



SECTION 9. JURISDICTIONAL ANNEXES

9.33 TOWNSHIP OF SHAMONG

This section presents the jurisdictional annex for the Township of Shamong that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the Township of Shamong participated in the planning process, an assessment of the Township of Shamong's risk and vulnerability, the different capabilities used in the Township of Shamong, and an action plan that will be implemented to achieve a more resilient community.

9.33.1 Hazard Mitigation Planning Team

The Township of Shamong identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many Township of Shamong departments, including the Office of Emergency Management, Administrator, Engineering, and Construction Official. The OEM Coordinator represented the community on the Burlington County Hazard Mitigation Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.33-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	John Lyons, OEM Coordinator	Name/Title:	Susan Onorato, Administrator
Address:	105 Willow Grove Road, Shamong, NJ 08008	Address:	105 Willow Grove Road, Shamong, NJ 08008
Phone Number:	609-618-7991	Phone Number:	609-268-2377 ext. 301
Email:	shamongoem@gmail.com	Email:	sonorato@shamong.net
NFIP Floodplain Administrator			
Name/Title:	Joe Hirsh, Township Engineer		
Address:	8 Stokes Road Medford, NJ 08055		
Phone Number:	856-235-7170		
Email:	jhirsh@erinj.com		
Additional Contributors:			
Name/Title:	Susan Onorato, Administrator		



Primary Point of Contact		Alternate Point of Contact	
Method of Participation:	Provided information on capabilities, NFIP administration. Reviewed draft annex.		
Name/Title:	John Lyons, OEM Coordinator		
Method of Participation:	Provided information on capabilities, NFIP administration, previous events. Attended the Planning Partnership Risk Assessment Meeting and Mitigation Strategy Workshop. Reviewed draft annex.		
Name/Title:	Anthony R. Lopez, PE, CME, CFM, Office of the Township Engineer		
Method of Participation:	Provided information on NFIP administration		
Name/Title:	Ed Toussaint, Construction Official		
Method of Participation:	Provided information on building permits and new development. Reviewed draft annex.		
Name/Title:	Joe Hirsh, Township Engineer		
Method of Participation:	Reviewed draft annex.		
Name/Title:	Mike DiCroce, Mayor		
Method of Participation:	Reviewed draft annex.		
Name/Title:	Gary Welsh, DPW Supervisor		
Method of Participation:	Reviewed draft annex.		

9.33.2 Municipal Profile

The Township of Shamong is located in western Burlington County. The Township is bordered by the Township of Washington to the south, Township of Medford to the north, and Township of Tabernacle to the east and north-east. To the west, the Township is bordered by the Camden County municipality of Waterford. Shamong has a total area of approximately 45 square miles, of which 44.4 square miles is land and 0.6 square miles is water. There are several unincorporated communities within the Township: Atsion, Dellette, Flyat, Hampton Furnace, High Crossing, Indian Mills, and Smalls.

The Township contains lands within the Pinelands which is managed by the Pinelands Comprehensive Management Plan. The plan establishes nine land use management areas with goals, objectives, development intensities and permitted uses for each. The boundaries of these management areas are displayed on the Pinelands Land Capability Map. They are implemented through local zoning that must conform with Pinelands land use standards. Shamong Township has lands designated as preservation area district, forest area, agricultural production area, rural development area, regional growth area, Pinelands Village, and special agricultural production area.

Shamong Township is governed under the Township form of government with a five-member Township Committee. The Township Committee is elected directly by the voters in partisan elections to serve three-year terms of office on a staggered basis, with one or two seats coming up for election each year. At an annual reorganization meeting, the Township Committee selects one of its members to serve as Mayor and another as Deputy Mayor.

Under the township form, all legislative powers are concentrated in the committee. The committee also has all executive powers not placed in the mayor either by general law or the revised Township act. Additionally, all municipalities under the traditional form may appoint, including the township form, may appoint a municipal administration and "delegate to him all or a portion of the executive responsibilities of the municipality."



According to the U.S. Census, the 2020 population for the Township of Shamong was 6,460, a 0.5 percent decrease from the 2010 Census. Data from the 2021 American Community Survey 5-Year Population Estimates indicate that 20.3 percent is 65 years of age or older, 5 percent of the population is 5 years of age or younger, 0 percent is non-English speaking, 10.4 percent has a disability, and 2.1 percent is below the poverty level.

The Steering Committee also identified households that are above the Federal Poverty Level, but earn less than the basic cost of living as socially vulnerable. For the Township of Shamong, 13 percent of households earn less than the basic cost of living and are considered socially vulnerable.

Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.33.3 Jurisdictional Capability Assessment and Integration

The Township of Shamong performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment includes the following analyses:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

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 the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The updated mitigation strategy provided an opportunity for the Township of Shamong to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the Township of Shamong. The comment field provides information as to how the capability integrates hazard mitigation and risk reduction.



Table 9.33-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	Chapter 71 Construction Codes, Uniform	Local	Construction Code Enforcement Agency
<p><i>How does this reduce risk?</i></p> <p>There is hereby established in the Township of Shamong a State Uniform Construction Code enforcing agency to be known as the "Construction Code Enforcement Agency," consisting of a Construction Official, Building Subcode Official, Plumbing Subcode Official, Electrical Subcode Official, Fire Protection Subcode Official and such other subcode officials for such additional subcodes as the Commissioner of the Department of Community Affairs, State of New Jersey, shall hereafter adopt as part of the State Uniform Construction Code. The Construction Official shall be the chief administrator of the enforcing agency.</p>				
Zoning/Land Use Code	Yes	Chapter 110 Land Development	Local	Joint Land Use Board; Zoning Official
<p><i>How does this reduce risk?</i></p> <p>The purpose of this chapter shall be to establish a pattern for the use of land and buildings as required to bring this chapter into conformance with the Pinelands Protection Act and Comprehensive Management Plan adopted thereunder for the purpose of obtaining certification of the Municipal Plan of the Township of Shamong, while at the same time accomplishing those purposes outlined by the Municipal Land Use Act (N.J.S.A. 40:55D-2 et seq.) by establishing a pattern for the use of land and buildings based upon the Master Plan and enacted in order to promote and protect the public health, safety, morals, comfort, convenience and the general welfare of the people. This chapter is intended to regulate the use of land within zoning districts, secure safety from fire, panic, and other dangers, provide adequate light and air, promote orderly development, avoid undue concentration of population, prevent the overcrowding of land or buildings, establish standards of development, limit congestion in the streets, prohibit incompatible uses, regulate the alteration of existing buildings, protect against hazards, conserve the taxable value of land, preserve open space, historic and natural features, permit the development of land in accordance with the purposes of the Pinelands Comprehensive Management Plan, encourage the inclusion of aesthetics, amenities of living, and a balance of public services, promote utilization of renewable energy sources, encourage procedures for land development to promote the more efficient use of land.</p>				
Subdivision Ordinance	Yes	Chapter 110 Land Development Article VI Subdivision and Site Plan Review and Approval	Local	Joint Land Use Board
<p><i>How does this reduce risk?</i></p> <p>Pursuant to the provisions of Section 28, P.L. 1975, c. 291 (N.J.S.A. 40:55D-37), approval of subdivision plats by resolution of the Planning Board shall be required as a condition for the filing of such plats with the Office of the Burlington County Clerk. Approval of site plans by resolution of the Planning Board shall be required as a condition for the issuance of a building permit and certificate of occupancy for any development, or change of use, except that subdivision or individual lot applications for detached one- or two-dwelling-unit buildings and accessory buildings such as a private garage, tool house, private greenhouse incidental to residential uses 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 § 110-118D of this chapter.</p>				
Site Plan Ordinance	Yes	Chapter 110 Land Development Article VI Subdivision and Site Plan Review and Approval	Local	Joint Land Use Board
<p><i>How does this reduce risk?</i></p> <p>Site development plans shall be so designed as to enhance the general appearance of the Township, the harmonious use of the land, and to encourage development and design consistent with the purpose of the zoning provisions.</p>				
Stormwater Management Ordinance	Yes	Chapter 145 Stormwater Management	Local, County, State, Pinelands Commission	Township Engineer



