9.6 BOROUGH OF HOPEWELL

This section presents the jurisdictional annex for the Borough of Hopewell and includes resources and information to assist public and private sectors with reducing losses from future hazard events. This annex is not intended as guidance for actions to take during a disaster. Rather, this annex provides actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex includes a general overview of the municipality and who in the community participated in the planning process, an assessment of the Borough of Hopewell's risk and vulnerability, the different capabilities, and an action plan that will be implemented to achieve a more resilient community.

9.6.1 Hazard Mitigation Planning Team

The Borough of Hopewell followed the planning process described in Section 2 (Planning Process) in Volume I of this plan update and developed the annex over the course of several months with input from many municipal departments as summarized in the table below. The primary and alternate points of contact represented the community on the 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, including the Borough of Hopewell hazard mitigation plan primary and alternate points of contact. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.6-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Michele Hovan, Borough Administrator **Address:** 88 East Broad Street, Hopewell, NJ 08525 **Phone Number:** 609-466-2636 **Email:** michele.hovan@hopewellboro-nj.us	**Name/Title:** Denis Pollack, Engineer's Office **Address:** 88 East Broad Street, Hopewell, NJ 08525 **Phone Number:** 908-879-6209 **Email:** denis.pollack@ferrieroengineering.com
NFIP Floodplain Administrator	
Name/Title: Vacant, Zoning Officer **Address:** 88 East Broad Street, Hopewell, NJ 08525 **Phone Number:** 609-466-2636 **Email:** zoning@hopewellboro-nj.us	
Additional Contributors	
Name/Title: Denis Pollack, Engineer's Office **Method of Participation:** Provided information on capabilities, past events, building permits, NFIP administration, previous actions, and hazard ranking.	
Name/Title: Paul Anzano, Mayor **Method of Participation:** Provided information on capabilities.	
Name/Title: Michele Hovan, Borough Administrator **Method of Participation:** Reviewed annex and provided updates.	

9.6.2 Municipal Profile

The Borough of Hopewell is located northern Mercer County and encompasses an area of 0.7 square miles. It was incorporated on April 14, 1891. The Borough is completely surrounded by Hopewell Township. Tributaries to Beden Brook are found within the Borough.

According to the U.S. Census, the 2010 population for the Borough of Hopewell was 1,922. The estimated 2019 population was 1,915, a 0.4 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 6.3 percent of the population is 5 years of age or younger and 13.9 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 Jurisdictional Capability Assessment and Integration

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

- An assessment of planning, 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. Annex development included reviewing planning and policy documents and surveying each jurisdiction to obtain a better understanding of their progress in plan integration and how risk reduction is supported. Areas with current mitigation integration are summarized in this jurisdictional Capability Assessment (Section 9.6.3). The updated mitigation strategy includes opportunities the Borough of Hopewell identified for integration of mitigation concepts to be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability

Section 5 (Capability Assessment) provides an overview of the planning, legal, and regulatory capabilities. The table below summarizes the regulatory tools that are available to the Borough of Hopewell, what is present in the jurisdiction, and code citation and date.

Table 9.6-2. Planning, Legal, and Regulatory Capability

	Jurisdiction has this? (Yes/No)	Required by State? (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	Yes	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)	State and Local	NJ State Office of Local Code Enforcement
How does this reduce risk? • The Uniform Construction Code establishes minimum building requirements which protect new construction from damages in expected hazard events.					
Zoning/Land Use Code	Yes	Yes, if the jurisdiction has a planning board	Chapters 10-13 and 19, Borough Ordinances	Local	Planning Board
How does this reduce risk? • The purpose of this chapter is to encourage the most appropriate use of land through the borough and to conserve the value of property, with due consideration for the character of the zones and their peculiar suitability for particular uses, all in accordance with a comprehensive plan designed to lessen congestion in the streets; to secure safety from fire, flood, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent overcrowding of land; to avoid undue					

	Jurisdiction has this? (Yes/No)	Required by State? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
concentration of population, and to that end to regulate the height, design appearance, number of stories and size of buildings and other structures; the percentage of the area of the lot that may be occupied; the size of yards, courts, and other open spaces; the density of population, and the location and use of buildings, structures, and land for trade, industry, residence or other purposes; and the height, size, and location of these uses within the limits of the borough.					
Subdivision Ordinance	Yes	Yes, if the jurisdiction has a planning board	Chapters 11, Borough Ordinance	Local	Planning Board
How does this reduce risk? • The purpose of this chapter shall be to provide rules, regulations and standards to guide land subdivision in the Borough of Hopewell in order to promote the public health, safety, convenience and general welfare of the borough. It shall be administered to insure the conservation, protection and proper use of land and adequate provision for circulation, utilities and services.					
Stormwater Management Ordinance	Yes	Yes	Chapter 19 Borough Ordinance	Local	Planning Board
How does this reduce risk? • The purpose of this chapter is to establish minimum stormwater management requirements and controls for major development and to reduce the amount of non-point source pollution entering surface and groundwaters. This chapter guides new development in a manner that is proactive and minimizes harmful impacts to natural resources. Specifically, this chapter shall: o 1. Reduce flood damage to protect public health, life and property; o 2. Minimize increased stormwater runoff rates and volumes; o 3. Minimize the deterioration of existing structures that would result from increased rates of stormwater runoff; o 4. Induce water recharge into the ground wherever suitable infiltration, soil permeability, and favorable geological conditions exist; o 5. Prevent an increase in non-point source pollution; o 6. Maintain the integrity and stability of stream channels and buffers for their ecological functions, as well as for drainage, the conveyance of floodwater, and other purposes; o 7. Control and minimize soil erosion and the transport of sediment; o 8. Minimize public safety hazards at any stormwater detention facility constructed pursuant to subdivision or site plan approval; o 9. Maintain adequate base-flow and natural flow regimes in all streams and other surface water bodies to protect the aquatic ecosystem; o 10. Protect all surface water resources from degradation; o 11. Protect groundwater resources from degradation and diminution; and o 12. Ensure that any additional 1/4 acre of impervious surface complies with this chapter, as required by Hopewell Borough's Tier B NJPDES permit.				
Post-Disaster Recovery/ Reconstruction Ordinance	No	No	-	-	-
How does this reduce risk?					
Real Estate Disclosure	Yes	Yes	N.J.A.C. 13:45A-29.1	State	State, Division of Consumer Affairs
How does this reduce risk? Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as estimated completion dates for improvements, fees for services and amenities, the type of title and ownership interest being offered, its proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.					
Growth Management	No	Yes, if the jurisdiction has a planning board	-	-	-
How does this reduce risk?					
Site Plan Ordinance	Yes	Yes, if the jurisdiction has a planning board	Chapter 13, Borough Ordinance	Local and County	Planning Board
How does this reduce risk? • The purpose of this chapter is to establish rules, regulations, standards and procedures for review of all development other than single or two-family dwellings in order to: o a. Preserve existing natural resources and give proper consideration to the physical constraints of the land. o b. Provide for safe and efficient vehicular and pedestrian circulation. o c. Provide for appropriate screening, landscaping, signing and lighting. o d. Ensure efficient, safe and aesthetic land development. o e. Provide for compliance with appropriate design standards to ensure adequate light and air, proper building arrangements and minimum adverse effect on surrounding property. o f. Develop proper safeguards to minimize any adverse impact on the environment. o g. Ensure the provision of adequate water supply, drainage and stormwater management, sanitary facilities and other utilities and services.					

