



## 9.9 Town of Hackettstown

This section presents the jurisdictional annex for the Town of Hackettstown.

### 9.9.1 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
Darren Tynan, Sergeant, Hackettstown Police 215 Stiger Street, Hackettstown, NJ 07840 (908) 852-3302 <a href="mailto:Hpd34@hackettstownpd.net">Hpd34@hackettstownpd.net</a>	Scott Wheeler, Lieutenant, Hackettstown Police 215 Stiger Street, Hackettstown, NJ 07840 (908) 852-3302 <a href="mailto:Hpd27@hackettstownpd.net">Hpd27@hackettstownpd.net</a>

### 9.9.2 Municipal Profile

The Town of Hackettstown is located in a valley along the banks of the Musconetcong River in eastern Warren County. The Town is also located in the New Jersey Highlands Region and one of the 88 municipalities protected by and subject to the provisions of the Highlands Act. The Town borders the Township of Washington to the southeast, the Township of Mansfield to the southwest, the Township of Allamuchy to the north, Morris County to the northeast, and the west to the Township of Independence. The Musconetcong Makes up the eastern border of the Town. Other waterbodies found in Hackettstown include: Mine Brook, the Morris Canal, Bowers Brook, and Trout Brook. According to the U.S. Census, the 2010 population for Town of Hackettstown was 9,724.

### Growth/Development Trends

Town of Hackettstown 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.

### 9.9.3 Natural Hazard Event History Specific to the Municipality

Warren 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 9.9-1. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
March 11-12, 2011	Heavy Rain and Flooding	N/A	N/A	The OEM evacuated people from Mountain Avenue between East Avenue and Route 57. Any other residents in the town did not need to evacuate. A shelter was set up at the high school (701 Warren Street). Road closures included: <ul style="list-style-type: none"> <li>East Ave was closed between RT182 (Mountain Ave) and the Washington Twsp Morris County town line due to flooding.</li> </ul>



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
				<ul style="list-style-type: none"> <li>• RT665 (Bilby RD) was closed at RT604 (Willow Grove Street) in both directions due to flooding</li> <li>• RT182 (Mountain Ave) northbound the right lane was closed between Mall Dr and East Ave due to flooding.</li> </ul>
September 28 – October 6, 2011	Remnants of Tropical Storm Lee	DR-4039	Yes	<p>DPW and Police overtime for traffic, collect debris, assist at shelter. There were numerous road closures in the Town that included:</p> <ul style="list-style-type: none"> <li>• East Ave was closed between RT182 (Mountain Ave) and RT46 .</li> <li>• Schooleys Mountain Road was closed at RT182 (Mountain Ave) due to flooding on the Washington Twp side.</li> <li>• Bergen St was closed due to flooding.</li> <li>• Park Ave was closed between Miller St and Franklin St due to flooding. 2days</li> <li>• Cook St was closed between Ruland Ave and Park Ave due to flooding. 2days</li> <li>• East Baldwin St was closed between Rt46 and First Ave due to flooding. 2days</li> <li>• West Prospect St was closed between RT46 and Harvey St due to flooding. 2days</li> </ul>
October 29, 2011	Severe Storm	DR-4048	Yes	<p>The national guard armory shelter was open for two days. Numerous roads were closed. Thousands were without power for several days.</p> <ul style="list-style-type: none"> <li>• Monroe St was closed between West Plane St and Grand Ave due to a downed wire. 3days</li> <li>• Center St was closed between Washington St and Madison St due to a downed wire and trees. 3days</li> <li>• Carol Dr was closed between Hurley Dr and Louis Dr due to a downed wire and trees. 3days</li> <li>• Hurley Dr is cloed between Cindy Ter and Connie Ter due to a downed wire and trees. 3days</li> <li>• Second St was closed between East Valley View Ave and East Baldwin St due to a downed tree. 3days</li> <li>• Second St was closed between Hamilton Dr and the Dead End due to a downed tree. 3days</li> <li>• East Prospect St was closed between Oak St and Seventh St due to a downed tree and downed wires. 3days</li> <li>• Lafayette St was closed between Miller St and Cook St due to a downed wire and trees. 3days</li> <li>• RT604 (Willow Grove St) was closed between RT665 (Bilby Rd) and the Sussex county line due to downed trees and wires.</li> <li>• Old Allamuchy Rd was closed between RT517 (High St) and Countryside Dr due to a downed tree. 3days</li> </ul>
October 26 – November 8, 2012	Hurricane Sandy	DR-4086	Yes	<p>DPW and Police overtime for traffic, collect debris, assist at shelter. The Trinity Church main building on Main Street was opened as a shelter to the community. Thousands were without power for days. Numerous road closures throughout the Town included:</p>



