

2. Planning Process

WHAT'S NEW IN CHAPTER 2?

- *The members of the planning team have been updated to reflect personnel changes, as have the municipal OEM coordinators in Bergen County.*
- *Sections of federal hazard mitigation funding and federal disaster funding opportunities have been added.*
- *Information about Bergen County's participation in the National Flood Insurance Program and the Community Rating System has also been added for this Update.*

This section of the Natural Hazard Mitigation Plan Update details the process by which the Plan Update was developed. It identifies the parties involved, their participation, methods of public outreach employed, and types of information gathered in order to assess potential projects worthy of hazard mitigation assistance in Bergen County.

It demonstrates the truly collaborative effort required to protect the population of Bergen County and reduce its vulnerability to all types of natural hazards by identifying the most effective ways to make the communities more resistant to the impacts of these hazards.

This Plan Update should be viewed as a living document, subject to periodic updates, improvements, and modifications, as deemed appropriate. Thereby, the planning process is dynamic; it can, and should, be revisited to monitor the progress of the projects proposed in this Plan and to assess the need for future projects.

2.1 The Planning Team

Many people and entities were involved in bringing the 2014 Bergen County Multi-Jurisdictional All-Hazards Mitigation Plan Update to fruition. The New Jersey Meadowlands Commission (NJMC) and Bergen County Office of Emergency Management (BCOEM), in coordination with the emergency management coordinators from the 70 Bergen municipalities, worked together to produce this Update.

The NJMC and BCOEM reviewed the data needed for the plan update, reached out to stakeholders for assistance to gather and disseminate information, examined vulnerable sites and facilities, and prioritized potential mitigation projects for future implementation and Federal funding.

In addition to their interaction with the NJMC and BCOEM, the OEM Coordinators serve as the bridge to other elements in each community. For example, they serve as the liaisons to other departments within the municipality, including Engineer, Administrator, Construction official and Planner. The OEM Coordinators are also the link to the local Community Emergency Response Teams (CERT), civic organizations, advocacy groups, and the general public by providing outreach to these significant stakeholders, many of whom hold a wealth of information regarding areas in need of hazard management and mitigation at the local level.

Table 2.1: Plan Development Team

MEMBER	TEAM ROLE	AGENCY POSITION
BERGEN COUNTY		
Brian Higgins	Public Safety Director/Chief	County Chief of Police
Lt. Matthew Tiedemann	OEM Coordinator	County Police Lieutenant
Det. Gidget Petry	Deputy OEM Coordinator	County Police Officer
Det. Ron Salzano	Deputy OEM Coordinator	County Police Officer
Matthew Ziemkiewicz	Deputy OEM Coordinator	Domestic Preparedness Planner
Thomas Metzler	Deputy OEM Coordinator	Bergen County OEM
Joseph A. Femia, PE	Technical Advisor	County Engineer
Gary M. Ascolese, PE	Data Collection/Engineer	Assistant County Engineer
Christos Kavvadas	Data Collection/Engineer	County Hydraulics Engineer
Elizabeth Stagg	Flood Plain Manager	Bergen County OEM
Peter Pluchino	Data Collection	Mosquito Control Division Director
John Araneo	Technical Advisor	County Bridge Engineer
NEW JERSEY MEADOWLANDS COMMISSION		
Cheryl Rezendes, AICP	Mitigation Plan Author /Data Collection/Planner	Principal Planner
Deborah Alaimo Lawlor, AICP/PP	Editor/Mitigation Plan Co-Author/Data Collection/Planner	Chief Planner
Dominador Elefante	Map and Database Services	GIS Administrator
Stephanie Bosits	Map and Database Services	GIS Specialist
Brandon Alviano	Data Collection/Planner	Staff Planner
Mia Petrou, AICP/PP	Data Collection/Planner	Senior Planner
Mark Skerbetz, AICP/PP	Data Collection/Planner	Senior Planner
Fawzia Shapiro, PE/PP	Data Collection/Planner	Senior Engineer
Ron Seelogy, PE/PP	Data Collection/Planner	Senior Engineer
Donna Bocchino	Data Collection	Administrative Assistant
Ed Ramirez	Data Collection	Grants & Construction Contracts Admin
Ralph Venturini	Deputy Mitigation Plan Coordinator	(Former) Chief Plan Examiner

Table 2.2: Municipal OEM Coordinators

MUNICIPALITY	OEM COORDINATOR
Allendale	Mr. Scott Zieber
Alpine	Mr. Charles Hoffman
Bergenfield	Mr. Thomas Rose
Bogota	Mr. Tito Jackson
Carlstadt	Mr. Hernan Lopez
Cliffside Park	Mr. Stewart DeVito
Closter	Sgt. James Winters
Cresskill	Chief Frank Tino Jr.
Demarest	Chief James Powderley
Dumont	Chief Brian Venezio
East Rutherford	Mr. Francis Joseph Jr.
Edgewater	Robert Christiansen
Elmwood Park	Mr. Scott Karcz
Emerson	PO Mark Savino
Englewood	PO Bryan Krane
Englewood Cliffs	D/C Michael McMorrow
Fair Lawn	Wendy Alvarez
Fairview	PO Vincent Bellucci
Fort Lee	Capt. Stephen Ferraro
Franklin Lakes	Mr. Craig Goldman
Garfield	PO Michael Marsh
Glen Rock	Joanne Perry
Hackensack	Capt. John Niland
Harrington Park	Mr. Michael Hunken
Hasbrouck Heights	Chief Michael Colaneri
Haworth	Mr. Rick Swarthe
Hillsdale	Mr. William Franklin
Ho-Ho-Kus	Mr. Jay Ludwig
Leonia	Mr. Ron Chace
Little Ferry	Chief Ralph Verdi
Lodi	Mr. Robert Cassiello
Lyndhurst	Chief James O'Connor
Mahwah	Mr. Raymond Roe
Maywood	Mr. Christopher Tuttle
Midland Park	Mr. Joseph Mulligan
Montvale	Mr. Bruce Piatt
Moonachie	Mary Ann Lyons
New Milford	Chief Frank Papapietro
North Arlington	Mr. Peter Massa
Northvale	Mr. Nicola Lepore

