

2016 Hazard Mitigation Plan Update

Middlesex County, New Jersey

Final Draft

February 23rd, 2016



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Section 1: Executive Summary

1.1 Overview and Purpose

On October 30, 2000, the President signed into law the Disaster Mitigation Act of 2000, also known as DMA 2000. Among its other features, DMA 2000 established a requirement that in order to remain eligible for federal disaster assistance and grant funds, local and state governments must develop and adopt hazard mitigation plans. On February 26, 2002, the Federal Emergency Management Agency (FEMA) published an Interim Final Rule (IFR) that set forth the guidance and regulations under which such plans are supposed to be developed. The IFR provides detailed descriptions of both the planning process that states and localities are required to observe and the contents of the plan that emerges. In January 2011 the Middlesex County Multi-Jurisdictional Hazard Mitigation Plan (the Plan) was adopted to satisfy these requirements. The original plan was approved by FEMA on December 8, 2010. It was then adopted by the County and became effective January 14, 2011. In the spring of 2015 Middlesex County initiated a plan update to the 2010 version as part of the 5-year maintenance cycle. Of the 25 municipalities that lie within Middlesex County, all 25 participated in the Plan update. All participating municipalities are listed in Section 2.1.2.

Hazard mitigation is often defined as actions taken to reduce the effects of natural hazards on a place and its population. The purpose of a mitigation plan is to identify risks and vulnerabilities within the community and develop a rational actionable strategy to reduce potential future losses. Middlesex County developed the original 2010 Hazard Mitigation Plan because of increasing awareness that natural hazards, especially flood and wind, have the potential to affect people, physical assets and operations in the County. This Plan Update includes a re-evaluation of the original hazards, the risk assessment, mitigation goals, strategies, and mitigation priorities. As part of the update process, these sections of the Plan were re-assessed to identify changes and updates that may have occurred since approval and adoption of the original Plan. The elements of the plan were reviewed in the context of recent storm events, new data on hazards, and the 2014 New Jersey State Hazard Mitigation Plan.

1.2 Organization of the Plan

This Plan Update was reorganized to improve readability and use. There are seven sections, 25 municipal appendices, and nine reference appendices. The municipal appendices contain the specific information for each town in the County, including information on plan participants and process, population, land use and development, critical facilities and infrastructure, hazard identification and risk assessments, a municipal capability assessment, mitigation action strategy, adoption procedures, and the process for plan integration, monitoring, and maintenance.

- Section 1 Executive Summary
- Section 2 Planning Process
- Section 3 County Profile
- Section 4 Hazard Identification and Risk Assessment
- Section 5 Mitigation Action Strategy
- Section 6 Approval and Adoption



- Section 7 Plan Monitoring and Maintenance

1.3 Planning Process

Section 2 provides details about the process that was used to develop this Plan update. The original process and the process for this Plan Update closely followed the guidance in the FEMA 386 series of planning guidance, which recommend a four-stage process for developing mitigation plans.

- Step 1 Organize resources
- Step 2 Assess risks
- Step 3 Develop a mitigation plan
- Step 4 Implement the plan and monitor progress

Step 1, organizing resources, is described in Section 2 (Planning Process) and the individual municipal appendices. These sections include details about who was involved, the processes that were used to establish leadership and advisory groups, and public and other outreach efforts.

Step 2, Section 4 details hazards that have been identified as potential natural hazards in the County and provides a risk assessment, using the best data available. The risk assessment for each hazard is included as part of the “Impact on Life and Property” subsection.

Step 3, development of the Mitigation Plan is described in Section 2 (Planning Process) and Section 5 (Mitigation Action Plan). Section 2 includes details about who was involved, the processes that were used, and the products that were developed. Section 5 includes the goals, objectives, and the actions designed to meet the goals. It also includes an assessment of the capabilities of the County to implement the plan and support the municipalities in their mitigation efforts. These sections are paralleled in each municipal appendix.

Step 4, implementing the Plan, is described in the Mitigation Action Plan in Section 6, which includes details about who is responsible for implementation of specific strategies and actions; and in Section 7, the Plan Monitoring and Maintenance section, which describes long-term implementation through periodic updates and reviews. These sections are included in each municipal appendix.

1.4 Hazards and Risk

1.2.1 Hazards

Section 5 of this Plan update include detailed descriptions of the process that was used to assess and prioritize Middlesex County’s risks from natural hazards, quantitative risk assessments for Middlesex County as a whole, and assessments that are more detailed for certain asset classes. A total of 15 hazards were initially identified and profiled by the HMPSC. A list of these hazards can be found at the beginning of Section 4, Hazard Identification and Risk Assessment.



