

## SECTION 3: PLANNING PROCESS

### 3.1 Introduction

This section includes a description of the planning process used to update the 2006 plan, including how it was prepared, who was involved in the process, how the public and stakeholders were involved, and how this plan coordinates and integrates with other related risk management mechanisms in the Lehigh Valley.

To ensure that the plan update met the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), as well as the interests and needs within the Lehigh Valley, the plan update process and plan documentation was developed to achieve the following goals:

- Lehigh and Northampton counties, and all of the municipalities in the Lehigh Valley, have elected to actively participate in the planning process, as identified in Table 3-1.

*Table 3-1. Jurisdictions Participating in the 2012 Update*

Participating Jurisdictions			
<b>LEHIGH COUNTY</b>			
Alburtis Borough	Allentown, City of	Bethlehem, City of (LC)(NC)	Catasauqua Borough
Coopersburg Borough	Coplay Borough	Emmaus Borough	Fountain Hill Borough
Hanover Township (LC)	Heidelberg Township	Lower Macungie Township	Lower Milford Township
Lowhill Township	Lynn Township	Macungie Borough	North Whitehall Township
Salisbury Township	Slatington Borough	South Whitehall Township	Upper Macungie Township
Upper Milford Township	Upper Saucon Township	Washington Township (LC)	Weisenberg Township
Whitehall Township			
<b>NORTHAMPTON COUNTY</b>			
Allen Township	Bangor Borough	Bath Borough	Bethlehem Township
Bushkill Township	Chapman Borough	East Allen Township	East Bangor Borough
Easton, City of	Forks Township	Freemansburg Borough	Glendon Borough
Hanover Township (NC)	Hellertown Borough	Lehigh Township	Lower Mt. Bethel Township
Lower Nazareth Township	Lower Saucon Township	Moore Township	Nazareth Borough
North Catasauqua Borough	Northampton Borough	Palmer Township	Pen Argyl Borough
Plainfield Township	Portland Borough	Roseto Borough	Stockertown Borough
Tatamy Borough	Upper Mt. Bethel Township	Upper Nazareth Township	Walnutport Borough
Washington Township (NC)	West Easton Borough	Williams Township	Wilson Borough
Wind Gap Borough			

LC = Lehigh County; NC = Northampton County

- In addition to considering all natural hazards facing the Lehigh Valley, thereby satisfying the natural hazards mitigation planning requirements specified in DMA 2000, the plan update process has considered man-made and technological hazards believed to pose significant risk to the Lehigh Valley, and expand further upon the natural hazards in the 2006 plan.

- The plan update has been developed following the process outlined by DMA 2000, FEMA regulations, and FEMA and PEMA guidance. Following this process has ensured that all the requirements are met, and supports plan review.

The plan update was written using the best available information obtained from a wide variety of sources. Throughout plan development, a concerted effort was made to gather information from participating county and municipal agencies and staff as well as stakeholders, federal and state agencies, and the residents within the Lehigh Valley. The Steering Committee solicited information from local agencies and individuals with specific knowledge of certain natural and non-natural hazards and past historical events, as well as considering planning and zoning codes, ordinances, and other recent planning decisions. The hazard mitigation strategies identified in this plan update have been developed through an extensive planning process involving county and local agencies, municipal officials and staff, and planning area residents.

This section of the plan update describes the mitigation planning process, including (1) Organization of Planning Process; (2) Plan Update Activity; (3) Stakeholder Outreach and Involvement; (4) Public Outreach and Participation; and (5) Integration/Coordination with Existing Plans and Programs.

## 3.2 Organization of Planning Process

The following section describes how the many parties involved in this plan update process were organized, and describes their involvement and input to the plan update.

The 2006 plan was prepared by the Lehigh Valley Planning Commission (LVPC), Lehigh County Emergency Management Agency (LCEMA) and Northampton County Emergency Management Services (NCEMS), with participation of all jurisdictions in the Lehigh Valley. Implementation of the 2006 plan was supported by these agencies, who further prepared the “Lehigh Valley Hazard Mitigation Plan - Annual Report 2008” documenting progress since the adoption of the 2006 plan.

LCEMA and NCEMS have served as the management team to implement and manage the overall plan update process. In November of 2008, Lehigh and Northampton counties were awarded a FEMA legislative Pre-Disaster Mitigation (PDM) planning grant as part of the 2008 Hazard Mitigation Assistance (HMA) program grant cycle.

Through an open bid process, Lehigh and Northampton counties selected a contract planning consultant (Tetra Tech, Inc. – Morris Plains, New Jersey) to support the plan update process. Specifically, the planning consultant was tasked with:

- Assisting with the organization of a Steering Committee and municipal planning partnership
- Assisting with the development and implementation of a public and stakeholder outreach program
- Data collection, and review and incorporation of existing plans and documents
- Facilitation of meetings (municipal planning partnership, Steering Committee, stakeholder, public and other)
- Reviewing and updating the hazards of concern
- Updating the profiling and risk assessment for the hazards of concern, including expanded consideration of non-natural hazards
- Assistance with the update of mitigation planning goals and objectives
- Review and evaluation of progress on the county and local mitigation strategies identified in the 2006 plan
- Assistance with the screening of mitigation actions and the identification of appropriate actions

- Assistance with the prioritization of mitigation actions
- Authoring of the draft and final plan documents

To facilitate the plan update process, LCEMA and NCEMS, with support from the contract planning consultant, established a Steering Committee to provide guidance and direction to the plan update effort, and to ensure the resulting document will be embraced both politically and by the constituency within the Lehigh Valley. The Steering Committee provided guidance and leadership, oversight of the planning process, and acted as the point of contact for all municipal planning partners and the various stakeholder and interest groups in the Lehigh Valley. Specifically, the Steering Committee was charged with the following responsibilities:

- Review the original plan and identify what is needed and desired in the plan update;
- Establish a timeline for the plan update process;
- Ensure that the plan update meets the requirements of prevailing Federal regulations and Federal and State guidance;
- Solicit and document the participation of all municipalities in the plan update process;
- Organize and oversee the public and stakeholder involvement process;
- Provide input to update the hazards of concern identified in the 2006 plan;
- Assist in gathering information for inclusion in the plan update, including the use of previously developed reports and data;
- Review and approve the data and information used within the plan update;
- Assist with review of the mitigation planning goals and objectives;
- Review and update the County-level mitigation strategy;
- Review and approve sections of the plan update;
- Adopt and maintain the plan update.

Table 3-2 shows the membership of the Steering Committee at the time of this plan update's publication.

