

2. COUNTY OF SUSSEX

This jurisdictional annex to the Sussex County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the County of Sussex with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Sussex, describes who participated in the planning process, assesses Sussex's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

2.1 HAZARD MITIGATION PLANNING TEAM

The County of Sussex identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many County departments. The Deputy Emergency Management Coordinators represented the community on the Sussex County HMP Planning Partnership, and Steering Committee, and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 2-1 summarizes County officials who participated in the development of the annex and in what capacity. Additional documentation of the County's planning activities through Planning Partnership meetings is included in Volume I.

Table 2-1. Hazard Mitigation Planning Team

Alternate Point of Contact

Filliary Folia of Contact	Alternate Form of Contact				
Name/Title: Eric Muller, Deputy Coordinator Address: 135 Morris Turnpike, Newton, New Jersey 07860 Phone Number: (973) 579-0380 x2536 Email: emuller@sussexcountysheriff.com	Name/Title: Steven Sugar, Deputy Coordinator Address: 135 Morris Turnpike, Newton, New Jersey 07860 Phone Number: (973) 579-0380 Email: ssugar@sussexcountysheriff.com				
National Flood Insurance Program Floodplain Administ	rator				
Floodplain Administration is conducted at the municipal level	el.				
Additional Contributors					
Name/Title: Ashley Havens, Division of Public Works; Office Method of Participation: Provided key information for the co					
Name/Title: David Kunz, GIS Manager Method of Participation: Provided key information for the co	mpletion of this annex.				
Name/Title: Scott House, Director of Public Works Method of Participation: Provided key information for the co	mpletion of this annex.				
Name/Title: Bill Koppenaal, Division of Engineering Administ Method of Participation: Provided key information for the co					
Name/Title: Tom Drabic, Planning and Economic Developm Method of Participation: Provided key information for the co					
Name/Title: James Aumick, Deputy Coordinator Method of Participation: Provided key information for the completion of this annex.					
Name/Title: Michael Strada, Sheriff Method of Participation: Provided key information for the co	mpletion of this annex.				



Primary Point of Contact



Primary Point of Contact

Alternate Point of Contact

Name/Title: Nickolas Kapetanakis, Community and Youth Services Director Method of Participation: Provided key information for the completion of this annex.

Name/Title: Ron Tappan, County Administrator

Method of Participation: Provided key information for the completion of this annex.

Name/Title: Autumn Sylvester, Planning and Economic Development

Method of Participation: Provided key information for the completion of this annex. Reviewed previous actions.

2.2 COMMUNITY PROFILE

Sussex County is the northern-most county in the State of New Jersey. It is bordered to the north by New York State, to the south by Warren and Morris Counties, to the east by Passaic County and to the west by the Delaware River and the Commonwealth of Pennsylvania. The County is made up of 24 jurisdictions that span approximately 536 square miles. There is a total of 1,417 miles of roads, 24 municipalities, and 536 square miles of land (NJDOT 2022). Historically, Sussex County has been a scenic, rural county with small municipalities, plenty of open space, and agriculture. According to the U.S. Census, the 2020 population for Sussex was 144,221, a 3.3-percent decrease from the 2010 Census.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2021 American Community Survey 5-Year Population Estimates indicates that 4.5-percent of the population is 5 years of age or younger, 17.6-percent is 65 years of age or older, 1.3-percent is non-English speaking, 5.1-percent is below the poverty threshold, and 10.9-percent is considered disabled.

The Steering Committee also identified households that are above the Federal Poverty Level but earn less than the basic cost of living as socially vulnerable. For the County of Sussex, 25-percent of households earn less than the basic cost of living and are considered socially vulnerable.

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

2.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Sussex performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs





Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Sussex to identify opportunities for integrating mitigation concepts into ongoing County procedures.

2.3.1 Planning and Regulatory Capability and Integration

Table 2-2 summarizes the planning and regulatory tools that are available to Sussex.

Table 2-2. Planning and Regulatory Capability and Integration

Table 2-2. Planning and Regulatory Capability and Integration				
	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
CODES, ORDINANCES, & REGU	LATIONS			
All codes, ord	inances, and	regulations are administered at t	the municipal lev	el.
PLANNING DOCUMENTS				
General/Comprehensive Plan	Yes	Sussex County Strategic Growth Plan, 2014	County	Division of Planning
How has or will this be integrated with the HMP and how does this reduce risk? The Strategic Growth Plan recommends strategies to reduce or reverse the loss of population and economic base that the County has been experiencing in recent years. In order for the Strategic Growth Plan to lead to improved economic stability, the information and recommendations found in this Plan should be considered by both private and public county stakeholders, in a partnership with the business community and non-profit organizations. The cooperation of state and regional agencies is also essential. The recommendations in this Update are based on six focus areas and informed by six Topic Reports that were selected by Sussex County. The Plan of Action lists recommendations for				

tourism, transportation, economic development, housing, reducing the regulatory burden, and agricultural development.					
Capital Improvement Plan	Yes	Annual Capital Project Requests	County	All Departments	

How has or will this be integrated with the HMP and how does this reduce risk?

County entities will submit desired capital projects to County Finance with project titles, descriptions, and anticipated costs. The submitted projects may include those with relevance to hazard mitigation, including stormwater management or making facilities more sustainable.

Disaster Debris Management	Yes	Disaster Debris Management	County	Division of Public
Plan		Plan		Works

How has or will this be integrated with the HMP and how does this reduce risk?

The Disaster Debris Management Plan establishes procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The County's plan identifies two county-owned locations for debris collection.

Floodplain Management or	Yes	Groundwater Manual, 1980	County	Division of Planning
Watershed Plan				

How has or will this be integrated with the HMP and how does this reduce risk?

The Groundwater Manual places a high priority on the protection and management of groundwater, especially existing and potential high yielding aquifers, since over 90% of area residents rely on groundwater for supplies. This manual is intended to:

- Identify critical areas in need of management and protection
- Identify the existing and potential problems which are specific to the planning area
- Offer municipal decision makers and professional staff a regional groundwater management strategy





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency	
 Outline practices which can be incorporated into municipal water plans and ordinances for managing groundwater Design a framework for implementing groundwater management at the municipal level 					
Stormwater Management Plan	No	-	-	-	
How has or will this be integrated with the HMP and how does this reduce risk?					
Stormwater Pollution Prevention Plan	Yes	Highway Agency Stormwater Pollution Prevention Plan, 2024	County	Division of Public Works	
How has or will this be integrated with the HMP and how does this reduce risk?					

The Stormwater Pollution Prevention Plan (SWPPP) is a site-specific, written document developed to identify potential sources of stormwater pollution. The SWPPP outlines the Best Management Practices (BMPs) employed to reduce pollutants in stormwater discharges from various sites. The SWPPP is used to identify all potential pollution sources that could come into contact with stormwater leaving a site, and includes the following elements:

- Descriptions of activities that could cause pollution
- Best Management Practices & control measures for preventing pollution
- Procedures for conducting inspections and monitoring
- Plans for keeping the SWPPP up to date

Open Space Plan	Yes	Open Space and Recreation	County	Division of Planning,
		Plan, 2016		Open Space
				Committee

How has or will this be integrated with the HMP and how does this reduce risk?

Preservation of open space must be planned just as any municipal or county infrastructure. The following goals and policies guide the recommendations of the Open Space and Recreation Plan Update:

- Protect the quantity and quality of water resources
- Secure protection of rivers, lakes, and streams
- Connect land for regional greenways and trail development
- Shape growth and maintain rural character of a community
- Safeguard threatened and endangered species habitat
- Add to publicly owned land
- Preserve scenic vistas
- Offer opportunities for resource-based ("passive") recreation
- Provide opportunities for facility-based ("active") recreation
- Engage in land stewardship activities
- Promote tourism activities
- Enhance land and sites with historic values

Urban Water Management Plan	No	-	-	-	
How has or will this be integrated with the HMP and how does this reduce risk?					
Habitat Conservation Plan Yes Highlands Regional Master State, Federal Highlands Council Plan. 2008					

How has or will this be integrated with the HMP and how does this reduce risk?

The Regional Master Plan evaluates how best to protect the natural and cultural resources of the Highlands Region while striving to accommodate a sustainable economy. The Plan establishes the capacity limitations for future growth within the Highlands Region related to both natural systems, such as protection of our drinking water supplies, and the built environment, such as wastewater and transportation infrastructure. The Plan evaluates the costs, and often unintentional consequences, of local land use planning decisions, assesses the environmental and economic benefits of natural resource and open space protection, particularly as they relate to water supply, and further develops the tools and methods necessary to institute growth control measures, where necessary, to safeguard critical natural resources.





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Economic Development Plan	Yes	Target Business and Industry Analysis, 2007	County	Vision2020 Economic Strategy Committee
Enhance intergovernmental p	ed objectives to al base that wing the County ese objectives sectors with the blanning and c	hat will lead to the creation of a s Il provide good, family sustaining 's quality of life and natural reso	g jobs for County urces, and broad nd public benefit red growth	residents, increase the en the County's potential
Shoreline Management Plan	No	-	-	-
How has or will this be integrated	with the HMP	and how does this reduce risk?		
Community Wildfire Protection Plan	No	-	-	-
How has or will this be integrated	with the HMP	and how does this reduce risk?		
Community Forest Management Plan	Yes	Community Forest Management Plan, 2003	County	Shade Tree Commission
How has or will this be integrated The objectives in this five-year pla will build on the successes of this and timeline for completion outline time-to-time to ensure there is no	n address stre plan and follow d in this plan a negative impa	eet trees, park trees, and trees on which we way on goals not attained during are dependent on the availability oct on the day-to-day operations of the day-to-day operations.	g this planning pe of funding and wo of the County.	eriod. The objectives will be altered from
Transportation Plan	Yes	Sussex County Ten-Year Mobility Study, 2006	County	Division of Planning
How has or will this be integrated of the goal of the study is to develop identifies challenges and issues the faced during the implementation prom the overall process; and presassociated partners to address cu	strategies to at have both r eriod for the p ents the recor	address transportation needs in resulted from the study process a lan; presents the study steps an nmended steps that should be to	and represent cha d the key findings aken by Sussex (allenges that will be s that have resulted County and its
Agriculture Plan	Yes	Comprehensive Farmland Preservation Plan, 2008	County	Agriculture Development Board
How has or will this be integrated Since the program's inception in 1 of farmland with another 2,894 acr 12,362 acres of farmland in Sussefarmland. In cooperation with local number of initiatives that help to p	983, the Suss res pending in x County. Sus I schools, orga	ex County Agriculture Developm 2007. At the end of 2007, the B sex County realizes the importa unizations, and research institution	oard will have pre ince of preserving ons, the County h	eserved a total of g its farmers as well its
	No	-	-	-
Climate Action/ Resilience/Sustainability Plan				
	with the HMP	and how does this reduce risk?		
Resilience/Sustainability Plan	with the HMP	Sussex County Strategic Growth Plan – Tourism Element, 2014	County	Division of Planning





Jurisdiction	Citation and Date (code	Authority (local,	
has this?	chapter or name of plan, date	county, state,	Responsible Person,
(Yes/No)	of enactment or plan adoption)	federal)	Department or Agency

Sussex County has the potential to leverage its natural assets to increase tourism and to have a positive impact on the economy. State, county, municipal, and private businesses offer a variety of different types of tourism activities including ecotourism/outdoor recreation, agritourism, arts and culture and other activities. This Strategic Growth Plan recommends conducting a limited study to identify how the County could take a more active role in promoting tourism and helping grow and expand the industry.

Business/ Downtown Development Plan	No	-	-	-	
How has or will this be integrated with the HMP and how does this reduce risk?					
Other: Complete Streets Study	Yes	Sussex County Complete Streets Policy and Implementation Plan, 2014	County, State	Division of Planning, New Jersey Transportation Planning Authority	

How has or will this be integrated with the HMP and how does this reduce risk?

