

"A Historic Past"



"A Bright Future"

CITY OF DELAWARE CITY

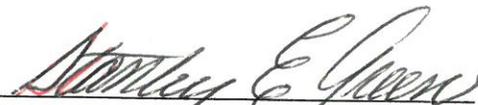
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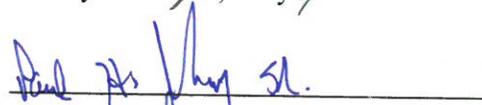
RESOLUTION 15-0817-01

WHEREAS, the Federal Disaster Mitigation Act of 2000, as amended, requires that local governments develop and adopt natural hazard mitigation plans in order to receive certain federal disaster assistance; and

WHEREAS, it is permissible that the City of Delaware City adopts the County mitigation plan as their jurisdiction's mitigation plan and by doing so, meets the requirements for maintaining a local hazard mitigation plan under 44 CFR Part 201, published by the Federal Emergency Management Agency (FEMA) on February 28, 2002, and amended on October 31, 2007;

BE IT HEREBY RESOLVED by the Mayor and Council of the City of Delaware City, this 17th day of August 2015 that the New Castle County Multi-Jurisdictional All Hazard Mitigation Plan dated May 26, 2015 is approved and adopted by and for the City of Delaware City. A copy of the plan is attached to this Resolution.

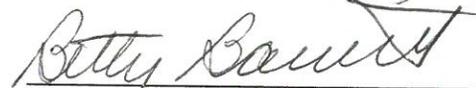

Stanley E. Green, Mayor

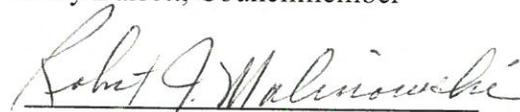

Paul H. Johnson, Sr., Councilmember

Megan Titus, Councilmember


Dawn K. Gwynn, Secretary


Beth Konkus, Councilmember


Betty Barrett, Councilmember


Robert Malinowski, Councilmember

2015 New Castle County
All Hazard Mitigation Plan Update



Plan Executive Summary

8 April, 2015

New Castle County Department of Public Safety
Office of Emergency Management

New Castle County All-Hazard Mitigation Plan Update Summary
April 2015

New Castle County Department of Public Safety
Office of Emergency Management
Cpl. Paul J. Sweeney Public Safety Headquarters
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Introduction

The purpose of the 2015 New Castle County Multi-jurisdictional All Hazard Mitigation Plan Update (hereinafter referred to as the "Plan") is to provide guidance for hazard mitigation in New Castle County unincorporated and incorporated areas as well as the University of Delaware Wilmington and Newark campuses. It identifies hazard mitigation goals, objectives and recommended actions and initiatives for county and municipal government to reduce injury and damage from natural and human-caused hazards.

This Plan meets the requirements for maintaining a local hazard mitigation plan under 44 CFR Part 201, published by the Federal Emergency Management Agency (FEMA) on February 28, 2002, and amended on Oct. 31, 2007.

This Plan keeps New Castle County and its municipalities qualified to obtain all disaster assistance to include all categories of Public Assistance, Individual Assistance and Hazard Mitigation grants available through the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended. The Enhanced State All Hazard Mitigation Plan qualifies the State for hazard mitigation planning and project funding of 20 percent of the federal Stafford Act disaster expenditures. It also keeps the state eligible for the annually funded Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program.

Without this plan, all eligible local jurisdictions – would be ineligible to receive a variety of disaster recovery programs, including the Public Assistance Program to repair or replace damaged public facilities, and the Fire Management Assistance Program to help the state and communities recover the costs of major disasters. However, the State and local communities would remain eligible for certain emergency assistance and Human Services programs available through the Stafford Act.

The Planning Process

This Plan is the product of several hours of work and the effort of people from many organizations. The Plan builds on a number of mitigation planning initiatives since 2009 and provides updates to those initiatives as well as incorporates new initiatives.

Staff from the New Castle County Office of Emergency Management led the development effort of the New Castle County Multi-Jurisdictional All Hazard Mitigation Plan Update. The Coordinator of Emergency Management directed the planning effort, supported by the Vision Planning and Consulting team.

The New Castle County Hazard Mitigation Steering Committee, assembled by the New Castle Office of Emergency Management, provided guidance and assisted with development of the All Hazard Mitigation Plan update, including review of previous hazard mitigation planning initiatives, development of mitigation strategies, an action plan, and an update to the local capability assessment. The members of the Steering Committee provided expertise and perspective to all aspects of the planning process, including, land-use planning, building codes, transportation, and infrastructure, to name a few. Representation included members from the local government, law enforcement, fire service, Licensing & Inspections, emergency management community, state agencies, Public Works, emergency medical professionals, building officials, municipal governments, and private industry.

