



Section 3 Planning Process

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3.1 Interim Final Rule for the Planning Process

“An effective planning process is essential to developing and maintaining a good plan. The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.”

The IFR Subsection 201.4 (c) (1) requires that the plan include:

“Description of the *planning process* used to develop the plan, including how it as prepared, who was involved in the planning process, and how other agencies participated.”

2008 Update note to reviewers: this document constitutes the State of New Jersey’s required three-year mitigation plan update. Although the State and FEMA Region II concurred that the 2005 plan document required considerable edits to make it more closely compliant with FEMA requirements, some aspects and text from the original version of the plan remain in this version. In the draft and final draft versions of the document, these holdovers are in blue font.

3.2 Description of the Planning Process

This updated section of the New Jersey State Hazard Mitigation Plan describes the processes used by the State to develop the original Plan, and to update the document in 2008. In this updated 2008 version of the Plan, the description of the original (2005) planning process was significantly edited for clarity and brevity. The longer original description can be reviewed in the 2005 Plan, which is available through the New Jersey Office of Emergency Management (NJOEM).

The original (2005) State Hazard Mitigation Plan was prepared by NJOEM with technical assistance from the Stevens Institute of Technology and a planning consultant, with collaboration from the interagency State Hazard Mitigation Team (SHMT) and its State Hazard Mitigation Planning subcommittee. Meeting minutes from the original Plan development process are included in the 2005 version of the State Hazard Mitigation Plan, but not in the update.

For the 2008 Plan update, NJOEM secured the services of planning consultants Jeffrey S. Ward and Associates, Inc., and Vissering Pardue and Associates, Inc. These firms facilitated the process and



performed much of the technical work related to hazard identification, vulnerability determinations and risk assessment.

By concurrence between NJOEM and FEMA Region II, the 2008 update to this Plan includes much more extensive changes than would normally be part of such an effort. FEMA guidance related to plan updates requires States to describe the process used to update the plan, specifically, determinations by the State and/or planning team about which sections require(d) updates, and how the updates were completed. Each section of this plan includes a brief description of the process used in the update, and where indicated, specific details about how technical aspects of the update were carried out.

Where appropriate or necessary, NJOEM has indicated where parts of the original document have been retained, and where additions have been made as part of the update. The plan update was completed on a relatively short schedule, so the process was highly streamlined, as outlined in the bullets below.

- Comprehensive review of all plan sections, and a written gap analysis to compare the 2005 version of the plan to IFR and "Blue Book" requirements.
- Consultation with FEMA Region II to discuss the 2005 version of the plan, especially areas where FEMA believes that there is opportunity for improvement.
- Comprehensive update to the Hazard Identification and Profiling, and Vulnerability Assessment and Loss Estimation sections of the plan, as the basis of other planning elements.
- Detailed review and update of the Mitigation Strategy Section. The update process was completed by the NJOEM, the Mitigation Core Team and the State Hazard Mitigation Team through a detailed review of the existing plan to identify progress on the actions it described, and development of additional goals, strategies and actions based on new results of the vulnerability assessment and loss estimation.
- Creation of a new appendix dedicated to the FEMA Severe Repetitive Loss mitigation program, and New Jersey's strategy to implement it in the State.

The Mitigation Core Team (MCT, described below) and the State Hazard Mitigation Team (SHMT) met multiple times during the plan update process to discuss progress and technical aspects of the work, and were provided draft sections of the plan at key points in the development process, for review and comment. Toward the end of the Plan development, the draft document was posted on the websites for the New Jersey Association of Floodplain Managers, the New Jersey Department of Environmental Protection, the New Jersey League of Municipalities, and the New Jersey Office of Emergency Management. The organizations sent emails to their membership advising them of the postings, encouraging them to review the documents, and providing an email address where they could send feedback. The comments were compiled and reviewed by the MCT, and where appropriate changes were made in the draft to reflect this feedback.

The focus of New Jersey's Statewide hazard mitigation effort is centered in the New Jersey Office of Emergency Management (NJOEM), located in the Division of State Police in the New Jersey Department of Law and Public Safety. NJOEM provides administrative support to the State Hazard Mitigation Team (SHMT). The SHMT is chaired by a representative of the Governor's Office. Other State agencies represented on the SHMT and actively involved in hazard mitigation include the Department of Environmental Protection (NJDEP), the Department of Community Affairs (NJDCA), the Department of Transportation (NJDOT), and the Department of Banking and Insurance (NJDOBI). The Executive Order establishing the SHMT is attached to this plan as Appendix C.



Two groups were mainly responsible for the 2008 Plan update, the Mitigation Core Team (MCT) and the State Hazard Mitigation Team (SHMT). Membership in these groups is shown in Tables 3.2-1-1 and 3.2-3-1.

3.2.1 The Mitigation Core Team

For the 2008 Plan update, NJOEM determined that the planning process should be facilitated by a group of subject matter experts who would be responsible for decision making, technical input and document review. This group was named the Mitigation Core Team (MCT), and was comprised of the individuals shown in Table 3.2-1-1. The third column in the table describes the responsibilities of each member of the team in the 2008 update process.

**Table 3.2-1-1
Membership of the New Jersey State Hazard Mitigation Plan Update
Mitigation Core Team (MCT)**

Core Team Member	Organization	Role in the Planning Process
Sgt. Jeffrey Crapser	New Jersey Office of Emergency Management	Project manager for State. Chairman of the Updated Plan, responsible for leading the teams and meetings, supporting data collection requests, overall project coordination. Liaison with FEMA Region II.
Pete Dennen	New Jersey Office of Emergency Management	Lead coordinator from NJOEM for all data collection, dissemination and organization for the MCT and SHMT. Primary liaison with consultant team, MCT and SHMT. Primary technical reviewer for all sections of the plan update.
Tom Rafferty	New Jersey Office of Emergency Management	Lead IT and GIS coordinator. Coordinated HAZUS-related activities. Liaison with State Treasury for matters related to inventories of State-owned facilities and the LBAM database. Staff responsible for HAZUS tabular data extracts used in flood and wind risk assessments. Coordinated land use/land cover analyses and provided technical review.
Joe Ruggeri	NJDEP, State NFIP Coordinator's Office	Primary technical reviewer for all flood-related aspects of the mitigation plan update. Technical advice on NFIP, dam safety, and flood-related regulations.
Helen Owens	New Jersey Department of Environmental Protection	Primary technical reviewer for all flood-related aspects of the mitigation plan update. Technical advice on NFIP, dam safety, and flood-related regulations. Review of all hazard and process-oriented sections of the plan update.
Mike Drake	NJ Forest Fire Service	Technical review of all hazard sections, focus on those related to fire hazards, fire regulations and fire history.
Jeffrey Burns	New Jersey Department of Treasury	Expertise in grants, budget and management of critical facilities. Input on State facilities aspects of the plan update.
Karl Muessig	New Jersey Geological Survey	Primary technical reviewer for all geological hazards. Technical expertise in earthquakes, landslides, and subsidence statewide.



Core Team Member	Organization	Role in the Planning Process
David Robinson	NJ State Climatologist	Primary reviewer for all weather-related hazards covered in the plan.

3.2.2 Consultant Team

The State was supported by a consultant team led by Jeffrey S. Ward and Associates (JSWA), with support from Vissering Pardue and Associates (VPA) and Princeton Hydro (PH). The consultant facilitated numerous aspects of the process, and provided technical support for certain key aspects, such as the risk assessment. The MCT met four times during the course of the Plan update. Meeting dates and general subject matter are shown in Table 3.2-1-1. Meeting minutes are located in Appendix F.

**Table 3.2-1-1
Meeting Dates and Subject Matter for Mitigation Core Team
during the 2008 NJ State Mitigation Plan Update**

MCT meeting date	Subject Matter
28 August 2007	Initial kickoff, review old plan to new plan gap analysis, discussed roles and responsibilities, discussed makeup of MCT and SHMT, and reviewed update plan structure
02 October 2007	Status of work completed to date, overview of meeting with FEMA RII, finalized make up of SHMT, update on HAZUS runs, identify State owned and critical facilities
28 November 2007	Hazard identification, and risk assessment, review and update actions from original, MCT feedback on draft sections
15 January 2008	Comprehensive review of all plan sections, STAPLEE process on actions
05 February 2008	Final pre-draft review of all plan sections, with changes from 1/15 meeting
TBD	Enter any later meetings.

