



9.22 BOROUGH OF WESTVILLE

This section presents the jurisdictional annex for the Borough of Westville 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 Borough participated in the planning process, an assessment of the Borough of Westville’s risk and vulnerability, the different capabilities used in the Borough, and an action plan that will be implemented to achieve a more resilient community.

9.22.1 Hazard Mitigation Planning Team

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

The following table summarizes municipal officials that participated in the development of the annex and in what capacity, including the Borough of Westville’s 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 9.22-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Ryan Giles, Borough Administrator Address: 165 Broadway Westville, NJ 08093-1148 Phone Number: 856-456-0030 Email: rgiles@westville-nj.com	Name/Title: Kathleen Carroll, Deputy Clerk Address: 165 Broadway Westville, NJ 08093-1148 Phone Number: 856-456-0030 Email: kcarroll@westville-nj.com
NFIP Floodplain Administrator	
Name/Title: Anthony Dariano, Construction Official Address: 165 Broadway Westville, NJ 08093-1148 Phone Number: 856-456-0030 Email: Adriano@westville-nj.com	



Name	Title	Method of Participation
Ryan Giles	Borough Administrator	Provided information on past events, reviewed risk rankings, contributed to mitigation strategy
Anthony Dariano	Construction Official	Provided information on NFIP administration, permits for new construction
Christine Byrne	Department of Public Works and Engineer	Provided update on past actions.
Candance Kanaplue	Bach Associates	Provided information on Borough capabilities

9.22.2 Municipal Profile

Westville was formed as a borough by an Act of the New Jersey Legislature on April 7, 1914, from portions of Deptford Township and West Deptford Township, based on the results of a referendum held on April 28, 1914. The borough was reincorporated on March 8, 1924. The Borough of Westville is known as "The Gateway to South Jersey!".

According to the United States Census Bureau, the Borough had a total area of 1.38 square miles, including 1.02 square miles of land and 0.36 square miles of water. Route 295 and 130 are the major routes that pass through the municipality. Unincorporated communities, localities and place names located partially or completely within the borough include Newbold, South Westville and Westville Manor.

Westville is governed under the Borough form of New Jersey municipal government. The governing body is comprised of a Mayor and a Borough Council, with all positions elected at-large on a partisan basis as part of the November general election. A Mayor is elected directly by the voters to a four-year term of office. The Borough Council is comprised of six members elected to serve three-year terms on a staggered basis.

According to the U.S. Census, the 2010 population for the Borough of Westville was 4,288. The estimated 2019 population was 4,169, a 2.9 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 5.5 percent of the population is 5 years of age or younger and 12.9 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.

9.22.3 Jurisdictional Capability Assessment and Integration

The Borough of Westville 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 9.22.3). The updated mitigation strategy includes opportunities the Borough of Westville identified for integration of mitigation concepts to be incorporated into municipal procedures.

9.22.3.1 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 Westville, what is present in the jurisdiction, and code citation and date.

Table 9.22-2. 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	Chapter 142, Construction Codes, Uniform, 1978	State and Local	Construction Code Enforcement Agency," consisting of a Construction Official, a Building Subcode Official, a Plumbing Subcode Official, an Electrical Subcode Official, a Fire Protection Subcode Official and such other subcode officials
<i>How does this reduce risk?</i>					
<ul style="list-style-type: none"> • <i>Adopts the uniform Construction Code for all new building and development.</i> 					
Zoning/Land Use Code	Yes	Yes, if the jurisdiction has a planning board	Chapter 205, Land Use and Development	Local	Planning Board and Zoning Board of Adjustment
<i>How does this reduce risk?</i>					
<ul style="list-style-type: none"> • <i>Establishes the Planning Board and Zoning Board procedures.</i> 					



	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
<ul style="list-style-type: none"> Establishes zoning regulations. 					
Subdivision Ordinance	Yes	Yes, if the jurisdiction has a planning board	Chapter 340, Subdivision of Land	Local	Planning Board
<p>How does this reduce risk?</p> <ul style="list-style-type: none"> The purpose of this chapter shall be to provide rules, regulations and standards to guide subdivision in the Borough of Westville in order to promote the public health, safety, convenience and general welfare of the municipality. It shall be administered to ensure the orderly growth and development, the conservation, protection and proper use of land and adequate provision for circulation, utilities and services. 					
Stormwater Management Ordinance	Yes	Yes	Chapter 330, Stormwater Control, 2007	Local	
<p>How does this reduce risk?</p> <ul style="list-style-type: none"> It is the purpose of this chapter to establish minimum stormwater management requirements and controls for major development, consistent with the statewide stormwater requirements at N.J.A.C. 7:8 and the provisions of the adopted Master Plan and land use ordinances of the Borough of Westville. Through this chapter, the Borough of Westville has established the following goals for stormwater control: <ul style="list-style-type: none"> (a) To reduce flood damage, including damage to life and property; (b) To minimize any increase in stormwater runoff from new development; (c) To reduce soil erosion from any development or construction project; (d) To assure the adequacy of existing and proposed culverts and bridges and other in-stream structures; (e) To maintain groundwater recharge; (f) To minimize any increase in nonpoint pollution; (g) To maintain the integrity of stream channels for their biological functions, as well as for drainage; (h) To restore, protect, maintain and enhance the quality of the streams and water resources and the ecological character and quality of the Borough of Westville; (i) To minimize pollutants in stormwater runoff from new and existing development in order to restore, protect, enhance and maintain the chemical, physical and biological integrity of the surface and groundwaters of the Borough of Westville, to protect public health and to enhance the domestic, municipal, recreational, industrial and other uses of water; and (j) To protect public safety through the proper design and operation of stormwater management basins. In order to achieve the goals for stormwater control set forth in this chapter, the Borough of Westville has identified the following management techniques: <ul style="list-style-type: none"> (a) Implementation of multiple stormwater management best management practices (BMPs) may be necessary to achieve the performance standards for stormwater runoff quantity and rate, groundwater recharge, erosion control, and stormwater runoff quality established through this chapter. (b) Compliance with the stormwater runoff quantity and rate, groundwater recharge, erosion control, and stormwater runoff quality standards established through N.J.A.C. 7:8-1.1 et seq., and this chapter, shall be accomplished, to the maximum extent practicable, through the use of nonstructural BMPs before relying on structural BMPs. Nonstructural BMPs are also known as "low-impact development (LID) techniques." (c) Nonstructural BMPs shall include both environmentally sensitive site design and source controls that prevent pollutants from being placed on the site or from being exposed to stormwater. (d) Source control plans shall be developed based upon physical site conditions and the origin, nature and the anticipated quantity or amount of potential pollutants. (e) Structural BMPs, where necessary, shall be integrated with nonstructural stormwater management strategies and proper maintenance plans. (f) When using structural BMPs, multiple stormwater management measures, smaller in size and distributed spatially throughout the land development site, shall be used wherever possible to achieve the performance standards for water quality, quantity and groundwater recharge established through this chapter before relying on a single, larger stormwater management measure to achieve these performance standards. 					
Post-Disaster Recovery/ Reconstruction Ordinance	No	No	-	-	-
<p>How does this reduce risk?</p>					
Real Estate Disclosure	Yes	Yes	N.J.A.C. 13:45A-29.1	State	State, Division of Consumer Affairs
<p>How does this reduce risk?</p>					



