



9.13 Township of Independence

This section presents the jurisdictional annex for the Township of Independence.

9.13.1 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
Deborah Hrebenack, Clerk/Administrator 286 B Route 46, Great Meadows, NJ 07838 (908) 339-1977 dhrebenak@independencenj.com	Dennis Riley, Chief of Police 286 B Route 46, Great Meadows, NJ 07838 (908) 296-6206 ipdriley@yahoo.com

9.13.2 Municipal Profile

The Township of Independence is located in southwestern Warren County and occupies 19.7 square miles. The Township is bordered to the north by the Townships of Frelinghuysen and Allamuchy; to the south by the Township of Mansfield; to the east by the Township of Allamuchy and the Town of Hackettstown; and to the west by the Township of Liberty. Great Meadows, Petersburg, and Vienna are unincorporated communities located within the Township. Additionally, the Pequest River runs through the northwest portion of the Township and the Morris Canal makes up a portion of its eastern border between Hackettstown. Other streams and rivers located in the Township include: Hackery Brook, Pohatcong Creek, Independence Creek, Barkers Mill Brook, and the Morris Canal. The Township of Independence is located within the New Jersey Highlands Region with lands lying in the Preservation and Planning Areas. According to the U.S. Census, the 2010 population for Township of Independence was 5,662.

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 9.13.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.13-1. 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					
Asbury Hill Estates	Res.	11	Ketcham/Asbury Rd.	Hackettstown	None
Kingston Hill	Res.	9	Laurel Ct.	Hackettstown	Wetlands, Floodplain
Known or Anticipated Development in the Next Five (5) Years					
Woodmont	Res.	120/5	922-930 Rt. 517	Hackettstown	None
Pio Costa	Comm.	2	260-276 Rt. 46	Great Meadows	Floodplain
Liberty Square	Comm.	2	923 Rt. 517	Hackettstown	Geologic Formation of Concern





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
Pio Costa	Res.	5	Alphano Rd.	Great Meadows	None

* Only location-specific hazard zones or vulnerabilities identified.

9.13.3 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 at the municipal level, is presented in the table below. This summary is based on reference material or local sources. For further details on these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.13-2. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 26 – November 8, 2012	Hurricane Sandy	DR-4086	Yes	Residents in the Township were sent to a shelter that was set up in the Town of Hackettstown. The Township was without power for approximately nine days. Roadways were partially to completely closed for four days, which comprised about 90% of the Township roadways. There was structural damage to the Township municipal building, Township senior center, and the Township Road Department buildings. There were various reports of structural damages to residences throughout the township. Other losses to the Township included the purchasing of generators for those who were on homebound oxygen. There were also overtime costs due to the closed roadways.

9.13.4 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 Township of Independence. 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 Township of Independence.



Table 9.13-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
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: \$231,487 2,500-Year GBS: \$3,718,620	Occasional	28	Medium
Flood	1% Annual Chance: \$2,876,750	Frequent	18	Medium
Geologic	RCV Exposed to Carbonate Rock Areas: \$250,944,960	Occasional	36	High
Hurricane	100-year MRP: \$229,275.00 500-year MRP: \$1,281,557.00 Annualized: \$15,191.00	Frequent	48	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Storm	100-Year MRP: \$229,275 500-year MRP: \$1,281,557 Annualized: \$15,191	Frequent	48	High
Severe Winter Storm	1% GBS: \$3,605,499 5% GBS: \$18,027,495	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$13,633,660	Occasional	16	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 Township of Independence.

Table 9.13-4. 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)
Independence, Township of	4	110	\$3,620,230	0	0	0

Source: FEMA Region 2, 2014





- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 11/30/2014. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 11/30/14.
- (2) Total building and content losses from the claims file provided by FEMA Region 2.
- (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.

Notes: 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.
A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.
Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude.

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.

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9.13.5 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 Township of Independence.

