

9.20 BOROUGH OF STANHOPE

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

9.20.1 Hazard Mitigation Planning Team

The Borough of Stanhope 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 coronavirus pandemic resulted in a strain on local resources that limited some participation, but every effort was made to connect with staff and stakeholders and gain diverse input. Due to safety precautions, all meetings were held virtually. 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 9.20-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact
Name / Title: Brian McNeilly, Borough Administrator		Name / Title: Eric Keller, Borough Engineer
Address: 77 Main Street, Star	1 /	Address: 77 Main Street, Stanhope, NJ 07874
Phone Number: (973) 347-01		Phone Number: (973) 291-2919
Email: bmcneilly@stanhopen	j.gov	Email: ekeller@bowmanconsulting.com
NFIP Floodplain Administ	rator	
Name / Title: Thomas Persho	use, Construction Official	
Address: 77 Main Street, Star	nhope, NJ 07874	
Phone Number: (973) 347-01	59 x20	
Email: tminniti@stanhopenj.	gov	
Name Title		Method of Participation
Brian McNeilly	Administrator	Primary point of contact, lead information gathering, attended the annex training
Wayne Anthony	OEM Coordinator	Provided background on previous submissions and current OEM related info
Eric Keller	Borough Engineer	Alternate point of contact, information resource
Thomas Pershouse	Construction Official	NFIP floodplain administrator

9.20.2 Jurisdiction Profile

The Borough of Stanhope is located at the southern tip of Sussex County. It has a total area of 2.2 square miles and is bordered to the north and west by Byram Townships, to the north and east by Hopatcong Borough and to the south by Morris County. Lake Musconetcong is a large lake located in the southeastern portion of the Borough. Tributaries of the Musconetcong River flow through the Borough.

According to the U.S. Census, the 2010 population for the Borough of Stanhope was 3,610. The estimated 2018 population was 3,411, a 5.5 percent increase from the 2010 Census. Data from the 2018 U.S. Census American Community Survey indicate that 4.9 percent of the population is 5 years of age or younger and 8.3 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.

9.20.3 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 9.19-2 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.

Type of 2017 2015 2016 2018 2019 **Development** Number of Building Permits for New Construction Issued Since the Previous HMP Within Within Within Within Within Total Total **SFHA Total SFHA Total SFHA SFHA** Total **SFHA** Single and Two-0 0 0 0 0 0 Family Units Multi-Family 0 0 0 0 0 0. 0 0 0 0 Other 0 0 0 (commercial, 0 0 0 0 0 0 0 mixed-use, etc.) Property or Location Description / **Type** Status of # of Units / **Known Hazard Development** of (address and/or Name **Development Development Structures** block and lot) Zone(s)* Recent Major Development and Infrastructure from 2015 to Present None identified Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years None anticipated

Table 9.20-2. Recent and Expected Future Development

9.20.4 Capability Assessment

Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The Borough of Stanhope 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

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



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 Stanhope 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 Stanhope and where hazard mitigation has been integrated.

Table 9.20-3. Planning, Legal and Regulatory Capability

		Authority that		been integra	s of the HMP ted into your ances/plans?
	Do you have this? (Yes/No)	enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Codes, Ordinances, & Requirements					
Building Code	Yes	State & Local	Yes	Yes	-
Comment: State mandated on local level under NJA Adopted 9/3/2019 This code follows State Uniform Constru			<i>ą.</i>).	Edition, 2018, NJ	AC 5:24-3.14
Zoning Code	Yes	Local	Yes – if municipality has a Planning Board	Yes	-
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 Land Use Department is responsible for this code in compliance with Chapter 100 of Borough Code.					
Subdivisions	Yes	Local	Yes – if municipality has a Planning Board	Yes	-
 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 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. The Land Use Department is responsible for this ordinance in compliance with Chapter 100 of Borough Code. 					
Stormwater Management	Yes	Local	Yes	Yes	-
Comment: See Title 7 of the NJ Administrative Code, N.J.A.C. 7:8 The Land Use Department is responsible for this ordinance in compliance with Chapter 100 of Borough Code.					
Post-Disaster Recovery	No	-	No	-	-
Post-Disaster Recovery No - No					