	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
<ul style="list-style-type: none"> 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	-	Local	-
<i>How does this reduce risk?</i>					
Site Plan Ordinance	Yes	Yes, if the jurisdiction has a planning board	Chapter 298, Site Plan Review, 1986	Local and County	Planning Board
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> The purposes of this chapter shall be as follows: <ul style="list-style-type: none"> A. To provide rules, regulations and standards to guide the development of lands in this Borough in a manner which will promote the public health, safety, morals and general welfare. B. To ensure the orderly development, conservation, protection and proper use of land and adequate provision for circulation, utilities and services. C. To provide adequate light, air and open space. D. To ensure the coordination of development within the Borough with the development and general welfare of neighboring municipalities, the county and the State of New Jersey as a whole. E. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight. F. To promote a desirable visual environment through creative development techniques and good civic design and arrangement. G. To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land. H. To encourage development which incorporates the best features of design and to relate the type, design and layout of residential, commercial, industrial and recreational development to the particular site. I. To encourage coordination of the various public and private procedures and activities shaping land development with a view to lessening the cost of such development, to ensuring the most efficient use of land and to protecting the Borough from undue obligations from land development. J. To promote the conservation of energy through the use of planning practices designed to reduce energy consumption and to provide for maximum utilization of renewable energy sources. 					
Environmental Protection Ordinance	No	Yes, depends on type of environmental areas	-	-	-
<i>How does this reduce risk?</i>					
Flood Damage Prevention Ordinance	Yes	Yes	Chapter 180, Flood Damage Prevention, 2016	Federal, State, County and Local	Construction Official
<i>How does this reduce risk?</i> <ul style="list-style-type: none"> It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: <ul style="list-style-type: none"> A. Protect human life and health; B. Minimize expenditure of public money for costly flood control projects; C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; D. Minimize prolonged business interruptions; E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; F. Help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas; G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and 					



	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
<ul style="list-style-type: none"> o H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. • In order to accomplish its purposes, this chapter includes methods and provisions for: <ul style="list-style-type: none"> o A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; o B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; o C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters; o D. Controlling filling, grading, dredging, and other development which may increase flood damage; and o E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. 					
Wellhead Protection	No	No	-	-	-
<i>How does this reduce risk?</i>					
Emergency Management Ordinance	Yes	No	Chapter 56, Police Department, 2000	Local	Police Department
<i>How does this reduce risk?</i>					
Climate Change Ordinance	No	No	-	-	-
<i>How does this reduce risk?</i>					
Disaster Recovery Ordinance	No	No	-	-	-
<i>How does this reduce risk?</i>					
Disaster Reconstruction Ordinance	No	No	-	-	-
<i>How does this reduce risk?</i>					
Other	No	-	-	-	-
Codes, Ordinances, & Regulations Connection to Mitigation and Safe Growth					
<ul style="list-style-type: none"> • Prior to, zoning changes, or development permitting, 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 it contain natural overlay zones that set conditions? No • Does the ordinance require developers to take additional actions to mitigate natural hazard risk? No • Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use? Yes • Do the ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains? Yes • Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? No • Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? No • Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources? Yes • Do the regulations allow density transfers where hazard areas exist? No • When updating ordinances, is hazard mitigation considered? Yes 					
Planning Documents					
Master Plan	Yes	Yes – County Yes - municipality	Master Plan Reexamination and Recommendations, 2018	Local	Planning Board
<i>How does this reduce risk?</i>					
Capital Improvement Plan	Yes	Allowed	Yearly Municipal Budget	Local	Administration office-CFO
<i>How does this reduce risk?</i>					



	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
Disaster Debris Management Plan	No	Yes	County wide plan exists, need local plan	County	Public Works
<i>How does this reduce risk?</i>					
Floodplain Management or Watershed Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Stormwater Management Plan	Yes	Yes	Stormwater Management Plan, 2020	Local	Engineer
<i>How does this reduce risk?</i>					
Stormwater Pollution Prevention Plan	Yes	Yes	Annual certification	State	Engineer
<i>How does this reduce risk?</i>					
Urban Water Management Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Habitat Conservation Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Economic Development Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Shoreline Management Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Community Wildfire Protection Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Community Forest Management Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Transportation Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Agriculture Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Climate Action/ Resiliency Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Tourism Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Business/ Downtown Development Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Other	No	No	-	-	-
Planning Connection to Mitigation and Safe Growth					



	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
<ul style="list-style-type: none"> 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 within the budget. Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards? Yes Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? Yes Do budgets provide funding for hazard mitigation projects identified in the County HMP? No Does the future land use map clearly identify natural hazard areas? Planning Do the land use policies discourage development or redevelopment with natural hazard areas? Yes Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas? Yes Does the transportation plan limit access to hazard areas? Yes Is transportation policy used to guide growth to safe locations? No Are transportation systems designed to function under disaster conditions (e.g. evacuation)? Somewhat Are environmental systems that protect development from hazards identified and mapped? Yes Do environmental policies maintain and restore protective ecosystems? Yes Do environmental policies provide incentives to development that is located outside protective ecosystems? No 					
Response/Recovery Planning					
Emergency Operations Plan	Yes	Yes	Emergency Operations Plan – Base Plan, 2020	Local	OEM
<i>How does this reduce risk?</i>					
Strategic Recovery Planning Report	No	No	-	-	-
<i>How does this reduce risk?</i>					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	No	-	-	-
<i>How does this reduce risk?</i>					
Post-Disaster Recovery Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Continuity of Operations Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Public Health Plan	No	No	-	-	-
<i>How does this reduce risk?</i>					
Other	No	-	-	-	-
Response/Recovery Planning Connection to Mitigation and Safe Growth					
<ul style="list-style-type: none"> Does your EOP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? Yes 					

9.22.3.2 Development and Permitting Capability

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

Table 9.22-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> If yes, what department is responsible? 	Yes	Land Use Board approval



Indicate if your jurisdiction implements the following	Yes/No	Comment
<ul style="list-style-type: none"> If no, what is your process for development? 		
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? <ul style="list-style-type: none"> If yes, describe. If no, quantitatively describe the level of buildout in the jurisdiction. 	No	There are limited areas of open land remaining in the Borough. Most open land does not meet minimal land use requirements to allow for development.