**Table 3-2. Lehigh Valley Hazard Mitigation Plan Update Steering Committee Membership**

Name	Title	Department / Agency
Angel Gillette, CEM	Manager, Hazard Mitigation and Disaster Recovery	Northampton County Emergency Management Services
Robert Mateff, ENP	Director/Coordinator	Northampton County Emergency Management Services
William Hillanbrand, MA	Emergency Management Planning Manager	Northampton County Emergency Management Services
Nick Tylenda	Deputy Director	Northampton County Emergency Management Services
Todd Weaver, ENP	Deputy Director for Systems Management	Northampton County Emergency Management Services
Tanya Hook	County Mitigation Lead – Community Outreach Coordinator	Lehigh County Emergency Management Agency
Thomas Nervine	Director	Lehigh County Emergency Management Agency
Nicole Burton	Administrative Assistant	Lehigh County Emergency Management Agency

Name	Title	Department / Agency
David Fenton	Operations and Training Coordinator	Lehigh County Emergency Management Agency
Geoffrey Reese, PE	Assistant Director	Lehigh Valley Planning Commission
Susan Rockwell	Senior Environmental Planner	Lehigh Valley Planning Commission

One of the first actions of the Steering Committee was to invite all municipalities in the Lehigh Valley to participate in the plan update process, and to formalize and document their intent to participate. In August 2011, all municipalities within the Lehigh Valley were notified of the pending planning process and invited to formally participate. Municipalities were asked to formally notify Lehigh County Emergency Management Agency and Northampton County Emergency Management Services of their intent to participate via a Letter of Intent, a sample of which is included in Appendix D, and to identify a primary and secondary planning point of contact to serve as their municipal representatives throughout the planning process.

Each municipality received a copy of the “Planning Partner Expectations” which outlined the responsibilities of all plan participants. All participating jurisdictions were charged with the following responsibilities:

- Identifying municipal representatives to serve as the planning points of contacts (POCs), responsible for representing the community and assuring that participation expectations are met;
- Providing representation at regular planning group meetings and workshops;
- Providing data and information as requested;
- Assisting with the identification of stakeholders within the community that should be informed and potentially involved with the planning process;
- Facilitating public outreach efforts with citizens and local stakeholders within their community;
- Assisting with the identification of past, ongoing and appropriate future mitigation strategies and activities;
- Reviewing and commenting on plan documents, specifically the draft plans prior to submission to PEMA and FEMA;
- Adopting the plan update by resolution of the governing body after FEMA conditional approval.

It is noted that the municipal Letter of Intent to Participate in the 2012 plan update includes language authorizing the Steering Committee to “guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan document” on their behalf. As such, this planning effort was organized generally according to the “Combination Model” identified in FEMA 386-8.

The Letter of Intent to Participate identifies the municipal planning partner expectations as those activities comprising overall participation by jurisdictions throughout the planning process. It is not meant, however, to serve as an explicit determinant of jurisdictional participation. It is recognized that the jurisdictions in the Lehigh Valley have differing levels of capabilities and resources available to apply to the planning process, and further have differing exposure and vulnerability to the natural and non-natural hazard risks being considered in this plan update. It was the Steering Committee’s intent to encourage participation by all inclusive jurisdictions, and to accommodate their specific needs and limitations while still meeting the intents and purposes of plan participation, the regulations and prevailing guidance. Such

accommodations have included the establishment of a Steering Committee and engaging a contract consultant to assume certain elements of the planning process on behalf of the jurisdictions, providing multiple sessions of municipal meetings, and providing additional and alternative mechanisms to meet the intent of participating in the planning process.

Ultimately, jurisdictional participation is evidenced by a completed annex (chapter) of the plan update wherein the jurisdiction has identified their planning POCs, evaluated their risk to the hazards of concern, identified their capabilities to effect mitigation in their community, and identified and prioritized an appropriate suite of mitigation initiatives, actions, and projects to mitigate their hazard risk; and eventually by the adoption of the plan update via resolution.

As all municipalities were encouraged to promote broad participation from the various departments and representatives within their community, we herein refer to the municipalities along with their planning POCs and others within their community that participated in the overall process as the “municipal planning partnership”, and the universe of county and local participants as the “planning partnership”.

The municipal planning POCs designated by the jurisdictions as of the date of the plan update are provided in each municipality’s annex in Section 9.

### 3.3 Plan Update Activity

During the course of the plan update, the Steering Committee and municipal planning partnership worked together through a variety of methods and venues to address the various elements of the plan update process, as summarized in Table 3-3, and further documented in the meeting agendas and minutes in Appendix C.

Municipalities, through their POCs and other municipal representatives, stakeholders and residents, actively participated through a program of meetings, forums, workshops, and other data and information collection and input mechanisms. Municipal level planning activities included a series of project meetings offered at multiple times and locations to accommodate the varying schedules of plan participants, augmented with direct local assistance through onsite meetings and phone and email support. Through these activities, municipalities were able to gather and share information, identify specific hazard areas and vulnerabilities, develop and update their local assets including critical facilities, identify their local capabilities to mitigate hazard risk, identify progress on their 2006 local mitigation strategies, and update their local strategies with new projects and initiatives addressing their local risks and vulnerabilities.

Table 3-3 presents a summary of project activities implemented, and milestones met, during the planning process for this update.

*Table 3-3. Summary of Project Activity and Milestones*

Date	Description of Activity	Participants
August 2008	Annual Plan Review and Report: Prepared a plan progress report, documenting progress to date on the 2006 plan.	Lehigh and Northampton counties; LVPC; all municipalities that participated in the 2006 plan.
July 7, 2011	Project Management /Steering Committee Meeting: Discuss project scope of work; assignment of responsibilities and schedule; establishing program for inviting, promoting and documenting municipal participation; discuss Steering Committee membership including	Angel Gillette, Bob Mateff – NCEMS; Tanya Hook, Tom Nervine – LCEMA; Jonathan Raser, Cynthia Bianco, Alison Miskiman - Tetra Tech

