



EXECUTIVE SUMMARY

BACKGROUND

A Hazard Mitigation Plan (HMP) is a living document that communities use to reduce their vulnerability to hazards. It forms the foundation for a community's long-term strategy to reduce disaster losses and creates a framework for decision making to reduce damages to lives, property, and the economy from future disasters. Examples of mitigation projects include home acquisitions or elevations to remove structures from high risk areas, upgrades to critical public facilities, and infrastructure improvements. Ultimately, these actions reduce vulnerability, and communities are able to recover more quickly from disasters. Gloucester County has demonstrated its commitment to reducing disaster losses by initially developing its multi-jurisdictional HMP in 2009 and updating information upon which to base a successful mitigation strategy to reduce the impacts of natural disasters and to increase the resiliency of its communities.

Hazard Mitigation is any sustained action taken to reduce or eliminate the long-term risk and effects that can result from specific hazards.

FEMA defines a **Hazard Mitigation Plan** as the documentation of a state or local government evaluation of natural hazards and the strategies to mitigate such hazards.

In response to the requirements of the Disaster Mitigation Act of 2000 (DMA 2000), which requires local governmental agencies to develop and update their HMP every five years, this plan serves as the 2022 update to the 2016 Gloucester County HMP. During the course of the planning process, the entire plan was updated with a focus on examining changes in vulnerability due to hazard events, reviewing local and county capabilities and how they implement hazard mitigation, and reviewing the mitigation strategy and identifying new initiatives to increase overall resiliency in the County.

Benefits of Mitigation Planning

Mitigation planning forms the foundation for Gloucester County's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. Mitigation planning also allows Gloucester County, as a whole and with participating jurisdictions, to remain eligible for mitigation grant funding for mitigation projects that will reduce the impact of future disaster events. The long-term benefits of mitigation planning include the following:

- An increased understanding of hazards faced by Gloucester County and their inclusive jurisdictions.
- Building more sustainable and disaster-resistant communities.
- Increasing education and awareness of hazards and their threats, as well as their risks.
- Developing implementable and achievable actions for risk reduction in the County and its jurisdictions.



- Building relationships by involving residents, organizations, and businesses.
- Identify implementation approaches that focus resources on the greatest risks and vulnerabilities.
- 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 and damages to human health and structures.
- Reduced repair costs.

Organizations Involved in the Mitigation Planning Effort

Gloucester and the participating jurisdictions intend to implement this HMP with full coordination and participation of County and local departments, organizations and groups, and relevant state and federal entities. Coordination helps to ensure that stakeholders have established communication channels and relationships necessary to support mitigation planning and mitigation actions included in Section 6 (Mitigation Strategy) and in the jurisdictional annexes in Section 9 (Jurisdictional Annexes).