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
<i>How does this reduce risk?</i> The Stormwater chapter includes provisions for improper disposal of waste and illicit connections.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Real Estate Disclosure	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property
<i>How does this reduce risk?</i> For leases, the law amends the New Jersey Truth-in-Renting Act, N.J.S.A. 46:8-43 et seq., to require every landlord to notify in writing each of the landlord's tenants, prior to lease signing or renewal, whether the property is located in the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area ("100-year floodplain") or Moderate Risk Flood Hazard Area ("500-year floodplain") and if the landlord has actual knowledge that the rental premises or any portion of the parking areas of the real property containing the rental premises has been subjected to flooding. The law does not apply to (1) landlords who lease commercial space or residential dwellings for less than one month, (2) residential dwellings in a premises containing not more than two units, (3) owner-occupied premises containing not more than three units, or (4) hotels, motels, or other guest houses serving transient or seasonal guests for a period of less than 120 days. The model notice is to contain the heading "Flood Risk" and questions for the landlord to answer regarding the landlord's actual knowledge of past flooding of the property. The questions regarding the property being in a FEMA Special or Moderate Risk Flood Hazard Area shall not contain the option for "unknown." To determine how the questions are to be answered, FEMA's current flood insurance rate maps for the leased premises area must be consulted. The landlord will be required to answer whether the rental premises or any portions of the parking areas of the real property containing the rental premises ever experienced any flood damage, water seepage, or pooled water due to a natural flood event and, if so, the number of times that has occurred. The notice to residential tenants must also indicate that flood insurance may be available to renters through FEMA's National Flood Insurance Program to cover their personal property and contents in the event of a flood and that standard renter's insurance does not typically cover flood damage. For sales, the law also amends the New Jersey Consumer Fraud Act, N.J.S.A. 56:8-1 et seq., to require sellers of real property to disclose, on the property condition disclosure statement, whether the property is located in the FEMA Special or Moderate Risk Flood Hazard Area and any actual knowledge of the seller concerning flood risks of the property to the purchaser before the purchaser becomes obligated under any contract for the purchase of the property. The disclosure statement must contain the heading "Flood Risk" and ask the seller the following questions: <ul style="list-style-type: none">• Is any or all of the property in the Special Flood Hazard Area ("100-year floodplain") or a Moderate Risk Flood Hazard Area ("500-year floodplain") according to FEMA's current flood insurance rate maps?• Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? Properties in the Special Flood Hazard Area with mortgages from federally regulated or insured lenders are required to obtain and maintain flood insurance.• Have you ever received assistance from, or are you aware of any previous owners receiving assistance from FEMA, the U.S. Small Business Administration, or any other federal disaster flood assistance for flood damage on the property? For properties that have received flood disaster assistance, the requirement to obtain flood insurance passes down to all future owners.• Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.• Is there a FEMA elevation certificate available for the property? If so, it must be shared with the buyer. An elevation certificate is a FEMA form, completed by a licensed surveyor or engineer, that provides critical information about the flood risk of the property and is used by flood insurance providers to determine the appropriate insurance rating for the property.• Have you ever filed a claim for flood damage to the property with any insurance provider? If the claim was approved, what was the amount received?• Has the property experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall, coastal storm surge, tidal inundation, or river overflow? If so, how many times?				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Not all provisions of this law have become effective at the time of the writing of this plan.				
Growth Management	No	-	-	-
<i>How does this reduce risk?</i>				
Environmental Protection Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Flood Damage Prevention Ordinance	Yes	Chapter 90 Flood Damage Prevention	Local	Construction Code Official or other designee
<i>How does this reduce risk?</i> 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 sound 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 Township has not adopted NJDEP's Model Code Coordinated Ordinance. The ordinance will require update.				
Wellhead Protection	No	-	-	-
<i>How does this reduce risk?</i>				
Emergency Management Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Change Ordinance	No	-	-	-
<i>How does this reduce risk?</i>				
Other	Yes	Chapter 144 Special Events	Local	Administration, OEM
<i>How does this reduce risk?</i> Introduced as a local ordinance, any private event that will have more than 250 attendees requires a permit and application / IAP that township officials including admin/clerk/OEM review and approve. This helps with awareness, coordination, safety planning and adherence to ordinances and best practices.				
Planning Documents				
Comprehensive/Master Plan	Yes	Master Plan, 2023	Local, Pinelands Commission & State	Township Committee
<i>How does this reduce risk?</i> The Master Plan enables the municipality to plan for its future growth. The report states the major land development problems and objectives present when the last report or plan was prepared and the status of these conditions today. The report also makes recommendations for changes to the master plan or development regulations that would further achieve the original goals or address				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
significant changes that have occurred since the last report was adopted. This report is separated into six sections addressing each element required by the Municipal Land Use Law.				
Capital Improvement Plan	Yes	Capital Improvement Program, Annual	Local	Township Committee
<i>How does this reduce risk?</i> The Township Committee prepare a program as part of the annual budget of municipal capital improvement projects projected over a term of 1 – 5 or more years, and amendments thereto. Such program may encompass road projects being currently undertaken or future projects to be undertaken with federal, state, county, and other public funds or under federal, state or county supervision. The first year of such program shall, upon adoption by the Township Committee, constitute the capital budget of the Township as required by N.J.S.A. 40A:4-43 et seq. The program shall classify projects in regard to the urgency and need for realization and shall recommend a time sequence for their implementation. The program may also contain the estimated cost of each project and indicate probable operating and maintenance costs and probable revenues, if any, as well as existing sources of funds or the need for additional sources of funds for the implementation and operation of each project. In preparing the program in a manner deemed appropriate by the Township Administrator, Township Committee, the Chief Fiscal Officer, or other County, state or Federal agencies.				
Disaster Debris Management Plan	Yes	Temporary Debris Management Area Plan	Local/County	Shamong Township, NJ DEP, and Burlington County
<i>How does this reduce risk?</i> TDMA plan in place between Shamong Township, NJ DEP, and Burlington County ensures the Township has pre-approved locations for storage of storm debris post incident. This allows for better management of debris disposal, pre-approved DEP locations, improved chances for PA reimbursement and an overall strategy for dealing with post storm/incident materials. Plan will be up for renewal in 2024/25.				
Floodplain Management or Watershed Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Stormwater Management Plan	Yes	Stormwater Management Plan, August 2007	Local, State, County	Township Engineer, State of NJ DEP
<i>How does this reduce risk?</i> Prohibits the spilling, dumping, or disposal of materials other than stormwater to the municipal separate storm sewer system (MS4) operated by the Township of Shamong so as to protect public health, safety, and welfare, and to prescribe penalties for the failure to comply.				
Stormwater Pollution Prevention Plan	Yes	Stormwater Pollution Prevention Plan, April 2024	Local, State, County	Twp Engineer, State of NJ DEP
<i>How does this reduce risk?</i> Establishes policies to identify and or prevent run-off &/or pollution to Township waterways.				
Open Space Plan	Yes	Open Space Plan, 11/17/2009	Local	Joint Land Use Board
<i>How does this reduce risk?</i> The Plan provides for preservation of land.				
Urban Water Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Habitat Conservation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Economic Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Shoreline Management Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Community Wildfire Protection Plan	Yes	Community Wildfire Protection Plan	Local	NJDEP Forest Fire Service
<i>How does this reduce risk?</i> A CWPP is in place between Shamong Township and NJDEP Forest Fire Service. Plan is coming up for review and will be assessed for updates and grant opportunities in fuel management, tools and equipment purchasing assistance, and comprehensive plan for wildfire urban interface management.				
Community Forest Management Plan	No	-	-	-
Transportation Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Agriculture Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Tourism Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Business/ Downtown Development Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Other	No	-	-	-
<i>How does this reduce risk?</i>				
Response/Recovery Planning				
Emergency Operations Plan	Yes	Emergency Operations Plan 2023-2025	Local/County/State	OEM
<i>How does this reduce risk?</i> The EOP was updated in summer 2023 and submitted to Burlington County for certification. Review process was changed by NJOEM from every 4 years to every 2 years. The Plan addresses annexes for emergency communications, evacuation, fire/ems, hazmat, volunteer programs, and temporary sheltering.				
Continuity of Operations Plan	Yes	Emergency Operations Plan 2023-2025	Local	OEM
<i>How does this reduce risk?</i> The EOP addresses COOP of government as relates to times of emergency, identifying the deputy or alternate resources as responsible for key functions in each annex.				
Strategic Recovery Planning Report	No	-	-	-
<i>How does this reduce risk?</i>				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
<i>How does this reduce risk?</i>				



