

# 9.10 Borough of Hamburg

This section presents the jurisdictional annex for the Borough of Hamburg.

## 9.10.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan's primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Keith Sukennikoff, OEM Coordinator	Michael Schneider, DPW/Road Supervisor
16 Wallkill Avenue, Hamburg, NJ 07419	16 Wallkill Avenue, Hamburg, NJ 07419
Phone: (973) 670-0105	Phone: (973) 600-5213
Email: Hamburg_oem2@hamburgnj.org	Email: Road_dept@hamburgnj.org

## 9.10.2 Municipal Profile

The Borough of Hamburg is located in northern Sussex County. It is bordered to the north, east and west by the Township of Hardyston and to the south by the Borough of Franklin. The Borough covers an area of approximately 1.2 square miles. According to the U.S. Census, the 2010 population for the Borough of Hamburg was 3,277. A tributary of the Wallkill River flows through the northern section of the Borough and along the Wallkill River forms the western border between the Borough and Township of Hardyston. Hamburg Creek is located in the southern end of the Borough. Hardistonville is an unincorporated area of the Borough.

### **Growth/Development Trends**

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in Section 9.10.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.10-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units/Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
Fairways at Wallkill	Res.	68	G/B Castle Road Block 11 Lot 30 and Block 11.01 Lot 1	Flood: 1% Chance; Carbonate Hazard	On going
Known or Anticipated Development in the Next Five (5) Years					
None identified at this time.					

<sup>\*</sup> Only location-specific hazard zones or vulnerabilities identified.

## 9.10.3 Natural Hazard Event History Specific to the Municipality

Sussex County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this plan update, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material



or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.10-2. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
August 26- September 5, 2011	Hurricane Irene	DR-4021	Yes	Hurricane Irene caused fallen debris and power outages in the Borough. The Borough used generators to power the Borough Hall, Police Department, water system and sewer system. The Borough also used contractors to provide sewage pumping during the outage. Roads were closed in the Borough due to flooding and debris. A water main under Route 23 was undermined by flooding and caused the pipes to separate. Damages to the Borough were over \$161,000.
October 26- November 8, 2012	Hurricane Sandy	DR-4086	Yes	Hurricane Sandy caused debris to fall on property and roadways throughout the Borough. There was also widespread power outages. The Borough provided backup power to essential facilities, barricaded hazardous streets, and provided traffic control. Damages and costs to the Borough were over \$53,000.

# 9.10.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The risk ranking methodology is presented in Section 5.3. However, each municipality had the opportunity to adjust the final ranking based on municipal feedback. The following summarizes the hazard vulnerabilities and their ranking in the Borough of Hamburg. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

## Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Borough of Hamburg.

Table 9.10-1. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>		Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Dam Failure	Damage estimate not a	available	Occasional	24	Medium
Drought	Damage estimate not available		Frequent	30	Medium
Earthquake	100-Year GBS: 500-Year GBS: 2,500-Year GBS:	\$0 \$399,167 \$6,271,068	Occasional	28	Medium
Flood	1% Annual Chance:	\$1,549,875	Frequent	18	Medium
Geologic	RCV Exposed to Carbonate Rock Areas:	\$625,285,229	Occasional	36	Medium*
Hurricane	100-year MRP:	\$169,219	Frequent	48	High



Hazard type	Estimate of Potential Dollar Structures Vulnerable to the		Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
	500-year MRP: \$90	08,528			
	Annualized: \$8,	,445			
Nor'Easter	Damage estimate not avail	able	Frequent	48	High
	100-Year MRP: \$10	69,219			
Severe Weather	500-year MRP: \$90	08,528	Frequent	48	High
VV Catalor	Annualized: \$8,	,445			
Severe Winter	1% GBS: \$4,	,787,774	Fraguent	51	High
Weather	5% GBS: \$23	3,938,870	Frequent	31	nigii
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas:	2,280,095	Frequent	24	Medium
Hazardous Materials	Damage estimate not avail	able	Frequent	36	High

#### Notes:

- \* The hazard ranking was changed for this hazard based on input from the municipality, population exposed, and/or event history. GBS = General building stock; MRP = Mean return period.
- The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- High = Total hazard priority risk ranking score of 31 and above
   Medium = Total hazard priority risk ranking of 15-30+

Low = Total hazard risk ranking below 15

c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 3.0 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the geologic and wildfire hazards, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

#### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Borough of Hamburg.

#### Table 9.10-4. NFIP Summary

					# Severe	# Policies in
				# Rep.	Rep. Loss	1% Flood
		# Claims	Total Loss	Loss Prop.	Prop.	Boundary
Municipality	# Policies (1)	(Losses) (1)	Payments (2)	(1)	(1)	(3)
Borough of Hamburg	4	0	\$0	0	0	0

Source: FEMA, 2014

- Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of November 31, 2014 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 11/31/2014.
- *Note (2)* Total building and content losses from the claims file provided by FEMA Region 2.
- Note (3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.
- Note (4) FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

#### **Critical Facilities**

There are no critical facilities located in the FEMA 1% or 0.2% annual chance flood boundary.