The purpose of the Sussex County Complete Streets Policy and Implementation Plan is to better accommodate the travel needs and desires of motorists, pedestrians, bicyclists, transit riders, seniors, children, and individuals with disabilities. The Plan recommends consideration of context-sensitive roadway design improvements that provide safe access for all users by designing and operating a comprehensive, integrated, and connected multimodal network (streets, sidewalks, and trails) of transportation options within the County. In addition, the Plan includes specific Complete Streets recommendations for targeted Pilot Locations.

Other: Natural Resources Inventory	Yes	Natural Resources Inventory, 2009	County	Division of Planning	
How has or will this be integrated with the HMP and how does this reduce risk? The Natural Resources Inventory provides a stand-alone discussion of natural resource issues that affect development, conservation, and the economic vitality of Sussex County.					
Other: Wastewater Management Plan	Yes	Sussex County Wastewater Management Plan, 2017	County	Water Quality Advisory Committee	

How has or will this be integrated with the HMP and how does this reduce risk?

This planning document provides a comprehensive plan for wastewater management for the 24 municipalities served by the County. Wastewater Management Planning is part of the continuing planning process required by the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.) and Section 208 of the federal Clean Water Act. The intent of the continuing planning process is to align federal, State, regional and local land use planning to ensure that these land use plans do not conflict with each other.

Other: Solid Waste	Yes	Solid Waste Management	County	Division of Planning
Management Plan		Plan, 2013		

How has or will this be integrated with the HMP and how does this reduce risk?

The plan provides an emphasis on public and private sector generators of solid waste to be active in source separation of marketable waste materials and reusable waste materials for return to the economic mainstream. The County is desirous of maximizing the diversion of the materials out of the solid waste stream into a recycling program. The purposes of this Solid Waste Management Plan are, on a County-wide basis, to standardize and to:

- Codify existing County policy and procedures to enable the County to efficiently enforce and effectively administer the Plan as it exists and as it may be amended from time to time.
- Establish minimum standards of performance for residential and non-residential generators of solid waste and recyclable materials.
- Aid in the conservation and recovery of valuable resources.
- Establish standardized responsibilities for residential generators of solid waste throughout the County.
- Establish standardized responsibilities for non-residential generators of solid waste throughout the County.
- Establish standardized performance responsibilities for all County Municipal Recycling Coordinators.
- Establish standardized performance responsibilities for the County Recycling Coordinator.
- Provide mechanisms for the enforcement of the provisions of this Plan and provide for penalties for those who are found to be non-compliant with any provision of the Plan, and to fix fees for compliance monitoring.





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency				
Remove a maximum amount or	of recyclable	material from the County solid w	aste stream.					
RESPONSE/RECOVERY PLANNIN	NG							
Emergency Operations Plan	Yes	Sussex County Emergency Operations Plan, 2023	County	Emergency Management				
How has or will this be integrated with the HMP and how does this reduce risk? The Emergency Operations Plan defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions the exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.								
Continuity of Operations Plan	Yes	Continuity of Operations Plan, 2020	County	Emergency Management				
How has or will this be integrated wi The Continuity of Operations Plan (an agency or organization are contin hazards approach, including natural	COOP) is a pinued in the e	policy and guidance document the event of an emergency. The CO						
Substantial Damage Response Plan	No	-	-	-				
How has or will this be integrated wi	ith the HMP	and how does this reduce risk?		I				
Threat and Hazard Identification and Risk Assessment	Yes	Sussex County THIRA	County, State	Emergency Management, NJ OHS&P				
How has or will this be integrated with the HMP and how does this reduce risk? The Threat and Hazard Identification and Risk Assessment (THIRA) is a three-step risk assessment process that helps the County understand its risks to natural, technological, and human-caused hazards and what must be done to address those risks. The County works with the New Jersey Office of Homeland Security (NJ OHS&P) to complete its THIRA.								
Post-Disaster Recovery Plan	No	-	-	-				
How has or will this be integrated wi	ith the HMP	and how does this reduce risk?		ı				
Duddie Heelth Dien	Yes	Sussex County Community Health Improvement Plan,	County	North Jersey Health				
Public Health Plan		2022		Collaborative				
How has or will this be integrated wi The Community Health Improvemer community health in Sussex County disease, mental health and substant for intervention. This document outli partners' activities that improve thes	nt Plan (CHIII) I. Using data Ice abuse, he Iines the prior	2022 and how does this reduce risk? P) is designed to set priorities an from the 2021 Community Heal ealthy aging, and maternal child rity areas for public health interve	th Needs Assess health were iden:	ources to improve ments, chronic tified as priority areas				

Traffic Diversion Plans (TDP) are sets of documents that detail the processes to be followed to divert traffic from specific areas of the County. The plans may vary on type of diversion technique and the purpose, factors used to decide diversion locations, and specific regulations or policies to the area.





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	• • • • • • • • • • • • • • • • • • • •	Responsible Person, Department or Agency
Other: Communications Plan	Yes	Communications Plan	County, Local	Emergency Management

How has or will this be integrated with the HMP and how does this reduce risk?

The Communications Plan is a strategic, step-by-step process that specifies when, how, and with whom to communicate with when an emergency occurs. This plan covers different communication channels and who is in charge of sending messages. The plan is broad enough to apply to most emergency situations but specific enough for everyone to follow. The plan includes items such as contact information for employees, stakeholders, and partnering agencies; notification methods; media contacts; and message prompts.

2.3.2 Development and Permitting Capability

Table 2-3 summarizes the capabilities of Sussex to oversee and track development.

Table 2-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? If you issue development permits, what department is responsible? If you do not issue development permits, what is your process for tracking new development?	No	Development permits are issued at the local municipal level.
Are permits tracked by hazard area? (For example, floodplain development permits.)	N/A	Development permits are issued at the local municipal level.
Do you have a buildable land inventory? If you have a buildable land inventory, please describe	Yes	There is a buildable land inventory however, it is in need of update; the inventory was last updated over 10 years ago.
Describe the level of buildout in your jurisdiction.	N/A	The County is fairly built out. The County is located in the Highlands area of New Jersey – consisting of approximately 129,749 acres of land; 70,769 acres in the Preservation Area and 58,980 acres in the Planning Area of the Highlands Region. For more information on buildout, please refer to the jurisdictional annexes in Chapter 3 through Chapter 26.

2.3.3 Administrative and Technical Capability

Table 2-4 summarizes potential staff and personnel resources available to Sussex and their current responsibilities that contribute to hazard mitigation.

Table 2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		





Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Planning Board	Yes	The Sussex County Planning Board (SCPB) is responsible for review or approval of site plan and subdivision applications and implementing the Sussex County Land Development Standards. The Development Review Committee of the SCPB is appointed to meet every two weeks for this purpose. The Sussex County Planning Board is also responsible for the adoption of a County Master Plan. Board membership is composed of nine members: six citizen members (with two alternates) appointed by the Board of County Commissioners, the Director, and another Commissioner (with one Commissioner alternate), and the County Engineer (with an alternate).
Zoning Board of Adjustment	No	-
Planning Department	Yes	The Division of Planning and Economic Development is responsible for providing staff and technical assistance to the County Planning Board, Agricultural Development Board, Solid Waste Advisory Committee, 208 Water Quality Policy Advisory Committee, Strategic Growth Advisory Committee and Board of County Commissioners on all matters related to land use, development, and conservation.
Mitigation Planning Committee	Yes	Sussex County Pre-Disaster Mitigation Steering Committee (alternately, Working Group)
Environmental Board/Commission	Yes	Water Quality Policy Advisory Committee, Solid Waste Advisory Committee, Department of Environmental and Health Services
Open Space Board/Committee	Yes	The Sussex County Open Space Committee consists of seven voting members who are appointed by the County Commissioners. The members are drawn from the following constituencies: Sussex County Planning Board, the business, eco-tourism, environmental, leisure, municipal and/or recreational communities of the County. The Committee oversees the use of Open Space Trust Fund dollars to acquire lands and wetlands for the protection of environmentally sensitive areas; for the preservation of scenic, cultural or historically valuable areas; and for public outdoor recreation areas.
Economic Development Commission/Committee	Yes	Sussex County Economic Development Partnership (SCEDP) creates sustainable economic opportunities and prosperity to improve the quality of life in Sussex County.
Public Works/Highway Department	Yes	The Sussex County Division of Public Works is responsible for the proper maintenance, surfacing, resurfacing, drainage and repair of all County roads, bridges, and drains. The Office of Roads maintains all County roads, bridges, and drains and keeps them in a clear and safe condition. The Division is also in charge of removing all snow, ice, leaves, debris, or other matter that may impede or restrict travel within the County.





Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
		The Division investigates complaints involving County roads and bridges and then takes proper action to see that the needed repairs are made with a minimum of delay.
Construction/Building/Code Enforcement Department	No	-
Emergency Management/Public Safety Department	Yes	The Division of Emergency Management is a county-level emergency service required by statute that coordinates all available resources to serve the needs of Sussex County during times of emergency events and disasters. In carrying out its responsibilities, the division oversees the emergency management activities of all county agencies and Sussex County's twenty-four municipalities. Each municipality has an emergency management coordinator with whom this division interacts and the coordinators, in turn, interact at the local level with police, fire, EMS, public
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	works, public health, schools, etc. Sussex County DPW installs snow fencing; annually cleans storm drains and inspects storm drains pre- and post-storm events
Mutual aid agreements	Yes	Intra-County Agreements County Fire Box Alarms Norwest Region (Hunterdon, Somerset, Sussex, Warren) Statewide HazMat County to municipality agreements (MOUs)
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	Yes	There is a Human Resources Manual, however there ae no job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk.
Other: Solid Waste Advisory Council	Yes	The Sussex County Solid Waste Advisory Council (SWAC) is responsible for advising the Sussex County Board of County Commissioners on issues related to solid waste and recycling within Sussex County. The SWAC also reviews any proposed amendments to the County Solid Waste Management Plan. SWAC membership is composed of a representative from each municipality (appointed by the municipality) and seven at-large members (appointed by the Board of County Commissioners). Ex-officio members include representatives from County Planning and Health offices and Sussex County Municipal Utilities Authority.
Other: Water Quality Advisory Committee	Yes	The Sussex County Water Quality Management Plan Policy Advisory Committee (PAC) is an advisory committee to the Sussex County Board of County Commissioners under the Federal Clean Water Act. The PAC reviews amendments to the Sussex County Wastewater Management Plan that involve sewer service areas and wastewater facilities. Its membership consists of a representative from each municipality, and up to seven at-large members, appointed by the Sussex County Board of County Commissioners.
TECHNICAL/STAFFING CAPABILITY		





Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Planners or engineers with knowledge of land development and land management practices	Yes	Planning Division, Engineering
Engineers or professionals trained in building or infrastructure construction practices	Yes	Division of Public Works—Office of Roads, Engineering
Planners or engineers with an understanding of natural hazards	Yes	Department of Engineering and Planning
Staff with expertise or training in benefit/cost analysis	Yes	Sussex County Department of Finance
Professionals trained in conducting damage assessments	No	The County does not have individuals trained in how to conduct damage assessment; however, there are individuals in Emergency Management who are able to collect and process the information collected from a damage assessment.
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Office of GIS Management
Staff that work with socially vulnerable populations or underserved communities	Yes	Sussex County and partnering agencies offer assistance to socially vulnerable populations and underserved communities. For more information, please go to (https://www.sussex.nj.us/cn/webpage.cfm?tpid=16564)
Environmental scientists familiar with natural hazards	No	Use outside consultant where necessary
Surveyors	Yes	Department of Engineering and Planning – Division of Engineering
Emergency manager	Yes	Sherriff's Office—Office of Emergency Management
Grant writers	Yes	Planning Division
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

2.3.4 Fiscal Capability

Table 2-5 summarizes financial resources available to Sussex.

Table 2-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	No
Impact fees for homebuyers or developers of new development/homes	No





Financial Resources	Accessible or Eligible to Use? (Yes/No)
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

2.3.5 Education and Outreach Capability

Table 2-6 summarizes the education and outreach resources available to Sussex.