Date	Description of Activity	Participants
	stakeholder involvement; review data collection and risk assessment progress; discuss review of 2006 plan, crosswalk and 2010 state plan, and establish plan update requirements; discuss public and stakeholder outreach strategy; discuss progress reporting and the tracking of "in kind" service.	
August 4, 2011	Project and Grant Meeting: Meeting with PEMA and FEMA Region III staff to discuss project execution, and project and grant administration.	Angel Gillette, Bob Mateff – NCEMS; Tanya Hook, Tom Nervine, Nicole Burton – LCEMA; Tess Grubb, Crystal Newman, Matt McCulloch – FEMA Region III; Jonathan Raser - Tetra Tech
September 2011	NCEMS develops and launches project Hazard Mitigation Planning website, including Citizens Hazard Preparedness / Public Awareness questionnaire.	NCEMS; public and stakeholders
October 26, 2011	Meeting with LVPC: Review and compile available data, reports and documents, including GIS data, model ordinances, and Act 167 Stormwater Management Plans.	Michael Kaiser, Geoffrey Reese, Susan Rockwell – LVPC; Jonathan Raser – Tetra Tech
October 2011	LVPC includes article on plan update process with links to public website and citizen survey in the 4Q11 edition of their newsletter.	LVPC; public and stakeholders
October 2011	Planning partnership provided tri-fold brochure for local public distribution, explaining the HMP program, how to provide input to the process, and local contact information.	Planning partnership, public
November 17, 2011 (2 identical sessions, afternoon and evening)	Municipal "Kick Off" Meeting – Northampton County: Provided overview of planning process, plan participant expectations, review of hazards and hazards of concern identification exercise, discussion of data needs, and discussion of public and stakeholder outreach efforts. Each municipality was provided survey forms for completion (Contact and Municipal Information, Evaluation of Identified Hazards, Capability Assessment).	Representatives from Northampton County municipalities (see Sign-In Sheets, Appendix C); Tetra Tech
November 29, 2011 (2 identical sessions, afternoon and evening)	Municipal "Kick Off" Meeting – Lehigh County: Provided overview of planning process, plan participant expectations, review of hazards and hazards of concern identification exercise, discussion of data needs, and discussion of public and stakeholder outreach efforts. Each municipality was provided survey forms for completion (Contact and Municipal Information, Evaluation of Identified Hazards, Capability Assessment).	Representatives from Lehigh County municipalities (see Sign-In Sheet, Appendix C); Tetra Tech
December 13, 2011	Northampton County Council of Governments and Municipalities – Joint Meeting: Project presentation by Angel Gillette explaining the status of the project and encouraging broad local participation.	Northampton County Council of Governments and municipal representatives (see Appendix E)
December 19, 2011	Steering Committee Meeting: Review overall project progress and discuss schedule; review progress on data collection and critical facility inventory; review status of regional profile; review	Angel Gillette, Bob Mateff – NCEMS; Jim Lakey – Northampton County GIS; Tanya Hook, David Fenton, Tom Nervine – LCEMA; Geoff Reese - LVPC; Jonathan



Date	Description of Activity	Participants
	updated hazards of concern, profiling and risk assessment progress; review municipal participation; discuss ongoing public and stakeholder outreach.	Raser - Tetra Tech
January 17, 2012	Municipal Project Meeting - Northampton County: Provided an overview of planning process and progress to date; reviewed selection of hazards and hazards of concern; discussed data needs and progress on local data collection; discussed progress on public and stakeholder outreach efforts. Each municipality was provided survey forms for completion (Contact and Municipal Information, Evaluation of Identified Hazards, Capability Assessment).	Representatives from Northampton County municipalities (see Sign-In Sheets, Appendix C); Angel Gillette – NCEMS; Cynthia Bianco - Tetra Tech
January 24, 2012	Municipal Project Meeting – Lehigh County: Provided an overview of planning process and progress to date; reviewed selection of hazards and hazards of concern; discussed data needs and progress on local data collection; discussed progress on public and stakeholder outreach efforts. Each municipality was provided survey forms for completion (Contact and Municipal Information, Evaluation of Identified Hazards, Capability Assessment).	Representatives from Lehigh County municipalities (see Sign-In Sheets, Appendix C); Tanya Hook, David Fenton – LCEMA; Jonathan Raser - Tetra Tech
March 26, 2012	Stakeholder Outreach Workshop, Northampton County: Conducted workshop with county and regional stakeholders to identify regional hazard vulnerabilities and capabilities, and screen a broad range of mitigation alternatives for use by the planning partnership.	Brian Harris, Tom Barnowski – Bushkill Township; Dave Malloy – PADEP; Gregory Long – Moravian College; Bob Mateff – NCEMS; Cordelia Miller – ARC; May Ellen Keegan – Monroe County EMA; Barry Downes, Diane Coffin, Kathleen McVeigh– Pennsylvania Power and Light; Marvin Gruber – NC Facilities; Mark Nalesnik – Carbon County EMA; Mark Stein – Bethlehem Area SD; Ken Johnson – Bethlehem Township VFC; Gary Falasen – Lehigh University; Kristen Wenrich – Bethlehem Health Bureau; Alice Rehrig – Lehigh Township; John Bast – City of Easton; Jeff Troxell – Lafayette College; Angel Gillette, William Hillanbrand, Nick Tylenda – NCEMS; Jonathan Raser, Kris Mattson -Tetra Tech
March 27, 2012	Stakeholder Outreach Workshop, Lehigh County: Conducted workshop with county and regional stakeholders to identify regional hazard vulnerabilities and capabilities, and screen a broad range of mitigation alternatives for use by the planning partnership.	William Bellas – PennDOT; Joel Calario – Allentown EMS; Ben Galiardo – Lower Macungie; John Dondero – Lower Milford Police Department; Mark Lapos – Parkland SD; Michael Nonemacher – Emmaus Ambulance Corp.; Judy Borger – Carbon County EMA; Vincent D’Angelo - PA State Police; Glenn Solt – LC General Services; Mark Rosania – Pinebrook Family Services; Barry Rodenbough – Allentown SD; Cordelia Miller - LV Red Cross; Larry Wiersch – Cetronia Ambulance; Kevin Gram – LC Authority; Grant Grimm - Upper Macungie Township; John Kalynych – LC EMA; Christopher Greb – Macungie Ambulance; MaryEllen Shiels – Allentown