		Authority that		Have aspects of the HM been integrated into yo codes/ordinances/plan	
	Do you have this? (Yes/No)	enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Real Estate Disclosure	Yes	State, Division of Consumer Affairs	Yes	Yes	-
Comment: N.J.A.C. 13:45A-29.1 - Before signing a (POS) approved by the New Jersey Real Estate Coimprovements, fees for services and amenities, the and police, as well as any hazards, risks or nuisana Growth Management	mmission. The POS type of title and ow	S provides information s enership interest being o	such as estimate offered, its proxi Yes – if municipality has a	d completion date	es for
			Planning Board		
State Mandated on a municipal level. So Redevelopment Plan provides for the de of state environmental regulations make Site Plan Review	lineation of Growt	th Areas and Environs;	Use of the endor	rsed plans in the i	•
county road or drainage facilities as set boards shall have a complete file of the shall file with the county planning board date of this act and shall notify the count which affects lands adjoining county re proposed facilities or public lands show county planning board at least 10 days	planning and zonid a copy of the plan of the plan of the plan of the count of the count of the public to the public	ng ordinances of all mu nning and zoning ordina of the introduction of c ly lands, or lands lying v aster plan or official co hearing thereon by per	nicipalities in th unces of the mun uny revision or a within 200 feet o unty map. Such sonal delivery or	e county, each m icipality in effect mendment of suc f a municipal bo notice shall be g	unicipal clerk on the effective h an ordinance undary, or iven to the
the official notice of the public hearing The Land Use Department is responsible				of Borough Code.	
Environmental Protection	Yes	State, Federal	No	Yes	-
Comment: Chapter 12 Environmental Commission Chapter 90 Hazardous Materials					
Flood Damage Prevention	Yes	Federal, State & Local	Yes	Yes	-
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. Regulations for the Flood Control Hazards Act were adopted in 2007 and amended effective June 20, 2016. • The Construction Official is responsible for this ordinance in compliance with Chapter 100, Article 21 – Flood Damage Prevention.					
Wellhead Protection	No	-	No	-	-
Comment:		T			
Comment: • Chapter 15 Fire Department	Yes	Local	No	No	-
Chapter 37 Police Department Climate Change	No	<u> </u>	No		
Climate Change	No	-	No	-	-
Comment:	No	<u> </u>	No		
Disaster Recovery Ordinance	No	-	No	-	-



		Authority that		been integra	ts of the HMP ated into your ances/plans?
	Do you have this? (Yes/No)	enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Comment:					
Disaster Reconstruction Ordinance	No	-	No	-	-
Comment:					
Other: Municipal Separate Storm Sewer System (MS4)	Yes	State	Yes	Yes	-
Comment: The Land Use Department is responsible	e for this ordinanc	e in compliance with Ci	hapter 100 of Bo	orough Code.	
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes	Local	No	Yes	-
Comment: The Zoning Department is responsible f	or these ordinance	s in compliance with Cl	hapter 100 of Bo	orough Code.	
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	Yes	-
among other things, the general location developments, parkways, playgrounds, for the general location and extent of forest water supply, sanitary and drainage fact important to the development of the count municipalities within the county in any in advise the board of chosen freeholders is expenditures. Per State of NJ Municipal components of a municipal Master Plant Further, all zoning ordinances must be supported to the Land Use Department is responsible.	forests, reservation is, agricultural arec cilities, or the proto inty. The county pla matters whatsoever with respect to the Land Use Law (M and requires that consistent with the	ns, parks, airports, and as, and open-developm ection of urban developm unning board shall encor which may concern the formulation of developm LUL) L. 1975, s. 2, effection and municipality preparation or will not master Plan or will not	other public wa ent areas for pu ment, and such urage the co-op e integrity of the ment programs a Aug 1, 1976 40:. are a master pla t be benefitted fr	ys, grounds, place rposes of conserve other features as eration of the loce county master pland budgets for county provides n and update it eom a presumptio	es and spaces; vation, food and may be val lan and to vapital the required very 6 years. n of validity.
Capital Improvement Plan	Yes	Local	No	No	-
Comment:					
Disaster Debris Management Plan	No	-	No	-	2021- Stanhope-003
Comment:					
Floodplain or Watershed Plan	No	-	No	-	-
Comment:					
Stormwater Management Plan	Yes	State	Yes	Yes	-
 Comment: 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 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. The Boro Engineer is responsible for this plan, which is a part of the Master Plan. Stormwater Pollution Prevention Plan					
Comment:	168	State, County	1 68	140	-
• 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 MSds. Under this program, permits must be secured by					