	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Post-Disaster Recovery Plan	No	-	-	-
<i>How does this reduce risk?</i>				
Public Health Plan	Yes	Emergency Operations Plan, Public Health Annex, 2023- 2025	Local	OEM, Burlington County Health Department
<i>How does this reduce risk?</i> Shamong Township participates in the County Health programs including annual meetings reviewing health priorities, participating in programs and education, clinics, countermeasure deployment planning and communications to the public. The 2023-25 EOP includes a public health annex that is deferred to Burlington County Health Dept board and directors.				
Other	No	-	-	-
<i>How does this reduce risk?</i>				

Development and Permitting Capability

The table below summarizes the capabilities of the Township of Shamong to oversee and track development.

Table 9.33-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Construction Office
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? • If yes, please describe	Yes	In the Township Master Plan
Describe the level of build-out in your jurisdiction.	N/A	According to the build out analysis presented in the township's Master Plan, Shamong Township has the potential for 563 new housing units and/or 104,921 square feet of commercial development.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Shamong and their current responsibilities that contribute to hazard mitigation.



Table 9.33-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	<p>The Planning Board shall accordingly exercise its power in regard to:</p> <ul style="list-style-type: none"> (1) The Master Plan pursuant to Article III. (2) Subdivision control and site plan review pursuant to Articles VI and VII. (3) The Official Map pursuant to Article V. (4) The Zoning Ordinance, including conditional uses pursuant to Article IX. (5) Variances and certain building permits in conjunction with subdivision, site plan and conditional use approval pursuant to § 110-44. (6) Historic resource preservation pursuant to § 110-36 of this chapter. (7) The powers of a Joint Land Use Board, pursuant to N.J.S.A. 40:55D-25c. <p>The Planning Board may:</p> <ul style="list-style-type: none"> (1) Participate in the preparation and review of programs or plans required by state or federal law or regulations; (2) Assemble data on a continuing basis as part of a continuous planning process; and (3) Perform such other advisory duties as are assigned to it by ordinance or resolution of the Township Committee for the aid and assistance of the Township Committee or other agencies or officers.
Zoning Board of Adjustment	Yes	See above, Joint Land Use Board (Planning & Zoning)
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Public Works Department clears roads of snow, makes sure the stormwater system is functional, and completes maintenance at Township facilities.
Construction/Building/Code Enforcement Department	Yes	The Building Codes, Construction Permits and Zoning Department serves and protects homeowners throughout Shamong per the New Jersey State Uniform Construction Codes (UCC) and the Ordinance Codes of Shamong Township.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Emergency Management/Public Safety Department	Yes	Shamong Township Office of Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	Yes	Resident notifications via Civic Alert provided by Burlington County
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Storm drains are inspected and if necessary cleared or repaired
Mutual aid agreements	Yes	With surrounding municipalities for mutual aid and various administrative tasks such as Tax Assessor, Tax Collector and Municipal Court.
Human Resources Manual <i>e.g., Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?</i>	Yes	Updated bi-annually with recommendations from the Burlington County Joint Insurance Fund with review by the Municipal Solicitor.
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	At the Township and Joint Land Use Board levels
Engineers or professionals trained in building or infrastructure construction practices	Yes	At the Township and Joint Land Use Board Levels
Planners or engineers with an understanding of natural hazards	Yes	At the Township level
Staff with expertise or training in benefit/cost analysis	No	Utilize Township Auditor/Engineer if necessary
Professionals trained in conducting damage assessments	Yes	Township Engineer
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	Yes	Township Engineer
Emergency Manager	Yes	Office of Emergency Management Coordinator
Grant writer(s) <i>Consider the following - Are data and maps from the HMP used to support documentation in grant applications?</i>	Yes	Township Engineer
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

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

Table 9.33-5. Fiscal Capabilities

Community development Block Grants (CDBG, CDBG-DR)	
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes



Community development Block Grants (CDBG, CDBG-DR)	
Impact fees for homebuyers or developers of new development/homes	NO – all privately owned wells & septic systems
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	Yes (bond anticipation notes)
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	N/A
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

Education and Outreach Capability

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

Table 9.33-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	Mayor, Township Administrator, Office of Emergency Management Coordinator, Solicitor
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Resident notifications via Civic Alert provided by Burlington County
Natural disaster/safety programs in place for schools	Yes	Shamong Twp. Board of Education responsible for these policies
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	Yes	Resident notifications via Civic Alert provided by Burlington County

Community Classifications

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

Table 9.33-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	No	-	-
Other	No	-	-

Note:

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). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.33-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam Failure	Moderate
Disease Outbreak	Strong
Drought	Moderate
Earthquake	Moderate
Extreme Temperature	Strong
Flood	Moderate
Severe Weather	Moderate
Severe Winter Weather	Strong
Wildfire	Moderate

9.33.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.



NFIP Floodplain Administrator (FPA)

Joe Hirsh, Township Engineer

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of Shamong.

Table 9.33-9. NFIP Summary

Active Policies	Total Premium + Policy Fee	Number of Losses	Total Net Payment	Repetitive Loss Properties
13	\$7,427	7	\$8,926.85	1

Source: NFIP 2023

Notes: Data current as of October 2023

RL Repetitive Loss

SRL Severe Repetitive Loss

RL FMA Definition Any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

RL NFIP Definition Any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978.

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in the Township of Shamong.

Table 9.33-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none">Do you maintain a list of properties that have been damaged by flooding?	Areas surrounding and within the SFHA experience flooding. The Township does not maintain a list.
Do you maintain a list of property owners interested in flood mitigation? <ul style="list-style-type: none">How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	No N/A
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none">If so, state what projects are underway.	No RiskMAP projects are currently underway within the Township. A Burlington County Risk MAP has been issued 7/31/2017 which includes the Township of Shamong.
<ul style="list-style-type: none">How do you make Substantial Damage determinations?How many were declared for recent flood events in your jurisdiction?	Damage sustained whereby the cost of restoring to its condition before damage would equal or exceed 50 percent of the market value prior to damage occurring. None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?	None N/A



NFIP Topic	Comments
<ul style="list-style-type: none"> If there are mitigated properties, how were the projects funded? 	
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. 	To the best of the Township's knowledge, no additional problem areas in the mapping exist.
NFIP Compliance	
What local department is responsible for floodplain management?	Engineering
Are any certified floodplain managers on staff in your jurisdiction?	The Office of the Township Engineer (ERI) includes certified floodplain managers to consult for the needs of the Township.
Do you have access to resources to determine possible future flooding conditions from climate change?	The Office of the Township Engineer has access to NJ FloodMapper which can be utilized to visualize impacts due to coastal flood events in conjunction with sea level rise.
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? 	No as this is completed by the Township Engineer (LICENSED), Environmental Resolutions.
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, engineer capabilities
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which exceeds 50 percent of the market value of the structure before the start of construction of the improvements.
What are the barriers to running an effective NFIP program in the community, if any?	None
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. 	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	According to records from NJDEP, the Township has not had a CAV or CAC.
What is the local law number or municipal code of your flood damage prevention ordinance? <ul style="list-style-type: none"> Have you adopted NJDEP's Model Code Coordinated Ordinance? What is the date that your flood damage prevention ordinance was last amended? 	Township of Shamong, NJ Part II, General Legislation Chapter 90 Flood Damage Prevention. No An amendment to the ordinance was introduced on May 7, 2024, with the second reading of the amended ordinance scheduled to be on June 11, 2024.
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	The Floodplain Management program meets the minimum requirements of the NFIP.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning	The Planning Board conducts subdivision control and site plan review pursuant to Articles VI and VII.



