



1. INTRODUCTION

Sussex County has developed a hazard mitigation plan (HMP) to reduce risks from disasters to the people, property, economy, and environment within the County. Developed by the County and 24 participating local jurisdictions (the Planning Partners), this HMP updates the 2021 Sussex County HMP. The updated 2025 HMP (also referred to as “the plan”) includes countywide analysis and assessment of hazards, risk, and capabilities.

1.1 OVERVIEW TO HAZARD MITIGATION PLANNING

1.1.1 What Is Hazard Mitigation?

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk and effects that can result from hazards. A hazard mitigation plan documents a state or local government’s evaluation of natural hazards and strategies to mitigate them.

Effective mitigation planning helps people, organizations, and government agencies to better prepare for and respond when disasters occur. It also allows local governments to remain eligible for Federal Emergency Management Agency (FEMA) grant funding for mitigation projects that will reduce the impact of future disaster events. The long-term benefits of mitigation planning and implementation include the following:

- An increased understanding of hazards faced by local communities
- A more sustainable and disaster-resistant community
- Financial savings through partnerships that support planning and mitigation efforts
- Focused use of limited resources on hazards that have the biggest impact on the community
- Reduced long-term impacts on human health and structures
- Reduced costs associated with response and recovery efforts, including repairs

The **Federal Emergency Management Agency** (FEMA) estimates that for every dollar spent on damage prevention (mitigation), twice that amount is saved by not having to perform post-disaster repairs.

1.1.2 Regulatory Framework

The U.S. government encourages communities to assess their vulnerability to various hazards before disaster strikes and then take actions to reduce potential risks. This allows communities to rebound from a natural disaster more quickly, with less loss of property or human injury and at much lower cost. Effective cost benefits include reductions in the time lost from productive activity by businesses and industries.

The federal Disaster Mitigation Act of 2000 (DMA 2000) updated the mitigation planning provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Under the new requirements, communities seeking certain hazard-related federal funding must have a plan that identifies actions to mitigate hazards, risks, and vulnerabilities and establishes a strategy to implement those actions. Regulations implementing the DMA 2000 are included in Title 44 of the Code of Federal Regulations, Section 201 (44 CFR 201). In New Jersey, responsibility for fulfilling the requirements of DMA 2000 and 44 CFR 201 and administering the FEMA Hazard Mitigation Program has been delegated to the New Jersey Office of Emergency Management (NJOEM).



To be eligible for federal hazard mitigation assistance, communities must prepare and maintain an HMP and update it every 5 years. Each local jurisdiction's HMP must identify potential natural hazards to the health, safety, and well-being of its residents and identify and prioritize actions that can be taken by the community to mitigate those hazards before disaster strikes.

One goal of the federal regulations is to facilitate cooperation between state and local authorities, prompting them to work together. This enhanced planning process enables local and state governments to better articulate accurate needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects.

Table 1-1 summarizes the 44 CFR 201 requirements and where each is addressed in this hazard mitigation plan.

Table 1-1. FEMA Local Mitigation Plan Review Crosswalk

| Plan Criteria | Primary Location in Plan |
|--|---|
| Prerequisites | |
| Adoption by the Local Governing Body: §201.6(c)(5) | Section 2.6; Appendix A |
| Planning Process | |
| Documentation of the Planning Process: §201.6(b) and §201.6(c)(1) | Chapter 2 |
| Risk Assessment | |
| Identifying Hazards: §201.6(c)(2)(i) | Chapter 5 |
| Profiling Hazards: §201.6(c)(2)(i) | Chapters 6 – 18 |
| Assessing Vulnerability: Overview: §201.6(c)(2)(ii) | Chapters 4, 6 – 18 |
| Assessing Vulnerability: Identifying Structures: §201.6(c)(2)(ii)(A) | Chapter 3; Section 4.1, Chapters 6 – 18 |
| Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B) | Section 4.2, Chapters 6 – 18 |
| Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C) | Section 3.8; Volume II |
| Mitigation Strategy | |
| Local Hazard Mitigation Goals: §201.6(c)(3)(i) | Chapter 21 |
| Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii) | Chapter 21; Volume II |
| Implementation of Mitigation Actions: §201.6(c)(3)(iii) | Chapter 22; Volume II |
| Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv) | Volume II |
| Plan Maintenance Process | |
| Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(i) | Chapter 22 |
| Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii) | Chapter 22; Volume II |
| Continued Public Involvement: §201.6(c)(4)(iii) | Chapter 22 |