Table 9.13-5. 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				
Master Plan	Yes	Local	Planning Bd.	Adopted
Capital Improvements Plan	Yes	Local	Township Committee	Chapter 255
Floodplain Management / Basin Plan	No			
Stormwater Management Plan	Yes	Local	Planning Bd.	Chapter 337
Open Space Plan	Yes			
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency Management Plan	Yes	Local/County	O.E.M.	Adopted
Emergency Response Plan	Yes	Local/County	O.E.M.	Adopted
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	Yes	Local	Township	W.M.P., Conservation Plan, Housing Element Fair Share Plan
Regulatory Capability				
Building Code	Yes	State & Local		State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.) Chapter 175 – Construction Codes, Uniform
Zoning Ordinance	Yes	Local	Township	Chapter 255 – Land Development



Table 9.13-5. 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	Township	Chapter 255 – Land Development
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Construction Official	Chapter 222 – Flood Damage Prevention; adopted 2011
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	Construction Official	
Growth Management Ordinances	Yes	Local	Township	Chapter 222
Site Plan Review Requirements	Yes	Local	Township	Adopted
Stormwater Management Ordinance	Yes	Local	Township	Chapter 339 – Stormwater Management; updated when necessary
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Township	Chapter 339 – Stormwater Management
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	Township	Tree Clearing, Steep Slopes Chapter 255 – Land Development

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Independence.

Table 9.13-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use Board
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Environmental Commission
Open Space Board/Committee	No	
Economic Development Commission/Committee	Yes	Land Use Board
Maintenance Programs to Reduce Risk	Yes	Storm Water Management Cleanup-Township
Mutual Aid Agreements	Yes	All with towns and county
Technical/Staffing Capability		



Table 9.13-6. 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	Engineer/Planner
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineer/Code Official
Planners or engineers with an understanding of natural hazards	Yes	Engineer, Code Official, O.E.M.
NFIP Floodplain Administrator	Yes	Michael Finelli
Surveyor(s)	Yes	Engineer
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Engineer, Planner (GIS Only)
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	O.E.M.
Grant Writer(s)	Yes	Engineer, O.E.M., Police
Staff with expertise or training in benefit/cost analysis	Yes	Engineer
Professionals trained in conducting damage assessments	Yes	Engineer, Code Official

Fiscal Capability

The table below summarizes financial resources available to the Township of Independence.

Table 9.13-7. 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	Yes
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
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	Yes

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 Township of Independence.



Table 9.13-8. 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	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	Yes		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes		
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	Yes	Zoning	

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 Township of Independence’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.



Table 9.13-9. 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		
Capability to Integrate Mitigation into Municipal Processes and Activities.	X		

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Michael Finelli, Engineer

Flood Vulnerability Summary

The Township does not maintain lists/inventories of properties that have been damaged by floods. During Hurricane Sandy and other events, the Township did not identify any structures damaged. The FPA makes Substantial Damage estimates; however, none were declared after Hurricane Sandy. Currently, there is no interest in mitigation (elevation or acquisition) and there are no properties in the process of mitigation. If any property is interested, funding would be through the property owner's flood insurance.

Resources

Staff members within the engineering office assist the FPA with the responsibilities of floodplain administration. NFIP services provided by the FPA are completed as requested. The Township has a stormwater management ordinance. The FPA feels adequately supported and trained to fulfill their responsibilities as the municipal floodplain administrator. The FPA would consider attending continuing education and/or certification training on floodplain management if it was offered in the County.

Compliance History

The Township is in good standing with the NFIP and the most recent compliance audit was conducted in spring 2014.

Regulatory

The Township's floodplain management regulations/ordinances do not exceed the FEMA and state minimum requirements. The Township does have other local ordinances, plans and programs that support floodplain management include the Township Code Officials.