3.2.3 The State Hazard Mitigation Team (SHMT)

The SHMT consists of representatives identified under Executive Order 115 (Florio) with responsibilities that include, but are not limited to, the following:

- Identifying hazards, monitoring changes in hazard vulnerability, and implementing measures for reducing potential damage by providing a mechanism for follow-up activities crucial to the successful implementation of team recommendations.
- Developing and maintaining a comprehensive state hazard mitigation plan for the reduction of natural hazards.
- Promoting public awareness of risks associated with known hazards and preparedness among residents of the State.
- Serving as an advisory group to the Governor’s Advisory Council on Emergency Services (GACES) and preparing post-disaster hazard mitigation recommendations for all applications for assistance.
- Investigating and recommending cost-effective hazard mitigation opportunities to the NJOEM and the GACES as part of any disaster recovery effort.



**Table 3.2-3-1
Membership of the New Jersey State Hazard Mitigation Plan Update
State Hazard Mitigation Team (SHMT)**

Name	Affiliation or Agency	
Jeffrey Crapser	New Jersey Office of Emergency Management	Project manager for State. Chairman of the Updated Plan, responsible for leading the teams, supporting data collection requests, overall project coordination.
Jack Donnelly	Office of the Governor	Chairman of the SHMT and authority on the Governor's behalf
Paul Miller	New Jersey Office of Emergency Management	Provide the team with work completed since 2005 approved plan
Peter Dennen	New Jersey Office of Emergency Management	Lead coordinator from NJOEM for all data collection, dissemination and organization for the MCT and SHMT.
Kathy Lear	New Jersey Office of Emergency Management	Expertise in FMA/HMGP planning and projects
Stacey Murphy	New Jersey Office of Emergency Management	Expertise in PDM planning
Thomas Rafferty	New Jersey Office of Emergency Management	Lead IT and GIS coordinator.
Paul Miller	New Jersey Office of Emergency Management	Vice Chair of the SHMT and provided the team with work completed since 2005 approved plan
Helen Owens	New Jersey Department of Environmental Protection	Expertise in land use, environmental issues, floodplain management and hazards statewide.
Joseph Ruggeri	New Jersey Department of Environmental Protection	Expertise in NFIP, dam safety, and flood-related regulations.
Gary Rice	New Jersey Department of Environmental Protection	Expertise in Green Acres program for NJ.
Vince Mazzei	New Jersey Department of Environmental Protection	Expertise on coastal area regulations, projects and issues.
Michael Drake	New Jersey Department of Environmental Protection	Expertise in fire hazards, fire regulations and fire history.
Maris Gabliks	New Jersey Department of Environmental Protection	Expertise in fire hazards, fire regulations and fire history.
Robert Sudal	New Jersey Department of Transportation	Expertise in road construction, drainage related road construction, policies enforced by DOT regarding contraflow and evacuation routes, emergency management, and the budget and CIP processes at DOT.
Lisa Webber	New Jersey Department of Transportation	Expertise in road construction, drainage related road constructions, policies enforced by DOT regarding contraflow and evacuation routes, emergency management and the budget and CIP processes at DOT.
Susan Bauer	New Jersey Department of Banking and Insurance	Expert in insurance industry regulations and work with insurance industry to promote mitigations efforts within industry, industry standards and with the insured.



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Name	Affiliation or Agency	
Steve Mattson	New Jersey Department of Banking and Insurance	Expert in insurance industry regulations and work with insurance industry to promote mitigations efforts within industry, industry standards and with the insured.
Carmine Giangiruso	New Jersey Department of Community Affairs	Expertise in Building Code and Standards, Smart Growth processes, and inspectors programs (to ensure enough inspectors are available to jurisdictions faced with a disaster/emergency)
Stephen Iaquinto	New Jersey Division of Military and Veterans Affairs	Liasion to the US Army Corp of Engineers and expertise with National Guard/ NJ military capabilities
Charles Guylas	New Jersey Division of Military and Veterans Affairs	Liasion to the US Army Corp of Engineers and expertise with National Guard/ NJ military capabilities
Thomas Balaint	New Jersey Office of the Attorney General	Expert in NJ Statutes, regulations and legal review of plan
Carl Wyhopen	New Jersey Office of the Attorney General	Expert in NJ Statutes, regulations and legal review of plan
Jeff Burns	New Jersey Department of Treasury	Expertise in grants, budget and management of critical facilities
Karl Muessig	New Jersey Geological Survey	Technical expertise in earthquakes, landslides, and subsidence statewide.
Richard Dalton	New Jersey Geological Survey	Technical expertise in earthquakes, landslides, and subsidence statewide.
Dave Robinson	New Jersey State Climatologist	Expertise in weather-related hazards statewide.
Jim Watt	NJDEP	Technical expertise in earthquakes, landslides, and subsidence statewide.
Steve Jandoli	NJDEP	Expertise in NFIP, dam safety, and flood-related regulations.

The State Hazard Mitigation Team met once during the plan update process and was provided a detailed explanation of the process, the preliminary results of the vulnerability assessment and loss estimation, and a discussion of the Mitigation Strategy section. When the draft plan was completed in mid-February, each member of the SHMT was sent an email requesting their review and comment on the document. The draft plan was made available to the SHMT via postings on the various sites noted above, or via ftp or CD, depending on individual needs. The SHMT was provided an email address where they could send feedback. When the planning team received this feedback, it was compiled into a single document and circulated to the MCT, so this group could determine on a case-by-case basis which comments should be incorporated.



The plan update was carried out on the schedule shown in Table 3.2-3-2.

**Table 3.2-3-2
Development Schedule, 2008 New Jersey State Hazard Mitigation Plan Update**

Description	Begin	End	Participation
Initial meeting with NJOEM staff	08/28/07	08/28/07	NJOEM, JSWA
General data collection	08/28/07	12/31/07	JSWA, MCT
Hazard data collection	08/28/07	12/31/07	JSWA, MCT
First MCT meeting	10/02/07	10/02/07	MCT, JSW
Hazard ranking/identification/profiling	08/29/07	11/02/07	JSWA, MCT
Secondary data development (hazards)	08/29/07	11/02/07	JSWA, MCT
Mitigation goals/objectives/strategies	08/29/07	11/28/07	JSWA, MCT
Implementation strategy	08/29/07	11/02/07	JSWA, MCT
Risk Assessment	08/29/07	11/02/07	JSWA, MCT
Second MCT Meeting	11/28/07	11/28/07	Staff, MCT, JSWA
SHMT and MCT meetings	01/15/08	01/15/08	SHMT, MCT, JSWA
Draft mitigation plan to NJOEM	01/15/08	01/15/08	JSWA
Third MCT meeting	02/05/08	02/05/08	Staff, MCT, JSWA
Final draft mitigation plan	--	02/15/08	JSWA
Review by SHMT, other groups	02/15/08	02/29/08	MCT/SHMT/Others
Final edits, final review	03/01/08	03/07/08	MCT, JSWA
NJOEM final review	03/10/08	03/14/08	MCT/NJOEM
Submit to FEMA Region II	--	03/17/08	NJOEM
Review/comment by FEMA Region II	TBD	TBD	FEMA Region II
Plan adoption	03/21/08	04/28/08	NJOEM

3.2.4 Plan Submission and Maintenance

Upon the FEMA Regional Director's written acknowledgment to the Governor that the New Jersey State Hazard Mitigation Plan update has been approved, the Plan will be distributed to the SHMT and to the Governor's Advisory Council on Emergency Services (GACES) and will be made available to interested parties via posting on the NJOEM web site, and by request to the State Hazard Mitigation Officer. NJOEM coordinated distribution of the updated SHMP to county and local emergency management officials and other appropriate organizations.



3.3 Coordination with State and Federal Agencies, and Interested Groups

3.3.1 Coordination with State Agencies

Due to its early colonization and development, New Jersey's land development patterns and emergency management programs were established long ago. Partnerships were formalized by creation of the 1984 State Hazard Mitigation Plan, and the State agency partners have continued to participate in developing revisions to that plan. While this current State Hazard Mitigation Plan is in a new format prescribed by FEMA which has challenged existing state emergency planning structures, the legacy of several decades of significant coordination between and among state agencies in implementing hazard mitigation projects and plans remains intact.