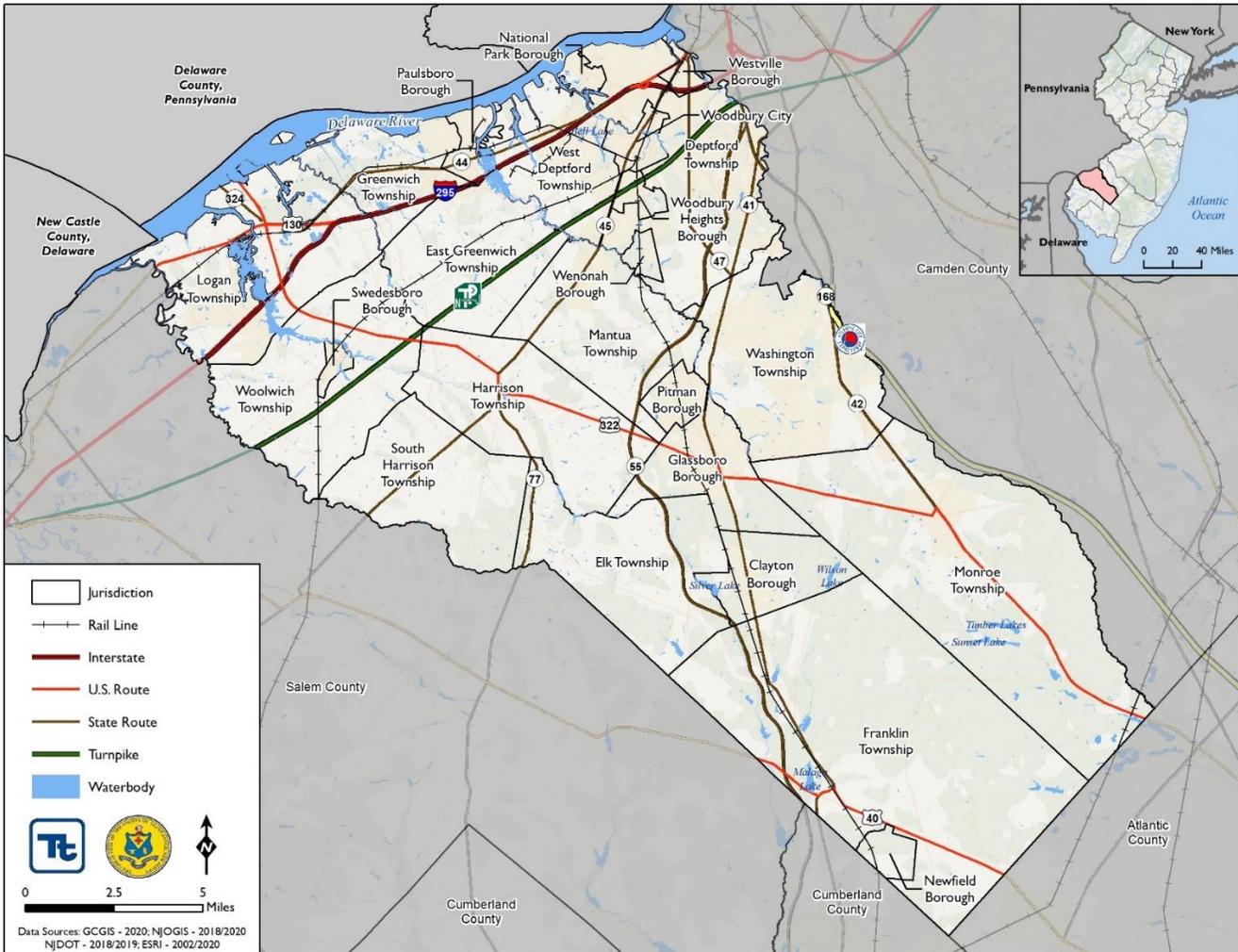
In addition to Gloucester County, all 24 municipal governments in the County, and Rowan University participated in the 2022 planning process as indicated in Table ES-1 below. A map of the Gloucester County HMP planning area is provided in Figure ES-1.

Table ES-1. Participating Gloucester County Jurisdictions

Jurisdictions		
Gloucester County		
Clayton (B)	Mantua (Twp)	Wenonah (B)
Deptford (Twp)	Monroe (Twp)	West Deptford (Twp)
East Greenwich (Twp)	National Park (B)	Westville (B)
Elk (Twp)	Newfield (B)	Woodbury (C)
Franklin (Twp)	Paulsboro (B)	Woodbury Heights (B)
Glassboro (B)	Pitman (B)	Woolwich (Twp)
Greenwich (Twp)	South Harrison (Twp)	Rowan University
Harrison (Twp)	Swedesboro (B)	
Logan (Twp)	Washington (Twp)	



Figure ES-1. Gloucester County, New Jersey



Multiple Agency Support for Hazard Mitigation

Input and support for this planning effort was obtained from a range of agencies, stakeholders, and through public involvement (as discussed in Section 3). Gloucester County Office of Emergency Management, with support from the Steering Committee, provided project management and oversight of the planning process. While participating jurisdictions were asked to identify a primary and alternate local Point of Contact (POC), broad participation by jurisdictional representatives was encouraged and supported throughout the planning process. A list of Steering Committee and municipal POCs is provided in Section 3 (Planning Process), while Appendix B (Participation Matrix) provides further documentation of the broader level of municipal involvement.

