



9.1 HUNTERDON COUNTY

This section presents the jurisdictional annex for the Hunterdon County. The annex includes a general overview of the Hunterdon County; an assessment of the Hunterdon County’s risk, vulnerability, and mitigation capabilities; and a prioritized action plan to implement prior to a disaster to reduce future losses and achieve greater resilience to natural hazards.

9.1.1 Hazard Mitigation Planning Team

Hunterdon County followed the planning process described in Section 2 (Planning Process). This annex was developed over the course of several months with input from many County representatives. County departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization. The coronavirus pandemic resulted in a strain on local resources that limited some participation, but every effort was made to connect with staff and stakeholders and gain diverse input. Due to safety precautions, all meetings were held virtually. The following table summarizes who participated and in what capacity. Additional documentation on the County’s planning process through Planning Partnership and Steering Committee meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact
Name / Title: Brayden Fahey, OEM Coordinator Address: Hunterdon County Department of Public Safety 201 Cherryville Road, Flemington, NJ 08822 Phone Number: 908-788-1196 Email: bfahey@co.hunterdon.nj.us		Name / Title: Andrew Camp, Deputy OEM Coordinator Address: Hunterdon County Department of Public Safety 201 Cherryville Road Flemington, NJ 08822 Phone Number: 908-788-1196 Email: acamp@co.hunterdon.nj.us
Name	Title	Method of Participation
Brayden Fahey	OEM Coordinator	Primary point of contact, attended meetings, provided data and information, contributed to mitigation strategy
Andrew Camp	Deputy OEM Coordinator	Alternate point of contact, attended meetings, provided data and information, contributed to mitigation strategy
Laura McDevitt	OEM Administrator	Attended meetings, provided data and information, contributed to mitigation strategy
Marc Saluk	Director, Hunterdon County Economic Development	Attended meetings, provided data and information
Frank Bell	Division Head, Hunterdon County Project Administration	Attended meetings, contributed to mitigation strategy
Carrie Fellows	Director, Hunterdon County Department of Planning & Land Use	Attended meetings, contributed to mitigation strategy
Patty Leidner	County GIS	Attended meetings, contributed to mitigation strategy
Chris Phelan	Hunterdon County Chamber of Commerce	Attended meetings, contributed to mitigation strategy
Chris Hunt	Hunterdon Medical Center	Attended meetings, contributed to mitigation strategy
Ken Bogen	Principal Planner (Now Retired), Hunterdon County Planning Division	Attended meetings, contributed to mitigation strategy



Thomas Mathews	Director, Hunterdon County Department of Public Works	Attended meetings, contributed to mitigation strategy
Karen B. DeMarco	Hunterdon County Health Services – Department of Health	Attended meetings, contributed to mitigation strategy

9.1.2 Jurisdiction Profile

Please refer to Section 4, Volume I of this Plan for details on Hunterdon County’s population, location, climate, history, growth and development.

9.1.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.1-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.1-2. Recent and Expected Future Development

Type of Development	2015	2016	2017	2018	2019
Number of Building Permits for New Construction Issued Since the Previous HMP					
Building permitting is completed at the local municipal level					
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					

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

9.1.4 Capability Assessment

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

- An assessment of legal and regulatory capabilities
- Development and permitting capabilities
- An assessment of fiscal capabilities
- An assessment of education and outreach capabilities
- Information on NFIP compliance
- Classification under various community mitigation programs
- The community’s adaptive capacity for the impacts of climate change

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and



each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized below. The Hunterdon County identified specific integration activities that will be incorporated into municipal procedures; these actions are included in the updated mitigation strategy.

PLANNING, LEGAL AND REGULATORY CAPABILITY

The table below summarizes the legal and regulatory tools that are available to the Hunterdon County and where hazard mitigation has been integrated.

Table 9.1-3. Planning, Legal and Regulatory Capability

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Codes, Ordinances, & Requirements					
Building Code	Yes	State & Local	Yes	Yes	-
Comment:					
<ul style="list-style-type: none"> State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14 Adopted 9/3/2019. 					
Zoning Code	Yes	State & Local	Yes – if municipality has a Planning Board	Yes	-
Comment:					
<ul style="list-style-type: none"> State permissive on local level. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan. The County Land Development Standards provide procedures, rules, regulations, and standards for review and approval of land subdivisions, and of site plans, pursuant to the County Planning Act, N.J.S.A. 40:27-1 et seq., as supplemented by Laws of 1968, Chapter 285, as amended. 					
Subdivisions	Yes	County & Local	Yes – if municipality has a Planning Board	Yes	-
Comment:					
<ul style="list-style-type: none"> P.L.1975, c.291 (C.40:55D-47): 40:55D-37. Grant of power; referral of proposed ordinance; county planning board approval a. The governing body may by ordinance require approval of subdivision plats by resolution of the planning board as a condition for the filing of such plats with the county recording officer and approval of site plans by resolution of the planning board as a condition for the issuance of a permit for any development, except that subdivision or individual lot applications for detached one or two dwelling-unit buildings shall be exempt from such site plan review and approval; provided that the resolution of the board of adjustment shall substitute for that of the planning board whenever the board of adjustment has jurisdiction over a subdivision or site plan pursuant to subsection 63b. of this act . Dictated by the Municipal Land Use Law. NJ Statute 40:27-6.2 - the board of commissioners of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions affecting county road or drainage facilities as set forth and limited hereinafter in this section. The County Land Development Standards provide procedures, rules, regulations, and standards for review and approval of land subdivisions, and of site plans, pursuant to the County Planning Act, N.J.S.A. 40:27-1 et seq., as supplemented by Laws of 1968, Chapter 285, as amended. 					
Stormwater Management	Yes	State & Local	Yes	Yes	-
Comment:					
<ul style="list-style-type: none"> See Title 7 of the NJ Administrative Code, N.J.A.C. 7:8 The County Land Development Standards provide procedures, rules, regulations, and standards for review and approval of land subdivisions, and of site plans, pursuant to the County Planning Act, N.J.S.A. 40:27-1 et seq., as supplemented by Laws of 1968, Chapter 285, as amended. Included in the Land Development Standards are Stormwater Standards. The Standards note that “Development contributes to increased flooding, channel erosion and quantities of pollutants. Regulation of increased stormwater runoff from such development can control to some extent the adverse impacts on the County’s water 					



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
<i>resources. The County Engineer will review each development for conformance to the design standards set forth herein to regulate the discharge of stormwater runoff.”</i>					
Post-Disaster Recovery	No	-	No	-	-
Comment:					
Real Estate Disclosure	Yes	State, Division of Consumer Affairs	Yes	Yes	-
Comment: <i>N.J.A.C. 13:45A-29.1 - Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as estimated completion dates for improvements, fees for services and amenities, the type of title and ownership interest being offered, its proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.</i>					
Growth Management	Yes	County	Yes – if municipality has a Planning Board	Yes	-
Comment: <ul style="list-style-type: none"> • State Mandated on a municipal level. See Zoning Ordinance; Also - Plan Endorsement Process via the State Development & Redevelopment Plan provides for the delineation of Growth Areas and Environs; Use of the endorsed plans in the implementation of state environmental regulations makes the Plan Endorsement process a growth management strategy. • Growth management is guided through the County’s Growth Management Plan, adopted December 2007. 					
Site Plan Review	Yes	County & Local	Yes – if municipality has a Planning Board	Yes	-
Comment: <ul style="list-style-type: none"> • Dictated by the Municipal Land Use Law which sets forth minimum requirements for plans, etc., timeframes for development review. NJ Statute 40:27-6.2: The board of commissioners of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions affecting county road or drainage facilities as set forth and limited hereinafter in this section. 40:27-6.10 In order that county planning boards shall have a complete file of the planning and zoning ordinances of all municipalities in the county, each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality in effect on the effective date of this act and shall notify the county planning board of the introduction of any revision or amendment of such an ordinance which affects lands adjoining county roads or other county lands, or lands lying within 200 feet of a municipal boundary, or proposed facilities or public lands shown on the county master plan or official county map. Such notice shall be given to the county planning board at least 10 days prior to the public hearing thereon by personal delivery or by certified mail of a copy of the official notice of the public hearing together with a copy of the proposed ordinance. • The County Land Development Standards provide procedures, rules, regulations, and standards for review and approval of land subdivisions, and of site plans, pursuant to the County Planning Act, N.J.S.A. 40:27-1 et seq., as supplemented by Laws of 1968, Chapter 285, as amended. 					
Environmental Protection	No	-	No	-	-
Comment:					
Flood Damage Prevention	No	State & Local	Yes	-	-
Comment: <ul style="list-style-type: none"> • The NJ State Law Flood Area Control Act (N.J.S.A. 58:16A-52) and the National Flood Control Act of 1968 (NFIP) are state and federal acts to support minimization of flood losses. They do not require local adoption but as enforced by the NJDEP, the floodplain ordinances of each municipality must be reviewed for compliance with these regulations. In addition, participation in the NFIP requires a floodplain ordinance. Regulations for the Flood Control Hazards Act were adopted in 2007 and amended effective June 20, 2016. • Adoption and enforcement of Flood Damage Prevention Ordinances is completed at the local level. 					
Wellhead Protection	No	-	No	-	-
Comment:					
Emergency Management	No	-	No	-	-
Comment:					
Climate Change	No	-	No	-	-





