

## 9.4 BOROUGH OF BRANCHVILLE

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

## 9.4.1 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
Jeff Lewis, OEM Coordinator	Christopher Franek, Deputy OEM
5 Main Street, P.O. Box 840, Branchville, NJ 07826	5 Main Street, P.O. Box 840, Branchville, NJ 07826
Phone: (973) 479-7203	Phone: (973) 670-7037
Email: jlewis310@embargmail.com	Email: Christoper.Franek@gmail.com

#### 9.4.2 MUNICIPAL PROFILE

The Borough of Branchville is located in northwestern Sussex County and surrounded entirely by the Township of Frankford. Culvers Creek and Dry Brook both flow through the Borough. The Borough has a total area of 0.6 square miles. According to the U.S. Census, the 2010 population for the Borough of Branchville was 841.

## **Growth/Development Trends**

The Borough of Branchville did not note any recent residential/commercial development since 2010 or any major residential or commercial development, or major infrastructure development planned for the next five years in the municipality.

## 9.4.3 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 9.4-1. 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	Local residents were evacuated and sheltered.  Mill Street and Broad Street were closed for two days and there were residential power outages.  The borough park and baseball field were damaged.
September 28 – October 6, 2011	Remnants of Tropical Storm Lee	DR-4039	Yes	Local residents were evacuated and sheltered. Broad Street was closed for two days and Mill Street was closed for three weeks. There were residential power outages as well. Infrastructure damage included the county bridge and roadway at Mill Street. Additionally, one home was deemed uninhabitable due to flood damage. Public assistance was requested. Other costs to



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
				the Borough included DPW cleanup and fire department pumping detail.
October 26 – November 8, 2012	Hurricane Sandy	DR-4086	Yes	The Borough was without power for one week and many local businesses had to close. Roads were also closed in the Borough. Other costs to the Borough included DPW clean up and fire department road closures.

### 9.4.4 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 Branchville. 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 Branchville.

Table 9.4-2. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dol Structures Vulnerable to		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 a	available	Frequent	30	Medium
	100-Year GBS:	\$0			
Earthquake	500-Year GBS:	\$531,175	Occasional	28	Medium
	2,500-Year GBS:	\$8,027,019			
Flood	1% Annual Chance:	\$3,813,930	Frequent	18	Medium
Geologic	GBS Exposed to Carbonate Rock Areas:	\$48,198,523	Frequent	54	Medium*
	100-year MRP:	\$25,242			
Hurricane	500-year MRP:	\$256,819	Frequent	48	High
	Annualized:	\$1,665			
Nor'Easter	Damage estimate not available		Frequent	48	High
	100-Year MRP:	\$25,242			
Severe Weather	500-year MRP:	\$256,819	Frequent	48	High
vv caurer	Annualized:	\$1,665			
Severe Winter	1% GBS:	\$1,057,879	E	51	TT: -1-
Weather	5% GBS:	\$5,289,397	Frequent	31	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas:	\$1,035,772	Frequent	18	Medium
Hazardous Materials	Damage estimate not a	available	Frequent	36	High



Notes: GBS = General building stock; MRP = Mean return period.

- \* The hazard ranking was changed for this hazard based on input from the municipality, population exposed, and/or event history.
- a. 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 Branchville.

# **Table 9.4-3. NFIP Summary**

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Flood Boundary (3)
Borough of Branchville	9	6	\$57,589	2	0	2

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.
- Note (5) A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

## **Critical Facilities**

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

#### Other Vulnerabilities Identified by Municipality

The hazard profiles in Section 5.0 of this plan 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.



## 9.4.5 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 Branchville.

**Table 9.4-4. 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	,			
Master Plan	Yes	Local	Mayor & Council	Code chapters: Chapter 97-19
Capital Improvements Plan	Yes	Local	Mayor & Council	Code chapters: Chapter 104-B
Floodplain Management/Basin Plan	Yes	Local	Mayor & Council	N/A
Stormwater Management Plan	Yes	Local	Mayor & Council	Chapter 121 Storm Water Management
Open Space Plan	No			
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local	Mayor & Council	N/A
Emergency Response Plan	Yes	Local	Mayor & Council OEM	N/A
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	Yes	Local	Mayor Council	121-16 requirements for a site Storm water Plan
Regulatory Capability				
Building Code	Yes	State, Local	Mayor & Council	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)