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
				<ul style="list-style-type: none"> <li>• College View Dr between Carter Terrace and Pleasant View Rd and Carter Terrace between Pleasant View Rd and Ferris Place are closed due to a leaning telephone pole with the potential of electrical wires coming down. 5 days</li> <li>• Entrance to Hackettstown High School at Warren St was closed due to a downed telephone pole and electrical wires. 4days</li> <li>• Sixth St was closed between East Baldwin St and East Valley View Ave was closed due to a downed tree and wires. 4days</li> <li>• Seventh St was closed between East Baldwin St and Hamilton Dr due to a downed tree. 4 days</li> <li>• Mitchell Rd was closed between Arthur Ter and Victoria Ln due to a tree leaning on electrical wires. 4days</li> <li>• Jefferson St was closed between Center St and West Plane St due to a downed tree. 4days</li> <li>• West Plane St was closed between Jefferson St and Monroe St due to downed trees and downed telephone poles. 4days</li> <li>• Carter Ter was closed in the area of Ferris Place due to a downed tree. 4days</li> <li>• Rt604 (Willow Grove St) is open at Bilby Rd but use caution due to downed trees and electrical wires on the side of the road. 4days</li> <li>• Rt604 is down to one lane in the area of Crane Rd due to a downed tree on electrical wires. 4days</li> <li>• First St was closed between East Valley View Ave and East Prospect St due to a downed electrical wire. 4days</li> </ul>

### 9.9.4 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 Town of Hackettstown. 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 Town of Hackettstown.

**Table 9.9-2. 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 available	Occasional	24	Medium
Drought	Damage estimate not available	Frequent	30	Medium
Earthquake	100-Year GBS: \$0 500-Year GBS: \$612,694 2,500-Year GBS: \$9,906,064	Occasional	28	Medium
Flood	1% Annual Chance: \$25,274,050	Frequent	18	Medium
Geologic	RCV Exposed to Carbonate Rock Areas: \$1,048,633,915	Frequent	54	High
Hurricane	100-year MRP: \$463,835.00 500-year MRP: 2709346 Annualized: \$31,093.00	Frequent	48	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Storm	100-Year MRP: \$463,835 500-year MRP: \$2,709,346 Annualized: \$31,093	Frequent	48	High
Severe Winter Storm	1% GBS: \$7,412,348 5% GBS: \$37,061,739	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$39,960,650	Frequent	24	Medium
Hazardous Materials	Damage estimate not available	Frequent	36	High

**Notes:**

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

- a. The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- b. High = Total hazard priority risk ranking score of 31 and above  
Medium = Total hazard priority risk ranking of 20-30+  
Low = Total hazard risk ranking below 20
- 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 2.2 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 Town of Hackettstown.

**Table 9.9-3. 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)
Hackettstown, Town of	77	34	\$178,946	0	0	35

Source: FEMA, 2014

Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of December 31, 2014 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. Number of claims includes open and closed claims. The number of claims represents claims closed by 12/31/2014.

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

The table below presents the number of critical facilities, by type, in the community located in the effective FEMA flood zones (1% and 0.2% annual chance boundaries).