	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
<i>Comment:</i>					
Disaster Recovery Ordinance	No	-	No	-	-
<i>Comment:</i>					
Disaster Reconstruction Ordinance	No	-	No	-	-
<i>Comment:</i>					
Other	No	-	No	-	-
<i>Comment:</i>					
Planning Documents					
Comprehensive / Master Plan	Yes	County	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> 2018 Revised NJ Statute 40:27-2; the county planning board shall make and adopt a master plan for the physical development of the county. The master plan of a county, with the accompanying maps, plats, charts, and descriptive and explanatory matter, shall show the county planning board's recommendations for the development of the territory covered by the plan, and may include, among other things, the general location, character, and extent of streets or roads, viaducts, bridges, waterway and waterfront developments, parkways, playgrounds, forests, reservations, parks, airports, and other public ways, grounds, places and spaces; the general location and extent of forests, agricultural areas, and open-development areas for purposes of conservation, food and water supply, sanitary and drainage facilities, or the protection of urban development, and such other features as may be important to the development of the county. The county planning board shall encourage the co-operation of the local municipalities within the county in any matters whatsoever which may concern the integrity of the county master plan and to advise the board of chosen commissioners with respect to the formulation of development programs and budgets for capital expenditures. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976 40:55D-28 provides the required components of a municipal Master Plan and requires that each municipality prepare a master plan and update it every 6 years. Further, all zoning ordinances must be consistent with the Master Plan or will not be benefitted from a presumption of validity. The Hunterdon Growth Management Plan of 2007 is administered by the County Planning Department. The Plan has sections on Natural Resources, Land Use, Transportation, Economic Development, People and Housing, Public Schools, Infrastructure, Land Preservation, and Historic Resources. 					
Capital Improvement Plan	Yes	County	No	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> The Capital Improvement Plan/Budget is updated annually. It is the responsibility of all County Departments and is overseen by the County Board of Chosen Commissioners. The county Capital Improvement Budget is the vehicle that county departments use to undertake various projects some of which include stormwater management and drainage activities. 					
Disaster Debris Management Plan	No	-	No	-	2021-Hunterdon County-017
<i>Comment:</i>					
Floodplain or Watershed Plan	Yes	County, Regional	No	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> The Delaware River Basin Commission (DRBC) addresses flooding in the Delaware River Basin. 					
Stormwater Management Plan	No	State & Local	Yes	-	-
<i>Comment:</i>					
<ul style="list-style-type: none"> The Stormwater Management rules (N.J.A.C. 7:8) rules were published in the February 2, 2004 NJ Register. These rules set forth the required components of regional and municipal stormwater management plans and establish the stormwater management design and performance standards for new (proposed) development. The design and performance standards for new development include groundwater recharge, runoff quantity controls, and runoff quality controls. The rules emphasize, as a primary consideration, the use of nonstructural stormwater management techniques including minimizing disturbance, minimizing impervious surfaces, minimizing the use of stormwater pipes, preserving natural drainage features, etc. The rules also set forth requirements for groundwater recharge, stormwater runoff quantity control, stormwater runoff quality control, and the prohibition of major development to be located within or to discharge runoff from the major development into a 300-foot riparian zone without prior authorization from the Department under the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13. 					
Stormwater Pollution Prevention Plan	Yes	Local	Yes	Yes	-



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Comment:					
<ul style="list-style-type: none"> The Phase II New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program (NJPDES) rules (N.J.A.C. 7:14A) were published in the February 2, 2004, NJ Register. These NJPDES rules are intended to address and reduce pollutants associated with existing stormwater runoff. The NJPDES rules establish a regulatory program for existing stormwater discharges as required under the Federal Clean Water Act. These NJPDES rules govern the issuance of permits to entities that own or operate small municipal separate storm sewer systems, known as MS4s. Under this program, permits must be secured by municipalities, certain public complexes such as universities and hospitals, and State, interstate and federal agencies that operate or maintain highways. The permit program establishes the Statewide Basic Requirements that must be implemented to reduce nonpoint source pollutant loads from these sources. The Statewide Basic Requirements include measures such as: the adoption of ordinances (litter control, pet waste, wildlife feeding, proper waste disposal, etc.); the development of a municipal stormwater management plan and implementing ordinance(s); requiring certain maintenance activities (such as street sweeping and catch basin cleaning); implementing solids and floatables control; locating discharge points and stenciling catch basins; and a public education component. Hunterdon County developed a sample stormwater management plan, which is designed to provide guidance and strategies for municipal stormwater programs. The document addresses best practices in regards to issues of groundwater recharge, impacts of stormwater runoff quantity and quality, water quality degradation associated with new development, design and performance standards, and low impact/sustainable management practices. It also gives advice to ensure integration of ordinances, municipal Master Plans, and other local plans to facilitate administrative consistency. 					
Urban Water Management Plan	No	-	No	-	-
Comment:					
Habitat Conservation Plan	No	-	No	-	-
Comment:					
Economic Development Plan	Yes	County, Regional	No	Yes	-
Comment:					
<ul style="list-style-type: none"> Comprehensive Economic Development Strategy Plan: The 2015 plan was developed by the County Planning Department and led to the creation of Hunterdon County Economic Development. <ul style="list-style-type: none"> Economic Development has worked on initiatives such as the 539 Agritrail for agricultural tourism and the Hunterdon County Main Streets initiative to promote and support local businesses Together North Jersey Plan: The Together North Jersey Plan of 2015 is a regional Plan for a Comprehensive Economic Development Strategy 					
Shoreline Management Plan	No	-	Yes – if located in a coastal zone	-	-
Comment:					
<ul style="list-style-type: none"> NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone management Rules N.J.A.C. 7:7E-1 et seq. 					
Community Wildfire Protection Plan	No	-	No	-	-
Comment:					
Community Forest Management Plan	Yes	County	No	Yes	-
Comment:					
<ul style="list-style-type: none"> Woodland Conservation Plan: The 2005 plan is the responsibility of the County Planning Department. 					
Transportation Plan	Yes	County	No	Yes	-
Comment:					
<ul style="list-style-type: none"> Transportation Plan: 2008 					
Agriculture Plan	Yes	County	No	Yes	-
Comment:					
<ul style="list-style-type: none"> Hunterdon County Comprehensive Farmland Preservation Plan: The 2008 plan is the responsibility of the County Planning Department. 					
Climate Action Plan	No	-	No	-	-
Comment:					



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	Have aspects of the HMP been integrated into your codes/ordinances/plans?	
				If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Tourism Plan	No	-	No	-	-
<i>Comment:</i>					
Business Development Plan	No	-	No	-	-
<i>Comment:</i>					
Other	Yes	County, Regional, State	No	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> • Open Space Plan: The Hunterdon County Open Space, Farmland and Historic Preservation Trust Fund Plan of 2016 is administered by the County Planning Department. • Animal Emergency Response Plan • Wastewater Management Plan: The 2013 plan is the responsibility of the County Planning Department. • Highlands Regional Master Plan: The 2008 Plan is the responsibility of the NJ Highlands Council. 					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	County	Yes	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> • Each county and municipality in the State shall prepare a written Emergency Operations Plan with all appropriate annexes necessary to implement the plan. Each Emergency Operations Plan shall be adopted no later than one year after the State Emergency Planning Guidelines have been adopted by the State Office of Emergency Management and shall be evaluated at such subsequent scheduled review of the State Emergency Operations Plan. L.1989, c.222, s.19. 					
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	County	No	Yes	-
<i>Comment: County</i>					
Post-Disaster Recovery Plan	No	-	No	-	-
<i>Comment:</i>					
Continuity of Operations Plan	Yes	County	No	Yes	-
<i>Comment:</i> Currently in final stages of development, along with Continuity of Government planning through Tetra Tech.					
Public Health Plan	Yes	County	No	Yes	-
<i>Comment:</i>					
<ul style="list-style-type: none"> • Community Health Improvement Plan: The 2007 plan is the responsibility of the County Health Department. 					
Other	No	-	No	-	-
<i>Comment:</i>					

Table 9.1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Issued at local municipal level.
Does your jurisdiction have the ability to track permits by hazard area?	Completed and tracked at local municipal level.
Does your jurisdiction have a buildable lands inventory? -If yes, please describe briefly. -If no, please quantitatively describe the level of buildout in the jurisdiction.	Yes; Hunterdon County Economic Development maintains a listing of potential commercial sites.

ADMINISTRATIVE AND TECHNICAL CAPABILITY

The table below summarizes potential staff and personnel resources available to the Hunterdon County.



Table 9.1-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	County Planning Board
Mitigation Planning Committee	Yes	Steering Committee established for 2016 Update
Environmental Board / Commission	Yes	Shade Tree Commission
Open Space Board / Committee	Yes	Open Space Advisory Committee
Economic Development Commission / Committee	Yes	Economic Development Director
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Reverse 911
Maintenance program to reduce risk	Yes	Public Works – ditch cleaning; snow fence installation, tree-trimming; inspect catch basins and pipe entrances pre- and post- storm events
Mutual aid agreements	Yes	County Office of Emergency Management and Public Works; Municipal fire services have an alerting plan that satisfies the Division of Fire Safety
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Department, Engineering Division
Engineers or professionals trained in building or infrastructure construction practices	Yes	Department of Public Works
Planners or engineers with an understanding of natural hazards	Yes	GIS, Emergency Management Division
Staff with training in benefit/cost analysis	No	Contractors as needed
Staff with training in green infrastructure	Yes	Staff training ongoing
Staff with education/knowledge/training in low impact development	Yes	Staff training ongoing
Surveyor	No	-
Stormwater engineer	Yes	Stormwater Engineer
Personnel skilled or trained in GIS applications	Yes	GIS
Local or state water quality professional	Yes	Engineer
Scientist familiar with natural hazards in local area	No	-
Emergency manager	Yes	Emergency Management Division (Public Safety Department)
Watershed planner	No	-
Environmental specialist	No	-
Grant writers	No	Contractors as needed
Resilience Officer	No	-
Other	Yes	Economic Development has assisted municipalities and businesses with the identification of grants and resources for coronavirus financial relief, PPE, and best practices.

FISCAL CAPABILITY

The table below summarizes financial resources available to the Hunterdon County.



Table 9.1-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes, as available
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	No
User Fees for Water, Sewer, Gas or Electric Service	Municipalities/or MUAs
Incur Debt through General Obligation Bonds	Yes – standard County Capital Ordinances
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	CDBG funds cannot fund projects in flood-prone areas
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes – Health Division for septic reviews
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	No

EDUCATION AND OUTREACH CAPABILITY

The table below summarizes the education and outreach resources available to the Hunterdon County.

Table 9.1-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Yes – County Administration Office- Ruthi Cass, Public Information Officer
Do you have personnel skilled or trained in website development?	Yes – IT Department – Carrie Moore, Division Head
Do you have hazard mitigation information available on your website? -If yes, briefly describe.	Yes – County website includes a page on hazard mitigation within the Department of Public Safety page, including information on current plan updates and links to citizen and stakeholder survey questionnaires. In addition, information and links have been shared on County and Public Safety social media accounts.
Do you use social media for hazard mitigation education and outreach? -If yes, briefly describe.	Yes – Department of Public Safety maintains Facebook and Twitter accounts which are frequently used for hazard mitigation education and outreach.
Do you have any citizen boards or commissions that address issues related to hazard mitigation? -If yes, briefly describe.	Yes – The Hunterdon County OEM Council and Hunterdon County Municipal OEM Coordinators meet regularly and routinely address issues related to hazard mitigation on a county-wide and municipal basis.
Do you have any other programs already in place that could be used to communicate hazard-related information? If yes, briefly describe.	Yes – County maintains a Citizen Alert Notification System (Nixle) to notify residents who opt in. In addition, OEM maintains a separate notification/communication system (IAR) for first responders and municipal OEM coordinators responding to incidents, which readily communicates hazard related information.

COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Hunterdon County.