Date	Description of Activity	Participants
		Health Bureau; Tanya Hook, David Fenton, Tom Nervine, Valerie Brooks – LC EMA; Jonathan Raser, Kris Mattson -Tetra Tech
April 2, 2012	Public Meeting – Northampton County: Public presentation describing the planning process; presenting information on the hazard profiling and risk assessment; and soliciting public input to the planning process.	Angel Gillette – NCEMS; Jonathan Raser, Kris Mattson -Tetra Tech
April 4, 2012	Public Meeting – Lehigh County: Public presentation describing the planning process; presenting information on the hazard profiling and risk assessment; and soliciting public input to the planning process.	Tanya Hook, David Fenton – LCEMA; Jonathan Raser, Kris Mattson -Tetra Tech
April 24, 2012	Planning Committee Meeting - Northampton County: Jurisdictional Annex Workshop to provide participating jurisdictions with draft templates, tools and resources to develop their chapter (jurisdictional annex) to the plan update.	Representatives from Northampton County municipalities (see Sign In sheets, Appendix C); Kelsey Walko – PEMA; Therese Grubb – FEMA Region III; Angel Gillette, Nick Tylenda – NCEMS; Jonathan Raser - Tetra Tech
April 26, 2012	Planning Committee Meeting, Lehigh County - Jurisdictional Annex Workshop to provide participating jurisdictions with templates, tools and resources to develop their chapter (jurisdictional annex) to the plan update.	Representatives from Lehigh County municipalities (see Sign In sheets, Appendix C); Tanya Hook, David Fenton, Tom Nervine - LCEMA; Jonathan Raser - Tetra Tech
May 10, 2012	Planning Committee Meeting – Lehigh and Northampton counties: Jurisdictional Annex Workshop to provide participating jurisdictions with draft templates, tools and resources to develop their chapter (jurisdictional annex) to the plan update.	Representatives from Northampton and Lehigh County municipalities (see Sign In sheets, Appendix C); Tanya Hook , Tom Nervine – LCEMA; Angel Gillette – NCEMS; Jonathan Raser, Paul Miller - Tetra Tech
May 12, 2012	PA Silver Jackets (State Hazard Mitigation Committee) Quarterly Meeting in Harrisburg, PA – Plan update project identified and discussed.	State Hazard Mitigation Committee members; Lehigh and Northampton county and Steering Committee representatives
April 2012 – March 2013	Lehigh and Northampton county and Steering Committee representatives and contract consultant work with municipalities to complete their jurisdictional annexes, including the identification and prioritization of mitigation initiatives and projects.	All participating municipalities; Lehigh and Northampton county and Steering Committee representatives; Tetra Tech
June 14, 2011	Steering Committee Meeting – Review project progress and municipal participation; review and approve plan maintenance and update procedures; discuss posting of draft plan for public and stakeholder comment; review plan completion schedule.	Thomas Nervine, Tanya Hook – LC EMS; Bob Mateff, Angel Gillette – NCEMA; Jonathan Raser – Tetra Tech
August, 2012	Project hazard mitigation planning website updated to include interim draft sections of the plan for public review and comment.	NCEMS, public and stakeholders
September 12, 2012	County Level Mitigation Strategy Meeting: Meeting to review draft updated county level mitigation strategies, review draft sections of the plan, discuss progress on municipal annexes.	Angel Gillette, William Hillanbrand, Bob Mateff – NCEMS; Tanya Hook, Tom Nervine – LCEMA; Jonathan Raser - Tetra Tech
September 2012	Updated draft plan sections posted to project HMP website. Counties and participating municipalities inform the public of the availability of the draft for	NCEMS; All participating municipalities



Date	Description of Activity	Participants
	review.	
September 28, 2012	Northampton County Association of Township Officials Annual Meeting – Plan update process and status of municipal participation presented to Northampton County Township Officials, encouraging planning support at the local government level.	Northampton County Township officials; Jonathan Raser – Tetra Tech
October 23, 2012	LVPC Environmental Committee meeting - Plan update process and status of municipal participation presented to the Environmental Committee, encouraging support for municipal participation.	LVPC Environmental Committee members; Jonathan Raser – Tetra Tech
November 29, 2012	LVPC Monthly Board meeting - Plan update process and status of municipal participation presented to the LVPC Board, encouraging support for municipal participation.	LVPC Board members; Jonathan Raser – Tetra Tech
November, 2012	Draft plan update (less jurisdictional annexes) submitted to PEMA / FEMA for preliminary review.	PEMA / FEMA Region III
March 2013	Complete draft plan posted to project website and announced to public via legal notice, website announcement and media release.	Lehigh and Northampton Counties; public.
March 2013	Draft plan update (complete) submitted to PEMA / FEMA for review and approval.	Lehigh and Northampton Counties; PEMA
Upon FEMA approval	Plan adopted via resolution by all plan participants	All participating jurisdictions

EMA = Emergency Management Agency

FEMA = Federal Emergency Management Agency

GIS = Geographic Information Systems

LCEMA = Lehigh County Emergency Management Agency

LVPC = Lehigh Valley Planning Commission

NCEMS = Northampton County Emergency Management Services

PEMA = Pennsylvania Emergency Management Agency

PennDOT = Pennsylvania Department of Transportation

SD = School District

VFC = Volunteer Fire Company

### 3.4 Stakeholder Outreach and Involvement

Diligent efforts were made to assure broad regional, county and local representation in this planning process. To that end, a comprehensive list of stakeholders was developed with the support of the Steering Committee. Stakeholder outreach was performed early on, and continually throughout the planning process, and included the following methods of outreach and involvement:

- Critical county and regional stakeholders served on the Steering Committee (see Steering Committee membership earlier in this section).
- Key State and Federal stakeholders (including PEMA and FEMA Region III) met directly with the Steering Committee and attended certain planning meetings throughout the plan update process.
- Members of the Steering Committee and municipal planning partnership serve on and/or participate with various regional, county and local stakeholder groups (e.g. Delaware River Basin Commission, Community Emergency Response Teams (CERTs), Local Emergency Planning Committees (LEPCs); Schools, Fire and Police Departments, Emergency Medical Services, utility authorities, and hazardous material response teams).

- The project was presented at numerous regularly scheduled stakeholder group meetings throughout the Lehigh Valley, wherein stakeholders were encouraged to provide input to the process and plan update relevant to their mission and purview.
- Mitigation survey forms (see Appendix E) were developed to elicit specific, relevant mitigation information. The surveys were distributed to the following stakeholder groups:
  - Emergency Medical Service Providers
  - Firefighters
  - Law Enforcement
  - Hospitals and Health Care Facilities
  - Schools Districts and Higher Education
  - Utilities
  - Business/Commerce
- In March 2012, a large and diverse group of stakeholders were invited to participate in a hazard mitigation workshop, held in each of the two counties (see invitation list in Appendix E). The reason for this meeting was to explain the purpose and benefits of mitigation planning, and to help identify potential mitigation strategies (initiatives, programs, projects) to be included in the plan update. The meeting was an open forum, facilitated by the contract consultant for this project, in the format of a Strengths, Weaknesses, Obstacles and Opportunities (SWOO) exercise. This interactive exercise was designed to screen a broad range of potential mitigation initiatives to address those hazards that pose the greatest risk in the Lehigh Valley, in order to identify specific mitigation initiatives at the regional, county and local level for inclusion in the plan update.