	Jurisdiction has this? (Yes/No)	Required by State? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
○ h. Provide for appropriate recreation, open space and public use areas. ○ i. Insure protection of potable water supply reservoirs from pollution or other degradation of water quality resulting from the development or other uses of surrounding land areas, which provision shall be in accordance with siting, performance, or other standards or guidelines adopted therefor by the Department of Environmental Protection and Energy. ○ j. Insure conformity with the public safety regulations concerning stormwater detention facilities adopted pursuant to R.S. 40:55D-38 and reflected in stormwater management plans and stormwater management ordinances adopted pursuant to 40:55D-93 et seq.					
Environmental Protection Ordinance	No	Yes, depends on type of environmental areas	-	-	-
How does this reduce risk?					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 14, Borough Ordinance	Federal, State, County and Local	Borough Flood Plain Administrator
How does this reduce risk? • It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: ○ a. Protect human life and health; ○ b. Minimize expenditure of public money for costly flood control projects; ○ c. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; ○ d. Minimize prolonged business interruptions; ○ e. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard; ○ f. Help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas; ○ g. Ensure that potential buyers are notified that property is in an area of special flood hazard; and ○ h. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.					
Wellhead Protection	No	No	-	-	-
How does this reduce risk?					
Emergency Management Ordinance	No	No	-	-	-
How does this reduce risk?					
Climate Change Ordinance	No	No	-	-	-
How does this reduce risk?					
Disaster Recovery Ordinance	No	No	-	-	-
How does this reduce risk?					
Disaster Reconstruction Ordinance	No	No	-	-	-
How does this reduce risk?					
Other	No	-	-	-	-
Codes, Ordinances, & Regulations Connection to Mitigation and Safe Growth					
How are codes, ordinances and regulations contributing to risk reduction in your community? • Building Code: ○ The State of New Jersey has adopted the 2018 International Building Code (IBC). Flood design provisions are found in the Building Subcode (Section 1612), Residential Subcode, Rehabilitation Subcode, and Plumbing, Mechanical, and Fuel Gas subcodes. The flood provisions are deemed by FEMA to meet or exceed NFIP requirements for buildings and structures. ○ The IBC includes design requirements for structural wind resistance. Design wind speeds in New Jersey vary based on structure type and location, with higher wind design speeds required in coastal areas. • Flood Damage Prevention Ordinance:					

	Jurisdiction has this? (Yes/No)	Required by State? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible

- A local flood damage prevention ordinance sets design standards for reducing flood losses and is required for participation in the National Flood Insurance Program.
- The local flood damage prevention ordinance requires permits for floodplain development, adopts and enforces flood maps, requires new and substantially improved structures be elevated above the base flood elevation, among other standards.
- In the State of New Jersey, all new and substantially improved structures are required to be elevated at least one foot above the base flood elevation.

- Stormwater Ordinance
  - New Jersey municipalities enact stormwater management ordinances to regulate runoff quantity and quality, groundwater recharge, and erosion control. Municipalities are required to update their municipal stormwater control ordinance to reflect amendments to the Stormwater Management rules at N.J.A.C. 7:8, adopted March 2, 2020 and should use NJ DEP's Model Stormwater Control Ordinance for Municipalities.
  - Stormwater ordinances for major development require mitigating runoff by requiring that peak runoff rates for the 2, 10, and 100-year storms be below pre-construction conditions and not increase flood damage downstream of the site.

Prior to zoning changes or development approvals, does the jurisdiction review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use? Yes

Does the zoning ordinance discourage development or redevelopment within natural areas including wetlands, floodways, and floodplains? Yes

Does the ordinance require developers to take additional actions to mitigate natural hazard risk? Yes

Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use? Yes

Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? Yes

Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources? Yes

Do the regulations allow density/development transfers where hazard areas exist? No

Planning Documents					
Master Plan	Yes 2007	Yes	Chapters 10 -13 Borough Ordinance	Local	Land Use
How does this reduce risk? Provides guidance for the long term development of the Borough.					
Capital Improvement Plan	Yes	Allowed	Capital Improvement Plan	Local	Administration
How does this reduce risk? Allocates funding for potential mitigation projects.					
Disaster Debris Management Plan	No	No	-	-	-
How does this reduce risk?					
Floodplain Management or Watershed Plan	Yes	No	Chapter 14 Borough Ordinance	Local	Administration
How does this reduce risk? Guides development in the floodplain.					
Stormwater Management Plan	Yes	Yes	Chapter 19 Borough Ordinance	Local	Administration
How does this reduce risk? Outlines stormwater management requirements in the Borough.					
Stormwater Pollution Prevention Plan	No	Yes	-	-	-
How does this reduce risk?					
Urban Water Management Plan	No	No	-	-	-
How does this reduce risk?					