Table 9.1-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No	-	-





Program	Participating?	Classification	Date Classified
Building Code Effectiveness Grading Schedule (BCEGS)	N/A	-	-
Public Protection (Fire ISO Protection Class)	N/A	-	-
Storm Ready Certification	N/A	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	N/A	-	-

ADAPTIVE CAPACITY

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

Table 9.1-9. Adaptive Capacity

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

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

NATIONAL FLOOD INSURANCE PROGRAM

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

Table 9.1-10. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Floodplain management is administered at the local municipal level.
Who is your floodplain administrator? (name, department/position)	N/A
Are any certified floodplain managers on staff in your jurisdiction?	No





Criterion	Response
What is the date that your flood damage prevention ordinance was last amended?	N/A
Does your floodplain management program meet or exceed minimum requirements? -If exceeds, in what ways?	N/A
When was the most recent Community Assistance Visit or Community Assistance Contact?	N/A
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? -If so, state what they are.	N/A
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? -If no, state why.	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? - If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? -If yes, is your jurisdiction interested in improving its CRS Classification? -If no, is your jurisdiction interested in joining the CRS program?	N/A
How many flood insurance policies are in force in your jurisdiction?*	858 policies
-What is the insurance in force? -What is the premium in force?	
How many total loss claims have been filed in your jurisdiction?*	1,244 claims
-How many claims are still open or were closed without payment? -What were the total payments for losses?	\$23,792,520 in payments
Do you maintain a list of properties that have been damaged by flooding?	No, records are kept by the NFIP or at the local level.
Do you maintain a list of property owners interested in flood mitigation?	No, records may be kept at the local level.

*According to FEMA statistics as of October 13, 2020
Source: FEMA 2020

ADDITIONAL AREAS OF EXISTING INTEGRATION

▪ **Planning**

- The Board of Chosen Commissioners serves as the top governing body in Hunterdon County. They approve major initiatives, capital improvement spending, and other high level decisions for the County. The Commissioners are supported in their duties by the Hunterdon County Planning Board, which has several major responsibilities, including:
 - Prepared and adopt a master plan for the physical development of the County
 - Review subdivision and site plan applications
 - Encourage municipal cooperation in matters of mutual and regional concern
 - Advise the Board of Chosen Commissioners on capital budgets and expenditures
 - Maintain a file on municipal master plans and development regulations
- Hunterdon County has developed or participated in the development of a Master Plan; Delaware River Basin Commission (DRBC) Plan; Hunterdon County Open Space, Farmland, and Historic Preservation Trust Fund Plan; Comprehensive Economic Development Strategy (CEDS); Together North Jersey Plan; Wastewater Management Plan; and Woodland Conservation Plan, amongst others. Many of these plans consider floodplains, steep slopes, and





other environmentally constrained areas. Additionally, several of the plans (such as the Master Plan, CEDS, Growth Management Plan and Together North Jersey) consider smart or strategic growth practices.

- Hunterdon County developed a sample stormwater management plan, which is designed to provide guidance and strategies for municipal stormwater programs. The document addresses best practices in regards to issues of groundwater recharge, impacts of stormwater runoff quantity and quality, water quality degradation associated with new development, design and performance standards, and low impact/sustainable management practices. It also gives advice to ensure integration of ordinances, municipal Master Plans, and other local plans to facilitate administrative consistency.
- Hunterdon County currently has an Open Space Procedures Manual which includes our Priority Evaluation System that is used to give a quality score to each prospective open space acquisition. Built-into this System are criteria designed to capture the nature of the project area to enhance water protection efforts and give weight to those with more desirable traits to that end. Factors include: well head protection, degree of groundwater recharge including aquifer recharge, headwaters, surface waters, wetlands, etc.
- The New Jersey Department of Health has developed a pamphlet on emergency planning that is available through the County's Division of Health Services. Based on the work and dedication of this department, Hunterdon County was ranked as the healthiest county in New Jersey for two years running in a Robert Wood Johnson Foundation study of vital health factors that influence health. Additionally, Hunterdon County began the Partnership for Health, a healthier community initiative in 1995, to serve as a countywide coalition of over 30 community agencies sharing a common interest in promoting the health of county residents.
- Hunterdon County participates in New Jersey's Radiological Program, per NJOEM's Radiological Program Guidelines. Hunterdon County OEM is privy to hazardous materials (HazMat) and capabilities for response if needed. The HazMat team also trains members of local emergency services to enhance local response.
- The Hunterdon County Division of Public Health preparedness team is a group of specialists that create, develop, evaluate and implement action plans to help prevent, prepare for, and respond to serious public health crises including emerging diseases, pandemic influenza, disease outbreaks, wide-scale natural disasters, and terrorist attacks.
- **Operational and Administration**
 - The Hunterdon County OEM maintains relationships with the U.S. Army Corps of Engineers (USACE) and the DRBC, along with Rutgers University. These relationships help provide the county with technical information and/or assistance in the identification of hazard areas and risk assessments.
 - The Hunterdon County OEM and County Planning encourage compliance with floodplain management as it relates to new and existing construction by integrating hazard mitigation practices with zoning, subdivision ordinances, comprehensive planning, and other land use tools at the municipal level.
 - The Hunterdon County Department of Public Works, through its Division of Roads and Bridges and Division of Engineering, regularly inspects bridges and roads for scour and debris post-storm and flood events to ensure structural integrity is being maintained.
 - The Board of Chosen Commissioners reviews information from the County Engineering Division, Roads and Bridges Division, and Planning Department to determine project priorities



and release capital improvement funding. These projects include addressing roads that experience frequent flooding (i.e., roadway design and drainage improvements).

- The Hunterdon County Division of Public Health environmental and consumer health program educates, enforces, and protects residents through programs in food safety, safe drinking water, septic and construction planning, air pollution control, solid waste enforcement, rabies control, kennel and public bathing place inspections, and many others.
- The Hunterdon County Division of Public Health mosquito and vector control program offers a full range of mosquito control and insect surveillance activities to the Hunterdon community.
- The Hunterdon County Division of Public Health preparedness team, in addition to their public health action plans described earlier, recruits and maintains the Medical Reserve Corp, a team of volunteers trained in public health preparedness efforts.
- The Hunterdon County Public Health Nursing Division provides population-based community health services in communicable disease control and education, pregnancy and prenatal care, chronic disease monitoring, childhood vaccination, lead poisoning prevention, health education, blood pressure monitoring and professional development resources for the medical community.

▪ **Funding**

- Operating Budget: The county’s operating budget contains provisions for necessary capital and infrastructure projects, as well as public safety and mitigation initiatives. In the 2015 budget, the County identified \$175,000 will be allocated to emergency management (over \$45,000 more than was allocated in the 2014 budget). The County also funds other departments involved in mitigation, such as public health, planning, and public works (which includes both the Building and Grounds Division and Engineering Division).
- Outside Funding: While much of the county’s revenue comes from taxes and other fees, part of its revenue is grant-related or received through State Aid. This includes the Victim Assistance Program and Homeland Security (NJ Department of Law and Public Safety), Subregional Transportation Planning (NJIT – North Jersey Transportation Planning Authority), Solid Waste initiatives (NJDEP), along with other programs. The County also participates in regional or multi-County grant funding opportunities, as needs dictate and opportunities arise.
- The county has led mitigation grant efforts to secure funding to assist flood-prone residents. In 2015, Hunterdon County, in cooperation with Warren County, developed a FEMA Flood Mitigation Assistance regional grant application to acquire severe repetitive loss properties in both Counties. The application is pending award.
- Capital Projects: The county Capital Improvement Budget is the vehicle that county departments use to undertake various projects some of which include stormwater management and drainage activities.

▪ **Education, Outreach and Training**

- Hunterdon County conducts public outreach regarding hazard mitigation through collaboration with local schools and colleges, community groups, and Community Emergency Response Team (CERT) workshops. The County utilizes a wide variety of tools and forums to disseminate preparedness and alert information to as many residents as possible. The most widely used include the Hunterdon County OEM and Division of Health websites, Hunterdon County OEM and Division of Health Twitter accounts, Hunterdon County OEM Facebook page, and Hunterdon County OEM Nixle account. The County also maintains a Citizen Alert Emergency Notification System, which enables the County to provide residents with critical information during hazard events. Residents can select to be notified by phone, e-mail, text



- message, hearing impaired devices, and more. The County also maintains a hotline to help individuals with disabilities register for emergency notifications or to receive other assistance.
- Hunterdon County additionally has other resources available. The county maintains a County Animal Response Team (CART). It also has a 2-1-1 telephone number that residents can access for general information. Upcoming workshops, conferences, and preparedness opportunities are posted on the Hunterdon County OEM website as opportunities arise.
 - The Hunterdon County OEM conducts outreach to municipal floodplain administrators; departments of planning, public works, engineering, etc.; and other local officials regarding the importance of hazard mitigation planning and provision of municipal plans and data for planning purposes during related meetings (such as the Emergency Management Coordinator meetings). The Hunterdon County OEM staff also attend New Jersey Emergency Preparedness and other preparedness conferences as appropriate and as funding allows.
 - Hunterdon County maintains a Division of GIS, which provides an explanation to residents on the purpose and benefits of a comprehensive GIS and several mapping applications (at Federal, State, and local levels). One noted application links visitors to the website to FEMA’s Flood Map Service Center so residents can check their relationship to the floodplain.
 - The Hunterdon County Health Division provides chemical safety programs for schools through the County Environmental Health Act (CEHA) program and Right to Know enforcement.

OPPORTUNITIES FOR FUTURE INTEGRATION

- **Historic Preservation Element/ HC Master Plan:** The Historic Preservation Element/ HC Master Plan (1978, 2001) is in need of update in order to identify/ inform property owners according to Secretary of the Interiors Standards. The County will hire a consultant to complete updates to the Historic Preservation Element/Master Plan (2021-Hunterdon County-004).
- **Long Term Recovery Plan:** The County will develop a long-term recovery plan for the County (2021-Hunterdon County-006).
- **Hazard Data Integration:** Additional integration of hazard mitigation information developed through the HMP planning process with other county data is needed. The County will enhance data integration on hazardous materials with most current information about other risk factors, e.g., population, climate, other site-specific characteristics. Complete identification of vulnerable populations (2021-Hunterdon County-012).
- **Disaster Debris Management Plan:** The County will develop and adopt a Disaster Debris Management Plan (2021-Hunterdon County-017).

9.1.5 Hazard Event History Specific to the Jurisdiction

Hunterdon County has a history of hazard events, as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles in Section 4.3 (Hazards of Concern) and includes a chronology of events that affected Hunterdon County and its jurisdictions.

9.1.6 Jurisdiction-Specific Vulnerabilities and Hazard Ranking

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 4.2 (Methodology and Tools) and Section 4.4 (Hazard Ranking) for a detailed summary for the Hunterdon County risk assessment results and data used to determine the hazard ranking discussed later in this section.



HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Hunterdon County that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Hunterdon County has significant exposure.

REPETITIVE FLOOD LOSSES

The following summarizes the repetitive and severe repetitive flood losses in the Hunterdon County.

- Number of repetitive loss (RL) properties: 184
- Number of severe repetitive loss (SRL) properties: 44
- Number of RL/SRL properties that have been mitigated: 9

Source: FEMA 2019

Note: The number of SRL properties excludes RL properties.

