

Section 1: Introduction

1.1 Background

The Albemarle Region, which is located in the Northeast corner of North Carolina, is comprised of Camden, Chowan, Currituck, Dare, Gates, Hertford, Pasquotank and Perquimans counties, is vulnerable to a wide range of natural and manmade hazards. These hazards threaten the life and safety of the Region's residents, and have the potential to damage or destroy both public and private property and disrupt the local economy and overall quality of life.

Natural hazards are a part of the world in which we live. Floods, hurricanes, tornadoes, winter storms, wildfires, and other hazardous events are natural phenomena. Natural hazards are inevitable and there is little humans can do to control force and intensity. However, how the natural and the built environments interact with hazards is quite different.

The natural environment is amazingly recuperative from the forces of wind, rain, fire and earth and can regenerate with resiliency, restoring habitat and ecosystems in time for the next generation of plant and animal life to begin anew. The built environment, however, is not as resilient. Natural disasters occur when human activity in the form of buildings, infrastructure, agriculture and other land uses are located in the path of the destructive forces of nature. Since the built environment is more susceptible to natural hazards and cannot recuperate like the natural environment, communities impacted by a natural hazard often recover only over a long period of time and at great social and economic cost.

In recent years, the frequency and impact of natural disasters have increased not because natural hazards occur more frequently but because more people are choosing to live and work in locations that put them and their property at risk. A tremendous number of Americans have chosen to live in areas at risk from coastal storms, repeated flooding, and seismic activity, often with little or no attention to the need for sound building practices or land use policy. As a result, risk of disasters occurring in the wake of natural hazards has grown exponentially. Likewise, while floods have caused a greater loss of life and property and have disrupted more families and communities than all other natural hazards combined, the rate of development in flood-prone areas continues to escalate, putting more people and property in danger.

Manmade hazards can be categorized as technological hazards or terrorism. FEMA Guide 386-7 "Integrating Manmade Hazards into Mitigation Planning" provides the following definitions: Technological hazards refer to the origins of incidents that can arise from human activities such as the manufacturing, transportation, storage and use of hazardous materials. Terrorism refers to the use of Weapons of Mass Destruction (WMD), including biological, chemical, nuclear and radiological weapons; arson, incendiary, explosive and armed attacks; industrial sabotage and intentional hazardous materials releases; and "cyber-terrorism".

With the increase in manmade hazard events in recent years, the need to incorporate these new threats into mitigation is becoming more and more evident. Events such as the 1995 bombing of the Murrah Federal Building, the 1996 Olympic Park Bombing, the 2001 Anthrax attacks, the 2001 hazardous materials train derailment, the September 11th attacks on Washington and New York, the 2002 Beltway sniper attacks, the 2009 mass casualty shooting at Fort Hood, the 2012 Sandy Hook shootings, the 2013 Boston Marathon Bombing, and a multitude of smaller-scale incidents and accidents reinforce the need for communities to reduce their vulnerabilities to future terrorist acts and technological disasters.

While natural and manmade hazards cannot be prevented, local communities can use various means to reduce the vulnerability of people and property to damage. Communities can reduce exposure to future natural hazards by managing the location and characteristics of both the existing and future built environment. By utilizing location and construction techniques, a community can mitigate negative impacts and reduce future damage to both human lives and property.

One of the most effective means that a community can use to implement a comprehensive approach to hazard mitigation is to develop, adopt, and update as needed, a local hazard mitigation plan. A mitigation plan establishes the broad local vision and guiding principles for reducing hazard risk, and further proposes specific mitigation actions to eliminate or reduce identified vulnerabilities.

Hazard mitigation is defined as “any action taken to eliminate or reduce the long-term risk to human life and property from natural and technological hazards. Mitigation activities are ongoing and overlap all phases of emergency management.

Each of twenty five jurisdictions participating in the development of the Albemarle Regional Hazard Mitigation Plan have existing hazard mitigation plans that they have developed over the years, as described in Section 2: *Planning Process*. The Albemarle Regional Hazard Mitigation Plan is an effective means to incorporate hazard mitigation principles and practices into the standard government activities and functions of the eight counties and 17 municipalities participating in this Plan. At its foundation, the Plan recommends specific actions and strategies to protect our built environment from the forces of nature and to protect the residents of the Albemarle Region from losses to those hazards that pose the greatest risk.