### Other Vulnerabilities Identified by Municipality

The hazard profiles in Section 5.0 have detailed information regarding each plan participant's vulnerability to the identified hazards. Further, mitigation projects have been identified that may more specifically detail vulnerabilities in the community. There are no additional vulnerabilities identified at this time.

# 9.10.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Education/Outreach and Community classification
- Self-Assessment of Capability
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

## **Planning and Regulatory Capability**

The table below summarizes the regulatory tools that are available to the Borough of Hamburg.

Table 9.10-5. Planning and Regulatory Tools

Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept./Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)				
Planning Capability	Planning Capability							
Master Plan	Yes	Local	LUB	1997; re-examination report November 2006				
Capital Improvements Plan	No							
Floodplain Management/Basin Plan	No							
Stormwater Management Plan	Yes - 4/20/05	Local	MC	Chapter 182				
Open Space Plan	Yes - 6/24/03	Local	MC	Chapter 215				
Stream Corridor Management Plan	No							
Watershed Management or Protection Plan	No							
Economic Development Plan	No							
Comprehensive Emergency Management Plan	No							
Emergency Response Plan	Yes – 2010	Local	OEM					
Post-Disaster Recovery Plan	No							
Transportation Plan	No							
Strategic Recovery Planning Report	No							
Other Plans:	No							
Regulatory Capability								
Building Code	Yes	State & Local		State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq)				
Zoning Ordinance	Yes	Local	Zoning	Chapter 215				



**Table 9.10-5. Planning and Regulatory Tools** 

Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept./Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Subdivision Ordinance	Yes	Local	LUB	Chapter 186
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State and Local	Construction Official	Chapter 215-20
NFIP: Cumulative Substantial Damages	Yes	Local	Construction Official	Chapter 215-20
NFIP: Freeboard	Yes	State & Local	Construction Official	NJDEP
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	LUB	Chapter 171
Stormwater Management Ordinance	Yes	Local	LUB	Chapter 182
Municipal Separate Storm Sewer System (MS4)	Yes	Local	DPW	Chapter 182
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State	Division of Consumer Affairs	N.J.A.C. 13-:45A-29.1
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	No			

# **Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the Borough of Hamburg.

Table 9.10-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Lane Use Board
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	Yes	Land Use Board, Recreation Commission
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Mayor and Council
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Mayor and Council
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Mayor and Council
Planners or engineers with an understanding of natural hazards	Yes	Mayor and Council
NFIP Floodplain Administrator	Yes	Construction Official
Surveyor(s)	Yes	Mayor and Council



Table 9.10-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Mayor and Council
Scientist familiar with natural hazards	Yes	Mayor and Council
Emergency Manager	Yes	Mayor and Council
Grant Writer(s)	No	
Staff with expertise or training in benefit/cost analysis	No	
Professionals trained in conducting damage assessments	No	

## **Fiscal Capability**

The table below summarizes financial resources available to the Borough of Hamburg.

**Table 9.10-7. Fiscal Capabilities** 

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact Fees for homebuyers or developers of new development/homes	Don't Know
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Don't Know
Withhold public expenditures in hazard-prone areas	Don't Know
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	Don't Know

## **Education/Outreach and Community Classifications**

The table below summarizes education/outreach programs the community participates in and the classifications for community program available to the Borough of Hamburg.

Table 9.10-8. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No		
Building Code Effectiveness Grading Schedule (BCEGS)	Yes		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes		
Storm Ready	No		
Firewise	No		
Disaster/Safety Programs in/for Schools	No		



Table 9.10-8. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	Yes		
Public-Private Partnerships	No		

N/A = Not applicable; NP = Not participating

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery, and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The Community Rating System (CRS) class applies to flood insurance while the Building Code Effectiveness Grading Schedule (BCEGS) and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within five road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at http://www.isomitigation.com/ppc/0000/ppc0001.html
- The National Weather Service Storm Ready website at http://www.weather.gov/stormready/howto.htm
- The National Firewise Communities website at <a href="http://firewise.org/">http://firewise.org/</a>

## **Self-Assessment of Capability**

The table below provides an approximate measure of the Borough of Hamburg's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.10-9. Self-Assessment of Capability

	Degree of 1	Hazard Mitigation Cap	ability
Area	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and Regulatory Capability		X	
Administrative and Technical Capability		X	
Fiscal Capability	X – limited staff		
Community Political Capability	X – limited staff		
Community Resiliency Capability	X – limited staff		
Capability to Integrate Mitigation into Municipal Processes and Activities	X – limited staff		



### **National Flood Insurance Program**

### NFIP Floodplain Administrator (FPA)

John Rushke, Borough Engineer

### Flood Vulnerability Summary

The Borough does not maintain lists/inventories of properties damaged by flooding and there were no properties damaged during the most recent flooding events in the Borough. The FPA does make substantial damage estimates; however, none were declared for Irene, Lee or Sandy.

#### Resources

The FPA is the sole person assuming the responsibilities of floodplain administration in the Borough of Hamburg. The FPA provides permit review, inspections, damage assessments, record keeping, GIS and education and outreach as NFIP administration services to the Borough. The FPA feels adequately supported and trained to fulfill their responsibilities. The FPA would consider attending continuing education and/or certification training on floodplain management if offered.

#### **Compliance History**

The Borough is currently in good standing with the NFIP. The date of the most recent compliance audit is unknown.

