

SECTION 1

INTRODUCTION

This section provides a general introduction to the Wake County Multi-Jurisdictional Hazard Mitigation Plan. It consists of the following five subsections:

- ◆ 1.1 Background
- ◆ 1.2 Purpose
- ◆ 1.3 Scope
- ◆ 1.4 Authority
- ◆ 1.5 Summary of Plan Contents

1.1 BACKGROUND

Natural hazards, such as floods, hurricanes and winter storms are a part of the world around us. Their occurrence is natural and inevitable, and there is little we can do to control their force and intensity. We must consider these hazards to be legitimate and significant threats to human life, safety, and property.

Wake County is located in the eastern portion of the Piedmont area of North Carolina. The County includes the Town of Apex, Town of Cary, Town of Fuquay-Varina, Town of Garner, Town of Holly Springs, Town of Knightdale, Town of Morrisville, City of Raleigh, Town of Rolesville, Town of Wake Forest, Town of Wendell, Town of Zebulon, and all unincorporated areas within the county. This area is vulnerable to a wide range of natural hazards such as hurricanes, floods, severe thunderstorms, and tornados. It is also vulnerable to human-caused hazards, including nuclear accidents and hazardous material spills. These hazards threaten the life and safety of residents in the Wake County and have the potential to damage or destroy both public and private property, disrupt the local economy, and impact the overall quality of life of individuals who live, work, and vacation in Wake County.

While the threat from hazardous events may never be fully eliminated, there is much we can do to lessen their potential impact upon our community and our citizens. By minimizing the impact of hazards upon our built environment, we can prevent such events from resulting in disasters. The concept and practice of reducing risks to people and property from known hazards is generally referred to as *hazard mitigation*.



FEMA Definition of Hazard Mitigation:

“Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.”

Hazard mitigation techniques include both structural measures (such as strengthening or protecting buildings and infrastructure from the destructive forces of potential hazards) and non-structural measures (such as the adoption of sound land use policies and the creation of public awareness programs). It is widely accepted that the most effective mitigation measures are implemented at the

local government level, where decisions on the regulation and control of development are ultimately made. A comprehensive mitigation approach addresses hazard vulnerabilities that exist today and in the foreseeable future. Therefore, it is essential that projected patterns of future development are evaluated and considered in terms of how that growth will increase or decrease a community's overall hazard vulnerability.

A key component in the formulation of a comprehensive approach to hazard mitigation is to develop, adopt, and update a local hazard mitigation plan as needed. A hazard mitigation plan establishes the broad community vision and guiding principles for reducing hazard risk, and further proposes specific mitigation actions to eliminate or reduce identified vulnerabilities.

The county and each of the twelve municipalities participating in the development of the Wake County Multi-Jurisdictional Hazard Mitigation Plan have an existing hazard mitigation plan that has evolved over the years, as described in Section 2: *Planning Process*. This multi-jurisdictional plan draws from each of the previous plans to document the efforts of each jurisdiction to incorporate hazard mitigation principles and practices into routine government activities and functions. *At its core, the Plan recommends specific actions to minimize hazard vulnerability and protect residents from losses to those hazards that pose the greatest risk.* These mitigation actions go beyond simply recommending structural solutions to reduce existing vulnerability, such as elevation, retrofitting, and acquisition projects. Local policies on community growth and development, incentives for natural resource protection, and public awareness and outreach activities are examples of other actions considered to reduce Wake County's vulnerability to identified hazards. The Plan remains a living document, with implementation and evaluation procedures established to help achieve meaningful objectives and successful outcomes over time.

1.1.1 The Disaster Mitigation Act and the Flood Insurance Reform Acts

In an effort to reduce the Nation's mounting natural disaster losses, the U.S. Congress passed the Disaster Mitigation Act of 2000 (DMA 2000) in order to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Section 322 of DMA 2000 emphasizes the need for state, local and Tribal government entities to closely coordinate on mitigation planning activities and makes the development of a hazard mitigation plan a specific eligibility requirement for any local or Tribal government applying for federal mitigation grant funds. In short, if a jurisdiction is not covered by an approved mitigation plan, it will not be eligible for mitigation grant funds. These funds include the Hazard Mitigation Grant Program (HMGP) and the Pre-Disaster Mitigation (PDM) program, both of which are administered by the Federal Emergency Management Agency (FEMA) under the Department of Homeland Security. Communities with an adopted and federally-approved hazard mitigation plan thereby become pre-positioned and more apt to receive available mitigation funds before and after the next disaster strikes.

