Section 2: Planning Process

This section includes a description of the process used to develop the Plan, including how it was prepared, who was involved in the process, and how the public was involved. It is broken down into the following sections:

- Plan Development Process
- Involved Stakeholders in Mitigation Planning
 - o Regional Planning Team
 - Municipal Participation
 - o Public Participation Citizen and Stakeholder Involvement
- Review and Incorporation of Existing Information

Plan Development Process

Requirement §201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process and how the public was involved.

The floods of 2004, 2005 and 2006 along the Delaware strained the already limited resources of many municipalities in the region. This planning effort was formed to combine the resources of state, regional and county agencies in order to assist local municipalities in completing the required planning process. In October 2006, the multi-agency and local planning effort to facilitate the development of this multi-jurisdictional Flood Mitigation Plan was formed.

Although the Plan is specific to flooding, it has been prepared to meet the All Hazard Plan requirements for the flood hazard. As such, the information contained in this plan will enable municipalities that participate in this Plan to use the enclosed information when preparing their All Hazard Plan, either individually or as part of a larger regional effort.

The multi-jurisdictional planning process recommended by the Federal Emergency Management Agency (FEMA Publication Series 386) was used to develop this Plan. The Local Mitigation Plan Crosswalk, found in Appendix A, provides a detailed summary of FEMA's current minimum standards of acceptability and notes the location of where each requirement is met within the Plan. These standards are based upon FEMA's Interim Final Rule as published in the Federal Register on February 26, 2002, in Part 201 of the Code of Federal Regulations (CFR).

The Plan was written using the best available information obtained from a wide variety of sources. Throughout the plan development process, a concerted effort was made to gather information from participating municipal and county agencies, as well as, stakeholders, federal and state agencies, members of the local business and industry community, and the citizens of the Plan area. The flood mitigation strategies contained within this plan have been developed through an extensive planning process involving local jurisdictions, citizens, counties, and state, regional and federal agencies.

The plan development process for the Plan is displayed as Figure 2-1 below:

A Multi-Jurisdictional <u>Flood</u> Mitigation Plan for the Non-Tidal N.J. Section of the Delaware River Basin

-Planning Process-Regional Planning Team Meeting (NJOEM, DRBC, NJDEP, County Officials) October 2006 **Hunterdon County** Sussex County Mercer County Warren County Kick-off Meeting Kick-off Meeting Kick-off Meeting Kick-off Meeting December 2006 December 2006 November 2006 December 2006 Hunterdon County Mercer County Sussex County Warren County Planning Planning Planning Planning Workshop Workshop Workshop Workshop March 2007 March 2007 March 2007 March 2007 Local Mitigation Planning Process Municipalities/Counties Submit Local Plans & Actions to DRBC Roll-up of Local Mitigation Actions Technical Technical Technical **Technical** Assistance Meeting Assistance Meeting Assistance Meeting Assistance Meeting October 2007 October 2007 October 2007 October 2007 DRBC drafts Final Plan Local Municipalities Review and Adopt the Plan Review of Draft Multi-jurisdictional Flood Mitigation Plan by Counties, NJOEM & FEMA by Resolution (After Plan is deemed Approvable by FEMA) Submission of FINAL Plan to FEMA

Figure 2-1: Plan Development Process Flowchart

An initial Regional Planning Team Meeting for the project was held on October 11, 2006 at a regionally central location, the NJ Water Supply Authority in Clinton, NJ. The meeting was

facilitated by the Delaware River Basin Commission. In attendance were also representatives from NJOEM, NJDEP, counties, NJ Water Supply Authority, the Delaware River Greenway Partnership, the Municipal Land Use Center, NJ State Legislature and FEMA.

At the initial meeting, the proposed planning approach, anticipated timeline and the respective roles and responsibilities of each team member were discussed. NJOEM described the benefits of having a Flood Mitigation Plan in place and the requirements of the planning process. NJDEP discussed the goals and objectives of planning process and how they parallel the findings of the Governor's Flood Mitigation Task Force Report. The DRBC specified the technical assistance and products that would be prepared to aid the local jurisdictions in meeting the necessary requirements of the planning process. The technical assistance and products included the following:

- Analysis of flood insurance claims and repetitive loss properties
- Flood hazard identification and vulnerability assessment (HAZUS)
- Essential Facility vulnerability analysis
- Land use and impervious cover change analysis
- Historic flood damage costs by municipal damage areas
- Basin-scale mitigation strategies and priorities
- Compendium of local mitigation strategies
- DRBC flood mitigation website to disseminate products and planning tools
- Facilitation of three meetings per county with municipalities
- Draft/compile final plan

Following the initial planning meeting in October 2006, each county made a commitment to be an active participant in the planning process and pledged to provide assistance throughout the planning process to its municipalities.

