



## 9.14 TOWNSHIP OF HARDING

This section presents the jurisdictional annex for the Township of Harding. The annex includes a general overview of the Township of Harding; an assessment of the Township of Harding's risk, vulnerability, and mitigation capabilities; and a prioritized action plan to implement prior to a disaster to reduce future losses and achieve greater resilience to natural hazards.

### 9.14.1 Hazard Mitigation Planning Team

The following individuals are the Township of Harding's identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

*Table 9.14-1. Hazard Mitigation Planning Team*

Primary Point of Contact	Alternate Point of Contact
Name / Title: Lorene K. Wright, Assistant Administrator Address: 21 Blue Mill Rd, PO Box 666, New Vernon, NJ 07976 Phone Number: 973-267-8000, ext. 1988 Email: lwright@hardingnj.org	Name / Title: Robert Falzarano, Administrator Address: 21 Blue Mill Rd, PO Box 666, New Vernon, NJ 07976 Phone Number: 973-267-8000, ext. 1917 Email: rfalzarano@hardingnj.org
NFIP Floodplain Administrator	
Name / Title: Paul Fox, Township Engineer Address: 21 Blue Mill Rd, PO Box 666, New Vernon, NJ 07976 Phone Number: 908-234-1086 Email: pfox@apgarassociates.com	

### 9.14.2 Jurisdiction Profile

The Township of Harding is located in southeastern Morris County. The Township encompasses approximately 21 square miles and is bordered by the Township of Morris to the north, the Township of Chatham to the east, the Township of Long Hill to the south, and the Townships of Bernards and Mendham and the Borough of Bernardsville to the west. There are two unincorporated communities in the Township: a portion of Green Village and New Vernon. The major bodies of water in the Township include the Passaic River, Great Brook, tributary to Great Brook, the Great Swamp, and Primrose Brook.

According to the U.S. Census, the 2010 population for the Township of Harding was 3,838. The estimated 2017 population was 3,887, a 1.3% increase from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 4.2% of the population is 5 years of age or younger and 25.2% is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

### 9.14.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.14-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figures 9.14-1 and 9.14-2 at the end of this annex illustrate the geographically delineated hazard areas and the location of potential new development.



Table 9.14-2. Recent and Expected Future Development

Type of Development	2015	2016	2017	2018	2019
<b>Number of Building Permits for New Construction Issued Since the Previous HMP</b>					
Single Family	7	7	4	8	4
Multi-Family	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0
Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
<b>Recent Major Development and Infrastructure from 2015 to Present</b>					
None					
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>					
Senior Residents	Mixed-Use	250 Units	Unknown yet	-	Concept
CPNJ	Group Home	1	Unknown yet	-	Concept
Single Family	Single family homes	4	Unknown yet	-	Concept

\* Only location-specific hazard zones or vulnerabilities identified.

#### 9.14.4 Capability Assessment

The Township of Harding performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community's adaptive capacity for the impacts of climate change.

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, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized below. The Township of Harding identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy.

#### PLANNING, LEGAL AND REGULATORY CAPABILITY

The table below summarizes the legal and regulatory tools that are available to the Township of Harding and where hazard mitigation has been integrated.



Table 9.14-3. Planning, Legal and Regulatory Capability

Legal and Regulatory Capability					
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
Codes, Ordinances, & Requirements					
Building Code	Yes	Local and State	Yes	No	No
Comment: State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14 Adopted 9/3/2019. State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)					
Zoning Code	Yes	Local and State	Yes	No	No
Comment: State permissive on local level. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan. Enforced by Planning Board, Article XXII-225-112.					
Subdivisions	Yes	Local	Yes	No	No
Comment: P.L.1975, c.291 (C.40:55D-47): 40:55D-37. Grant of power; referral of proposed ordinance; county planning board approval. Dictated by the Municipal Land Use Law. NJ Statute 40:27-6.2 The board of freeholders of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions affecting county road or drainage facilities as set forth and limited hereinafter in this section. Enforced by Planning Board, Article VXIII-225-60.					
Stormwater Management	Yes	State and Local	Yes	No	No
Comment: See Title 7 of the NJ Administrative Code, N.J.A.C. 7:8. Enforced by Planning Board, 225-182.					
Post-Disaster Recovery	No	-	No	-	-
Comment:					
Real Estate Disclosure	Yes	State	Yes	No	No
Comment: Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision. Enforced by the Division of Consumer Affairs, N.J.A.C. 13:45A-29.1.					
Growth Management	No	Local and State	Yes, if have planning board	-	-
Comment: State Mandated on a municipal level. See Zoning Ordinance. Plan Endorsement Process via the State Development & Redevelopment Plan provides for the delineation of Growth Areas and Environs; Use of the endorsed plans in the implementation of state environmental regulations makes the Plan Endorsement process a growth management strategy.					
Shoreline Development	No	-	No	-	-
Comment: NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone Management Rules N.J.A.C. 7:7E-1 et seq.					
Site Plan Review	Yes	Local	Yes	No	No
Comment: Dictated by the Municipal Land Use Law which sets forth minimum requirements for plans, etc., timeframes for development review. NJ Statute 40:27-6.2: The board of freeholders of any county having a county planning board shall provide for the review of all subdivisions of land within the county by county planning board and for the approval of those subdivisions affecting county road or drainage facilities. 40:27-6.10: Each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality and shall notify the county planning board of the introduction of any revision or amendment of such an ordinance which affects lands adjoining county roads or other county lands, or lands lying within 200 feet of a municipal boundary, or proposed facilities or public lands shown on the county master plan or official county map. Enforced by Planning Board, Article XVI-225-77 & 90.					