This planning effort was undertaken by representatives of the key State agencies involved in preparing for, responding to, recovering from and mitigating natural hazards. These entities comprised the State Hazard Mitigation Planning subcommittee: The New Jersey Office of Emergency Management, the New Jersey Department of Environmental Protection, the New Jersey Department of Community Affairs, the New Jersey Department of Treasury, the New Jersey Department of Transportation, the Department of Banking and Insurance, the New Jersey Board of Public Utilities, the New Jersey Office of Information Technology, the New Jersey State Climatologist and the Office of the Attorney General.

In addition to providing memoranda, maps, digital data and narratives identifying natural hazards and specific program responsibilities for inclusion within this plan, the respective roles of these agencies in this planning process were, and continue to be, as identified in Table 3.3-1-1.

**Table 3.3-1-1
State Agency Coordination, New Jersey State Hazard Mitigation Plan**

State Agency	Roles
Office of Emergency Management (New Jersey Department of Law and Public Safety, Division of State Police)	Oversight and management of state and local hazard mitigation plan preparation process; identification and evaluation of mitigation planning programs and opportunities; coordination of mitigation planning with preparedness, response and recovery planning and event management; coordination of natural hazard mitigation with mitigation of manmade hazards, including terrorism.
Department of Environmental Protection	Provision and analysis of digital data and research publications and memoranda; assessment of natural hazards, identification of management programs; direct participation of the State Coordinator for the National Flood Insurance Program, the Office of Land Use Regulation, Forest Fire Service, Geologic Survey and other experienced personnel; coordination with state and federal programs affecting natural hazard mitigation including open space conservation, historic preservation, water resources management, dam safety and shore protection.



State Agency	Roles
Department of Community Affairs	Assessment of building codes and their development, oversight and enforcement affecting hazard mitigation; coordination of state and local planning policies and initiatives affecting land use and infrastructure investments through State Development and Redevelopment Plan and needs for hazard mitigation; oversight of local government fiscal management; technical support for local redevelopment and revitalization initiatives that provide opportunities for hazard mitigation.
Department of Treasury	Identification of resources available for program implementation through oversight of state agency budgets; identification and management of state property and state owned and leased facilities potentially vulnerable to natural hazards.
Department of Transportation	Planning, management and integration of all transportation facilities to ensure the safe, efficient and effective movement of people and goods; planning and project implementation to reduce vulnerabilities to natural hazards and to mitigate potential impacts of natural hazards on critical transportation infrastructure; identify and reduce vulnerabilities of people and materials to natural hazards through emergency evacuation or other needs and initiatives.
Department of Banking and Insurance	Identification of opportunities to improve the collection of data regarding property losses associated with natural hazard events; identification of opportunities to ensure that hazard mitigation is given proper consideration in private sector banking, insurance and real estate transactions.
Board of Public Utilities	Provision and analysis of natural hazard information affecting the provision of electric power, telecommunications, public water, sewage collection and treatment, and other regulated public utilities.
Office of Information Technology	Provision of digital data and identification of opportunities for establishing, organizing and enhancing data necessary to improve identification and mitigation of natural hazards.
State Climatologist	Collection and management of weather, hydrologic and associated meteorological data; identification of opportunities to analyze and present data in ways that facilitate hazard mitigation planning and decision making.
Office of the Attorney General	Define policies and procedures for hazard mitigation planning and project implementation consistent with appropriate precedent and practice.

Each participating agency presented its programs, identified mitigation programs and opportunities, and subsequently discussed revisions to the plan required by FEMA. Each of the State agency members contributed data and analytical information to the plan (including the hazard and vulnerability analysis), provided draft narrative for inclusion in the plan, assisted in development and selection of mitigation strategies, reviewed all drafts of all sections of the plan and, through discussions at meetings of the planning subcommittee and of the State Hazard Mitigation Team, provided other relevant information on their subject areas of expertise. Plans and programs provided by or through New Jersey state agencies for hazard mitigation measures and funding are discussed throughout this plan. (retained from original). For the 2008, each of the agencies noted in the table above were either included in the process (as described earlier), or received separate notification that the draft plan update was available for review.

Throughout the development of the updated Plan, the NJOEM Mitigation Unit, the State Hazard Mitigation Officer (SHMO) and members of the SHMT informed the public about the updated plan, reached out to organizations to help educate, review and encourage participation by their members in hazard mitigation plans, and solicited comments from the public at various venues. Table 3.2-1-1 provides a brief overview of these efforts.



**Table 3.3-1-2
Public Outreach Efforts during the 2008 Plan Update Process**

Event	Organization	Date
New Jersey Association of Floodplain Management Annual Conference	New Jersey Association of Floodplain Management	October 18-19, 2007 October 26-27, 2006
Department of Environmental Protection, the New Jersey Office of Emergency Management, the National Weather Service. Testimony concerning flood mitigation and response from the New Jersey.	Public Hearing before Assembly, Statewide Flooding legislative panel	September 24, 2007
Delaware River Basin Group Annual Conference	Delaware River Basin Group (DRBG)	October 29, 2007
United States Army Corps of Engineers, the New Jersey Association for Floodplain Management, the New Jersey State League of Municipalities, distinguished experts from the academic community. Testimony concerning flood mitigation.	Panel Meeting of Statewide Flooding legislative panel	October 10, 2007
NJ League of Municipalities Annual Conference	NJ League of Municipalities	November 13-15, 2007 November 15, 2006

➤ **The Coordination Role of the State Hazard Mitigation Team**

As noted in Subsection 3.2.2, the State Hazard Mitigation Team (SHMT), which was established by Governor's Executive Order #15, is the means that NJOEM uses to coordinate its mitigation activities with other State agencies. Since the first version of the NJ All Hazard Mitigation Plan (Plan) was approved in April, 2005, members of the SHMT have been meeting quarterly to assess mitigation projects, prioritize applications for submittal, and determine if there are any changes to the Plan. Table 3.3.-1-3 shows meeting dates and agenda items for SHMT meetings from fall, 2005 to the present.

**Table 3.3-1-3
General Agendas for SHMT Meetings 2005-2007**

Meeting Date	Agenda
September 6, 2005	<ul style="list-style-type: none"> ▪ Call to Order ▪ Update on the Status of the Stevens PDM Planning Project ▪ Update on continued revisions required for the State Hazard Mitigation Plan ▪ Update on General Program Status: HMGP for DR 1530 and 1563; PDM FY 05 Applications and FY 06 Application Period; FMA FY 05 Applications received ▪ Review of Letters of Intent Submitted for DR-1588 ▪ New Business
November 22, 2005	<ul style="list-style-type: none"> ▪ Call to Order ▪ Status on obtaining additional staff member for Mitigation Unit ▪ Review of the Letters of Intent (20 received) ▪ Update on current projects ▪ Discussion of upcoming PDM workshops to encourage remaining 18 counties to apply for PDM planning grant funds ▪ Review of All Hazard Mitigation Plan



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Meeting Date	Agenda
January 27, 2006	<ul style="list-style-type: none"> ▪ Call to Order ▪ Review of DR 1530, DR 1563 and DR 1588 plan and projects ▪ Discussion of FY 2003 PDM Human Services Project – to be completed end of 1-2006 ▪ Review of FY 06 PDM planning applications (Of 11 applications, five were sent to FEMA). Five were prioritized by NFIP data, the Counties with the most repetitive losses were selected: Bergen, Cape may, Monmouth, Passaic and Somerset. ▪ Review of FMA planning ▪ Review FMA projects ▪ Review of the All Hazard Mitigation Plan
April 12, 2006	<ul style="list-style-type: none"> ▪ Call to Order ▪ Review of Applications under FY 06 PDM, FMA and DR 1588 ▪ Review of the Status of Current Projects ▪ Review and Task Assignment for the State Hazard Mitigation Plan ▪ New Business
September 20, 2006	<ul style="list-style-type: none"> ▪ Call to Order ▪ Review status of Current Projects for DR 1530, 1588, 1563, and 1653. ▪ Status of Counties and PDM grants for planning ▪ Discussion of increasing SHMT membership ▪ Request for SHMT to support Fire Service Efforts on tree removal along the Garden State Parkway
January 10, 2007	<ul style="list-style-type: none"> ▪ State of the State Plan ▪ Update on Mitigation Unit activities ▪ Prioritize 2007 PDM-C applications ▪ Discuss 2007 FMA and RFC applications ▪ Addressing Severe Repetitive Loss Structures ▪ Review future meeting dates ▪ Issues of concern ▪ Adjourn
April 18, 2007	<ul style="list-style-type: none"> ▪ Call to Order ▪ Update on the State of the Status's Mitigation Plan ▪ Announcement of Benefit/Cost Training ▪ Report from the Federal Grant Coordination Sub-Committee ▪ Creation of other Working Sub-Committees ▪ Status of 2007 Federal Applications
August 8, 2007	<ul style="list-style-type: none"> ▪ Call to Order ▪ State Hazard Mitigation Plan revision assistance ▪ Review of Current Projects ▪ Review of HMGP Process ▪ Review of the LOIs submitted under DR 1694 and next steps ▪ Discuss use of 5% set aside for state mitigation projects ▪ New Business
January 15, 2008	<ul style="list-style-type: none"> ▪ Meeting was dedicated to discussion of all section of draft State Hazard Mitigation Plan