Community Rating System

The Township of Independence 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 Township is located in both the Highlands Planning (6,510 acres) and Preservation (6,276 acres) Areas. The Township submitted a Petition for Plan Conformance for its Preservation Area lands only which was deemed administratively complete by the Highlands Council. The Township will utilize state grant funding for Preservation Area conformance, as well as the evaluation of economic development opportunities that may exist in the Planning Area portion of the Township. The Township recognizes the legal requirements imposed within the Highlands Preservation Area and seeks to amend the requirements by permitting opportunities for non-residential economic development uses in the Township's business highway corridors that may or may not be generally in keeping with the Highlands Act and the Highlands Regional Master Plan. The land use policies with respect to the Township's Highlands Preservation area are: (1) to provide reasonable opportunities for economic growth and development within lands adjacent to the Township's business highway corridors; (2) to provide potential locations for "mixed use" vides for affordable housing and to protect, enhance, and in some cases restore Highlands natural and cultural resources in the remainder of the Township Highlands Preservation Area while ensuring land use and development activities therein occur in a manner and location that is consistent with the Highlands Regional Master Plan.

The goals of the 2011 Highlands Preservation Area Element for the Master Plan include to protect, restore and enhance the quality and quantity of surface and groundwater; to preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring retention of the unique and significant natural, scenic, and other resources representative of the Township's Highlands Preservation Area; to protect the natural, scenic, and other resources of the Township's Highlands Preservation Area, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora; preserve farmland, historic sites, and other historic resources; preserve outdoor recreation opportunities on publicly owned land; promote conservation of water resources; promote brownfield remediation and redevelopment where applicable; promote compatible agricultural, horticultural, and cultural uses and opportunities; limit the maximum extent possible construction or development that is incompatible with preservation of this unique area; and promote economically beneficial development opportunities for a variety of commercial, office, service, and municipal uses to serve the needs of the citizens of the Township in appropriate locations along U.S. Route 46 and County Route 517 highway corridors.

The Township's Master Plan incorporates natural hazard risk and mitigation. Additionally, the Township has safe growth practices.

Regulatory and Enforcement (Ordinances)

The Township has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the NFIP Flood Damage Prevention Ordinance, a stormwater management ordinance and ordinances for steep slopes and sensitive environmental areas.

The Township reviews the hazard mitigation plan and any other hazard analysis prior to land use, zoning changes, or development permitting to ensure consistent and compatible land use. The Township also encourages the consideration of low occupancy, low-density zoning in hazard areas when practical. The



Township limits development in high hazard areas and their rezoning procedures recognizes hazard areas as limits on zoning changes. The Township's permit review process includes addressing of hazards. Hazard resistant construction standards are incorporated into the design and location of projects.

Chapter 222: Flood Damage Prevention - It is 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 to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. 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. Help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Chapter 255: Land Development – the purpose of the land development ordinance is as follows:

- A. To guide the appropriate use or development of all lands in this state in a manner which will promote the public health, safety, morals and general welfare.
- B. To secure safety from fire, flood, panic and other natural and man-made disasters.
- C. To provide adequate light, air and open space.
- D. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment.
- E. To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies.
- F. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements.
- G. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight.
- H. To promote a desirable visual environment through creative development techniques and good civic design and arrangements.
- I. To promote the conservation of open space and valuable natural resources, prevent erosion and to prevent urban sprawl and degradation of the environment through improper use of land.
- J. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land.

Chapter 339: Stormwater Management – this code is designed to establish requirements to control littering in the Township of Independence, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.



Operational and Administration

The Township has established a Land Use Board and Environmental Commission that aid in planning decisions to support the conservation and preservation of the Township's critical environmental features. The Township has plans and practices in place for protecting natural resources within the community. There are also employee job descriptions that include hazard mitigation. Additionally, several hazard mitigation actions are incorporated into the daily operations of the Township. Currently, the Township does not have a community resilience committee or advisor, but this will be pursued in the next five years. Refer to Independence Twp-4 in Table 9.13-12 for details on this proposed mitigation action.

