



9.13 BOROUGH OF HOPATCONG

This section presents the jurisdictional annex for the Borough of Hopatcong. The annex includes a general overview of the Borough of Hopatcong; an assessment of the Borough of Hopatcong’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.

9.13.1 Hazard Mitigation Planning Team

The following individuals are the Borough of Hopatcong’s identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

Table 9.13-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact
Name / Title: Wade Crowley, OEM Coordinator Address: 111 River Styx Road, Hopatcong, NJ 07843 Phone Number: (973) 390-0988 Email: wcrowley@hopatcong.org		Name / Title: Ron Tappan, Administrator Address: 111 River Styx Road, Hopatcong, NJ 07843 Phone Number: (973) 770-1200 Email: rtappan@hopatcong.org
NFIP Floodplain Administrator		
Name / Title: William O'Connor, Construction Official Address: 111 River Styx Road, Hopatcong, NJ 07843 Phone Number: (973)770-1200 Email: woconner@hopatcong.org		
Name	Title	Method of Participation
Wade Crowley	OEM Coordinator	Primary point of contact, provided data and information, contributed to mitigation strategy; attended the risk assessment meeting and mitigation strategy workshop
Ron Tappan	Administrator	Alternate point of contact
William O'Connor	Construction Official	NFIP floodplain administrator
Samantha Anello	Engineer	Provided data and information; contributed to mitigation strategy; attended the risk assessment meeting and mitigation strategy workshop

9.13.2 Jurisdiction Profile

Hopatcong Borough is located in southwestern Sussex County. It is bordered to the north by Sparta Township, to the east and south by Morris County, and to the west by Byram Township and Stanhope Borough. The Borough has a total area of 12.4 square miles. The following unincorporated communities are located within the Borough: Northwood, Byram Cover, Sperry Springs, Bonaparte Landing, Hopatcong Hills, and Hopatcong Heights. Streams in the Borough include: the Musconetcong River which makes up the eastern border of the Borough, and Lubbers Run. A portion of Lake Hopatcong is found in eastern Hopatcong Borough.

According to the U.S. Census, the 2010 population for the Borough of Hopatcong was 15,147. The estimated 2018 population was 14,362, a 5.2 percent decrease from the 2010 Census. Data from the 2018 U.S. Census American Community Survey indicate that 5.1 percent of the population is 5 years of age or younger and 13.7 percent 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.





9.13.3 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 9.13-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development.

Table 9.13-2. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019	
Number of Building Permits for New Construction Issued Since the Previous HMP										
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single and Two-Family Units										
Multi-Family										
Other (commercial, mixed-use, etc.)										
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		
Recent Major Development and Infrastructure from 2015 to Present										
Unavailable at this time.										
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years										
Unavailable at this time.										

* Only location-specific hazard zones or vulnerabilities identified.
SFHA = Special Flood Hazard Area

9.13.4 Capability Assessment

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

- 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 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 Borough of Hopatcong identified specific integration





activities that will be incorporated into municipal procedures; these actions 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 Borough of Hopatcong and where hazard mitigation has been integrated.

Table 9.13-3. Planning, Legal and Regulatory Capability

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Codes, Ordinances, & Requirements					
Building Code	Yes	State & Local	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> 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 The Borough is responsible for this code in compliance with State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.). 					
Zoning Code	Yes	Local	Yes – if municipality has a Planning Board	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> 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. The Zoning Department is responsible for this code in compliance with Chapter 242- Zoning. 					
Subdivisions	Yes	Local	Yes – if municipality has a Planning Board	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> P.L.1975, c.291 (C.40:55D-47): 40:55D-37. Grant of power; referral of proposed ordinance; county planning board approval a. The governing body may by ordinance require approval of subdivision plats by resolution of the planning board as a condition for the filing of such plats with the county recording officer and approval of site plans by resolution of the planning board as a condition for the issuance of a permit for any development, except that subdivision or individual lot applications for detached one or two dwelling-unit buildings shall be exempt from such site plan review and approval; provided that the resolution of the board of adjustment shall substitute for that of the planning board whenever the board of adjustment has jurisdiction over a subdivision or site plan pursuant to subsection 63b. of this act . Dictated by the Municipal Land Use Law. NJ Statute 40:27-6.2 - the board of commissioners 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. The Land Use Board is responsible for this ordinance in compliance with Chapter 209- Subdivision of Land. 					
Stormwater Management	Yes	State & Local	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> See Title 7 of the NJ Administrative Code, N.J.A.C. 7:8 The Engineering Department is responsible for this ordinance in compliance with Chapter 242 – Zoning, Stormwater Management Requirements. 					
Post-Disaster Recovery	No	-	No	-	-
<i>Comment:</i>					
Real Estate Disclosure	No	State, Division of Consumer Affairs	Yes	No	-
<i>Comment:</i> N.J.A.C. 13:45A-29.1 - 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 estimated completion dates for					





	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
<i>improvements, fees for services and amenities, the type of title and ownership interest being offered, its proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.</i>					
Growth Management	Yes	State	Yes – if municipality has a Planning Board	No	-
Comment: <ul style="list-style-type: none"> State Mandated on a municipal level. See Zoning Ordinance; Also - 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. The Administration is responsible for these ordinances, which are due to Highlands. 					
Site Plan Review	Yes	State, County & Local	Yes – if municipality has a Planning Board	Yes	-
Comment: <ul style="list-style-type: none"> 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 commissioners 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. 40:27-6.10 In order that county planning boards shall have a complete file of the planning and zoning ordinances of all municipalities in the county, each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality in effect on the effective date of this act 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. Such notice shall be given to the county planning board at least 10 days prior to the public hearing thereon by personal delivery or by certified mail of a copy of the official notice of the public hearing together with a copy of the proposed ordinance. The Land Use Board is responsible for these requirements in compliance with Chapter 191- Site Plan Review. 					
Environmental Protection	Yes	Local	No	Yes	-
Comment: <ul style="list-style-type: none"> Chapter 143, Lawn Fertilizers Chapter 147, Littering Chapter 154 Natural Area Preserve 					
Flood Damage Prevention	Yes	Federal, State & Local	Yes	Yes	2021-Hopatcong-009
Comment: <ul style="list-style-type: none"> 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. Regulations for the Flood Control Hazards Act were adopted in 2007 and amended effective June 20, 2016. The Construction Department is responsible for this ordinance in compliance with Chapter 124-Floodplain Management. 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: <ul style="list-style-type: none"> 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. The Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement. 					
Wellhead Protection	No	-	No	-	-