**Table 9.4-4. 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.)
Zoning Ordinance	Yes	Local	Mayor Council	Chapter 123 - Zoning
Subdivision Ordinance	No	State	Mayor & Council	Chapter 104 – Subdivision of Land
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Mayor & Council	Chapter 64 – Flood Damage Prevention
NFIP: Cumulative Substantial Damages	Yes	State	Mayor & Council	Chapter 64-5(25)
NFIP: Freeboard	Yes	State, Local	Mayor & Council	N/A
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Mayor & Council	Chapter 97-3
Stormwater Management Ordinance	Yes	Local	Mayor & Council	Chapter 121-6
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Mayor & Council	Chapter 144 – Sewage Disposal Systems, Individual
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	No	State	Division of Consumer Affairs	N.J.A.C. 13:45A-29.1
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes	Local	Borough	Chapter 111 – Trees and Shrubbery Chapter 131 – Flooding and Standing Water

# **Administrative and Technical Capability**

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

Table 9.4-5. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	Mayor & Council
Environmental Board/Commission	No	Mayor & Council
Open Space Board/Committee	No	Mayor & Council
Economic Development Commission/Committee	No	Mayor & Council
Maintenance Programs to Reduce Risk	No	Mayor & Council
Mutual Aid Agreements	Yes	Mayor Council OEM Fire Chief
Technical/Staffing Capability		



Table 9.4-5. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Mayor & Council
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Mayor & Council
Planners or engineers with an understanding of natural hazards	Yes	Mayor & Council
NFIP Floodplain Administrator	Yes	Construction Official
Surveyor(s)	Yes	Mayor & Council
Personnel skilled or trained in GIS and/or Hazus-MH applications	No	State
Scientist familiar with natural hazards	No	State
Emergency Manager	Yes	OEM
Grant Writer(s)	No	
Staff with expertise or training in benefit/cost analysis	No	
Professionals trained in conducting damage assessments	Yes	Mayor & Council

# **Fiscal Capability**

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

**Table 9.4-6. 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	Yes
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	N/A
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	No
Other	No

# **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 Branchville.



Table 9.4-7. 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)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	6/10	
Storm Ready	No		
Firewise	No		
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	No		
Public-Private Partnerships	No	Determined	

N/A = Not Applicable. NP = Not Participating. - = Unavailable. TBD = To Be Determined.

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 <a href="http://www.isomitigation.com/ppc/0000/ppc0001.html">http://www.isomitigation.com/ppc/0000/ppc0001.html</a>
- 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 Branchville's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.4-8. Self-Assessment of Capability

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

## **National Flood Insurance Program**

## NFIP Floodplain Administrator (FPA)

Wesley Powers, Construction Official

## Flood Vulnerability Summary

The Borough does not maintain lists or inventories of properties that have been damaged by floods. During Irene and Lee, seven residential structures were damaged and the Methodist Church was damaged. The FPA makes Substantial Damage estimates; however, none were declared for the recent events that impacted the Borough. There is currently no interest in mitigation (acquisition or elevation).

#### Resources

The FPA is the sole person assuming the responsibilities of floodplain administration within the Borough. NFIP administration services and functions provided by the FPA include permit review, inspections and damage assessments. The FPA indicated that the Borough does not provide any education or outreach to the community regarding flood hazards/risk or flood risk reduction. He stated that there are barriers to running an effective floodplain management program. The FPA does feel adequately supported and trained to fulfill his responsibilities as the Borough floodplain administrator and would consider attending training and/or continuing education training if offered in the County.

## **Compliance History**

The Borough is currently in good standing with the NFIP and the most recent compliance audit was conducted in 2012.

#### Regulatory

The Borough's floodplain management regulations meet the minimum set forth by FEMA and the state. The Borough does have other local ordinances, plans, and programs that support floodplain management.



## **Community Rating System**

The Borough of Branchville does not participate in the Community Rating System (CRS) program. However, the Borough would attend a CRS seminar if offered locally.

# **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 Planning Board/Zoning Board which reviews all applications for development and consider natural hazard risk areas in their review. Additionally, the hazard mitigation plan is reviewed prior to land use, zoning changes or development permitting, to ensure consistent and compatible land use within the Borough.