	Jurisdiction has this? (Yes/No)	Required by State? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Habitat Conservation Plan	No	No	-	-	-
How does this reduce risk?					
Economic Development Plan	No	No	-	-	-
How does this reduce risk?					
Shoreline Management Plan	No	No	-	-	-
How does this reduce risk?					
Community Wildfire Protection Plan	No	No	-	-	-
How does this reduce risk?					
Community Forest Management Plan	No	No	-	-	-
How does this reduce risk?					
Transportation Plan	No	No	-	-	-
How does this reduce risk?					
Agriculture Plan	No	No	-	-	-
How does this reduce risk?					
Climate Action/ Resiliency Plan	No	No	-	-	-
How does this reduce risk?					
Tourism Plan	No	No	-	-	-
How does this reduce risk?					
Business/ Downtown Development Plan	No	No	-	-	-
How does this reduce risk?					
Other	No	No	-	-	-
Planning Connection to Mitigation and Safe Growth					
How are your plans contributing to risk reduction in your community? No **Does the future land use map clearly identify natural hazard areas?** No, discussion in LUP provided **Do the land use policies discourage development or redevelopment within natural hazard areas?** Yes **Does the land use plan provide adequate space for expected future growth in areas located outside natural hazard areas?** No **Is transportation policy used to guide growth to safe locations?** No **Are transportation systems designed to function under disaster conditions (e.g. evacuation)?** No **Are environmental systems that protect development from hazards identified and mapped (i.e., dunes, rip rap, defensible space, wetlands/natural shoreline)?** No **Do environmental policies maintain and restore protective ecosystems?** No					
Response/Recovery Planning					
Emergency Operations Plan	Yes	Yes	Emergency Operations Plan	Local	Hopewell Valley OEM
How does this reduce risk? Describes expected emergency response to hazard events, responsibilities.					
Strategic Recovery Planning Report	No	No	-	-	-
How does this reduce risk?					

	Jurisdiction has this? (Yes/No)	Required by State? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
How does this reduce risk?					
Post-Disaster Recovery Plan	Yes	No	Post-Disaster Recovery Plan	Local	Hopewell Valley OEM
How does this reduce risk? Guides actions and measures taken following a disaster event.					
Continuity of Operations Plan	No	No	-	-	-
How does this reduce risk?					
Public Health Plan	No	No	-	-	-
How does this reduce risk?					
Other	No	-	-	-	-
Response/Recovery Planning Connection to Mitigation and Safe Growth					
How do your response/recovery plans contribute to risk reduction in your community? • Emergency Operations Plan (EOP): o NJ Rev Stat § App.A:9-43.2 (2013) requires a written Emergency Operations Plan (EOP) for each county and municipality in the State that coordinates with neighboring jurisdictions. o EOPs must address the needs of animals and individuals with animals; evacuation procedures for hospitals and health care facilities; and addressing evacuation of families and dependents of emergency responders. o EOPs must include a basic plan as well as Emergency Support Functions (ESF) annexes that address public information, hazardous materials, emergency warnings, and related subjects. o Emergency operations plans must be certified for approval by the New Jersey Office for Emergency Management. **Does your EOP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards?** Yes					

Development and Permitting Capability

The table below summarizes the capabilities of the Borough of Hopewell to oversee and track development.

Table 9.6-3. 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? - If no, what is your process for development?	Yes	Construction Department
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Development in the SFHA is tracked.
Do you have a buildable land inventory? - If yes, describe. - If no, quantitatively describe the level of buildout in the jurisdiction.	No	75 percent built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Borough of Hopewell and their current responsibilities which contribute to hazard mitigation.

Table 9.6-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Land Use, Planning Board. The Hopewell Borough Planning Board acts as a combined land use board, serving both as the town's zoning board of adjustment and exercises its planning functions. In addition to hearing subdivision and land use applications, the board is tasked with maintaining the municipality's master plan and acts on recommendations from the historic preservation commission.
Zoning Board of Adjustments	Yes	Master Plan, LDO, Zoning Board
Planning Department	Yes	Master Plan, LDO, Administration
Mitigation Planning Committee	Yes	Administration
Environmental Board/Commission	Yes	Hopewell Valley Green Team
Open Space Board/Committee	Yes	Hopewell Valley Open Space Commission
Economic Development Commission/Committee	Yes	Administration, Economic Development Commission
Public Works/Highway Department	Yes	Public Works
Construction/Building/Code Enforcement Department	Yes	NJ State Office of Local Code Enforcement
Emergency Management/Public Safety Department	Yes	Emergency Management
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	Swift911
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	DPW, Emergency Management Board
Mutual aid agreements	Yes	Administration
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Administration, Planning/Zoning, Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Administration, Planning/Zoning, Engineer
Planners or engineers with an understanding of natural hazards	Yes	Administration, Planning/Zoning, Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Administration
Professionals trained in conducting damage assessments	Yes	Administration
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Zoning Officer, Administration
Scientist familiar with natural hazards	Yes	Administration
Surveyor(s)	Yes	Zoning Officer, Administration
Emergency Manager	Yes	Hopewell Township Police/Hopewell Valley OEM
Grant writer(s)	Yes	Administration, Planning; Are data and maps from the HMP used to support documentation in grant applications?

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community? Maintain current data and maps that help can identify hazard areas.		

Fiscal Capability

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

Table 9.6-5. Fiscal Capabilities

Financial Resources	Are these accessible or eligible to use for mitigation? (Yes/No) If yes, please describe. If no, can this be used to support in the future?
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No
Fiscal Connection to Mitigation and Safe Growth	
How do your fiscal capabilities contribute to risk reduction in your community? When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals. Annually, the jurisdiction will review mitigation actions when allocating funding. **Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?** No **Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?** No **Do budgets provide funding for hazard mitigation projects identified in the County HMP?** Yes	

Education and Outreach Capability

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

Table 9.6-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	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.
Public information officer or communications office	Yes	Administrator
Personnel skilled or trained in website development	Yes	Contract
Hazard mitigation information available on your website	Yes	Additions in progress
Social media for hazard mitigation education and outreach	No	Website only
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Other programs already in place that could be used to communicate hazard-related information	Yes	Twitter and Borough website
Warning systems for hazard events	No	
Natural disaster/safety programs in place for schools	Yes	Hopewell Valley OEM
Other	No	-

Community Classifications

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

Table 9.6-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
Sustainable Jersey	Yes	None	March 2, 2009
StormReady Certification	No	-	-
Firewise Communities classification	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). In other words, it describes a jurisdiction's current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction's rating.