This HMP was prepared in accordance with the following regulations and guidance:



- FEMA *Local Mitigation Planning Handbook*, March 2013.
- FEMA *Integrating Hazard Mitigation into Local Planning*, March 1, 2013.
- FEMA *Plan Integration: Linking Local Planning Efforts*, July 2015.
- FEMA *Local Mitigation Plan Review Guide*, October 1, 2011.
- DMA 2000 (Public Law 106-390, October 30, 2000).
- 44 Code of Federal Regulations (CFR) Parts 201 and 206 (including: Feb. 26, 2002, Oct. 1, 2002, Oct. 28, 2003, and Sept. 13, 2004 Interim Final Rules).
- FEMA *How-To Guide for Using HAZUS-MH for Risk Assessment FEMA Document No. 433*, February 2004.
- FEMA *Mitigation Planning How-to Series (FEMA 386-1 through 4, 2002)*, available at: <http://www.fema.gov/fima/planhowto.shtm>.
- FEMA *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards*, January 2013.

Table ES-2 summarizes the requirements outlined in the DMA 2000 Interim Final Rule and provides the section where each is addressed in the HMP.

Table ES-2. FEMA Local Mitigation Plan Review Guide

Plan Criteria	Primary Location in Plan
Prerequisites	
Adoption by the Local Governing Body: §201.6(c)(5)	Section 2; Appendix A
Planning Process	
Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)	Section 3
Risk Assessment	
Identifying Hazards: §201.6(c)(2)(i)	Section 5.2
Profiling Hazards: §201.6(c)(2)(i)	Section 5.4
Assessing Vulnerability: Overview: §201.6(c)(2)(ii)	Section 5.4
Assessing Vulnerability: Identifying Structures: §201.6(c)(2)(ii)(A)	Section 4; Section 5.4
Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)	Section 5.4
Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)	Section 4; Section 9 Annexes
Mitigation Strategy	
Local Hazard Mitigation Goals: §201.6(c)(3)(i)	Section 6; Section 9 Annexes
Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)	Section 6; Section 9 Annexes
Implementation of Mitigation Actions: §201.6(c)(3)(iii)	Section 6; Section 9 Annexes
Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)	Section 6; Section 9 Annexes
Plan Maintenance Process	
Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(i)	Section 7
Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii)	Section 7; Section 9 Annexes
Continued Public Involvement: §201.6(c)(4)(iii)	Section 7



PLANNING PROCESS OVERVIEW

Gloucester County and the participating jurisdictions intend to implement this HMP with full coordination and participation of County and local departments, organizations and groups, and relevant state and federal entities. Coordination helps to ensure that stakeholders have established communication channels and relationships necessary to support mitigation planning and mitigation actions included in Section 6 (Mitigation Strategy) and Section 9 (Jurisdictional Annexes).

During the Gloucester County HMP planning process, the nation, the State of New Jersey and Gloucester County were facing the COVID-19 pandemic. The COVID-19 pandemic was declared a major disaster on March 25, 2020 (DR-4488). The Governor and local governments issued various orders requiring masks and social distancing based upon different infection levels in the State, County, and local governments. Gloucester County has been greatly impacted by the COVID-19 pandemic.

The Gloucester County Office of Emergency Management, Steering Committee members and the planning partners (County departments, municipalities and municipal utility authorities) were facing the COVID-19 pandemic concurrent with completing the update to the HMP. Gloucester County and all planning partners made their best effort to work through this unprecedented time to complete the HMP update and meet FEMA and State requirements. The public and stakeholder engagement strategy was modified to eliminate in-person engagement and meetings. All meetings were held virtually, including the Steering Committee draft review meeting and the draft plan presentation to the public.