County Kick-off meetings were held in the Nov/Dec 2006 timeframe in each County. The Regional Planning Team (including NJDEP, NJOEM and DRBC staff and County officials), interested municipal officials and regional agencies were in attendance. Invitations addressed to mayors were sent to all municipalities. At the County Kick-off meeting, the concept of hazard mitigation was introduced, followed by a more detailed discussion of local mitigation planning. Preliminary assessment products were made available by the DRBC. Specific data collection requests were explained, including a request for any unique local hazard risk data available at their local government level. Roles and responsibilities for the individual jurisdictions were defined, and the project timeline presented.

The intent of the County Kick-off meetings was to educate officials from all participating municipal jurisdictions on the mitigation planning process, as well as to explain the planning requirements and the individual roles being required and assigned to each of them. At this time, each municipality was charged to designate a local liaison and complete a Statement of Intent depicting their commitment to participating in the planning process.

A Statement of Intent for each participating municipality is included as Appendix B of this report. Each Statement is signed by both the designated local liaison and a local official. Some municipalities took formal action by their municipal governing body in order to participate in this planning process, others did not. Each municipality was responsible for completing the municipal process necessary to allow completion of the municipal actions required to be a part of this Plan.

Planning Workshops, one held per county, were held in March 2007. These Planning Workshops were designed to help designated local liaisons further understand the overall mitigation planning process and their responsibilities in that process. Examples of mitigation actions and a list of municipal requirements were provided to help aid municipalities in formulating their own list of desired mitigation actions and follow the FEMA required planning process.

County Technical Assistance meetings, again one per county, were held in October 2007. At these meetings the findings of the Vulnerability Assessment were presented to local officials and discussion of specific mitigation actions followed. Participants were asked to identify specific mitigation actions that their community could undertake to help their county or community become less vulnerable to flooding. A variety of planning tools and references for considering

and evaluating their mitigation action alternatives was handed out. County and local officials were instructed to take the materials back to their individual jurisdictions to begin proposing and prioritizing their mitigation actions.

Essential Facilities maps were prepared by DRBC and sent to each participating municipality. The maps were prepared using GIS. Each map contained aerial photos, FEMA Q3 floodplain boundaries, county identified essential facilities and FEMA (HAZUS) identified essential facilities. Municipalities were asked to verify the information on the maps and provide any additional facility information to DRBC for inclusion in the HAZUS risk assessment.

For the purposes of this risk assessment, the label "essential facility" may refer to any of the following: hospitals and other medical facilities, police and fire stations, emergency operations centers, government and public buildings, water treatment facilities and institutions with vulnerable populations such as colleges, schools, hospitals and nursing homes.



Figure 2-2: Sample Essential Facility Map

During the entire flood mitigation planning process, DRBC maintained a flood mitigation planning page on its website. The webpage was used to disseminate information and planning

tools developed to aid local municipalities in their planning process (guidelines, prepared technical assistance, questionnaires and presentations made at meetings). Some of these prepared documents are provided in Appendix C. During the review process, the plan will be posted on this website to aid in municipal and public final review.

Involved Stakeholders in Mitigation Planning

Regional Planning Team

The Regional Planning Team included the Delaware River Basin Commission (DRBC), the New Jersey Department of Environmental Protection (NJDEP), the New Jersey Office of Emergency Management (NJOEM) and county emergency management and planning departments.

Members of the Regional Planning Team established plan development goals; established a timeline for completion of the plan; ensured that the plan meets the requirements of DMA 2000 and FEMA guidance; solicited and encouraged the participation of municipalities, regional agencies, stakeholders, and citizens in the plan development process; assisted in gathering information for inclusion in the plan; organized and oversee the public involvement process; identified and profiled the flood hazard; estimated potential exposure or losses; evaluated development trends; and suggested mitigation strategies, goals, and actions.