**Table 9.9-4. Number of Critical Facilities in the DFIRM 1% and 0.2% Annual Chance Flood Boundaries**

Municipality	1% Annual Chance	0.2% Annual Chance
	None	Gas Station
Hackettstown, Town of	-	1

Source: Warren County, FEMA 2011

### 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.



### 9.9.5 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 Town of Hackettstown.

**Table 9.9-4. 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.)
<b>Planning Capability</b>				
Master Plan	Yes	State & Local	Planning Board	NJSA 40:55DD-89
Capital Improvements Plan	Yes	Local	Town Council	No
Floodplain Management / Basin Plan	Yes	Local	Flood Plan Administrator	Chapter 15 In Town Ordinance
Stormwater Management Plan	Yes/2005	State & Local	Planning Board	NJAC 7:14-A-25/LDO 525
Open Space Plan	Yes	State & Local		
Stream Corridor Management Plan	Yes	State & Local	Planning Board	LDO 506 Chapter 2 Article 2
Watershed Management or Protection Plan	Yes	Local	Town Engineer	No
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local	OEM	
Emergency Response Plan	Yes	Local	Town Council	Chapter 2 Article 2
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	No			
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	Construction Official	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes	Local	Zoning Official	UCC Chapter 1 Article 1
Subdivision Ordinance	Yes	Local	Planning Board	No
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Zoning Official	Chapter 17



**Table 9.9-4. 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.)
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local		
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Planning Board	Land Development Ordinance 802
Stormwater Management Ordinance	Yes	Local	Planning Board	Land Development Ordinance 525
Municipal Separate Storm Sewer System (MS4)	Yes	Local	HMUA	Hackettstown Municipal Utilities
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	No			
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes	Local	Board	LDO 506 Natural Features Critical Areas

**Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the Town of Hackettstown.

**Table 9.9-5. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Land Development Ordinance
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Chapter 2 Article 2
Open Space Board/Committee	Yes	Chapter 2 Article 2
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	No	
Mutual Aid Agreements	Yes	Warren County
<b>Technical/Staffing Capability</b>		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Hired Professionals
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	
Planners or engineers with an understanding of natural hazards	Yes	





**Table 9.9-5. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
NFIP Floodplain Administrator	Yes	Chapter 17, Zoning Official, David Diehl
Surveyor(s)	No	
Personnel skilled or trained in GIS and/or Hazus-MH applications	No	
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	OEM
Grant Writer(s)	Yes	Hackettstown Police Department
Staff with expertise or training in benefit/cost analysis	Yes	CFO
Professionals trained in conducting damage assessments	No	

**Fiscal Capability**

The table below summarizes financial resources available to the Town of Hackettstown.

**Table 9.9-6. Fiscal Capabilities**

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

**Table 9.9-7. 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	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes		





**Table 9.9-7. Education/Outreach and Community Classifications**

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Storm Ready	No	NP	N/A
Firewise	No	NP	N/A
Disaster/Safety Programs in/for Schools	Yes		
Organizations with Mitigation Focus (advocacy group, non-government)	Yes		
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 CRS class applies to flood insurance while the 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 1000 feet of a creditable fire hydrant and is within 5 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 <http://firewise.org/>

### Self-Assessment of Capability

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

**Table 9.9-8. Self-Assessment of Capability**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and Regulatory Capability		X	
Administrative and Technical Capability		X	
Fiscal Capability		X	
Community Political Capability		X	
Community Resiliency Capability		X	





Table 9.9-8. Self-Assessment of Capability

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Capability to Integrate Mitigation into Municipal Processes and Activities.		X	

**National Flood Insurance Program**

**NFIP Floodplain Administrator (FPA)**

David Diehl, CFM, Zoning Official is the FPA for the Town of Hackettstown

**Flood Vulnerability Summary**

The Town does not maintain lists/inventories of properties that have been damaged by floods. However, the Town knows where flood occurs in the municipality. Most of the flooding occurs during heavy rain events and mainly impacts basements. During recent flooding and storm events, structures were damaged; however, damages were not reported to Emergency Management. Substantial Damage estimates were made during Hurricanes Irene, Lee and Sandy based on Uniform Construction Code Chapter 7, Article 1 only. As of the date of this plan update, no one in the Town has indicated an interest in mitigation.

**Resources**

By Town Ordinance, the FPA is the sole person assuming responsibilities of floodplain administration. The Zoning Board provides relief to the FPA when needed. Floodplain administration services and functions provided by the FPA include permit reviews and inspections via UCC. The Town uses Facebook as a form of public outreach to provide information prior to hazard events and what to do during these events. The FPA did not indicate any barriers to running an effective floodplain management program. At present, the FPA feels adequately supported and trained to fulfill their duties.