CRITICAL FACILITIES AND LIFELINES

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

Table 9.1-11. Critical Facilities and Lifelines Flood Exposure

Name	Type	Exposure	
		1% Event	0.2% Event
No County facilities are identified as being located in the 1% or 0.2% floodplain. Municipal or privately owned critical facilities located in the floodplain are identified in the respective municipal annexes that the facility is located in.			

IDENTIFIED ISSUES AND PROBLEM AREAS

The jurisdiction has identified the following vulnerabilities within their community:

- Stormwater infrastructure is undersized at some locations within the County. This can lead to damages and increased flood risk.
- The coronavirus pandemic has demonstrated that additional sheltering capacity is needed during times when social distancing is needed.
- Backup power sources are necessary to maintain critical services for critical facilities. The Parks HQ requires backup power to maintain continuity of operations.
- The Historic Preservation Element/ HC Master Plan (1978, 2001) is in need of update in order to identify/ inform property owners according to Secretary of the Interiors Standards.
- The County has 184 repetitive loss (RL) properties and 44 severe repetitive loss (SRL) properties.
- The County lacks a long-term recovery plan.
- Emergency communications require expansion of coverage and backup power.
- The Hunterdon County Emergency Services Training Center requires upgrades to increase the ability of staff to be trained.
- County Departments and municipalities need to be kept up to date on FEMA grant programs in order to best position for applying for grant funding support for hazard mitigation actions.
- Additional public outreach is needed on hazard safety.





- The Sussex HMP has identified hazard exposure areas that include various critical facilities.
- Additional integration of hazard mitigation information developed through the HMP planning process with other county data is needed.
- Critical facilities that are rebuilt are designed to meet snow and ice loads. Wood framed structures that have not been recently upgraded require surveying to verify loading conditions.
- Levees in the County are not under the County’s jurisdiction but could require County assistance for response during emergency events.
- The number of hazmat responders in Hunterdon County has decreased within the last 10 years, enhancement the program with additional recruitment and training provides a structure for response and prevention of hazmat-related incidences. There is a need for enhancement of County-wide hazmat team response protocols/SOPs/Training.
- Additional emergency response vehicle capabilities are needed for hazard response. There is a lack of transportation options for residents with access and functional needs (including disabled and aging adult populations). Evacuation may be due to natural disaster or transport for emergency public health medical counter-measure (i.e., Point of Distribution).
- The County lacks a Disaster Debris Management Plan.

HAZARD RANKING

This section summarizes the jurisdiction’s primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; its potential impacts on people, property, and the economy; community capability and changing future climate conditions. This input supports the development of mitigation actions, targeting those hazards with the highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Hunterdon County as a whole. Therefore, the Hunterdon County ranked each hazard’s degree of risk as it pertains to their community factoring in their capabilities to withstand impacts and rebound after the event. The table below summarizes the hazard rankings of potential hazards for the Hunterdon County. The Hunterdon County has reviewed the Hunterdon County hazard ranking table and has provided input to its individual results to reflect the relative risk of the hazards of concern countywide.

Table 9.1-12. Hunterdon County Hazard Ranking

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

9.1.7 Mitigation Strategy and Prioritization

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

PAST MITIGATION INITIATIVE STATUS





The following table summarizes the jurisdiction’s progress on their mitigation strategy identified in the 2016 HMP. Actions that are carried forward as part of this plan update are included in Table 9.1-14 and Table 9.1-15 with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and can also be found under ‘Capability Assessment’ presented previously in this annex.

Table 9.1-13. Status of Previous HMP Mitigation Actions

2016 Action Number Action Description		Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
Hunterdon-1	Review and integrate the mitigation plan into the County Master Plan. Include hazard areas in County Master Plan updates.	County Planning	No Progress	X	2021-Hunterdon County-004
Hunterdon-2	Increase the capacity of the stormwater infrastructure in the County through mitigation activities such as: <ul style="list-style-type: none"> Wilson Drive and 523 – residential threat. Increase the capacity of the existing 36-inch pipe in Stockton Borough (municipal, County, and State in is needed). 604 (Sergeantsville – Montsville road) - Road flooding, capital funding 	Stockton Borough/Delaware Township with support from County	No Progress	X	2021-Hunterdon County-001
Hunterdon-3	Develop a long-term recovery plan for the County.	Planning Department and HC OEM	No Progress	X	2021-Hunterdon County-006
Hunterdon-4	Identify and implement actions to strengthen public health capabilities in County.	County Health	Ongoing Capability		
Hunterdon-5	Improve existing communications in County by adding radio tower sites to increase coverage and installing backup generators at existing tower facilities.	HC OEM	In Progress	X	2021-Hunterdon County-007
Hunterdon-6	Hunterdon County Emergency Services Training Center – Leasing building in Clinton Township (State property) <ul style="list-style-type: none"> Demo and rebuild the classroom building to construct a new classroom and shelter Reconstruct the live fire training building (at 25-years the State says the reach their maximum and have to be replaced) Purchase training props for the fire exercises 	County Architect, Board of Chosen Commissioners, HC OEM	In Progress; constructing the burn building (Phase 1 this year), Phase 2 for storage building and props next. Additional funding necessary.	X	2021-Hunterdon County-008
Hunterdon-7	Regularly review emergency supplies and mutual aid agreements to ensure sufficient access to supplies during disaster events (Case study – Running out of swift water rescue boats and equipment).	HC OEM	Ongoing Capability		



2016 Action Number	Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
Hunterdon-8	Conduct education and outreach to residents and business owners to inform them if their properties are in known hazard areas, and actions they can take to protect those properties. Ensure information is on County website and Facebook, and that it goes to Municipal OEMs, First-Responder Agencies, County Department Heads and the Public.	HC OEM, Planning, County Clerk	Ongoing Capability		
Hunterdon-9	Purchase and install generators for critical and essential facilities in the County: <ul style="list-style-type: none"> County Complex Fuel depots 	HC OEM	In Progress	X	2021-Hunterdon County-004
Hunterdon-10	Conduct annual workshop related to the FEMA HMA grant programs (HMGP, PDM, and FMA). This may be done at quarterly OEM coordinator meetings, and HC OEM will invite other County departments. Request and distribute NFIP stats to OEM coordinators at the County. County will email State for updated statistics prior to meeting.	HC OEM, Other County departments, NJ OEM	No Progress	X	2021-Hunterdon County-009
Hunterdon-11	Coordinate with NJOEM Mitigation and NJ Fire Safety to conduct annual workshops on hazard safety.	HC OEM, NJOEM, NJ Fires	No Progress	X	2021-Hunterdon County-010
Hunterdon-12	Inventory critical facilities to identify those in geographic areas that may be prone to high ground motion during earthquakes (due to proximity to faults or to soil characteristics), and those with structures that may be at risk during an earthquake.	HC OEM, GIS	No Progress	X	2021-Hunterdon County-011
Hunterdon-13	Enhance effective coordination and information sharing with NJOEM.	HC OEM, NJ OEM	Ongoing Capability		
Hunterdon-14	Enhance data integration on hazardous materials with most current information about other risk factors, e.g., population, climate, other site-specific characteristics. Complete identification of vulnerable populations.	HC OEM, County Health Department	In Progress, some work done with NJ DEP	X	2021-Hunterdon County-012
Hunterdon-15	Undertake a survey of critical facilities to identify and prioritize those that may have structural characteristics that make them vulnerable to excessive snow and ice loads. This includes further examination of flat-roofs. Full facilities review is under process for County-owned properties.	County Architect	In Progress. Necessary upgrades and improvements take place as buildings are updated. There is still a need to look at wood framed structures that have not been updated	X	2021-Hunterdon County-013





2016 Action Number Action Description		Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
			recently to verify loading conditions.		
Hunterdon-16	Complete study to determine if access and functional needs populations are in a hazard area (e.g., flood zone).	County Health Department, HCOEM, NOAA, USACE, local officials, NJDEP	Ongoing Capability		
Hunterdon-17	Identify levees in the County and conduct assessment for levees which appear to have vulnerabilities, and where there is potential for significant damage or loss of life.	County Engineer, Public Works, USACE	No Progress; dams and levees are under local ownership.	X	2021-Hunterdon County-014
Hunterdon-18	Support continuity of operations and implement mitigation projects and programs intended to reduce risk to critical facilities.	County Planning, HC OEM	Ongoing Capability		
Hunterdon-19	Integrate hazard mitigation priorities into Capital Improvement Plans, transportation planning, and other capital planning.	County Public Works and Engineering, HC OEM, Planning, Municipal OEMS and local permitting/planning offices	Ongoing Capability		
Hunterdon-20	Continue working with local and regional jurisdictions to encourage and support their efforts to mitigate RL and SRL properties, either individually through use of cluster solutions and/or basin projects, as appropriate, and offer technical support in carrying out the requirements of FEMA mitigation programs. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option. Phase 2: Work with the property owners and relevant jurisdictions to implement selected action based on available funding from FEMA and local match availability.	County Engineer, HC OEM, NJOEM	In Progress	X	2021-Hunterdon County-005
Hunterdon - 21	Develop Regional Homeland security Grant for a Regional Rail emergency plan (Freight and Passenger) – this is a regional action with Sussex / Warren / Somerset / Hunterdon OEMs	HCOEM, Sussex / Warren / Somerset OEMs	Complete		
Hunterdon – 22	Develop a Regional Damage Assessment Plan (3 years to implement) – regional plan post natural event to get damage assessments conducted (OEM Lead)	HCOEM, Sussex / Warren / Somerset OEMs	No Progress, however, actions have been taken at the state level to allow for shared services for post event damage assessments		



2016 Action Number	Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2021 HMP Update?	
				Check if Yes	Enter 2021 HMP Action #
Hunterdon-23	Public health implications of waterborne illness as a result of flooding. This project is intended to pursue a health education program for residents' pre, during, and post flooding incident to prevent water-borne illness.	Division of Health	In Progress	X	2021-Hunterdon County-018
Hunterdon-24	Public health implications of vector borne illness as a result of flooding. This project is intended to pursue a health education program for residents' pre, during, and post flooding incident and to increase vector control activities/mosquito control activities.	Division of Health	In Progress	X	2021-Hunterdon County-018
Hunterdon-25	Public health implications of power outages. The project is to develop education program related to power outage safety for residents and increase inspections by Registered Environmental Health Specialists at retail food establishments after a power outage event. A tailored message and program for Hunterdon County ensures higher compliance and education levels for residents.	Division of Health	In Progress, food complete	X	2021-Hunterdon County-018
Hunterdon-26	Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) Incidents. Enhancement of County-wide hazmat team response protocols/SOPs/Training.	Division of Health and HC OEM	In Progress	X	2021-Hunterdon County-015
Hunterdon-27	EMS Emerging Infectious Disease Readiness. Full scale drill of the County Ebola Preparedness Plan/Training.	Division of Health	In Progress. Action should be updated to "Enhance readiness of Countywide EMS staff for infectious disease events based on lessons learned during the Covid-19 pandemic"	X	2021-Hunterdon County-019
Hunterdon-28	Countywide Emergency Transportation. The project is to pursue a contract with an AFN partner-agency to utilize vehicles to transport individuals during an emergency. Trained volunteers could be utilized to operate the vehicles. This action/project may be more cost-effective and provide services to more residents rather than purchasing one vehicle.	HC OEM with support from Division of Health	In Progress	X	2021-Hunterdon County-016

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

- None identified





PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Hunterdon County participated in a risk assessment workshop in October 2020 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Hunterdon County participated in a mitigation action workshop in November 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Hunterdon County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; mitigation funding sources, and the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 *Selecting Appropriate Mitigation Measures for Floodprone Structures* (March 2007) and FEMA *Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards* (January 2013). Section 6 (Mitigation Strategy) and Appendix F (Mitigation Strategy Supplement) provide a more complete description of the Mitigation Toolbox and its resources.