The following agencies and individuals participated on the Regional Planning Team:

• Delaware River Basin Commission:

- o Robert Tudor, Deputy Executive Director project oversight, plan review, mitigation strategy input
- Laura M. Tessieri, P.E., CFM, Water Resources Engineer project lead, grant administration, plan process and development, document preparation, risk assessment, mitigation strategy input
- o Karen Reavy, GIS Specialist map and database preparation
- o Chris Koltalo, Intern map and database preparation
- o Courtney Vanous, Intern essential facilities database preparation, outreach to municipalities, document preparation

• New Jersey Department of Environmental Protection:

- o Joseph Ruggeri, P.E., CFM, project oversight, plan review, mitigation strategy input
- o A. Chris Gould land use/impervious surface analysis
- o Kerry Kirk-Plugh development of project approach/ outreach

• New Jersey State Police/ Office of Emergency Management:

- o Sgt. Paul Miller outreach, presentations at County meetings
- o Jeff Crapser outreach during resolution adoptions
- o Kathy Lear outreach, presentations at County meetings

• Natural Resource Conservation Service:

o Greg Westfall – municipal worksheet summaries, outreach, plan process development, presentations at County meetings

• Mercer County:

- o Robert Hartman, County Emergency Management Deputy Coordinator
- o Marisa Wieczorek, AICP/PP, Senior Planner

• Hunterdon County:

- o Ken Bogen, Principal Planner
- o William J. Powell, County Emergency Management Coordinator

• Warren County:

- o Frank E. Wheatley, County Emergency Management Coordinator
- o William E. Hunt, Domestic Preparedness Planner

• Sussex County:

- o Chief E.S. "Skip" Danielson, Director Emergency Services
- o Mark W. Vogel, Deputy Coordinator
- o Alice Brees, Planner
- o David Kunz, GIS Manager

Municipal Participation

Participation by municipalities in the planning process is not only required by FEMA in order for the jurisdiction to be eligible to adopt the multi-jurisdictional Flood Mitigation Plan, but it is also crucial for the successful development of a Flood Mitigation Plan that contains actions able to be implemented. Municipal involvement ensures ownership of the plan, takes advantage of local expertise and experience and results in a greater probability that the Plan contains mitigation actions that will be implemented in the future.

In order for each local municipality to be eligible to adopt the Flood Mitigation Plan, they are required to complete and document the local flood mitigation planning process completed at the municipal level. The Regional Planning Team developed a list of municipal requirements to ensure adequate levels of municipal participation. Tables 2-1-2-4 depict the record of participation for each municipality.

The list of municipal requirements for satisfactory participation in this plan include:

- 1. Submit a Statement of Intent for your municipality; designate a local liaison (point of contact) for your municipality
- 2. Attend county meetings and the planning workshop (a minimum of 2 meetings considered satisfactory)
- 3. Form a local mitigation planning committee; document your local planning process, keep track of all meeting dates and notes
- 4. Submit a completed municipal questionnaire and worksheet
- 5. Publish notice of your municipality's intent to prepare a Flood Mitigation Plan to encourage public participation and comment
- 6. Distribute a prepared questionnaire to residents/ businesses known to be in the flood prone areas
- 7. Allow time for comment at two public meetings; once during the drafting stage and another prior to adopting the plan; collect resident questionnaires and summarize public comments
- 8. Develop a list of flood mitigation goals for your community
- 9. Compose and prioritize a list of desired local mitigation actions (include estimated costs,

organization responsible for implementation, implementation schedule, overall priority and potential funding sources)

10. Following determination by FEMA that the Plan is deemed "approvable", adopt the plan locally by resolution

In order for each local municipality to successfully complete the above tasks, each municipality formed a local mitigation planning committee. There was no set requirement for the size of each committee or its composition. Each local mitigation planning committee varied by town due to size of municipality, vulnerability of the town or past history with flooding, etc. The Regional Planning Team suggested to municipalities that certain individuals fulfilling certain roles within the municipality sit on the task force. This guidance is contained in Appendix C. Although the composition of individuals on each committee varied from town to town, each participating municipality formed a committee, headed by their designated local liaison, which included a subset of one or more of the following:

- Local Emergency Management Coordinator
- Local Floodplain Administrator
- Stormwater Management Coordinator
- Public Works Supervisor
- Building Code Official
- Planning Board Member
- Zoning Board Member
- Flooded property owners
- Local Historians
- Residents/Business Owners
- Members of your Governing Body
- Administrator/Mayor
- Municipal Engineer
- Municipal Planner

Each Committee included individuals who were knowledgeable about local conditions, able to characterize the impacts of past flood events on their community, describe how existing land use planning addresses potential impacts of flooding, identify essential facilities within the municipality and evaluate local flood mitigation options. All participating municipalities were required to obtain public input by issuing public notice of intent to participate in the Plan and through a public meeting. For most municipalities, this requirement was met during a regularly held municipal governing board meeting.

Section 6 contains further details by municipality on the specific composition of each local mitigation planning committee and information on how and when each municipality met the municipal requirements for plan participation.