9.22.3.3 Administrative and Technical Capability

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

Table 9.22-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	Planning Board and Planning Secretary
Zoning Board of Adjustments	Yes	Planning Board and Planning Secretary
Planning Department	Yes	Planning Board and Planning Secretary
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Environmental Commission-Joyce Lovell
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Council Members and Administrator
Public Works/Highway Department	Yes	Superintendent of Public Works
Construction/Building/Code Enforcement Department	Yes	Code Enforcement Officer & Construction Official and Zoning Official
Emergency Management/Public Safety Department	Yes	LEPC
Warning Systems / Services (mass notification system, outdoor warning signals)	Yes	County with no outdoor warning signal
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Department of Public Works
Mutual aid agreements	Yes	County wide all hazards
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	Yes	Administrator
Other	No	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Appointed Engineering firms
Engineers or professionals trained in building or infrastructure construction practices	Yes	Appointed Engineering firms
Planners or engineers with an understanding of natural hazards	Yes	Appointed Engineering firms
Staff with expertise or training in benefit/cost analysis	Yes	Appointed Engineering firms



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Professionals trained in conducting damage assessments	Yes	Appointed Engineering firms
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Appointed Engineering firms
Scientist familiar with natural hazards	Yes	Appointed Engineering firms
Surveyor(s)	No	-
Emergency Manager	Yes	Steve Cope
Grant writer(s)	No	Are data and maps from the HMP used to support documentation in grant applications?
Resilience Officer	Yes	Police Department
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-
How do your administrative/technical capabilities contribute to risk reduction in your community?		
<ul style="list-style-type: none"> They help to ensure compliance with State and Federal regulations. 		

9.22.3.4 Fiscal Capability

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

Table 9.22-5. 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, could be costly for small towns
Authority to levy taxes for specific purposes	Yes, could be costly for residents
User fees for water, sewer, gas or electric service	Yes, but could increase fees
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
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	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No
Fiscal Connection to Mitigation and Safe Growth	
<ul style="list-style-type: none"> How do your fiscal capabilities contribute to risk reduction in your community? It doesn't because the cost is too high <ul style="list-style-type: none"> 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. 	



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?
<ul style="list-style-type: none"> Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards? Yes Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? Yes Do budgets provide funding for hazard mitigation projects identified in the County HMP? No 	

9.22.3.5 Education and Outreach Capability

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

Table 9.22-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comments (available staff, responsibilities, etc.)
Public information officer or communications office	Yes	Through Social Media
Personnel skilled or trained in website development	Yes	Deputy Clerk
Hazard mitigation information available on your website	No	In progress
Social media for hazard mitigation education and outreach	Yes	Weekly ongoings of the Municipality
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Environmental Commission and Town Watch
Other programs already in place that could be used to communicate hazard-related information	No	-
Warning systems for hazard events	Yes	County
Natural disaster/safety programs in place for schools	Yes	Snow plan and Active Shooter
Other	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. <ul style="list-style-type: none"> Use of social media. 		

9.22.3.6 Community Classifications

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

Table 9.22-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Unknown	Unknown



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unknown	Unknown
Sustainable Jersey	No	-	-
StormReady Certification	No	-	-
Firewise Communities classification	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

9.22.3.7 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 9.22-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak*
Coastal Erosion/Sea Level Rise	Moderate
Dam Failure/Levee Failure	Moderate
Disease Outbreak/Pandemic	Moderate
Drought	Moderate
Earthquake	Moderate
Extreme Temperatures	Moderate
Flood	Moderate
Geological Hazards	Moderate
Hazardous Materials	Moderate
Hurricane	Moderate
Invasive Species	Moderate
Nor’Easter	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Wildfire	Moderate
Utility Failure	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.



9.22.4 National Flood Insurance Program (NFIP) Compliance

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

Table 9.22-9. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
<ul style="list-style-type: none"> # NFIP Policies: 66 # RL properties: 7 # SRL properties: 0 #RL/SRL mitigated: 0 	<ul style="list-style-type: none"> Total premium in force: \$117,547.00 # claims filed: 82 Total loss payments: \$523,000.48
Describe areas prone to flooding in your jurisdiction.	Broadway, Willow, Delsea Drive, Woodbine, Boundary Lane and E. Olive, High Street, Timber Park and Delaware View and Route 45, Duncan
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
<ul style="list-style-type: none"> How do you make Substantial Damage determinations? How many were declared for recent flood events in your jurisdiction? 	Market Value of Structure 1
Detail any RiskMAP projects currently underway in your jurisdiction.	One project is currently underway
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?	Construction Office
Are any staff certified floodplain managers (CFMs) or is a consultant retained?	Yes, Anthony Dariano
Provide an explanation of who in your municipality provides NFIP administration services (permit review, GIS, education/outreach, inspections, engineering capability).	Construction Official
What specific training or support does your floodplain management staff need to support its floodplain management program?	Continuing education
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	50 percent of fair market cost of structure
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



NFIP Topic	Comments
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	12/6/1994
<ul style="list-style-type: none"> 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?	<ul style="list-style-type: none"> Chapter 180 2016
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	Minimum but flood damage prevention ordinance requires 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?	No
<ul style="list-style-type: none"> 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 September 16, 2019; NJDEP - 2021

Notes:

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

9.22.5 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 9.22-10. 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	0	0	2	0	1	0	0	0	0	0	1	0
Multi-Family	0	0	1	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	0	0	3	0	1	0	0	0	0	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.

9.22.6 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 4.1 (Identification of Hazards of Concern), Section 4.2 (Methodology and Tools), and Section 4.4 (Hazard Ranking) provide a detailed summary for the Borough of Westville’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 Westville has significant exposure. The maps also show the location of potential new development, where available.