Norwood	Chief Jeffrey Krapels
Oakland	Mr. Roy Bauberger
Old Tappan	Capt. Thomas Shine
Oradell	Ms. Laura Graham
Palisades Park	Mr. George Beck
Paramus	Mr. Steven Mehl
Park Ridge	Mr. Peter Mauro
Ramsey	Mr. Ralph Venturini
Ridgefield	Mr. Michael Handschin
Ridgefield Park	Mr. Douglas Hansen
Ridgewood	Mr. Robert Greenlaw
River Edge	Mr. Thomas Smith
River Vale	Lt. Sean Scheidle
Rochelle Park	Mr. Peter Donatello Jr.
Rockleigh	Mr. Michael Malhame
Rutherford	Mr. Paul Dansbach
Saddle Brook	Mr. John Tuohy
Saddle River	Mr. John Bishop
South Hackensack	Mr. Michael Ward
Teaneck	Mr. Larry Roberston
Tenafly	Mr. Anthony Barzelatto
Teterboro	Mr. Robert Pisko
Upper Saddle River	Chief Theodore Preusch
Waldwick	Mr. Robert Ryan
Wallington	Mr. Mark Lepinski
Washington Twp	Cpl. Saverio Fasciano
Westwood	Mr. Darren Blankenbush
Woodcliff Lake	Mr. Herbert Kuehlke
Wood-Ridge	Mr. Paul Dahl
Wyckoff	Sgt. Michael Steinbruch

2.2 History of the Process

Since "mitigate" simply means "to make less severe," it could be said that Bergen County has been in the hazard mitigation business since the first settlers located along the beautiful river valleys and mountain foothills of the region. While many hazards, from winter storms to tornadoes, have affected the County's inhabitants, flooding most often comes to mind when the topic of hazard mitigation planning arises. This is due to the fact that Bergen County is laced with several major rivers and an array of associated tributaries.

As is often the case with communities located adjacent to waterways, thriving development fills the floodplains, moving closer and closer to the water's edge for reasons of scenic beauty, transportation, industry, power generation, water supply and more. This pattern of development poses challenges as natural environmental phenomenon (such as the rise and fall of river levels) may impact human health and financial prosperity. This has occurred repeatedly over the years, bringing with it increased repetitive filing of losses due to damages incurred.

To lessen the impact of funding for repetitive losses during a disaster, FEMA, in accordance with the Disaster Mitigation Act of 2000 (44 CFR Parts 201 and 206), mandated that all jurisdictions (municipalities and counties) develop comprehensive all-hazard mitigation plans by November 1, 2003 in order to be eligible for Federal Hazard Mitigation Grant funding following a presidentially-declared disaster. FEMA authorized the development of multi-jurisdictional hazard mitigation plans to comply with this requirement. FEMA and the NJOEM granted permission to BCOEM to develop a plan for Bergen County and all of its municipalities. All 70 constituent municipalities in the County agreed to participate in this hazard mitigation planning endeavor in 2006, and again for this 2014 Plan update.

2.3 Public Participation in Bergen County post-Hurricane Irene and Superstorm Sandy

The outreach program developed for the 2008 plan was again utilized for this 2014 Update. Several events beyond the control of the Planning Team impacted the level of participation on the part of the municipalities, and greatly increased the amount of time that was originally allotted for this portion of the Planning process.

The Planning Team faced serious challenges relating to data collection and outreach in general. With 70 municipalities, many of them very modest in land area and population, the typical Bergen County OEM Coordinator often holds at least one additional position, whether working outside or within the municipality. Included in a long list of responsibilities are the ongoing recovery activities from Hurricane Irene (2011) and Superstorm Sandy (2012), which severely impacted many jurisdictions within Bergen County. The level of effort, administratively, for many OEM Coordinators has increased tenfold. Unfortunately, these circumstances hampered the efforts of the Planning Team to gather the baseline information that was needed to prepare the vulnerability assessment, and ultimately set the completion schedule back. Also impacted by the ongoing recovery efforts was attendance at Plan update meetings, which initially was very low but increased due to a more concerted communication effort on the part of the Planning Team. Mayors and Administrators from all 70 Bergen municipalities were included on all Plan communications, to increase awareness and improve participation.

The planning process consisted of meetings and data collection amongst four primary groups of participants:

- Government Agencies
- OEM Coordinators
- Key Stakeholders
- General Public

For this Plan update, numerous meetings and workshops were held to assist OEM Coordinators in each municipality with the task of gathering the bulk of the information required for the Plan update. **Table 2.3** details the level of participation in the Plan by each municipality in Bergen County. Any information submitted, as well as meetings attended during the planning process, is reflected in Table 2.3.