3.3.2 Coordination with FEMA Region II and Other Federal Agencies

Early in the 2008 Plan update process, NJOEM contacted FEMA Region II to advise them of the process that the State would follow, and to request Regional cooperation in developing the document. This was particularly important because of the relatively short time frame allotted to complete the update. FEMA Region II agreed that it would best serve the interests of the State to undertake a major rewrite of the 2005 document, to ensure that the next version is well organized and correctly responds to FEMA Interim Final Rule requirements.



The relationship between the State Hazard Mitigation Officer, the Mitigation Squad and FEMA Region II is very informal. Conversation, guidance and coordination between the various FEMA program managers and NJOEM are almost a daily occurrence. Formalized training occurs upon request from the SHMO to FEMA. NJOEM conducts various workshops throughout the year with FEMA support as requested or required.

During the yearly program rollouts, naturally the amount of coordination between Region II and NJOEM significantly increases. Application development coordination is especially important and has been very successful cooperative effort. Project development and administration has required an informal and close working relationship with the FEMA Region. As NJOEM or FEMA has become aware of significant changes within program guidance or laws and regulations, more rigid and formalized meetings or training will take place involving all of the appropriate personnel at the state and federal agency level.

Due to the nature of the work, much of the coordination and collaboration were done through telephone calls, emails and in person meetings. Due to staffing constraints, NJOEM relies heavily on the guidance of its FEMA Region II partners for help in the development of applications; technical assistance, local plan questions, implementation support and Hazard Plan Update guidance. Region II support and assistance is an invaluable asset to the NJOEM and the SHMT to meet their mitigation priorities, goals and actions. In addition to ongoing work, Region II has been a source of guidance and assistance with the updating of plan by providing a Disaster Assistance Employee to help with hazard data collection and analysis, dedicating time and resources to review sections of the plan, attends SHMT meetings, and answer any questions the MCT has as it updates the plan.

In addition routine, formal and informal communications took place between State personnel and personnel from FEMA and other Federal agencies closely associated with the planning, regulatory and investment activities of the State agencies. For example, NOAA, the United States Army Corps of Engineers and USEPA typically oversee or implement programs through the New Jersey Department of Environmental Protection, which in turn related Federal opportunities and constraints regarding potential natural hazard mitigation efforts for the State Hazard Mitigation Plan through its representatives on the State Hazard Mitigation Team. The New Jersey Department of Transportation addresses natural hazard mitigation issues in the course of its coordination of policies, plans and projects with agencies within and associated with the United States Department of Transportation. Federal land holding agencies in New Jersey, such as the Department of Defense and the National Park Service and Fish and Wildlife Service of the United States Department of the Interior, actively cooperate in mitigation planning, funding, and resource sharing in fuel reduction and wildfire suppression activities on and around their properties. The United States Department of Agriculture, Forest Service is a major provider of funding, training, and standards for all wildfire programs in New Jersey. As an example of the cooperation shared with these agencies, the "East Plains Fire Shed Management Plan," being developed with National Fire Plan monies provided by the USDA Forest Service, will work to mitigate wildfires caused by errant bombs on the Warren Grove Bombing Range. This wildland/urban interface mitigation plan covers 75,000-acres in six municipalities within two counties surrounding the range.

FEMA requires all municipalities to develop and adopt natural hazard mitigation plans to be eligible for a range of mitigation assistance and grants from FEMA. The Agency has provided significant funding assistance to New Jersey to develop hazard mitigation plans. Additional information regarding the preparation of local hazard mitigation plans in New Jersey is provided in Section 4 of the 2005 version of the State Hazard Mitigation Plan.



3.3.3 Coordination with Other Interested Groups

In addition to its collaborative work with other State Agencies and FEMA, The NJOEM and the NJDEP work closely with various organizations, interstate Task Forces and Commissions that work on mitigation from a regional perspective. Members of the SHMT participate on the Flood Task Force for NJ and for DRBC. Table 3.3-3-1 lists the various organizations with which NJOEM regularly interacts on issues of hazards and hazard mitigation. Those that are not directly represented on the MCT and the SHMT were notified when the draft plan was available for review, and were requested to provide feedback to NJOEM.

**Table 3.3-3-1
New Jersey Organizations with ongoing involvement with
NJOEM on Hazard Mitigation and Mitigation Planning**

Organization	Mission	NJ State Representative
Delaware River Basin Commission (DRBC)	The Delaware River Basin Commission was formed in 1954 with a consent decree signed between New York, New Jersey, Pennsylvania and Delaware. The Commission plans, regulates and analyses the 330 miles of the Delaware River that winds through these states. The DRBC is comprised of 5 Commissioners – a federally appointed Commissioner, and a Commissioner representing New York, New Jersey, Pennsylvania and Delaware. Each commissioner has one vote of equal power with a majority vote needed to decide most issues. Unanimity is required for votes on the annual budget and drought declarations. The Commission holds business meetings and hearings on policy matters and water resource projects under regulatory review. These sessions, along with meetings of the commission's various advisory committees, are open to the public.	Governor Corzine is Vice Chair of the Commission and NJ DEP Commissioner Jackson is his alternate..
Delaware River Basin Commission Flood Task Force (DRBC)	The Delaware River Basin Interstate Flood Mitigation Task Force was assembled in October 2006. It is comprised of 32 members from a geographically diverse array of government agencies (legislative, executive, federal, state and local), private businesses and not-for-profit Organizations. The group has identified a total of 44 consensus recommendations for a proactive, sustainable, and systematic approach to flood damage reduction. The recommendations are based upon a set of six guiding principles concerning floodplain restoration, floodplain protection, institutional and individual preparedness, local stormwater management and engineering standards, and the use of structural and non-structural measures.	NJDEP Commissioner Jackson is the lead representative.



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2007 State Hazard Mitigation Plan