For each of these hazards, the profiles in Section 4 include:

- Description
- Geographical Extent
- Severity
- Impact on Life and Property (and Vulnerabilities and Risk)
- Occurrence (probability)

In its early meetings related to this HMP update, the HMPSC reviewed the list of 18 hazards included in the 2010 HMP, as well as the list of hazards included in the 2014 New Jersey State Hazard Mitigation Plan. Through these efforts the HMPSC determined that several of the hazards could be combined, including Ice Storms and Severe Weather – Winter Storm. This reorganization reflects new understanding in hazard risks and mitigation strategy. For the same reason, power outages were identified as a separate hazard because of their potential impact on the County.

This list of 15 hazards was presented to the Local Planning Committee in each town to prioritize based on their own experience. They considered factors such as how often the hazard occurred, degree of property and infrastructure damage, number of people impacted, and time of recovery. The ranking of each hazard by the towns is included in each municipal appendix, as well as Section 5. The HMPSC prioritized the hazards for the entire County; this ranking informed the risk assessment of each hazard.

1.2.2 Risk Assessments

A risk calculation is a FEMA requirement. Risk is a numerical indication of potential future damages. Section 4 includes details about calculation methodologies and results of the countywide risk assessments. Additional risk calculations are included in the individual municipality appendices for hazards where the municipality experienced unique risk to a hazard and the data supported a risk assessment at the local level. These hazards include Flood, Hurricanes and Tropical Storms, Wildfire (where relevant), and Dam/Levee Failure (where relevant). Although some towns have unique vulnerability to certain hazards, such as coastal erosion, there was not substantial information to support a risk assessment at the local level. The risk assessments for the other hazards are included in Section 5.

1.5 Goals Objectives and Actions

Section 5 of this Plan describes Middlesex County’s priorities for mitigation actions. The section divides the actions by priority, and describes the funding required, sources of funding, the level of support, and the timing of the action. The section also includes Middlesex County hazard mitigation goals and objectives.

Goals are general guidelines that explain what Middlesex County wants to achieve. Goals are expressed as broad policy statements representing desired long-term results. The HMPSC reviewed the Goals and Objectives of the 2010 HMP and determined that these goals and objectives still comprehensively reflect the County’s current priorities. The broad goals of the 2016 Middlesex County Hazard Mitigation



Plan update are as follows:

- **Goal 1:** Improve **EDUCATION AND OUTREACH** efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact
- **Goal 2:** Improve **DATA COLLECTION, USE, AND SHARING** to reduce the impact of hazards
- **Goal 3:** Improve **CAPABILITIES, COORDINATION, AND OPPORTUNITIES** at municipal and county levels to plan and implement hazard mitigation projects, programs, and activities
- **Goal 4:** Pursue **OPPORTUNITIES TO MITIGATE** repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities

Objectives are well-defined intermediate points in the process of achieving goals (*Objectives* are generally coterminous with *strategies*). Middlesex County mitigation planning objectives for the 2016 Plan update can be found in Section 6.1.2. **Action Items** are the specific steps (projects, policies, and programs) that advance a given objective. They are highly focused, specific, and measurable. Middlesex County mitigation planning objectives for the Plan update can be found in Section 5.4.2.

The municipality working groups supported the same goals as the county-wide plan update, and with a few exceptions generally included the same objectives. Please refer to Section 5 for more information on the goals, objectives, and action items for the 2016 Middlesex County Hazard Mitigation Plan update.

1.6 Approval and Adoption

The Middlesex County Office of Emergency Management, with the endorsement of the HMPSC was responsible for recommending plan approval to Middlesex County Board of Chosen Freeholders. Consistent with that recommendation, the Middlesex County Board of Chosen Freeholders approved the original Hazard Mitigation Plan on January 14, 2011. The 2016 Middlesex County Hazard Mitigation Plan update was submitted to FEMA for approval on [insert date]. Upon approval by FEMA the Plan update was adopted by the Middlesex County Board of Chosen Freeholders on [insert date]. Subsequently, all 25 participating municipalities also adopted the Plan, submitted their adoption resolutions to FEMA, and received their own approval notifications, which are included in Appendix G.

1.7 Monitoring and Updating the Plan

Section 7 (Plan Monitoring and Maintenance) describes the schedule and procedures for ensuring that the Plan update stays current. The section identifies when the Plan must be updated, who is responsible for monitoring the Plan, and ensuring that the update procedures are implemented. This section provides a combination of cyclical dates (oriented toward FEMA requirements) and triggering events that will initiate amendments and updates to the 2016 Plan. The Middlesex County Office of Emergency Management & Preparedness is responsible for monitoring the Plan and initiating the cyclical update process.



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The Plan is available online and can be found at:

<http://www.co.middlesex.nj.us/Government/Departments/PSH/Pages/Middlesex-County-Hazard-Mitigation-Planning-Project.aspx>