Table 2-6. Education and Outreach Capabilities

		•
Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	County Administrator is PIO. OEM has an incident management team and there is a PIO for the Sheriff's Office
Personnel skilled or trained in website development	Yes	outside web master can be utilized for major changes as well.
Hazard mitigation information available on your website	Yes	County of Sussex webpage posts Pre-Disaster Mitigation Information as well as the current and prior HMP and contact information
Social media for hazard mitigation education and outreach	Yes	The County and many of its departments, offices, and divisions maintain Facebook pages.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	The County currently utilizes Swift911 but will be switching to Regroup.
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	Sussex County and partnering agencies offer assistance to socially vulnerable populations and underserved communities. For more information, please go to (https://www.sussex.nj.us/cn/webpage.cfm?tpid=16564)
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	CERT teams discuss preparedness

2.3.6 Community Classifications

Table 2-7 summarizes classifications for community programs available to Sussex.





Table 2-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

- = Unavailable

2.3.7 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 2-8 summarizes the adaptive capacity for each identified hazard of concern and the County's capability to address related actions using the following classifications:

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

Table 2-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak		
Dam Failure	Moderate		
Disease Outbreak	Moderate		
Drought	Moderate		
Earthquake	Moderate		
Flood	Moderate		
Geological Hazards	Moderate		
Hazardous Materials	Moderate		
Hurricane	Moderate		
Infestation	Moderate		
Nor'easter	Moderate		
Severe Weather	Moderate		
Severe Winter Weather	Moderate		
Wildfire	Moderate		



2.4 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 2-1 is responsible for maintaining this information.

2.4.1 NFIP Statistics

Table 2-9 summarizes the NFIP policy and claim statistics for Sussex.

Table 2-9. Sussex NFIP Summary of Policy and Claim Statistics

# Policies	168
# Claims (Losses)	174
Total Loss Payments	\$1,722,232.10
# Repetitive Loss Properties (NFIP definition)	15
# Repetitive Loss Properties (FMA definition)	0
# Severe Repetitive Loss Properties	0

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA Region 2 2024

2.4.2 Flood Vulnerability Summary

Table 2-10 provides a summary of the NFIP program in Sussex.

Table 2-10. NFIP Summary

NFIP Topic	Comments
Floodplain Administration is conduc	cted at the municipal level.

2.5 GROWTH/DEVELOPMENT TRENDS

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 2-11 through Table 2-13.





Table 2-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued						
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total			
2019							
Total Permits							
Permits within SFHA							
2020							
Total Permits							
Permits within SFHA							
2021							
Total Permits		Permitting is ca	rried out at the municipal level.				
Permits within SFHA							
2022							
Total Permits							
Permits within SFHA							
2023							
Total Permits							
Permits within SFHA							

SFHA = Special Flood Hazard Area (1% flood event)

Table 2-12. Recent Major Development and Infrastructure from 2019 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development	
The County indicated there has not been any recent major development or infrastructure from 2019 to present.						

Table 2-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development		
The County indicated there is no known or anticipated major development or infrastructure in the next five (5) years.							

2.6 JURISDICTIONAL RISK ASSESSMENT

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Sussex's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.





2.6.1 Hazard Area

The hazard profiles in Volume 1, Chapter 6 through Chapter 18 provide detailed information regarding each plan participant's vulnerability to the identified hazards. Chapter 4 (Methodology) and Chapter 19 (Hazard Ranking) provide detailed summaries for the County of Sussex's risk assessment results and data used to determine the hazard ranking discussed later in this section.

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

2.6.2 Hazard Event History

The history of natural and non-natural hazard events in Sussex is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 2-14 provides details on loss and damage in Sussex during hazard events since the last hazard mitigation plan update.

Table 2-14. Hazard Event History in Sussex

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Sussex
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488- NJ)	Yes	Sussex County accounted for 37,642 positive cases of COVID-19 in the State of New Jersey, and 425 of the reported deaths. A total of 277,542 vaccinations were delivered in the County to both residents and non-residents.	The County implemented masking and social distancing mandates. Non-emergent personnel were permitted to work from home.
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	Tropical Storm Isaias brought high winds and heavy rain to Sussex County; there were numerous reports of downed trees and power lines. Observations from surrounding areas suggest sustained tropical storm force winds likely occurred.	Downed trees and power lines were in abundance throughout the County. Public Works officials assisted in the clean-up on County maintained roadways and properties.
January 31 – February 2, 2021	Severe Winter Storm (DR-4597-NJ)	Yes	Heavy precipitation developed producing areas of extreme snowfall rates of 2 to 4 inches per hour in northern New Jersey. Numerous reports of 24 to 32 inches were received from across the County.	Heavy snowfall and high snow accumulations impacted the entire County. No damages or losses occurred to County property. Public Works officials assisted in the clean-up on County maintained roadways and properties.





Dates of	Event Type (Disaster	County	Summary of Event	Summary of Damage and
Event	Declaration)	Designated?		Losses in Sussex
September 1- 3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR- 4614-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall and flash floods. Widespread flash flooding occurred in Sussex County with numerous road closures.	

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)
N/A = Not applicable

2.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Sussex.

Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Sussex reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the County indicated the hazard rankings assessed were accurate.

Table 2-15 shows Sussex's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 2-15. Hazard Ranking

Hazard	Rank		
Dam Failure	Medium		
Disease Outbreak	Low		
Drought	Low		
Earthquake	Low		
Flood	Medium		
Geological Hazards	Low		
Hazardous Materials	Medium		
Hurricane	Medium		
Infestation	Low		





Hazard	Rank		
Nor'easter	High		
Severe Weather	High		
Severe Winter Weather	High		
Wildfire	Medium		

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

Critical Facilities

Table 2-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 2-16. Critical Facilities Flood Vulnerability

		Vulne	rability		
		1%	0.2%		
		Annual	Annual		Already Protected to
		Chance	Chance	Addressed by	0.2% Flood Level
Name	Туре	Event	Event	Proposed Action	(describe protections)
Sussex County does not have any facilities located within the 1 percent or 0.2 percent annual chance floodplains.					

Source: NJGIN 2023; Sussex County 2021, 2023; FEMA 2014

In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in Sussex County. Mitigation actions addressing the high hazard dams are listed in the appropriate jurisdictional annex:

- Clove River Dam (Sussex Borough)
- Reservoir Lake Dam (Byram Township)
- West Shore Trail Dam (Sparta Township)
- Diversion Dam (Hardyston Township)
- Cranberry Lake Dam (Byram Township)
- Lake Panorama Dike (Vernon Township)
- Great Gorge Dam (Vernon Township)
- Heaters Pond Dam (Ogdensburg Borough)
- Willow Crest Dam (Stillwater Township)
- Lake Rutherford Dam (Wantage Township)
- Crandon Lake Dam (Hampton Township)
- Lake Tranquility Dam (*Green Township*)
- East Cove Dam (Vernon Township)
- Wawayanda Lake Dam (Vernon Township)
- Mountain Creek Lake Dam (Vernon Township)





- Morris Lake Dam (Sparta Township)
- Upper West Highland Lake Dam (Vernon Township)
- Lake Mohawk Dam (Sparta Township)
- Glen Lake Dam (Sparta Township)
- Highland Lakes Dam (Vernon Township)
- Lake Gerard Dam (Franklin Borough)
- Lake Gerard Dam A (Franklin Borough)
- Lake Gerard Dike C (Franklin Borough)
- Upper Highland Lake Dam (Vernon Township)
- Hidden Valley Lake Dam (Vernon Township)
- Lake Gerard Dike B (Franklin Borough)
- Upper Mohawk Lake Dam (Sparta Township)
- Kemah Lake Dam (*Hampton Township*)
- Forest Lake Dam (*Andover Township*)
- Frenches Pond Dam (Byram Township)
- Paulins Kill Site 4 Dam (Town of Newton)
- Lake Tamarack Dam (Hardyston Township)
- Robert Rooke Dam (Sandyston Township)
- Steenykill Lake Dam (Montague Township)
- Canistear Reservoir #2 Dam (Vernon Township)
- Canistear Reservoir #1 Dam (Hardyston Township)
- Stump Pond Dam (Vernon Township)
- Pleasant Valley Lake Dam (Vernon Township)
- Lake Lenape Dam (Andover Township)
- Paulinskill Water Shed #2 Dam (Sussex Borough)

2.6.4 Identified Issues

After review of Sussex's hazard event history, hazard rankings, hazard location, and current capabilities, Sussex identified the following vulnerabilities within the community:

- Jurisdictions in the County participate in the National Floodplain Insurance Program, which is implemented by Floodplain Administrators in each jurisdiction. Floodplain Administrators in the County's jurisdictions have changed in recent years. There is not a list being maintained regularly to update the contact information for each jurisdictional Floodplain Administrator. New Jersey Department of Environmental Protection is not able to update their Floodplain Administrator list without information from County and Local level government.
- Jurisdictional Floodplain Administrators may change as often as annually. Floodplain Administrators may
 be unaware of the responsibilities associated within administering the National Flood Insurance Program
 (NFIP) and its requirements within their jurisdiction. The proper administration of the NFIP assists property





owners with receiving flood insurance, which allows the property owners to recover faster when flood waters recede and assists in the overall reduction of flood risk by implementing floodplain management regulations.

- Sussex County has identified the Fredon Civic Center, located at 436 State Route 94 S, as an eligible sheltering location; however, the site does not have the power to produce the required wattage needed to support sheltering activities. Based on the population of the County, additional sheltering locations are needed to meet the County's sheltering needs, making it crucial to provide additional electrical power to the Fredon Civic Center. Sheltering facilities are critical to support the constituents in the County when an emergency is occurring, such as a large-scale power outage, strong hurricane, or flooding conditions.
- The Department of Public Works (DPW) is responsible for much work in County areas to conduct tree
 trimming and emergency tree removal. Falling trees, tree limbs, and tree branches can impact utility lines
 during severe weather, hurricanes, nor'easters, and severe winter weather, causing power outages in
 portions, or throughout, the County. The DPW lacks a 70-foot tree truck and a stump grinder which would
 assist in the removal of trees identified to be a potential hazard.
- The Department of Public Works (DPW) building does not have a roof that meets current standards for snow load. Failure of the roof could lead to a reduction in critical services by DPW before, during, and after hazard events and increase the risk of roof collapse, endangering those inside the building.
- Sussex County is a densely forested County, with over half of its land cover being identified as forested land. Although many forested areas of the County is within State preserved land, the forested locations abut to residential communities. The public may not be aware, or educated, on how to prepare for a wildfire and what is at risk.
- 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 13 NFIP repetitive loss properties,
 1 FMA repetitive loss property, and 1 NFIP severe repetitive loss property, but other properties may be
 impacted by flooding as well.
- The Farmland Preservation Plan was last updated in 2008. A new update is needed which would incorporate more information on hazard mitigation. This plan works to preserve farmland in the County through the identification of various initiatives to promote the economic well-being of local farmers.
- The County's Land Development Standards have not been updated since 2008. The purpose of these standards are is provide rules, regulations, and standards for site plans and subdivisions and procedures for review of site plans and subdivisions within the County's jurisdiction to allow land development that is compatible and harmonious with the existing, planned, and contemplated infrastructure base of the County and to protect the public health, safety, and welfare; communicate the process of development review to applicants and municipalities; promote Villages and Centers with a pedestrian realm as a preferred land development type in order to implement the Sussex County Strategic Growth Plan; and internalize external costs.
- The Ten-Year Mobility Study is due for update. The goal of the study is to develop strategies to address transportation needs in the coming decade. The study identifies challenges and issues that have both resulted from the study process and represent challenges that will be faced during the implementation period for the plan; presents the study steps and the key findings that have resulted from the overall process; and presents the recommended steps that should be taken by Sussex County and its associated partners to address current and emerging transportation needs over the next 10 years.
- The County Wastewater Management Plan is currently in draft form and requires adoption. Adoption of this
 plan continues the County's efforts of maximizing the diversion of the materials out of the solid waste stream
 into a recycling program.





