

EXECUTIVE SUMMARY

The 2024 update to the Rockland County Hazard Mitigation Plan (HMP) was prepared in accordance with the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires state and local governments to prepare HMPs to remain eligible to receive pre-disaster mitigation grant funds available in the wake of federally declared disasters. Importantly, pre-disaster mitigation grant funds are separate and distinct from federal and state funds available for direct post-disaster relief (i.e., Public Assistance [PA] and Individual Assistance [IA]). Availability of those funds remains unchanged if a federally declared disaster occurs in Rockland County; affected municipalities will still receive immediate recovery assistance regardless of their participation in this HMP. However, DMA

Hazard Mitigation is any sustained action taken to reduce or eliminate longterm risk and effects that can result from specific hazards. FEMA defines a Hazard Mitigation Plan as documentation of a state or local government's evaluation of natural hazards and strategy to mitigate such hazards.

2000 improves the disaster planning process by (1) increasing requirements for hazard mitigation planning, and (2) necessitating that participating municipalities document their hazard mitigation planning process and identify hazards, potential losses, and mitigation needs, goals, and strategies.

Rockland County Multi-Jurisdictional Planning Process

Rockland County developed and adopted the Rockland County HMP in 2010, and later updated this plan in 2018. DMA 2000 regulations require that local plans be formally updated and adopted every 5 years, reassessing risk and updating local strategies to manage and mitigate those risks. To comply, Rockland County and inclusive jurisdictions actively participated in the update of the HMP. Extensive outreach efforts by the Rockland County Office of Emergency Management (OEM) resulted in full participation from all municipalities. Upon completion and approval of the HMP, participating jurisdictions will continue to address and implement the findings and recommendations of this HMP. Table ES-1 lists local governments that actively participated in the HMP update process to achieve or maintain their compliance with DMA 2000 requirements.

Jurisdictions **Rockland County** Airmont (V) Hillburn (V) Stony Point (T) Orangetown (T) Chestnut Ridge (V) Kaser (V) Piermont (V) Suffern (V) Clarkstown (T) Montebello (V) Pomona (V) Upper Nyack (V) Grand View-on-Hudson (V) New Hempstead (V) Ramapo (T) Wesley Hills (V) Haverstraw (T) New Square (V) Sloatsburg (V) West Haverstraw (V) Haverstraw (V) Nyack (V) Spring Valley (V)

Table ES-1. Participating Jurisdictions in the 2024 Rockland County HMP Update

During this HMP update process, Rockland County and the participating jurisdictions accomplished the following:

- Developed a steering committee and planning partnership.
- Reviewed and updated the hazards of concern.
- Profiled and prioritized these hazards.
- Estimated inventory at risk and potential losses associated with these hazards.





- Reviewed and updated hazard mitigation goals and objectives Hazard Mitigation is any sustained action taken to reduce or eliminate long-term risk and effects that can result from specific hazards. FEMA defines a Hazard Mitigation Plan as documentation of a state or local government's evaluation of natural hazards and strategy to mitigate such hazards.
- Reviewed and updated county and local mitigation strategies to address identified risks and vulnerabilities.
- Updated and developed maintenance procedures to be executed upon approval of the HMP.

As required by DMA 2000, the participating jurisdictions and Rockland County have informed the public about HMP update efforts and have provided opportunities for public comment and input regarding the planning process. In addition, numerous agencies and stakeholders have participated as core or support members to provide input and expertise to the planning process. This HMP documents the process and outcomes of the jurisdictions' mitigation planning efforts.

Rockland County and the participating jurisdictions incorporate mitigation planning as an integral component of daily government operations through existing processes and programs. Announcements regarding the planning process were publicized via public notice and on the Rockland County HMP website (Hazard Mitigation | Rockland County (Rocklandhmp.com)). The website also offered the public and stakeholder groups an opportunity to provide their input through a community survey. Updates to the HMP will be similarly announced after annual plan reviews and five-year updates. The questionnaire asked quantifiable questions about citizen perception of risk, knowledge of mitigation, and support of community programs. The Rockland County HMP Coordinator at the Rockland County OEM and local planning partnership representatives will be responsible for receiving, tracking, and filing public comments regarding this HMP.