		Authority that		been integra	s of the HMP ted into your ances/plans?		
	Do you have this? (Yes/No)	enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.		
municipalities, certain public complexes or maintain highways. The permit progr nonpoint source pollutant loads from the ordinances (litter control, pet waste, wil management plan and implementing ora basin cleaning); implementing solids an education component.	am establishes the ese sources. The Si dlife feeding, prop linance(s); requiri	Statewide Basic Requirer tatewide Basic Requirer er waste disposal, etc.), ng certain maintenance	rements that mus nents include me the developmen activities (such	st be implemented easures such as: t at of a municipal : as street sweepin	l to reduce he adoption of stormwater g and catch		
Urban Water Management Plan	No	-	No	-	-		
Comment:							
Habitat Conservation Plan	No	-	No	-	-		
Comment:							
Economic Development Plan	No	-	No	-	-		
Comment:							
Shoreline Management Plan	No	-	Yes – if located in a coastal zone	-	-		
• NJ Coastal Area Facility Review Act (N. including construction, relocation, and e structures, and site preparation. This la	enlargement of bui	ldings or structures, an	d excavation, gr	ading, shore prot	ection		
Community Wildfire Protection Plan	No	-	No	-	-		
Comment:							
Community Forest Management Plan	Yes	Local, County, State	No	No	-		
Comment:		State Country 8					
Transportation Plan	Yes	State, County & Local	No	No	-		
Comment:	Comment:						
Agriculture Plan	No	-	No	-	-		
Comment:							
Climate Action Plan	No	-	No	-	-		
Comment:							
Tourism Plan	No	-	No	-	-		
Comment:							
Business Development Plan	No	-	No	-	-		
Comment:							
Other: Open Space Plan	Yes	Local	No	Yes	-		
Comment: • The Land Use Department is responsible	e for this plan whi	ich was adonted in Anri	1 of 2009				
Response/Recovery Planning	e jor inis pian, wiii	en was adopied in Apri	i 0j 2009.				
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes	Yes	-		
Comment: • 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 OEM is responsible for this plan.							



		Authority that		Have aspects of the HMP been integrated into your codes/ordinances/plans?	
	Do you have this? (Yes/No)	enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	No	1	1
Comment:					
Post-Disaster Recovery Plan	No	-	No	-	-
Comment:	Comment:				
Continuity of Operations Plan	No	-	No	-	-
Comment:					
Public Health Plan	Yes	County	No	Yes	-
Comment:					
Other	No	-	No	-	-
Comment:					

Table 9.20-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes, Building Department
Does your jurisdiction have the ability to track permits by hazard area?	No
Does your jurisdiction have a buildable lands inventory? -If yes, please describe brieflyIf no, please quantitatively describe the level of buildout in the jurisdiction.	No

