes into consideration current priorities and the benefit-cost of the proposed project. When the funds requested for eligible projects exceed the available project funding in a given grant cycle, the Mitigation Section uses an independent Project Review Board (PRB) made up of representatives from the Disaster



Preparedness Commission (DPC) agencies and local jurisdictions. The role of the PRB is to assist in determining which projects should be recommended for funding, based on the prioritization criteria described in **Section 5.3.1** and the BCA and environmental reviews.

- BCAs and preliminary environmental reviews are conducted by the Mitigation Section before applications for projects are sent to the PRB. The Mitigation Section utilizes the most recent FEMA standards for BCAs by incorporating any and all mitigation policy updates. Mitigation Policy FP-108-024-01, released June 2013, has been included in **Appendix 5** as the current standard for BCA.

(Unified HMA: no ranking is currently necessary as multiple applications can be submitted under the various Unified HMA programs.)

5. **Submission to FEMA:** Projects are submitted to FEMA along with any outstanding required information (e.g., the Form 424 Request for Federal Assistance, Administrative Plan, Budget Forms and Assurances).

(Unified HMA: submission is made online using FEMA's eGrants system.)

6. **Administrative:** Notices of FEMA award or denial are transmitted to the applicants. Contracts are executed with applicants with awarded planning and project grants and kick-off meetings are held to ensure that applicants are aware of program requirements and deadlines.

(Unified HMA: the process is similar, with notifications made on FEMA's eGrants system.)

7. **Monitoring:** DHSES contacts each applicant once a month to discuss project status, upcoming benchmarks and deadlines, and any needed assistance. Applicants must also submit quarterly status reports for active grants; DHSES sends out e-mail reminders and contacts applicants who do not provide required documentation. Coordination occurs with FEMA and DHSES fiscal staff (e.g., extension request, scope changes) as necessary.

(Unified HMA: the process is identical.)

8. **Closeout:** Applicants complete all required paperwork and document their expenses. DHSES does not process final payments until the completed work has been inspected by Albany or Regional staff.

As an additional step, final payments for all acquisition projects are held until the applicant provides a notarized property deed containing the protective covenants required by FEMA. It should be noted that acquisition parcels must be managed in accordance with open space requirements in perpetuity and require the applicant to



submit reports to DHSES and FEMA every three years to document conformance with those standards and the provisions of the grant.

(Unified HMA: the process is identical.)

5.3.1 Criteria for Prioritizing Planning Grants

The Robert T. Stafford Act, as amended by Public Law 106390, October 30, 2000, Section 203 Pre-disaster Hazard Mitigation Sub-Section (d) State Recommendations –(C) Criteria, references use of criteria established in sub-section (g) in determining awards for assistance (Allocation of Funds). In summary, criteria include:

- Extent and nature of hazards to be mitigated
- Degree of commitment
- Contribution to mitigation goal/priorities of State and similarly, consistent with own plan
- Consistent with other assistance provided by this Act
- Extent of eligible activities to produce meaningful/definable outcomes are clearly defined
- Maximize net benefits to society
- Extent of assistance funds activity in small impoverished communities
- Other such criteria the President establishes

Between 2011 and 2014, all applications for LHMP planning grants were awarded. During the 2011-2012 time period, 34 (23 in 2012 and 11 in 2013) planning grants for county LHMPs were awarded. Due to the State's ability to fund all planning applications in the past, a prioritization process has not yet been needed for plan development funding applications.

For the 2014 update, however, general criteria were developed to guide prioritization of future planning and project grants. **Should the applications for planning or project grants exceed available funding, the DHSES Mitigation Section will utilize a PRB (as described above) to prioritize grant applications based on the following ranking criteria:**

1. Meets the criteria for the applicable grant program (HMGP, PDM, FMA, etc.)
2. Plan expiration date
3. Number of federal disaster declarations (past 25 years)
4. Susceptibility of the community to natural hazards
5. Participation in the National Flood Insurance Program, and number or claims history of repetitive loss properties
6. Past mitigation funding, and record of successful grant performance
7. Jurisdiction is small, fiscally-constrained, or experiencing special development pressures



8. Current priorities as determined by the disaster and resulting conditions or issues

Appendix 5, Attachment C describes the planning activity application and evaluation process and ranking system for planning and non-planning grants. **Appendix 5, Attachment D** provides FEMA Mitigation Policy 108-024-01, June 2013.

5.3.2 Criteria for Prioritizing Non-Planning Grants

Applicants must demonstrate that their risk is sufficient to merit grant funds, particularly when compared to the project cost, but there is often considerable uncertainty in risk determinations. For this and other reasons, the State places a special emphasis on the BCA, while considering a variety of factors in addition to cost and level of risk in determining its priorities for mitigation grants. A BCA must be performed by the DHSES Mitigation Section for non-planning grants to determine eligibility for funding.