Table 9.6-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Dam Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Geological Hazards	Moderate
Hazmat	Moderate
Hurricane	Moderate
Infestation and Invasive Species	Moderate
Nor'Easter	Moderate
Severe Weather	Moderate
Severe Winter Weather	Strong
Wildfire	Moderate

**Strong = Capacity exists and is in use, Moderate = Capacity may exist; but is not used or could use some improvement, Weak = Capacity does not exist or could use substantial improvement.*

9.6.4 National Flood Insurance Program (NFIP) Compliance

Th table below provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Table 9.6-9. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
• # NFIP Policies: 7 • # RL properties: 1 • # SRL properties: 0 • # RL/SRL mitigated: 0	• # claims filed: 2 • Total loss payments: $42,807
Describe areas prone to flooding in your jurisdiction.	There is a lack of substantial flood prone properties within the Borough.
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation, and if so, how many are interested in (elevation or acquisition)?	No
How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction?	Determinations are made per Chapter 14 Flood Damage Prevention – Section 14-4.3.5 None
Detail any RiskMAP projects currently underway in your jurisdiction.	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	Yes
NFIP Administration	
What local department is responsible for floodplain management?	Floodplain Administrator and Borough Engineer
Are any staff certified floodplain managers (CFMs) or is a consultant retained?	Yes

NFIP Topic	Comments
Provide an explanation of who in your municipality provides NFIP administration services (permit review, GIS, education/outreach, inspections, engineering capability).	Limited base on community need.
What specific training or support does your floodplain management staff need to support its floodplain management program?	None identified.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Substantial improvement is defined in Chapter 14 Flood Damage Prevention – Section 14-2 Definitions
Do you have access to resources to determine possible future flooding conditions from climate change?	No
NFIP Compliance	
List any outstanding NFIP compliance violations.	None identified
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	August 1, 2006
What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended?	Chapter 14 Flood Damage Prevention (Ord. No. 793)
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Yes, but the flood damage prevention ordinance will require update.
Are there other local ordinances, plans, or programs (site plan review, consideration of flood risk reduction when granting height variances) that support floodplain management and meeting the NFIP requirements?	Yes
Does your jurisdiction participate in CRS? • If yes, is your jurisdiction interested in improving its CRS Classification? • If no, is your jurisdiction interested in joining the CRS program?	No

Source: FEMA Region 2 2019

Notes:

RL—Repetitive Loss; SRL—Severe Repetitive Loss; NA—Not applicable

9.6.5 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 understanding 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.

Table 9.6-10. Recent and Expected Future Development

Type of Development	2016		2017		2018		2019		2020		2021	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	5	0	2	0	1	0	0	0	5	0	1	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	**5**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**1**	**0**

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None anticipated					

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

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

9.6.6 Jurisdictional Risk Assessment

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.2 (Methodology and Tools), Section 4.3 (Hazards of Concern), and Section 4.4 (Hazard Ranking) provide a detailed summary for the Borough of Hopewell's risk assessment results, and data used to determine the hazard ranking are discussed later in this section.