ADMINISTRATIVE AND TECHNICAL CAPABILITY

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

Table 9.20-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use Board
Mitigation Planning Committee	No	-
Environmental Board / Commission	Yes	Mayor and Council
Open Space Board / Committee	No	-
Economic Development Commission / Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Nixle Text Messaging System
Maintenance program to reduce risk	Yes	Risk Management Consultant
Mutual aid agreements	Yes	Fire Department
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Borough Engineer / Planner
Engineers or professionals trained in building or infrastructure construction practices	Yes	Borough Engineer / Construction Official



Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with an understanding of natural hazards	Yes	Borough Engineer
Staff with training in benefit/cost analysis	No	Chief Financial Officer
Staff with training in green infrastructure	Yes	Borough Engineer / Planner
Staff with education/knowledge/training in low impact development	Yes	Borough Engineer / Planner
Surveyor	Yes	Borough Engineer's Office
Stormwater engineer	Yes	Borough Engineer
Personnel skilled or trained in GIS applications	Yes	Borough Engineer / Planner
Local or state water quality professional	No	-
Scientist familiar with natural hazards in local area	No	-
Emergency manager	Yes	Emergency Management Coordinator
Watershed planner	No	-
Environmental specialist	No	-
Grant writers	Yes	Millennium Strategies
Resilience Officer	No	-
Other: NFIP Floodplain Administrator	Yes	Construction Official

FISCAL CAPABILITY

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

Table 9.20-6. 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	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	-

EDUCATION AND OUTREACH CAPABILITY

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

Table 9.20-7. 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



Criterion	Response
Do you have hazard mitigation information available on your	
website?	No
-If yes, briefly describe.	
Do you use social media for hazard mitigation education and	
outreach?	No
-If yes, briefly describe.	
Do you have any citizen boards or commissions that address issues	
related to hazard mitigation?	No
-If yes, briefly describe.	
Do you have any other programs already in place that could be	
used to communicate hazard-related information?	Yes, Borough website and social media
If yes, briefly describe.	

COMMUNITY CLASSIFICATIONS

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

Table 9.20-8. Community Classifications

Program	Participating?	Classification	Date Classified	
Community Rating System	No	-	-	
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-	
Public Protection (Fire ISO Protection Class)	Yes	Unknown	Unknown	
Storm Ready Certification	No	-	-	
Firewise Community Classification	No	-	-	
Sustainable Jersey	Yes	Not certified	Joined program on 9/14/2010	

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 9.20-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - Strong/Moderate/Weak
Dam Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Weak
Flood	Weak
Geologic	Weak
Hazardous Materials	Moderate
Hurricane and Tropical Storm	Moderate
Invasive Species	Weak



Hazard	Adaptive Capacity (Capabilities) - Strong/Moderate/Weak
Nor'Easter	Strong
Severe Weather	Moderate
Severe Winter Weather	Strong
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.

The Borough does not have access to resources to determine the possible impacts of climate change upon the municipality. However, the administration is supportive of integrating climate change in policies or actions.

NATIONAL FLOOD INSURANCE PROGRAM

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

Table 9.20-10. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Borough Engineer / DPW
Who is your floodplain administrator? (name, department/position)	Thomas Pershouse, Construction Official
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	2006
Does your floodplain management program meet or exceed minimum requirements? -If exceeds, in what ways?	The program meets minimum requirements set by FEMA and the State.
When was the most recent Community Assistance Visit or Community Assistance Contact?	Unknown
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
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?	No, but the FPA would attend training if needed.
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
How many flood insurance policies are in force in your jurisdiction?* -What is the insurance in force? -What is the premium in force?	3 policies
How many total loss claims have been filed in your jurisdiction?* -How many claims are still open or were closed without payment? -What were the total payments for losses?	2 claims \$16,257
Do you maintain a list of properties that have been damaged by flooding?	No



Criterion	Response
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

OPPORTUNITIES FOR FUTURE INTEGRATION

• **Disaster Debris Management Plan:** The Borough will develop a Disaster Debris Management Plan. (2021-Stanhope-003)

9.20.5 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 Stanhope'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 9.19-11 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 9.20-11. 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 24th.	No Damages or losses
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.	No Damages. Loss revenues and costs associated with PPE

Source: FEMA 2020, NOAA NCEI 2020

9.20.6 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 Stanhope 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 Stanhope 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 Stanhope has significant exposure.