FEMA provides a BCA “toolkit” to assist state and local planners, which standardizes the evaluation of cost effectiveness and quantifies the financial and social benefits of a proposed mitigation activity. Typical mitigation project benefits are derived from avoided damage to structures and contents, avoided deaths and injuries and avoidance of other quantifiable losses that a mitigation project can significantly reduce or eliminate. Acquisition-related mitigation projects have proven to be the most effective example of hazard mitigation. For all mitigation projects, those applications that receive less than a 1.0 ratio of benefit to cost are ineligible for federal HMA funding.

The Mitigation Section utilizes a combination of resources for BCAs to assist State and Local applicants in the mitigation actions and activities prioritization process.

New York State’s mitigation non-planning grant prioritization criteria is consistent with the law in that the methodology and ranking criteria aligns with that described in the Stafford Act. In addition to the standard prioritization criteria described in **Section 5.3.1** for planning grants, special disaster-specific conditions and/or priorities may be added to the criteria for project applications.

To ensure that all participants have realistic expectations, when interested applicants for non-planning grants are notified of the estimated pool of money and estimated maximums, the specific funding priorities are described in the notification of funding availability.

Eligible activities that may be funded through the HMA programs are described in **Table 5.3h**.



Table 5.3h: Eligible Mitigation Activities, by HMA Program

Eligible Activities	HMGP	PDM	FMA
1. Mitigation Projects	√	√	√
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction			√
Dry Floodproofing of Historic Residential Structures	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Minor Localized Flood Reduction Projects	√	√	√
Structural Retrofitting of Existing Buildings	√	√	
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Wind Retrofit for One- and Two-Family Residences	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildfire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Generators	√	√	
5 Percent Initiative Projects	√		
Advance Assistance	√		
2. Hazard Mitigation Planning	√	√	√
3. Management Costs	√	√	√

For HMA grants, the Mitigation Section uses FEMA’s six-month lock-in from the declaration date to establish an available funding pool. This is the minimum HMGP funding the State can expect to receive; final amounts are fixed at the twelve-month lock-in and FEMA regulations mandate that the six-month estimate can increase but never decrease. Allotted funds are divided by five, or multiples of five, to achieve a per-project maximum not to exceed \$1 million. The top-ranking project (based on the prioritization process established for that specific HMGP cycle) in each of DHSES’s five regions is selected and other projects on the list move up. The remaining projects are then selected based solely on ranking, until all available funds are awarded. HMGP planning grants are administered similarly, ensuring that at least one planning grant and one project grant will be funded in each of the five regions.

There are special considerations for grant funds and the extension of deadlines; hazard mitigation projects fall under these special considerations. Funds for permanent work projects must be completed within 18 months of the declaration date; however, New York State has the authority to extend the deadline up to 30 months after the declaration date. Only permanent work is eligible for hazard mitigation.



A new online application process was initiated in October 2013 to submit and review Hurricane Sandy HMGP project applications.

Section 406 Mitigation during Disasters

The Mitigation Section actively supports Section 406 mitigation activities associated with Public Assistance projects that are undertaken during recovery efforts. Funds for these projects occur following Presidential disaster declarations and emergency declarations. Mitigation staff maintains a presence in the Joint Field Office and in the field as needed, participates in applicant briefings and outreach efforts, reviews project worksheets, and conducts BCA when requested, as well as assisting FEMA in developing disaster-specific mitigation strategies. The Mitigation Section utilizes an information flyer to inform state and federal PA staff about the BCA for project grants, consistent with FEMA's effort to unify HMGP (Section 404) and recovery (Section 406) mitigation actions.

The State has the option of providing a portion of the 25% non-federal share under the PA program, and occasionally funds the acquisition of properties (see example at - www.nysdhcr.gov/Programs/FloodRemediation/, Greater Catskill Flood Remediation Program). The State provides no match under HMGP or the Unified HMA grant programs.

Section 406 Mitigation Funds - Public Assistance (PA) Program

Purpose: Available to government-owned or operated facilities and infrastructure damaged in a Presidentially declared disaster. Section 406 provides discretionary authority to fund mitigation measures in conjunction with the repairs due to disaster damage. These opportunities usually present themselves during the repair efforts. The mitigation measures must be related to eligible disaster-related damages and must directly reduce the potential of future, similar disaster damages to the eligible facility. Normally, this work is performed on the parts of the facility that were actually damaged by the disaster. In some instances, an eligible mitigation measure may not be an integral part of the damaged facility. FEMA will consider these exceptions on a case-by-case basis. For measures that exceed the above costs, the grantee or sub-grantee must demonstrate through an acceptable benefit/cost analysis methodology to validate that the measure is cost effective.