Legal and Regulatory Capability					
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Environmental Protection</b>	Yes	State, County, Local	No	-	-
<i>Comment: The rules that are utilized by the NJ Department of Environmental Protection and other environmental agencies are codified at Title 7 of the NJ Municipal Administrative Code. Local code Section 225-110 Great Swamp Watershed Environmental Protection.</i>					
<b>Flood Damage Prevention</b>	Yes	Federal, State, and Local	No	No	Yes
<i>Comment: The NJ State Law Flood Area Control Act (N.J.S.A. 58:16A-52) and the National Flood Control Act of 1968 (NFIP) are state and federal acts to support minimization of flood losses. They do not require local adoption but as enforced by the NJDEP, the floodplain ordinances of each municipality must be reviewed for compliance with these regulations. In addition, participation in the NFIP requires a floodplain ordinance. Enforced by Planning Board, 225-100. Recommend updating administrative agency and map designation. 2020-Harding-004.</i>					
<b>Wellhead Protection</b>	No	-	No	-	-
<i>Comment: Delineation of well head protection areas (WHPAs) is part of the NJ-approved 1991 well head protection plan (WHPP) for public community water supply wells. These are priority areas for efforts to prevent and clean up ground water contamination. Municipalities are empowered to regulate land use, physical facilities and other activities within WHPAs areas, the potential for groundwater contamination can be reduced under the provisions of the New Jersey Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., which authorizes each municipality to plan and regulate land use to secure a safe and adequate drinking water supply for its residents. Also refer to Safe Drinking Water Regulations (NJAC 7:10-11.7(b)1)).</i>					
<b>Emergency Management</b>	No	-	No	-	-
<i>Comment: Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years. See Emergency Operations Plans below.</i>					
<b>Climate Change</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Disaster Recovery Ordinance</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Disaster Reconstruction Ordinance</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Other: Steep Slopes</b>	Yes	Local	No	No	No
<i>Comment: Chapter 225, Part 2, Article XVIII Steep Slopes.</i>					
<b>Planning Documents</b>					
<b>Master Plan</b>	Yes	Local	Yes	No	No
<i>Comment: Per NJS: Yes, if planning board (40:55D-28) and must be re-examined every ten years (40:55D-89.1); Enforced by Planning Board. Adopted December 17, 1984 with amendments through November 27, 2017.</i>					
<b>Capital Improvement Plan</b>	Yes	Local	Allowed	No	No
<i>Comment: Per NJS 40:55D-29) the governing body is authorized to direct the planning board to prepare a CIP with at least a six-year planning horizon. Enforced by Town Committee, July 2014.</i>					
<b>Disaster Debris Management Plan</b>	Yes	Local	Yes	No	No
<i>Comment: Annex to Emergency Management Plan</i>					
<b>Floodplain or Watershed Plan</b>	Yes	Local	No	No	No
<i>Comment: Great Swamp Regional Watershed Plan, Silver Brook Watershed Plan, Passaic River Watershed Plan</i>					



Legal and Regulatory Capability					
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<b>Stormwater Management Plan</b>	Yes	Local	Yes	No	No
<i>Comment: Per NJDEP Storm Water Management Rule (N.J.A.C. 7:8, et seq.). The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999. The Department issued final stormwater rules on February 2, 2004 and four (4) NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities, as well as public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s). Enforced by Planning Board, Master Plan Stormwater Management Plan Element July 25, 2005..</i>					
<b>Stormwater Pollution Prevention Plan</b>	No	Local	No	-	-
<i>Comment: NJDEP Storm Water Management Rules do not require a Tier B municipalities to develop a Stormwater Pollution Prevention Plan.</i>					
<b>Urban Water Management Plan</b>	No	-	No	-	-
<i>Comment: Not Applicable – State Planning Area 5</i>					
<b>Habitat Conservation Plan</b>	No	-	No	-	-
<i>Comment: May develop a conservation plan element in master plan per NJSA 40:5D-28b (8).</i>					
<b>Economic Development Plan</b>	No	-	No	-	-
<i>Comment: Per NJSA 40:55D-28b. (9) There can be a generic Economic Development Element of the County Comprehensive Plan. Municipality can establish Economic Development Commission that can facilitate incentive programs (façade programs, low-interest loans, etc.)</i>					
<b>Shoreline Management Plan</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Community Wildfire Protection Plan</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Community Forest Management Plan</b>	No	-	No	-	-
<i>Comment: Optional accreditation for county and municipalities for reduction of liability, New Jersey Urban and Community Forestry Program (NJUCF).</i>					
<b>Transportation Plan</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Agriculture Plan</b>	No	-	No	-	-
<i>Comment: May develop a farmland preservation plan element per NJSA 40:5D-28b (13).</i>					
<b>Climate Action Plan</b>	No	-	No	-	-
<i>Comment: May develop a green building and environmental sustainability plan element per NJSA 40:5D-28b (16).</i>					
<b>Tourism Plan</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Business Development Plan</b>	No	-	No	-	-
<i>Comment:</i>					
<b>Other: Shade Tree Advisory Committee</b>	Yes	Local	Allowed	No	No
<i>Comment: 40:37-5. Powers; regulations; trees on highways; parks: Except as hereinafter provided, the shade tree commission may exercise exclusive control over the regulation, planting and care of shade and ornamental trees and</i>					