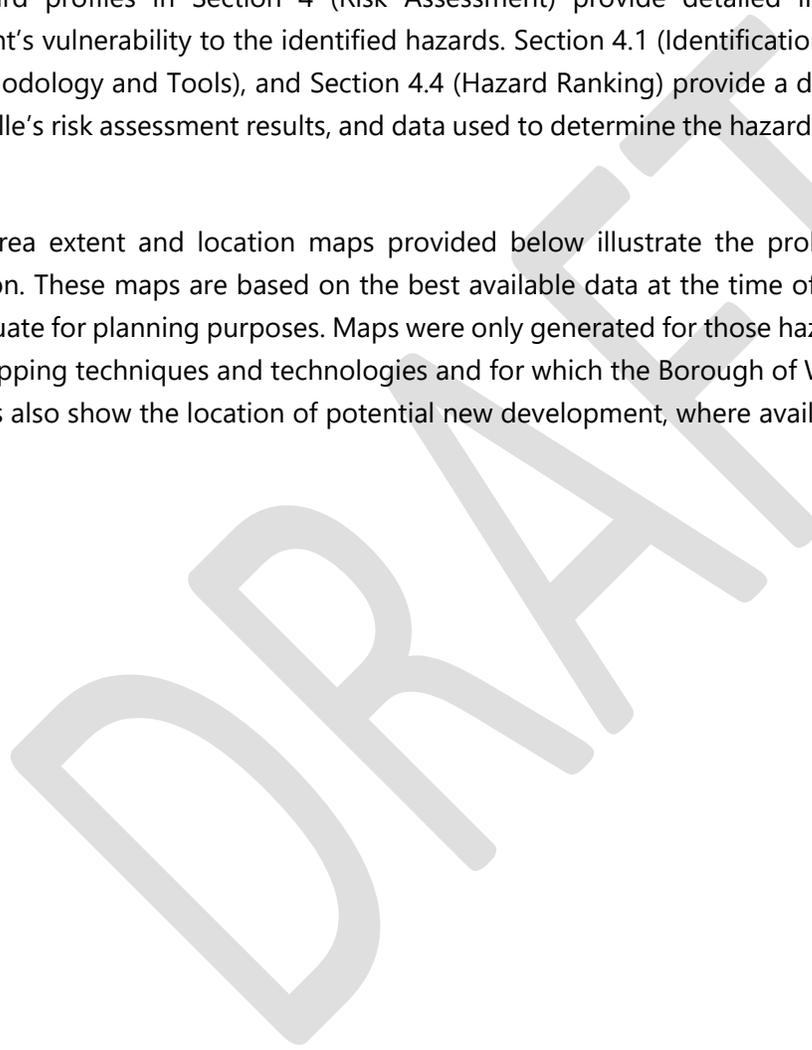
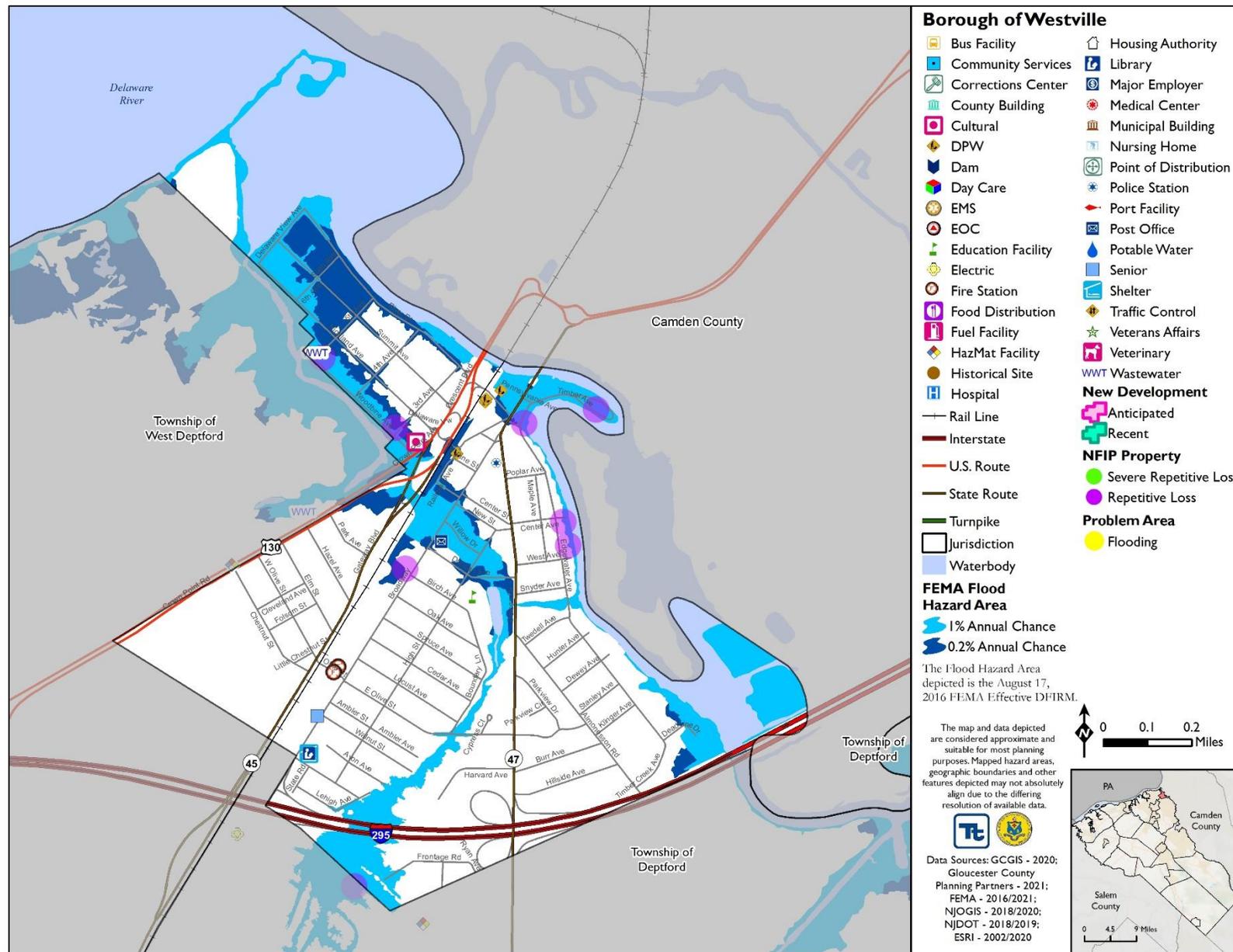




Figure 9.22-1. Borough of Westville Hazard Area Extent and Location Map 1



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Figure 9.22-2. Borough of Westville Hazard Area Extent and Location Map 2