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

Figure 9.6-1. Borough of Hopewell Hazard Area Extent and Location Map 1

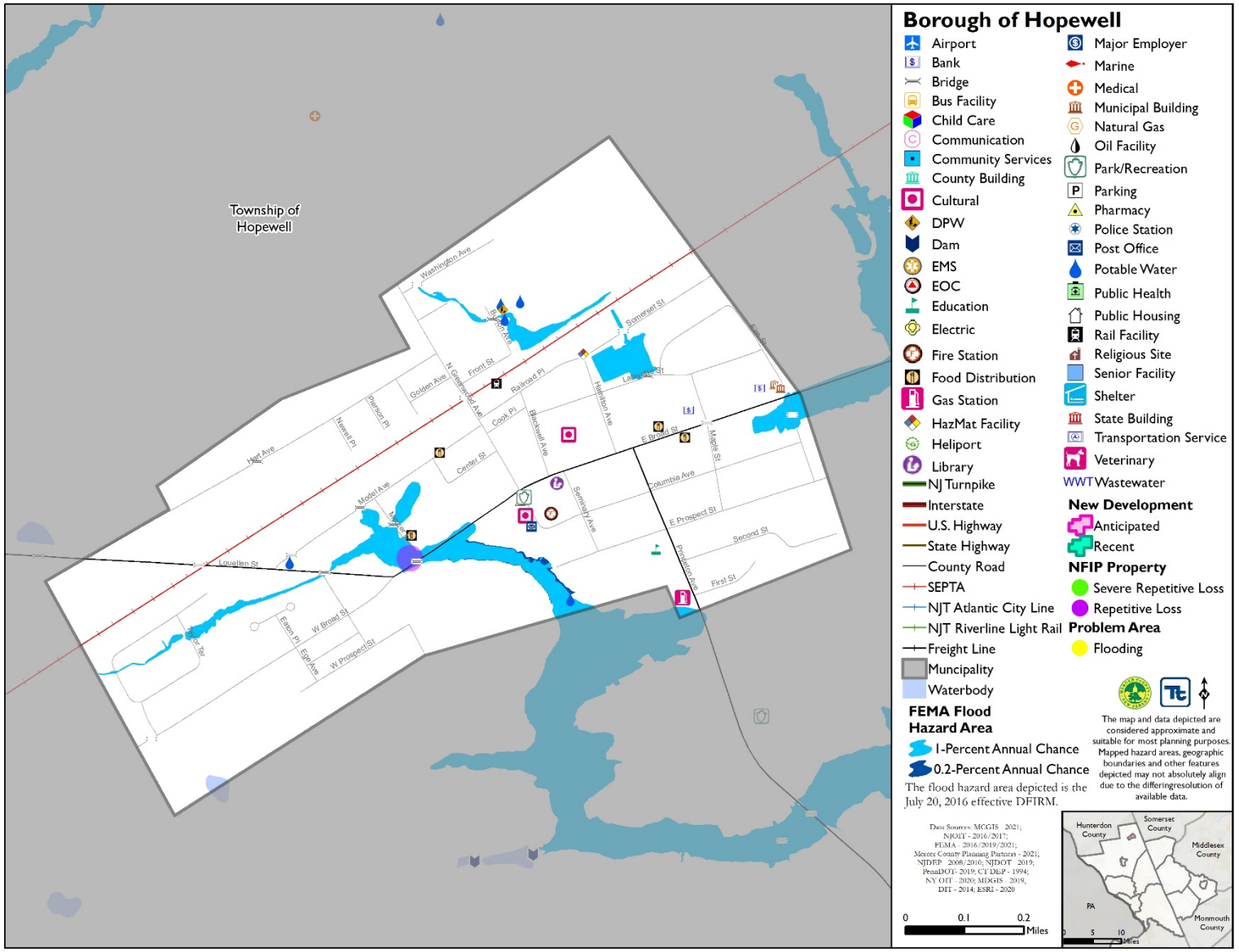


Figure 9.6-2. Borough of Hopewell Hazard Area Extent and Location Map 2

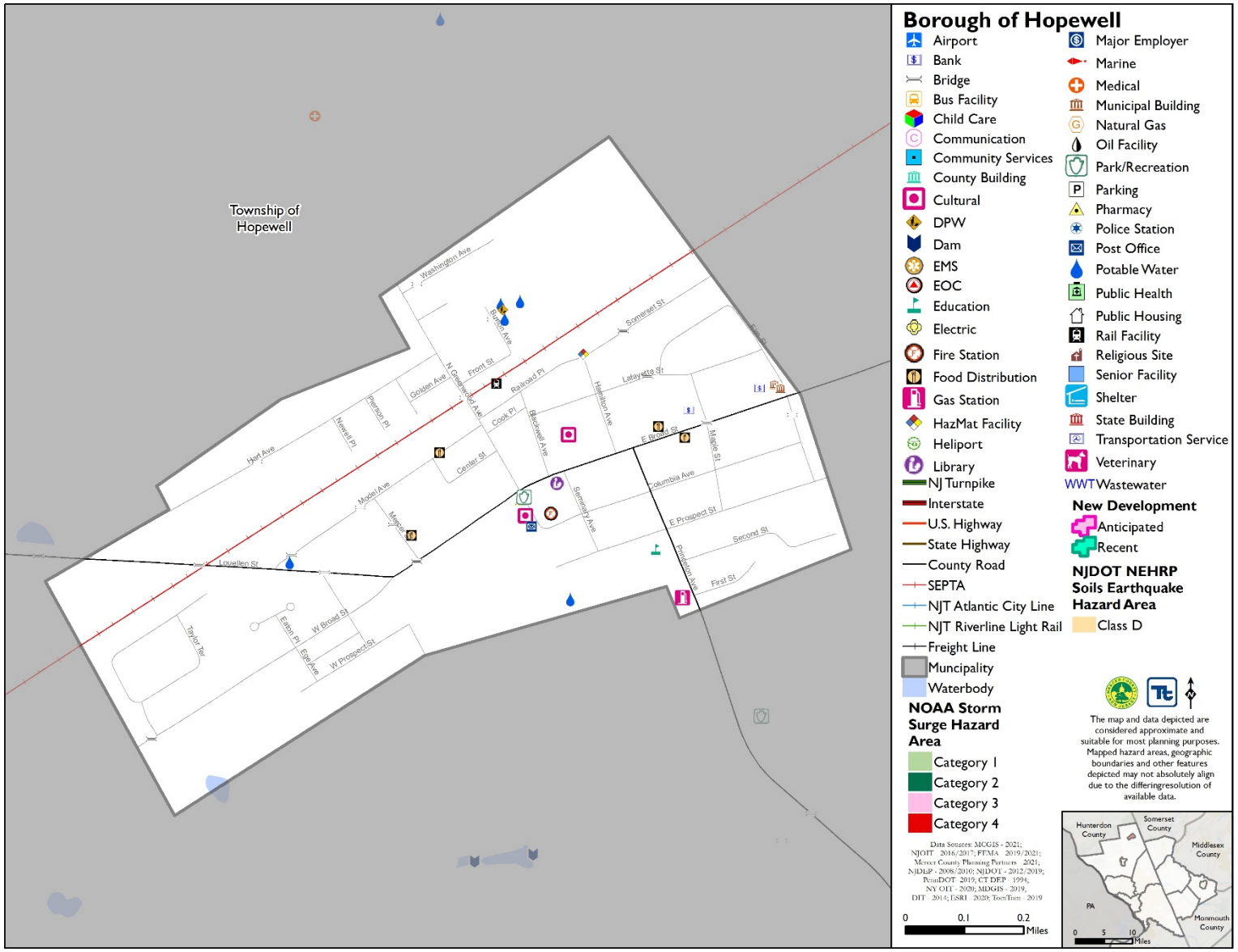


Figure 9.6-3. Borough of Hopewell Hazard Area Extent and Location Map 3

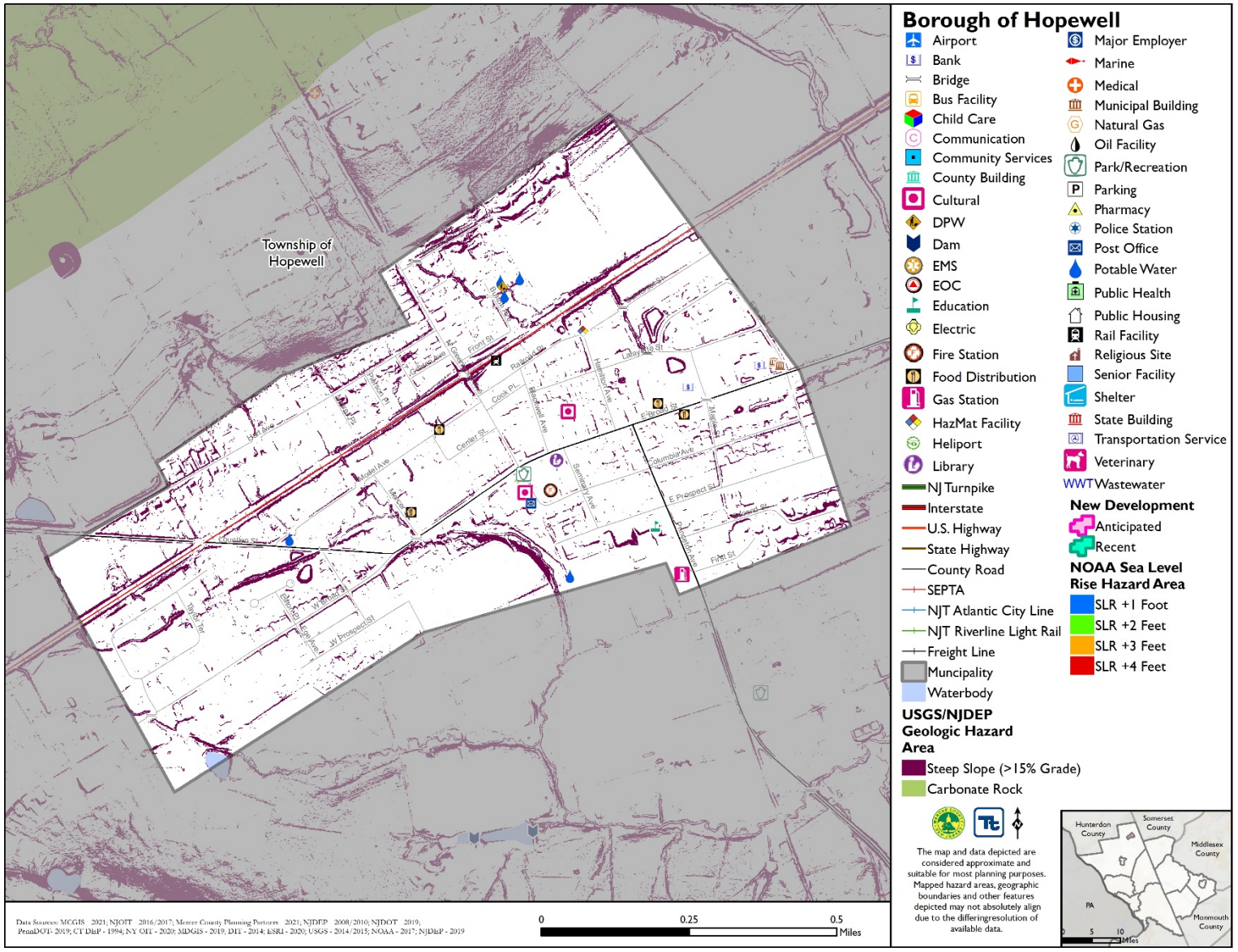
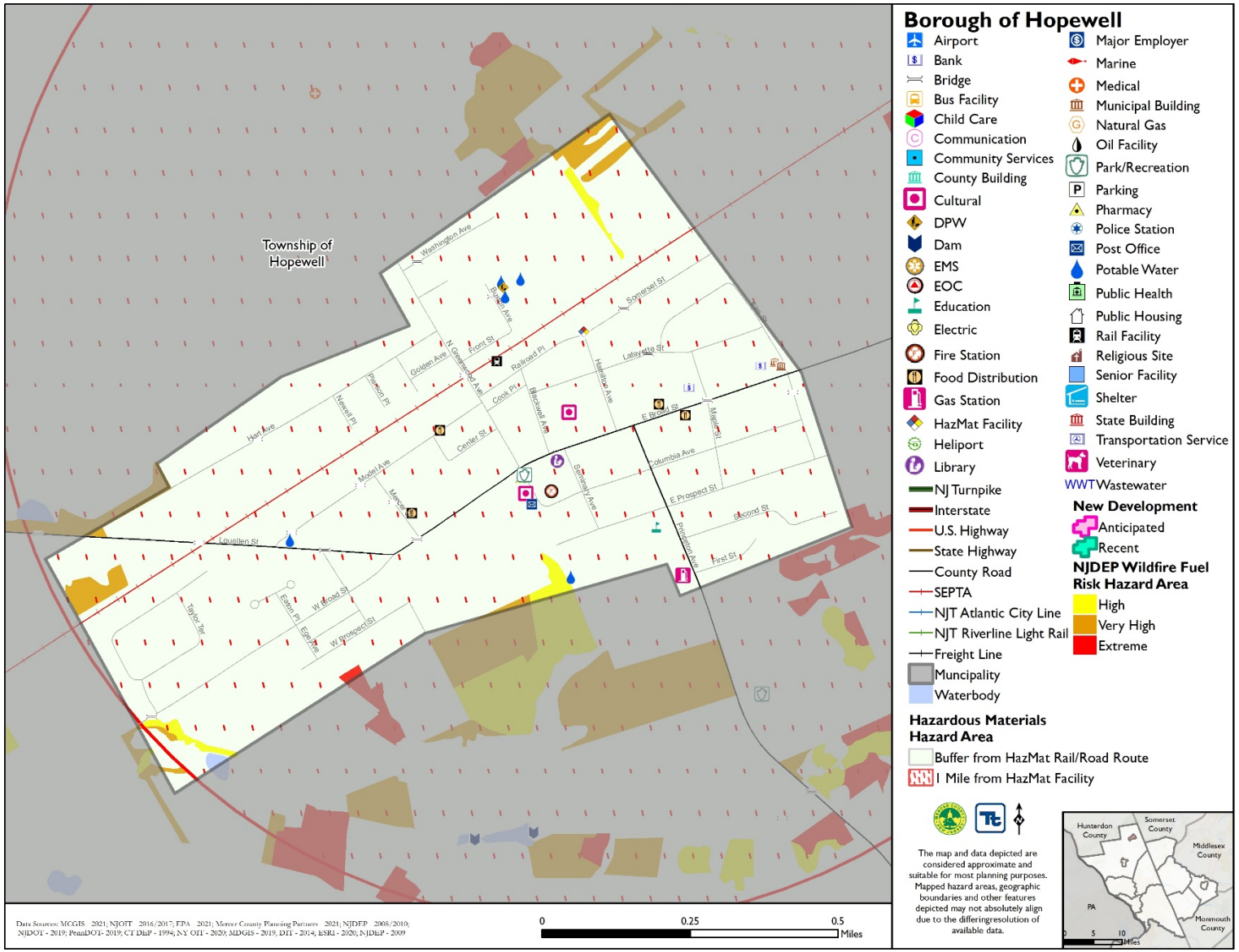


Figure 9.6-4. Borough of Hopewell Hazard Area Extent and Location Map 4



Hazard Event History

Mercer County has a history of natural hazard events as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Borough of Hopewell's history of federal declarations (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Mercer County. The table below provides details regarding municipal-specific loss and damages the County 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 9.6-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 13-14, 2015	Cold/Wind Chill	No	The center of an arctic air mass brought some of the lowest wind chills and temperatures of the winter season to New Jersey. Wind chill factors were recorded as low as 22 degrees below zero, with actual temperatures reaching -2ºF.	Many local governments across the area set up Code Blue shelters for the vulnerable population
January 22 – 24, 2016	Blizzard (DR-4264-NJ)	Yes	A low-pressure system moved up along the Carolina Coast intensifying into a major nor'easter, producing record snowfall in New Jersey on January 23. Wind gusts reached upwards of 60 mph and visibility was one-quarter mile or less throughout the region. Damages across the state were estimated at $82.6 million.	Up to 24 inches of snow was reported in Mercer County.
March 7, 2018	Winter Storm	No	A low pressure system moved northeast across Delaware and New Jersey bringing a wintery snow/rain mix overnight on March 6. Across the state, snowfall totals ranged from 6 to 24 inches. Heavy, wet snow downed trees and limbs leaving 350,000 customers state-wide without power.	Up to 11.5 inches of snowfall was reported in Mercer County.