Funding

The Township's municipal budget and capital improvements budget does not have line items for hazard mitigation project funding. This will be pursued in the next five years. Refer to Independence Twp-5 in Table 9.13-12 for details on this proposed mitigation action. Additionally, funding has not been provided for mitigation projects identified in the hazard mitigation plan. This will be pursued in the next five years. Refer to Independence Twp-6 in Table 9.13-12 for details on this proposed mitigation action.

Education and Outreach

The Township reaches out to colleges and universities for technical assistance with natural hazard mitigation activities. Additionally, the Township works closely with the local school district and assists with community service projects for the service organizations. The Township has a public outreach program that informs its citizens on hazards within the community. The Township also offers training on best practices for hazard mitigation, hazard identification, and other training related to hazard mitigation. The Township does not offer training on grant applications or conduct outreach on hazards. Both of these will be pursued in the next five years. Refer to Independence Twp-3 in Table 9.13-12 for details on this proposed mitigation action.



9.13.6 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.

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Table 9.13-10. 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	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why
Independence Township 1: Stream bank stabilization for 500 yards along the Pequest River near Water Street.	Department of Public Works (DPW) Supervisor	No Progress	1. 0% Complete 2. Budget and personnel constraints have restricted this action from moving forward 3. No funding secured	Discontinue	
Independence Township 2: Installation of rip-wrap in bend of Pequest River near Cemetery Road.	DPW Supervisor	Complete	1. 100 % complete 2. Work performed as part of a county contract during a bridge reconstruction.	Discontinue	This project has been completed and will not be included in the 2016 HMP Update.
Independence Township 3: Storm-water management system upgrade and improvement along Route 46 between Barkers Mill Road and Hill Terrace.	OEM Coordinator	Complete	1. 100% complete 2. This project was conducted by the State of New Jersey during a highway resurfacing project.	Discontinue	This project has been completed and will not be included in the 2016 HMP Update.
Independence Township 4: Installation of reverse 911 systems.	OEM Coordinator	Complete	1. 100 % complete 2. This project was conducted in conjunction with the county during our 911 conversion to the new structure.	Discontinue	This project has been completed and will not be included in the 2016 HMP Update.
Independence Township 5: Participate in the CRS program.	OEM Coordinator	In Progress	1. The Township is currently working on joining the CRS program	Include in 2016 HMP	The Township will continue to work on becoming a CRS community.
Independence Township 6: Establish a database identifying municipal residents most at risk to severe weather.	OEM Coordinator	Complete	1. 100 % complete 2. This was accomplished during the update of our current manual within the township	Discontinue	This project has been completed and will not be included in the 2016 HMP Update.
Independence Township 7: Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	WCOEM, OEM Coordinator	In Progress	This is a continuing process that carries from one year to the next	Include in 2016 HMP	This is a continuing process that carries from one year to the next





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 where the following FEMA publications were provided to all plan participants to use as a resource as part of the municipal 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 Township 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 9.13-11 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.’ Table 9.13-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.13-11. 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
Independence - 1	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	N/A	All	All	Township-wide	Medium	Low	Municipal Budget	Short	High	LPR, EAP	PR, PI
Independence - 2	Develop a Continuity of Operations (COOP) Plan for the Township	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	LPR	PR
Independence - 3	Provide training and outreach to the community in relation to grant applications and hazards	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	EAP	PI
Independence - 4	Create a community resilience committee and appoint an advisor	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	LPR	PR
Independence - 5	Create a line item for hazard mitigation in both the municipal budget and capital improvement budget.	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	LPR	PR
Independence - 6	Provide funding for mitigation projects identified in the hazard mitigation plan using the capital improvement budget.	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	LPR	PR
Independence - 7	Develop a transportation plan and have it include limited access to hazard areas.	N/A	All	All	Clerk / Admin	High	Low	Municipal Budget	Short – DOF	High	LPR	PR
Independence - 8	Maintain agreements with neighboring communities.	N/A	All	1, 2, 3, 6	Municipal OEM, Fire, EMS and Police	Medium	Low	Municipal Budget	Short	High	LPR	PR
Independence - 9	Enhance/Expand Tree Maintenance	N/A	All	All	Municipal Engineer and DPW	Medium to High	Medium	Municipal Budget and Grants	Short	Medium	LPR	PR
Independence - 10	Develop a Post Event Damage Assessment Program	N/A	All	All	Township-wide	Medium	Low to Medium	Municipal Budget and Grants	Short	High	LPR	PR