#### Regulatory

The Borough's floodplain management regulations/ordinances meet the minimum requirement of FEMA and the State. There are other local ordinances, plans and programs in the Borough that support floodplain management. The Borough has not considered joining CRS.

#### **Community Rating System**

The Borough of Hamburg does not participate in the Community Rating System (CRS) program.

### Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

#### Planning

## **Land Use Planning:**

The Borough has a Land Use Board which reviews all applications for development and consider natural hazard risk areas in their review.

#### **Highlands:**

Hamburg Borough is located in the New Jersey Highlands Region and is part of the Highlands Area. As such, the Borough is one of 88 municipalities protected by and subject to the provisions of the Highlands Water



Protection and Planning Act that protects, enhances and restores Highland's natural resources. The Highlands Act requires that future land use in the Highlands Region be guided by the Regional Master Plan's Land Use Capability Map (LUCM) Series which includes tools to identify and protect the natural, scenic and other resources of the region. In supporting and complying with the Highlands Act, the Borough enacted amendments and updates to local zoning and development ordinances that ensure the protection of important resources and areas. The Highland Act creates three primary zones: a Protection Zone, a Conservation Zone and an Existing community Zone. Protection Zones are areas with the highest quality resources with extreme limitations on allowable development while Conservation Zones have significant agricultural lands and associated woodlands and environmental features with allowable development consisting primarily of agricultural uses. Existing Community Zones consist of areas of concentrated development with limited environmental constraints. These zones are overlaid with existing local zoning maps to identify and address issues of public interest including watershed management, open space preservation, historic preservation, flood protection among others.

The Borough identified a new mitigation initiative to utilize the HMP when updating the Comprehensive Master Plan. Refer to Table 9.10-11 for further details.

### Regulatory and Enforcement (Ordinances)

The Borough has multiple chapters pertaining to the mitigation of hazards. These ordinances include the Flood Damage Prevention Chapter, Stormwater Control Chapter, and an Environmental Impact Statement requirement and ad Environmentally Sensitive Areas section included in the Land Use Chapter. The Borough also has a chapter specific to the hazards associated with environmentally sensitive areas.

# Chapter 215-20: Floodplains or Flood Hazards <a href="http://www.ecode360.com/10217544">http://www.ecode360.com/10217544</a>

The purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the alternate use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

## Chapter 181: Stormwater Management <a href="http://www.ecode360.com/10216322">http://www.ecode360.com/10216322</a>

The purposed of the Stormwater Control chapter is to implement best management practices for stormwater management designed to promote the public health, safety and general welfare the citizens.

#### **Chapter 171-8: Environmental Impact Statement**

http://www.ecode360.com/10216103?highlight=environmentally,environmental#10216103

The purpose of this section of the Chapter is to allow the Borough to assess the impact of a proposed development upon the natural environment, particularly with respect to potable water, pollution of all kinds, flooding and waste disposal.



**Highlands:** In addition, the Highlands Water Protection and Planning Act provides additional regulatory control over development within the Borough. While Major Highlands Development projects, as defined by the Highlands Act, still require local approvals, they must first receive a Highlands Resource Applicability Determination and be evaluated for consistency with the provisions of the Highlands Act. Major Highlands Development projects include a variety of projects such as any non-residential development, any residential development that disturbs one or more acres of land, any development that disturbs \(^1\)4 acres of more of forest among others. This process identifies any potential Highlands Resources on the site and if found requires adherence to relevant development standards and restrictions.

#### Operational and Administration

The Borough has established a Joint Land Use Board that is responsible for the review of development applications. The Borough has a Zoning officer as well as a planning and zoning board secretary.

## Funding

**Operating Budget:** The Borough's operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.

**Grants:** The Borough has received funding from the NJDOT, Sustainable Jersey, The Garden State Preservation Trust Fund, and Clean Communities grant programs for the completion of mitigation and emergency response related projects including roadway and drainage improvements.

#### **Education and Outreach**

The Borough's website's home page posts information regarding upcoming community events and important municipal decisions. Additionally, the Borough has a public outreach program that informs its citizens on hazards that may occur in the community.

### 9.10.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.

#### **Past Mitigation Initiative Status**

The following table indicates progress on the community's mitigation strategy identified in the 2011 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



## **Table 9.10-10. Past Mitigation Initiative Status**

<u>Initiative</u> <u>Number</u>	2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	<ol> <li>Describe Status</li> <li>Please describe what was accomplished and indicate % complete.</li> <li>If there was no progress, indicate what obstacles/delays encountered?</li> <li>If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?</li> </ol>	Next Step (Include in 2016 HMP? or Discontinue)	Describe Next Step  1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate).  2. If discontinue, explain why.	
Hamburg Borough 1	Backup generator for shelter at Hamburg Elementary School located on Linwood Avenue.	OEM Coordinator	No Progress	This project is 0% completed because funding has not been secured.	Include in 2016 HMP	The Hamburg School is utilized as a shelter; therefore, it requires a backup generator. This project will be carried over into the 2016 HMP.	
Hamburg Borough 2	Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.	School Administrator	In Progress	This project is 50% completed; however, funding has not been secured to complete.	Include in 2016 HMP	The Borough is planning on trying to secure funding to complete this project in the next budget. This project will be carried over into the 2016 HMP.	
Hamburg Borough 3	Flood proofing of the Hamburg Fire Company building.	Municipal Fire Chief	No Progress	0% complete	Discontinue	The building identified in this action has not shown sufficient flooding to warrant flood proofing; therefore, this action will be removed from this plan update.	
Hamburg Borough 4	Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	OEM Coordinator, in coordination with SCDEM	No Progress	0% complete	Include in 2016 HMP	The Borough will try to obtain funding to facilitate programs.  This action will be carried over into the 2016 HMP.	