Rockland County Hazard Mitigation Plan Adoption

Once the Federal Emergency Management Agency (FEMA) formally approves this HMP update, Rockland County and all participating jurisdictions will be required to formally adopt the updated HMP. A sample copy of an adoption resolution is included in Appendix A.

Risk Assessment

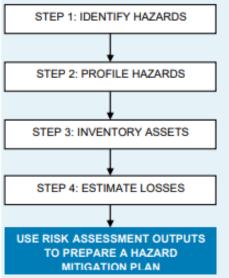
A key component of an HMP is accurate identification of risks posed by hazards and corresponding impacts on the community. The process of identifying hazards of concern, profiling hazard events, and conducting a vulnerability assessment is known as a risk assessment. The risk assessment portion of the mitigation planning process included the steps shown on Figure ES-1. The following section summarizes these steps.



Step 1: Identify hazards of concern. Rockland County considered the full range of natural and non-natural hazards that could impact the county, and then identified and ranked hazards of greatest concern. The following list of 11 hazards of concern was selected for further evaluation in the HMP:

- Dam Failure
- Disease Outbreak
- Drought
- Earthquake
- Extreme Temperature
- Flood (riverine, ice jam, flash flood)
- Landslide
- Severe Storm
- Severe Winter Storm
- Wildfire

Figure ES-1. Risk Assessment Process



Step 2: Prepare a profile of each hazard of concern. These profiles assist communities in evaluating and comparing hazards that can impact their areas. Each type of hazard has unique characteristics that vary from event to event. That is, impacts associated with a specific hazard can vary depending on the magnitude and location of each event (a hazard event is a specific, uninterrupted occurrence of a particular type of hazard). Further, probability of occurrence of a hazard at a given location affects the priority assigned to that hazard. Finally, each hazard impacts different communities in different ways, depending on geography, local development, population distribution, age of buildings, and mitigation measures already implemented.

Steps 3 and 4: Evaluate community assets and identify assets exposed or vulnerable to the identified hazards of concern. Hazard profile information combined with data regarding population, demographics, general building stock, and critical facilities at risk prepares the community to develop risk scenarios and estimate potential damages and losses from each hazard.

Overall vulnerability of Rockland County to the hazards of concern cannot be underestimated. Frequent severe storms result in wind damage and flooding that affect residents, businesses, and government services. National Flood Insurance Program (NFIP) statistics for the County, as of December 2023, identify approximately 962 NFIP policies in force, and paid claims since 1978 of nearly \$44 million.

Rockland County Mitigation Strategy

Outcomes of the risk assessment, supplemented by community input, provided a basis for reviewing past mitigation actions, future goals, and appropriate local mitigation actions.

Mission Statement, Goals, and Objectives

The 2018 HMP specified seven overarching mitigation goals that summarized hazard reduction outcomes the county and participating jurisdictions want to achieve. The Planning Partnership reviewed those seven mitigation goals and elected to edit them to the following mitigation goals:



- **Goal 1.** Protect life from natural and man-made hazards through planning, preparation, mitigation, and integration.
- **Goal 1.** Protect existing and future property including critical facilities, community lifelines, infrastructure, public, and private structures.
- **Goal 2.** Increase hazard risk and mitigation education and awareness programs for government agencies, private sector businesses, non-profit organizations, residents, and property owners.
- **Goal 3.** Preserve and restore natural systems through sustainable, cost-effective, and resilient mitigation projects and programs.
- **Goal 4.** Build emergency management capabilities through continuity of operations before, during, and after hazard events.
- **Goal 5.** Promote and encourage sustainability practices to reduce or eliminate impacts from natural and man-made hazard events.
- **Goal 6.** Integrate the hazard mitigation plan to ensure consistency with existing and future planning documents, regulatory programs, codes, ordinances, and state and federal hazard mitigation strategies.

The 2024 HMP identified 11 objectives intended to meet these six goals. Those goals, along with their corresponding objectives, guided identification, evaluation, and prioritization of specific mitigation actions. After review of the 2018 objectives, the Planning Partnership developed a set of objectives show in Table ES-2 that align more closely with the updated goals above.