Additionally, the Flood Insurance Reform Act of 2004 (P.L. 108-264) created two new grant programs, Severe Repetitive Loss (SRL) and Repetitive Flood Claim (RFC), and modified the existing Flood Mitigation Assistance (FMA) program. One of the requirements of this Act is that a FEMA-approved Hazard Mitigation Plan is now required if communities wish to be eligible for these FEMA mitigation programs. However, as of early 2014, these programs have been folded into a single Flood Mitigation Assistance (FMA) program.

This change was brought on by new, major federal flood insurance legislation that was passed in 2012 under the Biggert-Waters Flood Insurance Reform Act (P.L. 112-141) and the subsequent Homeowner

Flood Insurance Affordability Act in 2014 which revised Biggert-Waters. These acts made several changes to the way the National Flood Insurance Program is to be run, including raises in rates to reflect true flood risk and changes in how Flood Insurance Rate Map (FIRM) updates impact policyholders. These acts further emphasize Congress’ focus on mitigating vulnerable structures.

The Wake County Multi-Jurisdictional Hazard Mitigation Plan has been prepared in coordination with FEMA Region IV and the North Carolina Division of Emergency Management (NCEM) to ensure that the Plan meets all applicable FEMA and state requirements for hazard mitigation plans. A *Local Mitigation Plan Review Tool*, found in Appendix C, provides a summary of federal and state minimum standards and notes the location where each requirement is met within the Plan.

1.2 PURPOSE

The purpose of the Wake County Multi-Jurisdictional Hazard Mitigation Plan is to:

- ◆ Merge the existing Wake County, Town of Apex, Town of Cary, Town of Fuquay-Varina, Town of Garner, Town of Holly Springs, Town of Knightdale, Town of Morrisville, City of Raleigh, Town of Rolesville, Town of Wake Forest, Town of Wendell, and Town of Zebulon hazard mitigation plans into one multi-jurisdictional plan;
- ◆ Complete update of existing plans to demonstrate progress and reflect current conditions;
- ◆ Increase public awareness and education about the plan and the planning process;
- ◆ Maintain grant eligibility for participating jurisdictions; and
- ◆ Maintain compliance with state and federal legislative requirements for local hazard mitigation plans.

1.3 SCOPE

The focus of the Wake County Multi-Jurisdictional Hazard Mitigation Plan is on those hazards determined to be “high” or “moderate” risks to Wake County, as determined through a detailed hazard risk assessment. Other hazards that pose a “low” or “negligible” risk will continue to be evaluated during future updates to the Plan, but they may not be fully addressed until they are determined to be of high or moderate risk. This enables the participating jurisdictions to prioritize mitigation actions based on those hazards which are understood to present the greatest risk to lives and property.

The geographic scope (i.e., the planning area) for the Plan includes all of Wake County including all of its incorporated jurisdictions (see below) and unincorporated areas. **Table 1.1** indicates the participating jurisdictions.

TABLE 1.1: PARTICIPATING JURISDICTIONS IN THE WAKE COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Wake County	
Apex	Morrisville
Cary	Raleigh
Fuquay-Varina	Rolesville

Garner	Wake Forest
Holly Springs	Wendell
Knightdale	Zebulon

1.4 AUTHORITY

The Wake County Multi-Jurisdictional Hazard Mitigation Plan has been developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans and has been adopted by each participating jurisdiction in accordance with standard local procedures. Copies of the adoption resolutions for each participating jurisdiction are provided in Appendix A. The Plan shall be routinely monitored and revised to maintain compliance with the following provisions, rules, and 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);
- ◆ FEMA's Final Rule published in the Federal Register, at 44 CFR Part 201 (201.6 for local mitigation planning requirements and 201.7 for Tribal planning requirements); and
- ◆ Flood Insurance Reform Act of 2004 (P.L. 108-264), Biggert-Waters Flood Insurance Reform Act of 2012 (P.L. 112-141) and the Homeowner Flood Insurance Affordability Act.