- The Health Department requires increased technological capabilities to track disease outbreak events, notify the public of important updates, share information between departments, and allow for registration for testing, treatment, and vaccination.
- Backup power sources are necessary to maintain critical services for critical facilities. Backup power sources ensure continuity of operations when a power outage occurs from a hazard, such as hurricanes, nor'easters, severe weather, or severe winter weather. Backup power sources also ensure daily operations can occur during all hazard events. The Office of Bridges and Traffic lacks a backup power source.
- County facilities should be protected from hazards to maintain continuity of operations. Numerous facilities
 are aging and were built to standards that are lower than modern building requirements, making these
 facilities vulnerable to the various hazards which impact the County.
- The Frankford Wastewater Treatment facility requires upgrade of the force main to prevent spills of sewage.
 External spills of sewage can negatively impact habitats of nearby species, as well as seepage into the ground, potentially impacting groundwater and nearby waterbodies. Internal spills of sewage can lead to mold growth and unpleasant odors, impacting human health.
- There are 40 high hazard dams in the County within 15 of its jurisdictions, and several more in the surrounding Counties of Passaic, Morris, Warren (New Jersey), Orange (New York), and Pike (Pennsylvania). High hazard dams have the potential to severely impact those within inundation areas. Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event.
- Localities have not included hazard mitigation practices into their planning and zoning initiatives. Integrating
 mitigation into building and zoning protects existing infrastructure and guides the safe development of new
 construction.
- Several dams in Sussex County have received poor or unsatisfactory safety ratings on their most recent inspections. Dams with poor or unsatisfactory safety ratings have deficiencies that could potentially make dam failure more likely to occur or the consequences of dam failure more significant.
- Sussex County does not have digitized dam failure inundation area data for any of the dams in the County.
 Dam failure inundation area data is crucial for effective planning purposes. The inundation data will be able to show the locations most likely to be impacted by a dam failure event. This data can assist first responders and dam owners define safety and response procedures.

2.7 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

2.7.1 Past Mitigation Action Status

Table 2-17 indicates progress on the County's mitigation strategy identified in the 2021 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.



^{*} This issue was identified as a specific area of concern based on resident response to the Sussex County Hazard Mitigation Citizen survey.



2.7.2 Additional Mitigation Efforts

Sussex County did not identify any additional mitigation efforts completed since the last HMP.



Table 2-17. Status of Previous Mitigation Actions

		<u>, </u>	<u></u>	abio 2 11: Otatao on Frontida Militig		
Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021- Sussex County- 001	Sheltering	All Hazards	SCDEM	Problem: Additional sheltering locations are needed to meet the County's sheltering needs. Solution: The County will be working to establish new shelters at the Sussex County Fair Grounds (capacity of 200) and the Fredon Civic Center (capacity of 90). Shelters will be designed to meet FEMA standards and include backup power.	In Progress Viable shelter at Civic Center, but facility would need generator at location. The County Fair Grounds was established as a shelter.	Include in update Revise to Civic Center is eligible to be a sheltering location but would need a stand-by generator with transfer switch and necessary electrical components. Not applicable
2021- Sussex County- 002	Warming and Cooling Centers	Severe Weather, Severe Winter Weather	SCDEM	Problem: Warming centers need to be established in new locations to expand offerings of warming and cooling centers and maintain access for at risk communities. Solution: The County will expand the number of warming and cooling centers to service the County population.	Completed The County expanded availability of warming and cooling centers to include its County libraries.	Discontinue Not applicable Action completed
2021- Sussex County- 003	Increase Vegetation Management Capabilities	Severe Weather, Severe Winter Weather, Hurricane, Nor'easter	DPW	Problem: DPW is responsible for much work in County areas to conduct tree trimming and emergency tree removal. The DPW lacks a 70-foot tree truck and a stump grinder. Solution: The County will purchase a 70-foot tree truck and a stump grinder.	No Progress The purchase of this equipment is no longer a priority for the County for the continuation of its vegetation maintenance program.	Discontinue Not applicable The purchase of this equipment is no longer a priority for the County for the continuation of its vegetation maintenance program.
2021- Sussex County- 004	DPW Snow Load Retrofit	Severe Winter Weather, Nor'easter	Facilities	Problem: The Department of Public Works building does not have a roof that meets current standards for snow load. Failure of the roof could lead to a reduction in critical services by DPW before, during, and after hazard events.	No Progress Due to financial constraints and lack of funding sources, this action has not been completed.	Include in update Not applicable Not applicable





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Solution: The County Facilities Department will retrofit the roof to meet current standards for snow load on the County Department of Public Works building located on Route 206.		
2021- Sussex County- 005	FEMA HMA Informational Workshops	All Hazards	SCDEM, Engineering	Problem: With the advent of new information on how to apply for hazard mitigation funding support and new programs for funding support, additional education is needed for County staff and municipal staff on FEMA HMA grant programs.	Ongoing Capability Information on FEMA HMA grant programs and opportunities is regularly discussed with jurisdictions at quarterly coordinator meetings and during intra-departmental meetings.	Discontinue Not applicable Information on FEMA HMA grant programs and opportunities is regularly discussed with jurisdictions at quarterly coordinator meetings and during intradepartmental meetings.
				Solution: The County will expand offerings and incorporate information on BRIC at an annual workshop related to the FEMA HMA grant programs (HMGP, BRIC, FMA). This may be done at quarterly OEM coordinator meetings and invite other County departments.		
2021- Sussex County- 006	Wildfire Outreach	Wildfire	SCDEM	Problem: Wildfire preparedness by the public is lacking. Solution: Coordinate a yearly program for public information on wildfire with NJ Forest Fire Service (Division A Liaison); and post this information on the County website regarding the wildfire hazard (including current information about fuel loads and conditions that may affect potential for fires).	1. In Progress 2. The Division A liaison with the NJ Forest Fire Service performs training as available with County entities and individuals. The County is currently working with the Division A liaison to provide public information updates via the County website.	Include in update Remove yearly program portion from action and restrict action to website development for public information on the wildfire hazard. Not applicable
2021- Sussex County- 007	Repetitive Loss Mitigation Support	Flood, Severe Weather	SCDEM, local NFIP Floodplain Administrator, supported by homeowners	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 16 repetitive loss properties, but other properties may be impacted by flooding as well.	In Progress The County has been working with local jurisdictions to identify homeowners who would be interested in elevation, flood-proofing, or acquisition or their property. To date, no homeowners have been interested.	Include in update Revise to represent current amount of repetitive loss properties in the County. Not applicable





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Solution: Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect them from future damage; repetitive loss and severe repetitive loss properties should be a priority, when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option. Phase 2: Work with the property owners to implement selected action based on available funding from FEMA and local match availability.		
2021- Sussex County- 008	Update Farmland Preservation Plan	All Hazards	Department of Engineering and Planning	Problem: The Farmland Preservation Plan was last updated in 2008. A new update is needed which would incorporate more information on hazard mitigation. Solution: The County will update the Farmland Preservation Plan and include resiliency planning to address long term risk.	1. In Progress 2. The County is working with the Land Conservancy of NJ to update the Farmland Preservation Plan. Work is ongoing and expected to be ready for Commissioner adoption late 2025. Work on the plan update is funded using County Open Space Trust and a grant from the State Agricultural Development Committee. The project cost is estimated at \$70,000.	Include in update Not applicable Not applicable
2021- Sussex County- 009	Update Land Development Standards	All Hazards	Department of Engineering and Planning, Planning Board	Problem: The County's Land Development Standards have not been updated since 2008. Solution: The County will update the Land Development Standards. The update will include discussion on green technologies and BMPs for stormwater.	1. In Progress 2. The County has not advanced a project to update the 2008 Land Development Standards. The initiative will remain on the Division of Planning task list until such time as staffing resources become available to begin an update of the standards.	Include in update Not applicable Not applicable
2021- Sussex	Master Circulation Plan for	All Hazards	Department of Engineering and Planning	Problem: The Master Circulation Plan for Transportation is due for update.	In Progress The County has not advanced a project to develop a Master circulation	Include in update Not applicable Not applicable





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
County- 010	Transportation Update			Solution: The County will update the Master Circulation Plan for Transportation, using information from the Hazard Mitigation Plan to identify and reduce risk to the transportation system and maintain emergency access.	Plan. The initiative will remain on the Division of Planning task list until such time as staffing resources become available to begin an update of the standards.	
2021- Sussex County- 011	Adopt the Wastewater Management Plan	Severe Weather, Flood, Hurricane, Nor'easter.	Department of Engineering and Planning	Problem: The County Wastewater Management Plan is currently in draft form and requires adoption. Solution: The County's Wastewater Management Plan is currently in draft form. Prior to adoption, the County will use information from the Hazard Mitigation Plan to make updates to reduce risk to the wastewater management system.	In Progress An update to the County Wastewater Management Plan remains in the development stage. Work will be advanced based upon availability of staffing resources and NJDEP regulatory requirements.	Include in update Plan is in development stage, not draft form. Not applicable
2021- Sussex County- 012	Update Stormwater Pollution Prevention Plan	Flood, Severe Weather	Department of Engineering and Planning	Problem: The County's Stormwater Pollution Prevention Plan requires update. Solution: The County will update the Stormwater Pollution Prevention Plan, using information from the Hazard Mitigation Plan to assist in the update regarding storms and stormwater.	Complete The County's Stormwater Pollution Prevention Plan underwent an update and was adopted in 2024.	Discontinue Not applicable The County's Stormwater Pollution Prevention Plan underwent an update and was adopted in 2024.
2021- Sussex County- 013	PPE for Disease Outbreak Events	Disease Outbreak	Department of Health and Human Services	Problem: During the current COVID-19 pandemic, an adequate supply of personal protective equipment (PPE) for County staff was difficult to come by. Without proper PPE, it puts staff and emergency responders at risk to the spread of infectious diseases. Solution: The County will purchase PPE to create a stockpile for municipal staff. This will include gloves, masks, gowns, antibacterial handwash, antiviral cleaning solutions, sanitizers, and misters.	Complete The County has established methods of purchasing PPE, including bolstering its PPE stockpiles.	Discontinue Not applicable The County has established methods of purchasing PPE, including bolstering its PPE stockpiles.





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021- Sussex County- 014	Disinfecting Equipment for County Facilities	Disease Outbreak	Department of Health and Human Services, Facilities	Problem: In order to keep County facilities open and functioning during disease outbreak events, the County will require emerging technologies for the disinfecting of County facilities. Solution: The County Division of Facilities staff will continue to research emerging technologies for the disinfecting of buildings that would allow for continuing operations during disease outbreak events. The Facilities Department will deploy / install technologies that are determined to be cost-effective.	Complete The County has established updated methods for the thorough disinfecting of County facilities.	Discontinue Not applicable The County has established updated methods for the thorough disinfecting of County facilities.
2021- Sussex County- 015	Increased Computer Technology and Software for Health Department	Disease Outbreak	Department of Health and Human Services	Problem: The Health Department requires increased technological capabilities to track disease outbreak events, notify the public of important updates, share information between departments, and allow for registration for testing, treatment, and vaccination. Solution: The County will invest in funds to upgrade the Health Department's computer hardware and software capabilities to better identify, respond to, and treat disease outbreak events.	In Progress The County is currently looking into new technologies to notify the public of important updates, share information between departments, and allow for registration for testing, treatment, and vaccination.	
2021- Sussex County- 016	Office of Bridges and Traffic Backup Power	Severe Weather, Severe Winter Weather, Hurricane, Nor'easter	Facilities	Problem: Backup power sources are necessary to maintain critical services for critical facilities. The Office of Bridges and Traffic lacks a backup power source. Solution: Facilities will research what size generator is needed to power the Office of Bridges and Traffic. The County will then purchase and install the selected generator and necessary electrical components to supply backup power to the Office of Bridges and Traffic.	of funding sources, this action has not been completed.	Include in update Merge with Action as the office is in the same building as public works. Not applicable



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021- Sussex County- 017	County Facilities Hazard Surveying	Earthquake, Severe Weather, Severe Winter Weather	Facilities	Problem: County facilities should be protected from hazards to maintain continuity of operations. Numerous facilities are aging and were built to standards that are lower than modern building requirements. Solution: The County will complete the following surveys of County Facilities: Soil and shake characteristics with potential vulnerabilities to earthquake forces. Structures that may be at risk during an earthquake Wind vulnerabilities (buildings were designed to 70 mph; new updated code is 90 mph) Structural characteristics that make them vulnerable to excessive snow and ice loads The County will then pursue necessary structural improvements that are identified by these surveys.	No Progress Due to financial constraints and lack of funding sources, this action has not been completed.	
2021- Sussex County- 018	Frankford Wastewater Facility Upgrades	Hazardous Materials	Facilities, Sussex County Municipal Utilities Authority	Problem: The Frankford Wastewater Treatment facility requires upgrade of the force main to prevent spills of sewage. Solution: County Facilities will work with the Sussex County Utilities Authority to upgrade the force main at the Wastewater Facility.	No Progress Due to financial constraints and lack of funding sources, this action has not been completed.	