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
<i>Comment:</i>					
Emergency Management	Yes	Local	No	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> Chapter 17, Fire Department Chapter 39, Police Department 					
Climate Change	No	-	No	-	-
<i>Comment:</i>					
Disaster Recovery Ordinance	No	-	No	-	-
<i>Comment:</i>					
Disaster Reconstruction Ordinance	No	-	No	-	-
<i>Comment:</i>					
Municipal Separate Storm Sewer System (MS4)	Yes	Local	No	Yes	-
<i>Comment: The Engineering Department is responsible for this ordinance in compliance with Chapter 203 – Storm Sewer System.</i>					
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes	Local	No	Yes	-
<i>Comment: The Borough is responsible for these ordinances in compliance with Chapter 100 – Deer Management, Chapter 132 – Highlands, and Chapter 154 – Natural Area Preserve.</i>					
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> 2018 Revised NJ Statute 40:27-2; the county planning board shall make and adopt a master plan for the physical development of the county. The master plan of a county, with the accompanying maps, plats, charts, and descriptive and explanatory matter, shall show the county planning board's recommendations for the development of the territory covered by the plan, and may include, among other things, the general location, character, and extent of streets or roads, viaducts, bridges, waterway and waterfront developments, parkways, playgrounds, forests, reservations, parks, airports, and other public ways, grounds, places and spaces; the general location and extent of forests, agricultural areas, and open-development areas for purposes of conservation, food and water supply, sanitary and drainage facilities, or the protection of urban development, and such other features as may be important to the development of the county. The county planning board shall encourage the co-operation of the local municipalities within the county in any matters whatsoever which may concern the integrity of the county master plan and to advise the board of chosen commissioners with respect to the formulation of development programs and budgets for capital expenditures. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976 40:55D-28 provides the required components of a municipal Master Plan and requires that each municipality prepare a master plan and update it every 6 years. Further, all zoning ordinances must be consistent with the Master Plan or will not be benefitted from a presumption of validity. The Land Use Board is responsible for this plan in compliance with 2014 Master Plan Reexamination Report. 					
Capital Improvement Plan	Yes	Local	No	Yes	-
<i>Comment: The Administration is responsible for this plan</i>					
Disaster Debris Management Plan	No	-	No	-	2021-Hopatcong-010
<i>Comment:</i>					
Floodplain or Watershed Plan	No	-	No	-	-
<i>Comment:</i>					
Stormwater Management Plan	No	State & Local	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> The Stormwater Management rules (N.J.A.C. 7:8) rules were published in the February 2, 2004 NJ Register. These rules set forth the required components of regional and municipal stormwater management plans and establish the stormwater management design and performance standards for new (proposed) development. The design and performance standards for new development include groundwater recharge, runoff quantity controls, and runoff quality controls. The rules emphasize, as a primary consideration, the use of nonstructural stormwater management techniques including minimizing disturbance, minimizing 					



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
<p><i>impervious surfaces, minimizing the use of stormwater pipes, preserving natural drainage features, etc. The rules also set forth requirements for groundwater recharge, stormwater runoff quantity control, stormwater runoff quality control, and the prohibition of major development to be located within or to discharge runoff from the major development into a 300-foot riparian zone without prior authorization from the Department under the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13.</i></p>					
Stormwater Pollution Prevention Plan	Yes/No	If yes, who enforces?	Yes	Yes/No	Yes/No
<p>Comment:</p> <ul style="list-style-type: none"> The Phase II New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program (NJPDES) rules (N.J.A.C. 7:14A) were published in the February 2, 2004, NJ Register. These NJPDES rules are intended to address and reduce pollutants associated with existing stormwater runoff. The NJPDES rules establish a regulatory program for existing stormwater discharges as required under the Federal Clean Water Act. These NJPDES rules govern the issuance of permits to entities that own or operate small municipal separate storm sewer systems, known as MS4s. Under this program, permits must be secured by municipalities, certain public complexes such as universities and hospitals, and State, interstate and federal agencies that operate or maintain highways. The permit program establishes the Statewide Basic Requirements that must be implemented to reduce nonpoint source pollutant loads from these sources. The Statewide Basic Requirements include measures such as: the adoption of ordinances (litter control, pet waste, wildlife feeding, proper waste disposal, etc.); the development of a municipal stormwater management plan and implementing ordinance(s); requiring certain maintenance activities (such as street sweeping and catch basin cleaning); implementing solids and floatables control; locating discharge points and stenciling catch basins; and a public education component. 					
Urban Water Management Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Habitat Conservation Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Economic Development Plan	No	-	No	-	-
Comment:					
Shoreline Management Plan	Yes/No	If yes, who enforces?	Yes – if located in a coastal zone	Yes/No	Yes/No
<p>Comment:</p> <ul style="list-style-type: none"> 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. 					
Community Wildfire Protection Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Community Forest Management Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Transportation Plan	No	-	No	-	-
Comment:					
Agriculture Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Climate Action Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Tourism Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Business Development Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Other: Open Space Plan	Yes	Local	No	Yes	-



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Comment:					
<ul style="list-style-type: none"> The Open Space Department is responsible for this plan in compliance with Open Space and Recreation Plan Update, 2011. 					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes	Yes	-
Comment:					
<ul style="list-style-type: none"> Each county and municipality in the State shall prepare a written Emergency Operations Plan with all appropriate annexes necessary to implement the plan. Each Emergency Operations Plan shall be adopted no later than one year after the State Emergency Planning Guidelines have been adopted by the State Office of Emergency Management and shall be evaluated at such subsequent scheduled review of the State Emergency Operations Plan. L.1989, c.222, s.19. The Office of Emergency Management is responsible for this plan in compliance with Emergency Operation Plan. 					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Post-Disaster Recovery Plan	Yes	Local	No	Yes	-
Comment: The Office of Emergency Management is responsible for this plan in compliance with the Emergency Operation Plan.					
Continuity of Operations Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Public Health Plan	Yes/No	Yes/No	No	Yes/No	Yes/No
Comment:					
Other Plans	Yes	State & Local	No	Yes	-
Comment:					
<ul style="list-style-type: none"> The Highlands Council is responsible for these plans in compliance with Borough of Hopatcong Highlands Environmental Resource Inventory, 2013. 					