Legal and Regulatory Capability					
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated/Allowed	Has this been integrated? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
shrubbery now situate or which may hereafter be planted in any public highway, park or parkway of the county, including: a. The planting, trimming, spraying, care and protection thereof; b. The regulation and control of the use of the ground surrounding the same so far as may be necessary for their proper growth, care and protection; c. The moving or requiring the removal of any tree or part thereof, dangerous to public safety; d. The care and control of the parks and parkways; e. The encouragement of arboriculture. Amended by L.1958, c. 41, p. 132, s. 2, eff. May 20, 1958.					
Other - Historic Preservation Commission	Yes	Local	Allowed	No	No
Comment: 40:32-6. Acquisition and preservation of historical buildings and data - Any county may acquire, by gift or purchase, any real estate or any interests therein, together with any and all buildings thereon within the limits of the county for historical purposes, or for the purpose of preserving therein or thereon historical data and objects of historical interest.					
Response/Recovery Planning					
Emergency Operations Plan (EOP)	Yes	Local	Yes	No	-
Comment: Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years. Harding Township Emergency Guide. October 2018. <a href="http://www.hardingnj.org/filestorage/75/Harding_Twp_NJ_OEM_Booklet_2018_WEB.pdf">http://www.hardingnj.org/filestorage/75/Harding_Twp_NJ_OEM_Booklet_2018_WEB.pdf</a>					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	No	-	-
Comment:					
Post-Disaster Recovery Plan	Yes	Local	No	No	-
Comment: Enforced by OEMC, EOP. Yes, 12/3/2013					
Continuity of Operations Plan	No	-	No	-	-
Comment:					
Public Health Plan	No	-	No	-	-
Comment:					
Other	No	-	No	-	-
Comment:					

Table 9.14-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes Zoning Officer/Planning Board
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory? -If yes, please describe briefly. -If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes Included in the County's wastewater management plan.

#### ADMINISTRATIVE AND TECHNICAL CAPABILITY

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





**Table 9.14-5. Administrative and Technical Capabilities**

Staff/Personnel Resource	Available?	Department/Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	Yes	Township Engineer
Environmental Board / Commission	Yes	Environmental Commission, Shade Tree Advisory Committee, Historic Preservation Commission
Open Space Board / Committee	Yes	Land Trust
Economic Development Commission / Committee	Yes	Planning Board
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	AlertHarding; Outdoor Warning
Maintenance program to reduce risk	Yes	DPW
Mutual aid agreements	Yes	Police
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer/Planning Board Contractor
Engineers or professionals trained in building or infrastructure construction practices	Yes	Construction Code Official
Planners or engineers with an understanding of natural hazards	Yes	Engineering
Staff with training in benefit/cost analysis	Yes	CFO
Staff with training in green infrastructure	Yes	Engineering
Staff with education/knowledge/training in low impact development	Yes	Engineering
Surveyor	Yes	Engineering
Stormwater engineer	Yes	Engineering
Personnel skilled or trained in GIS applications	Yes	IT
Local or state water quality professional	Yes	New Jersey Highlands Council
Scientist familiar with natural hazards in local area	No	-
Emergency manager	Yes	OEMC
Watershed planner	Yes	Engineer
Environmental specialist	Yes	Engineer/Health
Grant writers	Yes	Business Administrator and Chief of Police/OEMC
Resilience Officer	No	-
Other – Damage Assessment	Yes	Township Engineer

#### FISCAL CAPABILITY

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



Table 9.14-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes – Open Space
User Fees for Water, Sewer, Gas or Electric Service	Yes
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	Yes
State-Sponsored Grant Programs	Hazard Mitigation Grant Program
Development Impact Fees for Homebuyers or Developers	No
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	No

### EDUCATION AND OUTREACH CAPABILITY

The table below summarizes the education and outreach resources available to the Township of Harding.

Table 9.14-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes – Links to Morris County OEM
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes – Township: Facebook PD: Facebook, Twitter, Instagram
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, briefly describe.	Yes – OEM Council
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, briefly describe.	Yes – Township Webpage/Social Media
Do you have any established warning systems for hazard events? • If yes, briefly describe.	Yes – Social Media, Electronic Messaging system, Township webpage

### COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Township of Harding.

Table 9.14-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Class 3	2018
Public Protection (Fire ISO Protection Class)	Yes	Class 5	2012
Storm Ready Certification	No	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	No		





### ADAPTIVE CAPACITY

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating. The Township has access to resources to determine the possible impacts of climate change upon the municipality. The administration is supportive of integrating climate change in policies or actions. Climate change is not currently being integrated into policies/plans or actions (projects/monitoring) within the municipality.

**Table 9.14-9. Adaptive Capacity**

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low
Dam Failure	Medium
Disease Outbreak	Medium
Drought	Low
Earthquake	Medium
Extreme Temperature	Medium
Flood	Medium
Geological Hazards	Low
Harmful Algal Bloom	Low
Hazardous Substances	Medium
Infestation	Low
Severe Weather	Medium
Severe Winter Weather	Medium
Wildfire	Low

### NATIONAL FLOOD INSURANCE PROGRAM

This section provides specific information on the management and regulation of the regulatory floodplain.