REPETITIVE FLOOD LOSSES

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

- 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 2019

CRITICAL FACILITIES AND LIFELINES

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

Table 9.20-12. Critical Facilities and Lifelines Flood Exposure

		Expo	sure
Name	Туре	1% Event	0.2% Event
	None identified		

Source: Sussex County Planning Partnership 2020

IDENTIFIED ISSUES AND PROBLEM AREAS

The jurisdiction has identified the following vulnerabilities within their community:

- There is no standby power at Lenape Valley Regional High School at 28 Sparta Road.
- There is no standby power at Stanhope Public School at 24 Valley Road.

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 Stanhope 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 Stanhope. The Borough of Stanhope 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 Stanhope agreed with the calculated hazard rankings.



Table 9.20-13. Borough of Stanhope Hazard Ranking

Dam Failure	Disease Outbreak	Drought	Earthquake	Flood	Geologic
Medium	Medium	Medium	Low	Medium	Medium

Hazardous Materials	Hurricane and Tropical Storm	Invasive Species	Nor'Easter	Severe Weather	Severe Winter Weather	Wildfire
High	High	High	High	High	High	Medium

9.20.7 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 9.19-15 and Table 9.19-16 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 9.20-14. Status of Previous HMP Mitigation Actions

			Status (In Progress, No	Include in the 2021 HMP Update?		
2016	6 Action Number Action Description	Responsible Party	Progress, Ongoing Capability, or Completed)	Check if Yes	Enter 2021 HMP Action #	
Stanhope-1 (revised old #1)	Ensure continuity of operations at critical facilities and municipal buildings. The following is identified at this time: Purchase and install a backup generators for Lenape Valley Regional High School and Valley Road School	Emergency Management	No Progress	X	2021- Stanhope-001, 2021- Stanhope-002	
Stanhope- 2 (old #4)	Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	Borough Administration	Ongoing Capability			
Stanhope-3 (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			



			Status (In Progress, No	Include in the 2021 HMP Update?		
2016	6 Action Number Action Description	Responsible Party	Progress, Ongoing Capability, or Completed)	Check if Yes	Enter 2021 HMP Action #	
Stanhope-4 (new)	Develop specific design guidelines and development review procedures for new construction, replacement, relocation and substantial improvement in hazard areas within the Borough.	Borough Administration	Ongoing Capability			
Stanhope- 5 (new)	When updating the Zoning Ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.	Borough Administration	Ongoing Capability			
Stanhope- 6 (new)	Ensure hazard mitigation initiatives are incorporated into the capital improvement plan; budget for some of these projects.	Borough Administration	Ongoing Capability			
Stanhope- 7 (new)	Incorporate risk assessment and hazard mitigation initiatives into planning efforts.	Borough Administration	Ongoing Capability			

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

None identified

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Stanhope 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 Stanhope 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 9.19-15 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Stanhope 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 9.19-16 provides a summary of the prioritization of all proposed mitigation initiatives for this HMP update.