Table 9.13-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes/No
Does your jurisdiction have the ability to track permits by hazard area?	Yes/No
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/No

ADMINISTRATIVE AND TECHNICAL CAPABILITY

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

Table 9.13-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use Board
Mitigation Planning Committee	Yes	OEM
Environmental Board / Commission	Yes	Environmental Committee
Open Space Board / Committee	Yes	Open Space Board





Staff/Personnel Resource	Available?	Department/Agency/Position
Economic Development Commission / Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes/No	
Maintenance program to reduce risk	Yes	OEM
Mutual aid agreements	Yes	Fire Department/EMS/OEM
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Land Use Board, Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Borough Engineer
Planners or engineers with an understanding of natural hazards	Yes	Borough Engineer
Staff with training in benefit/cost analysis	Yes	Administrator
Staff with training in green infrastructure	Yes/No	
Staff with education/knowledge/training in low impact development	Yes/No	
Surveyor	Yes	Borough Engineer
Stormwater engineer	Yes/No	
Personnel skilled or trained in GIS applications	No	-
Local or state water quality professional	Yes/No	
Scientist familiar with natural hazards in local area	No	-
Emergency manager	Yes	OEM
Watershed planner	Yes/No	
Environmental specialist	Yes/No	
Grant writers	Yes	Millennium
Resilience Officer	No	-
Other: Professionals trained in conducting damage assessments	Yes	Construction

FISCAL CAPABILITY

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

Table 9.13-6. 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
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	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Clean Water Act 319 Grants (Nonpoint Source Pollution)	Yes/No
Other: Open Space Acquisition Funding Programs	Yes





EDUCATION AND OUTREACH CAPABILITY

The table below summarizes the education and outreach resources available to the Borough of Hopatcong.

Table 9.13-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Yes/No
Do you have personnel skilled or trained in website development?	Yes/No
Do you have hazard mitigation information available on your website? -If yes, briefly describe.	Yes, some information is available through Emergency Management and the Fire Department.
Do you use social media for hazard mitigation education and outreach? -If yes, briefly describe.	Yes; Facebook and Twitter
Do you have any citizen boards or commissions that address issues related to hazard mitigation? -If yes, briefly describe.	The Borough of Hopatcong has an Emergency Management Plan in effect, which contains procedures, resources, departments and agencies to keep the Borough in a state of readiness in case an emergency should occur, and to be implemented as need arises. Continuing review, up-dating and implementation of the Plan is the responsibility of the Emergency Management Council. The Emergency Management Council consists of ten members appointed by the Mayor. Of the ten members one is appointed Coordinator and four others as Deputies. The membership cuts across Borough Departments, Hopatcong School District, churches, and local organizations.
Do you have any other programs already in place that could be used to communicate hazard-related information? If yes, briefly describe.	Health Clinic, Fire Prevention Bureau

COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Borough of Hopatcong.

Table 9.13-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	6	Approx. 2013
Public Protection (Fire ISO Protection Class)	No	-	-
Storm Ready Certification	No	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	Yes	Bronze	December 16, 2020

N/A = Not Applicable. NP = Not Participating. - = Unavailable.

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.

Table 9.13-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - Strong/Moderate/Weak
Dam Failure	Weak
Disease Outbreak	Moderate
Drought	Weak
Earthquake	Weak
Flood	Weak
Geologic	Weak
Hazardous Materials	Weak
Hurricane and Tropical Storm	Moderate
Invasive Species	Strong
Nor’Easter	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate
Wildfire	Weak

Notes:
 Strong = Capacity exists and is in use; Moderate = Capacity may exist, but is not used or could use some improvement;
 Weak = Capacity does not exist or could use substantial improvement; Unsure = Not enough information is known to assign a rating.

NATIONAL FLOOD INSURANCE PROGRAM

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

Table 9.13-10. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Construction Department
Who is your floodplain administrator? (name, department/position)	William O'Connor, Construction Official
Are any certified floodplain managers on staff in your jurisdiction?	
What is the date that your flood damage prevention ordinance was last amended?	July 6, 2011
Does your floodplain management program meet or exceed minimum requirements? -If exceeds, in what ways?	The program meets the minimum requirements.
When was the most recent Community Assistance Visit or Community Assistance Contact?	February 3, 1994
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? -If so, state what they are.	No
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? -If no, state why.	Yes





Criterion	Response
Does your floodplain management staff need any assistance or training to support its floodplain management program? - If so, what type of assistance/training is needed?	The FPA would welcome any continuing education or certification trainings on floodplain management if offered in the County.
Does your jurisdiction participate in the Community Rating System (CRS)? -If yes, is your jurisdiction interested in improving its CRS Classification? -If no, is your jurisdiction interested in joining the CRS program?	No, and the community hasn't considered joining.
How many flood insurance policies are in force in your jurisdiction?*	11 policies
-What is the insurance in force?	\$2,807,000 insurance in force
-What is the premium in force?	\$5,849 premium in force
How many total loss claims have been filed in your jurisdiction?*	12 claims
-How many claims are still open or were closed without payment?	\$54,193 in payments
-What were the total payments for losses?	
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 October 13, 2020
Reference: FEMA 2020