**Table 9.14-10. National Flood Insurance Program Compliance**

Criterion	Response
What local department is responsible for floodplain management?	Zoning and Engineering
Who is your floodplain administrator? (name, department/position)	Harding Township Planning Board – Engineer
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	11-28-2001
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets
When was the most recent Community Assistance Visit or Community Assistance Contact?	02-26-1993
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state what they are.	No



Criterion	Response
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> <li>If so, state what they are.</li> </ul>	Township was included in the Hackensack-Passaic Watershed, 02030103 Flood Risk Report. Morris County FEMA maps are preliminary.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> <li>If no, state why.</li> </ul>	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> <li>If so, what type of assistance/training is needed?</li> </ul>	No
Does your jurisdiction participate in the Community Rating System (CRS)? <ul style="list-style-type: none"> <li>If yes, is your jurisdiction interested in improving its CRS Classification?</li> <li>If no, is your jurisdiction interested in joining the CRS program?</li> </ul>	No
How many flood insurance policies are in force in your jurisdiction?* <ul style="list-style-type: none"> <li>What is the insurance in force?</li> <li>What is the premium in force?</li> </ul>	42 \$13,667,700 \$59,725
How many total loss claims have been filed in your jurisdiction?* <ul style="list-style-type: none"> <li>How many claims are still open or were closed without payment?</li> <li>What were the total payments for losses?</li> </ul>	13 3 \$240,098
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No

\*According to FEMA statistics as of 2018 and HUD-Ex 2020.

#### ADDITIONAL AREAS OF EXISTING INTEGRATION

In the performance period since adoption of the 2015 HMP, the Township of Harding made progress on integrating hazard mitigation into other initiatives. The following plans and programs currently integrate components of the HMP and strategy:

- The Township of Harding website identifies addresses in the floodways:  
[http://www.hardingnj.org/filestorage/1068/164/Harding\\_Township\\_Addresses\\_SFHA.pdf](http://www.hardingnj.org/filestorage/1068/164/Harding_Township_Addresses_SFHA.pdf).

#### 9.14.5 Hazard Event History Specific to the Jurisdiction

Morris County has a history of hazard events, as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles in Section 4.4 (Hazard Profiles) and includes a chronology of events that affected Morris County and its jurisdictions. The Township of Harding's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Morris County. Table 9.14-11 provides details regarding municipal-specific loss and damages the Township of Harding experienced during hazard events. Information provided in the table below is based on reference material or local sources.

**Table 9.14-11. Hazard Event History**

Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
January 21-24, 2016	Severe Winter Storm and Snowstorm (DR-4264)	Yes	An impulse from the west coast traversed the midsection of the country, then developed into a low-pressure system as it tracked	The Township experienced significant tree and utility damages.



Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
			across the Gulf States before intensifying along the Carolina coast into a major nor'easter, producing record snowfall in parts of New Jersey on January 23rd. It then moved out to sea after passing by the mid-Atlantic coast early on January 24th. Wind gusts up to 60 MPH produced blizzard conditions as visibilities dropped to one-quarter mile or less in spots.	
March 6-7, 2018	Severe Winter Storm and Snowstorm (DR-4368)	Yes	Precipitation gradually overspread the region during the overnight hours of March 6th to the 7th. 12 to 24 inches were observed across large parts of Morris County. The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages across portions of New Jersey, especially where the heaviest snow was reported.	The Township experienced significant tree and utility damages.

#### 9.14.6 Jurisdiction-Specific Vulnerabilities and Hazard ranking

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Township of Harding.

In an attempt to summarize the confidence level regarding the input utilized to populate the hazard ranking, a gradient of certainty was developed. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and increased understanding of the data utilized to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.



Table 9.14-12. Summary of Risk Assessment Results

Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
<b>Dam Failure</b>	Partial or complete failure of a dam  There are 5 dams in the Township, according to NJDEP.	Population impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		The number of building impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		Economic impacts include dam/building/infrastructure repairs; debris removal/disposal; utility impacts.		Low
<b>Disease Outbreak</b>	Disease Outbreaks which include: Mosquito-Borne Diseases, Tick-Borne Diseases, Campylobacteriosis, Influenza, Mumps, Ebola	Population impacted is dependent on the disease and severity of the outbreak; in some cases immuno-compromised persons are more vulnerable.		Structural impacts due to disease outbreak would be limited.		Economic losses can include County financial impacts to monitor/address outbreaks; lost wages or commercial interruptions; depends on the severity and type of disease outbreak.		Low
<b>Drought</b>	Prolonged drought event - The County is serviced by water supplies who primarily get water from groundwater sources; some surface water sources.	Entire population exposed. Population on surface water supplies may be impacted first; water restrictions/contamination; increased wildfire risk.		Droughts are not expected to cause direct damage to buildings.		Losses include aesthetic, landscape/nursery/agricultural industry impacts.		Low
<b>Earthquake</b>	"100, 500-, 2,500-Year Mean Return Period (MRP) Events evaluated  NEHRP Soils D&E (soft soils that amplify ground shaking are present in the County"	NEHRP D&E:	295	NEHRP D&E:	207	100-year Loss:	\$0	High
		Liquefaction Class 4:	315	Liquefaction Class 4:	192	500-year Loss:	\$1,950,568	
						2,500-year Loss:	\$28,497,719	
<b>Extreme Temperature</b>	Extreme temperature event (heat or cold)	Over 65 Population:	980	Physical impacts due to extreme temperatures would be limited.		Loss of business function is possible due to unexpected repairs (i.e. pipes bursting) or power failures.		Low
		Population Below Poverty Level:	101					
<b>Flood</b>	100- and 500-Year Mean Return Period Event	100-year	108	100-year	90	100-year Loss:	\$47,732,628	High
		500-year	112	500-year	102			
<b>Geological</b>		Class A:	0	Class A:	0	Class A:	0	Moderate



Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
	High Landslide Susceptibility Areas and Areas developed over carbonate rock	Class B:	95	Class B:	43	Class B:	\$21,314,927	
		Carbonate Bedrock:	0	Carbonate Bedrock:	0	Carbonate Bedrock:	\$0	
<b>Harmful Algal Bloom</b>	Any body of water or area adjacent that is susceptible to harmful algal bloom.	Population in contact (e.g., swimming) or drinking water from surface water impacted can result in a range of health effects		General building stock impacts due to harmful algal bloom are not anticipated. Critical facilities (i.e., water treatment plants) could lead to plant closures.		Economic impacts range from recreational closure of impacted waterbodies; cost to sample/monitor/remediate.		Low
<b>Hazardous Substance</b>	Release of a hazardous substance from a fixed site.	Population impacted will depend on the type of material and scale of the incident. May include population within small radii of site.		The degree of damages to a building depends on the scale of the incident.		The degree of damages depends on the scale of the incident.		Low
<b>Infestation</b>	Infestation including: Insects [e.g. Gypsy Moth, Mosquitoes, Spotted Lanternfly, Emerald Ash Borer], White-Tailed Deer, Rodents	Population impacted will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Physical impacts will be limited to indirect impacts from invasive species which affect crops and vegetation.		Economic impact will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Low
<b>Severe Weather</b>	Severe Weather Event	Entire population exposed; The degree of impact to the population depends on the scale of the incident.		Entire building stock is exposed; The degree of impact depends on the scale of the incident.		Annualized Loss:	\$33,319	High
						100 -Year Loss:	\$553,839	
						500-year Loss:	\$2,853,318	
<b>Severe Winter Weather</b>	Severe Winter Weather Event	All residents/commuters/visitors are exposed; socially-vulnerable populations may be at increased risk.		All buildings are exposed; the degree of impact depends on the scale of the incident.		The cost of snow and ice removal and repair of roads/infrastructure can impact operating budgets.		Low
<b>Wildfire</b>	Wildfire Fuel Hazard areas (High, Very High, Extreme)	Wildfire:	11	Wildfire:	10	Wildfire:	\$8,726,112	Moderate



### REPETITIVE FLOOD LOSSES

The following summarizes the repetitive and severe repetitive flood losses in the Township of Harding.

- Number of repetitive loss (RL) properties: 0
- Number of severe repetitive loss (SRL) properties: 0
- Number of RL/SRL properties that have been mitigated: 0

Source: FEMA BureauNet, 2019

### CRITICAL FACILITIES

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain.

**Table 9.14-13. Potential Flood Losses to Critical Facilities and Lifelines**

Name	Type	Exposure		Status of Mitigation
		1% Event	0.2% Event	
No critical facilities are located in the FEMA 1% and 0.2% Flood Hazard Area.				

### ADDITIONAL IDENTIFIED VULNERABILITIES

The jurisdiction has identified the following vulnerabilities within their community:

- Flooding occurs to the following streets: Dickson Mill Road, Long Hill Road, and Lees Hill Road.
- The Office of Emergency Management does not a centralized facility for dispatch, communications, coordination, and event hazard management. Current makeshift emergency operations occur in the municipal board room when needed. A consolidated OEM Center would enable the township more effective operations.
- Power poles are aging.

### HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Township of Harding 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 adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Township of Harding has significant exposure. Refer to Figures 9.14-1 and 9.14-2.

### HAZARD RANKING

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; its potential impacts on people, property, and the economy; community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 4.3 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Morris County as a whole. Therefore, each jurisdiction ranked the degree of risk to each hazard as it pertains to their community factoring in their capabilities to withstand impacts and rebound after the event. The table below summarizes the hazard rankings of potential natural hazards for the Township



of Harding. The Township of Harding has reviewed the Morris County hazard ranking table, as well as its individual results, to reflect the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Township of Harding increased the ranking for wildfire from Low to Medium.

Table 9.14-14. Township of Harding Hazard Ranking Input

Dam Failure	Disease Outbreak	Drought	Earthquake	Extreme Temperature	Flood	Geological Hazard
Medium	High	Medium	Medium	Medium	Medium	Low

Harmful Algal Bloom	Hazardous Substances	Infestation	Severe Weather	Severe Winter Weather	Wildfire
Low	High	Medium	High	High	Medium

### 9.14.7 Mitigation Strategy and Prioritization

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

#### PAST MITIGATION INITIATIVE STATUS

The following table summarizes the jurisdiction's progress on their mitigation strategy identified in the 2015 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 can also be found under 'Capability Assessment' presented previously in this annex.

Table 9.14-15. Status of Previous HMP Mitigation Actions

2015 Action Number Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2020 HMP Update?	
			Check if Yes	Enter 2020 HMP Action #
THD-1 - Engineering study to determine mitigation action for the following streets: Dickson Mill Road, Pleasant Plains Road, Long Hill Road, and Lees Hill Road.	Engineering	The County is currently studying Dickson Mill Road to replace the bridge.	X	2020-Harding-001
THD-2 - Backup power for DPW on 8 Millbrook Road.	Engineering	Complete – Generator is acquired	-	-
THD-3 - Develop all-hazards public education and outreach program for hazard mitigation and preparedness	OEM	Complete - Ongoing Capability	-	-
THD-4 - Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations.	Administration	Complete - Ongoing Capability	-	-



In addition to the above progress, the Township of Harding did not identify other mitigation projects/activities that were completed but not identified in the 2015 HMP mitigation strategy.

#### **PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE**

The Township of Harding participated in a risk assessment workshop in November 2019 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Township of Harding participated in a mitigation action workshop in March 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Morris County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; and 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 Flood prone Structures* (March 2007) and FEMA *Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards* (January 2013). Section 6 (Mitigation Strategy) and Appendix F (Mitigation Strategy Supplement) provide a more complete description of the Mitigation Toolbox and its resources.