NFIP Topic	Comments
board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	To be determined.

9.33.5 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 appreciating a jurisdiction's overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The Township does not track if permits are issued within the SFHA.

Table 9.33-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain)										
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	3	N/A	4	N/A	0	N/A	2	N/A	5	N/A
Multi-Family	-	N/A	-	N/A	-	N/A	-	N/A	-	N/A
Other (commercial, mixed-use, etc.)	-	N/A	-	N/A	-	N/A	-	N/A	-	N/A
Total Permits Issued	3	N/A	4	N/A	0	N/A	2	N/A	5	N/A

SFHA Special Flood Hazard Area (1% annual chance flood event)

* Only location-specific hazard zones or vulnerabilities identified.

Table 9.33-12. Recent and Expected Future Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2019 to Present					
Forrest Hollow Court Subdivisions	Residential	12 Structures	Forrest Hollow Court (located along Grassy Lake Road, near the intersection with Atsion Road)	Development is not built in the floodplain, but is located nearby. The development is located within the very high and high wildfire fuel risk areas.	A major subdivision was approved in 2019 for the development of 12 single family homes. These structures will be built on Forrest Hollow Court, which is located off of Grassy Lake Road, near the intersection with Atsion Road. The structures are still being built; construction began in 2023.
Known or Anticipated Major Development in the Next Five (5) Years					
There is no known or anticipated major development within the Township in the next five (5) years.					



9.33.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.2 (Methodology) and Section 4.4 (Hazard Ranking) provide detailed summaries for the Township of Shamong's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the Township of Shamong has significant exposure. The maps also show the location of potential new development, where available.



Figure 9.33-1. Township of Shamong Flood and Sea Level Rise Hazard Area Extent and Location Map

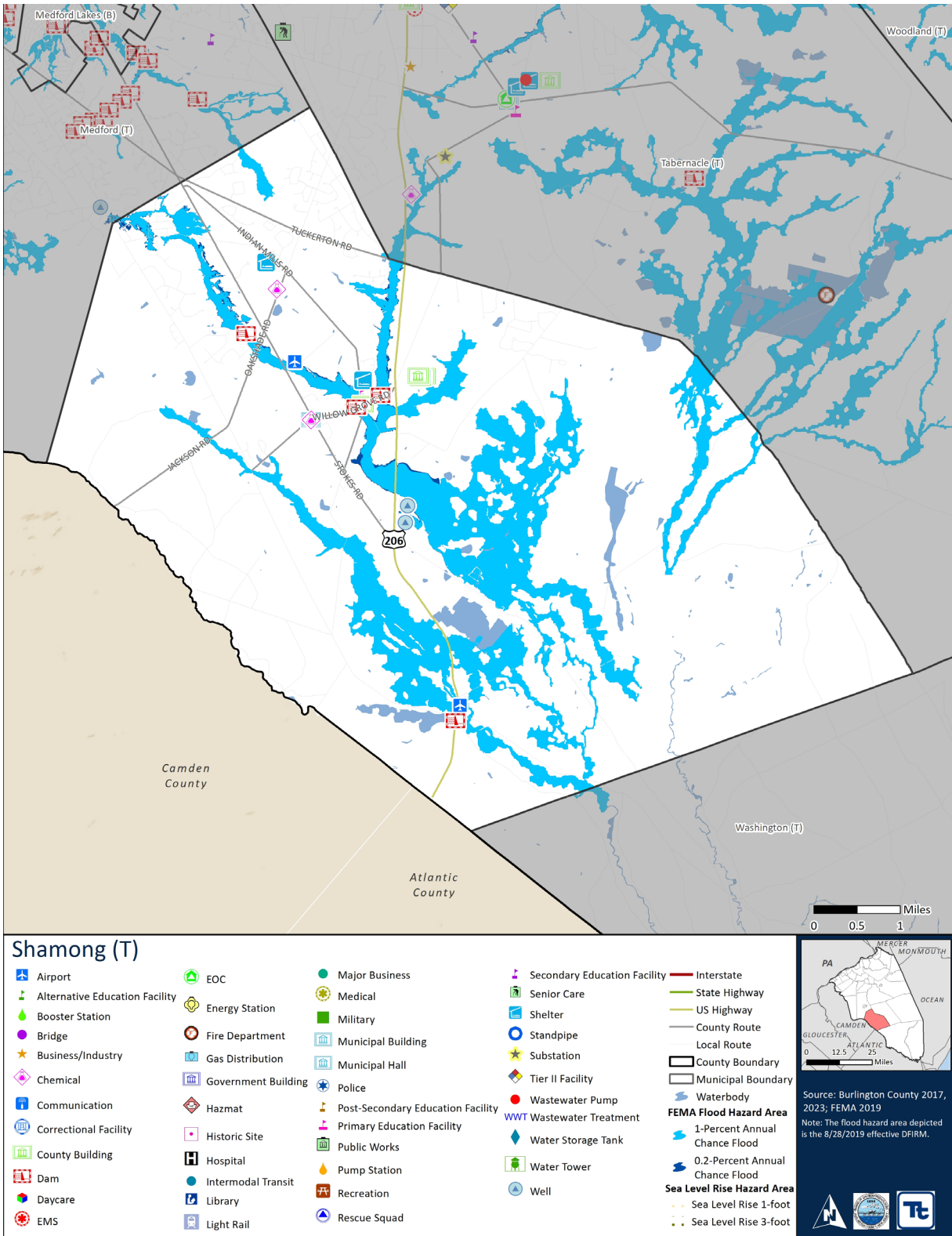
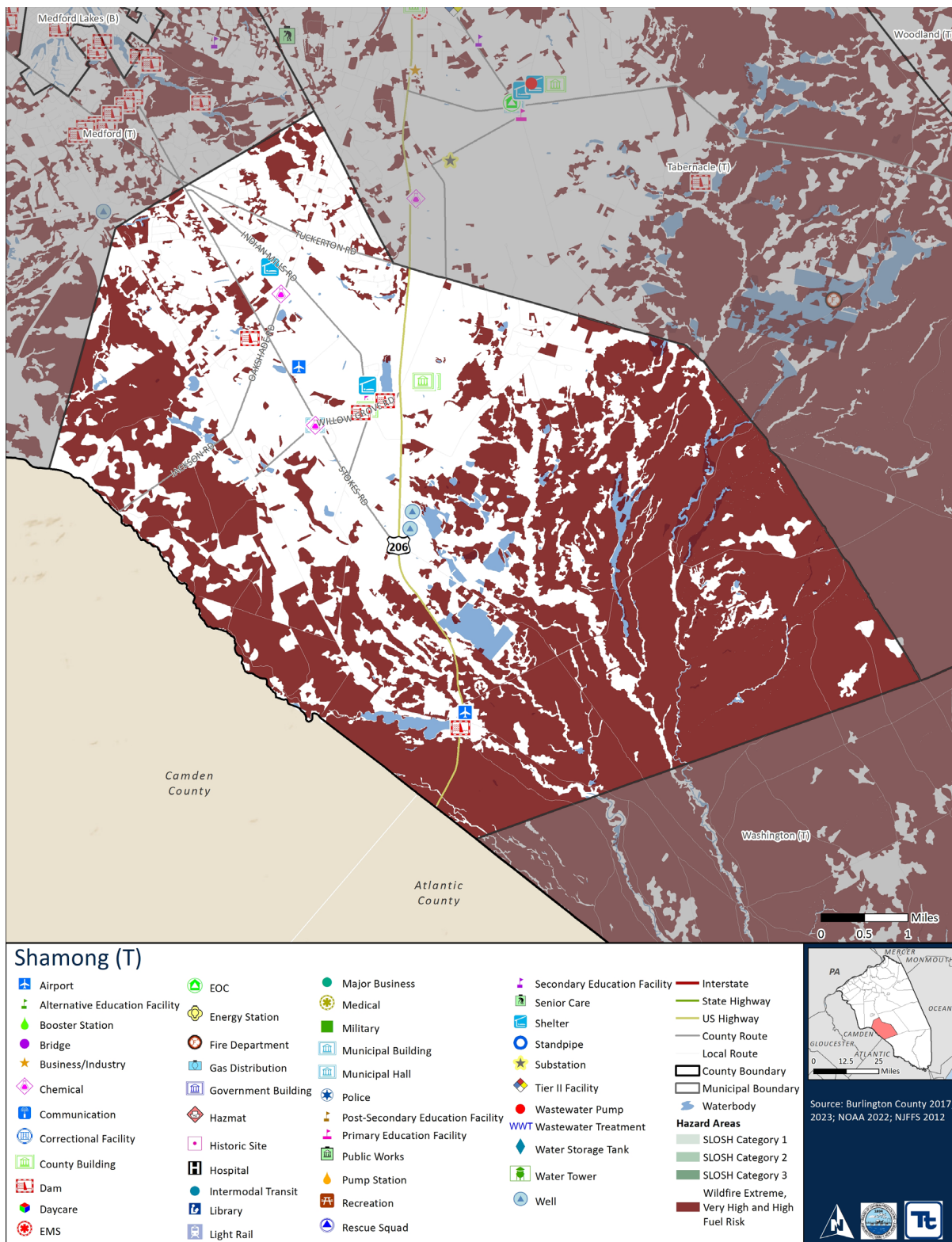