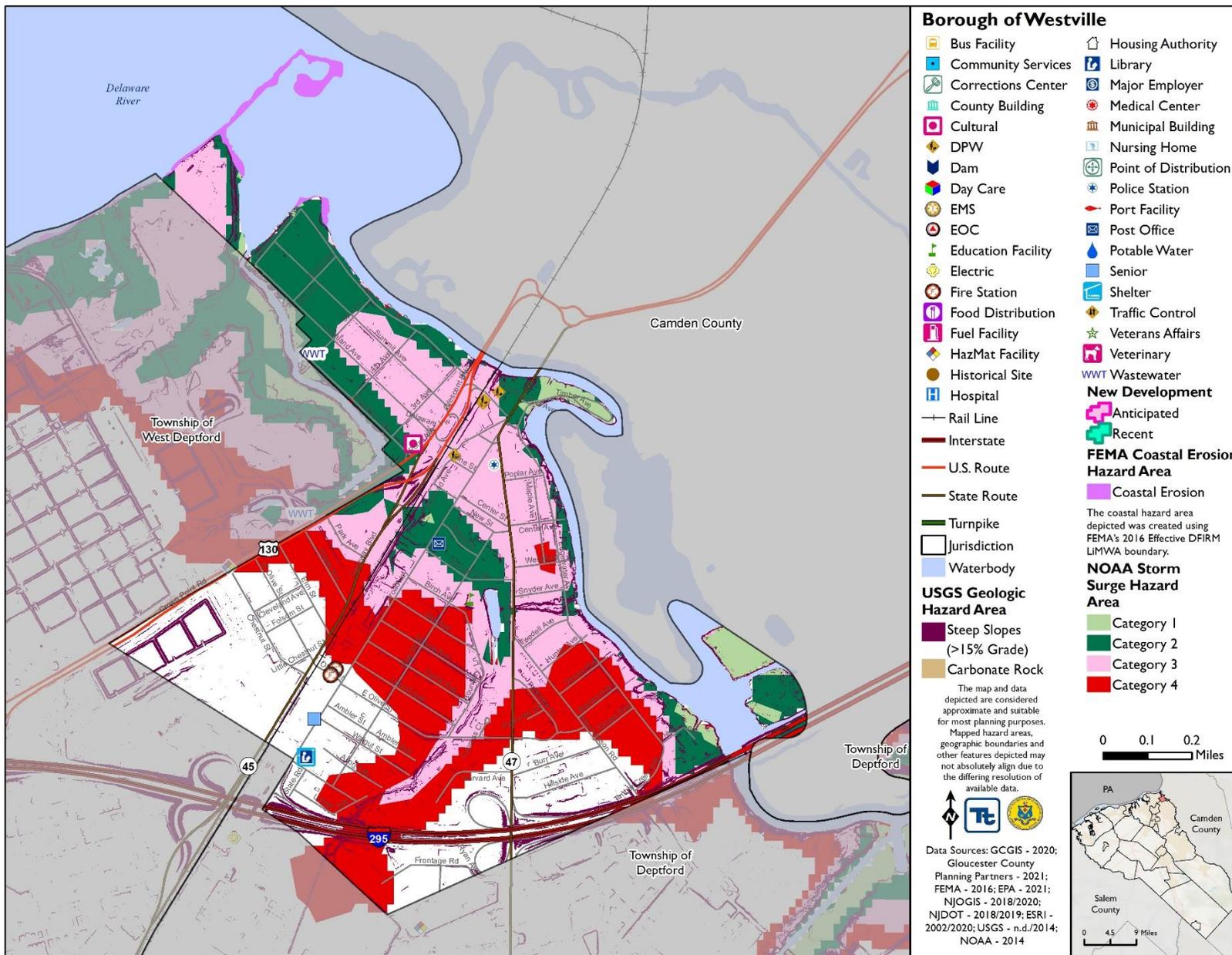
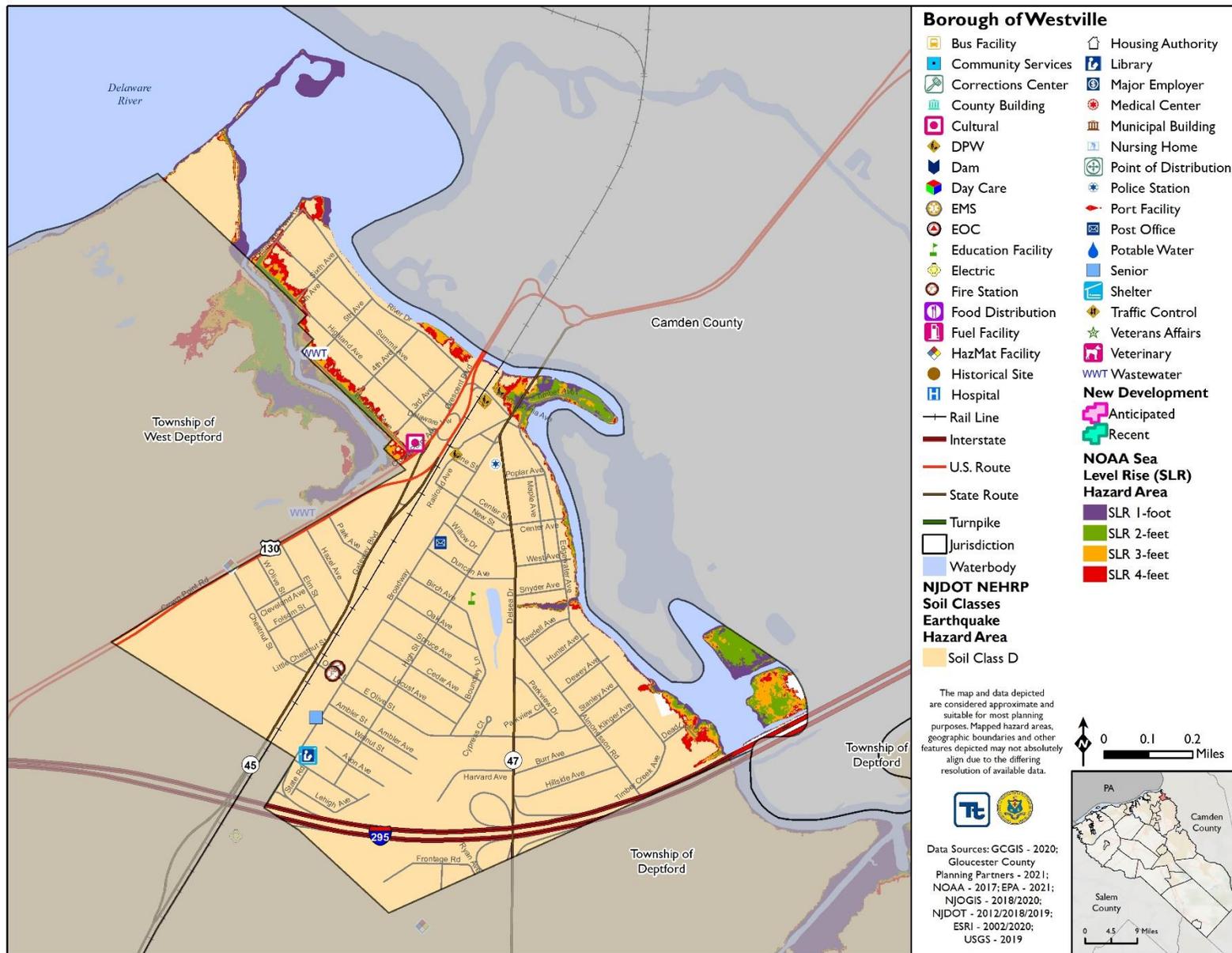