As discussed in Section 6 (Mitigation Strategy), 14 criteria were used to evaluate each action, including an evaluation of the benefits and costs. For each new mitigation action, a numeric rank was assigned (-1, 0, or 1) for each of the 14 evaluation criteria. The results of this evaluation, in addition to input from the jurisdiction, were then used to prioritize the mitigation initiatives as 'High', 'Medium', or 'Low.' Table 9.14-17 summarizes the evaluation of each mitigation initiative and the resulting priority, listed by Action Number.



Table 9.14-16. Proposed Hazard Mitigation Initiatives and Associated Priority

Initiative Number	Mitigation Initiative Name	Description of the Problem	Description of the Solution	New or Existing Assets?	Hazard(s ) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2020-Harding-001	New Vernon Area Flooding	Flooding occurs to the following streets: Dickson Mill Road, Long Hill Road, and Lees Hill Road.	Perform engineering study to determine the mitigation actions for Dickson Mill Road. County to mitigate Long Hill and Lees Hill Roads.	Existing	Flood, Severe Storm, Severe Winter Weather	1, 4	<u>Engineering</u> , Administration	HMGP, PDM, municipal budget	High	High	Long	High	SIP	PP, SP
2020-Harding-002	Emergency Operations Management Center	The center currently lacks a central location for communications, dispatch services, coordination of logistics, and distribution of municipal assets.	Repurpose municipally owned facility to accommodate OEM Center	Existing	All	1, 2, 3, 4	<u>OEM</u> , Engineering, Administration	HMGP, PDM, municipal budget	High	High	Long	High	SIP, EAP	PI, ES
2020-Harding-003	Power Poles	Power Poles - aging infrastructure	Work with electric utility to upgrade and harden power grid.	Existing	All	1, 4	Administration, Electric Company	Municipal budget	High	High	Short	High	SIP	PP, PI, ES
2020-Harding-004	Flood Damage Prevention Ordinance (FDPO)	In FDPO in Part II, Article XIX: Flood Damage Prevention, the Planning Board is designated the administrative agency, but the engineer is the floodplain manager.	Update FDPO. Town is looking to use model D from <a href="https://www.nj.gov/dep/floodcontrol/modelord.htm">https://www.nj.gov/dep/floodcontrol/modelord.htm</a> for the ordinance.	New	Flood	1, 4	<u>Administration</u> , Engineering, Planning Board	Municipal	High	Low	Short	Medium	LPR	PR
2020-Harding-005	Dam Coordination	Mt. Kemble Lake, Primrose Pond, Silver Lake, Glen Alpin No. 1, and Glen Alpin No. Dams are located in but owned outside of the jurisdiction of the Township.	Coordinate with the State to ensure any deficiencies are addressed in the future and include in the State HMP.	Existing	Dam Failure, Earthquake, Flood, Geological Hazards, Severe Weather, Severe Winter Weather	1, 4	<u>Engineering</u> , FPA, OEM	Municipal budget	Medium	Medium	Short	Medium	SIP	SP, ES



Notes:

Acronyms and Abbreviations:

CAV	Community Assistance Visit
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
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

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

**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 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. 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 preserve or restore the functions of natural systems. 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. 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 9.14-17. Summary of Prioritization of Actions and Action Priorities**

Initiative Number	Mitigation Initiative Name	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
2020-Harding-001	New Vernon Flooding	1	1	0	1	1	1	0	1	1	1	1	0	1	1	11	High



Initiative Number	Mitigation Initiative Name	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
2020-Harding-002	Emergency Operations Management Center	1	1	1	1	1	1	0	0	1	1	1	1	1	1	12	High
2020-Harding-003	Power Poles	1	1	1	1	1	1	1	0	1	1	1	1	0	1	12	High
2020-Harding-004	FDPO	1	1	1	1	0	0	0	0	1	0	0	0	1	1	7	Medium
2020-Harding-005	Dam Coordination	1	1	1	1	0	0	0	0	1	0	1	1	0	1	8	Medium

Notes: Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions.



**Table 9.14-18. Analysis of Mitigation Actions by Hazard and Category**

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
<b>Dam Failure</b>	004, 005	004, 005	005	004, 005,	004, 005	005	004, 005	004, 005
<b>Disease Outbreak</b>	-	-	-	-	002	-	-	-
<b>Drought</b>	-	-	-	-	002	-	-	-
<b>Earthquake</b>	-	-	-	-	002, 003, 005	-	-	-
<b>Extreme Temperature</b>	-	-	-	-	001, 002, 003, 004, 005	-	-	-
<b>Flood</b>	004	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005
<b>Geological</b>	-	-	-	-	002, 003, 005	-	-	-
<b>Harmful Algal Bloom</b>	-	-	-	-	002	-	-	-
<b>Hazardous Substance</b>	-	-	-	-	002	-	-	-
<b>Infestation</b>	-	-	-	-	002	-	-	-
<b>Severe Weather</b>	-	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005
<b>Severe Winter Weather</b>	-	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005	001, 002, 003, 004, 005
<b>Wildfire</b>	002, 003	002, 003	002, 003	002, 003	002, 003	002, 003	002, 003	002, 003

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

**RED** = high ranked hazard

**ORANGE** = medium ranked hazard

**YELLOW** = low ranked hazard

### 9.14.8 Staff and Local Stakeholder Involvement in Annex Development

The Township of Harding followed the planning process described in Section 2 (Planning Process). This annex was developed over the course of several months with input from many jurisdiction representatives. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization. The following table summarizes who participated and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