The Gloucester County Office of Emergency Management website was updated, and social media and email was utilized to advertise the draft plan posting to residents and stakeholders. Additionally, the website created for the HMP update (<https://www.gloucestercountynjhmp2021.com/>) was maintained throughout the planning process and included the draft plan and a link to provide comments and input. All planning partners were notified that the draft plan was posted for public and stakeholder review, were provided social media posts/images, and were asked to distribute these notifications in their jurisdictions. Lastly, stakeholders that were distributed the stakeholder surveys were notified via email that the draft plan was posted for public review and comment. Public and stakeholder comments received on the draft plan were shared with the planning partners via email. To complete the update to the draft plan prior to submission to NJOEM, teleconference meetings were held in a best effort to complete jurisdictional annexes given staffing constraints during the active pandemic.



MULTIPLE AGENCY SUPPORT FOR HAZARD MITIGATION

Primary responsibility for the development and implementation of mitigation strategies and policies lies with local governments. However, local governments are not alone; various partners and resources at the regional, state, and federal levels are available to assist communities in the development and implementation of mitigation strategies. Within New Jersey, NJOEM is the lead agency providing hazard mitigation planning assistance to local jurisdictions. NJOEM provides guidance to support mitigation planning. In addition, FEMA provides grants, tools, guidance, and training to support mitigation planning.

The Gloucester County Office of Emergency Management and the Steering Committee provided project management and oversight of the planning process. Participating jurisdictions were asked to identify a primary and alternate local point of contact (POC) to be members of the Planning Committee and lead the planning process update on behalf of the jurisdiction. At the start of the planning process, each municipality identified their Floodplain Administrator and requested their involvement. Further, each jurisdiction was encouraged to form a 'mitigation

team' comprised of representatives across departments to ensure broad participation, share the work of the update process and ensure accurate information was captured in their chapter, or annex. The mitigation team worked directly with the primary and alternate POCs and contributed to the jurisdictional annexes presented in Section 9 (Jurisdictional Annex). Together, the Steering Committee and Planning Committee are referred to as the Planning Partnership for the Gloucester County HMP update. A list of Steering Committee and jurisdiction POCs is provided in Section 2 (Planning Process), while Appendices B (Meeting Documentation) and Appendix C (Participation Documentation) provide further documentation of the broader level of municipal involvement. Additional input and support for this planning effort was obtained from a range of agencies and through public and stakeholder involvement (as discussed in Section 2 and presented in Appendix D – Public and Stakeholder Outreach).

Steering Committee (SC) is comprised of County and municipal representatives that guide and lead the HMP update process on behalf of the Planning Partnership.

Planning Committee (PC) is comprised of representatives from each participating jurisdiction (County and municipalities).

Planning Partnership = SC + PC

GOALS AND OBJECTIVES

The planning process included a review and update of the prior mitigation goals and objectives as a basis for the planning process and selection of appropriate mitigation actions addressing all hazards of concern. Further, the goal development process considered the mitigation goals expressed in the 2019 State of New Jersey HMP, as well as other relevant county and local planning documents, as discussed in Section 6 (Mitigation Strategy).



HAZARDS OF CONCERN

Gloucester County and participating jurisdictions reviewed the hazards that caused measurable impacts based on events, losses, and information available since the development of the 2016 Gloucester County HMP and the 2019 State of New Jersey HMP. A list of potential hazards of concern was reviewed by the Planning Partnership, and each was evaluated to identify the hazards of concern for the 2022 update planning process. The list was presented to each of the participating jurisdictions where they evaluated their risk and vulnerability from each hazard of concern. While the overall hazard rankings were calculated for the County and each participating jurisdiction, the specific hazard rankings displayed in each annex reflect jurisdictional input. The hazard risk rankings were used to focus and prioritize individual jurisdictional mitigation strategies.

PLAN INTEGRATION INTO OTHER PLANNING MECHANISMS

Plan integration is the process by which jurisdictions look at their existing planning framework and align efforts with the goal of building a safer, smarter, and more resilient community. It is specific to each community and depends on the vulnerability of the built environment. Community-wide plan integration supports risk reduction through various planning and development measures, both before and after a disaster. Plan integration involves a community's plans, policies, codes, and programs that guide development and the roles of people and government in implementing these capabilities. Successful integration occurs through collaboration among a diverse set of stakeholders in the community (FEMA 2015).