Organization	Mission	NJ State Representative
<p>NJ Flood Mitigation Task Force</p>	<p>After two devastating floods from September 2004 through April 2005, then Acting Governor Codey established the New Jersey Flood Mitigation Task Force to study flooding issues in New Jersey. In addition to meeting with the public, the Task Force formed a committee to study the technical; funding, public education and planning issues that faced flood mitigation efforts. The Task Force was comprised on 17 key flood stakeholders, including, but not limited to, the Mayor of Trenton, the Executive Director of the DRBC, Trenton Resident and CEO of Isles, the State Hazard Mitigation Officer, and a Representative from FEMA II. After careful examination and public input, the Task Force provided statewide recommendations to improve and strengthen regulatory protections of floodplains and homes; to aggressively pursue mitigation and control measures through improved studies, forecasting and flood warning systems; to request funding for planning and additional resources dedicated to reduce flood risk in NJ; and to improve assistance for New Jersey residents before and after a flooding event takes place.</p>	<p>Honorable Lisa P. Jackson*, Commissioner of the New Jersey Department of Environmental Protection (DEP), Carol Collier, Executive Director of the Delaware River Basin Commission (DRBC), Honorable David M. Del Vecchio, Mayor of Lambertville, Elizabeth Johnson, Trenton Resident and CEO of Isles, Inc., Robert Medina, P.E., President of Medina Consultants, John Miller, P.E., CFM, Senior Water Resource Engineer for Princeton Hydro, LLC, Sergeant First Class Paul Miller, State Hazard Mitigation Officer for NJ State Police, Professor James K. Mitchell, Chairman of the Rutgers Department of Geography, Honorable Douglas H. Palmer, Mayor of Trenton, Henry S. Patterson, III, Executive Director of the New Jersey Water Supply Authority, Lt. Colonel Robert J. Ruch, Philadelphia District of the U.S. Army Corps of Engineers, Jeff Scott, Planning/zoning chair, Frenchtown Borough, Cleighton D. Smith, P.E., CFM, Senior Project Manager for Dewberry & Davis, Maya K. van Rossum, Delaware River Keeper, Gregory J. Westfall, USDA Natural Resources Conservation Service, Honorable Harry L. Wyant, Jr., Mayor of Phillipsburg</p>
<p>Delaware and Raritan Canal Commission</p>	<p>Established in October, 1974, when Governor Brendan Byrne signed the D&R Canal State Park Law. The Commission was created to accomplish three main tasks: To review and approve, reject or modify any action by the State in the Canal Park, or any permit for action in the park; to undertake planning for the development of the Canal Park; and to prepare and administer a land use regulatory program that will protect the Canal Park from the harmful impacts of new development in central New Jersey</p>	<p>David DelVecchio, <i>Chairman</i> Martin D. Jessen, <i>Vice-Chairman</i> Richard C. Albert Lisa P. Jackson David H. Knights John S. Loos Phyllis L. Marchand Alison Mitchell Douglas H. Palmer</p>



Organization	Mission	NJ State Representative
Interstate Environmental Council (IEC)	Interstate Environmental Council (IEC) The mandates of the Commission are governed by the Tri-State Compact, Statutes, and the IEC's Water Quality Regulations. Its responsibilities and programs include activities in areas such as air pollution, resource recovery facilities and toxics; however, the IEC's continuing emphasis is on water quality, an area in which the Commission is a regulatory and enforcement agency.	
NJ League of Municipalities	New Jersey State League of Municipalities is a voluntary association created to help communities do a better job of self-government through pooling information resources and brain power. It is authorized by State Statute and since 1915, has been serving local officials throughout the Garden State. All 566 municipalities are members of the League. Over 560 mayors and 13,000 elected and appointed officials of member municipalities are entitled to all of the services and privileges of the League	
NJAFM	The New Jersey Association for Floodplain Management (NJAFM) is dedicated to reducing loss of life and property damage resulting from floods and promoting sound floodplain management at all levels of government. Our organization of 170 active New Jersey members is a chapter of the national Association of State Floodplain Managers (ASFPM), with 11,000 individual members and chapter members strong. Our goals are to heighten awareness of flood risk, provide education, promote mitigation and improve communication to protect public safety, property and the economy.	NJDEP, NJOEM, USGS

In addition to the agencies and organizations listed in the table above, the 2005 version of this Plan listed several additional offices and agencies with some involvement with hazard mitigation. This section is retained verbatim from the original plan.

➤ **New Jersey Office of Smart Growth**

In response to the need for increased coordination between the State Planning Commission and other agencies of state government with the New Jersey Office of Emergency Management, the Office of Smart Growth (Department of Community Affairs) has taken action to ensure that emerging issues related to mitigation and planning are effectively addressed.

Policies promoting hazard mitigation planning incorporated into land use and infrastructure plans at all levels of government were incorporated into the revised New Jersey State Development and Redevelopment Plan prepared under New Jersey's State Planning Act and adopted by the New Jersey State Planning Commission, and independent, quasi-legislative body, in March 2001. The State Planning Commission has initiated a comprehensive review and update of this plan through a "cross-acceptance" process that is scheduled to be completed in late 2005. This periodic review and update process provides an opportunity to evaluate progress and to incorporate additional recommendations from the State Hazard Mitigation Plan as appropriate. In addition, agencies participating in the State Hazard Mitigation Team, either as members of the State Planning Commission itself or as members of the Interagency Smart Growth Team, have an opportunity to alert the State Planning Commission and Office of Smart Growth when any proposed changes to the State Development and Redevelopment Plan may encourage development in hazard prone areas, cause potential threat to nearby areas, or reduce open space that provides flood storage. Proposed



changes to the State Development and Redevelopment Plan were being identified, evaluated and negotiated in early 2005 as this State Hazard Mitigation Plan was prepared. Through initiatives such as the "endorsement" of local land use plans by the State Planning Commission, local governments are encouraged to incorporate local hazard mitigation planning in "smart growth" initiatives.

In addition, a member of the Office of Smart Growth Executive Management Team serves on the State Hazard Mitigation Team. This individual reports issues of concern to the Office of Smart Growth Executive Director who serves as NJOSG's primary interface with the State Planning Commission. Information is also shared with the State Hazard Mitigation Team from the State Planning Commission through a similar process.

The Office of Smart Growth serves as staff to the State Planning Commission and coordinates and facilitates two implementation teams. The Interagency Smart Growth Team, representing twelve state agencies, serves as a deliberative body for smart growth policy and strategy including emerging hazard mitigation issues. The Smart Growth Project Review Team (also interagency) facilitates the completion of redevelopment projects in Planning Areas 1, 2 and Designated Centers as defined in the State Development and Redevelopment Plan.

One recent major project, under development in Bloomfield, New Jersey, involved potential flood plain issues. Through the cooperative efforts of the Department of Environmental Protection, Office of Smart Growth, local officials and the developer, plans were created to mitigate any potential flood issues. These steps were taken to ensure that no loss of life or property would occur as a result of this important redevelopment project.

The staff member who represents the Office of Smart Growth on the State Hazard Mitigation Plan Team and communicates issues of concern to the State Planning Commission leads both teams. Recommendations of the State Hazard Mitigation Plan Team will be communicated to the Chairperson of the State Planning Commission for inclusion in the State Development and Redevelopment Plan prior to its next adoption.

➤ Floodplain Management Committee

In 2004, a newly formed Floodplain Management Committee was established under the New Jersey Section of the American Resources Association. NJOEM is represented on this committee. This committee's work can be identified as a new initiative to develop a plan to address flood hazards and mitigation. In January 2005 the Association mailed a survey to all NJ municipal mayors to determine local capabilities, needs and interests regarding floodplain management, in order to facilitate the development of programs to address these needs. Expanded use of GIS and other tools may be developed to facilitate the local's needs. Results of the survey will be available at http://www.awra.org/state/new_jersey/.

➤ New Jersey Department of Transportation Capital Project Planning

The New Jersey Department of Transportation coordinates its capital planning with hazard mitigation through four routinely updated documents (including the date of the most recent update):

- "Ranking for Statewide drainage Projects" (05/25/04)
- "Division of Design Services - Status of NJDOT Dams 2005" (04/21/05)
- "Overall Scour Report-State Owned Bridges" (02/16/05)
- "County Owned Bridges-Already Replaced/Countermeasures Installed" (04/19/05)



3.4 Integration into other Ongoing State Planning Efforts

The New Jersey Department of Transportation coordinates its capital planning with hazard mitigation through four routinely updated documents (including the date of the most recent update):

➤ NJ State Development and Redevelopment Plan.

Office of Smart Growth/ State Planning Commission/Department of Community Affairs. The State Planning Act of 1985, N.J.S.A. 52:18A-196 et seq., empowered the State Planning Commission with the responsibility to prepare, revise, and readopt the New Jersey State Development and Redevelopment Plan (State Plan) every three years. The State Plan was adopted using the process of Cross-acceptance, a legislatively mandated process whereby planning policies are reviewed by government entities at all levels and the public to assess their consistency with each other and with the State Plan. The State Plan was developed for the purpose of promoting cooperative planning among municipalities, counties, regional entities and the State, to change the way land use decisions have been made in our State over the past 30 years, and to promote sustainable economic growth in a way that sensibly balances the need to protect open space. Thanks to years of work evaluating the goals, policies and strategies of the State Plan, we now have a clear framework for what the landscape of New Jersey should look like in 2025

➤ Office of Smart Growth

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The staff member who represents the Office of Smart Growth on the State Hazard Mitigation Plan Team and communicates issues of concern to the State Planning Commission leads both teams. Recommendations of the State Hazard Mitigation Plan Team will be communicated to the Chairperson of the State Planning Commission for inclusion in the State Development and Redevelopment Plan prior to its next adoption.