Appendix A contains all of the public outreach materials developed for the Plan update. This includes Power Point presentations from all outreach meetings, flyers that were sent out to notify Bergen municipalities of the meetings, and public notices that were published in The Record newspaper for the February 2014 outreach meetings.

Also included in Appendix A is the press release that was developed and distributed during Fall 2014 to solicit public input on the draft plan. This press release was distributed/posted to the following locations:

- New Jersey Meadowlands Commission website;
- Bergen County website;
- Hudson County OEM;
- Passaic County OEM;
- Essex County OEM;
- New York City OEM;
- The Port Authority of New York and New Jersey;
- Bergen County Utilities Authority; and
- 70 Bergen County municipalities.

It should be noted that the Bergen County Office of Emergency Management holds Quarterly Emergency Management Coordinator's meetings. These meetings are not open to the public. Each quarterly meeting generally includes an update of Mitigation Plan status, a discussion of hazards, and a request for feedback from attendees/communities. Invitees include municipal OEM Coordinators, CERT Program Managers, as well as representatives from NJ State Police, Port Authority of NY/NJ, Public Service Electric and Gas Company, United Water Company, Passaic Valley Water Commission, and other interested parties.

Upon completion, the Plan update will be submitted to the New Jersey State Police, Bergen County, and the 70 Bergen County municipalities for review and approval prior to final submission to FEMA for approval. Resolutions from each of the participating jurisdictions will be retained on file at the BCOEM. Public input will be accepted at each of the local and county meetings at which the resolutions are voted upon in order to provide broad geographical access for public comment on the final plan. Additionally, the entire plan and appendices will be available for public review and comment on the NJMC and Bergen County websites.

2.4 Data Gathering

Gathering the data necessary to identify potential projects and areas in need of mitigation from real or potential natural hazard damage was a massive undertaking, particularly since it was done at the multi-jurisdictional scale.

Initially, NJMC asked the Bergen County municipalities to submit any historical natural hazard disaster information they had on record. This data may have included updated names and locations of impacted sites/areas, critical facilities, critical infrastructure, other infrastructure of importance, vulnerability analyses, etc. Depending upon the individual municipality, the information may have been gathered from a number of existing municipal documents such as master plans, capital improvement plans, floodplain management plans, emergency operation plans, former insurance claims, etc. For this update, municipalities were asked to provide only information that was new or had changed from their submission for the 2008 Plan. For the mitigation strategy portion of the Plan update (Section 4), municipalities were asked to provide a progress report on any mitigation project from the 2008 plan. New mitigation projects were also requested. Also included in the mitigation section are summaries of the Letters of Intent (LOI) submitted by all Bergen towns in 2013.

Scanned Letters of Intent can be found in Appendix F. Additional scanned forms from the data gathering effort are available upon request, including sign-in sheets from the public outreach effort.

Table 2.3: Plan Participation by Bergen County Municipalities

	MUNICIPALITY	Attended Kickoff Meeting 2/12/13	Attended Workshop 6/26/13	Attended Workshop 6/27/13	Attended Mitigation Meeting 2/12/14	Attended Mitigation Meeting 2/28/14	Met with Planning Team 2014**	Resolution Approving the Plan	Updated Municipal Information	Submitted Mitigation Project(s)	CC Worksheet
201	Allendale				X				YES	YES	YES
202	Alpine				X				YES	YES	YES
203	Bergenfield	X	X			X	X		YES	YES	YES
204	Bogota				X				YES	YES	YES
205	Carlstadt	X		X					YES	YES	YES
206	Cliffside Park	X	X		X				YES	YES	YES
207	Closter	X		X		X			YES	YES	YES
208	Cresskill				X		X		YES	YES	YES
209	Demarest*						X		YES	YES	YES
210	Dumont	X			X				YES	YES	YES
212	East Rutherford					X			YES	YES	YES
213	Edgewater	X	X				X		YES	YES	YES
211	Elmwood Park	X							YES	YES	YES
214	Emerson			X					YES	YES	YES
215	Englewood				X				YES	YES	YES
216	Englewood Cliffs*						X		YES	YES	YES
217	Fair Lawn	X	X		X				YES	YES	YES
218	Fairview					X			YES	YES	YES
219	Fort Lee	X			X				YES	YES	YES
220	Franklin Lakes		X		X				YES	YES	YES
221	Garfield					X			YES	YES	YES
222	Glen Rock				X				YES	YES	YES
223	Hackensack				X				YES	YES	YES

	MUNICIPALITY	Attended Kickoff Meeting 2/12/13	Attended Workshop 6/26/13	Attended Workshop 6/27/13	Attended Mitigation Meeting 2/12/14	Attended Mitigation Meeting 2/28/14	Met with Planning Team 2014**	Resolution Approving the Plan	Updated Municipal Information	Submitted Mitigation Project(s)	CC Worksheet
224	Harrington Park*								YES	YES	YES
225	Hasbrouck Heights	X			X				YES	YES	YES
226	Haworth				X	X			YES	YES	YES
227	Hillsdale	X	X		X				YES	YES	YES
228	Ho-Ho-Kus	X	X			X			YES	YES	YES
229	Leonia		X		X				YES	YES	YES
230	Little Ferry	X		X	X				YES	YES	YES
231	Lodi	X				X			YES	YES	YES
232	Lyndhurst	X		X		X			YES	YES	YES
233	Mahwah	X			X				YES	YES	YES
234	Maywood		X			X			YES	YES	YES
235	Midland Park					X			YES	YES	YES
236	Montvale				X				YES	YES	YES
237	Moonachie	X		X	X				YES	YES	YES
238	New Milford			X		X			YES	YES	YES
239	North Arlington	X				X			YES	YES	YES
240	Northvale*								YES	YES	YES
241	Norwood				X				YES	YES	YES
242	Oakland		X		X		X		YES	YES	YES
243	Old Tappan			X	X				YES	YES	YES
244	Oradell					X			YES	YES	YES
245	Palisades Park				X				YES	YES	YES
246	Paramus*								YES	YES	YES
247	Park Ridge	X		X		X			YES	YES	YES
248	Ramsey		X				X		YES	YES	YES
249	Ridgefield	X				X			YES	YES	YES