Table 9.20-15. 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
		Problem: Backup power sources are necessary to maintain critical services for critical facilities. There is no standby power at Lenape Valley Regional High School at 28 Sparta Road.		Hurricane,			FEMA HMGP and BRIC, USDA Communit y Facilities	Ensure					
2021- Stanhope- 001	Generator for Lenape Valley Regional High School	Solution: The Borough will work with Lenape Valley High School to purchase and install a 75-85 kW generator and necessary electrical components to supply backup power to the School.	Existing	Nor'Easter , Severe Weather, Severe Winter Weather	1, 6	Emergency Manageme nt, School District	Grant Program, Emergency Manageme nt Performanc e Grants (EMPG) Program, Municipal Budget	s continu ity of operati ons of High School	\$75,0 00 - \$100, 000	Wi thi n 5 ye ars	Hig h	SIP	ES
2021- Stanhope- 002	Generator for Stanhope School	Problem: Backup power sources are necessary to maintain critical services for critical facilities. There is no standby power at Stanhope Public School 24 Valley Road. Solution: The Borough will work with the Stanhope School to purchase and install a 35-40 kW generator and necessary electrical components to supply backup power to the School.	Existing	Hurricane, Nor'Easter , Severe Weather, Severe Winter Weather	1, 6	Emergency Manageme nt, School District	FEMA HMGP and BRIC, USDA Communit y Facilities Grant Program, Emergency Manageme nt Performanc e Grants (EMPG) Program, Municipal Budget	Ensure s continu ity of operati ons of School	\$50,0 00	Wi thi n 5 ye ars	Hig h	SIP	ES
2021- Stanhope- 003	Disaster Debris Management Plan	Problem: The Borough lacks a Disaster Debris Management Plan. Solution: The Borough will develop and adopt a Disaster Debris Management Plan. The Plan will include any necessary mutual aid discussions to supplement the Borough's capabilities. Solution:	N/A	All Hazards	5	OEM, Administrat ion	Borough budget	Increas ed disaste r capabil ities	Staff time	2 ye ars	Hig h	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.





Table 9.20-16. 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- Stanhope- 001	Generator for Lenape Valley Regional High School	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021- Stanhope- 002	Generator for Stanhope School	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021- Stanhope- 003	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Notes: 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 9.20-17. 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
Disease Outbreak					X			X
Drought					X			X
Earthquake					X			X
Flood					X			X
Geologic					X			X
Hazardous Materials					X			X
Hurricane and Tropical Storm					X			X
Invasive Species					X			X
Nor'Easter					X			X
Severe Weather					X			X
Severe Winter Weather					X			X
Wildfire					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