➤ State Facilities Risk Management Program

The State of New Jersey addresses hazard mitigation for State-owned and State-leased properties through the Bureau of Risk Management in the Department of the Treasury in association with its insurance carrier(s). Each facility is required to have an emergency response plan in place along with a loss prevention and control program that includes a "red tag permit system" supervising all fire protection water supply valve closures, an electrical system maintenance program and a risk assessment of all plans for additions or other changes to building construction, protection or building use.

In advance of Hurricane Isabel, the Bureau of Risk Management distributed copies of a detailed, four-page Flood Checklist to each State department specifying actions to be taken when flood threatens, after a flood, and each year prior to flood season. In addition, Flood Emergency Response Plans have been developed, or are being developed, and updated each February for each State facility. These plans include:

- An overview of the flood threat, identifying the source of potential flooding and the depth of 100 year and 500 year floods relative to the floor heights of each facility;
- Monitoring procedures during potential flood events, including regular observations of flood heights in water bodies, listening for flood alerts, and checking local water backup points at bridges, culverts and storm drains during heavy rain and thunderstorms to ensure drainage is not obstructed;
- An action matrix addressing areas sensitive to potential impacts of flood waters and required responses to weather advisories, changes in river elevation, flood and post-flood conditions; and
- Lists of emergency contacts and approved contractors for future mitigation and remediation.

➤ Coastal Land Use Regulation Program

NJDEP is also involved in a variety of hazard mitigation initiatives as part of the Coastal Zone Management Program and as part of the Department's interaction with FEMA related to the National Flood Insurance Program (NFIP). The Coastal Area Facilities Review Act (N.J.S.A. 13:19), the Waterfront Development Law (N.J.S.A. 12:5-3), and the Wetlands Act of 1970 (N.J.S.A. 13:9A) provide rules and regulations governing development in vulnerable coastal areas of New Jersey. Department staff routinely provides information to and work directly with municipal officials and property owners in the hazard identification, vulnerability analysis and mitigation planning. Through the NJDEP regulatory programs, hazard mitigation activities are often required as a condition of a permit approval.

New Jersey's coastal zone is vulnerable to various coastal hazards including chronic and episodic erosion, flooding, storm surge, tropical and extratropical storms, wind, and sea level rise. Many areas of the coast



were developed before there was an informed appreciation of coastal hazards. Consequently, extensive areas of dense development exist in areas subject to coastal hazards. Moreover, recent population increase, as evidenced by the 2000 census data, has placed more people and property at risk from these hazards. With the continuing trend of sea level rise, this vulnerability will increase.

Development continues in hazardous areas along the coast, particularly reconstruction of existing residential development and the conversion of single family/duplex dwellings into multi-unit dwellings. In many cases, modest seasonal shore homes are replaced with larger year-round dwellings. As a result, the number of people and value of the property at risk is significantly increasing. On the other hand, improved hazard resistant construction techniques and hazard sensitive building standards are resulting in more storm-resistant coastal development.

Coastal hazard vulnerability, particularly along the intensely developed oceanfront areas of New Jersey, is often influenced by the management practices on the adjacent beaches, dune systems, and shorelines. Protection, management, and enhancement of these important features, is a critical component of the New Jersey Coastal Management Program. With more than 50 municipalities, numerous beach associations and hundreds of private property owners controlling beach and dune areas, management practices and the resultant degree of vulnerability vary greatly.

New Jersey's Coastal Management Program has responded to these hazards in several ways. New Jersey has adopted a number of enforceable policies that deal directly with development in hazardous areas. These standards are codified in the Coastal Zone Management rules. These standards are designed to facilitate sound management of beaches, dunes, and shorelines throughout the coast to establish and support a consistent line of protection in the form of well-maintained and protected beaches and dunes. The standards are also intended to reduce development in the most vulnerable areas and provide that any such development is located to reduce potential damage from coastal hazards, and does not adversely affect either the adjacent shorelines or structures or ecosystem.

In oceanfront and bay front areas, NJDEP rules prevent additions to or tearing down and rebuilding homes that result in place the home closer to an eroding shoreline, or in additional encroachment on dunes that is not mitigated for by enhancing the dune as a shore protection feature. These enforceable policies also prohibit much residential development in V-zones, and govern beach and dune disturbance. Further, these Coastal Zone Management rules contain standards for beach and dune management and implementation of Best Management Practices (BMPs). These standards also maximize the benefits of the Federal/State beach nourishment program by restoring the natural and beneficial functions of the beach and dune systems.

Among the enforceable policies in riverine and bay front areas are regulations that strongly encourage the use of bioengineering as a preferred alternative to hard shoreline protection structures, particularly along the lower energy shorelines of the back-bays and rivers. By reflecting wave and current energy, bulkheads have frequently caused scour and erosion of sensitive environmental resources. NJDEP has also successfully promoted construction of sloped riprap revetments as an alternative to bulkheads. Sloped revetments have less impact on marine and estuarine resources because they tend to dissipate wave and current energy and thus reduce erosive and scour effects.

The NJDEP Coastal Planning Office is the conduit for federal Coastal Zone Management grants that may be used for hazard mitigation activities such as historical shoreline change mapping projects, educational programs and coastal area planning initiatives. Under NOAA's 309 Grant Program the Coastal Planning Office has initiated a "Coastal Hazards" task that will develop guidelines and manuals to inform the public and local officials about coastal hazards and vulnerabilities, to create fact sheets and to conduct workshops.



Pursuant to Federal regulations at 15 CFR 930, Federal activities affecting the coastal zone are required to be consistent with approved state coastal management programs. New Jersey currently requires consistency determinations for revisions to Flood Insurance studies and National Flood Insurance Rate Maps (FIRMs). The NJDEP Coastal Planning Office is currently proposing amended Coastal Zone Management guidelines that will require a Coastal Zone Management determination for local Hazard Mitigation Plans as well as future amendments to the State Hazard Mitigation Plan.

➤ Coastal Blue Acres

The Green Acres, Farmland Historic Preservation and Blue Acres Bond of 1995 contained \$15 million for the creation of a new program: Coastal Blue Acres (CBA). These funds were divided into two parts: \$6 million dollars which has been used for pre-storm acquisition of unimproved or largely unimproved storm damage prone and buffer lands. Nine million dollars has been reserved for post-storm funding to acquire properties that have suffered at least a 50% reduction in the value of improvements as a result of storm damage. These properties can be located anywhere on a coastal barrier island, within 150 feet of the mean high water line of a tidal waterway or 150 feet of the landward limit of a beach or dune.

The purpose of CBA is to provide grants and loans to county and municipal governments to acquire, for recreation and conservation purposes, lands in the coastal areas that:

- Have been damaged by storms or storm related flooding
- May be prone to incurring damage by storms or storm related flooding
- Buffer or protect other lands from storm damage

CBA acquisitions can only be made from willing sellers. The CBA legislation specifically prohibits the use of eminent domain by a local government in acquiring land using CBA funding. Municipalities must be willing participants in the program as well. Sites acquired with CBA funding will be restricted to minimal improvements for public access. The development of recreation facilities that could become a storm hazard is prohibited.

The CBA legislation also states that all lands acquired with CBA funds shall be regulated under existing Green Acres rules. This includes submission of a recreation and open space inventory and the attachment of contractual restriction to all CBA acquired lands and all other lands held by a local government for conservation and recreation purpose.

➤ Building Codes

The Department of Community Affairs has adopted building codes that address different hazards that affect New Jersey. The State has adopted the 2000 International Building Code (IBC) and the 2000 International Residential Code (IRC) modified to comply with State laws. These address the construction of new buildings and their relationship to weather-related and geological hazards.