August 4, 2020	Tropical Storm	N/A	Tropical Storm Isaias brought high winds, heavy rain, several tornadoes, and coastal flooding to the mid-Atlantic region, becoming the most impactful tropical cyclone to impact most of the region since Sandy in 2012.	Although the County was impacted, the Borough did not report damages.
January 20, 2020 – Present	Covid-19 Pandemic (EM-3451-NJ) (DR-4488-NJ)	Yes	Beginning on January 20, 2020, the pandemic resulting from the Coronavirus Disease (COVID-19) created conditions of sufficient severity and magnitude to warrant a disaster declaration in the State of New Jersey.	The coronavirus pandemic resulted in closures and masking and social distancing requirements.
Jan. 31 to Feb 31, 2021	Winter Storm	No	A Low-pressure system moved northeast across Delaware and New Jersey bring winter snow across the state. Snowfall totals ranged from 0.5 to 32 inches.	Up to 14.4 inches of snow was reported in Mercer County

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 4.3 (Hazards of Concern) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the Borough of Hopewell'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 Section 4 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each participating jurisdiction can have differing degrees of risk exposure and vulnerability compared with Mercer County as a whole. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Borough of Hopewell. The Borough of Hopewell reviewed the community's hazard risk/vulnerability risk ranking table, including municipal-specific results, to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Borough of Hopewell indicated the following:

- The Brough changed the hazard rankings of dam failure and disease outbreak to medium, noting limited occurrence of events.
- The Borough agreed with the remainder of the calculated hazard rankings.