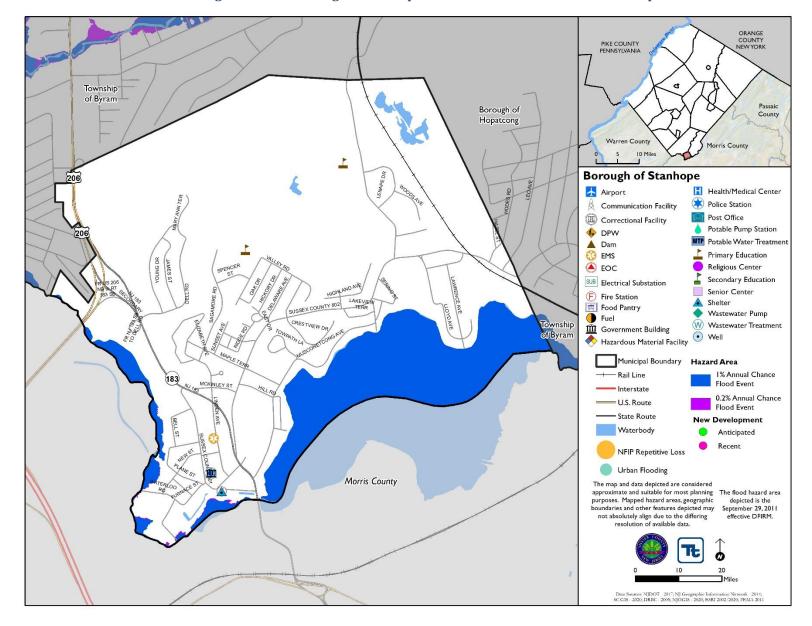


Figure 9.20-1. Borough of Stanhope Hazard Area Extent and Location Map 1



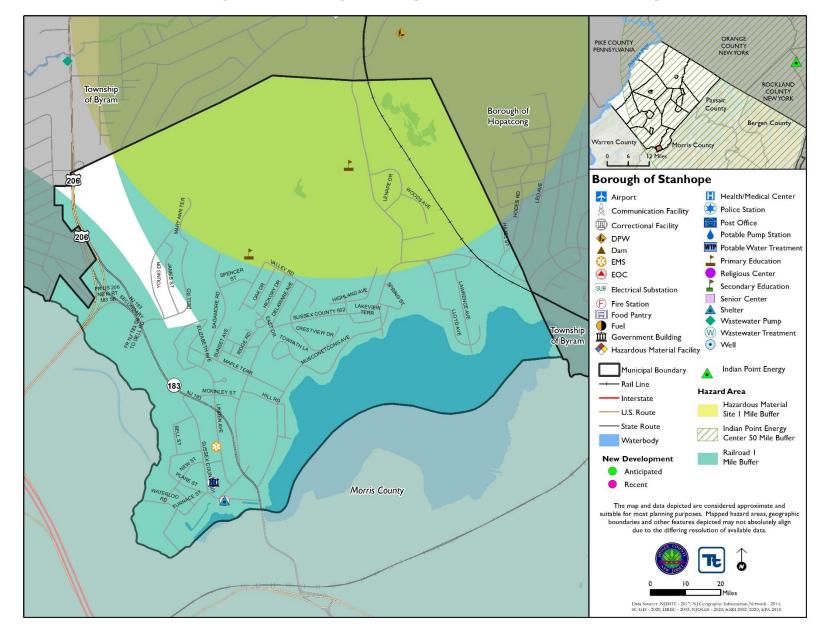
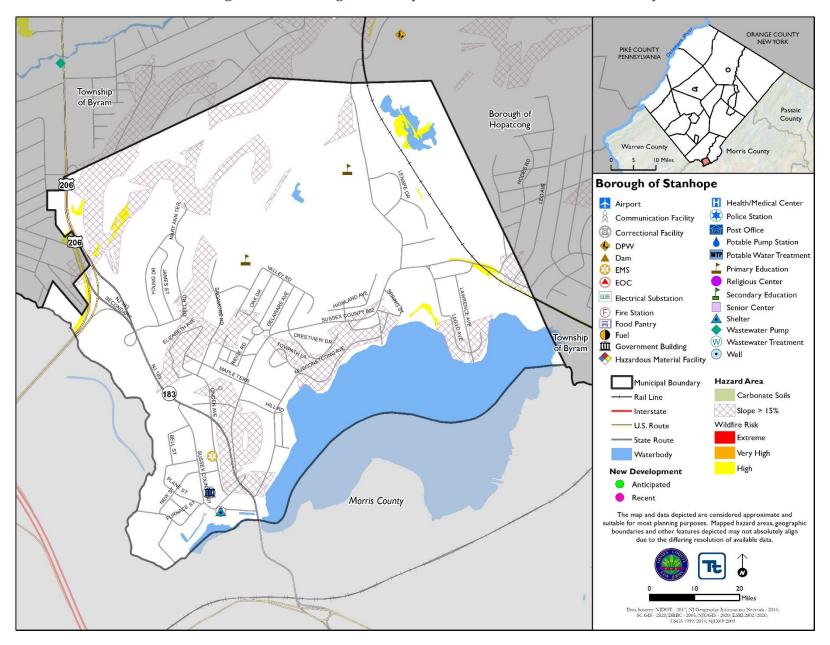