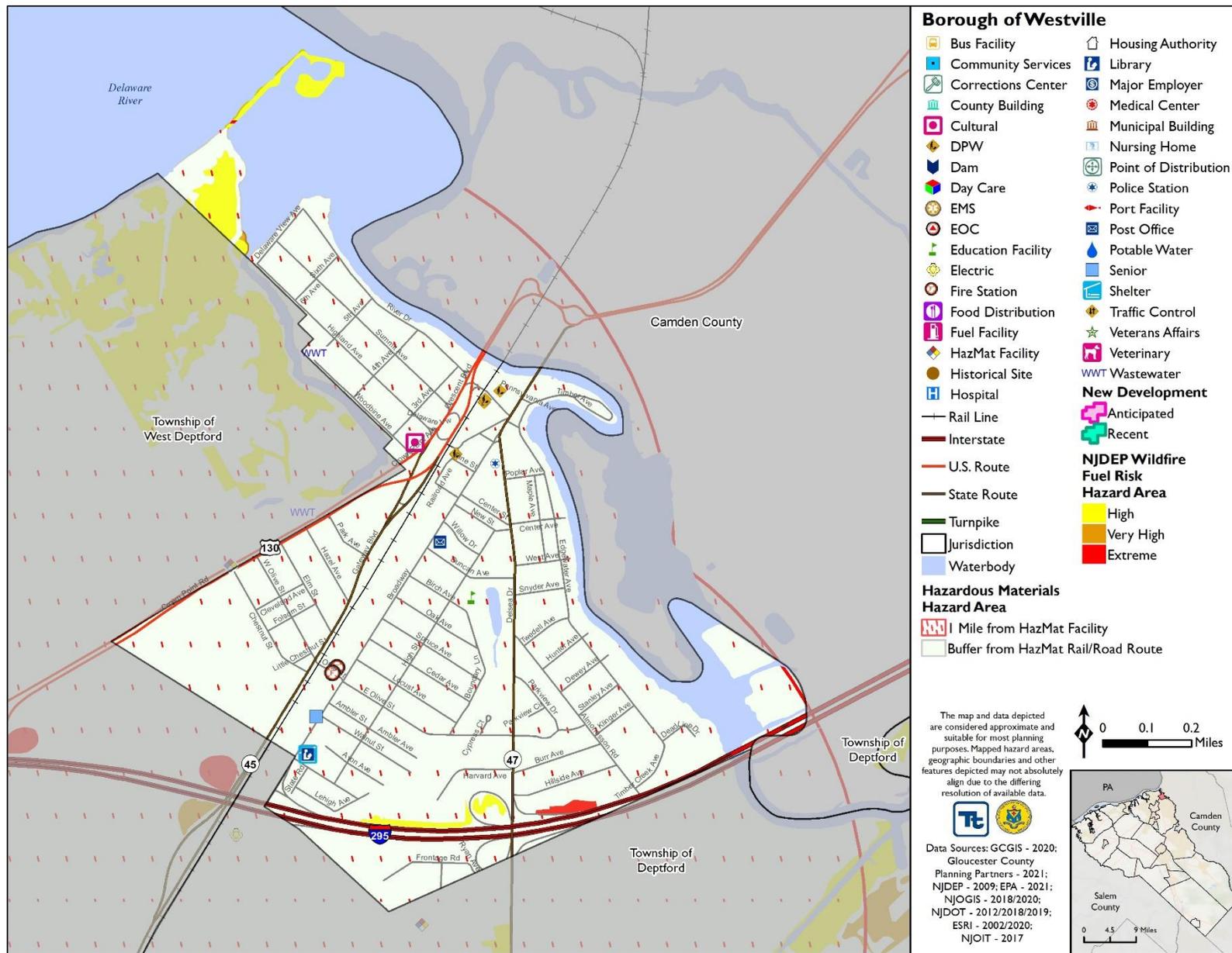
Figure 9.22-3. Borough of Westville Hazard Area Extent and Location Map 3



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Figure 9.22-4. Borough of Westville Hazard Area Extent and Location Map 4





9.22.6.1 Hazard Event History

Gloucester 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 Westville’s history of federal declarations (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Gloucester County. The table below provides details regarding municipal-specific loss and damages the Borough 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 9.22-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 15, 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 -2°F.	Although the County was impacted, the Borough did not report damages.
June 23, 2015	Severe Storm (DR-4231-NJ)	Yes	In Gloucester County, the Red Cross opened two comfort stations. Wind damage was most severe between Greenwich Township and Mantua Township. Lightning struck a refinery in Paulsboro, causing a loss of power and off-gas. In Wenonah, wind damage knocked down several massive oak trees. In Mantua, the microburst knocked down an estimated 2,800 trees and 100 poles. The Township’s Fire Department building was severely damaged. Wind also knocked down power poles in East Greenwich along Kings Highway. Roads throughout East Greenwich were impassable. Damage was estimated at \$10 million.	Although the County was impacted, the Borough did not report damages.
January 22 – 24, 2016	Severe Winter Storm and Snowstorm (DR-4264-NJ)	Yes	Snow totals in Gloucester County included 21 inches in Deptford, 20.9 inches in Pitman, 17.5 inches in Turnersville, 14.5 inches in Williamstown, and one foot in Mullica Hill.	Although the County was impacted, the Borough did not report damages.
March 6, 2018	Winter Storm	No	Gloucester County was hit with isolated heavy snow, with totals ranging from	Although the County was impacted, the Borough did not report damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			five inches in Pitman to 6.5 inches in West Deptford.	
January 20, 2020 – Present	Covid-19 Pandemic (EM-3451-NJ) (DR-4488-NJ)	Yes	Between March 1, 2020 and March 15, 2021, Gloucester County reported 21,065 confirmed cases of COVID-19, and 530 total fatalities.	The Borough was subject to closures and social distancing requirements.
June 19, 2019	Severe storm flooding event	No	Westville was hit with a severe summer thunderstorm that resulted of 5 inches of rain that caused localized and significant flooding with significant property damage.	60 residents were evacuated from their homes to the Borough’s local shelter. Local, county and state OEM were onsite. The Municipal building operated by the Lions Club was damaged as well.
Last 5 years	Heavy rain and full moons	No	Localized flooding along Broadway, Woodbine, Duncan, Route 45, Delsea Drive, Highland Avenue, Timber Park, Willow Street, Boundary Lane, East Olive, High Street and Delaware View residents	Although the County was impacted, the Borough did not report damages.

9.22.6.2 Hazard Ranking and Vulnerabilities

The hazard profiles in Section 4.1 (Identification of 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 Westville’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 Gloucester County as a whole. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Borough of Westville. The Borough of Westville reviewed the county 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 indicated the following:

- The Borough changed the hazard ranking for dam and levee failure from medium to low due to lack of levee systems.
- The Borough changed the hazard ranking for drought from medium to low based on lack of drought events.
- The Borough changed the hazard ranking for flood from low to medium due to historic flooding in the past five years.
- The Borough agreed with the remainder of the calculated hazard rankings.

Table 9.22-12. Hazard Ranking Input

Coastal Erosion	Dam/ Levee	Disease Outbreak	Drought	Earthquake	Extreme Temperature	Flood
Low	Low	Low	Low	Low	Medium	Medium
Geologic	Hazardous Materials	Hurricane	Invasive Species	Nor'Easter	Severe Storm	
Low	High	High	Low	Medium	High	
	Severe Winter Storm	Wildfire	Utility Failure			
	Medium	Low	Medium			

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 and presents Hazus estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.22-13. Potential Flood Losses to Critical Facilities

Name	Type	Lifeline?	Exposure		Comment
			1% Event	0.2% Event	
Westville Water Department Well #6	DPW	Y	X	X	-
Westville Water Department Well #5	DPW	Y	-	X	-
St. Anne's/St. Joachim's Parish Hall	Cultural Site	Y	-	X	-

Source: Gloucester County Planning Partners - 2021; HIFLD - 2020; EPA - 2021; FEMA 2016



9.22.6.3 Identified Issues

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

- Flooding along Broadway (County Route 551) is problematic. The Borough does not have jurisdiction to complete work on its own. Flooding has resulted in damages. The area is not in the special flood hazard area.
- 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 7 repetitive loss properties, but other properties may be impacted by flooding as well.
- Backup power sources are necessary to maintain critical services for critical facilities. The Community Center lacks a backup power source.
- Parkview Elementary School lacks back up power. The school is not under the Borough's jurisdiction.
- The culvert at East Olive Street and Boundary Lane over Clear Creek is undersized and contributes to flooding.
- Various roadways and infrastructure under NJ DOT jurisdiction are in need of replacement or upgrade. Numerous projects are planned.
- The current flood damage prevention ordinance does not meet the state's recommendation for a code-coordinated flood damage prevention ordinance.
- The Borough lacks an adopted Disaster Debris Management Plan.
- Hazard outreach is limited in the Borough. An educated public is needed in order to reduce the level of response needed by municipal staff.