2.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Sussex participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 "Selecting Appropriate Mitigation Measures for Floodprone Structures" (March 2007)
- FEMA "Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards" (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Sussex would like to pursue in the future to reduce the effects of hazards. The actions are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in County priorities.

Table 2-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 2-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 2-18. Analysis of Mitigation Actions by Hazard and Category

		Actions That Address the Hazard, by Action Category									
		FE	MA		CRS						
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES	
Dam Failure	X	Х			X				X	X	
Disease Outbreak	X				Х						
Drought	Х	Х			X					X	
Earthquake	Х	X			X					X	
Flood	Х	Х		Х	Х	Х	Х			Х	
Geological Hazards	Х	Х			Х					X	
Hazardous Materials	Х	Х			X					X	
Hurricane	Х	Х			Х					X	
Infestation	X				Х						
Nor'easter	Х	Х			Х	Х				X	
Severe Weather	X	Х			Х					X	
Severe Winter Weather	Х	Х			Х	Х				Х	
Wildfire	Х	Х		Х	Х		Х			Х	

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 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

Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems.

These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities





Table 2-19. Summary of Prioritization of Actions

							Sco	res for	Evaluat	tion Cri	teria						
Project Number	Project Name	Life Safety	Property Protection	Cost- Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	High / Medium / Low
2025-SussexC-01	Municipal Floodplain Administrator Tracking	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2025-SussexC-02	NFIP Training for County and Municipal Officials	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2025-SussexC-03	Fredon Civic Center Generator	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	Medium
2025-SussexC-04	Public Works Facility Snow Load Retrofit	1	1	1	1	1	0	0	1	1	1	1	1	0	0	11	High
2025-SussexC-05	Wildfire Outreach	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2025-SussexC-06	Repetitive Loss Mitigation Support	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2025-SussexC-07	Update Farmland Preservation Plan	0	1	1	1	1	0	1	0	1	1	0	1	0	1	9	Medium
2025-SussexC-08	Update Land Development Standards	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2025-SussexC-09	Master Circulation Plan for Transportation Update	1	0	1	1	1	1	0	0	1	1	0	1	1	1	10	Medium
2025-SussexC-10	Wastewater Management Plan Update	0	1	1	1	1	1	1	0	1	1	1	1	1	1	12	High
2025-SussexC-11	Increased Computer Technology and Software for Health Department	1	0	1	1	1	1	0	1	1	0	0	1	0	0	8	Medium
2025-SussexC-12	County Facilities Hazard Surveying	0	1	1	1	1	0	0	0	1	1	0	1	1	0	8	Medium





							Sco	res for	Evaluat	tion Cr	teria						
Project Number	Project Name	Life Safety	Property Protection	Cost- Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	High / Medium / Low
2025-SussexC-13	Frankford Wastewater Facility Upgrades	0	1	1	0	1	0	1	1	1	0	0	1	1	0	8	Medium
2025-SussexC-14	High Hazard Potential Dam Rehab	1	1	1	0	1	0	0	1	1	1	1	1	1	1	11	High
2025-SussexC-15	Integration of Mitigation Principles into Planning and Zoning Initiatives	1	1	1	1	1	0	1	1	1	1	1	1	0	1	12	High
2025-SussexC-16	Dam Repairs Across Sussex County	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-SussexC-17	Dam Failure Inundation Mapping	1	1	1	1	1	0	1	1	1	1	0	1	0	1	11	High

Note: Volume I, Section 21 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).



Action 2025-SussexCo-01. Municipal Floodplain Administrator Tracking

Lead Agency:	Sussex County OEM						
Supporting Agencies:	NJDEP, Municipal Floodplain A	dministrators					
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards □Hazardous Materials		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather □ Wildfire				
Description of the Problem:	implemented by Floodplain Adr the County's jurisdictions have regularly to update the contact	ninistrators in each changed in rece information for e ironmental Prote	tional Floodplain Insurance Program, which is ach jurisdiction. Floodplain Administrators in ent years. There is not a list being maintained each jurisdictional Floodplain Administrator. ection is not able to update their Floodplain hty and Local level government.				
Description of the Solution:	The County will create a survey annually to collect the name and contact informatic jurisdiction's Floodplain Administrator. The creation of this list will allow the County updated list of municipal FPA contact information which can then be shared with be municipalities for intra-governmental collaboration for flooding concerns and to NJI any concerns brought to the agency can be sent to the correct municipal contact.						
Estimated Cost:	Low						
Potential Funding Sources:	Annual Budget						
Implementation Timeline:	Within 3 years, then ongoing						
Goals Met:	4, 5						
Benefits:			dictional floodplain administrators and their ect individual is being notified regarding any				
Impact on Socially Vulnerable Populations:			s for socially vulnerable populations who have eve a line of communication to ask questions				
Impact on Future Development:	Officials have the opportunity to flood hazard areas.	influence future	e development and prevent unsafe building in				
Impact on Critical Facilities/Lifelines:	The identified floodplain admini for, and prevent interruptions in		vide direction on ways the prepare for, plan sult of a flood.				
Impact on Capabilities:		contact for flood	County, municipalities, and the State by applications. This will allow any issues and to the correct party.				
Climate Change Considerations:	Climate change is likely to resu contribute to increased flood ris		d more frequent rainfall events that will				
Mitigation Category	□Local Plans and Regulations □Structure and Infrastructure F	` '	□Natural Systems Protection (NSP)⊠Education and Awareness Programs (EAP)				
CRS Category	□ Preventative Measures (PR) □ Property Protection (PP) ☑ Public Information (PI)		□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)				
Priority	⊠High	□Medium	□Low				
Alternatives:	Action		Evaluation				
	No Action	Problem persists					
	Hire outside contractors for administration	Costly, would need to maintain list of who from contractor is Floodplain Administrator as well.					







Action 2025-SussexCo-02. NFIP Training for County and Municipal Officials

Lead Agency:	Sussex County OEM							
Supporting Agencies:	NJDEP, Municipal Floodplain Administrators							
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards □Hazardous Materials		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather □ Wildfire					
Description of the Problem:	Jurisdictional Floodplain Admin Administrators may be unaware National Flood Insurance Progr proper administration of the NF which allows the property owne the overall reduction of flood ris	e of the respons am (NFIP) and IP assists prop rs to recover fa	ibilities associat its requirements erty owners with ster when flood	ted within administering the swithin their jurisdiction. The n receiving flood insurance, waters recede and assists in				
Description of the Solution:	To assist in the education of jur Jersey Department of Environm regulations of the NFIP and res County Office of Emergency Ma	nental Protection ponsibilities of I	n (NJDEP) to an being a Floodpla	nually offer a training on the ain Administrator. The Sussex				
Estimated Cost:	Low							
Potential Funding Sources:	Annual Budget							
Implementation Timeline:	Within 3 years, then ongoing							
Goals Met:	4, 5							
Benefits:	Providing an opportunity for Co educated on floodplain manage plans and procedures in a way	ment practices	and standards	can aid in the development of				
Impact on Socially Vulnerable Populations:	Officials that are up to date on t areas of high flood risk, which is resided. Safer dwellings may be	s where socially	vulneráble pop	ulations have historically				
Impact on Future Development:	Officials that understand best p influence future development a							
Impact on Critical Facilities/Lifelines:	The opportunity will exist for lead attend training and provide dire interruptions in service as a res	ction on ways tl						
Impact on Capabilities:	Officials that attend trainings wi management principles and the							
Climate Change Considerations:	Climate change is likely to resu contribute to increased flood ris		d more frequent	t rainfall events that will				
Mitigation Category	□Local Plans and Regulations □Structure and Infrastructure F	` /	,	ems Protection (NSP) nd Awareness Programs (EAP)				
CRS Category	□Preventative Measures (PR) □Property Protection (PP) ⊠Public Information (PI)			ource Protection (NR) ood Control Projects (SP) Services (ES)				
Priority	⊠High	□Medium		□Low				
Alternatives:	Action			Evaluation				
	No Action		ı	Problem persists				
	Hire outside contractors for administration	floodplain	Costly					
	Establish shared service agr floodplain administration from municipalities		Neighboring municipalities are unlikely to have the staff capacity to take on this role					



2-35



Action 2025-SussexCo-03. Fredon Civic Center Generator

Lead Agency:	Sussex County Engineer						
Supporting Agencies:	Fredon Civic Center Facilities Manager, Sussex County OEM, Public Works						
Hazard(s) of Concern:	 ☑Dam Failure ☐Disease Outbreak ☑Drought ☑Earthquake ☑Flood ☑Geological Hazards ☑Hazardous Materials 	□ Disease Outbreak □ Infest □ Drought □ Nor'e □ Earthquake □ Flood □ Sevel □ Geological Hazards □ Hazardous Materials					
Description of the Problem:	an eligible sheltering location; required wattage needed to su County, additional sheltering le making it crucial to provide ad facilities are critical to support	however, the sit upport sheltering ocations are nee ditional electrica the constituents	Center, located at 436 State Route 94 S, as e does not have the power to produce the activities. Based on the population of the ded to meet the County's sheltering needs, power to the Fredon Civic Center. Sheltering in the County when an emergency is, strong hurricane, or flooding conditions.				
Description of the Solution:	The Fredon Civic Center facilities manager and County OEM will work with the County Engineer to identify the correct sized generator to support the energy demand at the Fredon Civic Center. Public Works will oversee installation of a fixed mounted diesel-powered generator and necessary electrical components to supply backup power to the Fredon Civic Center, located at 436 State Route 94 S. The Fredon Civic Center will be responsible for maintenance and testing of the generator following installation.						
Estimated Cost:	Medium						
Potential Funding Sources:	HMGP, BRIC, USDA Commur Performance Grants (EMPG)		ant Program, Emergency Management I Budget				
Implementation Timeline:	Within 5 years						
Goals Met:	1, 2, 5, 7						
Benefits:	This action protects public hea facility and its essential function		nd ensures continued operation of a critical er outage.				
Impact on Socially Vulnerable Populations:			rtunity for first responders, utility workers, and ources to vulnerable and hazard prone areas.				
Impact on Future Development:	This action results in protectio	n of a critical fac	ility that could support future development.				
Impact on Critical Facilities/Lifelines:	This action protects public heat facility and its essential function		nd ensures continued operation of a critical er outage.				
Impact on Capabilities:	This action ensures continuity	of operations to	maintain capabilities.				
Climate Change Considerations:			ather events such as flooding, wind, and ires. This action accounts for a likely increase				
Mitigation Category	□Local Plans and Regulations Structure and Infrastructure	` '	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)				
CRS Category	□Preventative Measures (PR □Property Protection (PP) □Public Information (PI))	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) ⊠Emergency Services (ES)				
Priority	□High	⊠Medium	□Low				
Alternatives:	Action		Evaluation				
	No Action	Current problem continues					
	Microgrid	Costly and difficult to implement.					
	Solar panels and batter	ry backup	Solar power is unlikely to be able to provide battery power for extended power failure events.				