Figure 9.20-2. Borough of Stanhope Hazard Area Extent and Location Map 2



Figure 9.20-3 Borough of Stanhope Hazard Area Extent and Location Map 3





	Action	Worksheet						
Project Name:	Generator for Lenape Valley Regional High School							
	2021-Stanhope-001							
Risk / Vulnerability	Troject Number.							
	Severe Weather, Severe Win	ter Weather, Hurricane, Nor	'Easter					
Hazard(s) of Concern:								
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. There is no standby power at Lenape Valley Regional High School at 28 Sparta Road.							
Action or Project Intended	Action or Project Intended for Implementation							
Description of the Solution:								
Is this project related to a	Critical Facility? Yes	⊠ No □						
Level of Protection:	75-85 kW	Estimated Benefits		Ensures continuity of				
Useful Life:	20 years	(losses avoided): Goals Met:		operations of High School 1. 6				
	·			Structure and Infrastructure				
Estimated Cost:	\$75,000 - \$100,000	Mitigation Action Type	:	Projects (SIP)				
Plan for Implementation	11:-1.	Desired Time frame for		Wishin 5				
Prioritization:	High	Desired Timeframe for Implementation:		Within 5 years				
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sour	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget					
Responsible	Emergency Management,	Local Planning Mechan	isms	Hazard Mitigation, Emergency Management				
Organization:	School District	to be Used in						
Three Alternatives Conside	ered (including No Action)	Implementation if any:						
TIMES TRESTRACTIVES GOTISTAL	Action	Estimated Cost		Evaluation				
	No Action	\$0		Problem continues.				
Alternatives:	Install solar panels	\$100,000	amo e	eather dependent; need large bunt of space for installation; xpensive if repairs needed				
	Install wind turbine			ather dependent; poses a threat wildlife; expensive repairs if needed				
Progress Report (for plan i	naintenance)							
Date of Status Report:								
Report of Progress:								
Update Evaluation of the Problem and/or Solution:								



	Acti	on Worksheet				
Project Name:	Generator for Lenape Valley Regional High School					
Project Number:	2021-Stanhope-001					
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate				
Life Safety	1	Project will protect critical services of Lenape Valley Regional High School				
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 5 years				
Agency Champion	1	Emergency Management, School District				
Other Community Objectives	1					
Total	12					
Priority (High/Med/Low)	High					



	Action \	Worksheet						
Project Name:	Generator for Stanhope School							
Project Number:	2021-Stanhope-002							
Risk / Vulnerability								
	Severe Weather, Severe Wint	er Weather, Hurricane, Nor'	'Easter					
Hazard(s) of Concern:								
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. There is no standby power at Stanhope Public School 24 Valley Road.							
Action or Project Intended	Action or Project Intended for Implementation							
Description of the Solution:								
Is this project related to a	Critical Facility? Yes	No □						
Level of Protection:	35-40 kW	Estimated Benefits		Ensures continuity of				
Useful Life:	20 years	(losses avoided): Goals Met:		operations of School 1. 6				
	-			Structure and Infrastructure				
				Projects (SIP)				
Plan for Implementation	High	Desired Timeframe for		Within 5 years				
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years					
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sour	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget					
Responsible	Emergency Management,	Local Planning Mechan	isms	Hazard Mitigation,				
Organization:	School District	to be Used in	Emergency Management					
Three Alternatives Conside	ered (including No Action)	Implementation if any:						
Timee Timee macry es sons rat	Action	Estimated Cost		Evaluation				
	No Action	\$0		Problem continues.				
Alternatives:	Install solar panels	\$100,000	amo e:	eather dependent; need large bunt of space for installation; xpensive if repairs needed				
	Install wind turbine			ather dependent; poses a threat wildlife; expensive repairs if needed				
Progress Report (for plan i	maintenance)							
Date of Status Report:								
Report of Progress:								
Update Evaluation of the Problem and/or Solution:		_						



	Acti	on Worksheet				
Project Name:	Generator for Stanhope School					
Project Number:	2021-Stanhope-002					
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate				
Life Safety	1	Project will protect critical services of Stanhope School				
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 5 years				
Agency Champion	1	Emergency Management, School District				
Other Community Objectives	1					
Total	12					
Priority (High/Med/Low)	High					