Specific areas of concern based on resident response to the citizen survey include:

- Various areas in the Borough were identified as being floodprone including:
 - Forbidden Circle
 - Newbold section of Westville, 600 block of Highland Avenue
 - Brooklawn Circle
 - Broadway in front of Gateway diner
 - Broadway at 1st Colonial National Bank
 - Duncan Avenue by the park
 - Willow Street
 - Thomas West Park
 - Route 45
 - High Street
 - Duncan
 - East Olive Street
 - Boundary



- Delsea Drive
- Delaware View
- Highland Avenue
- Woodbine Avenue
- Crown Point Road
- Route 130
- Flood prone areas should include a large portion of Broadway (Westville, NJ) as the damage a flood caused millions of dollars of damage without any help from FEMA due to not being designated as a flood zone.
- Flooding causes sewer backup.

9.22.7 Mitigation Strategy and Prioritization

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

9.22.7.1 Past Mitigation Initiative Status

The following table indicates progress on the community'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 9.22-14. Status of Previous Mitigation Actions

2016 Action Number and Action Description		Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2022 HMP? Check if Yes	Enter 2022 HMP Action #
MJ-1	Improve drainage at State Route 45 and railroad.	Municipal OEM, NJDOT	No Progress	Yes	2022-Westville-006
MJ-2	Improve drainage on Willow Drive between High Street and Broadway (County Route 551).	Municipal OEM, Gloucester County DPW	No Progress	Yes	2022-Westville-001
MJ-3	Maintain duckbill valves along Broadway (County Route 551).	Municipal OEM, NJ DOT	No Progress	Yes	2022-Westville-001
M-01	Identify and pursue outreach and education opportunities	Municipal OEM	No Progress	Yes	2022-Westville-009
M-02	Prioritize critical facilities and complete site and facility surveys to identify vulnerabilities and potential mitigation measures.	Municipal OEM and Facility Managers	Ongoing Capability	No	-
M-03	Conduct Regular Municipal Working Group Meetings	Municipal OEM and Municipal Working Group	Ongoing Capability	No	-
M-04	Install permanent backup emergency power generator at Parkview Elementary School (CF-6).	Municipal OEM and School Board	No Progress	Yes	2022-Westville-004
M-05	Conduct study to determine flood and erosion remedial related mitigation measures along Woodbine Avenue and Lake Martha.	Municipal OEM and Public Works Department	No Progress	Yes	2022-Westville-006
M-06	Elevate / acquire homes along Big Timber Creek, particularly around Route 47 bridge.	Floodplain Administrator	No Progress	Yes	2022-Westville-002
M-07	Elevate / acquire homes on Edge Water Avenue	Floodplain Administrator	No Progress	Yes	2022-Westville-002
M-08	Address identified Repetitive Flood Loss Properties to include areas such as Big Timber Creek and Edge Water Avenue.	Floodplain Administrator	No Progress	Yes	2022-Westville-002



9.22.7.2 Additional Mitigation Efforts

Other than routine maintenance activities and progress noted in Table 9.22-14, the Borough did not undertake any additional mitigation efforts in the last five years.

9.22.7.3 Proposed Hazard Mitigation Initiatives for the HMP Update

The Borough of Westville participated in a mitigation action workshop in August 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 9.22-15. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion/Sea Level Rise	X			X			X			X
Dam Failure/Levee Failure	X			X			X			X
Disease Outbreak/Pandemic	X			X			X			X
Drought	X			X			X			X
Earthquake	X			X			X			X
Extreme Temperatures	X			X			X			X
Flood	X	X		X	X	X	X		X	X
Geological Hazards	X			X			X			X
Hazardous Materials	X			X			X			X
Hurricane	X			X			X			X
Invasive Species	X			X			X			X
Nor'Easter	X			X			X			X
Severe Storm	X	X		X		X	X		X	X
Severe Winter Storm	X			X			X			X
Wildfire	X			X			X			X
Utility Failure	X	X		X			X			X

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

The table below (Table 9.22-16) summarizes the comprehensive range of specific mitigation initiatives the Borough of Westville 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 (Mitigation Strategy), 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1)



for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.22-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

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Table 9.22-16. 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
2022-Westville-001	Flooding at Broadway	<p>Problem: Flooding along Broadway (County Route 551) is problematic. The Borough does not have jurisdiction to complete work on its own. Flooding has resulted in damages. The area is not in the special flood hazard area.</p> <p>Solution: The Borough will work with the State and County to complete stormwater upgrades. Upgrades could include:</p> <ul style="list-style-type: none"> Improved drainage Installation of backflow prevention devices on outfalls Rebuild/restore flaps on 300 block and remove debris 	Existing	Flood, Severe Storm	1, 2	State of New Jersey, County of Gloucester, Borough of Westville	BRIC, HMGP	Reduction in flooding	High	Within 5 years	High	SIP	SP
2022-Westville-002	Address Identified Repetitive Flood Loss Properties	<p>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 7 repetitive loss properties, but other properties may be impacted by flooding as well. There are several areas in the Borough that are flood prone including:</p> <ul style="list-style-type: none"> Forbidden Circle 	Existing	Flood, Severe Storm	1, 2, 3	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.	\$2 million	3 years	High	SIP	PP



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
		<ul style="list-style-type: none"> Newbold section of Westville, 600 block of Highland Avenue Brooklawn Circle Broadway in front of Gateway diner Broadway at 1st Colonial National Bank Duncan Avenue by the park Willow Street Thomas West Park Route 45 High Street Duncan East Olive Street Boundary Delsea Drive Delaware View Highland Avenue Woodbine Avenue Crown Point Road Route 130 <p>Solution: Conduct outreach to 20 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/elevati</p>											



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
		ng residential homes in the flood prone areas that experience frequent flooding (high risk areas).											
2022-Westville-003	Backup Power for Community Center	<p>Problem: Backup power sources are necessary to maintain critical services for critical facilities. The Community Center lacks a backup power source.</p> <p>Solution: The Engineer will research what size generator is needed to power the Community Center. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to the Community Center. The Department of Public Works will be responsible for maintenance of the generator.</p>	Existing	Utility Failure	1, 2, 6	Engineer, Public Works	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Municipal Budget	Ensures continuity of operations	\$50,000	Within 5 years	High	SIP	ES
2022-Westville-004	Backup Power for Parkview Elementary School	<p>Problem: Parkview Elementary School lacks backup power. The school is not under the Borough's jurisdiction.</p> <p>Solution: OEM and the Borough Engineer will meet with the facility managers to explain potential funding opportunities to provide for backup power installation.</p>	Existing	Utility Failure	1, 3, 6	OEM, Engineer, facility manager	Borough budget	Facility manager aware of potential funding for backup power	Staff time	1 year	High	EAP	PI
2022-Westville-005	Upsize Culvert at East Olive and Boundary	<p>Problem: The culvert at East Olive Street and Boundary Lane over Clear Creek is undersized and contributes to flooding.</p> <p>Solution: The Borough Engineer will determine the proper size for the</p>	Existing	Flood, Severe Storm	1, 2	DPW, Engineer	BRIC, HMGP, Municipal budget	Reduction in flood risk, culvert damage	High	Within 5 years	High	SIP	SP