**Compliance History**

The Town of Hackettstown is currently in good standing with the NFIP; however, the FPA is unsure of the most recent compliance audit.

**Regulatory**

The Town's floodplain regulations/ordinances exceed the FEMA and state minimum requirements (L.D.O. 506 Natural Features Requirements). Additional local ordinances, plans and programs that support floodplain management include Ordinance 506 (Natural Features [Critical Areas]), Ordinance 802 (Site Plan Requirements) and Ordinance 500 (Performance Standards). The Town does not participate in CRS as they do not see any benefits from the program since there is very little flooding in the Town. However, the Town would consider attending a CRS seminar if offered locally.

**Community Rating System**

The Town of Hackettstown 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

The Town is located within both the Highlands Planning and Preservation Area. The 2012 Master Plan Reexamination Report discusses how past reexamination goals remain priorities but have been altered or advanced with the Highlands Water Protection and Planning Act. The Town will develop plans to protect and restore the Musconetcong River, in addition to a potential recreational greenway; an Environmental Resources Inventory was also proposed for development in accordance to the HWPPA. Additionally, the Town incorporates hazard risk/mitigation into the plan and updates. The Town practices safe growth practices.

The goals of the 2011 Highlands Master Plan Element include to protect, restore and enhance the quality and quantity of surface and groundwater, to preserve extensive and contiguous areas of land in its natural state, to promote the conservation of water resource, and to promote brownfield remediation and redevelopment if possible. Many objectives are aimed to protect forest resources, open water and riparian areas, steep slopes, critical habitats, water resources and prime groundwater recharge areas. The Plan proposes to prohibit certain land uses in these areas in addition to land located above carbonate bedrock. The 2011 Highlands Environmentally Resource Inventory identifies the location and extent of these natural resources and environmentally sensitive areas within the Town.

Hackettstown currently has a fire plan and stormwater management plan.

### Regulatory and Enforcement (Ordinances)

The Town currently has a stormwater management ordinance. When updating the municipal ordinances, hazard mitigation is and will be a priority (refer to Table 9.9-10).

### Operational and Administration

Prior to land use, zoning changes, or development permitting reviews, the Town reviews the current HMP and other hazard analysis to ensure consistent and compatible land use. Additionally, the Town encourages consideration of low occupancy, low-density zoning in the identified hazard areas. Permit review process also includes addressing hazards. Hazard resistant construction standards are incorporated into the design and location of projects in the Town of Hackettstown. The Town limits development in high hazard areas and rezoning procedures recognizes hazard areas as limits on zoning changes.

The Town has plans and practices that protect natural resources within the community.

The Town has practices in place to protect infrastructure within the community.

### Education and Outreach

The Town posts information regarding the status of emergency events on the Town website homepage and has a link to JCP&L's My Town status page for up-to-date information regarding power outages. The Town also currently uses the Nixle alert system to provide residents with emergency alerts, advisories and community messages. However, the Town currently does not provide public outreach to inform its residents on hazards but they will pursue this in the next five years (refer to Table 9.9-10).



The Town currently does not reach out colleges and universities for technical assistance with natural hazard mitigation activities; however, this will be pursued in the next five years (refer to Table 9.9-10). .

### **9.9.6 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.

DRAFT



Table 9.9-9. Past Mitigation Initiative Status

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 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why
Hackettstown 1: Acquisition / elevation of one Repetitive Loss (RL) property on Water Street.	Town OEM	In Progress	Not an RL property anymore	Discontinue	This project will not be included in the 2016 HMP because the property is no longer identified as an RL property.
Hackettstown 2: Flood-proofing the House of the Good Sheppard on Willow Grove Street between Bilby Road and Stephens State Park Road.	Town Engineer	No Progress	Not an issue	Discontinue	This is not an issue anymore and will not be included in the 2016 HMP Update.
Hackettstown 3: Emergency back-up generator for Municipal Emergency Operations Center located in the Moore Street Firehouse on Moore Street.	Town OEM	In Progress	Waiting on grant money	Include in 2016 HMP	The Town is currently waiting on grant money to proceed. This initiative will be carried over into the 2016 HMP Update.
Hackettstown 4: Raise embankment to eliminate flooding at River Edge Trailer Park along Route 182 at Route 57.	Department of Public Works Supervisor	No Progress	Flooding comes from Musconetcong River and the Town is unable to raise embankment	Discontinue	The Town is unable to raise embankment; therefore, this initiative will not be included in the 2016 HMP Update.
Hackettstown 5: Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	WCOEM, Town OEM	In Progress	Continuing education happens all the time	Include in 2016 HMP	The Town sends information out via social media (Twitter and Facebook) to residents. This action will be carried over into the 2016 HMP Update.