The following is a list of the various stakeholders that were invited to participate in the development of this plan update, along with a summary of how these stakeholders participated and contributed to the plan. It should be noted that this summary listing cannot possibly represent the universe of stakeholders that were aware of and/or contributed to this plan update. Outreach efforts were being made, both formally and informally, throughout the process by the many planning partners involved in the effort, and documentation of all such efforts is impossible. Rather, this summary is intended to demonstrate the scope and breadth of the stakeholder outreach efforts made during the development of this plan update.

Information and input provided by these stakeholders has been included throughout this plan update where appropriate, as identified in the references.

### 3.4.1 Federal, State and Regional Agencies

**Federal Emergency Management Agency (FEMA) Region III:** Provided planning grant funding; provided programmatic guidance and support; attended and facilitated certain project meetings; provided National Flood Insurance Program (NFIP) data for the Lehigh Valley; provided input on risk ranking (risk factor) process; reviewed plan update documents.

**Pennsylvania Emergency Management Agency (PEMA):** Attended and facilitated certain project meetings; provided grant administration support and guidance; provided recent FEMA planning guidance; provided programmatic, technical and administrative assistance.

**Pennsylvania Department of Environmental Protection (PADEP):** Invited to participate on the Steering Committee. The PADEP sanitarian supervisor attended the March 2012 stakeholder workshop and provided input on mitigation support and efforts available through PADEP.

**Pennsylvania Department of Transportation (PennDOT):** Attended the March 2012 stakeholder workshop and provided input on mitigation activities for state infrastructure in the Lehigh Valley.

**American Red Cross of the Greater Lehigh Valley:** Provided data on shelters and sheltering. Attended March 2012 stakeholder outreach workshops; discussed issues with sheltering and utility outages.

**United States Army Corps of Engineers:** Provided data and information on dams and levees in the Lehigh Valley.

### 3.4.2 Lehigh and Northampton County Government Agencies

**Northampton County Emergency Management Services (NCEMS):** Mitigation project management; provided grant and contract application and administrative support; provided direct representation on the Steering Committee; provided data and information on assets and vulnerabilities throughout the County; supported public and stakeholder outreach including hosting the public HMP website; identified completed and ongoing mitigation activities and updates to the county and local mitigation strategies; reviewed and provided comment on draft plan sections; and facilitated regional mitigation planning coordination.

**Lehigh County Emergency Management Agency (LCEMA):** Assisted NCEMS with mitigation project management; provided direct representation on the Steering Committee; provided data and information on assets and vulnerabilities throughout the County; supported public and stakeholder outreach; identified completed and ongoing mitigation activities and updates to the county and local mitigation strategies; reviewed and provided comment on draft plan sections; and facilitated regional mitigation planning coordination.

**Lehigh Valley Planning Commission (LVPC):** Provided representation on the Steering Committee; provided regional data and information, plans and studies; supported public and stakeholder outreach, assisted with the identification of county and local vulnerabilities; reviewed and provided comments on draft plan sections.

**Lehigh County Geographic Information Systems (GIS) Department:** Provided critical GIS data for Lehigh County.

**Northampton County GIS Department:** Provided critical GIS data for Northampton County.

**Lehigh County General Services:** Attended a March 2012 stakeholder outreach workshop; provided information on the capabilities and services available through general services that can support regional mitigation, emergency and risk management; and provided input on mitigation projects addressing Lehigh County-owned assets.

**Northampton County Department of Community and Economic Development (NCDCED):** Provided input on their capabilities to support regional mitigation and disaster recovery; provided information on growth and development in the region; identified vulnerabilities in the county; and identified specific initiatives to improve disaster response and recovery.

**Northampton County Department of Public Works (NCDPW):** Provided information on the capabilities and services available through the public works division that can support mitigation, emergency and risk management; provided information on potential mitigation projects addressing Northampton County-owned assets. Public Works and Emergency Management staff conducted site

visits to potential mitigation project areas in April 2012. This was further supported by the County's contract engineer (Borton-Lawson), who assisted with identifying vulnerable county infrastructure and developing mitigation projects to address these vulnerabilities.

### 3.4.3 Surrounding Counties

All counties bordering the Lehigh Valley (including Hunterdon County, New Jersey) were invited to attend the March 2012 stakeholder outreach meetings to learn about the plan update project and provide input and coordination into the process. Invitations were sent to the County Emergency Managers. Representatives from Carbon and Monroe counties attended the stakeholder outreach workshops in March 2012, discussed hazard vulnerabilities in their county, and provided input to this plan update.

### 3.4.4 Fire Services

Fire Companies – Fire companies in Lehigh and Northampton counties were provided with the Fire Services mitigation survey developed for this process, and invited to attend the March 2012 stakeholder outreach workshops. The following fire companies either provided completed surveys (see Appendix E) and/or attended the March 2012 workshops:

- Bethlehem Township Volunteer Fire Department
- Catasauqua Borough Fire Department
- East Allen Township Fire Department
- Hanover Township (LC) Fire Department
- Forks Township Fire Department
- New Tripoli Fire Company

Their input, including the identification of specific hazard vulnerabilities and/or mitigation strategies, has been incorporated into this plan update as appropriate.

### 3.4.5 Police and Law Enforcement Services

Municipal police departments in the Lehigh Valley were provided an opportunity to provide input to the planning process through their municipal contacts, including identifying hazard vulnerabilities, and identifying potential mitigation projects and activities. Each police department was provided the Law Enforcement mitigation survey form developed for this process, and invited to attend the March 2012 stakeholder outreach workshops.

The following police departments either provided completed surveys (see Appendix E) and/or attended the March 2012 workshops:

- Coopersburg Police Department
- Hanover Township (LC) Police Department
- Lehigh Township Police Department
- Lower Milford Police Department
- Lower Saucon Police Department
- Pennsylvania State Police
- Upper Saucon Police Department

Their input, including the identification of specific hazard vulnerabilities and/or mitigation strategies, has been incorporated into this plan as appropriate.

### 3.4.6 School Districts and Higher Education

All Lehigh and Northampton County school districts and higher education institutions were provided the opportunity to provide input to the planning process, including being provided with the School District and Higher Education mitigation survey form, and were invited to attend the March 2012 stakeholder outreach workshops.