Table 9.13-11. 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
Independence - 11	Support continuity of operations at critical facilities. At this time the following project is identified: upgrade the generator to supply power to entire building.	Existing	All	6	Township	Medium	Medium	Municipal Budget and Grants	Short	Medium	SIP	PP
Independence - 12	Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated. See following related Community Assistance Visit (CAV) initiative.	N/A	Flood	1, 2, 3, 4	NFIP FPA, as fully supported by local government officials	Medium - High	Low	Municipal Budget	Short (year 1)	High	LPR, EAP	PR, PI

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 | N/A | Not applicable |
| DPW | Department of Public Works | NFIP | National Flood Insurance Program |
| FEMA | Federal Emergency Management Agency | NJDEP | New Jersey Department of Environmental Protection |
| FPA | Floodplain Administrator | NJOEM | New Jersey Office of Emergency Management |
| HMA | Hazard Mitigation Assistance | 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

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:





Costs:

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:

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 9.13-12. 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
Independence - 1	Conduct all hazards public education and outreach program for hazard mitigation and preparedness.	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High
Independence - 2	Develop a Continuity of Operations (COOP) Plan for the Township	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 3	Provide training and outreach to the community in relation to grant applications and hazards	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 4	Create a community resilience committee and advisor	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 5	Create a line item for hazard mitigation in both the municipal budget and capital improvement budget.	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 6	Provide funding for mitigation projects identified in the hazard mitigation plan using the capital improvement budget.	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 7	Develop a transportation plan and have it include limited access to hazard areas.	1	1	1	1	1	1	0	0	0	1	1	0	0	0	8	High
Independence - 8	Maintain agreements with neighboring communities.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
Independence - 9	Enhance/Expand Tree Maintenance	1	1	0	0	0	0	1	1	0	0	1	1	1	1	8	Medium
Independence - 10	Post Event Damage Assessment Program	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
Independence - 11	Support continuity of operations at critical	0	0	0	1	1	1	0	1	1	1	0	1	1	1	9	Medium





Table 9.13-12. 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
	facilities - Upgrade the generator to supply power to entire building.																
Independence - 12	Support participation in the NFIP Community Rating System (CRS) program by attending CRS workshop(s) if offered within the county. Join the CRS program if adequate resources to support long term participation can be dedicated.	1	1	1	1	1	1	0	0	0	0	1	0	0	0	7	High

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



9.13.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.13.8 Hazard Area Extent and Location

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

9.13.9 Additional Comments

None at this time.

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Figure 9.13-1. Township of Independence Hazard Area Extent and Location Map 1