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Once the Plan is promulgated by County Council, and approved by (FEMA), the Committee will function as an advisor to the Coordinator of Emergency Management, the State Hazard Mitigation Officer, and the State Flood Mitigation Officer on hazard mitigation efforts, including future reviews and revisions.

Participation of local agencies was critical in the development of the Plan. Over 20 stakeholders (listed below) participated by identifying potential vulnerable facilities along with agency-specific goals to address their vulnerabilities through mitigation actions and initiatives.

Village of Arden	NC County Code Official
Village of Ardencroft	NC County Special Services
Village of Ardentown	NC County Police Division
Town of Bellefonte	NC County Land Use
Delaware City	Delaware Emergency Management Agency
Town of Elsmere	NC County Office of Emergency Management
Town of Middletown	Delaware Department of Transportation
City of Newark	DNREC
City of New Castle	NC County Council
Town of Newport	Members of local print media
Town of Odessa	Citizens of NCC
Town of Townsend	NCC Planning Board Members
NC County Community Services	NCC Office of Law

Coordination of Local Planning

There was close coordination at the State, local government, and University levels. This approach facilitated the integration of the planning processes. County-level goals and actions were linked to the goals established in the state Plan. This allowed more effective coordination of municipal, county and state goals. County goals will provide valuable feedback to state officials as they developed broader state-level mitigation goals during their next update. County-level risk assessments were conducted in a manner that provided updates to the existing vulnerabilities and presented an opportunity for the State to provide input during the planning process.

Prioritizing Recipients for Hazard Mitigation Grants

The process used to review, evaluate and select projects for hazard mitigation grants is built on years of public participation. The State's Hazard Mitigation Grant Program uses a competitive system where both Federal and State criteria are used to evaluate and recommend projects for funding. Projects recommended for funding are those that best document their ability to reduce future impacts of natural disasters as well as demonstrate cost-effectiveness through a benefit-cost analysis. Only projects with a minimum benefit-cost ratio of 1-to-1 receive further consideration by a review committee. Typically, hazard mitigation funds following a disaster are available on a competitive basis to all eligible agencies and organizations statewide.

Maintaining the Plan

The New Castle County Multi-Jurisdictional All Hazard Mitigation Plan is a living document and will be reviewed, updated and adopted by county officials and submitted to FEMA for approval every five years. The Plan will be revised more frequently if conditions under which the Plan was developed materially

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change as a result of new or revised policy, a major disaster, or availability of funding.

Participants in the maintenance of this Plan include the NCC Hazard Mitigation Council and representatives of local jurisdictions whose hazard mitigation plans influenced the Plan's development.

Review of the Plan can take place in three ways:

- Annually, for progress made on mitigation actions and projects identified in the Mitigation Strategy.
- After each presidentially declared disaster, to look for areas where the Plan should be refocused due to the impact of the disaster.
- Every five years before the county plan is resubmitted for approval to FEMA.

The process used to monitor mitigation measures is similar to the one used to monitor, evaluate and update the content of the plan. Actions and projects identified in the mitigation strategies will be reviewed annually at the Hazard Mitigation Workshop held in conjunction with DEMA, DNREC, New Castle County, Wilmington, County municipalities and stakeholders in mitigation projects. Local agencies will submit brief progress reports annually. NCC OEM will track the overall progress of actions and projects identified in the plan.

Risk Assessment

The NCC Hazard Identification, Analysis, and Vulnerability Assessment, completed in August 2015 identified nine natural and three human-caused hazards that have the greatest potential to adversely affect the people, environment, economy and property of New Castle County, Delaware and incorporated areas. Hazards that were considered include: Flood, Hurricanes and Coastal Storms, Severe Thunderstorms and Tornadoes, Drought/Extreme Heat, Hail, Winter Storms and Freezes, Hail, Earthquake, Dam/Levee Failure, Terrorism, Hazardous Materials, and Energy Pipeline Failures.

Overall Risk Ranking for New Castle County

Probability of Future Events -The final step of any hazard analysis is calculating the likelihood of future events. Given the number of events that have occurred in the past and the time period over which those events have occurred, one can calculate the number of events that occur per year. This gives a sense of the probability of future occurrences. The results of this calculation for New Castle County are presented in **Table 4.2-9**.

Hazard	Rank
Coastal Flood	1
Riverine Flood	2
Hurricane Wind	3
Earthquake	4
Winter Storm	5
Severe Thunderstorm	6
Extreme Temperatures	7
Tornado	8
Lightning	9
Hail	10
Drought	11

New Castle County Mitigation Goals and Objectives

The Hazard Mitigation Advisory Committee supported the review of the goals, objectives, mitigation actions, and initiatives (mitigation strategy).