ADDITIONAL AREAS OF EXISTING INTEGRATION

- **Sustainable Jersey:** The Borough of Hopatcong recently was awarded Bronze certification in the Sustainable Jersey Program. The Borough earned credit in the following areas related to hazard mitigation:
 - *Community Education and Outreach:* In September 2019, the Borough had a unique town wide clean-up in which cleaned up areas that were prone to litter with stagnant water and could be infested with mosquitoes. Paige Lockburner of Sussex County Mosquito Control gave a presentation on litter and how it aids in the breeding of mosquitos as well as the life span of mosquitos themselves.
 - *Fleet Inventory:* Hopatcong's fleet is currently comprised of sedans, vans, light and heavy duty trucks, and other equipment for more specialized fire and emergency services. The Borough's trucks are maintained regularly by staff mechanics and local, specialized, automotive and truck repair businesses. The Borough conducts Motor Vehicle Records abstract reports, once a year for all full time, part time or seasonal employees and volunteers who drive a municipal or personal vehicle as part of their job responsibilities. The Borough conducts Driver's Training and Instruction both internally and externally for all DPW employees as seasons and situations are identified. Hopatcong's fleet of vehicles are continually being replaced with more fuel efficient models when available.
 - *HAB Innovative Project:* In mid-July 2020 Hopatcong Borough installed a pilot project to remedy the harmful algal blooms (HAB's) that closed Lake Hopatcong last summer and caused extreme recreational and economic distress to the area. Water and air quality around the lake was affected and found to be toxic for pets and swimmers. The 60-acre Crescent Cove section of Hopatcong is one of the most impaired HAB areas on the lake and has been battling algal blooms for years prior to last year's closing. For this reason, it was the perfect site for the pilot project. Hopatcong's mayor, Michael Francis, did considerable research and settled on a bottom-diffused aeration system of controlling algal blooms for which the borough received a \$145,680 grant from the DEP to purchase/install the system to demonstrate its effectiveness in the prevention, mitigation, and control of HAB's . The project has the potential of providing the state with validated results on whether this technology offers promise for the rest of Lake Hopatcong and other bodies of water in NJ. The project uses EverBlue-Lakes micro-porous ceramic aeration diffuser technology consisting of one land-based compressor system and 38 in-lake diffusers connected by a self-sinking airline. 10 diffusers form a Bubble Curtain at the mouth of the cove to reduce surface algal scums and floating weeds by keeping them from entering the treatment





area. 28 additional diffusers are situated throughout Crescent Cove to circulate and aerate the remaining target area. Testing will be on-going and results will be accumulated and reported at the end of one year as required by the grant. The objective is to maintain Algal cell counts below the threshold of 20,000 cells/millilitre. If this pilot project is successful similar aeration systems could be installed elsewhere on LH and around NJ, and Crescent Cove will be free of HAB's.

- o *Environmental Commission:* The Hopatcong Environmental Commission is one of the more active organizations in the Borough of Hopatcong. The group has had a long history of service to the town and in the last several years has become very active in organizing and promoting green events and coordinating programs that benefit the community such as Town Cleanup and Free Trees to residents through the NJ Tree Recovery Program. In addition, they have worked with the LHF on lake clean up and screening for invasive aquatic weeds. Members assist the Musconetcong Water Assoc in water testing of the Musconetcong River downstream from its headwaters of Lake Hopatcong and they have marked storm drains throughout the borough to curb dumping.
- o *Tree Protection Ordinance:* The ordinance prohibits the uncontrolled destruction, removal and cutting of trees and takes into consideration the protection of old growth forests, trees of historical and botanical rarity.

OPPORTUNITIES FOR FUTURE INTEGRATION

- **Flood Damage Prevention Ordinance:** The Borough will update the Flood Damage Prevention Ordinance to include freeboard (2021-Hopatcong-003).

9.13.5 Hazard Event History Specific to the Jurisdiction

Sussex 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 4.3 (Hazards of Concern) and includes a chronology of events that affected Sussex County and its jurisdictions. The Borough of Hopatcong's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Sussex County. Table 9.13-11 provides details regarding municipal-specific loss and damages the jurisdiction experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.13-11. Hazard Event History

Date(s) of Event	Event Type (disaster declaration if applicable)	Sussex County Designated?	Summary of Event	Summary of Local Damages and Losses
January 22, 2016 - January 24, 2016	DR-4264: Severe Winter Storm and Snowstorm	Yes	A major nor'easter, produced record snowfall and blizzard conditions in parts of New Jersey on January 23 rd and 24 th .	Although the County was impacted, the Borough did not report damages.
January 20, 2020 and continuing	EM-3451, DR-4488: COVID-19 Pandemic	Yes	The coronavirus pandemic resulted in the need for shutdowns and social distancing and mask requirements.	The Borough was subject to closures and masking and social distancing requirements.
August 4, 2020	Tropical Storm Isaias (Declaration to be determined)	Yes	Tropical Storm Isaias	High winds resulted in falling trees and branches.

Source: FEMA 2020, NOAA NCEI 2020





9.13.6 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. Refer to Section 4.2 (Methodology and Tools) and Section 4.4 (Hazard Ranking) for a detailed summary for the Borough of Hopatcong risk assessment results and data used to determine the hazard ranking discussed later in this section.

HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Borough of Hopatcong 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 Borough of Hopatcong has significant exposure.

REPETITIVE FLOOD LOSSES

The following summarizes the repetitive and severe repetitive flood losses in the Borough of Hopatcong.

- Number of repetitive loss (RL) properties: 1
- Number of severe repetitive loss (SRL) properties: 0
- Number of RL/SRL properties that have been mitigated: 0

Source: FEMA 2019

Note: The number of SRL properties excludes RL properties.

CRITICAL FACILITIES

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

Table 9.13-12. Critical Facilities and Lifelines Flood Exposure

Name	Type	Exposure	
		1% Event	0.2% Event
22-247 Dallis Pond Dam	Dam	X	X
25-42 Lake Hopatcong	Dam	X	X

Source: Sussex County Planning Partnership 2020

Note: *Identified lifeline

IDENTIFIED ISSUES AND PROBLEM AREAS

The jurisdiction has identified the following vulnerabilities within their community:

- Backup power sources are necessary to maintain critical services for critical facilities. The Borough has entered into a mutual aid agreement with the St. Jude Church Parish to be an emergency shelter. The Parish lacks a backup power source.
- A new chipper is needed to help with storm clean up as most storms cause tree and utilities damage in the Borough.
- Nutrients entering the lake through stormwater contribute to harmful algal blooms. Harmful algal blooms present a health concern and are damaging to the environment.





- The Borough requires an upgraded radio system that can be used by all our emergency services to better coordinate emergency response in the town during storms and other emergencies.
- The Ambulance Squad building is over 40 years old and is deteriorating.
- The Borough has one unmitigated repetitive loss property.
- The Borough would like to enhance existing outreach and develop additional hazard outreach.
- The Borough’s flood damage prevention ordinance lacks the state mandated freeboard requirement.
- The Borough lacks a Disaster Debris Management Plan.