## **Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy**

The Borough has not identified any additional mitigation projects/activities that have been completed since approval of the 2011 Plan.

### **Proposed Hazard Mitigation Initiatives for the Plan Update**

The Borough participated in a mitigation action workshop in April 2015 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013). In May 2015, the Borough participated in a second workshop led by FEMA Region 2 and NJOEM and was provided the results to the risk assessment to further assist with the identification of mitigation actions.

Table 9.10-11 summarizes the comprehensive-range of specific mitigation initiatives the Borough would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.10-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.





**Table 9.10-11. Proposed Hazard Mitigation Initiatives** 

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Hamburg-	Backup generator for shelter at Hamburg Elementary School located on Linwood Avenue.	Existing	All	1, 2, 6	OEM Coordinator	High	High	HMGP with local cost share	Short Term / DOF	High	SIP	PP
Hamburg- 2	Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.	Existing	Severe Winter Weather	1, 2	School Administrator, Municipal Engineer	High	High	FEMA Mitigation Assistance	Short Term / DOF	High	SIP	PP
Hamburg-	Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the Borough website and social media.	N/A	All	All	OEM Coordinator, in coordination with SCDEM	High	Low	Municipal Budget	Ongoing	High	EAP	PI
Hamburg-	Multi-purpose emergency vehicle to support highways	N/A	All	1, 2, 3, 6	Borough OEM	High	Medium	FEMA Mitigation Assistance	Short Term / DOF	High	SIP, NSP	PP, NR
Hamburg- 5	Purchase Bobcat Skid-Steer to use during debris cleanup operations and post-hazard events.	N/A	All	2, 6	Borough DPW	High	Medium	FEMA Mitigation Assistance	Short Term / DOF	High	SIP, NSP	PP, NR
Hamburg-	Create and maintain a plan for adequate road and debris clearing capabilities within the Borough.	N/A	All	All	Borough DPW	High	Low	Municipal Budget	Ongoing	Medium	LPR, NSP	PR, NR
Hamburg-	To ensure continuity of operations, purchase portable generator for critical facilities	New and Existing	All	1, 2, 6	Municipal Engineer, OEM Coordinator	High	Medium	HMGP with local cost share	Short Term / DOF	High	SIP	PP
Hamburg- 8	Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation	Both	All	All	Planning	High	Low	Municipal Budget	Ongoing	High	LPR	PR



**Table 9.10-11. Proposed Hazard Mitigation Initiatives** 

Initiative	Mitigation Initiative of the HMP will be considered	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	during any future site plan review processes.											
Hamburg- 9	During the Borough's rezoning procedures or update of the zoning ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.	N/A	All	All	Borough Administration	High	Low	Municipal Budget	Ongoing	High	LPR	PR
Hamburg- 10	Prepare and enforce a fire plan for the Borough and recognize the existence of wildfire hazards and identify risk areas based on a vulnerability assessment.	New and Existing	Wildfire	All	OEM Coordinator	High	Low	Municipal Budget	Ongoing	High	LPR, EAP	PR, PI
Hamburg-	The Borough will work with local school districts and assist with community service projects regarding hazards and mitigation.	N/A	All	All	OEM Coordinator	High	Low	Municipal Budget	Ongoing	High	EAP	PI
Hamburg- 12	Catch basin and general stormwater facility maintenance	Existing	Flood, Severe Weather, Severe Winter Weather	2, 4	Borough DPW and Engineer	Loss of Function	Medium	Municipal Budget	Short Term & Ongoing	High	SIP	PP
Hamburg- 13	Perform study to analyze where sanitary sewer reinforcement is needed and address where necessary.	New and Existing	Severe Weather, Severe Winter Weather, Earthquake	2	Borough Engineer	Loss of function, road closings / detours	Medium	HMGP with local cost share; municipal budget	Short Term	Medium	SIP	PP
Hamburg- 14	Tree removal and maintenance in the Borough	Existing	Severe Weather, Severe Winter Weather	2, 4	Borough DPW	Loss of function, road closings / detours	Medium	Municipal Budget	Short Term & Ongoing	High	SIP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

9.10-14

<sup>\*</sup>Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.



#### Acronyms and Abbreviations:

CRS Community Rating System
DPW Department of Public Works

FEMA Federal Emergency Management Agency

FPA Floodplain Administrator HMA Hazard Mitigation Assistance

*N/A* Not applicable

NFIP National Flood Insurance Program

NJDEP New Jersey Department of Environmental Protection

NJOEM New Jersey Office of Emergency Management

OEM Office of Emergency Management

#### Costs:

Where actual project costs have been reasonably estimated:

Low < \$10,000

Medium \$10,000 to \$100,000

*High* > \$100,000

Where actual project costs cannot reasonably be established at this time:

Low Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Medium Could budget for under existing work plan, but would require a

 $reapportion ment\ of\ the\ budget\ or\ a\ budget\ amendment,\ or\ the\ cost\ of\ the$ 

project would have to be spread over multiple years.