Mission - Develop and maintain a comprehensive pre- and post-disaster hazard mitigation program guided by the effective use of technology and data, improved communications and warnings, the purchase of

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necessary equipment, sound planning, the adoption of codes, enhanced transportation networks, expanded education and outreach efforts, strengthened public facilities and infrastructure and the implementation of projects designed to reduce the vulnerability of individuals, families, households, businesses, infrastructure, and critical facilities to the negative effects of natural hazards.

The mitigation actions address or solve statewide mitigation issues or problems. The steering Committee revisited the following mission statement for the New Castle County All Hazard Mitigation Plan and the following goals and for hazard mitigation. The following goals and mitigation actions represent a comprehensive approach taken by the County and its municipalities. The goals have remained unchanged for the most part since the 2009 Plan. However, the goals have been reworded to focus on natural hazards rather than natural and human caused hazards. A new goal (goal #11) has been added to the list of existing goals.

Goal #1 New Castle County and its municipalities will continue to maximize the use of technology (GIS, remote sensing, etc.) and data to develop sound mitigation policies and projects.

Goal #2 New Castle County and its municipalities will continue to emphasize the use of sound planning practices to reduce the impacts of natural hazards.

Goal #3 New Castle County and its municipalities will continue to acquire or upgrade existing equipment to improve disaster readiness and implement hazard mitigation measures.

Goal #4 New Castle County and its municipalities will continue to improve communication and warning systems to better protect lives and property from the potential impacts of natural hazards.

Goal #5 New Castle County and its municipalities will continue to enhance and implement local codes and ordinances at higher standards to reduce the impacts of natural hazards while considering a holistic approach as well as at the project level.

Goal #6 New Castle County and its municipalities will continue to adopt transportation-related measures to improve evacuation, sheltering and security concerns.

Goal #7 New Castle County and its municipalities will continue to enhance education and outreach strategies to improve the dissemination of information to the public regarding hazards, including the steps that can be taken to reduce hazard impacts.

Goal#8 New Castle County and its municipalities will continue to adopt mitigation measures that better protect critical facilities and infrastructure from the impacts of natural hazards.

Goal#9 New Castle County and its municipalities will continue to identify and implement sound hazard mitigation projects.

Goal#10 New Castle County and its municipalities will ensure that sound stormwater management principles are implemented throughout the County.

Goal #11 New Castle County and its municipalities will continue to identify potential funding sources and partnerships for projects.

The following goals from the 2011 University of Delaware Disaster Resistant University Hazard Mitigation Plan were updated at the Committee meeting on 9 January 2015 and represent a comprehensive approach

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taken by the University and its departments. One objective has been deleted, 3 old actions have been moved to the goals and objectives section from the 2011 Disaster Resistant University Plan.

University of Delaware Goals and Objectives

Goal #1 - Protect the health, safety and wellbeing of our student body, faculty and staff from negative impacts of a disaster through the implementation of mitigation projects at all our campuses

- Objective 1.1: Support funding reasonable mitigation projects which look to improve all aspects of safety on UD campuses

Goal #2 – Protect UD property from the adverse affects of disasters through mitigation projects at all our campuses

- Objective 2.1: Support funding reasonable mitigation projects which look to reduce loss to the University
- Objective 2.2: Encourage the incorporation of reasonable mitigation projects and concepts into new construction on UD campuses
- Objective 2.3: Ensure the redundancy of power systems that affect buildings, equipment, and research projects.

Goal #3 – Incorporate mitigation aspects into our already existing partnerships with the City of Newark, County of New Castle and State of Delaware

- Objective 3.1: Partner with various levels of government on the education and outreach of disaster related messages to joint audiences

Goal #4 – Help reinforce and augment the University's mission to prepare for, respond to and recover from disaster events affecting any of our campuses

- Objective 4.1: Encourage emergency response planning on both the academic and administrative sides of the University
- Objective 4.2: Continue to foster existing emergency planning and response partnerships with all levels of government

Goal #5 – Incorporate mitigation planning into University-sponsored construction.

- Objective 5.1: Increase the overall preparedness level of the University community through outreach and training of both the student and the employee population
- Objective 5.2: Work with the University Facilities Planning and Construction Unit to ensure hazard considerations are included in all new facility planning

Mitigation actions from the 2004 Plan were reviewed in detail to determine the status of each action (completed, cancelled, in progress, not started, ongoing, etc.) Specific mitigation actions are contained in Section 6.2 of the Plan. Of the actions developed in the 2009 plan, a total of 61 actions have been completed in the municipalities and unincorporated areas of the county, and nine actions have been cancelled. The majority of the remaining actions that have been carried over into the 2009 update have not yet been implemented.