Figure 9.33-2. Township of Shamong SLOSH and Wildfire Hazard Area Extent and Location Map





Hazard Event History

Burlington County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The Township of Shamong's history of federally declared (as presented by FEMA) and significant hazard events [as presented in NOAA-National Centers for Environmental Information (NCEI)] is consistent with that of the County. The table below provides details regarding municipal-specific loss and damages the Township of Shamong experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources.

Table 9.33-13. Hazard Event History Since 2019

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	Burlington County accounted for 115,985 positive cases of COVID-19 in the State of New Jersey, and 1,265 of the reported deaths. A total of 991,269 vaccinations were delivered in the County to both residents and non-residents.	DCA LGEF Grant Recipient approx. \$12,000 2020. JIF expense reimbursement 2020 approx. \$10,000
June 3, 2020	Severe Weather Incident	No	Severe Weather	Storm generated need for a Prelim Damage Assessment. PA did not rise to threshold for county impact to declare. Locally damage to 4 homes Emergency Protective Measures Debris Removal \$55,000
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	Tropical Storm Isaias brought high winds and heavy rain to Burlington County; some areas of the County reported more than 6 inches over several hours. Burlington County Central Communications fielded over 400 emergency calls and 1,400 non-emergency calls, many for flooded basements and residences.	FEMA Public Assistance Grant 4574PA Approximately \$25,000 2021



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall, flash floods, and a tornado (EF-1) that moved through Edgewater Park, Beverly, Burlington Township and Burlington City. Rainfall totals exceed 3 inches in parts of County; 4 water rescues occurred due to flash flooding.	Local expenses did not rise to threshold for PA. < \$5,000
June 19-20, 2022	Mullica River Wildfire	No	Major forest fire in Wharton State Forest, areas of SR-206 and within boundaries of Shamong Township Acreage burn > 15,000	Local expenses did not rise to threshold for PA. Local Fire Company assets and personnel time. < \$5,000
August 20-23, 2023	Dragway Wildfire	No	Major forest fire in Wharton State Forest, Waterford, and Shamong Twp. Road closures municipal and county. Local Fire Company structural protection of Oak View Estates Mobile Home Park Acreage burn > 5,000	Local expenses did not rise to threshold for PA. Local Fire Company assets and personnel time. OEM resource requests escalated to Burlington County and emergency comms system. < \$5,000
April 23-25, 20224	County Line Wildfire	No	Major Forest Fire at the Burlington County / Camden County line in Wharton State Forest. Over 500 acres burned. A State Forest campground was evacuated for precautions, trails were closed, and Oakshade/Jackson Road was closed for smoke and back burn operations.	No local impact or damage for municipal, no home threatened, minimal support and calls for local vol. fire company. No OEM resource requests. OEM local communication notices using Civic Alert broadcasts.

Source: FEMA 2023, NOAA NCEI 2023

Notes:

DR Major Disaster Declaration (FEMA)

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

N/A Not applicable



Hazard Ranking and Vulnerabilities

The hazard profiles in Volume 1, Section 4 (Risk Assessment) have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Township of Shamong's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; and community capabilities to address the hazard and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Shamong. The Township of Shamong reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Township of Shamong indicated the following:

- The Township changed their ranking for wildfire from medium to high because of the increase in wildfires in the WUI.
- The Township agreed with the remainder of the calculated hazard rankings.

Table 9.33-14. Hazard Ranking Input

Hazard	Hazard Ranking – High/Medium/Low
Dam Failure	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Low
Extreme Temperature	Medium
Flood	Low
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	High

Critical Facilities

The table below identifies critical facilities and lifelines in the community located in the 1-percent and 0.2-percent floodplain and presents Hazus-MH estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.



Table 9.33-15. Potential Flood Losses to Critical Facilities and Community Lifelines

Name	Type	Exposure	
		1% Event	0.2% Event
Indian Mills Brook Dam	Dam	Yes	Yes

Source: Burlington County 2023; Burlington County Planning Partnership 2023; FEMA 2019

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in or could impact the Township of Shamong:

- Astion Lake Dam – New Jersey Department of Transportation

Identified Issues

After review of the Township of Shamong’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Township of Shamong identified the following vulnerabilities within their community:

- The Township has not adopted NJDEP’s Model Code Coordinated Ordinance.
- The Township’s Disaster Debris Management Plan is up to be renewed.
- The Township has a process to perform Substantial Damage Assessments, but not a formal plan.
- The Township does not track if permits are issued within the SFHA.
- The Township’s Community Wildfire Protection Plan is due for review and update.
- The Township building, public works building, and Indian Mills School do not currently have backup power installed at the facilities and suffer from not being able to perform continuity of operations during power outages.
- The Township does not have their own emergency alert system and relies on the County Civic Alert system to warn residents of emergency alerts.
- The Township has not fully integrated hazard mitigation principles and recommendations into their plans and codes that are used to support development within the Township.
- The Township knows that there are repetitive loss properties located in the Township boundaries that need flood hazard mitigation alternatives. One of the locations that was identified is Stokes Road.
- The Township does not have official food banks and PPE distribution centers established to help those that may be impacted by an emergency.
- The Robbins well hydrant has a fire pump in place, but does not have emergency power backup generation, which makes it unable to pump during times of a power outage.
- The Township has a population of underserved migrant workers that do not speak English and reside in the WUI, as well as mobile home parks which are all located in the WUI and are greatly impacted during the wildfire season.
- The Township does not coordinate with State Parks/Forests or privately owned facilities to educate them about important emergency alerts as well as hazard mitigation and prevention.



- The Indian Mills Brook Dam, a critical infrastructure, is located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Astion Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby.

9.33.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2019 HMP. Actions that are in progress are carried forward and combined with new actions as part of this plan update and are included in the tables with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such and previously presented in the 'Capability Assessment' earlier in this annex.