The Borough limits development in high hazard areas and their permit review process includes addressing hazards. The Borough also incorporates hazard resistant construction standards into the design and location of projects. The Borough's rezoning procedures recognize hazard areas as limits on zoning changes.

## Regulatory and Enforcement (Ordinances)

The Borough has multiple chapters pertaining to the mitigation of hazards. These ordinances include the Flood Damage Prevention Chapter, Stormwater Management Chapter, and an Environmental Impact Statement requirement included in the Site Plan Review Chapter. The Borough also has a chapter specific to the hazards associated with area that may be underlain with carbonate.

## Chapter 64: Flood Damage Prevention <a href="http://www.ecode360.com/8955484">http://www.ecode360.com/8955484</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 121: Stormwater Management <a href="http://www.ecode360.com/8956544">http://www.ecode360.com/8956544</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 97-10: Environmental Impact Statement**

http://www.ecode360.com/8955953?highlight=environmentally,environmental#8955953

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.

The Borough has identified two new mitigation initiatives: 1) Future rezoning procedures will recognize natural hazard areas; and 2) Establish a community resilience committee and advisor. Refer to Table 9.4-10 below for further information.

## Operational and Administration

The Borough has established a Land Use Board (Planning and Zoning), Environmental Commission, and an Open Space Committee, that aid in planning decisions to support the conservation and preservation of the Township's critical environmental features.

## **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.

#### **Education and Outreach**

The Borough's website posts information regarding upcoming community events and important municipal decisions. <a href="http://branchvilleborough.com/">http://branchvilleborough.com/</a>.

The Borough has identified a new mitigation initiative to provide information on all types of hazards, preparedness and mitigation measures, and responses on the Borough website. Refer to action 'Branchville -6' in Table 9.4-10 below.



Figure 9.4-1. Screenshot of Borough Website with Examples of Their Emergency Information Notification



### 9.4.6 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 HMP. 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 9.4-9. Past Mitigation Initiative Status** 

<u>Initiative</u> <u>Number</u>	2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status  1. Please describe what was accomplished and indicate % complete.  2. If there was no progress, indicate what obstacles/delays encountered?  3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2016 HMP? or Discontinue)	Describe Next Step  1. If including action in the 2015 HMP, revise/reword to be more specific (as appropriate).  2. If discontinue, explain why.
Branchville Borough 1	Implementation of Fire Wise community program.	OEM Coordinator	Complete	This project has been completed and was funded locally.	Discontinue	This projects has been completed and will not be included in the 2016 HMP Update.
Branchville Borough 2	Raise embankments along 40 feet of the Culver Brook near Milk Street.	Borough Engineer	Complete	Project has been completed.	Discontinue	This projects has been completed and will not be included in the 2016 HMP Update.
Branchville Borough 3	Raise embankments along 70 feet of the Dry Brook near Borough baseball field.	Borough Engineer	No Progress	Funding has not been secured for this project; therefore, there has been no progress.	Include in 2016 HMP	The Borough will include this action in the 2016 HMP Update.
Branchville Borough 4	Armoring and bank stabilization for Small Pond Dam located on Wantage Avenue.	Borough Engineer	No Progress	This is on private property.	Discontinue	The location of this proposed action is on private property; therefore, the Borough will not include this action in the 2016 HMP Update.
Branchville Borough 5	Flood proofing of the Little Children's World school building.	Facility Administrator	No Progress	There has been no progress on this action.	Discontinue	The Borough will not include this action in the 2016 HMP Update.
Branchville Borough 6	Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	OEM Coordinator, in coordination with SCDEM	Complete	This project has been completed and was funded locally.	Discontinue	This projects has been completed and will not be included in the 2016 HMP Update.



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

There are no additional completed mitigation projects/activities identified since the adoption of the 2011 HMP.

## **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, a second workshop was led by FEMA Region 2 and NJOEM and provided the results to the risk assessment to further assist with the identification of mitigation actions.