HAZARD RANKING

This section summarizes the jurisdiction’s primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Section 4 (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 development of mitigation actions, targeting those hazards with the highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Sussex County as a whole. Therefore, the Borough of Hopatcong ranked each hazard’s degree of risk 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 hazards for the Borough of Hopatcong. The Borough of Hopatcong has reviewed the Sussex County hazard ranking table and has provided input to its individual results to reflect the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Borough of Hopatcong indicated the following reasons why hazard rankings have changed since the 2016 HMP:

- The Borough changed the hazard ranking for drought from medium to low.
- The Borough changed the hazard ranking for flood from medium to low.
- The Borough changed the hazard ranking for hazardous materials from medium to low.
- The Borough changed the hazard ranking for invasive species from medium to high.
- The Borough agreed with the remainder of the calculated hazard rankings.

Table 9.13-13. Borough of Hopatcong Hazard Ranking

Dam Failure	Disease Outbreak	Drought	Earthquake	Flood	Geologic	
Medium	Medium	Low	Low	Low	Low	
Hazardous Materials	Hurricane and Tropical Storm	Invasive Species	Nor’Easter	Severe Weather	Severe Winter Weather	Wildfire
Low	High	High	High	High	High	Low

9.13.7 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 2016 HMP. Actions that are carried forward as part of this plan update are included in Table 9.13-15 and Table 9.13-16 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 9.13-14. Status of Previous HMP Mitigation Actions

2016 Action Number Action Description		Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
Hopatcong-1 (new)	Ensure continuity of operations at critical facilities and municipal buildings: Identified at this time, purchase and install Hopatcong Borough DPW Bldg Generators	DPW, OEM	In Progress. All Borough buildings have generator back up power. A generator is still needed for St. Jude church Parrish center, as the Borough has entered into a mutual aid agreement with them to be an emergency shelter.	X	2021-Hopatcong-001
Hopatcong-2 (new)	Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.	Planning	Ongoing Capability		
Hopatcong-3 (new)	Offer training on best practices for hazard mitigation and hazard identification for Borough employees.	OEM Coordinator	Ongoing Capability		
Hopatcong-4 (old #1)	Retrofit the windows on Hudson Maxim School located on River Styx Road to meet high wind standards.	Borough Administration	No longer a concern as the building is being sold.		
Hopatcong-5 (old #2)	Retrofit roof to meet current snow load standards on Hopatcong Municipal Facility located on River Styx Road.	Borough Administration	Complete. New roof has been installed on the building.		
Hopatcong-6 (revised old #6)	The Borough will work with the NJDEP to alleviate flooding of the small stream that flows through the area of Flora Avenue between Durban and Wills Avenue.	Borough Administration, NJDEP	Complete. DPW worked with the County and the stream bed has been dredged to alleviate flooding concerns.		
Hopatcong-7 (old #8)	Enhance the current all-hazards public education and outreach program by developing, implementing and facilitating a multi-hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the	OEM with support from County OEM	In Progress	X	2021-Hopatcong-008





2016 Action Number	Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
	Borough website and social media.				
Hopatcong-8 (new)	Upgrade radio communication and pagers for fire department	Fire Department	In Progress. Fire Department pagers have been purchased, but the radio frequency used by the Fire Department is being phased out for emergency services by the FCC. A project is in the works to bring all the Borough emergency services onto one radio system.	X	2021-Hopatcong-005

In addition to the above progress, the Borough of Hopatcong identified the following mitigation projects/activities that were completed but not identified in the 2016 HMP mitigation strategy:

- HAB innovated project (see above in integration section).

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Hopatcong participated in a risk assessment workshop in October 2020 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Borough of Hopatcong participated in a mitigation action workshop in November 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Sussex County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; mitigation funding sources, 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 Floodprone 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.

Table 9.13-15 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Hopatcong would like to pursue in the future to reduce the effects of hazards. Initiatives are dependent upon available funding (grants and local match availability) and can 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 (Mitigation Strategy), 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 actions as *High*, *Medium*, or *Low*. The table below summarizes the evaluation of each mitigation initiative, listed by action number.

Table 9.13-16 provides a summary of the prioritization of all proposed mitigation initiatives for this HMP update.





Table 9.13-15. Proposed Hazard Mitigation Initiatives

Initiative Number	Mitigation Initiative Name	Description of the Problem and 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
2021-Hopatcong-001	St. Jude Parrish Center Backup Power	Problem: Backup power sources are necessary to maintain critical services for critical facilities. The Borough has entered into a mutual aid agreement with the St. Jude Church Parish to be an emergency shelter. The Parish lacks a backup power source.	Existing	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter	1, 2, 6	Administration, Engineer, St Jude Parish	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	Ensure continuity of operations of sheltering location	\$50,000	3 years	High	SIP	ES
		Solution: The Engineer will research what size generator is needed to power the Parish. The Borough will then assist with the purchase and installation of the selected generator and necessary electrical components to supply backup power to the shelter.											
2021-Hopatcong-002	Woodchipper	Problem: A new chipper is needed to help with storm clean up as most storms cause tree and utilities damage in the Borough.	Existing	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter	5	Public Works	Borough Budget	Increased capability for storm response and cleanup	\$5,000	1 year	High	SIP	ES
		Solution: The Borough will purchase a new woodchipper and train staff in its use. The Borough											
2021-Hopatcong-003	Filters for Lakeside Storm Drains	Problem: Nutrients entering the lake through stormwater contribute to harmful algal blooms.	Existing	Severe Weather, Infestation and Invasive Species	2	Public Works	HMGP, BRIC, Borough budget	Reduction in harmful algal blooms	Medium	2 years	High	SIP	SP, NR
		Solution: The Borough will purchase and install filters on storm drains. Public Works will be in charge of the installation and maintenance of these filters.											
2021-Hopatcong-004	Harmful Algal Bloom Control	Problem: Harmful algal blooms present a health concern and are damaging to the environment.	N/A	Infestation and Invasive Species	2	Administration	NJ DEP grants, environmental grants	Reduction in harmful algal blooms			High	NSP	NR
		Solution: The Administration will work with the NJDEP to gain approval to introduce albino carp into the lake to eat plant life that contributes to harmful algae blooms.											