**Table 3.4-1
Natural Hazards/Building Codes**

Hazard		IBC Code
Geological	Sinkholes and landslides	The current Building Subcode provides requirements for soils investigations before a building is designed that addresses these issues.
	Earthquakes	The current Building Subcode provides requirements for soils investigations before a building is designed that addresses these issues.
Meteorological	High Wind	The Building Subcode and the One and Two Family Subcode (IBC and IRC 2000, New Jersey edition) has the latest wind maps and requires new buildings to be designed and constructed using these current values. In the years since the Uniform Construction Code was adopted, the requirements for building construction has been changed to address the current requirements concerning wind pressure requirements.
	Flooding	The IBC and IRC 2000, New Jersey Edition, requires new buildings to be designed and constructed to comply with the most recent requirements concerning construction in a flood hazard area (A and V zones).
	Wave Action	Under the IBC and IRC 2000, New Jersey requires new buildings to be designed and constructed to comply with the most recent requirements concerning construction in a flood (velocity) hazard area (coastal V zones).
	Drought	The Plumbing Subcode and the Energy Subcode of the Uniform Construction Code provide water conservation standards.
Manmade	Conflagration (Fire)	The Uniform Construction Code provides for fire safety through the Building Subcode. The requirements for combustibility/non-combustibility, suppression, ratings of exterior walls, etc. address this area. New Jersey fire departments that report to the Division of Fire Safety use a National reporting system, developed by the Federal Government, referred to as N.F.I.R.S. 5.0 (National Fire Incident Reporting System). This system captures information regarding fire department responses to emergencies in the community. The benefit of this system is that the information collected is "all-incident," not just fire related, giving a computer generated statistically accurate picture of to which hazards the fire service responds. Additionally, this system provides the SHMT the ability to address trends in urban and wildland fires. Not all fire departments in New Jersey report fires using NFIRS. About 60-70% of fire departments submit incident reports to the Division of Fire Safety.
	Energy	The Uniform Construction Code provides for energy conservation through the adoption of the Energy Subcode. Further, the code officials in the State of New Jersey receive continuing education for all new code requirements and all other aspects of the adopted codes.

➤ **Hurricane Programs**

The NJOEM, in conjunction with the FEMA Region II, the New Jersey Department of Environmental Protection, the National Weather Service and the U.S. Army Corps of Engineers/Philadelphia District, has completed a technical data report entitled "New Jersey Hurricane Evacuation Study 1992". This study has been reviewed by interested parties and the data is being used to increase the State's preparedness levels. This comprehensive report contains data quantifying the major factors involved in hurricane evaluation



decision-making. Proper use of this study will permit each county to update and revise hurricane evacuation plans and operational procedures.

➤ State Transportation Improvement Plan Flood Mitigation Projects

Over recent years, approximately \$2 billion per year has been spent on transportation projects. Along with state investments, transportation programs rely substantially on capital financing provided by the federal government. The state's Transportation Trust Fund (TTF) and the federal Transportation Equity Act for the 21st Century (TEA-21) primarily provide funding for transportation projects. TEA-21 also established a nationwide pilot program to help communities reconcile land use and transportation decision-making, which includes opportunities to integrate hazard mitigation in both transportation and land use planning and projects.

The New Jersey Department of Transportation works closely with the three Metropolitan Planning Agencies (MPOs) in New Jersey. Projects using Federal funding are first approved through the State Transportation Improvement Plan (STIP) as a result of discussions between the Department and the MPO. Once federal funding is approved the project is moved into the planning phase. The Department planning process begins with the submission of a "Problem Statement", which can come from any number of sources. Highway infrastructure repetitive issues and losses are rolled into the NJDOT Drainage Management System and are dealt with through the NJDOT Capital Program or Maintenance Repair Contracts. In either case project execution is dependent on annual funding allocations. During the planning and scoping processes for each project, whether State, Interstate, Freeway, or Land Service, flooding mitigation reviews are implemented up to the 100-year storm. These mitigation efforts include but are not limited to, expanded drainage system, enlarged drainage system, retention/detention basins and vortex chambers.

An example of NJDOT mitigation efforts is the replacement of the New Jersey Route 72 bridge in Ocean County. This existing bridge is the only egress from Long Beach Island and is recognized as a vulnerable area for that reason. Working within the NJDOT, the Offices of Design and of Emergency Management are providing mitigation efforts in the planning of the new bridge with the addition of a pumping station immediately on entering the island. The project remains several years "out" in the capital budget at this time.

NJDOT maintenance, Traffic Operations Centers and office buildings have historically not sustained repetitive losses due to flooding or natural hazards.

➤ Tidal Gauge Monitoring

As a method of pre-emptive mitigation, the Department has put in place a series of tidal gauges recording real time information that is transmitted directly to the USGS and the Weather Service. These gauges are located along the coast of the Delaware Bay and River and are used by DOT and NJOEM to follow tidal changes before and during a weather event. Due to budget constraints through, DOT will no longer fund the monitoring and maintenance. NJOEM has agreed to take on the funding until December 2007. Due to a coordinated effort, NJOEM was given notice of the DOT lack of funding in advance and was able to offset those closing of the program due to lack of funds.

➤ State of New Jersey Water Emergency Plan

The State of New Jersey Water Emergency Plan approved in 2002 guides the necessary actions to be taken in response to a potential water shortage situation or water shortage emergency pursuant to the Water Supply Management Act and the Emergency Management Act. It describes the responsibilities of the New Jersey Department of Environmental Protection under the Water Supply Management Act with respect



to the State's water supply in such an emergency and serves as a supplement to the State Emergency Operations Plan.

[2008 Plan update deleted subsection on manmade hazard programs]

➤ NJDEP Dam Safety Program

The purpose of the Dam Safety program is to minimize the possibility of a dam failure and to mitigate the effects of dam failures that do occur. A dam failure on a sunny day can cause major floor damage and a dam failure during a general flood event can greatly increase flood damage.

The Division of Engineering and Construction, Dam Safety Program published [Dam Safety Standards, N.J.A.C. 7:20](#). Under N.J.A.C. 7:20-1.4, General Requirements and Prohibitions, subsection (g) states: "The Department may deny any application for a dam permit, based upon its conclusion that the construction or operation of a dam will cause an unacceptable threat to or impact on natural or cultural resources or the environment".

N.J.A.C. 7:20-1.7 Application Stage, subsection (f), states: "All applicants must submit an Operation and Maintenance Manual in accordance with N.J.A.C. 7:20-1.1 and applicants for Class I and II dams (see N.J.A.C. 7:20-1.8) shall prepare and submit an Emergency Action Plan which shall at least include a Dam Breach Analysis, Inundation Maps and Emergency Notification and Evacuation Plans." The NJDEP developed [Guidelines For Developing An Emergency Action Plan](#), on file at NJOEM, to assist dam owners in the preparation of an emergency action plan.

In 1912 the legislature of the State of New Jersey instituted laws relating to the construction, repair, and inspection of existing and proposed dams. The law was amended in 1981 and became known as the Safe Dam Act. New Jersey's Dam Safety program is administered by the Department of Environmental Protection, Division of Engineering and Construction, Bureau of Dam Safety and Flood Control, under rules and regulations promulgated in May 1985 known as the Dam Safety Standards

In New Jersey, a dam is any artificial barrier, together with appurtenant works that raise the waters of a stream more than five feet above the usual mean low water height. The Bureau of Dam Safety and Flood Control reviews plans and specifications for the construction of new dams, or for the alteration, repair or removal of existing dams and must grant approval before the owner can proceed with caution. All applicants must submit an Operation and Maintenance Manual and applicants for Class I and II dams must prepare and submit an Emergency Action Plan.

The New Jersey Office of Emergency Management maintains a number of published plans and procedures to facilitate coordination in hazard preparedness, response, recovery and mitigation (see below). Many of these plans are prepared and maintained through interdepartmental efforts.

Other State Agency Plans Guiding Mitigation Actions

- State of New Jersey Emergency Operations Plan, March 2005, New Jersey Office of Emergency Management. This plan sets for guidance policies and procedures for State departments and agencies, counties and municipalities in their development of emergency plans and in their support of state emergency management activities.



- Winter Storm Procedures, January 2005, NJ Office of Emergency Management. This procedure provides describes the actions necessary to properly respond to and manage a winter storm event from the state Emergency Operations Center.
- Reverse 911 Procedures, August 2004, NJ Office of Emergency Management. This plan sets guidance policies and procedures for notification by telephone of residents of selected areas of impending or actual events that may affect life and safety
- Hurricane Procedures, July 2004, NJ Office of Emergency Management. This procedure describes the actions necessary to properly respond to and manage a hurricane event from the state Emergency Operations Center.
- State Warning Plan, June 2004, NJ Office of Emergency Management. The purpose of this plan is to alert the affected segments of a given population to have them take specific protective action.
- State of New Jersey Water Emergency Plan, February 2002, NJ Office of Emergency Management and NJ Department of Environmental Protection. This plan provides guidance for the necessary actions to be taken and response to a potential water shortage situation or water shortage emergency.
- Emergency Alert System Operational Plan, June 2001, NJ Office of Emergency Management. This plan provides direction and control for the NJ state emergency communications committee of the emergency alert system in accordance with the rules, regulations and policies of the Federal Communications Commission.