Action 2025-SussexCo-04. Public Works Facility Snow Load Retrofit

Lead Agency:	Sussex County Public Works		
Supporting Agencies:	Sussex County Engineer		
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake □Flood □Geological Hazards □Hazardous Materials	□Hurricane □Infestation ⊠Nor'easter □Severe Weather ⊠Severe Winter Weather □Wildfire	
Description of the Problem:			
Description of the Solution:	The County Engineer will provide guidance on Spring Street, Newton, NJ) to meet current sno contractor will assess the provided guidance a retrofit the Public Works building to meet curre	ow load standards. Public Works or a hired nd implement the appropriate measures to	
Estimated Cost:	High		
Potential Funding Sources:	HMGP, BRIC, USDA Community Facilities Gra	ant Program	
Implementation Timeline:	Within 5 years		
Goals Met:	2, 6		
Benefits:	This action will protect the Public Works building with severe winter weather and nor'easters.	ng from collapse from snow loads associated	
Impact on Socially Vulnerable Populations:	The Public Works Department which operates out of the Public Works building provides services to the entire population of Sussex County, including its socially vulnerable populations. Should the snow load be too great for the existing Public Works building, the services provided by the Public Works Department may be hindered.		
Impact on Future Development:	Not applicable		
Impact on Critical Facilities/Lifelines:	This action will protect the Public Works building from suffering a potential roof collapse.		
Impact on Capabilities:	This action will permit the Public Works Department to operate under heavy snowfall conditions without worrying that the snow load may cause the roof to collapse to some extent, which would hinder the Department's operations.		
Climate Change Considerations:	Climate change is likely to increase the severit weather events such as nor easters and sever the chance of heavier snowfalls.		
Mitigation Category	□Local Plans and Regulations (LPR) ⊠Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	□Preventative Measures (PR) ⊠Property Protection (PP) □Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Priority	⊠High □Medium	□Low	
Alternatives:	Action	Evaluation	
	No Action	Current problem continues	
	Build new structure	Costly, unnecessary	
	Replace roof without referencing changes in building standards	May result in same issue	



Action 2025-SussexCo-05. Wildfire Outreach

Lead Agency:	Sussex County OEM		
Supporting Agencies:	Sussex County IT, NJFFS		
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake □Flood □Geological Hazards □Hazardous Materials		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather ☑ Wildfire
Description of the Problem:	as forested land. Although mar	ny forested areas esidential comm	with over half of its land cover being identified is of the County is within State preserved land, unities. The public may not be aware, or what is at risk.
Description of the Solution:		oublic informatio	ork with the Division A liaison with the NJ n surrounding wildfires (i.e. how to prepare, County's website.
Estimated Cost:	Low		
Potential Funding Sources:	County Budget		
Implementation Timeline:	Within 2 years, then ongoing		
Goals Met:	1, 2, 3, 7		
Benefits:			and inform populations on the wildfire hazard ill ensure the resources provided are verified.
Impact on Socially Vulnerable Populations:	Socially vulnerable populations, as well as the entire population of the County, will have the opportunity to become informed on the topic of wildfires and the risk which the hazard may pose to them and their property.		
Impact on Future Development:	Educating the public on the risks of wildfire may influence individuals to not live in forested of woodland locations, which may prevent future development in areas at risk to wildfires.		
Impact on Critical Facilities/Lifelines:	Educating populations on hazard risk and how to mitigate the risks can decrease the demand for utilities and emergency services including health and medical, law enforcement, and search and rescue.		
Impact on Capabilities:	This action would build upon the County's already existing public education and outreach program.		
Climate Change Considerations:		ures projected to	ry and frequency of many climate-related o increase and dry conditions to persist,
Mitigation Category	□Local Plans and Regulations □Structure and Infrastructure I	` '	□Natural Systems Protection (NSP) ⊠Education and Awareness Programs (EAP)
CRS Category	□Preventative Measures (PR) □Property Protection (PP) ⊠Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)
Priority	⊠High	□Medium	□Low
Alternatives:	Action		Evaluation
	No Action		Current problem continues
	Rely on federal resources		Resources may be generalized and not specific to the risks in the County
	Do not post information on website and instead offer only in-person information sessions		Persons may not be able to attend in-person sessions due to personal limitations and availability





Action 2025-SussexCo-06. Repetitive Loss Mitigation Support

Lead Agency:	Sussex County OEM			
Supporting Agencies:	Municipal Floodplain Administra	tors, Property (Owners	
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards □Hazardous Materials		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather □ Wildfire	
Description of the Problem:	properties have been repetitively has 13 NFIP repetitive loss prop	y flooded as do erties, 1 FMA r	ages to residential properties. These cumented by paid NFIP claims. The County repetitive loss property, and 1 NFIP severe ay be impacted by flooding as well.	
Description of the Solution:	acquisition/relocation to protect t repetitive loss properties should	them from futur be a priority, w		
	, , , ,		etermine most cost-effective mitigation option.	
	Phase 2: Work with the property funding from FEMA and local ma		lement selected action based on available	
Estimated Cost:	Low			
Potential Funding Sources:	BRIC, FMA, HMGP, match from	property owne	rs	
Implementation Timeline:	Within 2 years, then annual outro	each as grants	or funding become available	
Goals Met:	1, 2, 3, 7			
Benefits:	Eliminates flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.			
Impact on Socially Vulnerable Populations:	Removing homes from the floodplain immediately removes the risk to life and property. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.			
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.			
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.			
Impact on Capabilities:	Removing the risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed.			
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.			
Mitigation Category	□Local Plans and Regulations (⊠Structure and Infrastructure P	, ,	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	□Preventative Measures (PR) ⊠Property Protection (PP) □Public Information (PI)		□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)	
Priority	□High	□Medium	□Low	
Alternatives:	Action		Evaluation	
	No Action		Current problem exists	
	Levee around floodplain		Costly, not enough room	





Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.



Action 2025-SussexCo-07. Update Farmland Preservation Plan

Lead Agency:	Sussex County Engineering and Planning			
Supporting Agencies:	Land Conservancy of NJ, Suss Committee	Land Conservancy of NJ, Sussex County Open Space, NJ Agricultural Development Committee		
Hazard(s) of Concern:	⊠Dam Failure □Disease Outbreak ⊠Drought ⊠Earthquake ⊠Flood ⊠Geological Hazards ⊠Hazardous Materials		 ☑ Hurricane ☑ Infestation ☑ Nor'easter ☑ Severe Weather ☑ Severe Winter Weather ☑ Wildfire 	
Description of the Problem:	would incorporate more inform- farmland in the County through economic well-being of local fa NJ to update the Farmland Pre Commissioner adoption late 20	The Farmland Preservation Plan was last updated in 2008. A new update is needed which would incorporate more information on hazard mitigation. This plan works to preserve farmland in the County through the identification of various initiatives to promote the economic well-being of local farmers. The County is working with the Land Conservancy of NJ to update the Farmland Preservation Plan. Work is ongoing and expected to be ready for Commissioner adoption late 2025. Work on the plan update is funded using County Open Space Trust and a grant from the State Agricultural Development Committee. The project		
Description of the Solution:	NJ to update the Farmland Pre	servation Plan b	continue working with the Land Conservancy of by late 2025, using funding from the County Agricultural Development Committee.	
Estimated Cost:	Medium			
Potential Funding Sources:	County Open Space Trust, Sta	te Agricultural D	Development Committee grant	
Implementation Timeline:	Within 2 years			
Goals Met:	4, 5			
Benefits:	The updating of the Farmland Preservation Plan will provide an updated inventory of farmlands within the County and will identify the potential acreage of farmland available for preservation. This plan assists in furthering the County's efforts to prevent development where it may be unnecessary and to reduce the possibility of future development in areas which may otherwise be at risk to certain hazards.			
Impact on Socially Vulnerable Populations:	Not applicable			
Impact on Future Development:	This plan will outline preservation strategies for farmland in the County, preventing future development in these areas which can reduce hazard risk.			
Impact on Critical Facilities/Lifelines:	Preserving farmlands reduces the potential number of residents or future residents within the County by preventing development on these lands. Therefore, the likelihood of heightened demand for critical services, including first responders, utilities, governmental operations, etc. would be lowered.			
Impact on Capabilities:	This action will update an already existing planning capability of the County, making it more resilient by outlining initiatives to preserve farmland and reduce the potential structural and building damages or impacts from the identified hazards.			
Climate Change Considerations:	As climate change projections become reality, the need for open space to reduce impervious coverage becomes heightened. Green, open, and agricultural lands assist in absorbing heat from the atmosphere without emitting any heat in return.			
Mitigation Category			□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Priority	□High	⊠Medium	□Low	
Alternatives:	Action		Evaluation	
	No Action		Current problem continues	





Search for additional funding	May interrupt the current project schedule to seek additional funding
Do not continue plan update	Outdated information would then be utilized to support other plans and grant opportunities



Action 2025-SussexCo-08. Update Land Development Standards

Lead Agency:	Sussex County Engineering and Planning		
Supporting Agencies:	Planning Board		
Hazard(s) of Concern:	 ☑Dam Failure ☐Disease Outbreak ☑Drought ☑Earthquake ☑Flood ☑Geological Hazards ☑Hazardous Materials 		 ☑ Hurricane ☐ Infestation ☑ Nor'easter ☑ Severe Weather ☑ Severe Winter Weather ☑ Wildfire
Description of the Problem:	The County's Land Development Standards have not been updated since 2008. The purpose of these standards are to provide rules, regulations, and standards for site plans and subdivisions and procedures for review of site plans and subdivisions within the County's jurisdiction to allow land development that is compatible and harmonious with the existing, planned, and contemplated infrastructure base of the County and to protect the public health, safety, and welfare; communicate the process of development review to applicants and municipalities; promote Villages and Centers with a pedestrian realm as a preferred land development type in order to implement the Sussex County Strategic Growth Plan; and internalize external costs.		
Description of the Solution:	partnership with the Sussex Co	ounty Planning E	update the Land Development Standards in Board. The update will include discussion on ctices for stormwater management.
Estimated Cost:	Low		
Potential Funding Sources:	County Budget		
Implementation Timeline:	5 years		
Goals Met:	4, 5		
Benefits:	Mitigation considerations being taken when developing or updating land development standards can lessen the risk of damage from a hazard event and increase overall community resiliency.		
Impact on Socially Vulnerable Populations:	Communities that regularly and collaboratively update their planning efforts are more likely to have identified ways to best work with vulnerable populations to increase their level of preparedness.		
Impact on Future Development:	Updated land development standards ensure that any new development that does take plac is built to the safest standards based upon the best available data.		
Impact on Critical Facilities/Lifelines:	Integrating mitigation into land guides the safe development of		andards protects existing infrastructure and on.
Impact on Capabilities:			er the capabilities of agencies and es are available at any given point in time and
Climate Change Considerations:			ill require a more intense focus on plan remain current and accurate over time.
Mitigation Category	⊠Local Plans and Regulations □Structure and Infrastructure		□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)
Priority	⊠High	□Medium	□Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	Update only policies and regulations		Plans may not contain the most updated, relevant resources to be considered good reference documents





Focus only on best practices for stormwater management in updates

Will not be all inclusive, additional updates will be necessary





Action 2025-SussexCo-09. Master Circulation Plan for Transportation Update

Lead Agency:	Sussex County Engineering and Planning		
Supporting Agencies:	Sussex County Public Works		
Hazard(s) of Concern:	 ☑Dam Failure ☐Disease Outbreak ☑Drought ☑ Earthquake ☑ Flood ☑ Geological Hazards ☑ Hazardous Materials 	 ☑ Hurricane ☐ Infestation ☑ Nor'easter ☑ Severe Weather ☑ Severe Winter Weather ☑ Wildfire 	
Description of the Problem:	The Ten-Year Mobility Study is due for update to address transportation needs in the coming issues that have both resulted from the study pfaced during the implementation period for the findings that have resulted from the overall prothat should be taken by Sussex County and its emerging transportation needs over the next 1	decade. The study identifies challenges and process and represent challenges that will be plan; presents the study steps and the key cess; and presents the recommended steps associated partners to address current and	
Description of the Solution:	Sussex County Engineering and Planning will Transportation in partnership with Sussex Cou Hazard Mitigation Plan to identify and reduce r emergency access.	nty Public Works, using information from the	
Estimated Cost:	Medium		
Potential Funding Sources:	FTA grants, NJDOT grants, County Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	4, 5		
Benefits:	The update to this study will identify challenges and issues that have both resulted from the study process and represent challenges that will be faced during the implementation period for the plan; present the study steps and the key findings that have resulted from the overall process; and present the recommended steps that should be taken by Sussex County and its associated partners to address current and emerging transportation needs.		
Impact on Socially Vulnerable Populations:	This study will assess all modes of transportation with Sussex County, including public transportation which is utilized significantly by socially vulnerable populations. Outcomes of this study may benefit these populations as strategies identified may include to strengthen public transportation in the County and expand its offerings.		
Impact on Future Development:	Future development in the County may be impacted by the completion of this study as outcomes may include the expansion of various transportation systems, including public transportation and the extension or widening of roadways. In either case, land would possibly need to be developed for additional bus or train stops or the expansion of roadways. Conversely, future development could be halted due to study findings which may indicate future transportation development should not occur in newly identified hazard areas or protected areas.		
Impact on Critical Facilities/Lifelines:	This action directly impacts the transportation lifeline. Outcomes from this study may benefit or negatively impact this lifeline.		
Impact on Capabilities:	This action will update a current planning capability of Sussex County and provide recommended steps that should be taken to address current and emerging transportation needs.		
Climate Change Considerations:	The anticipated increase in temperatures may impact how transportation strategies are identified and implemented in the County. Extreme heat can cause asphalt to absorb and emit heat, which can impact roadways conditions, potentially damage vehicles, and cause railways to expand. Additional hazards, such as heavy rains and flooding conditions may cause a need to be identified surrounding stormwater management to relieve roadways of floodwaters.		
Mitigation Category	☑Local Plans and Regulations (LPR)☐Structure and Infrastructure Project (SIP)	□ Natural Systems Protection (NSP) □ Education and Awareness Programs (EAP)	
CRS Category	☑Preventative Measures (PR)☐Property Protection (PP)☐Public Information (PI)	□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)	