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

There are no additional mitigation projects/activities identified that have also been completed but were not identified in the previous mitigation strategy in the 2011 Plan.

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

The County hosted a mitigation action workshop in March 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 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 9.9-11 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 9.9-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.9-10. 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
Hackettstown-1 (former Hackettstown-3; LOI #1620)	Support the continuity of operations at critical facilities. At this time, the purchase of emergency back-up generators for the following critical facilities in the Town are identified: high school, Moore Street firehouse, DPW, police department, and EOC.	Existing	All	6	Town OEM	High	High	HMGP with local cost share	Short Term / DOF	High	SIP	PP
Hackettstown-2 (former Hackettstown-5)	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	Both	All	1, 2, 3	WCOEM, Town OEM	High	Low	Local budget	Short	High	EAP	PI
Hackettstown - 3	Develop relationships with local colleges and universities for technical assistance with natural hazard mitigation activities.	NA	All	3, 4, 5	Zoning	High	Low	Local budget	Short	High	EAP	PI
Hackettstown - 4	Enforce floodplain codes and standards beyond the minimum set by FEMA and the State.	Both	Flood	1, 2	Zoning	High	Low	Local Budget	Short	High	LPR	PR

Notes:

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

\*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

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





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.

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 9.9-11. 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
Hackettstown-1 (former Hackettstown-3; LOI #1620)	Emergency back-up generator for the following critical facilities in the Town: high school, Moore Street firehouse, DPW, police department, and EOC.	1	0	1	1	1	1	1	1	1	1	1	1	0	0	11	High
Hackettstown-2 (former Hackettstown-5)	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	1	1	1	1	1	1	0	0	1	0	1	1	0	0	9	High
Hackettstown - 3	Develop relationships with local colleges and universities for technical assistance with natural hazard mitigation activities.	1	1	1	1	1	1	0	0	1	0	1	1	0	0	9	High
Hackettstown - 4	Enforce floodplain codes and standards beyond the minimum set by FEMA and the State.	1	1	1	1	1	1	0	0	1	0	1	1	0	0	9	High

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



---

### 9.9.7 Future Needs To Better Understand Risk/Vulnerability

---

None at this time.