1.5 SUMMARY OF PLAN CONTENTS

The contents of this Plan are designed and organized to be as reader-friendly and functional as possible. While significant background information is included on the processes used and studies completed (i.e., risk assessment, capability assessment), this information is separated from the more meaningful planning outcomes or actions (i.e., mitigation strategy, mitigation action plan).

Section 2, **Planning Process**, provides a complete narrative description of the process used to prepare the Plan. This includes the identification of participants on the planning team and describes how the public and other stakeholders were involved. It also includes a detailed summary for each of the key meetings held, along with any associated outcomes.

The **Community Profile**, located in Section 3, provides a general overview of Wake County, including prevalent geographic, demographic, and economic characteristics. In addition, building characteristics and land use patterns are discussed. This baseline information provides a snapshot of the planning area and helps local officials recognize those social, environmental, and economic factors that ultimately play a role in determining the region's vulnerability to hazards.

The Risk Assessment is presented in three sections: Section 4, **Hazard Identification**; Section 5, **Hazard Profiles**; and Section 6, **Vulnerability Assessment**. Together, these sections serve to identify, analyze, and assess hazards that pose a threat to Wake County. The risk assessment also attempts to define any hazard risks that may uniquely or exclusively affect specific areas of Wake County.

The Risk Assessment begins by identifying hazards that threaten Wake County. Next, detailed profiles are established for each hazard, building on available historical data from past hazard occurrences, spatial extent, and probability of future occurrence. This section culminates in a hazard risk ranking

based on conclusions regarding the frequency of occurrence, spatial extent, and potential impact highlighted in each of the hazard profiles. In the vulnerability assessment, FEMA's Hazus^{®MH} loss estimation methodology is used in conjunction with GIS analysis to evaluate known hazard risks by their relative long-term cost in expected damages. In essence, the information generated through the risk assessment serves a critical function as the participating jurisdictions in Wake County seek to determine the most appropriate mitigation actions to pursue and implement—enabling them to prioritize and focus their efforts on those hazards of greatest concern and those structures or planning areas facing the greatest risk(s).

The **Capability Assessment**, found in Section 7, provides a comprehensive examination of Wake County's capacity to implement meaningful mitigation strategies and identifies opportunities to increase and enhance that capacity. Specific capabilities addressed in this section include planning and regulatory capability, staff and organizational (administrative) capability, technical capability, fiscal capability, and political capability. Information was obtained through the use of a detailed survey questionnaire and an inventory and analysis of existing plans, ordinances, and relevant documents. The purpose of this assessment is to identify any existing gaps, weaknesses, or conflicts in programs or activities that may hinder mitigation efforts and to identify those activities that should be built upon in establishing a successful and sustainable local hazard mitigation program.

The *Risk Assessment*, and *Capability Assessment* collectively serve as a basis for determining the goals for the Wake County Multi-Jurisdictional Hazard Mitigation Plan, each contributing to the development, adoption, and implementation of a meaningful and manageable *Mitigation Strategy* that is based on accurate background information.

The **Mitigation Strategy**, found in Section 8, consists of broad goal statements as well as an analysis of hazard mitigation techniques for the jurisdictions participating in the Wake County Multi-Jurisdictional Hazard Mitigation Plan to consider in reducing hazard vulnerabilities. The strategy provides the foundation for a detailed **Mitigation Action Plan**, found in Section 9, which links 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 functional, through the identification of immediate and short-term 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 Wake County less vulnerable to the damaging forces of hazards 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, where possible, hazard mitigation policies and programs with complimentary community goals related to disaster recovery, housing, economic development, recreational opportunities, transportation improvements, environmental quality, land development, and public health and safety.

Plan Maintenance, found in Section 10, includes the measures that the jurisdictions participating in the plan 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.

SECTION 1: INTRODUCTION

Municipality-specific **Annexes** have been created to include specific information for each municipality. Topics covered in the annexes include community profile, risk assessment, vulnerability, and capability assessment information. The mitigation actions relevant for each particular municipal jurisdiction are also included in the Annex.