Table 9.33-16. Status of Previous Mitigation Actions

Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)?		
				Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
SG-1 (former SG-8)	Obtain and install backup power sources at critical facilities.	Municipality with support from County, NJOEM and FEMA	In Progress The Township has installed backup power for the Local Fire Station and Memorial School. The Township building is still in need of backup power.	Yes	The Township building does not have emergency power backup.	Municipality with support from County, NJOEM and FEMA
SG-2 (former SG-12)	Enhance resilience to severe storms by joining the NOAA "Storm Ready" program.	Municipality with support from County, NJOEM and FEMA	In Progress The Township has access to Civic Alert which provides warning alerts and alarms.	Yes	Reliance on Burlington County Civic Alert System precludes the Township from owning the release and subscription of residents to the weather alerts.	Municipality with support from County, NJOEM and FEMA
SG-3 (former SG-13)	Provide public education and outreach on proper installation and/or use of backup power	Municipal Clerk	Complete Building Codes and electrical inspections cover the proper use of backup power generation.	No	-	-
SG-4 (former SG-15)	Evaluate the benefits of participating in the Firewise or RSG Program	Municipal OEM	Complete The Township participates in RSG and routinely shares information about fuel management and wildfire risks.	No	-	-
SG-5	During future updates of the Master Plan, Stormwater Management Plan, Open Space Plan, or other plans, work to integrate hazard mitigation principles and recommendations into	Municipality	In Progress The master plan is under review in the 2023/2024 cycle. There are	Yes	The master plan has been reviewed and updated. There are ongoing updates to	Municipality



Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)?		
				Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
	the plans. Additionally, use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community.		ongoing updates to FIRM maps and engineering overviews.		FIRM maps and engineering overviews.	
SG-6	<p>The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas include:</p> <ul style="list-style-type: none"> Stokes Road <p>Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative is dependent on funding, benefits versus cost, and willing participation of property owners.</p>	Municipality with support from County	<p>In Progress</p> <p>Stokes Road Bridge construction is currently scheduled for 2024.</p>	Yes	The Township has an ongoing review of RL and SRL locations, updates to FEMA maps and public education.	Municipality with support from County



Additional Mitigation Efforts

In addition to the mitigation initiatives completed in the table above, the Township of Shamong identified the following mitigation efforts completed since the last HMP:

- During paving projects, all storm drains were repaired or rebuilt as needed to meet stormwater management regulations.

Since the adoption of the County's first HMP, the Township of Shamong has made significant mitigation progress in the following areas:

- Stormwater Management

Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Shamong participated in a mitigation action workshop in October 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Flood prone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Table 9.33-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA						CRS			
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X	X		X	X		X		X	X
Disease Outbreak	X	X		X	X		X			X
Drought	X	X		X	X		X			X
Earthquake	X	X		X	X		X			X
Extreme Temperature	X	X		X	X		X			X
Flood	X	X		X	X		X		X	X
Severe Weather	X	X		X	X		X			X
Severe Winter Weather	X	X		X	X		X			X
Wildfire	X	X		X	X	X	X	X		X

Note: Mitigation categories are described below the Mitigation Initiatives.



The following pages list the specific mitigation initiatives Township of Shamong would like to pursue in the future to reduce the effects of hazards. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in Township priorities.



Action 2024-Shamong-01. Code Coordinated Ordinance

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Construction Official, Administration, NFIP State Coordinator, FEMA Regional Office
Hazard(s) of Concern:	Flood
Description of the Problem:	A recent audit of New Jersey's model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. These regulations are: the NFIP implemented by local floodplain administrators, the New Jersey Flood Hazard Area Control Act (FHACA) implemented at the State level by the NJDEP, and the Uniform Construction Code (UCC) implemented by the local Construction Official. NJDEP used this feedback to develop a model Code Coordinated Ordinance and continues to work with municipalities to update flood damage prevention ordinances to the Code Coordinated Ordinance.
Description of the Solution:	After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the municipality will update and adopt the Code Coordinated Ordinance.
Estimated Cost:	Staff time
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years
Goals Met:	1, 2, 5,7
Benefits:	The updated ordinance will improve floodplain management, meet NFIP requirements, and increase resilience of new and substantially improved structures in the floodplain.
Impact on Socially Vulnerable Populations:	The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to socially vulnerable populations exists.
Impact on Future Development:	The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the same requirements as general building construction that are set forth in the ordinance.
Impact on Capabilities:	This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.
Climate Change Considerations:	The updated ordinance includes the State's higher standards that are in place to address heightened flood risk due to climate change such as



	those for floodway rise and mandatory freeboard have been incorporated in these new model ordinances.	
Mitigation Category:	Local Plans and Regulations	
CRS Category:	Preventative Measures	
Priority:	High	
Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Modify existing flood damage prevention ordinance	Time intensive
	Leave NFIP	Residents lose flood insurance coverage



Action 2024-Shamong-02. Disaster Debris Management Plan

Lead Agency:	Public Works	
Supporting Agencies:	OEM, NJDEP, County	
Hazard(s) of Concern:	Dam Failure, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	Major disaster events can result in large amounts of debris that overwhelm normal trash collection operations. Depending on the amount generated, temporary staging areas for debris collection may be needed. The municipality does not have a disaster debris management plan in place. During a disaster that results in debris, the municipality A plan with outlined responsibilities is needed to adequately address post-disaster cleanup operations.	
Description of the Solution:	The municipality will update its disaster debris management plan. This plan will establish procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The plan will identify responsibilities for execution of the plan. The plan will align with permitted temporary collection areas.	
Estimated Cost:	Staff time	
Potential Funding Sources:	Municipal budget	
Implementation Timeline:	Within 5 years	
Goals:	5, 6	
Benefits:	The action will result in increased quicker and more efficient cleanup after disaster events.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The action will result in increased post disaster capabilities.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the capabilities to respond to these events.	
Mitigation Category:	Local Plans and Regulations	
CRS Category:	Emergency Services	
Priority:	High	
Alternatives:	Action	Evaluation
	No Action	-



	Rely on federal cleanup	These services may or may not be available
	Rely on state cleanup	These services may or may not be available



Action 2024-Shamong-03. Substantial Damage Management Plan

Lead Agency:	Floodplain Administrator
Supporting Agencies:	Public Works, OEM, Construction Department
Hazard(s) of Concern:	Dam Failure, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire
Description of the Problem:	<p>Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"> • Determine where the damage occurred within the community and if the damaged structures are in an SFHA. • Determine what to use for “market value” and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure’s pre-damage value. • Require permits for floodplain development. <p>The municipality does not have a Substantial Damage Management Plan in place. The municipality is in need of a plan to provide a framework for conducting such inspections and determinations.</p>
Description of the Solution:	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 <i>Developing a Substantial Damage Management Plan</i> (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
Estimated Cost:	Low
Potential Funding Sources:	Municipal budget
Implementation Timeline:	Within 5 years to develop the plan; ongoing to maintain and update the plan
Goals Met:	1, 2, 5, 7
Benefits:	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.
Impact on Socially Vulnerable Populations:	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.
Impact on Future Development:	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.