Table 9.6-12. Hazard Ranking Input

Dam Failure	Disease Outbreak	Drought	Earthquake	Flood	Geological Hazards	Hazardous Materials
High	High	Medium	Low	Medium	Low	High

Hurricane/ Tropical Storm	Infestation and Invasive Species	Nor'Easter	Severe Weather	Severe Winter Weather	Wildfire
High	High	Medium	High	High	Low

Note: The scale is based on the hazard rankings established in Section 4.4 (Hazard Ranking) and modified as appropriate during review by the jurisdiction.

Critical Facilities

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

Table 9.6-13. Potential Flood Losses to Critical Facilities

Name	Type	Exposure	
		1% Event	0.2% Event
250.6 - LOUELLEN ST RT 518 OVER BEDEN BRK	Bridge	X	X
250.5 - W BROAD ST RT 518 OVER BEDEN BRK	Bridge	X	X
253.3 - ELM ST OVER BEDEN BRK TRIB	Bridge	X	X

Name	Type	Exposure	
		1% Event	0.2% Event
254.7 - MERCER ST OVER BEDEN BRK TRIB	Bridge	X	X
WELL 6	Potable Water Well	X	X

Source: Mercer County 2021, FEMA 2016

Identified Issues

After review of the Borough of Hopewell's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Borough of Hopewell has identified the following vulnerabilities within their community:

- The trash rack at the Hart Avenue watercourse experiences clogging due to gabion rocks being unsecured. This leads to flooding of the surrounding area.
- The municipal building and Well #4 lack backup power sources.
- The Borough has 1 repetitive loss property.
- Additional outreach is needed on invasive species and infestations.
- The Borough lacks a Disaster Debris Management Plan.
- The Borough's flood damage prevention ordinance requires update.

9.6.7 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the Borough of Hopewell's mitigation strategy identified in the 2016 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and are discussed in the 'Capability Assessment' presented previously in this annex.

Table 9.6-14. Status of Previous Mitigation Actions

2017 Action Number and Action Description		Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP?	
				Check if Yes	Enter 2021 HMP Action #
Hopewell Boro-1 (old Hopewell Borough 4)	Continue and enhance the "all hazards" public education and outreach program for hazard mitigation and preparedness in the Borough. This includes posting information on the Borough website, presentations to Borough Council, and educate residents.	OEM Coordinator	In Progress. More information is needed for	Yes	2021-Borough of Hopewell-006
Hopewell Boro-2 (new)	Provide emergency power to Public Works Facility via a generator	Administration	Completed	No	-
Hopewell Boro-3 (new)	Provide emergency power to Municipal Building via a generator	Administration	No Progress	Yes	2021-Borough of Hopewell-002
Hopewell Boro-4 (new)	Installing trash rack at headwall and adding concrete apron over existing gabion baskets at Hart Ave. watercourse	Administration	No Progress	Yes	2021-Borough of Hopewell-001
Hopewell Boro-5 (new)	Provide emergency power to Well #4 via a generator	Administration	No Progress	Yes	2021-Borough of Hopewell-003
Hopewell Boro-6 (new)	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option (in progress). Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.	Engineering via NFIP FPA with NJOEM, FEMA support	No Progress	Yes	2021-Borough of Hopewell-007

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Borough of Hopewell has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2017 HMP:

- None identified

Proposed Hazard Mitigation Initiatives for the HMP Update

The Borough of Hopewell participated in a mitigation action workshop in June 2021 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 Floodprone 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.

Table 9.6-15. Analysis of Mitigation Actions by Hazard and Category

	FEMA					CRS				
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X									X
Disease Outbreak	X									X
Drought	X									X
Earthquake	X									X
Flood	X	X				X			X	X
Geological Hazards	X									X
Hazmat	X									X
Hurricane	X	X								X
Infestation and Invasive Species	X			X			X			X
Nor'Easter	X	X								X
Severe Weather	X	X				X				X
Severe Winter Weather	X	X								X
Wildfire	X									X

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

The table below summarizes the comprehensive range of specific mitigation initiatives the Borough of Hopewell would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.1-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.6-16. Proposed Hazard Mitigation Initiatives and Associated Priority

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
2021-Borough of Hopewell-001	Hart Avenue Trash Rack	**Problem**: The trash rack at the Hart Avenue watercourse experiences clogging due to gabion rocks being unsecured. The unsecured rocks are captured by the trash rack, leading to damming of the watercourse. This leads to flooding of the surrounding area. **Solution**: The Borough Engineer will complete a feasibility assessment to determine whether the gabion rocks should be replaced with a concrete headwall or if the gabion rocks can be concrete secured into place. The cost-effective measure will then be implemented by Public Works.	Existing	Flood	2	Engineer, Public Works	BRIC, HMGP, Borough budget	Reduction in damage to trash rack, reduction in flood risk	Medium	Within 5 years	High	SIP	SP, PP
2021-Borough of Hopewell-002	Municipal Building Backup Power	**Problem**: Backup power sources are necessary to maintain critical services for critical facilities. The Municipal Building lacks a backup power source. **Solution**: The Engineer will research what size generator is needed to power the Municipal Building. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to the Municipal Building.	Existing	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter	1, 2, 6	Engineer, Public Works	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget	Ensures continuity of operations of Municipal Building	$75,000	Within 5 years	High	SIP	ES
2021-Borough of Hopewell-003	Well #4 Backup Power	**Problem**: Backup power sources are necessary to maintain critical services for critical facilities. Well #4 lacks a backup power source.	Existing	Severe Weather, Severe Winter Weather,	1, 2, 6	Engineer, Public Works	FEMA HMGP and BRIC, USDA Community Facilities	Ensures continuity of operations of Well #4	$50,000	Within 5 years	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
		Solution: The Engineer will research what size generator is needed to power Well #4. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to Well #4.		Hurricane, Nor'Easter			Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget						
2021-Borough of Hopewell-004	Disaster Debris Management Plan	**Problem**: The Borough lacks an adopted Disaster Debris Management Plan. **Solution**: The Borough will complete and adopt the in-progress Disaster Debris Management Plan.	Existing	All Hazards	6	Public Works, OEM	Borough budget	Increased planning for post-disaster response and cleanup.	Staff time	6 months	High	LPR	ES
2021-Borough of Hopewell-005	Flood Damage Prevention Ordinance Update	**Problem:** The current flood damage prevention ordinance does not meet the state's recommendation for a code-coordinated flood damage prevention ordinance. **Solution:** The Borough will update the flood damage prevention ordinance using the NJ DEP's model code coordinated ordinance to create better coordination between NFIP implementation by the floodplain administrator, 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 Construction Official.	New	Flood	2	Floodplain Administrator, Administration	Borough budget	Meet state and FEMA standards for flood damage prevention, reduce flood risk on new development	Staff time	6 months	Medium	LPR	PR
2021-Borough of	Infestation and Invasive Species Outreach	**Problem**: Increased outreach is needed to educate the public on the identification and potential mitigation	N/A	Infestation and Invasive Species	3	Administration, OEM	Borough budget	Increased knowledge and private mitigation	Staff time	6 months	Medium	EAP	PI