Initiative Number	Mitigation Initiative Name	Description of the Problem and 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
2021-Hopatcong-005	Radio System	Problem: The Borough requires an upgraded radio system that can be used by all our emergency services to better coordinate emergency response in the town during storms and other emergencies.	N/A	All Hazards	6	Emergency Management	Emergency Management Performance Grants (EMPG) Program, Borough Budget	Coordinated emergency response	Medium	2 years	High	LPR	ES
		Solution: The Borough will purchase an upgraded radio system that will be able to be used into the future.											
2021-Hopatcong-006	Ambulance Squad Building	Problem: The Ambulance Squad building is over 40 years old and deteriorating.	Existing	All Hazards	1, 2, 6	Administration, Engineer, Ambulance Squad	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Borough Budget	Critical facility protected from damages	High	Within 5 years	High	SIP	PR
		Solution: The Borough will construct a new building for the Ambulance Squad with modern standards for construction of critical facilities.											
2021-Hopatcong-007	Repetitive Loss Mitigation	Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Borough has one repetitive loss property but other properties may be impacted by flooding as well. Solution: Conduct outreach to 5 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating	Existing	Flood, Severe Weather	2	NFIP Floodplain Administrator, supported by homeowners	FEMA HMGP and FMA, local cost share by residents	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood	\$400,000	3 years	High	SIP	PP





Initiative Number	Mitigation Initiative Name	Description of the Problem and 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
		residential homes in the flood prone areas that experience frequent flooding (high risk areas).						storage					
2021-Hopatcong-008	Hazard Outreach Enhancement	<p>Problem: The Borough would like to enhance existing outreach and develop additional hazard outreach.</p> <p>Solution: The Borough will enhance the current all-hazards public education and outreach program by developing, implementing and facilitating a multi-hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the Borough website and social media.</p>	Existing	All Hazards	3	Administration	Borough budget	Increased public awareness and preparedness	Staff time	1 year	High	EAP	PI
2021-Hopatcong-009	Flood Damage Prevention Ordinance Update	<p>Problem: The Borough's Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement.</p> <p>Solution: The Borough will update the Flood Damage Prevention Ordinance to include the freeboard requirement.</p>	New	Flood	2	FPA, Administration	Borough budget	Meet state standards, reduce future flood risk	Staff time	6 months	High	LPR	PR
2021-Hopatcong-010	Disaster Debris Management Plan	<p>Problem: The Borough lacks a Disaster Debris Management Plan.</p> <p>Solution: The Borough will develop and adopt a Disaster Debris Management Plan.</p>	Existing	All Hazards	5	Public Works, Emergency Management	Borough budget	Increased planning and capabilities	Staff time	1 years	High	LPR	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
 BRIC Building Resilient Infrastructure and Communities 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.*

DRAFT



Table 9.13-16. Summary of Evaluation 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	Total	High / Medium / Low
2021-Hopatcong-001	St. Jude Parrish Center Backup Power	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High ⚠
2021-Hopatcong-002	Woodchipper	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2021-Hopatcong-003	Filters for Lakeside Storm Drains	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2021-Hopatcong-004	Harmful Algal Bloom Control	0	1	1	1	1	1	0	0	1	1	1	1	1	1	11	High
2021-Hopatcong-005	Radio System	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2021-Hopatcong-006	Ambulance Squad Building	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021-Hopatcong-007	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2021-Hopatcong-008	Hazard Outreach Enhancement	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-Hopatcong-009	Flood Damage Prevention Ordinance Update	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2021-Hopatcong-010	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Notes: Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

⚠ This action has been identified as being of highest importance to the municipality and an action that the municipality would like to complete as soon as funding is received.



Table 9.13-17. 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
Dam Failure	X		X		X			X
Disease Outbreak	X		X		X			X
Drought	X		X		X			X
Earthquake	X		X		X			X
Flood	X	X	X		X			X
Geologic	X		X		X			X
Hazardous Materials	X		X		X			X
Hurricane and Tropical Storm	X		X		X			X
Invasive Species	X		X	X	X			X
Nor'Easter	X		X		X			X
Severe Weather	X	X	X		X			X
Severe Winter Weather	X		X		X			X
Wildfire	X		X		X			X