1.1.3 Specialized Terms and Concepts

Like any technical field, hazard mitigation has developed over the years its own set of terms and concepts with particular meanings within the hazard mitigation practice. A full glossary and list of acronyms is provided at the front of this volume. The list below provides a quick reference for specialized terms whose use is especially prominent in this hazard mitigation plan:

- **Adaptive capacity**—the ability of a human or natural system to adjust to climate change by moderating potential damage, taking advantage of opportunities, or coping with the consequences (EPA 2023)



- **Asset**—anything that is important to the character and function of a community (e.g., people, structures, community lifelines, the economy, and natural, historic, and cultural resources) (FEMA 2023)
- **Capability assessment**—an evaluation of which authorities, policies, programs, funding and resources a participant has to accomplish hazard mitigation (FEMA 2023)
- **Cascading hazards**—a primary event, such as heavy rainfall, seismic activity, or rapid snowmelt, followed by a chain of consequences that may range from modest (lesser than the original event) to substantial (National Academies of Sciences, Engineering, and Medicine 2022)
- **Community lifelines**—the most fundamental services in a community that, when stabilized, enable all other aspects of society to function (FEMA 2023)
- **Extent**—the range of anticipated intensities of the identified hazards within a community, most commonly expressed using various scientific scales (FEMA 2022)
- **Hazard profile**—a description of a hazard's location, extent, previous occurrences and probability of future events within a community (FEMA 2023)
- **Hazard ranking**—the process of identifying the hazards that pose the greatest risk to a community, based on how likely the hazard is to occur, the potential consequences if the hazard does occur, and other relevant local factors
- **Impact**—the consequences or effects of a hazard on a community's assets identified in the vulnerability assessment. (FEMA 2023)
- **Integration**—the inclusion of hazard mitigation principles, vulnerability information and mitigation actions into other existing community planning to leverage activities that have co-benefits, reduce risk and increase resilience (FEMA 2022)
- **Mitigation action**—measures, projects, plans or activities proposed to reduce the current and future vulnerabilities identified in the risk assessment (FEMA 2023)
- **Mitigation strategy**—the long-term blueprint for reducing the potential hazard-related losses identified in the risk assessment; the strategy consists of mitigation goals, mitigation actions, and a plan for implementing the actions (FEMA 2023)
- **Natural hazard**—a source of harm or difficulty created by a meteorological, environmental or geological event (FEMA 2023)
- **Plan maintenance**—monitoring and updating a hazard mitigation plan as warranted by changing conditions, availability of new information, and progress on the proposed mitigation actions (FEMA 2023)
- **Planning process**—the procedures used to develop a hazard mitigation plan with broad acceptance across the community
- **Risk**—the potential for damage or loss when natural hazards interact with people or assets (FEMA 2023)
- **Risk assessment**—a data-driven analysis to find where a local jurisdiction is vulnerable to hazards (FEMA 2023)
- **Social vulnerability**—the potential for loss within an individual or social group, as affected by traits that influence the individual's or group's resilience, which is their ability to prepare for, respond to, cope with, or recover from an event (FEMA 2023)
- **Stakeholder**—individuals or groups that a mitigation action or policy affects, including businesses, private organizations and residents (FEMA 2023)
- **Vulnerability**—a description of which assets within locations identified to be hazard prone are at risk from the effects of the hazard (FEMA 2023)



1.2 HISTORY OF HAZARD MITIGATION PLANNING IN SUSSEX COUNTY

1.2.1 Previous Sussex County HMPs

Sussex County has been included in 28 federal disaster declarations (major disaster, fire management, and emergency) since 1954. The County prepared and adopted its first hazard mitigation plan in 2011. The plan has been regularly updated since then, with updates adopted in 2016, and 2021. The most recent update identified the following as the greatest hazards of concern in Sussex County:

- Dam failure
- Disease outbreak
- Drought
- Earthquake
- Flood
- Geological hazards
- Hazardous materials
- Infestation
- Nor'easter
- Severe weather
- Severe winter weather
- Wildfire

1.2.2 Key Changes in the Current Update

The following are the most significant changes made between the previous County HMP (2021) and the current (2025) update:

- The 2025 Sussex County HMP includes discussions on socially vulnerable populations and the planning process included outreach to socially vulnerable populations to gather their input.
- For the 2025 HMP update, the capability assessment was expanded; the discussion of capabilities in each jurisdictional annex has been expanded as well (Volume II).