Disaster Legislation

Guidance for hazard mitigation planning comes from the Disaster Mitigation Act of 2000 (DMA 2000), which amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing Section 409 and replacing it with Section 322. This amendment placed a new emphasis on the coordination of State and local planning by requiring the development and submission of a hazard mitigation plan not only by the State, but also local governments as a condition of receiving various types of pre and post disaster assistance for mitigation efforts as identified under the Stafford Act. This assistance includes funding under the Hazard Mitigation Grant Program (HMGP) as well as the Pre-Disaster Mitigation (PDM) Program.

Additional grant funding is also available through the Severe Repetitive Loss (SRL) program and the Repetitive Flood Claim (RFC) program. These grant programs were created as part of the Flood Insurance Reform Act of 2004. The reform act also modified the existing Flood Mitigation Assistance (FMA) program. One of the key requirements of this act is that a FEMA approved Hazard Mitigation Plan is now required if communities wish to be considered for these funding programs.

This Plan was prepared in coordination with FEMA and the North Carolina Division of Emergency Management (NCEM) to ensure that it meets all applicable planning requirements. This includes conformance with FEMA's latest *Local Mitigation Planning Handbook* (released March 2013) and *Local Mitigation Plan Review Guide* (released October 2011). FEMA Guide 386-7, *Integrating Manmade Hazards into Mitigation Planning* as also consulted. A *Local Hazard Mitigation Plan Update Checklist*, found in Appendix B, provides a summary of FEMA and NCEM's current minimum standards of acceptability and notes the location within the Plan where each planning requirement is met.

1.2 Purpose

The purpose of this Hazard Mitigation Plan is:

- To demonstrate a local commitment to hazard mitigation planning principles in the Albemarle region;
- To reduce natural hazard vulnerability by reducing the potential for future damages and economic losses;
- To speed recovery and redevelopment following future natural hazard events;
- To qualify for additional grant funding, in both the pre-disaster and post-disaster environment; and
- To comply with federal and state requirements for local hazard mitigation plans.

1.3 Scope

This Hazard Mitigation Plan will be updated and maintained to continually address those hazards determined to be of high and moderate risk through the detailed vulnerability assessment for the Albemarle Region (see Section 4: Hazard Identification & *Risk Assessment*). Other hazards that pose a low or negligible risk will continue to be evaluated during future updates to this plan, but they may not be fully addressed until they are determined to be of high or moderate risk to the Albemarle Region.

The geographic scope (i.e. the "planning area") for this plan includes all incorporated and unincorporated areas of Camden, Chowan, Currituck, Dare, Gates, Hertford, Pasquotank and Perquimans counties. Participating jurisdictions are shown in **Table 1.1**.

Table 1.1: PARTICIPATING JURISDICTIONS IN THE ALBEMARLE REGIONAL HAZARD MITIGATION PLAN

Camden County	Chowan County	Currituck County	Dare County	Gates County	Hertford County	Pasquotank County	Perquimans County
	Town of Edenton		Town of Duck	Town of Gatesville	Town of Ahoskie	City of Elizabeth City	Town of Hertford
			Town of Kill Devil Hills		Town of Cofield		Town of Winfall
			Town of Kitty Hawk		Town of Como		
			Town of Manteo		Town of Harrellsville		
			Town of Nags Head		Town of Murfreesboro		
			Town of Southern Shores		Town of Winton		

These 25 participating jurisdictions have previously been covered under eight separate county level plans. The decision was made to create one regional mitigation plan in order to accomplish the following planning goals:

- Support a more holistic regional planning effort, taking into account shared concerns and shareable resources;
- Conform to NCEM’s preference for regional hazard mitigation planning in the state; and
- Leverage available funding and resources for mitigation planning.

1.4 Authority

This Hazard Mitigation Plan has been adopted by all participating jurisdictions in accordance with the authority and police powers granted to counties as defined by the State of North Carolina (N.C.G.S., Chapter 153A). This Hazard Mitigation Plan has also been adopted by all participating incorporated municipal jurisdictions under the authority granted to cities and towns as defined by the State of North Carolina (N.C.G.S., Chapter 160A). Copies of all local resolutions to adopt the Plan are included in Appendix A.

This Plan was developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans. The Plan shall be monitored and updated (See Section 8 – Plan Maintenance Procedures) on a routine basis to maintain compliance with the following legislation:

- Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-

390) and by FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, at 44 CFR Part 201.