	MUNICIPALITY	Attended Kickoff Meeting 2/12/13	Attended Workshop 6/26/13	Attended Workshop 6/27/13	Attended Mitigation Meeting 2/12/14	Attended Mitigation Meeting 2/28/14	Met with Planning Team 2014**	Resolution Approving the Plan	Updated Municipal Information	Submitted Mitigation Project(s)	CC Worksheet
250	Ridgefield Park					X	X		YES	YES	YES
251	Ridgewood	X				X			YES	YES	YES
252	River Edge		X		X				YES	YES	YES
253	River Vale			X					YES	YES	YES
254	Rochelle Park	X	X			X	X		YES	YES	YES
255	Rockleigh*								YES	YES	YES
256	Rutherford				X		X		YES	YES	YES
257	Saddle Brook					X	X		YES	YES	YES
258	Saddle River*								YES	YES	YES
259	South Hackensack				X		X		YES	YES	YES
260	Teaneck	X			X				YES	YES	YES
261	Tenafly			X	X				YES	YES	YES
262	Teterboro	X							YES	YES	YES
263	Upper Saddle River	X			X				YES	YES	YES
264	Waldwick				X				YES	YES	YES
265	Wallington	X				X			YES	YES	YES
266	Washington	X				X			YES	YES	YES
267	Westwood			X		X			YES	YES	YES
268	Woodcliff Lake			X	X		X		YES	YES	YES
269	Wood-Ridge	X		X		X	X		YES	YES	YES
270	Wyckoff	X			X				YES	YES	YES
	Bergen County	X	X	X	X	X			YES	YES	YES

*These municipalities did not attend any of the outreach meetings held by the Planning Team. Each of these municipalities either met with the Planning Team or participated electronically and via phone conversation. All municipalities submitted the required paperwork,

Details of these meetings can be found in **Appendix B.

2.5 Coordination with Existing Planning Efforts and Programs

Section 322 of the Stafford Act requires state and local governments to prepare multi-hazard mitigation plans as a precondition for receiving FEMA mitigation project grants. In New Jersey, municipalities are authorized to prepare local disaster plans based on the premise that they are best equipped to assess their strengths and weaknesses, opportunities, and constraints. Local governments have intimate knowledge of the local geography, and in a disaster, local government personnel are on the front lines providing personnel and equipment to support the community.

Various FEMA programs are available to provide assistance to local governments. These programs help the County by providing funding for flood mitigation projects and flood insurance. The HMGP can also provide funds to mitigate the risk from other natural hazards. Continued involvement in these programs will help to administer funds and resources to support this Plan.

2.6 Federal Hazard Mitigation Funding Opportunities

FEMA's Hazard Mitigation Assistance (HMA) grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages. Currently, FEMA administers the following HMA grant programs: 1) Flood Mitigation Assistance (FMA); 2) Hazard Mitigation Grant Program; and 3) Pre-Disaster Mitigation (PDM).

As of July 2013, the Repetitive Loss Grant Program (RFC) and Severe Repetitive Loss Grant Program (SRL) are no longer funded and are now addressed under the unified FMA program. The Biggert Waters Flood Insurance Reform Act of 2012 eliminated the SRL program. For more information Biggert Waters Flood Insurance Reform Act visit: <http://www.fema.gov/flood-insurance-reform-act-2012>. For previous year information regarding the SRL Program visit: <http://www.fema.gov/severe-repetitive-loss-program>. For previous year information on the RFC Program visit: <http://www.fema.gov/repetitive-flood-claims-program>

Federal mitigation grant funding (Stafford Act 404 and 406) is available to all communities with a current hazard mitigation plan (this plan); however most of these grants require a "local share" in the range of 0-25% of the total grant amount. Participation in FEMA 404 HMGP may cover mitigation activities including raising, removing, relocating or replacing structures within flood hazard areas. The FEMA mitigation grant programs are described below.

Flood Mitigation Assistance (FMA) Program

FMA provides funding to assist states and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the NFIP. The FMA is funded annually; no federal disaster declaration is required. Only NFIP insured homes and businesses are eligible for mitigation in this program. Funding for FMA is very limited and, as with the HMGP, individuals cannot apply directly for the program. Applications must come from local governments or other eligible organizations. The federal cost share for an FMA project is 75%. At least 25% of the total eligible costs must be provided by a non-federal source. Of this 25%, no more than half can be provided as in-kind contributions from third parties. At minimum, a FEMA-approved Hazard Mitigation Plan is required before a project can be approved. FMA funds are distributed from FEMA to the state. NJOEM serves as the grantee and program administrator for FMA.