1.3 PLAN ORGANIZATION

The Sussex County HMP provides a detailed review and analysis of each hazard of concern, resources, and relevant statistical information for the Planning Partners. The plan is organized into two volumes: Volume I includes all information that applies to the entire planning area (Sussex County); and Volume II includes specific information for each participating jurisdiction.

Volume I is a resource for ongoing mitigation analysis. It includes a description of the County and its jurisdictions as well as information on mitigation planning and how the risk assessment and capability assessment were performed. Volume I of the plan includes the following chapters:

- Part 1: The Planning Process and Planning Area



- Chapter 1: Introduction
- Chapter 2: Planning Process—A description of the plan development process, committee and stakeholder roles and activities, how the plan will be incorporated into existing programs, and the adoption of the plan by each participating jurisdiction
- Chapter 3: County Profile—An overview of Sussex County, including general information and physical conditions, land use patterns and trends, population and demographics, economy, general building stock inventory, community lifelines, and natural, historic, and cultural resources
- Part 2: Risk Assessment
 - Chapter 4: Methodology—Description of the methodology used to assess hazard risk and the status of local data
 - Chapter 5: Hazards of Concern Identification—Documentation of the process of identifying the natural hazards of concern for further profiling and evaluation
 - Chapters 6 – 18—Hazard profiles and findings of the risk assessment (estimates of the impact of hazard events on life, safety, and health; general building stock; critical facilities; the economy; and natural, historic, and cultural resources)
 - Chapter 19: Hazard Ranking—Description and summary of the hazard ranking process
- Part 3: Capability Assessment
 - Chapter 20: Capability Assessment—A summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, county, local) that support hazard mitigation within the County
- Part 4: Mitigation Strategy
 - Chapter 21: Mitigation Strategy—Information regarding the mitigation goals and objectives identified by the Steering Committee in response to priority hazards of concern, and the process by which County and local mitigation strategies have been developed or updated
- Part 5: Plan Maintenance
 - Chapter 22: Plan Maintenance Procedures—A system to continue to monitor, evaluate, maintain, and update the plan

Volume II consists of annexes for each participating jurisdiction. Each annex summarizes the jurisdiction's planning, regulatory, and fiscal capabilities; evaluates vulnerabilities to hazards; describes the status of past mitigation actions; and provides a specific mitigation strategy. The annexes provide each jurisdiction with an expedient resource for implementing mitigation projects and maximizing future grant opportunities.

Appendices include the following:

- Appendix A: Sample Resolution of Plan Adoption—Resolutions issued by each jurisdiction to support adoption of this HMP.
- Appendix B: Participation Matrix—A log of individual participants' contributions to the planning process
- Appendix C: Meeting Documentation—Agendas, attendance sheets, minutes, and other documentation (as available and applicable) of planning meetings convened during the development of the plan
- Appendix D: Public and Stakeholder Outreach Documentation—Documentation of the public and stakeholder outreach effort including webpages, informational materials, public and stakeholder meetings and presentations, surveys, and other methods used to receive and incorporate public and stakeholder comment and input to the plan update process



- Appendix E: Action Worksheet Template and Instructions
- Appendix F: Plan Maintenance Tools—Examples of plan review templates available to support annual plan review and example FEMA Guidance Worksheets (FEMA 386-4)
- Appendix G: Critical Facility Inventory
- Appendix H: Risk Assessment Supplementary Data—Details regarding past hazard events since those documented in the 2021 plan
- Appendix I: Mitigation Strategy Supplementary Data—Summaries of additional activities and resources provided to plan participants to support the update of the mitigation strategy
- Appendix J: NJOEM Planning Standards—Planning standards and guidelines for hazard mitigation planning in New Jersey
- Appendix K: Linkage Procedures—Description of the process for jurisdictions that did not participate in this HMP to gain future coverage under the plan
- Appendix L: Dam Supplement—Information on high hazard dams within Sussex County

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