**Table 9.14-19. Contributors to the Annex**

Entity	Title	Method of Participation
Lorene Wright	Assistant Administrator	Attended Annex Meeting on 9/26/2019, provided comments
Paul Fox	Township Engineer	Attended Annex Meeting on 9/26/2019, provided comments
Erik Heller	Police Chief	Reviewed and provided comments on draft annex



Figure 9.14-1. Township of Harding Hazard Area Extent and Location Map 1

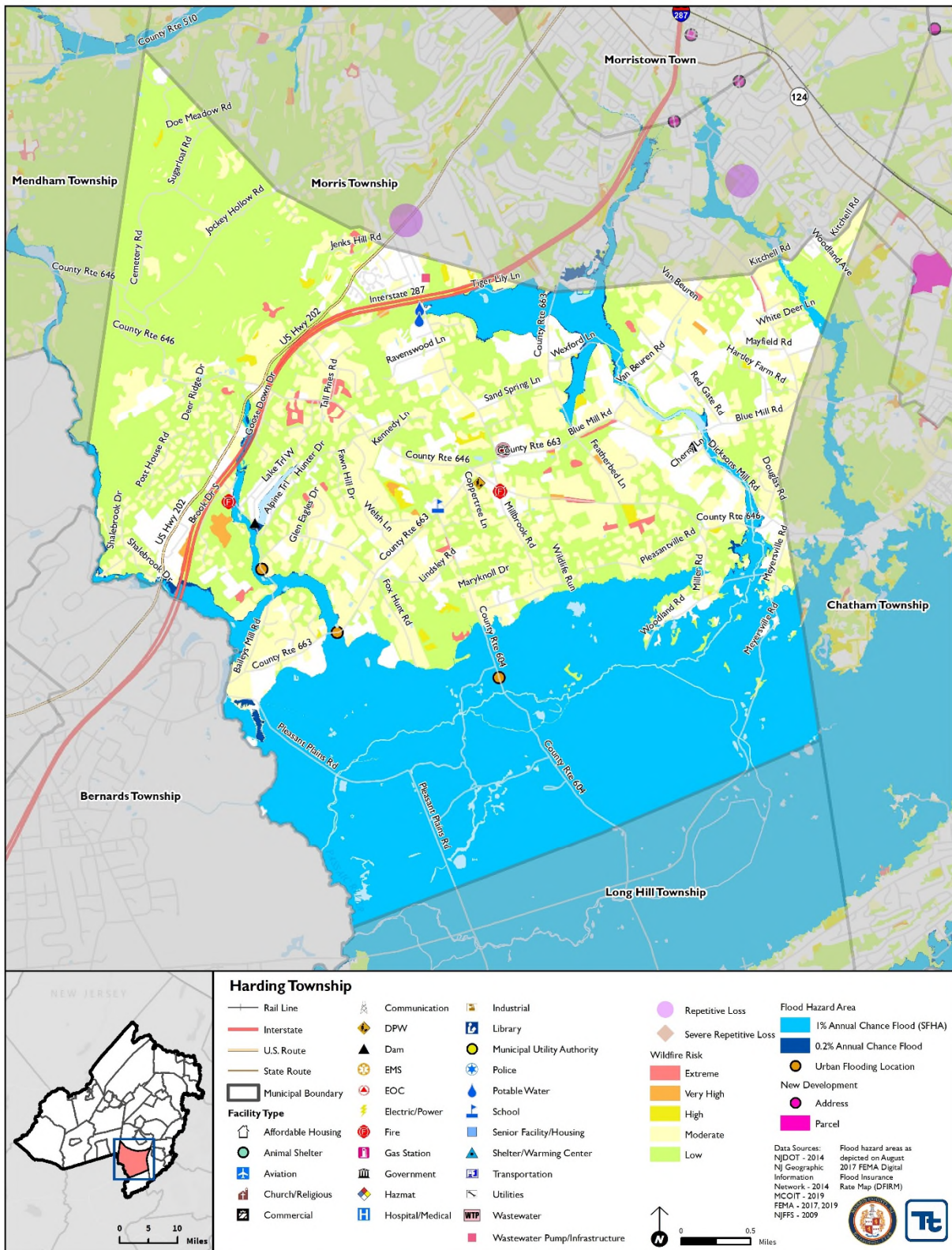
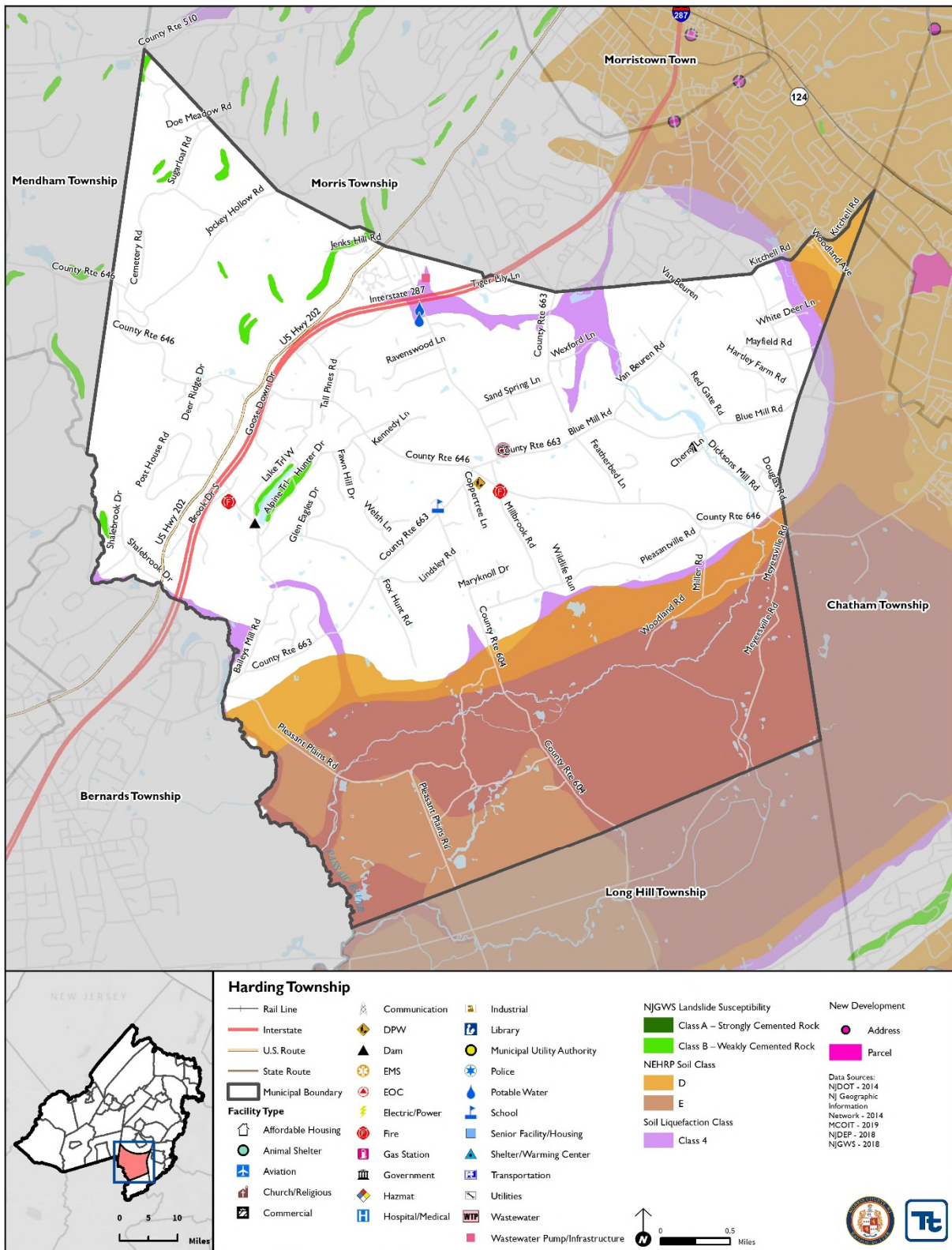