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

high ranked hazard

ORANGE medium ranked hazard

YELLOW low ranked hazard



Figure 9.13-1. Borough of Hopatcong Hazard Area Extent and Location Map 1

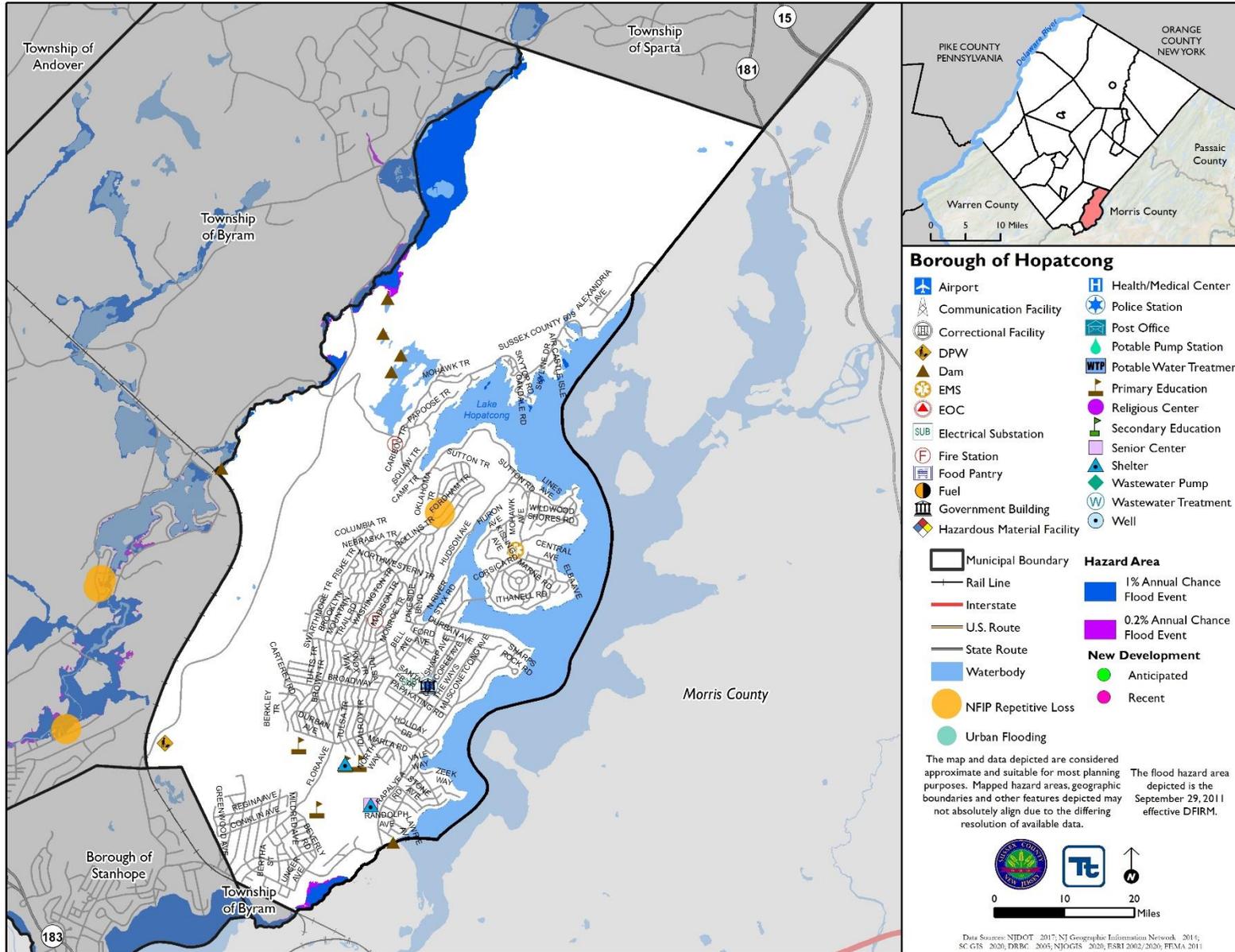




Figure 9.13-2. Borough of Hopatcong Hazard Area Extent and Location Map 2

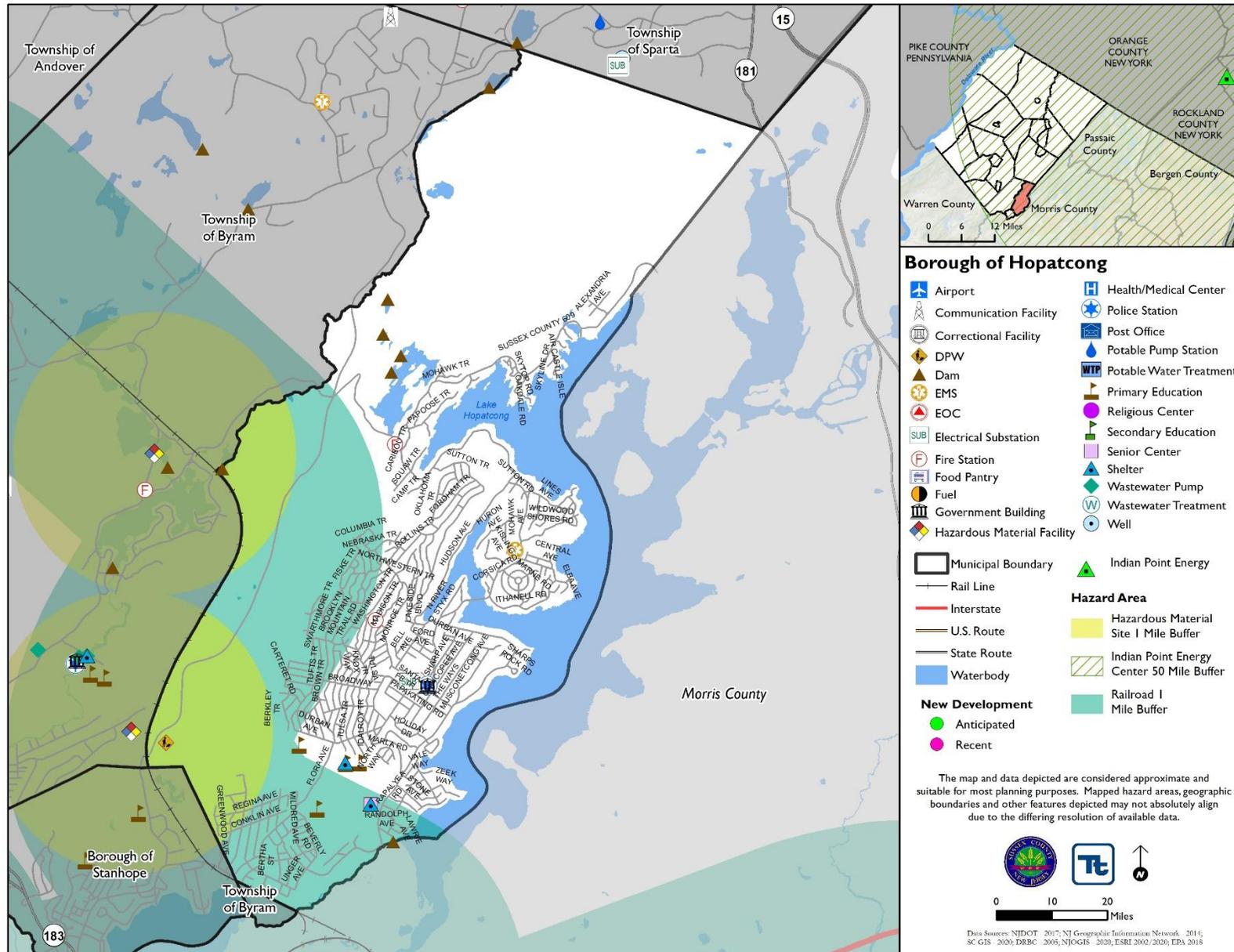
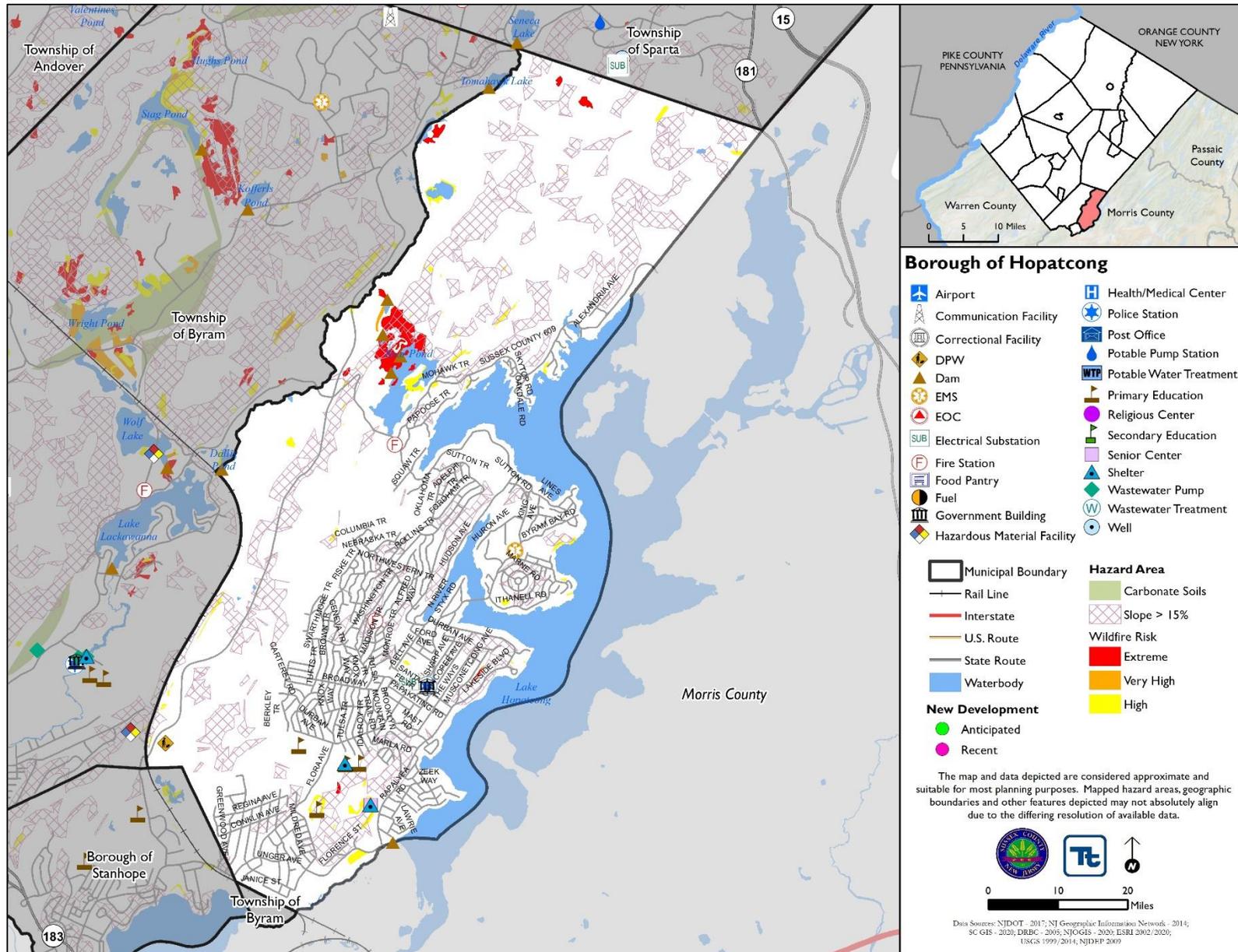