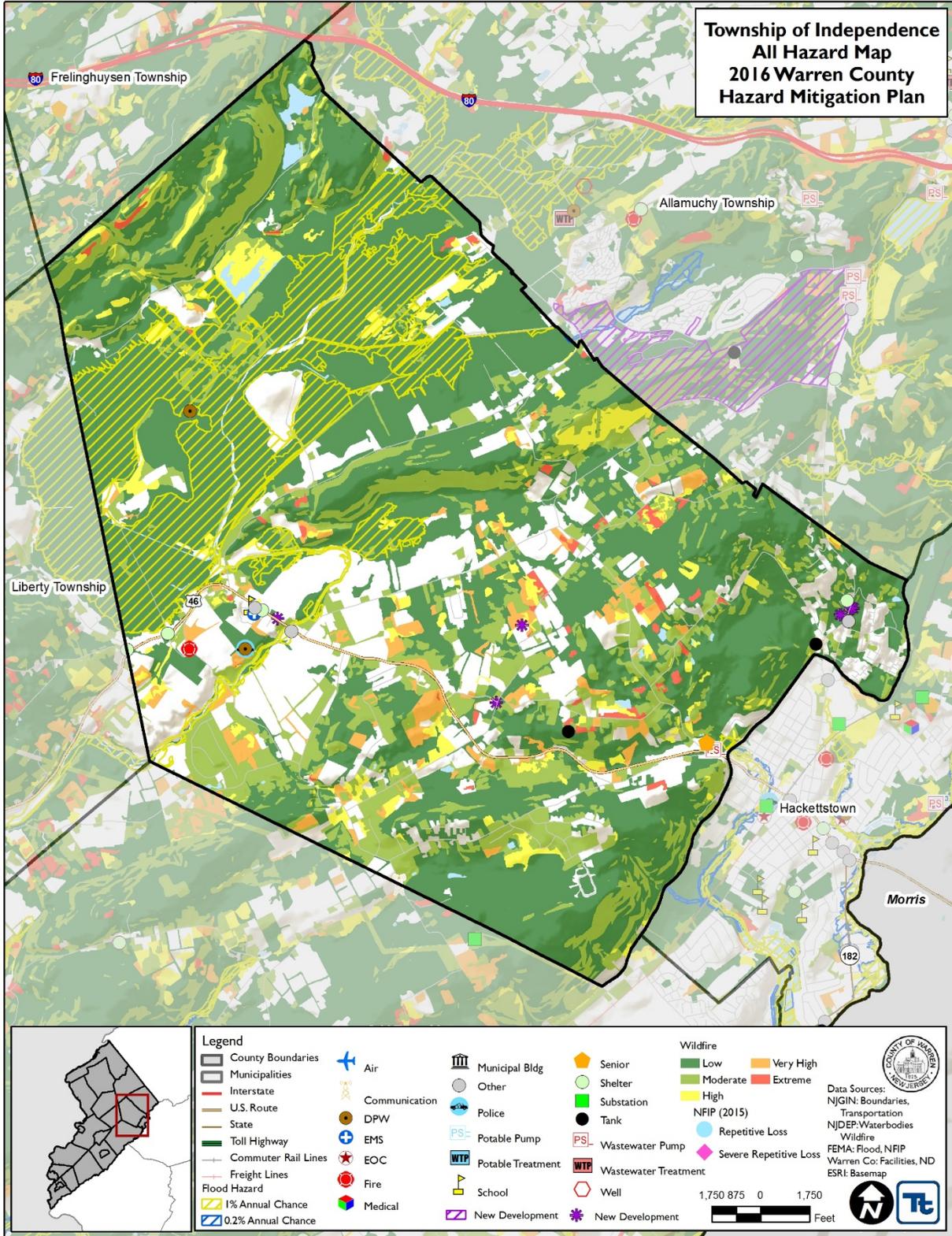
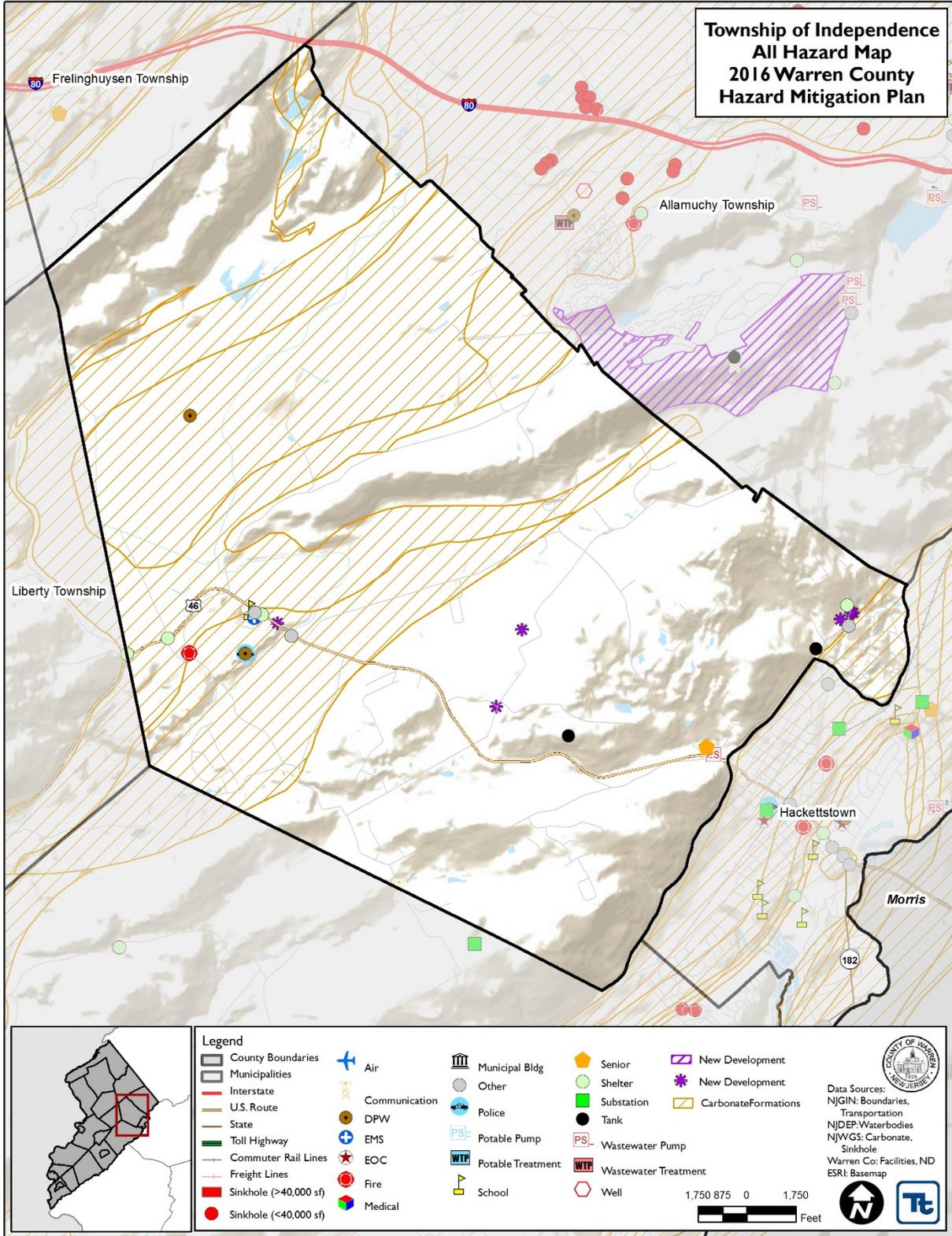




Figure 9.13-2. Township of Independence Hazard Area Extent and Location Map 2





Action Number: Independence Twp-11
Mitigation Action/Initiative: Support continuity of operations at critical facilities

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Generator that supplies power to emergency operations center is inadequate. The entire building is not supplied with power.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Upgrade the generator to supply power to entire building. 2. Obtain quotes for future consideration at budget time 2. Leave original generator in place
Action/Project Intended for Implementation	
Description of Selected Action/Project	Support continuity of operations at critical facilities – the following is identified at this time - upgrade generator
Action/Project Category	SIP
Goals Met	6
Applies to existing and or new development, or not applicable	Existing and new
Benefits (losses avoided)	Medium
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Municipality
Local Planning Mechanism	Municipal
Potential Funding Sources	Municipal Budget/ Grants
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Independence Twp-11
Mitigation Action/Initiative: Support continuity of operations at critical facilities

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	0	
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	Med	