Figure 9.14-2. Township of Harding Hazard Area Extent and Location Map 2





Name of Jurisdiction:

Township of Harding

Name and Title Completing Worksheet:

L. Wright

Action Worksheet			
<b>Project Name:</b>	New Vernon Area Flooding		
<b>Project Number:</b>	2020-Harding-001		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm, Severe Winter Weather		
<b>Description of the Problem:</b>	Flooding occurs to the following streets: Dickson Mill Road, Long Hill Road, and Lees Hill Road.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Perform engineering study to determine the mitigation actions for Dickson Mill Road. County to mitigate Long Hill and Lees Hill Roads.		
<b>Is this project related to a Critical Facility or Lifeline?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Level of Protection:</b>	High	<b>Estimated Benefits (losses avoided):</b>	High
<b>Useful Life:</b>	TBD	<b>Goals Met:</b>	1, 4
<b>Estimated Cost:</b>	High	<b>Mitigation Action Type:</b>	SIP
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Medium
<b>Estimated Time Required for Project Implementation:</b>	Short	<b>Potential Funding Sources:</b>	HMGP, PDM, municipal budget
<b>Responsible Organization:</b>	Engineering	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Perform engineering study	Medium	Identifies cost effective solutions
	Reroute roads to avoid flooding	High	Not cost effective
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Name of Jurisdiction:

Township of Harding

Name and Title Completing Worksheet:

L. Wright

Action Worksheet		
Project Name:	New Vernon Area Flooding	
Project Number:	2020-Harding-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	



Name of Jurisdiction:

Township of Harding

Name and Title Completing Worksheet:

L. Wright

Action Worksheet			
<b>Project Name:</b>	OEM Facility		
<b>Project Number:</b>	2020-Harding-002		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	All		
<b>Description of the Problem:</b>	The center currently lacks a central location for communications, dispatch services, coordination of logistics, and distribution of municipal assets.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Repurpose municipally owned facility to accommodate OEM Center.		
<b>Is this project related to a Critical Facility or Lifeline?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Level of Protection:</b>	High	<b>Estimated Benefits (losses avoided):</b>	High
<b>Useful Life:</b>	TBD	<b>Goals Met:</b>	1, 4
<b>Estimated Cost:</b>	\$100,000 to 150,000	<b>Mitigation Action Type:</b>	Emergency operations plan, Hazard mitigation
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Short
<b>Estimated Time Required for Project Implementation:</b>	Short	<b>Potential Funding Sources:</b>	HMGP, PDM, Municipal Budget
<b>Responsible Organization:</b>	OEM, Engineering, DPW	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Emergency Services, Hazard Mitigation
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Current problem continues
	Repurpose municipal facility	\$100,000-\$150,000	Cost effective solution
			Not feasible
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Name of Jurisdiction:

Township of Harding

Name and Title Completing Worksheet:

L. Wright

Action Worksheet		
Project Name:	DPW Backup Power	
Project Number:	2020-Harding-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	1	
Agency Champion	1	
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	