Figure 9.13-4 Borough of Hopatcong Hazard Area Extent and Location Map 3





Action Worksheet			
Project Name:	Public Works Maintenance Building Backup Power		
Project Number:	2021-Hopatcong-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Borough has entered into a mutual aid agreement with the St. Jude Church Parish to be an emergency shelter. The Parish lacks a backup power source.		
Action or Project Intended for Implementation			
Description of the Solution:	The Engineer will research what size generator is needed to power the Parish. The Borough will then assist with the purchase and installation of the selected generator and necessary electrical components to supply backup power to the shelter.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations of sheltering location
Useful Life:	20 years	Goals Met:	1, 2, 6
Estimated Cost:	\$50,000	Mitigation Action Type:	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 3 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Administration, Engineer, St Jude Parish	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Install solar panels	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	\$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Public Works Maintenance Building Backup Power	
Project Number:	2021-Hopatcong-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of the shelter at the St. Jude Church Parish.
Property Protection	1	Project will protect building from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Borough has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter
Timeline	0	Within 3 years
Agency Champion	1	Administration, Engineer, St Jude Parish
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Filters for Lakeside Storm Drains		
Project Number:	2021-Hopatcong-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Weather, Infestation and Invasive Species		
Description of the Problem:	Nutrients entering the lake through stormwater contribute to harmful algal blooms.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will purchase and install filters on storm drains. Public Works will be in charge of the installation and maintenance of these filters.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	Reduction in nutrients in stormwater	Estimated Benefits (losses avoided):	Reduction in harmful algal blooms
Useful Life:	5 years	Goals Met:	2
Estimated Cost:	Medium	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	HMGP, BRIC, Borough budget
Responsible Organization:	Public Works	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation, Stormwater management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Build large detention basins to catch all runoff	High	Costly
	Build nutrient filtration systems for all stormwater pipes	High	Costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Filters for Lakeside Storm Drains	
Project Number:	2021-Hopatcong-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The Borough has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Weather, Infestation and Invasive Species
Timeline	1	2 years
Agency Champion	1	Public Works
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Ambulance Squad Building		
Project Number:	2021-Hopatcong-006		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The Ambulance Squad building is over 40 years old and deteriorating.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will construct a new building for the Ambulance Squad with modern standards for construction of critical facilities.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Level of Protection:	500-year storm event	Estimated Benefits (losses avoided):	Critical facility protected from damages
Useful Life:	15 years	Goals Met:	2, 6
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	FEMA HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Borough Budget
Responsible Organization:	Administration, Engineer, Ambulance Squad	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation, Emergency Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Rebuild facility to new standards	High	Costly and not necessary
	Build secondary facility protected to new standards	High	Costly and not necessary
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Ambulance Squad Building	
Project Number:	2021-Hopatcong-006	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Ambulance Squad Building
Property Protection	1	Project will protect Ambulance Squad Building from future damages.
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The Borough has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	0	Within 5 years
Agency Champion	1	Administration, Engineer, Ambulance Squad
Other Community Objectives	1	Protection of critical services
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Repetitive Loss Mitigation		
Project Number:	2021-Hopatcong-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe weather		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Borough has one repetitive loss property but other properties may be impacted by flooding as well.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 5 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	Goals Met:	2
Estimated Cost:	\$400,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate homes	\$500,000	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages	
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Repetitive Loss Mitigation	
Project Number:	2021-Hopatcong-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Families moved out of high-risk flood areas.
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The Borough has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	0	Project would remove families from the flood prone areas of the Borough.
Administrative	0	
Multi-Hazard	1	Flood, Severe weather
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	