The following school districts and higher education institutions either provided completed surveys (see Appendix E) and/or attended the March 2012 workshops:

- Allentown School District
- Bethlehem Area School District
- Parkland School District
- Easton Area School District
- Southern Lehigh School District
- DeSales University
- Lafayette College
- Lehigh University
- Moravian College
- Northampton Community College
- Lehigh Carbon Community College

Their input, including the identification of specific hazard vulnerabilities and/or mitigation strategies, has been incorporated into this plan update as appropriate, including needs for backup power and other improvements at schools used for sheltering, and initiatives to improve emergency management preparedness coordination prior to mass-gathering events.

### 3.4.7 Hospitals, Health Care and Emergency Medical Services

Owners/operators of hospitals and health care facilities, and health agencies in the Lehigh Valley, were provided the Hospitals and Health Care Facilities mitigation survey developed for this process, and were invited to attend the March 2012 stakeholder outreach workshops. Emergency Medical Services (EMS) providers in the Lehigh Valley were provided the Emergency Medical Services mitigation survey developed for this process, and were invited to attend the March 2012 stakeholder outreach workshops.

The following hospitals, health care facilities, health services and EMS providers in the Lehigh Valley either provided completed surveys (see Appendix E) and/or attended the March workshops:

- City of Allentown EMS
- Cetronia Ambulance
- Emmaus Ambulance Corporation
- Macungie Ambulance
- Allentown Health Department
- Bethlehem Health Department

Their input, including the identification of specific hazard vulnerabilities and/or mitigation strategies, has been incorporated into this update as appropriate.

### 3.4.8 Transportation

Pennsylvania Department of Transportation (PennDOT): Attended the March 2012 stakeholder workshops and provided input on mitigation activities for state transportation infrastructure in the Lehigh Valley.

### 3.4.9 Utilities

Pennsylvania Power and Light (PPL): Attended the stakeholder outreach workshops in March 2012; provided data and information on PPL risk management programs; provided public outreach materials related to personal and commercial risk mitigation. Hosted a public outreach meeting where the plan update process was presented.

Outreach to utilities serving the Lehigh Valley was facilitated and supported through the distribution of the Utilities Stakeholder Survey. Specific information and input provided by these entities has been incorporated into this plan update as appropriate, including the distribution of public outreach information/materials provided by PPL through the countywide public education and outreach initiatives.

### 3.4.10 Business and Commerce

Outreach to business and commercial entities in the Lehigh Valley was facilitated and supported through the distribution of the Business/Commerce Stakeholder Survey, and through invitation to attend the stakeholder workshops in March 2012. Respondents to this survey include Pinebrook Family Services.

Further, several businesses in the Lehigh Valley supported the public outreach process by hosting forums where this plan update process was presented to the public (see following subsection). Specific information and input provided by these entities has been incorporated into this plan update as appropriate.

## 3.5 Public Outreach and Participation

In order to facilitate coordination and communication with the Steering Committee, planning partnership and citizens, numerous methods of public outreach were conducted to inform the public of the plan update and encourage participation in the planning process. The following public outreach efforts were made during the development and review of this plan update:

- Members of the Steering Committee made presentations on the project at the following meetings to explain the project and process, and to encourage full and broad municipal participation:
  - Four Seasons at Farmington Community Outreach Meeting (1/23/12 – 7pm)
  - Meeting with Lehigh County Aging and Adult Services (3/6/12 – 10am)
  - Lehigh County Bicentennial Celebration at Ag Hall (3/10/12 – 11am to 8pm)
  - Emergency Preparedness Outreach Event at Liberty Resources (Allentown, 3/29/12 – 10am)
  - Emergency Preparedness Outreach Event at Lutron Electronics (Upper Saucon, 5/22/12 – 11 am)
  - Emergency Preparedness Outreach Event at Lutron Electronics (Upper Saucon, 5/22/12 – 12 pm)



- Emergency Preparedness Outreach Event at Lutron Electronics (Upper Macungie, 6/11/12 – 10am)
  - Emergency Preparedness Outreach Event at Lutron Electronics(Upper Macungie, 6/11/12 – 4pm)
  - Emergency Preparedness Outreach Event at Lutron Electronics (Emmaus, 6/15/12 – 12 pm)
  - LC Lunch and Learn at PPL (Allentown, 9/13/12 – 12 pm)
  - LC Parkland Emergency Preparedness Day (South Whitehall, 9/15/12 – 11am)
  - LC Wells Fargo Safety Fair (Bethlehem, 9/25/12 – 11am)
  - LC Lunch and Learn at Wells Fargo (Bethlehem, 9/26/12 – 11am)
  - LC Points of Pride Parade (Allentown, 9/29/12 – 11am)
- Northampton County Emergency Management Services developed a public Hazard Mitigation Planning webpage ([http://www.nc911.org/html/hazard\\_mitigation.html](http://www.nc911.org/html/hazard_mitigation.html)) to explain the project and elicit public participation in the process and input into the plan update. The webpage was launched in September 2011. See Appendix E for further views of the webpages and content.



The banner features the Northampton County logo, a photograph of a street scene, a photo of an emergency vehicle, a photo of a white emergency trailer with the text 'A COMMITMENT TO EMERGENCY PREPAREDNESS', and a photo of a fire. Below the banner is the title 'LEHIGH VALLEY HAZARD MITIGATION PLAN UPDATE' flanked by the County of Northampton and County of Lehigh seals. Below the title are links for a citizen survey and an application update.

## LEHIGH VALLEY HAZARD MITIGATION PLAN UPDATE

**\*\*\*Citizen Hazard Preparedness Survey\*\*\***

 [HMGP Application Timelines Update](#)

- [Hazard Mitigation Plan 2012 Update - Introduction](#)
- [What is Hazard Mitigation?](#)
- [How does this Plan benefit the Lehigh Valley?](#)
- [How can I get involved?](#)
- [County Contacts](#)
- [Plan Update Steering Committee](#)
- [Public Outreach Events and Activities](#)
- [2006 Hazard Mitigation Plan](#)
- [Resources and Links](#)
- [Stakeholder Forms](#)

- An on-line natural hazards preparedness citizen survey was developed to gauge household preparedness that may impact the Lehigh Valley and to assess the level of knowledge of tools and techniques to assist in reducing risk and loss from those hazards (<http://www.surveymonkey.com/s/G7PYYW7>). The questionnaire asked 23 quantifiable questions about citizen perception of risk, knowledge of mitigation, and support of community programs. The questionnaire also asked several demographic questions to help analyze trends.

The questionnaire has been available on the public website since September 2011, and further advertised in the project tri-fold brochure (see below), through email distribution lists, and local newsletters. Appendix E summarizes public input received through the website, the online survey, and other sources.