- North Carolina General Statutes, Chapter 166A: North Carolina Emergency Management Act, as amended by Senate Bill 300: An Act to Amend the Laws Regarding Emergency Management as Recommended by the Legislative Disaster Response and Recovery Commission (2001).

1.5 Plan Overview

This Hazard Mitigation Plan is divided into eight major sections, each of which is described briefly below. The Plan also includes several appendices for additional or supplemental items not included in the main body of the Plan, including copies of local adoption resolutions (Appendix A), a completed *Local Hazard Mitigation Plan Update Checklist* (Appendix B), Public Outreach Strategy (Appendix C), public participation survey results (Appendix D), copies of meeting agendas, sign-in sheets, and PowerPoint slides (Appendix E), etc.

This *Introduction* (Section 1) provides background on hazard mitigation planning and the Disaster Mitigation Act of 2000, and defines the purpose, scope, and authority of the Plan as adopted by all participating jurisdictions. It also provides the following outline of each section making up the Plan.

The *Planning Process*, found in Section 2, fully documents the process by which the Albemarle Region prepared this regional hazard mitigation plan as an update to its eight existing county level plans. This includes a description of the key steps involved in the processes followed, who was involved (i.e., the members of the Hazard Mitigation Planning Committee) and full descriptions of community meetings and workshops, how the public and other stakeholders were notified and involved, and how each of the municipal jurisdictions participated in the process.

The *Regional Profile*, located in Section 3, describes the general makeup of the Albemarle Region, including its counties and local municipalities, including relevant geographic, demographic, and economic characteristics. In addition, building characteristics and land use patterns are discussed along with general historical disaster data. This baseline information provides context for the region-wide planning area and thereby assists the planning team in recognizing the social, environmental, and economic factors that ultimately play a role in determining community vulnerability to natural hazards.

Hazards Identification, found in Section 4, serves to identify the hazards that impact Albemarle Region. This section also looks at available historical data from past hazard occurrences and establishes hazard-by-hazard profiles.

The *Vulnerabilities Assessment*, found in Section 5, analyzes and assesses the Albemarle Region's overall risk to natural hazards. The vulnerabilities assessment also attempts to define any hazard risks that may uniquely or exclusively affect localized areas within the participating jurisdictions.

The *Capability Assessment*, located in Section 6, includes a comprehensive examination and evaluation of individual capacities to implement mitigation strategies, a review of local government authority for hazard mitigation planning, a description of each local government organization and staff, a review of technical and fiscal capabilities, and a summary statement of each community's local commitment to hazard mitigation planning. The purpose of this step was to identify any gaps or weaknesses in local programs or regulations, to determine if any existing programs/regulations had the effect of hindering hazard mitigation, and to identify programs/regulations that could be revised or amended to strengthen local hazard mitigation efforts. The *Community Profile*, *Risk Assessment*, and *Capability Assessment* collectively serve as a basis for determining the goals for the Hazard Mitigation Plan, each contributing to the development, adoption, and implementation of a meaningful *Mitigation Strategy* that is based on accurate background information.

The *Mitigation Strategy*, found in Section 7, consists of regional goal statements as well as specific mitigation actions for each local government jurisdiction participating in the planning process, along with a set of regional mitigation actions to be implemented by the Albemarle Hazard Mitigation Planning Committee. The *Mitigation Strategy* provides the foundation for detailed *Mitigation Action Plans*, found in Section 7, that link specific mitigation actions for each jurisdiction to locally assigned implementation mechanisms and target completion dates. Together, these sections are designed to make the Plan both strategic (through the identification of long-term goals) and also functional through the identification of short-term and immediate actions that will guide day-to-day decision-making and project implementation.

In addition to the identification and prioritization of possible mitigation projects, emphasis is placed on the use of program and policy alternatives to help make the Albemarle Region less vulnerable to the damaging forces of nature while improving the economic, social, and environmental health of the community. The concept of multi-objective planning was emphasized throughout the planning process, particularly in identifying ways to link hazard mitigation policies and programs with complimentary community goals related to housing, economic development, downtown revitalization, recreational opportunities, transportation improvements, environmental quality, land development, and public health and safety.

The *Plan Maintenance Procedures*, found in Section 8, includes the measures each participating jurisdiction will take to ensure the Plan's continuous long-term implementation. The procedures also include the manner in which the Plan will be regularly evaluated and updated to remain a current and meaningful planning document.

Appendices are also included and contain supporting documentation from the planning process as noted throughout the plan.