Impact on Critical Facilities/Lifelines:	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.	
Impact on Capabilities:	This action improves disaster recovery capabilities.	
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.	
Mitigation Category:	Local Plans and Regulations	
CRS Category:	Emergency Services, Preventative Measures	
Priority:	High	
Alternatives:	Action	Evaluation
	No Action	-
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements



Action 2024-Shamong-04. Permit Tracking

Lead Agency:	Township Administration	
Supporting Agencies:	Township Floodplain Administrator, Construction Official, Planning and Zoning Boards	
Hazard(s) of Concern:	Earthquake, Flood, Wildfire	
Description of the Problem:	The Township does not track permits by hazard area.	
Description of the Solution:	The Township will establish and implement a permit tracking process.	
Estimated Cost:	Staff time, Low	
Potential Funding Sources:	Municipal Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	1, 2, 5	
Benefits:	This action will allow all permits issued within the Township to be tracked by hazard area.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	This action may lead to permits being restricted within various identified hazard areas in the Township and municipal codes to be updated.	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	This action will create a new capability for the Township.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the Township's ability to track structures located in hazard areas which may have conditions exacerbated by the impacts of climate change, such as floods and wildfires.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Preventative Measures	
Priority	Medium	
Alternatives	Action	Evaluation
	No action	Current problem remains
	Track only flood development permits	Will align with NFIP requirements, but will not consider other hazard areas in the Township
	Contract permit tracking to another municipality	Costly



Action 2024-Shamong-05. Community Wildfire Protection Plan Update

Lead Agency:	Township Fire Department	
Supporting Agencies:	Township OEM, NJ Fire Service, Township Administration	
Hazard(s) of Concern:	Wildfire	
Description of the Problem:	The Township's Community Wildfire Protection Plan was last updated in 2011 and is in need of being updated.	
Description of the Solution:	The Township will update the Community Wildfire Protection Plan collaboratively with government representatives, in consultation with federal agencies and other interested parties.	
Estimated Cost:	Low	
Potential Funding Sources:	Municipal Budget	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2, 3, 4, 5, 6, 7	
Benefits:	This action will update an already existing capability by addressing issues such as wildfire response, hazard mitigation, community preparedness, and structure protection.	
Impact on Socially Vulnerable Populations:	This action will provide socially vulnerable populations an opportunity to be involved in the planning process, as a key element in community fire planning should be the meaningful discussion it promotes among community members regarding their priorities for local fire protection and forest management.	
Impact on Future Development:	This action may identify areas in which future development should be restricted due to vulnerability to the wildfire hazard.	
Impact on Critical Facilities/Lifelines:	This action will identify critical facilities and community lifelines located within the wildland-urban interface and are vulnerable to the wildfire hazard.	
Impact on Capabilities:	This action will update an existing Township capability.	
Climate Change Considerations:	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the likelihood of wildfires.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Natural Resource Protection, Emergency Services, Preventative Measures, Property Protection	
Priority	High	
Alternatives	Action	Evaluation



	No action	Plan will remain outdated
	Update without collaborative input	Plan will not meet minimum HFRA requirements
	Elect to discontinue plan	HFRA requirements will not be met.



Action 2024-Shamong-06. Township Building Backup Power

Lead Agency:	Township of Shamong Public Works	
Supporting Agencies:	Burlington County, NJOEM, FEMA	
Hazard(s) of Concern:	Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The Township building, public works building, and Indian Mills School do not currently have backup power installed at the facilities and suffer from not being able to perform continuity of operations during power outages.	
Description of the Solution:	The Township will conduct a study to determine to correct sized generators needed for the Township building, public works building, and Indian Mills School to be able to perform continuity of operations. Once the correct size is determined, the Township will acquire funding for the purchase and installation of the generators. Once installed, Public Works will be responsible for maintenance.	
Estimated Cost:	>\$100,000 per generator	
Potential Funding Sources:	HMGP, BRIC, Township Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 6, 7	
Benefits:	The Township building, public works building, and Indian Mills School will be able to perform continuity of operations during power outages.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	The Township building, public works building, and Indian Mills School will have redundant power.	
Impact on Capabilities:	The Township will be better prepared to respond to hazard events during power outages.	
Climate Change Considerations:	Climate change is leading to an increase in severity and frequency of storms.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Emergency Services	
Priority	Medium	
Alternatives	Action	Evaluation
	No Action	Current problem continues
	Solar Panels	Weather dependent and costly
	Mobile Generator	May lack sufficient power supply or run time



Action 2024-Shamong-07. Emergency Alert System

Lead Agency:	Township of Shamong	
Supporting Agencies:	Burlington County, NJOEM, FEMA	
Hazard(s) of Concern:	Extreme Temperature, Severe Weather, Severe Winter Weather	
Description of the Problem:	The Township does not have their own emergency alert system and relies on the County Civic Alert system to warn residents of emergency alerts.	
Description of the Solution:	The Township will acquire funding to install an emergency alert system that they have full access to so that they can issue emergency alerts as soon as they are aware of an emergency.	
Estimated Cost:	TBD	
Potential Funding Sources:	HMGP, Township Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	1, 2, 3, 5, 6, 7	
Benefits:	The Township will provide residents with emergency warnings as soon as they realize something is happening.	
Impact on Socially Vulnerable Populations:	Socially Vulnerable populations may not speak English, nor have access to cell phones and internet, which make issuing warnings a more difficult feat.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	An emergency system can alert critical facilities and lifelines of potential problems.	
Impact on Capabilities:	This action gives the Township an increased warning time to process potential emergencies.	
Climate Change Considerations:	Climate change impacts the severity and frequency of storms.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Current problem continues
	Utilize federal alert system	Will not alert for local emergencies
	Encourage local community groups to have emergency text chains	Not effective method



Action 2024-Shamong-08. Hazard Mitigation Integration

Lead Agency:	Township of Shamong	
Supporting Agencies:	NJOEM	
Hazard(s) of Concern:	Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The Township has not fully integrated hazard mitigation principles and recommendations into their plans and codes that are used to support development within the Township.	
Description of the Solution:	During future updates of the Master Plan, Stormwater Management Plan, Open Space Plan, or other plans, the Township work to integrate hazard mitigation principles and recommendations into the plans. Additionally, the Township will use these hazard mitigation principles and plan recommendations to update local building and zoning codes to create a more resilient community.	
Estimated Cost:	Staff Time	
Potential Funding Sources:	HMGP, BRIC, Township Budget	
Implementation Timeline:	Ongoing once established	
Goals Met:	1, 2, 3, 5	
Benefits:	The Township will have codes and plans that integrate hazard mitigation principles.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may not have direct access to codes and plans, nor speak the language that they are written in.	
Impact on Future Development:	Hazard mitigation principles will be integrated into future development via building and zoning codes.	
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines will be expected to follow updated plans and codes.	
Impact on Capabilities:	The Township's capability to handle hazard events is greatly improved by integrating hazard mitigation into other plans and codes.	
Climate Change Considerations:	Hazard events are increasing in frequency and severity due to climate change.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Preventative Measures	
Priority	Medium	
Alternatives	Action	Evaluation
	No Action	-



	Rely on County Plans/Codes	Plans are not specific to the Township and the relevant mitigation issues that they have apart from the County
	Create additional hazard mitigation information	Integrating relevant plans/codes together makes them more useful than creating additional separate documents



Action 2024- Shamong-09. Non-Structural Flood Hazard Mitigation Alternatives

Lead Agency:	Township of Shamong	
Supporting Agencies:	NJOEM	
Hazard(s) of Concern:	Flood, Dam Failure	
Description of the Problem:	The Township knows that there are repetitive loss properties located in the Township boundaries that need flood hazard mitigation alternatives. One of the locations that was identified is Stokes Road.	
Description of the Solution:	<p>The Township will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, specifically those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL). At risk areas included Stokes Road, which is scheduled for construction in 2024.</p> <p>Alternatives would include acquisition/relocation or elevation depending on feasibility, and the completion of initiative is dependent on funding, benefits versus cost, and willing participation of property owners. The Township will continue to review RL/SRL locations and will promote mitigation alternatives.</p>	
Estimated Cost:	TBD	
Potential Funding Sources:	HMGP, BRIC, FMA, Township Budget	
Implementation Timeline:	Ongoing	
Goals Met:	2, 3, 5, 7	
Benefits:	The Township will reduce flood related issues that are connected to repetitive loss properties.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may not be aware of where the floodplain and RL/SRL properties are located.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	This action strengthens the Township's capability to deal with the flood hazard.	
Climate Change Considerations:	Hazard events are increasing in frequency and severity due to climate change.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Structural Flood Control Projects	
Priority	High	
Alternatives	Action	Evaluation
	No action	Current problem continues



	Construct flood walls/barriers around vulnerable areas	Costly and can divert floodwaters to other areas
	Deployable flood barriers for vulnerable areas	Requires a great deal of work to implement prior to each event