### 9.9.8 Hazard Area Extent and Location

---

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

### 9.9.9 Additional Comments

---

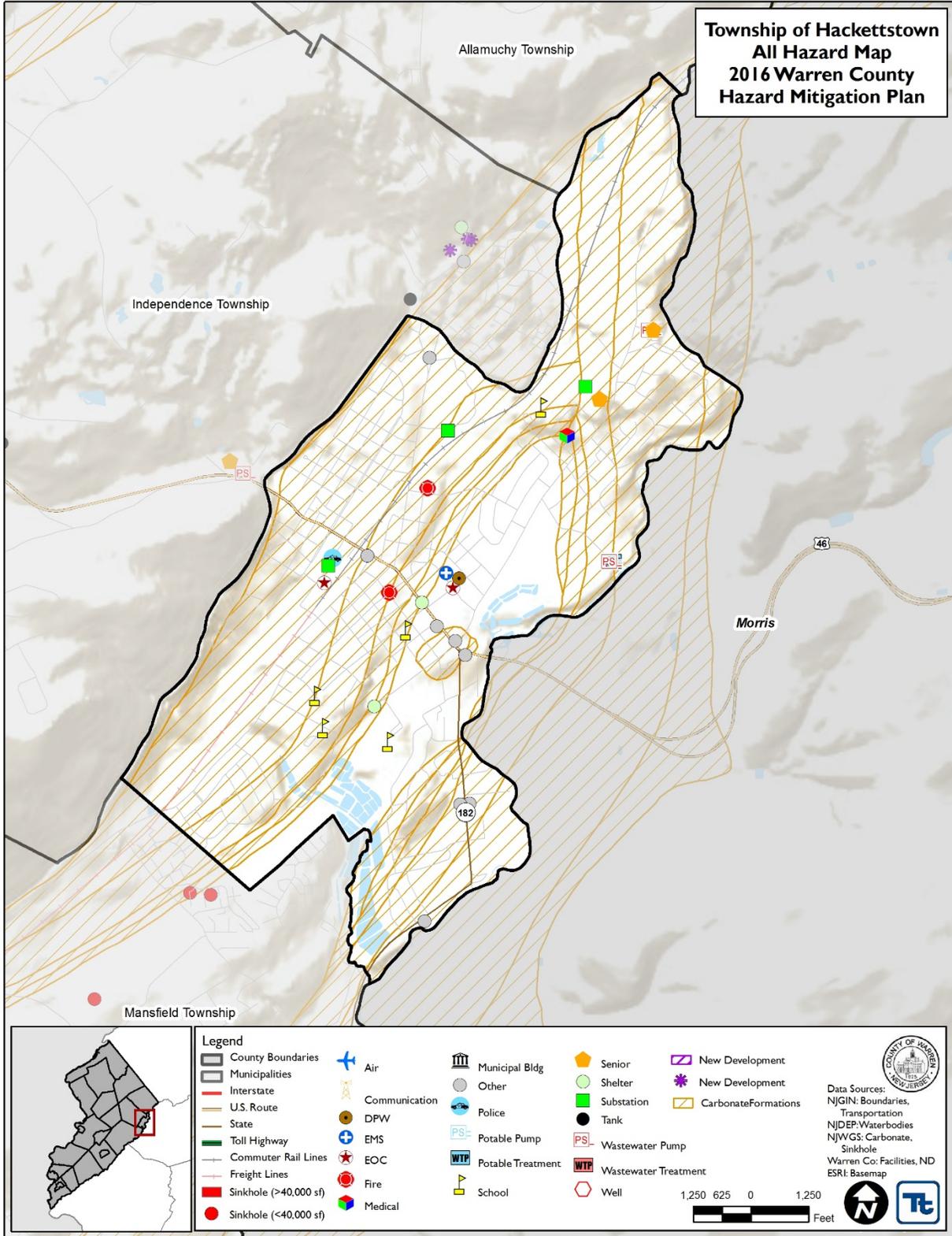
None at this time.

DRAFT





Figure 9.9-2. Town of Hackettstown Hazard Area Extent and Location Map 2





**Action Number:** Hackettstown - 1

**Mitigation Action/Initiative:** Emergency back-up generator for critical facilities in the Town

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All
<b>Specific problem being mitigated:</b>	Lack of backup power to critical facilities in the Town which prevents them from functioning during emergency events
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	<ol style="list-style-type: none"> <li>1. Purchase and install backup generators for critical facilities.</li> <li>2. Purchase portable generators – not feasible for longer power outages</li> <li>3. Do nothing – current problem continues</li> </ol>
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Emergency back-up generator for the following critical facilities in the Town: high school, Moore Street firehouse, DPW, police department, and EOC.
<b>Action/Project Category</b>	SIP
<b>Goals/Objectives Met</b>	6
<b>Applies to existing and/or new development; or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High – provide power to Town shelter and critical facilities
<b>Estimated Cost</b>	High
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible/Lead Agency/Department</b>	OEM
<b>Local Planning Mechanism</b>	
<b>Potential Funding Sources</b>	HMGP with local cost share
<b>Timeline for Completion</b>	Short Term / DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:



**Action Number:** Hackettstown - 1

**Mitigation Action/Initiative:** Emergency back-up generator for critical facilities in the Town

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Local Champion	0	
Other Community Objectives	0	
Total	11	
<b>Priority (High/Med/Low)</b>	<b>High</b>	