Hazard Mitigation Grant Program (HMGP)

The HMGP is a post-disaster mitigation program. It is made available to states by FEMA after a Federal disaster declaration. The HMGP can provide up to 75% funding for hazard mitigation projects. The HMGP can be used to fund cost-effective projects that will protect public or private property in an area covered by a federal disaster declaration, or that will reduce the likelihood of damage from future disasters. Examples of projects include acquisition and demolition of structures in hazard prone areas, flood proofing or elevation to reduce future damage, minor structural improvements and development of state or local standards. Projects must fit into an overall mitigation strategy for the area identified as part of a local planning effort. All applicants must have a FEMA-approved Hazard Mitigation Plan. HMGP eligible applicants include state and local governments, certain nonprofit organizations or institutions that perform essential government services, and Indian tribes and authorized tribal organizations. Individuals or homeowners cannot apply directly for the HMGP; a local government must apply on their behalf. Applications are submitted to NJOEM and placed in rank order for available funding and submitted to FEMA for final approval. Eligible projects not selected for funding are placed in an inactive status and may be considered as additional HMGP funding becomes available.

Pre-Disaster Mitigation (PDM) Program

The PDM program is an annually funded, nationwide, competitive grant program. No disaster declaration is required. Federal funds will cover 75% of a project's cost up to \$3 million. As with the HMGP and FMA, a FEMA-approved local Hazard Mitigation Plan is required to be approved for funding under the PDM program.

2.7 Federal Disaster and Recovery Assistance Programs

Following a disaster, various types of assistance may be made available by local, state and federal governments. The types and levels of disaster assistance depend on the severity of the damage and the declarations that result from the disaster event. Among the general types of assistance that may be provided should the President of the United States declare the event a major disaster are the following:

Individual Assistance (IA)

IA provides help for homeowners, renters, businesses and some non-profit entities after disasters occur. For homeowners and renters, the IHP (individuals and households program) assists those who suffered uninsured or underinsured losses. They may be eligible for a Home Disaster Loan to repair or replace damaged real estate or personal property. Renters are eligible for loans to cover personal property losses. Individuals may borrow up to \$250,000 to repair or replace real estate, \$40,000 to cover losses to personal property and an additional 20% for mitigation.

For businesses, loans may be made by the SBA and USDA to repair or replace disaster damages to property owned by the business, including real estate, machinery and equipment, inventory and supplies. Businesses of any size are eligible. Non-profit organizations such as charities, churches, private universities, etc. are also eligible. These loans are restricted, by law, to small businesses only.

Public Assistance (PA)/Section 406

PA provides cost reimbursement aid to local governments (state, county, local, municipal authorities and school districts) and certain non-profit agencies that were involved in disaster response and

recovery programs or that suffered loss or damage to facilities or property used to deliver government-like services. The purpose of the PA program is to provide enough funding to restore a damaged facility to its pre-disaster design, function and capacity. During the repair efforts, mitigation opportunities may present themselves. The 406 program is implemented in conjunction with the PA program; additional funding may be authorized to modify the damaged facility in order to mitigate potential future damage. The cost effective mitigation measure must be applied on the parts of the eligible facility that were actually damaged by the disaster and must directly reduce the potential of future, similar disaster damages.

Community Development Block Grants (CDBG)

The Community Development Block Grant (CDBG) program provides communities with resources to address a wide range of community development needs. The CDBG program works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses. HUD determines the amount of each grant by using a formula comprised of several measures of community need, including the extent of poverty, population, housing overcrowding, age of housing, and population growth lag in relationship to other metropolitan areas.

2.8 National Flood Insurance Program

The National Flood Insurance Program (NFIP) was established in 1968 by the U.S. Congress to provide affordable federally-backed flood insurance to property owners. The intent of the NFIP is to ensure that new development does not worsen flooding problems, and is better able to withstand any future flooding. To be eligible for participation in the NFIP, communities must adopt and enforce a floodplain management ordinance to regulate new development in Special Flood Hazard Areas (SFHAs), as well as designate a floodplain administrator. Participation in the NFIP is voluntary.

When a community chooses to join the NFIP, it must require permits for all new construction in the SFHA (as determined by flood hazard mapping) and ensure that both the construction materials and methods used will minimize potential flood damage. The federal government then makes flood insurance available for eligible buildings and their contents within the community. Local floodplain management ordinances and enforcement procedures must meet program NFIP requirements. Local regulations must be updated when additional data are provided by FEMA or when Federal or state standards are revised.

Flood Insurance Rate Maps

A Flood Insurance Rate Map (FIRM) is an official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. Flood risk information presented on FIRMs is based on historic, meteorological, hydrologic, and hydraulic data, as well as open-space conditions, flood control works, and development. To prepare FIRMs that illustrate the extent of flood hazard in a flood prone community, FEMA conducts engineering studies referred to as Flood Insurance Studies (FISs). Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas (SFHAs) on FIRMs. SFHAs are those areas subject to inundation by a flood that has a 1-percent or greater chance of being equaled or exceeded during any given year. This type of flood is referred to as a base flood. A base flood has a 26-percent chance of occurring during a 30-year period. The base flood is a regulatory standard used by Federal agencies, and

most states, to administer floodplain management programs, and is also used by the National Flood Insurance Program as the basis for insurance requirements nationwide.

A variety of information can be found on FIRMs, including:

- Common physical features, such as major highways, secondary roads, lakes, railroads, streams, and other waterways;
- Special Flood Hazard Areas;
- Base (1% annual chance) flood elevations or depths;
- Flood insurance risk zones;
- Areas subject to inundation by the 0.2 percent annual chance flood;
- Areas designated as regulatory floodways; and
- Undeveloped coastal barriers.