High Would require an increase in revenue via an alternative source (i.e., bonds,

grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

#### Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program

HMGP Hazard Mitigation Grant Program
PDM Pre-Disaster Mitigation Grant Program
HMA Hazard Mitigation Assistance Program

#### Timeline:

Short 1 to 5 years
Long Term 5 years or greater
OG On-going program
DOF Depending on funding

#### Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology)

has been evaluated against the project costs, and is presented as:

Low= < \$10,000

Medium \$10,000 to \$100,000

*High* > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low Long-term benefits of the project are difficult to quantify in the short term.

Medium Project will have a long-term impact on the reduction of risk exposure to

life and property, or project will provide an immediate reduction in the risk

exposure to property.

High Project will have an immediate impact on the reduction of risk exposure to

life and property.

#### Mitigation Category:

- Local Plans and Regulations (LPR) These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

#### CRS Category:

- Preventative Measures (PR)-Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP)-These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI)-Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR)-Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.



- Structural Flood Control Projects (SP)-Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES)-Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities





**Table 9.10-12. Summary of Prioritization of Actions** 

Mitigation Action / Project Number	Mitigation Action / Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
Hamburg-1	Backup generator for shelter at Hamburg Elementary School located on Linwood Avenue.	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
Hamburg-2	Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
Hamburg-3	Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the Borough website and social media.	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
Hamburg-4	Multi-purpose emergency vehicle to support highways	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
Hamburg-5	Purchase Bobcat Skid-Steer to use during debris cleanup operations and post-hazard events.	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	High
Hamburg-6	Create and maintain a plan for adequate road and debris clearing capabilities within the Borough.	1	1	1	1	1	1	0	0	1	1	1	1	1	0	11	Medium
Hamburg-7	Portable generator for critical facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
Hamburg-8	Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
Hamburg-9	During the Borough's rezoning procedures or update of the zoning ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
Hamburg-10	Prepare and enforce a fire plan for the Borough and recognize the existence of wildfire hazards and identify risk areas based on a vulnerability assessment.	1	1	1	1	1	1	1	0	1	1	0	1	0	0	10	High
Hamburg-11	The Borough will work with local school districts and assist with community service projects regarding hazards and mitigation.	1	1	1	1	1	1	1	0	1	1	1	1	0	0	11	High
Hamburg-12	Catch basin and general stormwater facility maintenance	0	1	1	1	1	1	1	1	0	1	1	1	1	1	12	High
Hamburg-13	Perform study to analyze where sanitary sewer reinforcement is needed and address where necessary.	0	1	1	1	1	1	-1	1	1	1	1	1	1	1	11	Medium
Hamburg-14	Tree removal and maintenance in the Borough	0	1	1	1	1	1	1	-1	0	1	1	1	1	1	10	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



# 9.10.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

### 9.10.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Borough of Hamburg that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Borough of Hamburg has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

## 9.10.9 Additional Comments

None at this time.





Figure 9.10-1. Borough of Hamburg Hazard Area Extent and Location Map 1

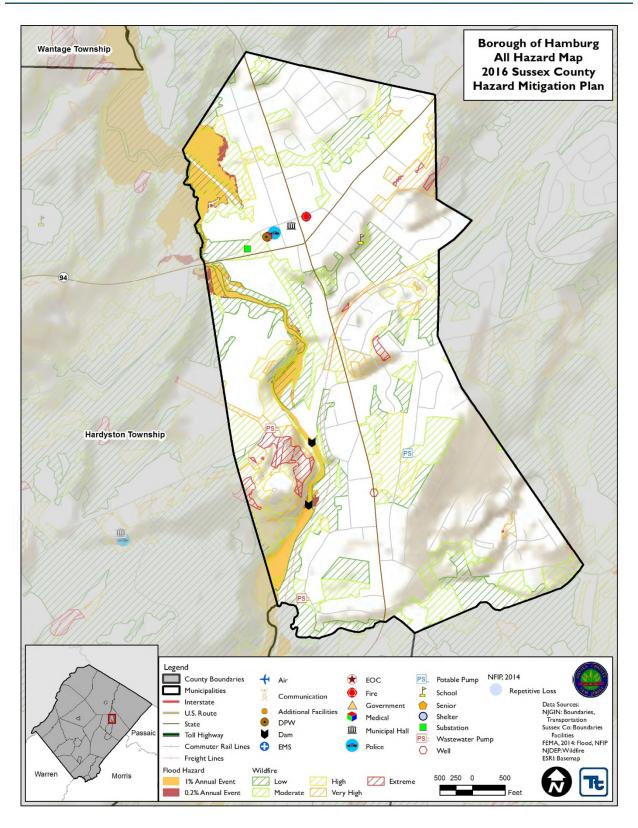
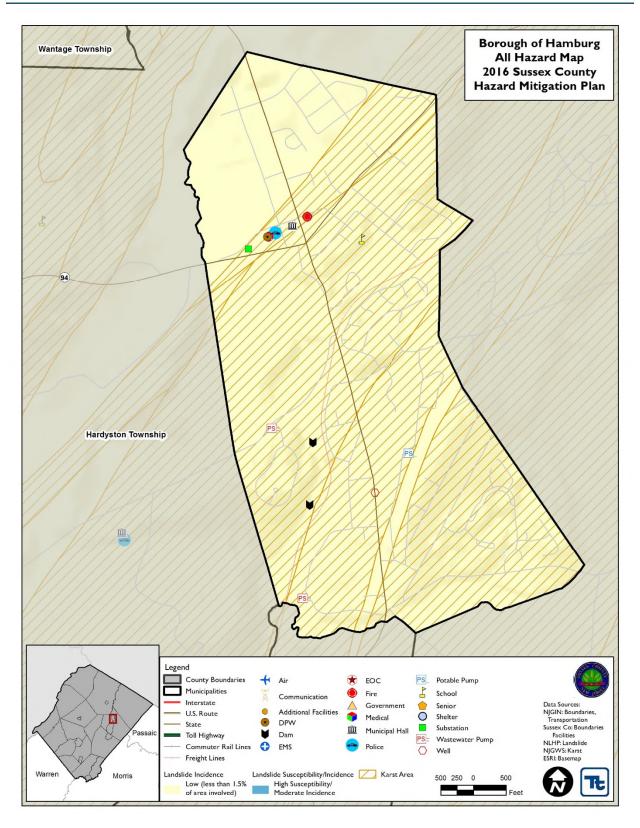