Effective mitigation is achieved when hazard awareness and risk management approaches and strategies are integrated into local planning mechanisms and become an integral part of public activities and decision making. Within Gloucester County, there are numerous existing plans and programs that support hazard risk management and reduction, and thus, it is critical that the 2022 HMP update integrates, coordinates with, and complements those mechanisms.

Section 5 (Capability Assessment) provides 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. Within each jurisdictional annex in Section 9 (Jurisdictional Annexes), the County and each participating jurisdiction identified how they have integrated hazard risk management into their existing planning, regulatory and operational/administrative framework ("existing integration"), and how they intend to promote this integration ("opportunities for future integration").

A further summary of these continued efforts to develop and promote a comprehensive and holistic approach to hazard risk management and mitigation is presented in Section 9 (Jurisdictional Annexes).



IMPLEMENTATION OF PRIOR AND EXISTING LOCAL HAZARD MITIGATION PLANS

Section 6 (Mitigation Strategy) and Section 9 (Jurisdictional Annexes) of the plan present the status of the mitigation projects identified in the 2016 Gloucester County HMP. Numerous projects and programs have been implemented that have reduced hazard vulnerability to assets in the planning area. The County and jurisdictional annexes, as well as plan maintenance procedures in Section 7 (Plan Maintenance), were developed to encourage specific activities. Future actions including integrating hazard mitigation goals into Master Plan updates; reviewing the HMP during updates of codes, ordinances, zoning, and development; and ensuring a more thorough integration of hazard mitigation, with its related benefits into municipal operations, will be completed within the upcoming five-year planning period.

IMPLEMENTATION OF THE PLANNING PROCESS

The planning process and findings are required to be documented in local HMPs. To support the planning process in developing this HMP, Gloucester County and the participating jurisdictions have accomplished the following:

- Developed a Steering Committee and countywide planning partnership with jurisdictions and stakeholders.
- Reviewed the 2016 Gloucester County Hazard Mitigation Plan.
- Identified and reviewed those hazards that are of greatest concern to Gloucester County and its jurisdictions (hazards of concern) to be included in the plan.
- Profiled the relevant hazards.
- Estimated the inventory at risk and potential losses associated with the relevant hazards.
- Reviewed and updated the hazard mitigation goals and objectives.
- Reviewed mitigation strategies identified in the 2016 Gloucester County HMP.
- Developed new mitigation actions to address reduction of vulnerability of hazards of concern.
- Involved a wide range of stakeholders and the public in the plan process.
- Developed mitigation plan maintenance procedures to be executed after obtaining approval of the plan from NJOEM and FEMA.

As required by the DMA 2000, Gloucester County and its participating jurisdictions have informed the public and provided opportunities for public comment and input. Numerous agencies and stakeholders were invited to participate in the planning process by providing input and expertise. Refer to Appendix D (Public and Stakeholder Outreach Documentation) for copies of public service announcements, social media posts and other forms of public and stakeholder outreach conducted.



ADOPTION

Upon FEMA Approval Pending Adoption (APA) status of the 2022 HMP update, Gloucester County and each participating jurisdiction will adopt the plan by resolution of local governing body. An example resolution authorizing adoption of the 2022 Gloucester County Hazard Mitigation Plan may be found in Appendix A (Plan Adoption). The Gloucester County and jurisdiction adoption resolutions will be included in Appendix A upon receipt of the FEMA APA status. Please refer to Section 8 (Planning Partnership) for additional information on plan adoption procedures.

JURISDICTIONAL ANNEXES

Similar to the 2016 HMP, jurisdictional annexes were maintained and updated for the 2022 HMP. The jurisdictional annexes continue to provide a unique, stand-alone guide to mitigation planning for each jurisdiction. The Gloucester County HMP Update is organized so that there is an annex for Gloucester County and for every jurisdiction within the county's borders. Section 9 (Jurisdictional Annexes) includes an annex for every jurisdiction in the County.