All Bergen County municipalities participate in the NFIP. Table 2.4 details the participation of Bergen municipalities in the NFIP and includes information on Repetitive and Severe Repetitive Loss Properties, losses and claims. This information was provided by FEMA and is dated February 28, 2014. Updated NFIP information is available from FEMA.

2.9 Repetitive Losses and Severe Repetitive Losses

According to FEMA, a Repetitive Loss (RL) property is any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP. Currently there are over 122,000 RL properties nationwide.ⁱ Table 3.14 highlights the repetitively flooded properties in Bergen County. The information for this table was acquired from FEMA and is dated 7/31/13.

The definition of severe repetitive loss (SRL) was established in section 1361A of the National Flood Insurance Act, as amended (NFIA), 42 U.S.C. 4102a. According to FEMA, an SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

- (a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- (b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.ⁱⁱ

2.10 Risk Mapping, Assessment, and Planning (MAP) Program

Risk MAP is the FEMA program that provides communities with flood information and tools to enhance their mitigation plans and take action to better protect their residents. Through more precise flood mapping, risk assessment tools, and planning and outreach support, Risk MAP strengthens local ability to make informed decisions about reducing risk. Through collaboration with State, Tribal, and local entities, Risk MAP delivers quality data that increases public awareness and leads to action that reduces risk to life and property. Risk MAP focuses on products and services beyond the traditional Flood

Insurance Rate Map (FIRM) and works with officials to help put flood risk data and assessment tools to use, effectively communicating risk to citizens and enabling communities to enhance their mitigation plans and actions

This non-regulatory mapping was not available for this Plan update; the RISK MAP program will be used for future Bergen Plan updates and through the maintenance process.

Table 2.4: NFIP Information on New Jersey Repetitive and Severe Repetitive Loss Properties

Source: Consolidated information obtained from Bureau Net as of February 28, 2014

Municipal Identification			Repetitive Loss Property Information				Severe Repetitive Loss Information			
Municipality <i>74% of towns in NJ have Repetitive Loss Properties</i>	NFIP CID #	Co/Mun #	# of RL Properties	# of RL Losses	Total NFIP Claims Paid	# Mitigated	# of SRL Properties	# of SRL Losses	Total NFIP SRL Claims Paid	# Mitigated
Allendale Borough	340019	0201	4	12	141,957.24	0	1	5	87,445.85	0
Bergenfield Borough	340020	0203	8	19	235,046.01	0	0	0	0	0
Bogota Borough	340021	0204	3	11	238,025.90		1	7	186,753.17	0
Carlstadt Borough	340022	0205	8	50	2,709,586.89	0	3	34	818,470.33	0
Closter Borough	340023	0207	6	15	172,096.68	0	1	4	57,976.83	0
Cresskill Borough	340024	0208	7	19	245,188.39	0	0	0	0	0
Demarest Borough	340025	0209	2	4	32,850.25	0	0	0	0	0
Dumont Borough	340026	0210	8	17	93,676.03	0	0	0	0	0
Elmwood Park Borough	340500	0211	8	25	649,779.82	0	2	8	132,511.53	0
East Rutherford Borough	340028	0212	47	119	4,332,688.51	0	5	20	871,609.42	0
Emerson Borough	340030	0212	3	9	101,904.65	0	1	4	39,618.63	0
Edgewater Borough	340029	0213	4	14	2,314,879.6	0	2	10	2,226,152.81	0
Englewood City	340031	0215	35	90	2,723,912.91	0	1	4	203,716.25	0
Fair Lawn Borough	340033	0217	29	90	1,673,112.23	0	8	40	1,151,517.62	0
Fairview Borough	340034	0218	4	12	273,149.45	0	1	5	109,824.71	0
Franklin Lakes Borough	340036	0220	5	11	119,063.33	0	0	0	0	0
Garfield City	340037	0221	36	97	2,255,921.19	0	3	14	404,730.47	0
Glen Rock Borough	340038	0222	2	5	26,640.47	0	0	0	0	0
Hackensack City	340039	0223	60	154	6,423,655.82	0	2	11	551,020.17	0
Harrington Park Borough	340040	0224	2	4	63,498.95	0	0	0	0	0
Hasbrouck Heights Boroug	340041	0225	3	8	521,781.62	0	0	0	0	0
Haworth Borough	340042	0226	2	4	29,595.34	0	0	0	0	0
Hillsdale Borough	340043	0227	48	192	4,137,305.56	2	13	85	1,572,091.46	0
Ho-Ho-Kus Borough	340044	0228	4	11	76,938.82	0	0	0	0	0