Table 9.4-10 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.' Table 9.4-11 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



**Table 9.4-10. 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
Branchville-1 (old #3)	Raise embankments along 70 feet of the Dry Brook near Borough baseball field.	Existing	Flood	1, 2, 6	Borough Engineer	High	High	HMGP with local cost share	Short Term / DOF	Low	SIP	PP
Branchville-2 (new)	Future rezoning procedures will recognize natural hazard areas that will allow greater intensity or density of use.	New and Existing	All	All	Borough Administration	High	Low	Municipal Budget	Ongoing	Medium	LPR	PR
Branchville-3 (new)	Establish a community resilience committee and advisor.	N/A	All	All	Borough Administration	High	Low	Municipal Budget	Ongoing	Medium	LPR	PR
	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable.  Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option.  Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.											
Branchville-4 (new)	See above.	Existing	All	All	Engineering via NFIP FPA with NJOEM, FEMA support	High	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation)	High	SIP	PP
Branchville-5 (revised old #6)	Provide information on all types of hazards, preparedness and mitigation measures, and responses on the Borough website.	N/A	All	All	Borough	High	Low	Municipal Budget	On Going	High	LPR, EAP	PR, PI

#### Notes:

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

#### Acronyms and Abbreviations:

CRS Community Rating System NFIP National Flood Insurance Program

DPWDepartment of Public WorksNJDEPNew Jersey Department of Environmental ProtectionFEMAFederal Emergency Management AgencyNJOEMNew Jersey Office of Emergency Management

1A Federal Emergency Management Agency NJOEM New Jersey Office of Emergency Management
Floodplain Administrator OEM Office of Emergency Management

FPA Floodplain Administrator OEM Office of Emergency Management HMA Hazard Mitigation Assistance

N/A Not applicable <u>Potential FEMA HMA Funding Sources:</u>

<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.



FMA Flood Mitigation Assistance Grant Program

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

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

reapportionment 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.

Timeline:

Short 1 to 5 years

Long Term 5 years or greater

OG 0n-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.

#### <u>Mitigation Category:</u>

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 9.4-11. 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
Branchville-1 (old #3)	Raise embankments along 70 feet of the Dry Brook near Borough baseball field.	1	1	0	0	0	0	1	1	1	0	0	0	0	0	5	Low
Branchville-2 (new)	Future rezoning procedures will recognize natural hazard areas that will allow greater intensity or density of use.	1	1	1	1	0	1	1	0	0	1	1	1	0	0	9	Medium
Branchville-3 (new)	Establish a community resilience committee and advisor.	1	1	1	1	0	1	1	0	0	1	1	1	0	0	9	Medium
Branchville-4 (new)	Support the mitigation of vulnerable structures via retrofit or acquisition / relocation	1	1	1	1	0	0	0	1	1	1	1	1	0	0	9	High
Branchville-5 (revised old #6)	Provide information on all types of hazards, preparedness and mitigation measures, and responses on the Borough website.	1	1	1	1	0	1	1	0	0	1	1	1	0	0	9	Medium

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



## 9.4.7 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None at this time.

## 9.4.8 HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps have been generated for the Borough of Branchville 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 Branchville has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

## 9.4.9 ADDITIONAL COMMENTS

None at this time.