Action 2024-Shamong-10. Food and Supply Banks

Lead Agency:	Township of Shamong	
Supporting Agencies:	Non-Profits	
Hazard(s) of Concern:	Drought, Disease Outbreak, Severe Storm, Severe Winter Storm, Wildfire	
Description of the Problem:	The Township does not have official food banks and PPE distribution centers established to help those that may be impacted by an emergency.	
Description of the Solution:	The Township will establish several food banks and PPE distribution centers and will ensure that residents are knowledgeable of these locations.	
Estimated Cost:	\$10,000	
Potential Funding Sources:	HMGP, Township Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	1, 5	
Benefits:	The Township will have emergency distribution centers established in the event of an emergency.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may be in need of more supplies during an emergency.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The Township will strengthen their capability to ensure residents have supplies they may need in the event of an emergency.	
Climate Change Considerations:	Climate change is increasing the severity and frequency of storm events.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Current problem remains
	Contract with existing food banks	Other populations will lose opportunities for assistance
	Partner with surrounding municipalities	Municipalities may not need to open when the Township does



Action 2024-Shamong-11. Fire Pump Emergency Power

Lead Agency:	Township Fire Services	
Supporting Agencies:	Township of Shamong Administration	
Hazard(s) of Concern:	Drought, Extreme Temperature, Severe Weather, Severe Winter Weather	
Description of the Problem:	The Robbins well hydrant has a fire pump in place, but does not have emergency power backup generation, which makes it unable to pump during times of a power outage.	
Description of the Solution:	The Township will conduct a study to determine the right size backup generator and will acquire funding to obtain and install the generator. Fire Services will be responsible for maintenance.	
Estimated Cost:	\$100,000	
Potential Funding Sources:	HMGP, BRIC, Township Budget	
Implementation Timeline:	Within 5 Years	
Goals Met:	1, 2, 5, 6	
Benefits:	The Township will be able to fight fires more safely during power outages.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	Future development may rely on this fire pump to douse fires before they grow to impact additional development.	
Impact on Critical Facilities/Lifelines:	Critical facilities may rely on this pump to douse fires before they grow to impact critical facilities and lifelines.	
Impact on Capabilities:	This strengthens to Township's availability to fight fires, especially during power outages.	
Climate Change Considerations:	Climate change is increasing drought and extreme temperatures which can spur and strengthen fires.	
Mitigation Category	Structure and Infrastructure Project	
CRS Category	Emergency Services	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Current problem continues
	Solar Panels	Weather dependent and costly
	Mobile Generator	May lack sufficient power supply or run time



Action 2024-Shamong-12. Socially Vulnerable Population Outreach

Lead Agency:	Township of Shamong	
Supporting Agencies:	NJOEM	
Hazard(s) of Concern:	Wildfire	
Description of the Problem:	The Township has a population of underserved migrant workers that do not speak English and reside in the WUI, as well as mobile home parks which are all located in the WUI and are greatly impacted during the wildfire season.	
Description of the Solution:	The Township will enhance outreach and communication to migrant workers that do not speak English as well as to the mobile home parks that are located within the WUI to ensure that people impacted by the WUI are knowledgeable of mitigation techniques.	
Estimated Cost:	Staff Time	
Potential Funding Sources:	HMGP, Township Budget	
Implementation Timeline:	Within 1 year, Ongoing once established	
Goals Met:	1, 2, 3, 5, 7	
Benefits:	Socially vulnerable individuals who are located in the WUI areas of the Township will become more knowledgeable of the wildfire hazard.	
Impact on Socially Vulnerable Populations:	This action provides additional outreach to socially vulnerable populations.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	The Township improves their wildfire capability as well as their outreach to socially vulnerable populations.	
Climate Change Considerations:	Climate change is increasing drought and extreme temperatures which can spur and strengthen fires.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Public Information	
Priority	High	
Alternatives	Action	Evaluation
	No action	Current methods remain the only ones used
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Township



	Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance
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Action 2024-Shamong-13. Education and Coordination

Lead Agency:	Township of Shamong	
Supporting Agencies:	NJOEM	
Hazard(s) of Concern:	Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	The Township does not coordinate with State Parks/Forests or privately owned facilities to educate them about important emergency alerts as well as hazard mitigation and prevention.	
Description of the Solution:	The Township will work with state entities and privately owned facilities to educate them about important emergency alerts available and hazard mitigation and prevention.	
Estimated Cost:	Staff Time	
Potential Funding Sources:	HMGP, Township Budget	
Implementation Timeline:	1 year, Ongoing once established	
Goals Met:	1, 2, 3, 5, 7	
Benefits:	The Township will have better educated residents and business owners that may not receive Township alerts or information.	
Impact on Socially Vulnerable Populations:	N/A	
Impact on Future Development:	Privately owned, new development, will have opportunities for education and outreach in relation to hazard mitigation.	
Impact on Critical Facilities/Lifelines:	N/A	
Impact on Capabilities:	This action strengthens the Township's capability to perform outreach and education to all entities in the Township.	
Climate Change Considerations:	Climate change is leading to an increase in frequency and severity of storms.	
Mitigation Category	Education and Awareness Programs	
CRS Category	Public Information	
Priority	High	
Alternatives	Action	Evaluation
	No action	Current methods remain the only ones used
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Township



	Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance
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Action 2024-Shamong-14. Dam Owner Partnership

Lead Agency:	Township OEM	
Supporting Agencies:	NJDEP, Dam Owners	
Hazard(s) of Concern:	Dam Failure	
Description of the Problem:	The Indian Mills Brook Dam, a critical infrastructure, is located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Astion Lake Dam, within its jurisdiction. These structures have the potential to impact those living nearby.	
Description of the Solution:	Work with the owners of the dams to ensure inspections and safety procedures are up to date.	
Estimated Cost:	Low	
Potential Funding Sources:	Municipal budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 7	
Benefits:	This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.	
Impact on Socially Vulnerable Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.	
Impact on Future Development:	N/A	
Impact on Critical Facilities/Lifelines:	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam.	
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event. This action will increase the capabilities to respond to these events.	
Mitigation Category	Local Plans and Regulations	
CRS Category	Preventative Measures	
Priority	High	
Alternatives	Action	Evaluation
	No Action	Township will be unaware of any safety concerns for the dam or its condition



	Utilize information from NJDEP	Owners may not be required to submit a safety plan to the State
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory



The prioritization criteria provided in Volume 1, Section 6 (Mitigation Strategy) identify 14 evaluation/prioritization criteria 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 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.33-18. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Community Objectives	Total	High / Medium / Low
2024-Shamong-01	Code Coordinated Ordinance	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2024-Shamong-02	Disaster Debris Management Plan	0	1	1	1	1	1	1	0	1	1	1	1	0	1	11	High
2024-Shamong-03	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2024-Shamong-04	Permit Tracking	0	1	1	1	1	1	0	0	1	1	0	1	0	1	9	Medium
2024-Shamong-05	Community Wildfire Protection Plan Update	1	1	1	1	1	1	1	1	1	0	1	1	1	1	13	High
2024-Shamong-06	Township Building Backup Power	0	1	1	1	1	1	0	0	1	1	0	1	1	1	10	Medium
2024-Shamong-07	Emergency Alert System	1	0	1	1	1	1	0	1	1	1	1	1	0	1	11	High
2024-Shamong-08	Hazard Mitigation Integration	0	1	1	1	1	1	0	0	1	1	1	1	0	1	10	Medium
2024-Shamong-09	Non-Structural Flood Hazard Mitigation Alternatives	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2024-Shamong-10	Food and Supply Banks	1	0	1	1	1	1	0	1	1	1	0	1	1	1	11	High
2024-Shamong-11	Fire Pump Emergency Power	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High



Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Community Objectives	Total	High / Medium / Low
2024-Shamong-12	Socially Vulnerable Population Outreach	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2024-Shamong-13	Education and Coordination	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2024-Shamong-14	Dam Owner Partnership	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High

Note: Volume 1, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).