- A hazard mitigation planning tri-fold brochure (see Appendix E) was developed to inform the public of the planning process, provide local contact information, and encourage the public to review the plan and provide input. Lehigh County distributed the brochure at the various Citizen Corps, Local Emergency Planning Committee (LEPC), Local Emergency Planning Coordinators Meetings, and the various community outreach events that were conducted from March to August (see above list of events).
- The Lehigh Valley Planning Commission included an article entitled “Lehigh Valley Hazard Mitigation Plan Update” in their October/November/December 2011 newsletter. The full article is provided in Appendix E.

<i>October/November/December 2011</i>	<i>3</i>	<i>Lehigh Valley Planning Commission</i>
<b>Lehigh Valley Hazard Mitigation Plan update</b>		
<p><b>L</b>ehigh and Northampton counties have initiated an update to the Lehigh Valley Hazard Mitigation Plan, July 2006. The Lehigh Valley is vulnerable to a variety of natural hazards (flooding, tornadoes, severe winter storms) as well as man-made hazards (hazardous material</p>	<p>Lehigh and Northampton counties, and all 62 municipalities within the two counties, previously adopted a HMP for the Lehigh Valley that was approved by FEMA in April 2007. This plan was the first two county venture in the state. The LVPC assisted the Lehigh and</p>	<p>planning website has been developed to inform and engage the public and other local and regional stakeholders in the planning process (<a href="http://www.nc911.org/html/hazard_mitigation.html">http://www.nc911.org/html/hazard_mitigation.html</a>). This site includes an online hazards awareness and preparedness survey and will include</p>

- A round of public meetings was offered in Northampton County and Lehigh County in April 2012 to present the results of the risk assessment, and to encourage public input to the planning process.
- The project has been presented by members of the Steering Committee at various regularly scheduled local meetings to encourage awareness of the project and elicit input to the plan update, including the following:
  - LC Citizens Corps Meeting (2/22/12 – 3 pm)
  - LC Local Emergency Management Coordinators Meeting (3/8/12 – 7 pm)
  - LC Local Emergency Management Coordinators Meeting (4/12/12 – 7 pm)
  - LC Local Emergency Planning Committee (LEPC) Meeting (6/14/12 – 10 am)
  - LC Citizen Corps Meeting (6/27/12 – 3 pm)
  - LC Council of Governments Meeting (9/11/12- 1pm)
  - NC LEPC Meeting (3/7/12 – 10 am)
  - NC LEPC Meeting (6/6/12 – 10 am)
  - NC Local Emergency Management Coordinators Meeting (6/13/12 – 7 pm)
  - NC Local Emergency Management Coordinators Meeting (8/8/12 – 7 pm)

- NC Council of Governments Meeting (6/14/12- 10 am)
  - NC Council of Governments Meeting (8/13/12- 10 am)
  - NC Council of Governments Meeting (9/11/12- 10 am)
  - NC Public Safety Briefing (6/9/11 – 7 pm)
  - NC Public Safety Briefing (4/12/12 – 7 pm)
  - NC Public Safety Briefing (6/14/12 – 7 pm)
  - NEPARTF VOAD Subcommittee Meeting (6/23/12 – 10 am)
  - Lehigh Valley Disaster Relief Task Force Meeting (8/9/12 – 10 am)
- The plan update process was discussed at the PA Silver Jackets (State Hazard Mitigation Committee) Quarterly Meeting in Harrisburg, PA on May 12, 2012.
  - Draft and final versions of the plan update have been posted to the public website ([http://www.nc911.org/html/hazard\\_mitigation.html](http://www.nc911.org/html/hazard_mitigation.html) ) for public review and comment, as they became available.
  - The complete draft plan was posted to the public website in March 2103 and advertised via legal notice, on both County emergency management homepages, and through press releases to local media.
  - The two counties and all municipalities have identified continued public outreach as a high priority mitigation initiative within their jurisdictional annexes (see Section 9).

### 3.6 Integration/Coordination with Existing Plans and Programs

Effective mitigation is achieved when hazard awareness and risk management approaches and strategies become an integral part of public activities and decision-making. In the Lehigh Valley there are many existing plans and programs that support hazard risk management, and thus it is critical that this hazard mitigation plan integrate and coordinate with, and complement, those mechanisms.

Section 5 “Capability Assessment” provides a summary and description of the existing plans, programs and regulatory mechanisms in the Lehigh Valley that support hazard mitigation. This section documents how these existing plans and programs have been integrated into this updated plan, and how this plan will continue to promote and effect that coordination.

The integration of existing data, plans and programs is further documented in the comprehensive “References” section of this plan update, as well as in the “Data and Methodology” sections of the hazard profiles (Section 4).

#### 3.6.1 Emergency Management Plans and Programs

The Lehigh Valley HMP update project has been managed through the LCEMA and NCEMS, allowing broad integration of relevant emergency management data, information and programs to this update. Further, county and municipal participation in this process has included emergency managers, police, fire and other first responders, and input from members of LEPCs and Community Emergency Response Teams (CERTs).

Data and information used included disaster claims data (including public and individual assistance) and other loss information to support the updated vulnerability assessments and assist with the identification

of appropriate, cost-effective mitigation projects. Specifics about response and recovery programs and efforts in the Lehigh Valley, including the management and administration of mitigation and emergency preparedness grant programs, have led to specific county and local-level mitigation actions to improve regional emergency management coordination and build related risk management capabilities.

The two counties and municipalities in the Lehigh Valley recognize that the findings and recommendations of this plan update need to be incorporated into their emergency planning, preparedness, response and recovery programs and operations. Public education and outreach to improve personal preparedness, and promote an awareness of mitigation opportunities and personal protection through risk insurance, have been incorporated in specific county and local initiatives.

### 3.6.2 Comprehensive Planning and Land Use Regulation

Available comprehensive/master and relevant land use planning and regulation documents were reviewed during this plan update process, including:

- Comprehensive Plan, The Lehigh Valley...2030, April 2005, Update June 2010
- Lehigh Valley 2010 Comprehensive Economic Development Strategy
- Lehigh Valley Surface Transportation Plan, 2011-2030, October 2010
- Lehigh Valley Greenways Plan, A Regional Greenways Plan for Lehigh and Northampton Counties, 2007
- Lehigh Valley Profiles and Trends, June 2011
- Floodplain Guide/Model Regulations, October 2007
- Riparian and Wetland Buffers Guide/Model Regulations, January 2011
- Conservation Subdivisions Guide/Model Regulations, November 2010
- Steep Slope Guide/Model Regulations, November 2008
- Woodlands Guide/Model Regulations, March 2009
- Subdivision and Building Activity Report, March 2011
- Lehigh and Northampton Counties, Housing in the Lehigh Valley, July 2009

Information from these plans was incorporated into the regional profile (Section 2), hazard profiles (Section 4), and into the asset inventory (population/demographics, general building stock, critical facilities) used to develop the updated vulnerability assessments (Section 4).