Figure 9.4-2. Borough of Branchville Hazard Area Extent and Location Map 1

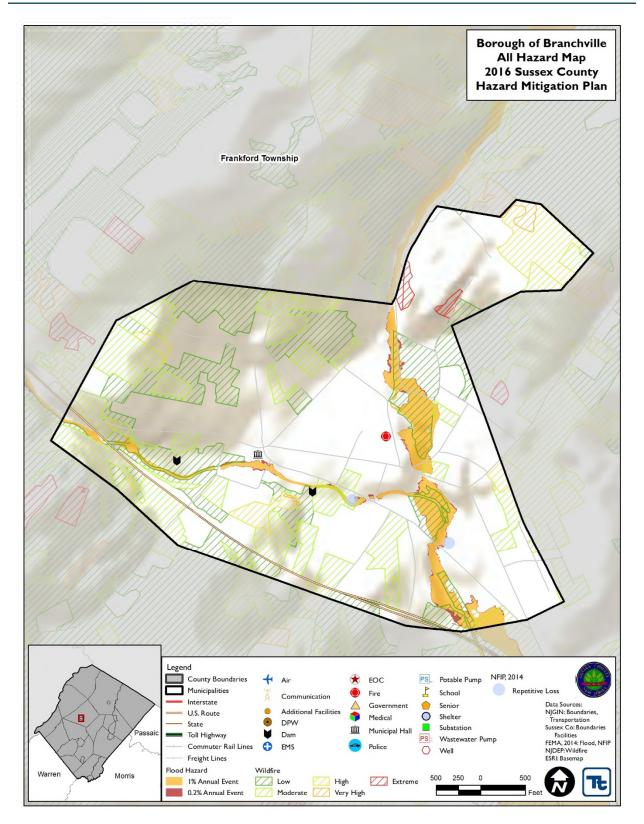
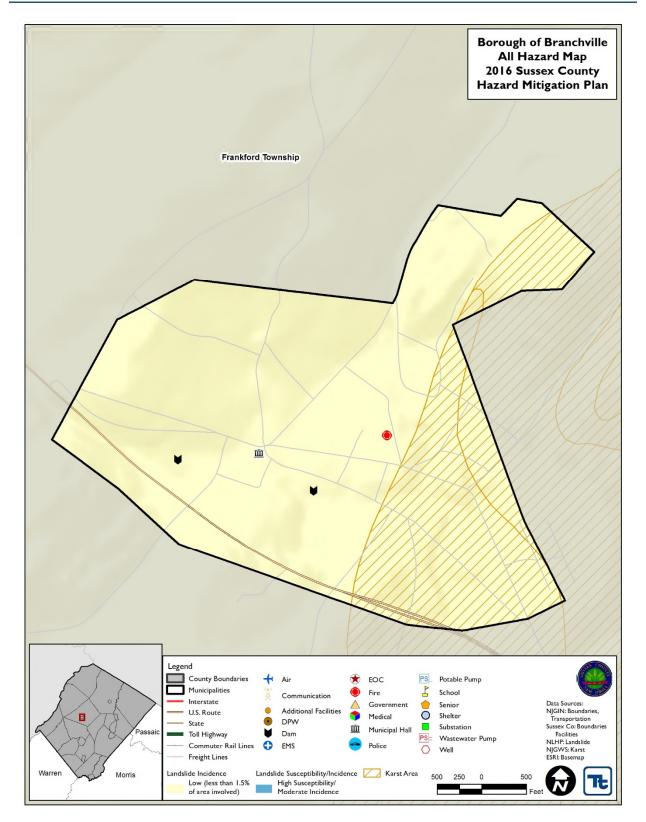




Figure 9.4-3. Borough of Branchville Hazard Area Extent and Location Map 2





**Action Number:** Branchville-1

Mitigation Action/Initiative: Raise embankments along 70 feet of the Dry Brook near Boro baseball field.

Assessing the Risk								
Hazard(s) addressed:	Flood							
Specific problem being mitigated:	During periods of heavy precipitation, Dry Brook tends to overflow its banks and floods the baseball fields in the Borough.							
	Evaluation of Potential Actions/Projects							
Actions/Projects Considered	1. Raise embankments along 70 feet of the Dry Brook near Boro baseball field.							
(name of project and reason for not selecting):	2. Do nothing – current problem continues							
ior not selecting).	3. No other feasible options were identified							
	Action/Project Intended for Implementation							
Description of Selected Action/Project	Raise embankments along 70 feet of the Dry Brook near Boro baseball field.							
Action/Project Category	SIP							
Goals/Objectives Met	1, 2, 6							
Applies to existing and/or new development; or not applicable	Existing							
Benefits (losses avoided)	High							
Estimated Cost	Medium							
Priority*	Low							
	Plan for Implementation							
Responsible/Lead Agency/Department	Borough							
Local Planning Mechanism	Stormwater Management							
Potential Funding Sources	Grant funding with local cost share							
Timeline for Completion	Short Term / DOF							
	Reporting on Progress							
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:							



**Action Number:** Branchville-1

Mitigation Action/Initiative: Raise embankments along 70 feet of the Dry Brook near Boro baseball field.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Boro well is located along stream
Property Protection	1	Ball field damaged from previous flooding
Cost-Effectiveness	0	
Technical	0	
Political	0	
Legal	0	
Fiscal	1	Cut out cleanup cost
Environmental	1	Impact on wildlife
Social	1	Impact on community
Administrative	0	
Multi-Hazard	0	
Timeline	0	
Local Champion	0	
Other Community Objectives	0	
Total	5	
Priority (High/Med/Low)	Low	