Table 9.1-14 summarizes the comprehensive-range of specific mitigation initiatives the Hunterdon County would like to pursue in the future to reduce the effects of hazards. Initiatives are dependent upon available funding (grants and local match availability) and can be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.1-15 provides a summary of the prioritization of all proposed mitigation initiatives for this HMP update.



Table 9.1-14. Proposed Hazard Mitigation Initiatives

Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2021-Hunterdon County-001	Increase the Capacity of the Stormwater Infrastructure in Hunterdon County	<p>Problem: Stormwater infrastructure is undersized at some locations within the County. This can lead to damages and increased flood risk.</p> <p>Solution: Increase the capacity of the stormwater infrastructure in the County through mitigation activities such as:</p> <ul style="list-style-type: none"> Wilson Drive and 523 – residential threat. Increase the capacity of the existing 36-inch pipe in Stockton Borough (municipal, County, and State in is needed). 604 (Sergeantsville – Montsville Road) - Road flooding, capital funding 	Existing	Flood, Severe Weather	2	Stockton Borough/Delaware Township with support from County	HMGP, BRIC, County bond	Reduction in stormwater infrastructure damages and flood risk	High	Within 5 years	High	SIP	SP
2021-Hunterdon County-002	Expand Sheltering Capabilities	<p>Problem: The coronavirus pandemic has demonstrated that additional sheltering capacity is needed during times when social distancing is needed.</p> <p>Solution: The County will identify additional facilities that could be developed into shelters. The County will then work with FEMA to identify what upgrades are needed to the facilities to meet sheltering guidelines. Expected upgrades needed include heat, food preparation areas, etc.</p>	Existing	All Hazards	1, 6	HC OEM	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, County Budget	Increases emergency sheltering capacity	High	Within 5 years	High	SIP	PP, ES
2021-Hunterdon County-003	Backup Power for Critical Facilities	<p>Problem: Backup power sources are necessary to maintain critical services for critical facilities. The Parks HQ requires backup power to maintain continuity of operations.</p> <p>Solution: The Engineer will research what size generator is needed to power the Parks HQ. The County will then purchase and install the selected generator and necessary electrical components to supply backup power to the Parks HQ.</p>	Existing	Hurricane, Nor’Easter, Severe Weather, Severe Winter Weather	1, 2, 6	HC OEM, Parks Dept	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG)	Ensures continuity of operations of Parks HQ	\$50K	Within 5 years	High	SIP	PP





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2021-Hunterdon County-004	Historic Preservation Element /HC Master Plan	<p>Problem: The Historic Preservation Element/ HC Master Plan (1978, 2001) is in need of update in order to identify/ inform property owners according to Secretary of the Interiors Standards.</p> <p>Solution: The County will hire a consultant to complete updates to the Historic Preservation Element/Master Plan.</p>	Existing	All Hazards	3, 4	Dept Planning & Land Use (GIS, C&H, Projects)	Program, County Budget NJ Highlands Coalition	Share resources/information re: hazard mitigation & recovery	\$50K - 75K	Start 2022	High	LPR, EAP	PR, PI
2021-Hunterdon County-005	Repetitive Loss Mitigation	<p>Problem: The County has 184 repetitive loss (RL) properties and 44 severe repetitive loss (SRL) properties.</p> <p>Solution: The County will support local municipalities and homeowners in efforts to mitigate repetitive loss properties.</p>	Existing	Flood, Severe Storm	2	Planning	HMGP, BRIC, FMA, homeowners, County budget (for support)	Reduction of flood risk	High for mitigation, low for county support	3 years	High	SIP	PP
2021-Hunterdon County-006	Long Term Recovery Plan	<p>Problem: The County lacks a long-term recovery plan.</p> <p>Solution: The County will develop a long-term recovery plan for the County.</p>	New & Existing	All Hazards	3, 6	Economic Development, Planning Department, and HC OEM	NJOEM, County budget	Increased planning and capabilities for disaster recovery	Medium	Within 5 years	High	LPR	ES, PR
2021-Hunterdon County-007	Radio Towers	<p>Problem: Emergency communications require expansion of coverage and backup power.</p> <p>Solution: The County will work to improve existing communications in the County by adding radio tower sites to increase coverage and installing backup generators at existing tower facilities.</p>	New & Existing	All Hazards	1, 2, 5, 6	HC OEM	HMGP, BRIC, NJOEM, County budget	Ensures continuity of operations and expands	Medium/High	Within 5 years	High	SIP	ES





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2021-Hunterdon County-008	Hunterdon County Emergency Services Training Center	<p>Problem: The Hunterdon County Emergency Services Training Center requires upgrades to increase the ability of staff to be trained.</p> <p>Solution: The County will complete construction of the live fire training building and construct a storage building and purchase training props for fire exercises.</p>	Existing	Wildfire	3	County Architect, Board of Chosen Commissioners, HC OEM	HMGP, Emergency Management Grant Program, Assistance to Firefighters Grant Program, County budget	Increased capability to train staff to address wildfire event impacts	\$7-8 M	2 years	High	SIP, EAP	ES
2021-Hunterdon County-009	FEMA Funding Workshops	<p>Problem: County Departments and municipalities need to be kept up to date on FEMA grant programs in order to best position for applying for grant funding support for hazard mitigation actions.</p> <p>Solution: The County will conduct annual workshop related to the FEMA HMA grant programs (HMGP, BRIC, and FMA). This may be done at quarterly OEM coordinator meetings, and HC OEM will invite other County departments as part of the HMP maintenance strategy.</p> <p>Request and distribute NFIP stats to OEM coordinators at the County. County will email State for updated statistics prior to meeting.</p>	Existing	All Hazards	3, 4	HC OEM, Other County departments, NJ OEM	County budget	Increased success in FEMA grant applications for hazard mitigation support	Staff time	1 year, ongoing once established	High	EAP	PI
2021-Hunterdon County-010	Hazard Safety Workshops	<p>Problem: Additional public outreach is needed on hazard safety.</p> <p>Solution: The County will coordinate with NJOEM Mitigation and NJ Fire Safety to conduct annual workshops on hazard safety.</p>	Existing	All Hazards	3	HC OEM, NJOEM, NJ Fires	County budget	Increased hazard awareness and preparedness	Staff time	1 year	High	EAP	PI





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2021-Hunterdon County-011	Critical Facility Hazard Mitigation Inventory	Problem: The Sussex HMP has identified hazard exposure areas that include various critical facilities. Solution: The County will inventory critical facilities to identify those in geographic areas that may be prone to hazard impacts and identify next actions to take to address structural means of protection.	Existing	All Hazards	4	HC OEM, GIS	NJOEM; County	Identification of needs for future mitigation actions	Staff time	Within 5 years	Medium	SIP	PP, ES
2021-Hunterdon County-012	Hazard Data Integration	Problem: Additional integration of hazard mitigation information developed through the HMP planning process with other county data is needed. Solution: The County will enhance data integration on hazardous materials with most current information about other risk factors, e.g., population, climate, other site-specific characteristics. Complete identification of vulnerable populations.	Existing	All Hazards	4	NJ DEP, HC OEM, County Health Department	County budget	Integration of hazard mitigation concepts, improved decision making resources	Staff time	2 years	Medium	LPR	PR
2021-Hunterdon County-013	Critical Facility Snow and Ice Loads	Problem: Critical facilities that are rebuilt are designed to meet snow and ice loads. Wood framed structures that have not been recently upgraded require surveying to verify loading conditions. Solution: The County will complete surveys of wood framed structures to verify loading conditions and identify upgrade needs.	Existing	Severe Winter Weather	2, 6	County Architect	County budget	Reduction in risk of structural failure	Staff time	2 years	Medium	SIP, LPR	PP, PR
2021-Hunterdon County-014	County Levee Coordination	Problem: Levees in the County are not under the County's jurisdiction but could require County assistance for response during emergency events. Solution: The County will seek to be kept updated on surveys of levees in the County to maintain emergency management coordination between local, county, state, and federal agencies.	Existing	Flood	3, 4	HC OEM, NJ DEP, USACE, Local facility managers	County budget	Increased emergency preparedness and coordination	Staff time	2 years	High	LPR	ES
2021-Hunterdon County-015	Chemical, Biological, Radiological, Nuclear,	Problem: The number of hazmat responders in Hunterdon County has decreased within the last 10 years, enhancement the program with additional	Existing	Hazardous Materials	1, 2, 3, 5	Division of Health and HC OEM	Public Health Emergency Preparedne	Provision of an enhanc	Costs include staff traini	1 year	High	LPR	ES





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
	Explosive (CBRNE) Incidents Hazmat Response	recruitment and training provides a structure for response and prevention of hazmat-related incidences. There is a need for enhancement of County-wide hazmat team response protocols/SOPs/Training. Solution: The County will work to enhance County-wide hazmat team response protocols/SOPs/Training for Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) Incidents.					ss (Health)/County Environmental Health Act	ed county-wide hazmat response protects the physical environment of Hunterdon county's natural resources and the health of community residents.	ng time and material expense. \$25,000/year				
2021-Hunterdon County-016	Countywide Emergency Transportation	Problem: Additional emergency response vehicle capabilities are needed for hazard response. There is a lack of transportation options for residents with access and functional needs (including disabled and aging adult populations). Evacuation may be due to natural disaster or transport for emergency public health medical counter-measure (i.e., Point of Distribution). Solution: The project is to pursue a contract with an AFN partner-agency to utilize vehicles to transport individuals during an emergency. Trained volunteers could be utilized to operate the vehicles. This action may be more cost-effective and provide services to more residents rather than purchasing one vehicle.	N/A	All Hazards	1, 5	HC OEM with support from Division of Health	FEMA HMA; NJOEM; County budget	Avoid over-taxing the existing Link transportation system, and provision of needed services to at-risk population.	Low	2 years	Medium	LPR	ES





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2021-Hunterdon County-017	Disaster Debris Management Plan	Problem: The County lacks a Disaster Debris Management Plan. Solution: The County will develop and adopt a Disaster Debris Management Plan.	Existing	All Hazards	2, 5, 6	HC OEM	County budget	Increased disaster response capabilities	Low	2 years	High	LPR	ES
2021-Hunterdon County-018	Increased Health Related Hazard Outreach	Problem: Expansion of health-related hazards outreach is needed including in the public health implications of waterborne illness and vector borne illness as a result of flooding and necessary safety precautions for residents to take regarding food when power loss is experienced. Solution: The Department of Health will expand health education for residents' pre, during, and post flooding incident to prevent water-borne illness and to increase vector control activities/mosquito control activities. The Department will also expand education for residents for food safety after a power outage event.	N/A	Flood, Hurricane, Nor'Easter Severe Weather, Severe Winter Weather		Department of Health	County budget	Increased public awareness and preparation	Staff time	1 year	High	EAP	PI
2021-Hunterdon County-019	Infectious Disease Readiness	Problem: The Covid-19 pandemic has resulted in the identification of new best practices to respond to and address infectious disease but update of County policy and staff training is necessary to realize these improvements. Solution: County OEM and the Department of Health will work to enhance the readiness of Countywide EMS staff for infectious disease events based on lessons learned during the Covid-19 pandemic. Readiness actions to include training for EMS staff and proper PPE.	N/A	Disease Outbreak		HC OEM, Department of Health	County budget	Increased preparedness	Staff time	1 year	High	LPR	ES

Notes:

Acronyms and Abbreviations:

CAV Community Assistance Visit
 CRS Community Rating System
 DPW Department of Public Works

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:





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

BRIC Building Resilient Infrastructure and Communities Program

The estimated cost for implementation.