Recommendations within these plans have been considered in developing and updating the county and municipal-level mitigation strategies. The availability of model ordinances, developed by the LVPC to address the specific risks and regulatory frameworks of the Lehigh Valley, was presented to the planning partnership during the planning process, discussed at the Jurisdictional Annex Workshops, and included in mitigation strategy identification/development resources provided to the plan participants.

It was the intention that through this planning process, municipalities shall incorporate the findings and recommendations of this plan update into future local planning efforts, and into the overall execution of their land-use planning process (e.g. site plan review, permitting, code enforcement). Known or anticipated future development in the Lehigh Valley was identified at the local level, including the identification of known hazard risks and risk zones, within the jurisdictional annexes (Section 9).

### 3.6.3 Act 167 Stormwater Management Plans

The LVPC provided Act 167 Stormwater Management Plans for the entire Lehigh Valley. Information that was incorporated into this plan update includes general watershed information, identification of



floodprone areas and known restrictions, and potential mitigation projects. At the Jurisdictional Annex Workshops, all municipalities were provided excerpts (hard copy and on CD) of the salient portions of the Act 167 Stormwater Management Plans for their watershed for review and use as they were developing their jurisdictional annexes.

In 2007, the LVPC secured a 5-year bi-county contract from PADEP to update existing Act 167 plans. The LVPC began work under the contract, however due to lack of funding, PADEP terminated all Act 167 contracts in 2010. LVPC work on these plan updates is deferred until funding is restored.

#### 3.6.4 National Flood Insurance Program (NFIP) and the Community Rating System (CRS)

Currently all municipalities in the Lehigh Valley participate in the NFIP, with no municipalities having outstanding sanctions or suspensions. All municipalities have adopted a Flood Damage Prevention Ordinance which is administered locally by their Floodplain Administrator, as identified in the “Regulatory” and “Administrative and Technical” section of the Capability Assessment in each municipality’s annex (Section 9). All floodplain managers were informed of the planning process, and were tasked with reviewing the plan documents and providing direct input to the plan update.

At the time this plan update was written, the Lehigh County FEMA Digitized Flood Insurance Rate Maps (DFIRM) dated July 2004 and the Northampton County preliminary DFIRMs dated 2011 were used to evaluate exposure and determine potential future losses. The Northampton County 2011 DFIRMs, although considered preliminary, are the best available data and were used for this plan update.

FEMA Region III provided NFIP policy, claims and repetitive loss data for the entire Lehigh Valley. This data was incorporated in the flood hazard profiling and risk assessment (Section 4), as well as into the municipal annexes in Section 9. All municipalities were encouraged to include mitigation initiatives that specify continued and enhanced participation in the NFIP, and address their flood vulnerable structures and infrastructure, including Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties.

Both counties and all municipalities have identified public outreach initiatives that include increasing public awareness of and participation in the NFIP. Further, both counties have identified that they will be hosting a hazard insurance forum with major regional insurers to better understand hazard insurance issues (requirements, availability, limitations, costs, etc.) and thus be better able to inform the public.

As updated NFIP mapping is prepared for Lehigh and Northampton counties, communities will need to adopt this mapping, update their NFIP Flood Damage Prevention Ordinances, and assist their residents with issues such as Letters of Map Amendment (LOMAs). FEMA Region III and the State NFIP Coordinator’s Office provide support for these efforts, in addition to the LVPC who prepared a model Floodplain Ordinance for use by Lehigh Valley communities.

Currently within the Lehigh Valley only Hanover Township in Northampton County participates in the CRS program, with a current rating of 9 (5% discount on flood insurance premiums). Northampton County Emergency Management Services sponsored a CRS workshop in May 2012 to inform the communities of the program and encourage participation. Increased participation in the Lehigh Valley will continue to be supported by both Counties as identified in their updated mitigation strategies. Further, certain communities in the Lehigh Valley have identified in their updated mitigation strategies that they plan to apply to the CRS program.

FEMA Unified Hazard Mitigation Assistance (Unified HMA) Grant, approved HMP, the two counties and all communities in the Lehigh Valley are eligible to apply for and receive mitigation grant funding for eligible, cost-effective mitigation projects under the Unified HMA grant programs, including:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Repetitive Flood Claims (RFC)
- Severe Repetitive Loss (SRL)

Throughout this plan update process, participating municipalities were provided information, including FEMA brochures and publications, to inform them of these grant programs. The counties and all municipalities were asked to identify any projects that were funded under these programs, as identified in their jurisdictional annexes (Section 9). As an example, Lower Macungie Township in Lehigh County received SRL funding to address two SRL properties, and has applied for HMGP funding to address three additional flood vulnerable residential properties.

During this update process, the 2012 Unified HMA national program was offered in the Commonwealth, in addition to several HMGP opportunities in the wake of declared disasters in the Commonwealth. In particular, HMGP opportunities following Hurricane Irene (DR-4025) and Tropical Storm Lee (DR-4030) made available significant levels of HMGP funding in the Commonwealth.

As the counties and municipalities updated their mitigation strategies, potential mitigation grant eligible projects have been indicated as such when identifying the potential funding source. LCEMA and NCEMS will continue to inform their inclusive municipalities as mitigation grant opportunities are announced by PEMA, and provide assistance as feasible and appropriate with the grant application process.

### 3.6.5 Capital Improvement Planning

Both counties and many of the municipalities in the Lehigh Valley have capital improvements plans, identifying specific capital projects to be funded and completed according to a defined schedule. Some of these projects involve improvements to facilities and infrastructure that provide hazard mitigation benefits. As such, during this update process, the counties and municipalities have been encouraged to consider the mitigation benefits associated with their known or anticipated capital projects as a way to help prioritize their execution and to develop awareness that mitigation grants may be available to help fund such projects.

### 3.6.6 Housing and Urban Development (HUD) and Community Development Block Grant (CDBG) Funding

Opportunities for the application of HUD and CDBG funding to support certain types of mitigation activities in the Lehigh Valley, as identified in the 2012-2017 Northampton County Consolidated Plan, were reviewed as part of this plan update process.