Priority	□High	⊠Medium	□Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	Only assess County roads in update		Update will not be fully inclusive of all transportation aspects
	Do not reference hazard mi	igation plan	Hazards which may impact the transportation lifeline will not be addressed





Action 2025-SussexCo-11. Wastewater Management Plan Update

Lond Anomore	Sussex County Engineering and Planning		
Lead Agency:	Sussex County Public Works		
Supporting Agencies:	•		
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards □Hazardous Materials		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather □ Wildfire
Description of the Problem:		y's efforts of m	currently in its development stages. Adoption aximizing the diversion of the materials out of n.
Description of the Solution:	and Planning in partnership with	Sussex Coun	vill be updated by Sussex County Engineering ty Public Works. Information from the Hazard o reduce risk to the wastewater management
Estimated Cost:	Medium		
Potential Funding Sources:	NJDEP, County Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	4, 5		
Benefits:	An updated wastewater management plan will provide a needed overview on changes since the 2017 wastewater management plan. This update will include an overview on current wastewater services and responsibilities, current public water supply services, environmental, regional and local considerations to wastewater services, water resource management Issues, future wastewater service and capacity, and significant actions to be taken.		
Impact on Socially Vulnerable Populations:	Populations which rely on the services from the MUA will benefit from this action, as maintain an up-to-date wastewater management plan will ensure the infrastructure in the County is being surveyed, and any identified issues within the service area are identified to be addressed.		
Impact on Future Development:	Future development in the County will have a plan which details how it may be tied into existing wastewater infrastructure.		
Impact on Critical Facilities/Lifelines:	This plan will update the existing wastewater management plan, which discusses the wastewater infrastructure within the County, including 24 municipalities within the County. Wastewater facilities are included in the water systems lifeline.		
Impact on Capabilities:	This action will update an alread principles.	ly existing plan	ning capability and integrate hazard mitigation
Climate Change Considerations:	heightened flood risk have the p	otential to imp	articular heavy rains, and the associated act wastewater management systems by ystems. An updated plan can discuss how this
Mitigation Category	⊠Local Plans and Regulations (□Structure and Infrastructure P	` '	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)
CRS Category	 ☑ Preventative Measures (PR) ☑ Property Protection (PP) ☑ Public Information (PI) 		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)
Priority	⊠High	□Medium	□Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	Do not reference hazard mitigation plan Create updated plan for the County and not include any municipalities		Hazards which may impact wastewater management systems will not be addressed
			Ineffective and would not cover the County's full service area





Action 2025-SussexCo-11. Increased Computer Technology and Software for Health Department

Lead Agency:	Sussex County Health and Human Services			
Supporting Agencies:	Sussex County OEM, Sussex County IT			
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake □Flood □Geological Hazards □Hazardous Materials		□Hurricane □Infestation □Nor'easter □Severe Weatl □Severe Winte	
Description of the Problem:	The Health Department require outbreak events, notify the public departments, and allow for regi	lic of important ા	updates, share ir	nformation between
Description of the Solution:	Sussex County Health and Hur hardware and software capabili events. Sussex County OEM a available options for upgrades.	ties to better ide	entify, respond to	o, and treat disease outbreak
Estimated Cost:	Medium			
Potential Funding Sources:	County Budget			
Implementation Timeline:	Within 5 years			
Goals Met:	5, 6, 7			
Benefits:	This action will permit Sussex County Health and Human Services to share critical information at a quicker rate which can inform the public of health emergencies and save lives. Furthermore, the advancement in technology would strengthen the County's ability to track infection rates, schedule testing, provide treatment, and give vaccinations.			Ith emergencies and save gthen the County's ability to
Impact on Socially Vulnerable Populations:	Increased technological capabilities would permit Sussex County Health and Human Services to expand its communication methods with socially vulnerable populations, which is critical for their health and well-being in the event of a disease outbreak, pandemic, or health emergency. Socially vulnerable populations are often the most at risk to disease outbreaks, pandemics, and health emergencies.			
Impact on Future Development:	Not applicable			
Impact on Critical Facilities/Lifelines:	Updating medical equipment and capabilities ensures that all members of the community can receive adequate medical care and remain informed in the event of a personal or community-wide emergency.			
Impact on Capabilities:	Updating medical equipment and capabilities increases the ability of the community to assist outside agencies and respond internally to large-scale events.		ity of the community to assist	
Climate Change Considerations:	A projected warmer, moist climatisease, including mosquitos, ti vectors may lead to higher rate	cks, and other p	pests and parasit	
Mitigation Category	⊠Local Plans and Regulations □Structure and Infrastructure F			ms Protection (NSP) d Awareness Programs (EAP)
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)	
Priority	□High	⊠Medium		□Low
Alternatives:	Action			Evaluation
	No Action		Curi	rent problem exists
	Resort to paper trac	king	Inefficier	at and may cause errors
			,	t effective; individuals may not ive information outsourced



Action 2025-SussexCo-12. County Facilities Hazard Surveying

Lead Agency:	Sussex County Facilities			
Supporting Agencies:	Sussex County Engineering and	d Planning		
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought ⊠Earthquake □Flood □Geological Hazards □Hazardous Materials		 ☑ Hurricane ☐ Infestation ☑ Nor'easter ☑ Severe Weather ☑ Severe Winter Weather ☐ Wildfire 	
Description of the Problem:	Numerous facilities are aging a	nd were built to	ards to maintain continuity of operations. standards that are lower than modern building e to the various hazards which impact the	
Description of the Solution:	Sussex County Facilities will complete the following surveys of County facilities in partnership with Sussex County Engineering and Planning: Soil and shake characteristics with potential vulnerabilities to earthquake forces. Structures that may be at risk during an earthquake Wind vulnerabilities (buildings were designed to 70 mph; new updated code is 90 mph) Structural characteristics that make them vulnerable to excessive snow and ice loads The County will then pursue necessary structural improvements that are identified by these surveys.			
Estimated Cost:	Medium			
Potential Funding Sources:	FEMA HMGP and BRIC, USDA	Community Fa	acilities Grant Program, County Budget	
Implementation Timeline:	Within 3 years	Within 3 years		
Goals Met:	2, 6			
Benefits:	This action will strengthen the structural integrity of county facilities and minimize potential impacts from future hazards and emergency events. Furthermore, the enhanced protection and security of these facilities ensures that governmental services continue to be offered before, during, and after an emergency event or incident to support the community.			
Impact on Socially Vulnerable Populations:	Socially vulnerable populations may rely on essential services provided by the County, often which are housed at county facilities. These services may include the library system, transportation services, social services, and senior programs.			
Impact on Future Development:	Individuals living in future developed areas would benefit from structurally sound and secured county facilities as they provide essential services.			
Impact on Critical Facilities/Lifelines:	This action will strengthen critical facilities within the County which provide essential services to the constituents of the County, including its residents and visitors.			
Impact on Capabilities:	Not applicable			
Climate Change Considerations:			e frequency and severity of weather-related rength and integrity of county facilities.	
Mitigation Category	⊠Local Plans and Regulations □Structure and Infrastructure F		□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Priority	□High	⊠Medium	□Low	
Alternatives:	Action		Evaluation	
	No Action		Current problem exists	
	Survey facilities which contain essential personnel only		All government buildings are considered critical facilities no matter the personnel in them, would cause potential bias	





Build all new county facilities	Cost prohibitive



Action 2025-SussexCo-13. Frankford Wastewater Facility Upgrades

Lead Agency:	Sussex County Facilities			
Supporting Agencies:	Sussex County Municipal Utilities Authority			
Hazard(s) of Concern:	□Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards ⊠Hazardous Materials	 ⊠Hurricane □Infestation ☑Nor'easter ☑Severe Weather ☑Severe Winter Weather □Wildfire 		
Description of the Problem:	The Frankford Wastewater Treatment facility requires upgrade of the force main to prevent spills of sewage. External spills of sewage can negatively impact habitats of nearby species, as well as seepage into the ground, potentially impacting groundwater and nearby waterbodies. Internal spills of sewage can lead to mold growth and unpleasant odors, impacting human health.			
Description of the Solution:	Sussex County Facilities will work with the Sus most cost effective and efficient method to upg Once identified, a contractor will be selected to	rade the force main at the Wastewater Facility.		
Estimated Cost:	High			
Potential Funding Sources:	BRIC, County budget			
Implementation Timeline:	Within 5 years			
Goals Met:	2, 6			
Benefits:	This action will prevent future ruptures, spills, or interruptions in the Frankford Wastewater Facility, which is a part of the County's wastewater management system, permitting the critical facility to operate as needed and support the residents, visitors, and emergency personnel in the Town.			
Impact on Socially Vulnerable Populations:	Populations which rely on the services from the Frankford Wastewater Facility will benefit from this action, as removing the risk for external sewage spills protects their health and potentially property from repercussions. Furthermore, this action protects potential water sources for the overall population of the County, as an external spill from the Facility could impact ground and surface water, both of which are sources of potable water in the County.			
Impact on Future Development:	Future development will be supported by stronger, more resilient, infrastructure.			
Impact on Critical Facilities/Lifelines:	This action will improve the County's wastewater system, which is part of the water systems lifeline, by strengthening its infrastructure to remove the risk of ruptures or interruptions from periods of heavy rain, severe storms, severe winter storms, and flexing of pavement during periods of extreme temperature. Resolving these issues will assist in preventing hazardous materials from spilling.			
Impact on Capabilities:	Not applicable			
Climate Change Considerations:	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. These periods of intense rain would cause further harm if a spill were to occur, as the water runoff would exacerbate the movement of the spilled materials.			
Mitigation Category	□Local Plans and Regulations (LPR) ⊠Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)		
CRS Category	□Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) ⊠Emergency Services (ES)		
Priority	□High ⊠Medium	□Low		
Alternatives:	Action	Evaluation		
	No Action	Current problem exists		
	Build secondary facility	Very high cost		





Remove facility Removal of facility not a possibility



Action 2025-SussexCo-14. High Hazard Potential Dam Rehab

Lead Agency:	Sussex County Engineer			
Supporting Agencies:	Sussex County OEM, Dam Owners, Municipal Engineers, NJDEP			
Hazard(s) of Concern:	☑Dam Failure □Disease Outbreak □Drought □Earthquake □Flood □Geological Hazards □Hazardous Materials	□Hurricane □Infestation □Nor'easter □Severe Weather □Severe Winter Weather □Wildfire		
Description of the Problem:	There are 40 high hazard dams in the County within 15 of its jurisdictions, and several more in the surrounding Counties of Passaic, Morris, Warren (New Jersey), Orange (New York), and Pike (Pennsylvania). High hazard dams have the potential to severely impact those within inundation areas. Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event.			
Description of the Solution:	The Sussex County Engineer will work with its local jurisdictions and dam owners of high hazard dams in the County to complete an engineering study of the high hazard dams. Sussex County will provide any relevant information and input to Municipal Engineers regarding any County roads which may be impacted by a dam failure event at any of these dams. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the local jurisdictions and dam owners will pursue funding support with assistance from Sussex County, seek permit approval from NJDEP, and implement the cost-effective measures.			
Estimated Cost:	High			
Potential Funding Sources:	FEMA BRIC, HHPD			
Implementation Timeline:	Within 5 years			
Goals Met:	1, 2, 7, 8			
Benefits:	This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.			
Impact on Socially Vulnerable Populations:	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.			
Impact on Future Development:	Future development located in or near the dam inundation area will be further protected from a dam failure event.			
Impact on Critical Facilities/Lifelines:	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam and strengthen the structural integrity of dam, as needed.			
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.			
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event due to projecter increases in precipitation. This action will increase the capabilities to respond to these events			
Mitigation Category	□Local Plans and Regulations (LPR) Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)		
CRS Category	□Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)	□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)		
Priority	⊠High □Medium	□Low		
Alternatives:	Action	Evaluation		
	No Action	Current problem exists		
Decommission Dam		High cost, flood risk at high hazard dams, potential loss of waterbodies as an environmental and recreational resources.		