3.5 Integration into other FEMA Mitigation Programs and Initiatives

The NJOEM is responsible for educating, reviewing and administering many of the mitigation grant programs that FEMA offers. In this capacity, NJOEM works closely with FEMA to understand the requirements necessary for grant applications and utilizes on-line and in-person training that FEMA provides as well as establishing effective communication with FEMA Region II in support of further educating NJ communities to the grant opportunities, applications and obligations as well as obtain guidance to help facilitate grant application. In addition the NJOEM coordination with FEMA, the NJ DEP works with FEMA as the NFIP Coordinator for the State. NJOEM administers grants that FEMA awards for Severe Repetitive Loss (SRL), Repetitive Loss (RL) Pre-Disaster Mitigation (PDM), Flood Management Assistance (FMA) and Hazard Mitigation Grant Program (HMGP).

Appendix H of the 2008 plan update is a fact sheet NJOEM provides to communities that explains the various grant opportunities.

➤ National Flood Insurance Program (NFIP)

The NFIP is administered by the NFIP Coordinator within the NJ Department of Environmental Protection. The NFIP Coordinator works closely with NJOEM on all NFIP issues, since eligibility for pre- and post-disaster programs relies on participation in the program. The three components of the program are: flood insurance, floodplain management, and flood hazard mapping. The NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in the participating communities. Community participation in the NFIP is voluntary. Gaining municipality participation in the NFIP and encouraging property owners to purchase flood insurance significantly reduces disaster costs. Together these programs systematically reduce flood exposure to people and their property. Of the 566 municipalities in NJ, there are 546 participating in the NFIP. The NFIP Coordinator works closely with FEMA to educate or inform communities of their responsibilities



➤ Flood Mitigation Assistance Program (FMA)

Although the NFIP is administered by NJDEP, the FMA program is the responsibility of NJOEM. NJOEM works with the SHMT to identify, prioritize, and implement FMA programs. There are three types of grants available under FMA: Planning, Project, and Technical Assistance Grants. FMA Planning Grants are available to States and communities to prepare Flood Mitigation Plans. NFIP participating communities with approved Flood Mitigation Plans can apply for FMA Project Grants. FMA Project Grants are available to States and NFIP participating communities to implement measures to reduce flood losses. Ten percent of the Project Grant is made available to States as a Technical Assistance Grant. These funds may be used by the State to help administer the program. Communities receiving FMA Planning and Project Grants must be participating in the NFIP. The program requires a 75/25 cost share.

➤ Hazard Mitigation Grant Program (HMGP)

HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The HMGP, administered by FEMA, provides grants to States and local governments to implement long-term hazard mitigation measures after a federal disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The Program requires a 75/25 cost-share. The SHMT reviews all applications. The SHMT will review, select, and prioritize applications for potential projects. The process for that selection is described WHERE.

Hazard mitigation planning is an important aspect of a successful mitigation program. A fundamental component of the DMA2K is the emphasis on planning. The State is eligible for up to 15% of the overall federal disaster expenditures if the State has an approved Standard All Hazards Mitigation Plan. Hazard mitigation planning is a collaborative process whereby hazards affecting the community are identified, vulnerability to the hazards is assessed, and consensus reached on how to minimize or eliminate the effects of these hazards.

➤ Pre-Disaster Mitigation Program (Competitive) (PDM-C)

PDM is authorized by §203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC, as amended by §102 of DMA2K. Funding for the program is provided through the National Pre-Disaster Mitigation Fund to assist States and local governments in implementing cost-effective hazard mitigation activities that complement a comprehensive mitigation program. All applicants must be participating in the NFIP if they have been identified as having a Special Flood Hazard Area. In addition, the community must not be suspended or on probation from the NFIP. The NJOEM works directly with the FEMA Region II program coordinator to develop and submit projects and plans for funding consideration. 44 CFR Part 201, Hazard Mitigation Planning, establishes criteria for State and local hazard mitigation planning authorized by §322 of the Stafford Act, as amended by §104 of the DMA. After November 1, 2003, local governments and Indian Tribal governments applying for PDM funds through the States need to have an approved local mitigation plan prior to the approval of local mitigation project grants. States are also required to have an approved Standard State mitigation plan in order to receive

PDM funds for State or local mitigation projects after November 1, 2004. Therefore, the development of State and local multi-hazard mitigation plans is key to maintaining eligibility for future PDM funding. NJOEM mitigation staff works with local jurisdictions to develop projects for potential PDM funding.



➤ Severe Repetitive Loss Grant Program (SRL)

Early in 2008 FEMA initiated the Severe Repetitive Loss Grant Program, which makes available mitigation grant funds to reduce losses to a high-risk subset of NFIP repetitive loss properties. In addition to these funds being available through a new, dedicated source, the program also offers an improved 90/10 federal/non-federal cost share when certain conditions are met. These are described in detail in Appendix G of the 2008 NJ HMP.

3.6 Incorporation of Local Plans

When the 2005 plan was approved, no local plans had been approved, and therefore there were none to incorporate into the State HMP. Since the April 2005 plan was approved, the SHMO, NJOEM and SHMT have been working with the 21 counties and 566 municipalities to educate communities about the benefits of a plan, support any requests for assistance in planning applications, and providing review and analysis of plans in conjunction with FEMA Region II so that communities understand the requirements for plan approval.

As noted in various other places in the 2008 Plan update, the State has facilitated (and FEMA has funded) numerous grants to support development of local and regional hazard mitigation plans. The grants are shown in the two tables below.

Table 3.6-1
2005 and 2006 Planning Grants in New Jersey

Government	Source	FEMA Funds	Other Funds	Total
Mercer, Hunterdon, Warren and Sussex Counties	FMA	\$97,000	\$32,858	\$129,858
Burlington	FMA	\$63,700	\$21,233	\$84,933
Burlington	HMGP	\$71,899	\$23,966	\$95,865
Essex	PDM	\$1,176,187	\$392,062	\$1,568,250
Hudson	PDM	\$879,999	\$303,600	\$1,183,600
Monmouth	PDM	\$345,375	\$103,615	\$448,990
Somerset	PDM	\$199,000	\$59,700	\$258,700
Total		\$2,833,160	\$937,034	\$3,770,196



Table 3.6-1
2007 Planning Grants in New Jersey

2007 Mitigation Planning Grants				
Government	Funding Source	FEMA Funds	Other Funds	Total
Camden/Cumberland/Salem/Gloucester	PDM	\$463,000	\$155,000	\$618,000
Atlantic	PDM	\$165,000	\$55,000	\$220,000
Cape May	PDM	\$474,000	\$158,000	\$632,000
Middlesex	PDM	\$200,000	\$66,000	\$266,000
Morris	PDM	\$300,000	\$100,000	\$400,000
Passaic	PDM	\$225,000	\$75,000	\$300,000
Union	HMGP	\$375,000	\$125,000	\$500,000
Total		\$2,202,000	\$734,000	\$2,936,000

Section 6 (Coordination of Local Planning) includes a more detailed description of NJOEM's plan to incorporate local plans into the State document. The State intends to remain closely engaged with these local and regional entities as they develop plans, to offer technical support, and to ensure that the State and local documents are well integrated. In developing the State HMP, NJOEM has obtained and analyzed a significant amount of technical data, which will be provided to local and regional planners. Part of the technical support that the State will offer includes descriptions of specific methodologies that should be used in vulnerability assessments and loss estimations. The State will also offer to review interim versions of local and regional plans and provide feedback to planners in key subject areas. NJOEM believes this will improve the consistency of the local plans, and make them more easily integrated into the State HMP. NJOEM will also facilitate information sharing among local and regional planners as HMPs are developed over the next two years.

The present section of the State HMP will be updated periodically, as the local plans are developed and new and more detailed information is available.