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

Mitigation Category:

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

CRS Category:

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

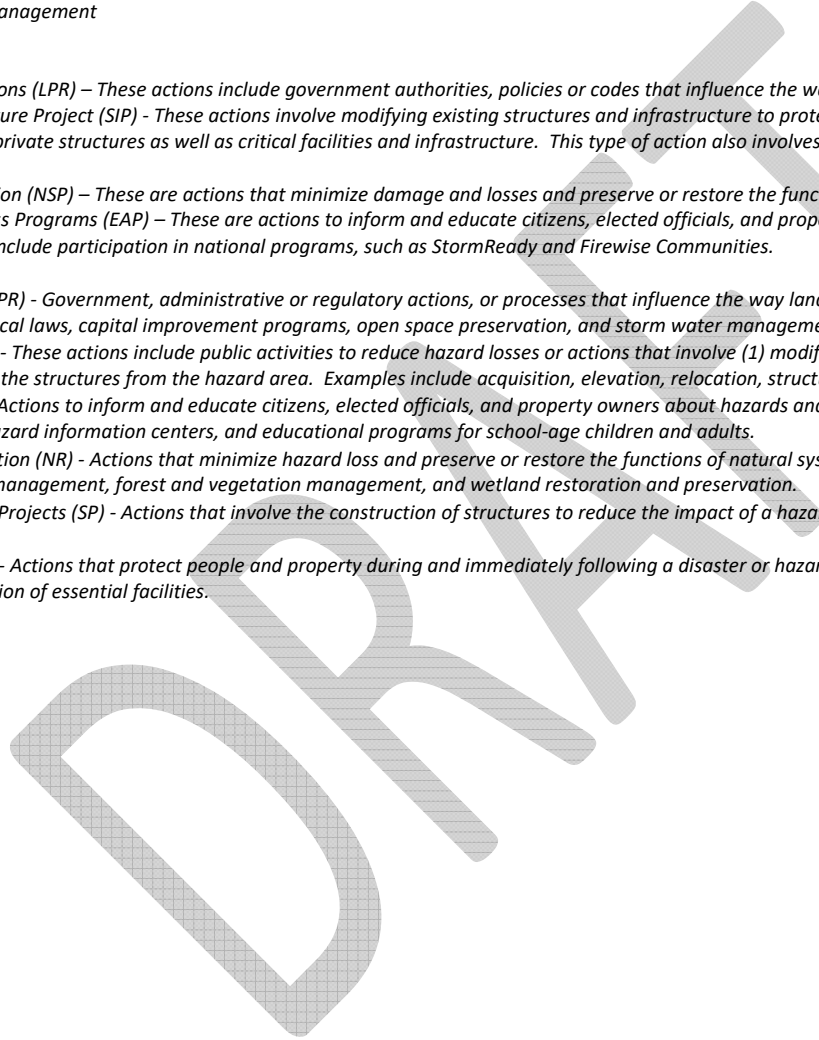




Table 9.1-15. Summary of Evaluation and Action Priorities

Initiative Number	Mitigation Initiative Name	Life Safety	Property Protection	Cost Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
2021-Hunterdon County-001	Increase the Capacity of the Stormwater Infrastructure in Hunterdon County	0	1	1	1	1	1	0	1	1	1	1	0	1	1	11	High
2021-Hunterdon County-002	Expand Sheltering Capabilities	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021-Hunterdon County-003	Backup Power for Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2021-Hunterdon County-004	Historic Preservation Element /HC Master Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2021-Hunterdon County-005	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2021-Hunterdon County-006	Long Term Recovery Plan	1	1	1	1	1	1	1	1	1	1	1	0	1	1	13	High
2021-Hunterdon County-007	Radio Towers	1	1	1	1	1	1	0	0	1	1	1	0	1	1	11	High
2021-Hunterdon County-008	Hunterdon County Emergency Services Training Center	1	1	0	1	1	1	0	0	1	1	0	1	1	1	9	High
2021-Hunterdon County-009	FEMA Funding Workshops	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-Hunterdon County-010	Hazard Safety Workshops	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-Hunterdon County-011	Critical Facility Hazard Mitigation Inventory	1	1	1	0	1	1	-1	0	1	1	0	1	0	1	8	Medium
2021-Hunterdon County-012	Hazard Data Integration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-Hunterdon County-013	Critical Facility Snow and Ice Loads	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High





Initiative Number	Mitigation Initiative Name	Life Safety	Property Protection	Cost Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
2021-Hunterdon County-014	County Levee Coordination	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2021-Hunterdon County-015	Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) Incidents Hazmat Response	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2021-Hunterdon County-016	Countywide Emergency Transportation	1	0	1	1	0	1	0	0	1	0	1	1	1	1	8	Medium
2021-Hunterdon County-017	Disaster Debris Management Plan	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2021-Hunterdon County-018	Increased Health Related Hazard Outreach	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2021-Hunterdon County-019	Infectious Disease Readiness	1	0	1	1	1	1	1	1	1	1	0	1	1	1	12	High

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


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

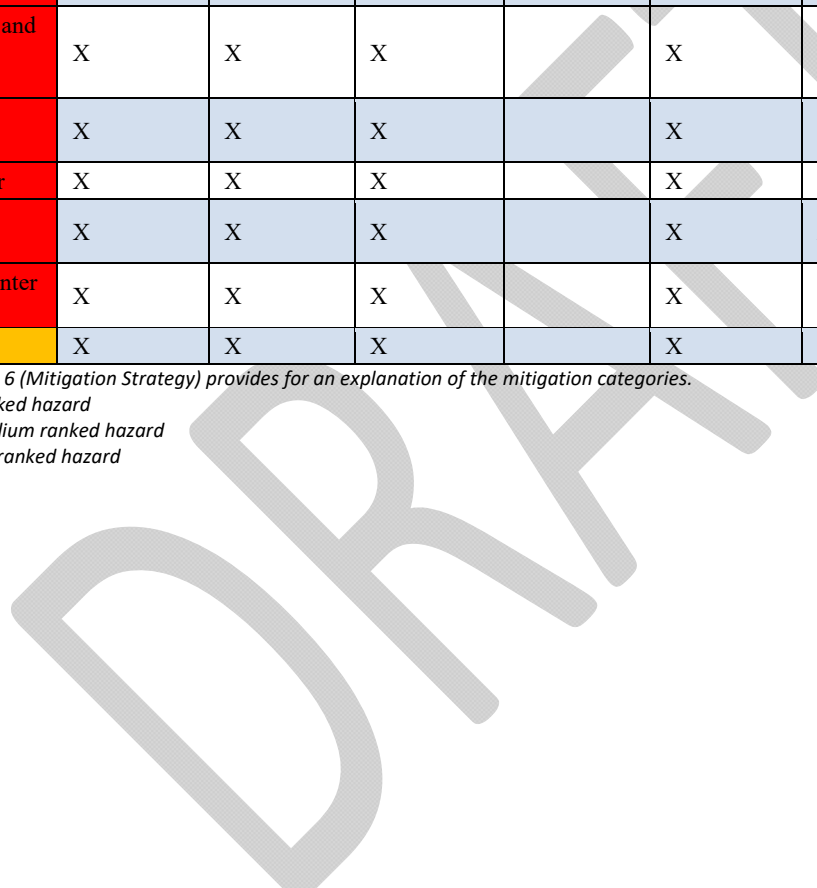


Table 9.1-16. Analysis of Mitigation Actions by Hazard and Category

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Dam Failure	X	X	X		X			X
Disease Outbreak	X	X	X		X			X
Drought	X	X	X		X			X
Earthquake	X	X	X		X			X
Flood	X	X	X		X	X		X
Geologic	X	X	X		X			X
Hazardous Materials	X	X	X		X			X
Hurricane and Tropical Storm	X	X	X		X			X
Invasive Species	X	X	X		X			X
Nor'Easter	X	X	X		X			X
Severe Weather	X	X	X		X	X		X
Severe Winter Weather	X	X	X		X			X
Wildfire	X	X	X		X			X

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

- RED** high ranked hazard
- ORANGE** medium ranked hazard
- YELLOW** low ranked hazard