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
		culvert. Public Works will be responsible for the replacement and upsizing of the culvert and future maintenance.											
2022-Westville-006	Support NJ DOT Infrastructure Improvements	<p>Problem: Various roadways and infrastructure under NJ DOT jurisdiction are in need of replacement or upgrade. Numerous projects are planned.</p> <p>Solution: The Borough will provide input and data to support potential NJ DOT projects. Particular projects include:</p> <ul style="list-style-type: none"> Improve drainage at State Route 45 and railroad. Conduct study to determine flood and erosion remedial related mitigation measures along Woodbine Avenue and Lake Martha. Forbidden Circle flooding: Rebuild two bridges from Brooklawn and create retaining ponds. Route 130 flooding 	Existing	Flood, Severe Storm	1, 2, 3, 4	OEM, Administration	Borough budget	Reduction in flooding of critical infrastructure	Staff time	Within 6 months	High	EAP	PI
2022-Westville-007	Flood Damage Prevention Ordinance	<p>Problem: The current flood damage prevention ordinance does not meet the state's recommendation for a code-coordinated flood damage prevention ordinance.</p> <p>Solution: The Borough will update the flood damage prevention</p>	New	Flood	1, 2	Floodplain Administrator, Administration	City budget	Meet state and FEMA standards for flood damage prevention, reduce flood risk on new	Staff time	6 months	Medium	LPR	PR



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
		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.						development					
2022-Westville-008	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	5	Public Works, OEM	Borough budget	Increased planning for post-disaster response and cleanup.	Staff time	6 months	High	LPR	ES
2022-Westville-009	Expand Hazard Outreach	Problem: Hazard outreach is limited in the Borough. An educated public is needed in order to reduce the level of response needed by municipal staff. Solution: The Borough will expand hazard outreach, including outreach on mitigation opportunities for homeowners and business owners.	N/A	All Hazards	3	Administration	Borough budget	Increased public awareness, reduced need for municipal response	Low	Within 2 years	High	EAP	PI

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 9.22-17. 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
2022-Westville-001	Flooding at Broadway	1	1	0	1	1	0	0	1	1	0	1	0	1	1	9	High 
2022-Westville-002	Address Identified Repetitive Flood Loss Properties	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2022-Westville-003	Backup Power for Community Center	1	1	1	1	1	1	0	1	1	1	0	0	1	1	11	High
2022-Westville-004	Backup Power for Parkview Elementary School	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2022-Westville-005	Upsize Culvert at East Olive and Boundary	1	1	1	1	1	0	0	1	1	0	1	0	1	1	10	High
2022-Westville-006	Support NJ DOT Infrastructure Improvements	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2022-Westville-007	Flood Damage Prevention Ordinance	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2022-Westville-008	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2022-Westville-009	Expand Hazard Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	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.



9.22.8 Action Worksheets

The following action worksheets have been developed by the Borough of Westville 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.

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Action Worksheet			
Project Name:	Flooding at Broadway		
Project Number:	2022-Westville-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Flooding along Broadway (County Route 551) is problematic. The Borough does not have jurisdiction to complete work on its own. Flooding has resulted in damages. The area is not in the special flood hazard area.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough will work with the State and County to complete stormwater upgrades. Upgrades could include: <ul style="list-style-type: none"> • Improved drainage • Installation of backflow prevention devices on outfalls • Rebuild/restore flaps on 300 block and remove debris 		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	TBD by developed actions	Estimated Benefits (losses avoided):	Reduction in flood risk, stormwater flood damage, maintains emergency access
Useful Life:	30 years	Goals Met:	
Estimated Cost:	TBD by developed actions. Anticipated High.	Mitigation Action Type:	Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMGP, BRIC
Responsible Organization:	State of New Jersey, County of Gloucester, Borough of Westville	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation planning, Stormwater management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate buildings	Very High	Costly and would not solve roadway flooding
	Buyout buildings	Very High	Costly and would not solve roadway flooding
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Flooding at Broadway	
Project Number:	2022-Westville-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects life from flooding and maintains emergency access.
Property Protection	1	Protects buildings from flood damage
Cost-Effectiveness	0	
Technical	1	Technically feasible project
Political	1	
Legal	0	The Borough does not have the legal authority to conduct the project alone.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	Project would reduce flooding impacts
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	State of New Jersey, County of Gloucester, Borough of Westville
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Address Identified Repetitive Flood Loss Properties		
Project Number:	2022-Westville-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Flood		
Description of the Problem:	<p>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 7 repetitive loss properties, but other properties may be impacted by flooding as well. There are several areas in the Borough that are flood prone including:</p> <ul style="list-style-type: none"> • Forbidden Circle • Newbold section of Westville, 600 block of Highland Avenue • Brooklawn Circle • Broadway in front of Gateway diner • Broadway at 1st Colonial National Bank • Duncan Avenue by the park • Willow Street • Thomas West Park • Route 45 • High Street • Duncan • East Olive Street • Boundary • Delsea Drive • Delaware View • Highland Avenue • Woodbine Avenue • Crown Point Road • Route 130 		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 20 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	Goals Met:	1, 2, 3
Estimated Cost:	\$2 Million	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:			

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Action Worksheet		
Project Name:	Address Identified Repetitive Flood Loss Properties	
Project Number:	2022-Westville-002	
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	Severe Storm, Flood
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Backup Power for Community Center		
Project Number:	2022-Westville-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Utility Failure		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Community Center 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 Community Center. The Borough will then purchase and install the selected generator and necessary electrical components to supply backup power to the Community Center. The Department of Public Works will be responsible for maintenance of the generator.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Level of Protection:	N/A	Estimated Benefits (losses avoided):	Ensures continuity of operations of Community Center
Useful Life:	20 years	Goals Met:	1, 3
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, 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:	Backup Power for Community Center	
Project Number:	2022-Westville-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Community Center
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	0	Utility Failure
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Public Works
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

Action Worksheet



Project Name:	Upsize Culvert at East Olive and Boundary		
Project Number:	2022-Westville-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	The culvert at East Olive Street and Boundary Lane over Clear Creek is undersized and contributes to flooding.		
Action or Project Intended for Implementation			
Description of the Solution:	The Borough Engineer will determine the proper size for the culvert. Public Works will be responsible for the replacement and upsizing of the culvert and future maintenance.		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	TBD by size selected	Estimated Benefits (losses avoided):	Reduction in flood risk, culvert damage
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMGP, BRIC, municipal budget
Responsible Organization:	DPW, Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Elevate roadway	\$500,000	Costly and may not solve problem
	Relocate roadway	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Upsize Culvert at East Olive and Boundary	
Project Number:	2022-Westville-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protects life from flooding.
Property Protection	1	Protects culvert from flood damage
Cost-Effectiveness	1	
Technical	1	Technically feasible project
Political	1	
Legal	0	Project may require permitting
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	Project would reduce flooding impacts
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	Within 5 years
Agency Champion	1	DPW, Engineer
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	