Figure 9.10-2. Borough of Hamburg Hazard Area Extent and Location Map 2





Mitigation Action/Initiative: Obtain back up power to ensure continuity of operations

Assessing the Risk							
Hazard(s) addressed:	Power loss from high winds/storm events						
<b>Specific problem being mitigated:</b> Hamburg School does not have backup power and needs to be in operation during a natural hazard event; building serves as a shelter.							
Eval	uation of Potential Actions/Projects						
Actions/Projects Considered	Purchase a backup generator						
(name of project and reason for	2. Co-Gen facility or build a new shelter						
not selecting):	3. Do nothing						
Action	Project Intended for Implementation						
Description of Selected							
Action/Project Category	SIP						
Goals Met	1, 2, 6						
Applies to existing and or new development, or not applicable  Existing building							
Benefits (losses avoided)	High						
Estimated Cost	High (estimated \$750,000.)						
Priority	High						
	Plan for Implementation						
Responsible Organization	Municipal Engineer						
Local Planning Mechanism	Capital Plan and Mitigation Plan						
Potential Funding Sources	FEMA Mitigation Assistance						
Timeline for Completion Short (5 years but depends on funding) DOF							
	Reporting on Progress						
Date of Status Report/ Report of Progress	Date: Progress on Action/Project: DOF						



Mitigation Action/Initiative: Purchase generator to ensure continuity of operations

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	School serves as a shelter
Property Protection	1	Protects pipes from freezing
Cost-Effectiveness	1	Prevents structural damage
Technical	1	Engineering
Political	1	Mayor and Council
Legal	1	
Fiscal	0	Grant funding is necessary
Environmental	0	
Social	1	School services vulnerable populations
Administrative	1	
Multi-Hazard	1	Yes it is a shelter
Timeline	1	Can implement in 5 years but depends of funding availability
Agency Champion	1	
Other Community Objectives		
Total	11	
Priority (High/Med/Low)	High	



Mitigation Action/Initiative: Retrofit Hamburg School Roof

	Assessing the Risk							
Hazard(s) addressed:	Roof Damage incurred by severe winter weather							
Specific problem being mitigated:	Hamburg School Roof is only 50% replaced							
Eval	uation of Potential Actions/Projects							
Actions/Projects Considered	1. Complete the replacement							
(name of project and reason for	2. Repair partial roof							
not selecting):	3. Do nothing							
Action	Project Intended for Implementation							
Description of Selected Action/Project	Replace the roof to ensure safety							
Action/Project Category	SIP							
Goals Met	1, 2							
Applies to existing and or new development, or not applicable	Existing Building							
Benefits (losses avoided)	High – only school system							
Estimated Cost	High – (estimated cost 150,000.)							
Priority	High							
	Plan for Implementation							
Responsible Organization	Municipal Engineer							
Local Planning Mechanism	Mitigation Plan							
Potential Funding Sources	FEMA Mitigation Assistance							
Timeline for Completion	Short (5 years depending on funding)							
	Reporting on Progress							
Date of Status Report/ Report of Progress	Date: Progress on Action/Project: DOF							



Mitigation Action/Initiative: Retrofit Hamburg School Roof

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	School serves as a shelter
Property Protection	1	Protects the school
Cost-Effectiveness	1	Prevents structural damage
Technical	1	Engineering
Political	1	Mayor and Council
Legal	1	
Fiscal	0	Grant funding necessary
Environmental	0	
Social	1	School services valuable populations
Administrative	1	
Multi-Hazard	1	Shelter
Timeline	1	Can implement in 5 years depending on funding
Agency Champion	1	
Other Community Objectives		
Total	11	
Priority (High/Med/Low)	High	