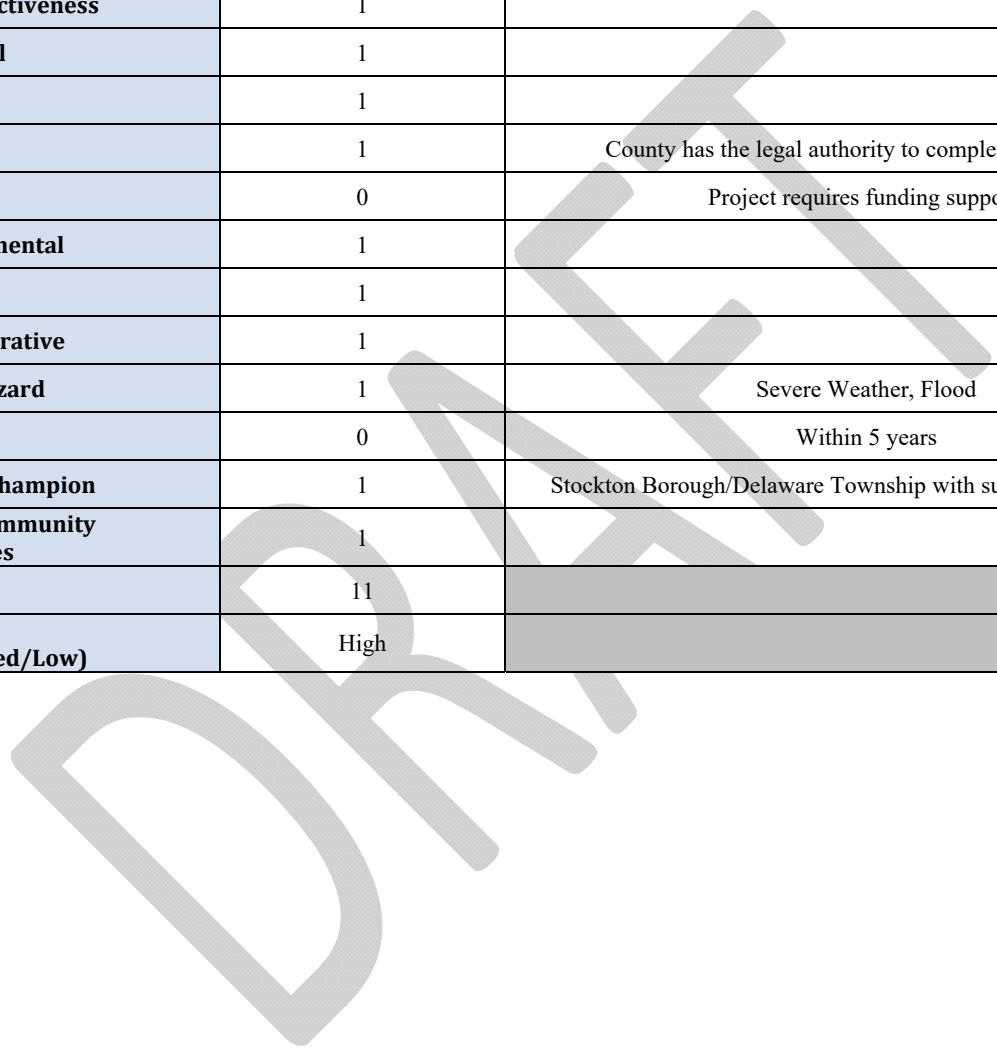




Action Worksheet			
Project Name:	Increase the Capacity of the Stormwater Infrastructure in Hunterdon County		
Project Number:	2021-Hunterdon County-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Weather		
Description of the Problem:	Stormwater infrastructure is undersized at some locations within the County. This can lead to damages and increased flood risk.		
Action or Project Intended for Implementation			
Description of the Solution:	Increase the capacity of the stormwater infrastructure in the County through mitigation activities such as: <ul style="list-style-type: none"> •Wilson Drive and 523 –residential threat. Increase the capacity of the existing 36-inch pipe in Stockton Borough (municipal, County, and State in is needed). •604 (Sergeantsville – Montsville Road) - Road flooding, capital funding 		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	Designed per site.	Estimated Benefits (losses avoided):	Reduction in stormwater infrastructure damages and flood risk
Useful Life:	30 years	Goals Met:	2
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, BRIC, County budget
Responsible Organization:	Stockton Borough/Delaware Township with support from County	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	Current problem continues
	Remove roads	Low	Roadways cannot be removed
	Relocate floodprone roads to other locations	High	Not feasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Increase the Capacity of the Stormwater Infrastructure in Hunterdon County	
Project Number:	2021-Hunterdon County-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project will protect roadways from flooding, stormwater infrastructure damages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	County 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, Flood
Timeline	0	Within 5 years
Agency Champion	1	Stockton Borough/Delaware Township with support from County
Other Community Objectives	1	
Total	11	
Priority (High/Med/Low)	High	

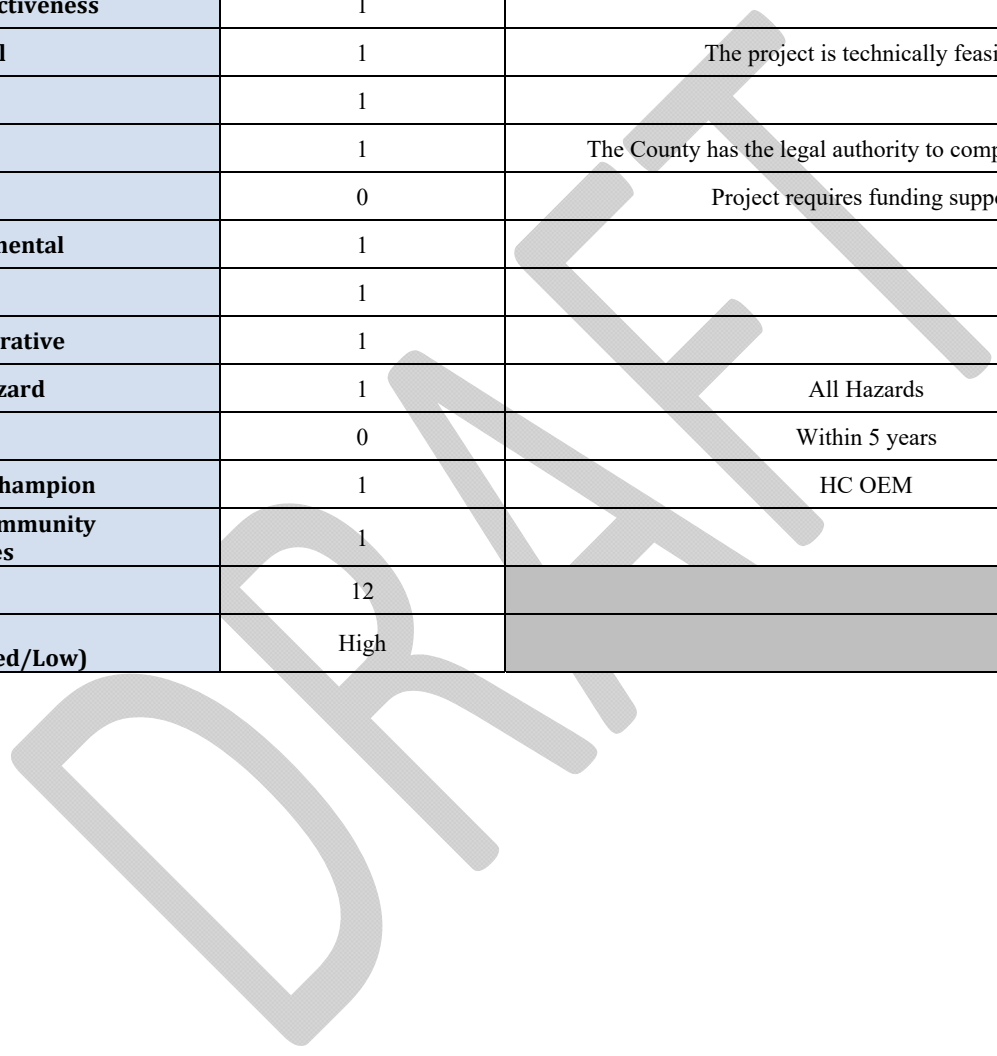




Action Worksheet			
Project Name:	Expand Sheltering Capabilities		
Project Number:	2021-Hunterdon County-002		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	The coronavirus pandemic has demonstrated that additional sheltering capacity is needed during times when social distancing is needed.		
Action or Project Intended for Implementation			
Description of the Solution:	The County will identify additional facilities that could be developed into shelters. The County will then work with FEMA to identify what upgrades are needed to the facilities to meet sheltering guidelines. Expected upgrades needed include heat, food preparation areas, etc.		
Is this project related to a Critical Facility?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Level of Protection:	Emergency shelter requirements	Estimated Benefits (losses avoided):	Increases emergency sheltering capacity
Useful Life:	15 years	Goals Met:	1, 6
Estimated Cost:	High	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA HMGP and BRIC, USDA Community Facilities Grant Program, EMPG, County Budget
Responsible Organization:	HC OEM	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.
	Purchase multi-use trailers	\$1M per trailer	Require deployment, limited space
	Build new facilities	High	Costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Expand Sheltering Capabilities	
Project Number:	2021-Hunterdon County-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provides increased sheltering capabilities
Property Protection	1	Project will strengthen building protections in identified expanded sheltering locations
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The County has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All Hazards
Timeline	0	Within 5 years
Agency Champion	1	HC OEM
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	