Table ES-2. Rockland County Hazard Mitigation Plan Objectives

Number	Objective
1	Enhance early notification systems and communication infrastructure to provide adequate warning and information regarding all hazards
2	Review, strengthen and enforce existing building codes, ordinances, and safety procedures to increase the resilience of construction to the impacts of hazards.
3	Identify and implement cost-effective structural and property protection projects to reduce the impacts from flooding, including acquisition, elevation, and relocation projects.
4	Develop and distribute public awareness materials about natural hazard risks, preparedness, and mitigation.
5	Ensure continuity of government operations, emergency services, and essential facilities and adequate supplies for emergency response services at the local level during and immediately after hazard events.
6	Strengthen communication and cooperation between public agencies, citizens, non-profit groups, and businesses to implement mitigation activities effectively.
7	Maintain and encourage ongoing relationships between state agencies and partners to play an active and vital role in preservation and restoration of vulnerable natural systems.
8	Pursue mitigation actions that will preserve or restore the environment's natural abilities to absorb the impacts of natural and man-made hazards.
9	Encourage smart growth, neighborhood revitalization and economic development with an awareness of the existence and location of natural hazard areas to mitigate impacts of hazards on life, property, and the economy, while exploring sustainable development measures and preserving quality of life and existing community and neighborhood character.
10	Improve hazard data through participation in studies, research, and mapping to enhance information related to the impacts of hazards and related risks, vulnerability, and losses.
11	Continue to participate in state, regional, and local programs and efforts that focus on practices that support or enhance resiliency.





Capability Assessment

Capability assessments were prepared by Rockland County and each participating jurisdiction. A capability assessment is an inventory of a community's missions, programs, and policies and an analysis of its capacity to implement them. This assessment is an integral part of the planning process. The capability assessment process includes identification, review, and analysis of current local and state programs, policies, regulations, funding, and practices that may either facilitate or hinder mitigation.

By completing these assessments, Rockland County and participating jurisdictions learned how or whether they would be able to implement certain mitigation actions by determining the types of mitigation actions that may be prohibited by law, limitations that may hinder mitigation actions, the range of local and/or state administrative, programmatic, regulatory, financial, and technical resources available to assist in implementing their mitigation actions.

Identification, Prioritization, Analysis, and Implementation of Mitigation Actions

Rockland County has seen much success in the implementation of the 2018 HMP, particularly with actions that integrate hazard mitigation into jurisdictions' daily operations. As part of the planning process for this HMP update, all participating jurisdictions evaluated their risks and known or anticipated losses to the hazards of concern, assessed their capabilities to manage hazard risk, reviewed progress on past mitigation efforts, and identified a comprehensive range of mitigation alternatives and actions they endeavor to implement as resources are identified and available. The HMP identifies all proposed mitigation actions relevant to achievement of the goals and objectives presented above. The county and participating jurisdictions have identified appropriate local mitigation actions along with hazards mitigated, goals, and objectives met; lead agencies; estimated costs; potential funding sources; and proposed timeline. These actions are identified in Volume II, Section 9 for the county and each participating jurisdiction.

Plan Maintenance Procedures

Hazard mitigation planning is an ongoing process. Section 7 of this plan presents procedures for HMP maintenance and updates. The Planning Partnership will continue ongoing mitigation efforts to implement the HMP and revise and update the HMP as necessary.

To monitor implementation of the HMP, Planning Partnership members will meet annually to discuss the status of HMP implementation and will prepare a report summarizing the status of the HMP and any needed updates. The mitigation evaluation will address changes as new hazard events occur, as the area develops, and as more is learned about hazards and their impacts. The evaluation will include an assessment of whether the planning process and actions have been effective, whether development or other issues warrant changes to the HMP or its priorities, progress toward achievement of the communities' goals, and whether changes are warranted. The HMP will be updated at a minimum within the five-year cycle specified by DMA 2000.



Point of Contact

To request information or provide comments regarding this HMP, please contact the designated HMP coordinator at Rockland County Office of Emergency Management:

Christopher F. Jensen, Program Coordinator

Rockland County Office of Fire and Emergency Services

(845) 364-8902 | JensenC@co.rockland.ny.us