Public Participation - Citizen and Stakeholder Involvement

Requirement §201.6(b)(1): The planning process shall include an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.

Requirement §201.6(b)(2): The planning process shall include an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process

Throughout the planning process, citizen and stakeholder input was sought through a variety of mechanisms. Some stakeholders attended county meetings, others provided information to the plan process and still more reviewed the final plan. These stakeholders will be important resources following plan approval and adoption, in helping to identify funding or opportunities to leverage funds in order to complete the prioritized mitigation actions contained in this Plan.

Stakeholders to this Plan include

- NJ Water Supply Authority;
- National Park Service;
- National Resources Conservation Service;
- NJ State legislative offices;
- Delaware Joint Toll Bridge Commission;
- Delaware Raritan Canal Commission;
- Municipal Land Use Center at TCNJ;
- New Jersey Department of Transportation; and
- local watershed groups.

Each participating municipality was required to hold and publicly notice a public meeting at which time local input to the plan was gathered. Public notice was often accomplished through announcements in local newspapers. A survey aimed at gaining information from flood impacted residents and businesses was produced by DRBC for use by municipalities. The survey sought information from citizens about flooding and asked for specific action recommendations to reduce future risks. The survey results provided a source of information to the municipalities for use in formulating mitigation actions. Details on how each municipality solicited public and interested stakeholder input, including survey results, is contained in each specific municipal flood profile and mitigation action plan in Section 6.

The DRBC Website was also used to disseminate information to the public and other interested parties during the Flood Mitigation Plan process. For example, posted materials include an article about the planning project, the residential survey, presentations made at public meetings, a summary of historical disasters in the DRBC, and information on grant opportunities. Many of these materials are included in Appendix C. The draft Plan was made available on the DRBC's website for public review and comment. Each participating jurisdiction plans to allow for public review and comment prior to their Governing Bodies' adoption of the Plan. A copy of each resolution adopting the Plan is in Appendix F (forthcoming upon adoption).

Review and Incorporation of Existing Information

Requirement §201.6(b)(3): The planning process shall include a review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

The New Jersey State Hazard Mitigation Plan (accessible online at http://www.njmit.net/njshmp/) was reviewed by the Project Management Team. The State's plan acknowledges "Hazard mitigation plans, which include a hazard and vulnerability analysis, long term hazard reduction strategies and hazard minimization activities, are part of series of major plans and reports associated with the emergency management cycle" and is the "demonstration of New Jersey's commitment to reduce risk from natural hazards and serves as a guide for both State and local decision makers as they commit resources to reducing the effects of natural hazards on lives and property". (State Hazard Mitigation Plan, pg. 2)

Municipalities were also requested to review their Municipal Master Plan, Land Use/Zoning ordinances, Floodplain Management Ordinance, any Open Space and Farmland Preservation programs in their community and any other ordinances enacted in their municipality to help mitigate flooding impacts. (e.g. Stream Corridor, Woodland Conservation, Steep Slopes, Stormwater Management).

In addition to these, other plans deemed necessary for review by each municipality's Local Flood Mitigation Planning Committee are listed in the Flood Profile and Mitigation Action Plan by Jurisdiction in Section 6.

Table 2-1. Record of Participation for Mercer County

| Nature of Participation | Ewing | Hamilton | Hopewell | Lawrence | Pennington | Trenton |
|--|----------|----------|----------|----------|------------|----------|
| Submitted Statement of Intent | √ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Attended County Meetings | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Formed a local mitigation planning committee | √ | √ | ✓ | ✓ | √ | √ |
| Completed municipal questionnaire and worksheet | ✓ | √ | √ | √ | ✓ | √ |
| Published notice of intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Distributed questionnaires and summarized public comment | √ | √ | √ | √ | √ | √ |
| Allowed time for comment at public meetings | √ | ✓ | ✓ | ✓ | ✓ | √ |
| Developed community flood mitigation goals | √ | ✓ | ✓ | √ | √ | √ |
| Developed a mitigation strategy | √ | √ | √ | √ | ✓ | ✓ |
| Adopted plan by resolution | | | | | | |