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Action 2025-SussexCo-16. Integration of Mitigation Principles into Planning and Zoning Initiatives

Lead Agency:	Sussex County Engineering and Planning			
Supporting Agencies:	Sussex County Planning Board, Sussex County OEM, Municipal Planning Boards, Municipal Zoning Boards, Municipal Planning Departments			
Hazard(s) of Concern:	⊠Dam Failure ⊠Disease Outbreak ⊠Drought ⊠Earthquake ⊠Flood ⊠Geological Hazards ⊠Hazardous Materials		 ☑ Hurricane ☑ Infestation ☑ Nor'easter ☑ Severe Weather ☑ Severe Winter Weather ☑ Wildfire 	
Description of the Problem:		n into building ar	practices into their planning and zoning nd zoning protects existing infrastructure and on.	
Description of the Solution:	During future updates of local planning and zoning initiatives, work with municipal agencies to integrate hazard mitigation principles and recommendations into the policies, plans, and regulations. Tools and resources available from FEMA and other sources will be utilized to integrate climate adaptation planning such as FEMA's "Climate Adaptation Planning: Guidance for Emergency Managers" document.			
Estimated Cost:	Low			
Potential Funding Sources:	HMGP, BRIC, FMA, Annual Bu	ıdget		
Implementation Timeline:	Within 3 years, then ongoing s	upport		
Goals Met:	1, 2, 5, 7			
Benefits:	This action provides an opportunity for coordination amongst agencies and their planning efforts to improve the overall ability to prepare for, respond to, and recover from events. Mitigation considerations being taken when developing or updating building and zoning codes can lessen the risk of damage from a hazard event and increase overall community resiliency.			
Impact on Socially Vulnerable Populations:	Communities that collaborate and coordinate their planning efforts are more likely to have identified ways to best work with vulnerable populations to increase their level of preparedness.			
Impact on Future Development:	Coordinated planning efforts provide an opportunity for efficient and safe growth and development. Updated building and zoning codes ensure that any new development that does take place is built to the safest standards based upon the best available data.			
Impact on Critical Facilities/Lifelines:	Integrating mitigation into building and zoning protects existing infrastructure and guides the safe development of new construction.			
Impact on Capabilities:	A consolidated planning process brings together the capabilities of agencies and departments and better identifies what resources are available at any given point in time and where they are needed most.			
Climate Change Considerations:	As the climate changes, planning processes will require a more intense focus on plan maintenance and gathering of the best data to remain current and accurate over time. Tools and resources available from FEMA and other sources will be utilized to integrate climate adaptation planning such as FEMA's "Climate Adaptation Planning: Guidance for Emergency Managers" document.			
Mitigation Category	⊠Local Plans and Regulations (LPR) □Structure and Infrastructure Project (SIP)		□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Priority	⊠High	□Medium	□Low	
Alternatives:	Action		Evaluation	



2-55



No Action	Current problem exists
Update only policies and regulations	Plans may not contain the most updated, relevant resources to be considered good reference documents
Wait for municipalities to reach out for assistance before offering help	Integration of hazard mitigation principles may not be performed thorough, if at all



Action 2025-SussexCo-16. Dam Repairs Across Sussex County

Lead Agency:	Sussex County Engineer		
Supporting Agencies:	Municipal Engineers, Dam Owners, NJDEP		
Hazard(s) of Concern:	 ☑Dam Failure ☐Disease Outbreak ☐Drought ☐Earthquake ☐Flood ☐Geological Hazards ☐Hazardous Materials 	□Hurricane □Infestation □Nor'easter □Severe Weather □Severe Winter Weather □Wildfire	
Description of the Problem:	Several dams in Sussex County have received most recent inspections. Dams with poor or unstat could potentially make dam failure more lik failure more significant. These dams include: Whites Pond Dam, Andover Township (p) Hemlock Lake Dam, Andover Township Lake Valentine Dam, Andover Township Lake Aeroflex Dam, Andover Township (west Shore Trail Dam, Byram Township Granberry Lake Dam, Byram Township (p) Cranberry Lake Dam, Byram Township (p) Cranberry Lake Dam, Byram Township (p) New Jersey No Name # 11 Dam, Frankford J.A. Little Farm Pond Dam, Fredon Township (p) Fawn Lake Dam, Hardyston Township (p) Bear Pond Dam E, Hopatcong Borough (p) Holiday Pond Dam, Montague Township (p) Sawmill Pond Dam, Sandyston Township (p) Sawmill Pond Dam, Sandyston Township (p) Sakellinger Lake Dam, Sparta Township (p) Lake Grinnell Dam, Sparta Township (p) Lake Grinnell Dam, Sparta Township (p) Lower Crandon Lake Dam, Stillwater Township (p) Lower Crandon Lake Dam, Stillwater Township (p) Lake Plymouth Dam, Stillwater Township (p) Lake Plymouth Dam, Stillwater Township (p) Lake Conway Dam, Vernon Township (p) Lake Conway Dam, Vernon Township (p) Lake Panorama Dike, Vernon Township (p) Lake Panorama Dike, Vernon Township (p) Lake Panorama Dike, Vernon Township (p) Lake Wanda Dam, Vernon Township (poor) Billhill Dam, Vernon Township (poor) Billhill Dam, Vernon Township (poor) Lake Wanda Dam, Vernon Township (poor) Billhill Dam, Vernon Township (poor) Lake Panorama Dam, Vernon Township (poor) Billhill Dam, Vernon	satisfactory safety ratings have deficiencies sely to occur or the consequences of dam oor) (poor)	
Description of the Solution:	The Sussex County Engineer will work with municipal engineers, dam owners and managers, and the NJDEP Bureau of Dam Safety to review the most recent inspections of dams in the municipality that have resulted in a poor or unsatisfactory safety rating, identify the deficiencies, determine the necessary repairs and improvements necessary to address the deficiencies, identify available funding sources for the identified repairs/improvements, and implement the cost-effective repairs/improvements.		
Estimated Cost:	Low for initial assessment of options, TBD for total cost based on mitigation actions selected		
Potential Funding Sources:	NJDEP, Annual Budget, Municipal Budgets		





Implementation Timeline:	Within 5 years			
Goals Met:	1, 2, 7, 8			
Benefits:		Dam failure will be avoided, which will reduce the risk of harm to people and property downstream. Certain safety requirements will be met that can allow for funding to be received		
Impact on Socially Vulnerable Populations:	The most vulnerable populations may live directly downstream of the dam and lack the ability to receive notifications of dam failure or evacuate when notified. Preventing dam failure allows those communities to remain intact and reduces the risk of loss of life and property in those areas.			
Impact on Future Development:	A community is more likely to remain in or relocate to an area where dam failure is less likely to occur. Future development downstream of dams will also be protected from dam failure.			
Impact on Critical Facilities/Lifelines:	(If dam is hydroelectric) – Utilities services are likely to remain intact with the decreased risk of damage to the structure. (If not hydroelectric) – Roads are more likely to remain undamaged with the storage of water behind the dam.			
Impact on Capabilities:	Conducting an engineering analysis will allow for more efficient allocation of resources and grant funds to retrofit structures as needed.			
Climate Change Considerations:	Climate change is resulting in an increase to annual precipitation. Much of this increase is in the form of heavy rainfall events. Consideration should be taken for increases in frequency and severity of rainfall events to ensure that the dam is designed to withstand these increases.			
Mitigation Category	□Local Plans and Regulations (LPR) ⊠Structure and Infrastructure Project (SIP)		□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category	□ Preventative Measures (PR) □ Property Protection (PP) □ Public Information (PI)		□ Natural Resource Protection (NR) Structural Flood Control Projects (SP) □ Emergency Services (ES)	
Priority	⊠High □Medium			□Low
Alternatives:	Action No Action Work without Municipal Engineer involvement Remove all dams			Evaluation
			Risk of dam fail	ure remains or increases over time
			Improvements made but may lack appropriate support from municipalities	
				r analysis, dam removal may rease flooding risk





Action 2025-SussexCo-17. Dam Failure Inundation Mapping

Lead Agency:	Sussex County Engineer			
Supporting Agencies:	Municipal Engineers, Dam Owners, NJDEP			
Hazard(s) of Concern:	 ⊠Dam Failure □Disease Outbreak □Drought □Earthquake ⊠Flood □Geological Hazards □Hazardous Materials 		□ Hurricane □ Infestation □ Nor'easter □ Severe Weather □ Severe Winter Weather □ Wildfire	
Description of the Problem:	Sussex County does not have digitized dam failure inundation area data for any of the dams in the County. Dam failure inundation area data is crucial for effective planning purposes. Th inundation data will be able to show the locations most likely to be impacted by a dam failure event. This data can assist first responders and dam owners define safety and response procedures.			
Description of the Solution:		ation modeling	ngineers, dam owners and managers, and in high-risk areas, prioritizing dams and their or significant hazard.	
Estimated Cost:	Medium			
Potential Funding Sources:	Annual Budget, Municipal Budge	ets, NJDEP		
Implementation Timeline:	Within 4 years			
Goals Met:	1, 2, 7, 8			
Benefits:	Identification of dams that are at higher risk of failure and an understanding of inundation zones provides the opportunity to work with the downstream community to prepare for any potential flooding events and address any ways to mitigate the overall risk of failure.		downstream community to prepare for any	
Impact on Socially Vulnerable Populations:	areas are most likely to experier	most vulnerable populations may live directly downstream of the dam. Identifying which as are most likely to experience significant impacts will allow for planning and staging cources to protect lives and property.		
Impact on Future Development:	New structures are less likely to be built in areas where the risk of inundation is high. This can guide capital improvement projects within the municipality and only allow development areas where it is safe to build, and guide future building codes, zoning, land use and permitting.			
Impact on Critical Facilities/Lifelines:	Allows for the identification of infrastructure that currently exists which may be vulnerable to impacts so that sufficient planning and preparation to increase resiliency and decrease likelihood of interruption.			
Impact on Capabilities:	Identification of inundation areas provides a framework to plan for the needs of communities that lie within the areas of highest risk.			
Climate Change Considerations:	Increase in extreme rainfall events may alter the floodplain, which impacts the dam inundation zones as water moves downstream.			
Mitigation Category	⊠Local Plans and Regulations (□Structure and Infrastructure P		□ Natural Systems Protection (NSP) □ Education and Awareness Programs (EAP)	
CRS Category	⊠Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)		□ Natural Resource Protection (NR) □ Structural Flood Control Projects (SP) □ Emergency Services (ES)	
Priority	⊠High	□Medium	□Low	
ernatives: Action			Evaluation	
	No Action Remove all dams Rely on NJDEP to conduct inundation mapping		Current problem exists	
			Without proper analysis, dam removal may increase flooding risk	
			NJDEP may not have all resources available locally to accurate portray inundation areas	