Mitigation Action/Initiative: Multi-purpose emergency vehicle

	Assessing the Risk							
Hazard(s) addressed:	Highway Hazard							
Specific problem being mitigated:	Safety on two major highways running through borough							
Evaluation of Potential Actions/Projects								
Actions/Projects Considered	1. Purchase Vehicle							
(name of project and reason for	2. Purchase Highway safety equipment							
not selecting):	3. Do nothing							
Action	Project Intended for Implementation							
Description of Selected Action/Project	Purchase vehicle to ensure safety is maintained on the highway during and post hazard events							
Action/Project Category	SIP							
Goals Met	1, 2, 3, 6							
Applies to existing and or new development, or not applicable	Existing Highways and streets							
Benefits (losses avoided)	High							
Estimated Cost	Medium (estimated \$50,000.00)							
Priority	High							
	Plan for Implementation							
Responsible Organization	Mayor and Council							
Local Planning Mechanism	Mitigation Plan							
Potential Funding Sources	FEMA Mitigation Assistance							
Timeline for Completion	Short (5 years depending on funding)							
	Reporting on Progress							
Date of Status Report/ Report of Progress	Date: Progress on Action/Project: DOF							



Mitigation Action/Initiative: Multipurpose emergency vehicle

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Serves as continuing flow of traffic through municipality
Property Protection	1	Protects from major motor vehicle accidents occurring
Cost-Effectiveness	1	Prevents major motor vehicle accidents from occurring
Technical	1	Engineering
Political	1	Mayor and Council
Legal	1	
Fiscal	0	Grant funding is necessary
Environmental	0	
Social	1	Valuable of keeping the highway open
Administrative	1	
Multi-Hazard	1	Used as a emergency service unit for OEM, police and fire
Timeline	1	5 years depending on funding
Agency Champion	1	
Other Community Objectives		
Total	11	
Priority (High/Med/Low)	High	



Mitigation Action/Initiative: Purchase Bobcat Skid Steer

Assessing the Risk			
Hazard(s) addressed:	Damage incurred from storm		
Specific problem being mitigated:	Small Space Areas		
Eval	Evaluation of Potential Actions/Projects		
Actions/Projects Considered	1. Purchase Equipment		
(name of project and reason for	2. Do nothing		
not selecting):	3. No other feasible options were identified		
Action	Project Intended for Implementation		
Description of Selected Action/Project	Purchase unit for town to ensure debris cleanup operations during and post hazard events		
Action/Project Category	SIP, NSP		
Goals Met	2, 6		
Applies to existing and or new development, or not applicable	Existing infrastructure		
Benefits (losses avoided)	High		
Estimated Cost	Medium (estimated \$ 40,000.00)		
Priority	High		
	Plan for Implementation		
Responsible Organization	Municipal Engineer		
Local Planning Mechanism	Mitigation Plan		
Potential Funding Sources	FEMA Mitigation Assistance		
Timeline for Completion	Short (5 years but depends on funding)		
Reporting on Progress			
Date of Status Report/ Report of Progress	Date: Progress on Action/Project: DOF		



Mitigation Action/Initiative: Purchase Bobcat Skid Steer

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Serves as continuous operations in municipality
Property Protection	1	
<b>Cost-Effectiveness</b>	1	Prevents structural damage
Technical	1	Engineer
Political	1	Mayor and Council
Legal	1	
Fiscal	0	Need Grant Funding
Environmental	0	
Social	1	Valuable in confined areas within the municipality
Administrative	1	
Multi-Hazard	1	Easier to use in confined areas within the municipality
Timeline	1	Short (5 years depending on funding
Agency Champion	11	
Other Community Objectives		
Total	1	
Priority (High/Med/Low)	High	



Mitigation Action/Initiative: Catch basin and general stormwater facility maintenance

Assessing the Risk		
Hazard(s) addressed:	Flood, Severe Weather, Severe Winter Weather	
Specific problem being mitigated:	Stormwater structures malfunctioning during large storm events due to improper maintenance or no maintenance	
Eval	uation of Potential Actions/Projects	
Actions/Projects Considered	Catch basin and general stormwater facility maintenance	
(name of project and reason for	2. Do nothing – current problem continues	
not selecting):	3. No other feasible options were identified	
Action	Project Intended for Implementation	
Description of Selected Action/Project	Debris removal and maintenance in and around catch basins and other stormwater facilities especially before and after large storm events. This will allow them to function properly. A lack of maintenance may clog the systems and propagate local flooding.	
Action/Project Category	SIP	
Goals Met	2, 4	
Applies to existing and or new development, or not applicable	Existing	
Benefits (losses avoided)	Loss of function	
Estimated Cost	\$15,000 (Medium)	
Priority	High	
	Plan for Implementation	
Responsible Organization	Borough DPW, Borough Engineer	
Local Planning Mechanism	Emergency Management Planning	
Potential Funding Sources	Hamburg Borough	
Timeline for Completion	Short Term (1-year) and continuing in the future	
Reporting on Progress		
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:	



Mitigation Action/Initiative: Catch basin and general stormwater facility maintenance