Table 2-2. Record of Participation for Hunterdon County

| Nature of Participation | Delaware | East Amwell | Franklin | Frenchtown | Hampton | Kingwood | Lambert- ville | Lebanon Twp | Milford | Raritan | Stockton | West Amwell |
|--|----------|----------------|----------|------------|----------|----------|-------------------|----------------|----------|----------|----------|----------------|
| Submitted Statement of Intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Attended County Meetings | √ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Formed a local mitigation planning committee | √ | ✓ | √ | ✓ | √ | ✓ | √ | √ | ✓ | ✓ | √ | ✓ |
| Completed municipal questionnaire and worksheet | ✓ | √ | √ | ✓ | ✓ | √ | √ | √ | ✓ | ✓ | ✓ | ✓ |
| Published notice of intent | √ | ✓ | √ | ✓ | ✓ | ✓ | √ | √ | ✓ | ✓ | ✓ | ✓ |
| Distributed questionnaires and summarized public comment | √ | √ | √ | √ | ✓ | √ | ✓ | ✓ | √ | √ | ✓ | ✓ |
| Allowed time for comment at public meetings | √ | √ | √ | √ | √ | ✓ | √ | √ | √ | √ | √ | ✓ |
| Developed community flood mitigation goals | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Developed a mitigation strategy | √ | ✓ | √ | ✓ | √ | √ | ✓ | √ | ✓ | ✓ | √ | ✓ |
| Adopted plan by resolution | | | | | | | | | | | | |

Table 2-3. Record of Participation for Warren County

| Nature of Participation | Belvidere | Blairstown | Franklin | Frelinghuysen | Hackettstown | Hardwick | Harmony | Independence | Knowlton |
|--|-----------|------------|----------|---------------|--------------|----------|----------|--------------|----------|
| Submitted Statement of Intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Attended County Meetings | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Formed a local mitigation planning committee | ✓ | √ | √ | √ | √ | √ | ✓ | √ | √ |
| Completed municipal questionnaire and worksheet | ✓ | ✓ | √ | ~ | √ | ✓ | ✓ | ✓ | ✓ |
| Published notice of intent | ✓ | ✓ | √ | ✓ | √ | √ | ✓ | ✓ | √ |
| Distributed questionnaires and summarized public comment | √ | √ | √ | ✓ | √ | √ | ✓ | √ | ✓ · |
| Allowed time for comment at public meetings | √ | √ | √ | √ | ✓ | ✓ | ✓ | ✓ | √ |
| Developed community flood mitigation goals | ✓ | ✓ | √ | ✓ | ✓ | ✓ | ✓ | ✓ | √ |
| Developed a mitigation strategy | ✓ | ✓ | √ | ✓ | ✓ | ✓ | ✓ | ✓ | √ |
| Adopted plan by resolution | | | | | | | | | |

Table 2-3. Record of Participation for Warren County (continued)

| Nature of Participation | Lopatcong | Mansfield | Oxford | Phillipsburg | Pohatcong | White |
|---|-----------|-----------|----------|--------------|-----------|----------|
| Submitted Statement of Intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Attended County Meetings | ✓ | ✓ | √ | ✓ | ✓ | ✓ |
| Formed a local mitigation planning committee | √ | √ | ✓ | ✓ | ✓ | ✓ |
| Completed municipal questionnaire and worksheet | ✓ | ✓ | √ | ✓ | ✓ | ✓ |
| Published notice of intent | ✓ | ✓ | √ | ✓ | ✓ | ✓ |
| Distributed questionnaires and summarized public comment | √ | √ | √ | √ | ✓ | √ |
| Allowed time for comment at public meetings | √ | √ | ✓ | ✓ | ✓ | ✓ |
| Developed community flood mitigation goals | ~ | √ | √ | ✓ | ✓ | √ |
| Developed a mitigation strategy Adopted plan by resolution | √ | ✓ | ✓ | ✓ | ✓ | ✓ |

Table 2-4. Record of Participation for Sussex County

| Nature of Participation | Andover Borough | Branchville | Byram | Frankford | Fredon | Montague | Newton | Sandyston | Sparta | Stillwater |
|--|--------------------|-------------|----------|-----------|----------|----------|----------|-----------|----------|------------|
| Submitted Statement of Intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Attended County Meetings | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Formed a local mitigation planning committee | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | √ | ✓ | ✓ |
| Completed municipal questionnaire and worksheet | ✓ | √ | ✓ | ✓ | ✓ | √ | √ | √ | ✓ | ✓ |
| Published notice of intent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | √ | ✓ |
| Distributed questionnaires and summarized public comment | ✓ | √ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Allowed time for comment at public meetings | √ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Developed community flood mitigation goals | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | √ |
| Developed a mitigation strategy | ✓ | ✓ | ✓ | √ | ✓ | √ | ✓ | ✓ | ✓ | ✓ |
| Adopted plan by resolution | | | | | | | | | | |