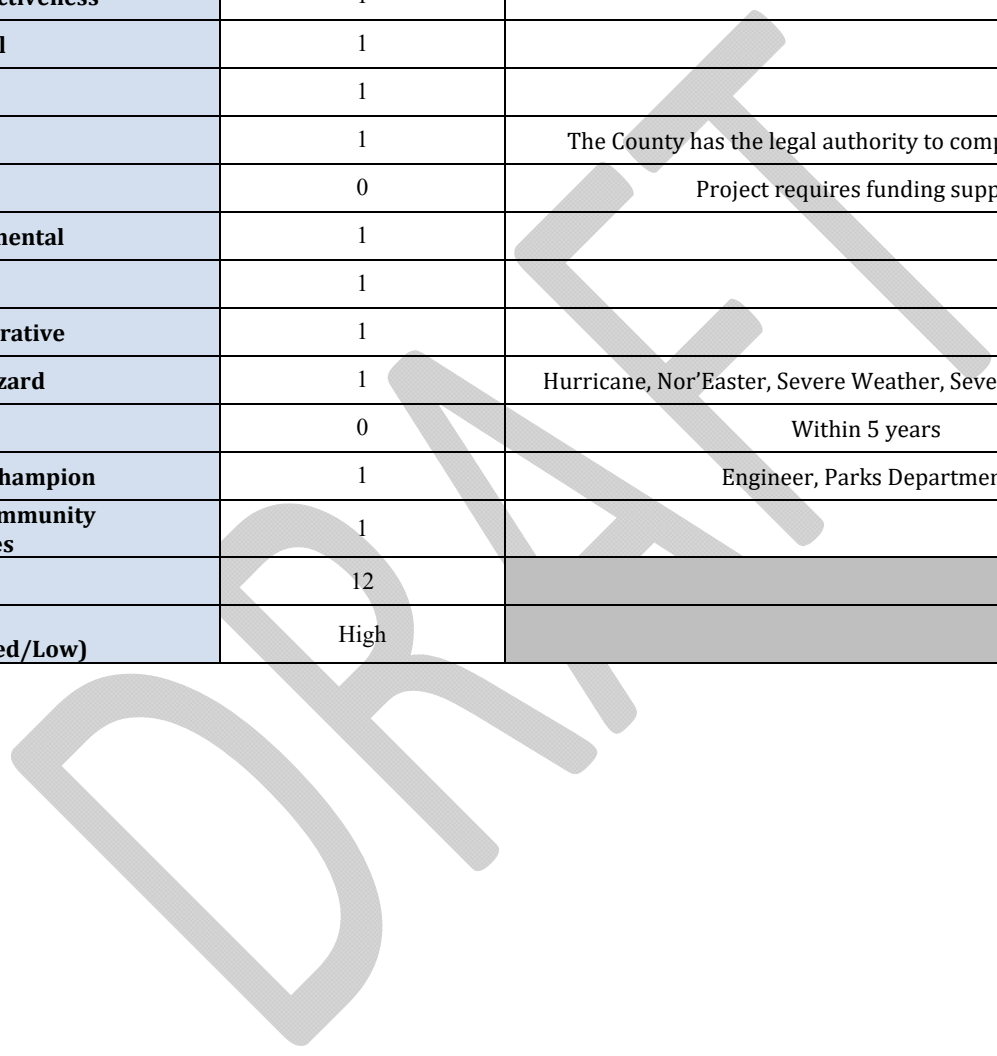




Action Worksheet			
Project Name:	Backup Power for Critical Facilities		
Project Number:	2021-Hunterdon County-003		
Risk / Vulnerability			
Hazard(s) of Concern:	Hurricane, Nor’Easter, Severe Weather, Severe Winter Weather		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Parks Headquarters requires backup power to maintain continuity of operations.		
Action or Project Intended for Implementation			
Description of the Solution:	The Engineer will research what size generator is needed to power the Parks Headquarters. The County will then purchase and install the selected generator and necessary electrical components to supply backup power to the Parks Headquarters.		
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 Parks Headquarters
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, County Budget
Responsible Organization:	Engineer, Parks Department	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 Critical Facilities	
Project Number:	2021-Hunterdon County-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect critical services of Parks Headquarters.
Property Protection	1	Project will protect building from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The County has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Hurricane, Nor'Easter, Severe Weather, Severe Winter Weather
Timeline	0	Within 5 years
Agency Champion	1	Engineer, Parks Department
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	





Action Worksheet			
Project Name:	Repetitive Loss Properties		
Project Number:	2021-Hunterdon County-005		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
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 County has 184 repetitive loss (RL) properties and 44 severe repetitive loss (SRL) properties.		
Action or Project Intended for Implementation			
Description of the Solution:	The County will support municipalities as they provide information on mitigation alternatives to flood prone property owners. After preferred mitigation measures are identified, the County will support municipalities as they collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
Useful Life:	Acquisition: Lifetime Elevation: 30 years (residential)	Goals Met:	2
Estimated Cost:	\$3Million	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:	HC OEM	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:			



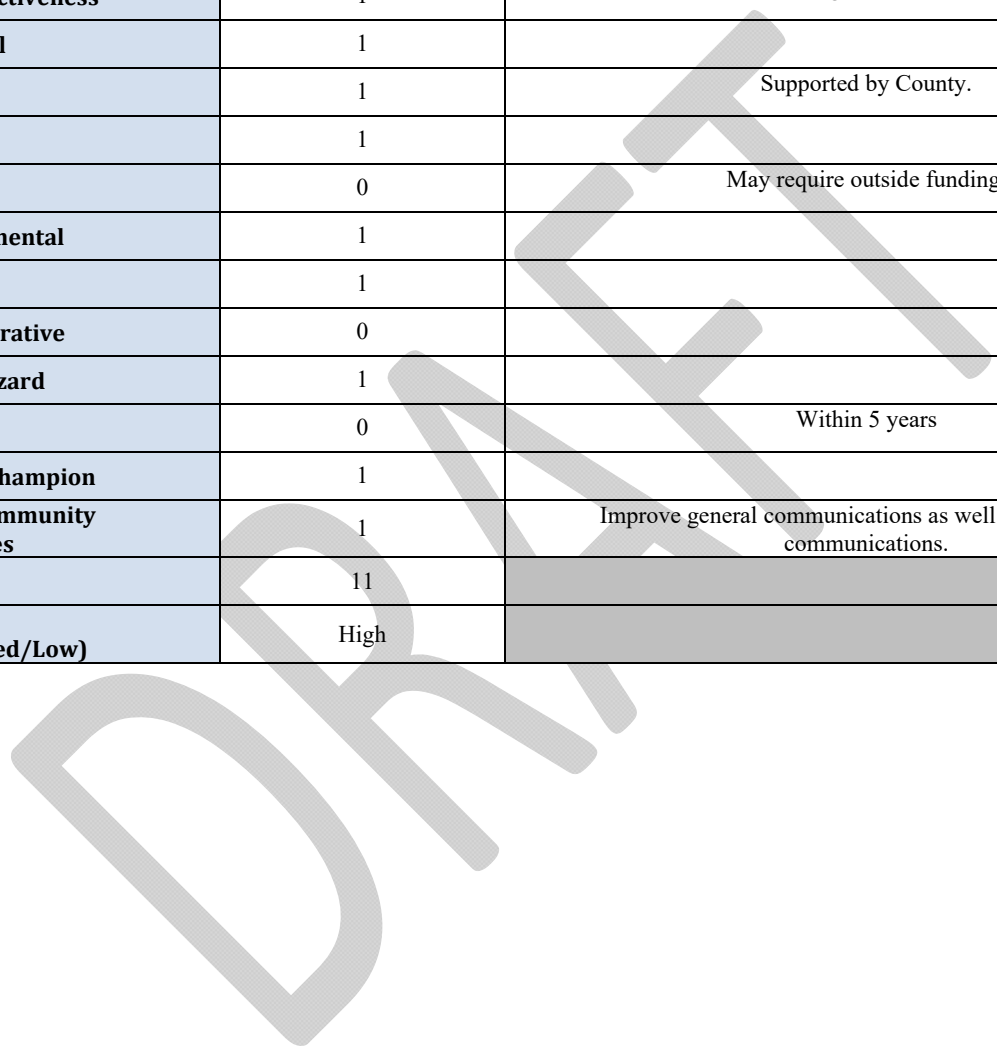
Action Worksheet		
Project Name:	Repetitive Loss Properties	
Project Number:	2021-Hunterdon County-005	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Families moved out of high-risk flood areas.
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The County 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 County.
Administrative	0	
Multi-Hazard	1	Flood, Severe Weather
Timeline	0	
Agency Champion	1	HC OEM
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Radio Towers		
Project Number:	2021-Hunterdon County-007		
Risk / Vulnerability			
Hazard(s) of Concern:	All Hazards		
Description of the Problem:	Emergency communications require expansion of coverage and backup power.		
Action or Project Intended for Implementation			
Description of the Solution:	The County will work to improve existing communications in the County by adding radio tower sites to increase coverage and installing backup generators at existing tower facilities.		
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 and expands emergency communications
Useful Life:	20 years	Goals Met:	1, 2, 5, 6
Estimated Cost:	Medium/High	Mitigation Action Type:	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, BRIC, NJOEM, County budget
Responsible Organization:	HC OEM	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 for backup power of existing towers	\$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed. No expansion of coverage.
	Portable solutions for communication	High	Requires deployment.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Radio Towers	
Project Number:	2021-Hunterdon County-007	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Increase responder response time and efficiency.
Property Protection	1	Increase responder response time and efficiency.
Cost-Effectiveness	1	Best long-term solution.
Technical	1	
Political	1	Supported by County.
Legal	1	
Fiscal	0	May require outside funding.
Environmental	1	
Social	1	
Administrative	0	
Multi-Hazard	1	
Timeline	0	Within 5 years
Agency Champion	1	
Other Community Objectives	1	Improve general communications as well as emergency communications.
Total	11	
Priority (High/Med/Low)	High	





Action Worksheet			
Project Name:	Hunterdon County Emergency Services Training Center		
Project Number:	2021-Hunterdon County-008		
Risk / Vulnerability			
Hazard(s) of Concern:	Wildfire		
Description of the Problem:	The Hunterdon County Emergency Services Training Center requires upgrades to increase the ability of staff to be trained.		
Action or Project Intended for Implementation			
Description of the Solution:	The County will complete construction of the live fire training building and construct a storage building and purchase training props for fire exercises.		
Is this project related to a Critical Facility or Lifeline?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Level of Protection:		Estimated Benefits (losses avoided):	Increased capability to train staff to address wildfire event impacts
Useful Life:	25 years	Goals Met:	3
Estimated Cost:	\$7-8M	Mitigation Action Type:	Structure and Infrastructure Project, Education and Awareness Programs
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2 years
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, Emergency Management Grant Program, Assistance to Firefighters Grant Program, County budget
Responsible Organization:	County Architect, Board of Chosen Commissioners, HC OEM	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	Current problem continues
	Complete live fire training building but not storage building	High	Less capabilities
	Work with neighboring County to use their facilities	Medium	Unlikely to have capacity to host Hunterdon County's needs
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Hunterdon County Emergency Services Training Center	
Project Number:	2021-Hunterdon County-008	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Ensure quality of emergency responders.
Property Protection	1	Ensure quality of emergency responders.
Cost-Effectiveness	0	
Technical	1	
Political	1	Supported by County.
Legal	1	The County has the legal capability to complete the project
Fiscal	0	Requires outside funding.
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Wildfire
Timeline	1	Short
Agency Champion	1	
Other Community Objectives	1	
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Countywide Emergency Transportation		
Project Number:	2021-Hunterdon County-016		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	Additional emergency response vehicle capabilities are needed for hazard response. There is a lack of transportation options for residents with access and functional needs (including disabled and aging adult populations). Evacuation may be due to natural disaster or transport for emergency public health medical counter-measure (i.e., Point of Distribution).		
Action or Project Intended for Implementation			
Description of the Solution:	The project is to pursue a contract with an AFN partner-agency to utilize vehicles to transport individuals during an emergency. Trained volunteers could be utilized to operate the vehicles. This action may be more cost-effective and provide services to more residents rather than purchasing one vehicle.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	Transportation options established	Estimated Benefits (losses avoided):	Avoid over-taxing the existing Link transportation system, and provision of needed services to at-risk population.
Useful Life:	15 years	Goals Met:	1, 5
Estimated Cost:	Low	Mitigation Action Type:	Local Plans and Regulations
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	Within 2 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	FEMA HMA; NJOEM; County budget
Responsible Organization:	HC OEM with support from Division of Health	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation, Emergency planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Purchase ADA-compliant vehicle/operate with CERT or MRC	Medium	Costly
	Pursue a contract with AFN partner agency to utilize vehicles during emergency	High	Costly
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Countywide Emergency Transportation	
Project Number:	2021-Hunterdon County-016	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Without transportation, some segments of the population cannot evacuate or acquire needed services
Property Protection	0	
Cost-Effectiveness	1	Contract option is more cost effective than purchasing vehicles.
Technical	1	
Political	0	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	Would benefit persons with access and functional needs and other vulnerable populations.
Administrative	0	
Multi-Hazard	1	Any hazard requiring evacuation.
Timeline	1	
Agency Champion	1	Division of Health, Health Officer
Other Community Objectives	1	Benefits vulnerability populations/whole community approach
Total	8	
Priority (High/Med/Low)	Medium	