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	No loss of life threat currently exists
Property Protection	1	Protection of existing stormwater structures from damage, protection from local flooding damage
Cost-Effectiveness	1	Cost of maintenance is minimal in comparison to the potential damages
Technical	1	Maintenance is feasible and undertaken by most municipalities
Political	1	Political and overall public support for the project implementation
Legal	1	Legally feasible
Fiscal	1	Can be carried out by Hamburg staff and volunteers
Environmental	1	No permitting required for maintenance
Social	0	Project will have positive impacts on populations throughout Hamburg
Administrative	1	Hamburg has the capabilities to implement and maintain the project
Multi-Hazard	1	Flood, Severe Weather, Severe Winter Weather
Timeline	1	Project goals I one year and continuously before and after large storm events
Agency Champion	1	Advocated for by the governing body
Other Community Objectives	1	Address local maintenance issues
Total	12	
Priority (High/Med/Low)	High	



Mitigation Action/Initiative: Sanitary Sewer Reinforcement

	Assessing the Risk	
Hazard(s) addressed:	Severe Weather, Severe Winter Weather, Earthquake	
Specific problem being mitigated:	Reduce the impact of hazards to the municipal sewer system	
Eval	uation of Potential Actions/Projects	
Actions/Projects Considered	Sanitary Sewer Reinforcement	
(name of project and reason for	2. Do nothing – current problem continues	
not selecting):	3. No other feasible options were identified	
Action	Project Intended for Implementation	
Description of Selected Action/Project	Perform a study to analyze where sanitary sewer reinforcement is needed due to the most imminent threats of failure or cracking during extreme weather conditions; address where practical	
Action/Project Category	SIP	
Goals Met	2	
Applies to existing and or new development, or not applicable	New and Existing	
Benefits (losses avoided)	Loss of function, road closings/detours	
Estimated Cost	\$50,000 (Medium)	
Priority	Medium	
	Plan for Implementation	
Responsible Organization	Borough Engineer	
Local Planning Mechanism	Floodplain Management	
Potential Funding Sources	HMGP with local cost share; Borough	
Timeline for Completion	Short Term, 1-3 years	
Reporting on Progress		
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:	



Mitigation Action/Initiative: Sanitary Sewer Reinforcement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	No loss of life threat currently exists
Property Protection	1	Will minimize damage to existing sanitary infrastructure
Cost-Effectiveness	1	The cost of the study is small in comparison to the potential damages and costs associated with such
Technical	1	Feasible
Political	1	Political and overall public support for the project implementation
Legal	1	Legally feasible
Fiscal	-1	New authorization or funding from another source is needed
Environmental	1	May require standard land use permits from NJDEP for certain areas, but generally no permits required
Social	1	Project will have positive impacts on populations throughout Hamburg
Administrative	1	Hamburg has the capabilities to implement and maintain the project
Multi-Hazard	1	Severe Weather, Severe Winter Weather, Earthquake
Timeline	1	Goal for study is one to three years; additional time depending on maintenance required
Agency Champion	1	Advocated for by the governing body
Other Community Objectives	1	Addresses capital improvements
Total	11	
Priority (High/Med/Low)	Medium	



Mitigation Action/Initiative: Tree removal and maintenance

Assessing the Risk			
Hazard(s) addressed:	Severe Weather, Severe Winter Weather, Hurricanes		
Specific problem being mitigated:	Trees that down power lines during storm events		
Eval	Evaluation of Potential Actions/Projects		
Actions/Projects Considered	Tree removal and maintenance		
(name of project and reason for	2. Do nothing – current problem continues		
not selecting):	3. No other feasible options were identified		
Action	Project Intended for Implementation		
Description of Selected Action/Project	Tree removal and maintenance in the vicinity of power lines in order to minimize power outages from downed trees/tree limbs during severe storm and severe winter storm events.		
Action/Project Category	SIP		
Goals Met	2, 4		
Applies to existing and or new development, or not applicable	Existing		
Benefits (losses avoided)	Loss of function, road closures/detours		
Estimated Cost	\$30,000 (medium)		
Priority	High		
	Plan for Implementation		
Responsible Organization	Borough DPW		
Local Planning Mechanism	Emergency Management Planning		
Potential Funding Sources	Hamburg Borough		
Timeline for Completion	Short Term		
Reporting on Progress			
Date of Status Report/ Report of Progress	Date: Progress on Action/Project: DOF		



Mitigation Action/Initiative: Tree removal and maintenance

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	No loss of life threat currently exists
Property Protection	1	Protection of existing power lines
Cost-Effectiveness	1	Cost of tree removal is minimal in comparison to the potential losses in power outages from both the point of view of repairing the lines and from the homeowners losses
Technical	1	Tree removal is very feasible
Political	1	Political and overall public support for the project implementation
Legal	1	Legally feasible
Fiscal	1	New authorization or funding from another source is needed
Environmental	-1	Removal of trees
Social	0	May get backlash due to the removal of healthy trees
Administrative	1	Hamburg has the capabilities to implement and maintain the project
Multi-Hazard	1	Severe Weather, Severe Winter Weather, Hurricanes
Timeline	1	Immediately and continuously
Agency Champion	1	Advocated for by the governing body
Other Community Objectives	1	Addresses capital improvements
Total	10	
Priority (High/Med/Low)	High	