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Timeline	Priority	Mitigation Category	CRS Category
Hopewell-006		of invasive species and native species of concern. **Solution**: The Borough will expand outreach offerings on infestations and invasive species.						of invasive species					
2021-Borough of Hopewell-007	Repetitive Loss Mitigation	**Problem**: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Borough has 1 repetitive loss property but other properties may be impacted by flooding as well. Flooding is most likely along Beden Brook which flows by and sometimes under residential properties. **Solution**: Conduct outreach to 10 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).	Existing	Flood, Severe Weather	1, 2	NFIP Floodplain Administrator, supported by homeowners	FEMA HMGP and FMA, local cost share by residents	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	$500,000	3 years	High	SIP	PP

Notes:
Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations: *Potential FEMA HMA Funding Sources:* *Timeline:*

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*
FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

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

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

Table 9.6-17. Summary Evaluation and Action Priority

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2021-Borough of Hopewell-001	Hart Avenue Trash Rack	0	1	1	1	1	0	0	1	1	1	0	0	1	1	9	High ⚠
2021-Borough of Hopewell-002	Municipal Building Backup Power	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021-Borough of Hopewell-003	Well #4 Backup Power	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021-Borough of Hopewell-004	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2021-Borough of Hopewell-005	Flood Damage Prevention Ordinance Update	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2021-Borough of Hopewell-006	Infestation and Invasive Species Outreach	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2021-Borough of Hopewell-007	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High

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

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

9.6.8 Action Worksheets

The following action worksheets have been developed by the Borough of Hopewell to aid in the submittal of grant applications to support the funding of high priority proposed actions. The State of New Jersey requires at least two projects be developed with action worksheets.

Action Worksheet			
Project Name:	Hart Avenue Trash Rack		
Project Number:	2021-Borough of Hopewell-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The trash rack at the Hart Avenue watercourse experiences clogging due to gabion rocks being unsecured. The unsecured rocks are captured by the trash rack, leading to damming of the watercourse. This leads to flooding of the surrounding area.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough Engineer will complete a feasibility assessment to determine whether the gabion rocks should be replaced with a concrete headwall or if the gabion rocks can be concrete secured into place. The cost-effective measure will then be implemented by Public Works.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Level of Protection:	TBD by engineering study	**Estimated Benefits (losses avoided):**	Reduction in debris jam and flood risk
Useful Life:	20 years	**Goals Met:**	2
Estimated Cost:	Medium	**Mitigation Action Type:**	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	Within 5 years	**Potential Funding Sources:**	HMGP, BRIC, Borough budget
Responsible Organization:	Engineer, Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation, Stormwater management
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Buyout homes exposed to flooding	High	Costly
	Conduct debris clearing after every rainfall event	Medium	Limited staffing ability
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet		
Project Name:	Hart Avenue Trash Rack	
Project Number:	2021-Borough of Hopewell-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	0	
Property Protection	1	Properties protected from flooding
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	0	The Borough may require permitting to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Public Works
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Municipal Building Backup Power		
Project Number:	2021-Borough of Hopewell-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Municipal Building lacks a backup power source.		
Action or Project Intended for Implementation			
Description of the Solution:	The Engineer will research what size generator is needed to power the Municipal Building. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to the Municipal Building.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of Municipal Building
Useful Life:	20 years	**Goals Met:**	1, 2, 6
Estimated Cost:	$50,000	**Mitigation Action Type:**	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Engineer, Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Municipal Building Backup Power	
Project Number:	2021-Borough of Hopewell-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of Municipal Building
Property Protection	1	Project will protect building from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Borough has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Public Works
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Well #4 Backup Power		
Project Number:	2021-Borough of Hopewell-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. Well #4 lacks a backup power source.		
Action or Project Intended for Implementation			
Description of the Solution:	The Engineer will research what size generator is needed to power Well #4. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to Well #4.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of Well #4
Useful Life:	20 years	**Goals Met:**	1, 2, 6
Estimated Cost:	$50,000	**Mitigation Action Type:**	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 5 years
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Engineer, Public Works	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Well #4 Backup Power	
Project Number:	2021-Borough of Hopewell-002	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of Well #4
Property Protection	1	Project will protect building from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Borough has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Severe Weather, Severe Winter Weather, Hurricane, Nor'Easter
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Public Works
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Repetitive Loss Mitigation		
Project Number:	2021-Borough of Hopewell-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Weather		
Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Borough has 1 repetitive loss property but other properties may be impacted by flooding as well. Flooding is most likely along Beden Brook which flows by and sometimes under residential properties.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 10 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes ☐	No ☒	
Level of Protection:	1% annual chance flood event + freeboard *(in accordance with flood ordinance)*	**Estimated Benefits (losses avoided):**	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	**Goals Met:**	1, 2
Estimated Cost:	$500,000	**Mitigation Action Type:**	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	6-12 months
Estimated Time Required for Project Implementation:	Three years	**Potential Funding Sources:**	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Current problem continues
	Elevate homes	$500,000	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
	Elevate roads	$500,000	Elevated roadways would not protect the homes from flood damages

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

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