Municipal Identification			Repetitive Loss Property Information				Severe Repetitive Loss Information			
Municipality <i>74% of towns in NJ have Repetitive Loss Properties</i>	NFIP CID #	Co/Mun #	# of RL Properties	# of RL Losses	Total NFIP Claims Paid	# Mitigated	# of SRL Properties	# of SRL Losses	Total NFIP SRL Claims Paid	# Mitigated
Little Ferry Borough	340046	0230	249	590	13,292,998.08	0	6	32	805,558.21	0
Lodi Borough	340047	0231	141	485	18,191,644.76	2	23	164	7,783,324.59	1
Lyndhurst Township	340048	0232	107	294	8,276,912.2	5	13	52	2,038,442.77	1
Mahwah Township	340049	0233	23	86	2,015,373.92	0	8	39	905,629.52	0
Maywood Borough	340050	0234	5	14	91,968.19	0	0	0	0	0
Midland Park Borough	340051	0235	2	6	41,510.01	0	0	0	0	0
Montvale Borough	340052	0236	1	2	40,466.90	0	0	0	0	0
Moonachie Borough	340053	0237	13	41	8,496,570.26	0	2	14	4,156,620.65	0
New Milford Borough	340054	0238	140	507	21,139,137.13	4	46	252	8,908,521.8	4
North Arlington Borough	340055	0239	10	21	841,499.85	0	0	0	0	0
Northvale Borough	340056	0240	8	17	1,399,629.98	0	0	0	0	0
Norwood Borough	340057	0241	2	6	32,178.85	0	0	0	0	0
Oakland Borough	345309	0242	74	275	5,832,456.14	20	22	117	3,039,715.25	3
Old Tappan Borough	340059	0243	5	18	486,519.03	0	1	4	331,011.43	0
Oradell Borough	340060	0244	2	6	666,871.94	0	0	0	0	0
Palisades Park Borough	340061	0245	2	12	1,885,332.84	0	1	1	1,878,594.62	0
Paramus Borough	340062	0246	12	31	409,509.15	0	0	0	0	0
Ridgefield Borough	340065	0249	7	19	343,831.81	0	1	5	80,327.88	0
Ridgefield Park Village	340066	0250	44	111	2,206,997.66	3	3	14	280,049.47	0
Ridgewood Village	340067	0251	29	85	1,780,924.71	0	4	18	646,350.05	0
River Edge Borough	340068	0252	14	41	3,017,720.58	0	2	10	1,114,050.23	0
River Vale Township	340069	0253	17	61	2,673,761.42	0	2	26	1,665,663.47	0
Rochelle Park Township	340070	0254	156	403	15,792,028.22	6	0	0	0	0
Rutherford Borough	340072	0256	55	173	3,948,034.13	0	10	50	1,651,875.45	0
Saddle Brook Township	340074	0257	50	126	4,913,968.68	0	0	0	0	0
Saddle River Borough	340073	0258	7	25	387,346.85	0	2	10	132,127.95	0
South Hackensack Twp	340515	0259	8	16	561,114.71	0	0	0	0	0

Municipal Identification			Repetitive Loss Property Information				Severe Repetitive Loss Information			
Municipality <i>74% of towns in NJ have Repetitive Loss Properties</i>	NFIP CID #	Co/Mun #	# of RL Properties	# of RL Losses	Total NFIP Claims Paid	# Mitigated	# of SRL Properties	# of SRL Losses	Total NFIP SRL Claims Paid	# Mitigated
Teaneck Township	340075	0260	8	18	129,307.30	0	0	0	0	0
Tenaflly Borough	340076	0261	5	10	58,326.47	0	0	0	0	0
Upper Saddle River Boro	340077	0263	5	10	47,344.05	0	0	0	0	0
Waldwick Borough	340078	0264	1	2	6,651.06	0	0	0	0	0
Wallington Borough	340079	0265	98	247	5,748,854.97	0	7	28	1,154,137.37	0
Washington Township	340080	0266	5	22	225,180.79	0	0	0	0	0
Westwood Borough	340081	0267	108	420	10,937,646.71	0	34	213	6,631,912.47	0
Woodcliff Lake Boro	340082	0268	3	7	131,245.57	0	0	0	0	0
Wood-Ridge Borough	340083	0269	4	10	199,792.78	0	0	0	0	0
Wyckoff Township	340084	0270	1	9	439,033.29	0	0	0	0	0
NJ Meadowlands Comm.	340570	0299	119	303	17,077,145.45	2	6	51	3,315,338.14	0
Bergen County Total			1878	5521	183,359,092.1	44	237	1351	54,932,690.57	9

Each Bergen County municipality has a floodplain manager. Table 2.5 lists the Floodplain Administrators (FPAs) for each jurisdiction.

Table 2.5: Bergen County Floodplain Administrators

MUNICIPALITY	NAME	TITLE
Allendale	John A. Wittekind, Jr.	Construction Code Official
Alpine	Gary Vander Veer	Engineer
Bergenfield	Kenneth R. Pfannen	Construction Official
Bogota	Daniel D. Howell	Construction Official
Carlstadt	Frank J. Recanati	Construction Official
Cliffside Park	Stewart DeVito	OEM Coordinator
Closter	Michael Sartori	Construction Official
Cresskill	Edward M. Rossi	Construction Official
Demarest	Edward M. Rossi	Construction Official
Dumont	Edward Rossi	Building Inspector
East Rutherford	Frank Recanati	Construction Official
Edgewater	John Candelmo	Construction Official
Elmwood Park	Nordan Murphy	Engineer
Emerson	Carol Dray	Borough Clerk
Englewood	Ken Albert/Frantz Volcey	Engineer
Englewood Cliffs	Bernard Mirandi	Engineer
Fair Lawn	Kenneth Garrison	Engineer
Fairview	Thomas Leonardi	Building Inspector
Fort Lee	Brian Ribarro	Construction Official
Franklin Lakes	Raymond W. Dressler	Construction Official
Garfield	Gerald P. Walis	Construction Official
Glen Rock	Brian Frugis	Construction Official
Hackensack	Joseph C. Mellone	Construction Official
NJ Meadowlands Commission	Sara J. Sundell	Chief Engineer
Harrington Park	Joseph P. Zavarino	Construction Official
Hasbrouck Heights	Nicholas Melfi, Jr.	Construction Official
Haworth	Harry W. Kraus	Construction Official
Hillsdale	Michelle E. Wood	Construction Official
Ho-Ho-Kus	Mark Berninger	Construction Official
Leonia	Jack Peters	Construction Official
Little Ferry	Richard Bolan	Construction Official
Lodi	Joel (Bo) K. Lavin	Construction Official
Lyndhurst	Mark J. Sadonis	Construction Official
Mahwah	Kevin Boswell	Engineer

Maywood	George J Georgeou	Clerk
Midland Park	John A. Wittkind, Jr.	Construction Official
Montvale	Jeffrey Fette	Construction Official
Moonachie	Michael Sartori	Construction Official
New Milford	James Taormina	Construction Official
North Arlington	Robert A. Kairys	Construction Official
Northvale	Nicola A. Lepore	Construction Official
Norwood	Paul D. Renaud	Construction Official
Oakland	Dan Hagberg	Planning Board/CO
Old Tappan	Nicola A. Lepore	Construction Official
Oradell	Stanley Kufel	OEM Coordinator
Palisades Park	Anthony Pollotta	Construction Official
Paramus	George Georgeou	Construction Official
Park Ridge	Nick Saluzzi	Construction Official
Ramsey	Jack D'Agostaro	Engineer
Ridgefield	Armand S. Marini, III	Construction Official
Ridgefield Park	Michael Landolfi	Construction Official
Ridgewood	Anthony Merlino	Construction Official
River Edge	Robert E. Byrnes, Sr.	Construction Official
River Vale	Michael Sartori	Construction Official
Rochelle Park	Richard Bolan	Construction Official
Rockleigh	William J. McGuire	Construction Official
Rutherford	John J. Uhl	Construction Official
Saddle Brook	Anthony Ambrogio	Construction Official
Saddle River	Martin Spence	Engineer
South Hackensack	Hugh J. Riley	Construction Official
Teaneck	Steven M. Gluck	Construction Official
Tenafly	Robert E Byrnes, Sr.	Construction Official
Teterboro	Joseph G. Marra	Construction Official
Upper Saddle River	Theodore Preusch	Boro Administrator
Waldwick	Joseph G. Mysliwicz	Construction Official
Wallington	Nick Melfi	Construction Official
Washington	John Scialla	Construction Official
Westwood	Armand Marini	Construction Official
Woodcliff Lake	Canio N. Saluzzi	Construction Official
Wood-Ridge	Brian Intindola	Engineer

2.11 Community Rating System

The National Flood Insurance Program (NFIP) Community Rating System (CRS) was implemented in 1990 as a voluntary program for recognizing and encouraging community floodplain management activities exceeding the minimum NFIP standards. Any community in full compliance with the minimum NFIP floodplain management requirements may apply to join the CRS.

Under the CRS, flood insurance premium rates are discounted to reflect the reduced flood risk and to reward community actions that meet the three goals of the CRS, which are:

- Reduce flood damage to insurable property;
- Strengthen and support the insurance aspects of the NFIP; and
- Encourage a comprehensive approach to floodplain management.

Flood insurance premium discounts ranging from 5% to a maximum of 45% will be applied to eligible policies in a community in recognition of the floodplain management activities implemented. Four classes of activities are recognized for eliminating flood exposure: Public Information, Mapping and Regulation, Flood Damage Reduction, and Flood Preparedness. Credit points are determined by FEMA based on the activities of each community, and these points determine the premium discount.

Table 2.6: Bergen County Participation in CRS

Information dated May 5, 2014

COMMUNITY	CRS ENTRY DATE	CURRENT EFFECTIVE DATE	CURRENT CLASS	% DISCOUNT FIR SFHA	% DISCOUNT FOR NON-SFHA	STATUS
ENGLEWOOD	10/1/91	10/1/01	10	0	0	R
GARFIELD	05/1/12	05/1/12	9	5	5	C
LITTLE FERRY	10/1/93	10/1/94	10	0	0	R
LODI	10/1/92	10/1/93	10	0	0	R
NEW JERSEY MEADOWLANDS COMMISSION*	10/1/92	05/1/09	7	15	5	C
OAKLAND	10/1/95	10/1/96	10	0	0	R
RIDGEWOOD	10/1/92	10/1/02	7	15	5	C
ROCHELLE PARK	10/1/06	10/1/06	8	10	5	C

**Only the portions of Bergen County municipalities within the NJMC jurisdiction are included in the CRS program. Bergen County NJMC communities include Carlstadt, East Rutherford, Little Ferry, Lyndhurst, Moonachie, North Arlington, Rutherford, South Hackensack, and Teterboro.*

Some communities feel that participating in the CRS will be time consuming and require a considerable time investment on their part. It is true that a CRS-participating community must designate a local official to act as the CRS coordinator and point of contact. This person will need to devote some time to become familiar with CRS and complete an application. After the first year, less time is required as the community standardizes its implementation procedures. Certainly, the time commitment for CRS Class 9 or Class 8 communities is much less than that for communities in CRS Class 3, 2, or 1, but the premium discount is also not as great. CRS communities report that the additional commitment is well worth the effort in reduced premiums, a safer community, and increased recognition and awareness of flood risk. Participation in the CRS is included as a mitigation activity (Chapter 4) for all non-participating Bergen County communities with SFHAs within their borders.

ⁱ FEMA, National Flood Insurance Program: Frequently Asked Questions.
http://www.fema.gov/txt/rebuild/repetitive_loss_faqs.txt

ⁱⁱ FEMA, Severe Repetitive Loss Pilot Program Guidance, January 14, 2008.