Cape Fear
Regional Hazard Mitigation Plan
2020

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SECTION 1: INTRODUCTION

This section provides a general introduction to the Cape Fear Regional Hazard Mitigation Plan. It consists of the following five subsections:

- 1.1 Background
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- 1.4 Authority
- 1.5 Summary of Plan Contents

1.1 Background

Natural hazards, such as winter storms, floods, and tornadoes, 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.

The Cape Fear Region is located in the western part of North Carolina and includes the counties of Chatham, Lee, Harnett, Johnston, Moore and the municipal governments within those counties. This area is vulnerable to a wide range of natural hazards such as winter storms, severe thunderstorms, and floods. It is also vulnerable to human-caused hazards, including chemical releases and hazardous material spills. These hazards threaten the life and safety of residents in the Cape Fear Region 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 the region.

While the threat from hazardous events may never be fully eliminated, there is much we can do to lessen their potential impact upon our communities 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. 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.

Each of the five counties and their municipal jurisdictions participating in the development of the Cape Fear Hazard Mitigation Plan have an existing hazard mitigation plan that has evolved over the years, as described in Section 2: ***Planning Process***. This regional plan draws from each of the County plans to document the region's sustained efforts 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 the region'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 Act

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. 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). This act 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. The Biggert-Waters Act further emphasizes Congress' focus on mitigating vulnerable structures.

The Cape Fear Regional 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 B 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 Cape Fear Regional Hazard Mitigation Plan is to:

- Complete update of existing Plan to demonstrate progress and reflect current conditions;
- Increase public awareness and education;
- 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 Cape Fear Regional Hazard Mitigation Plan is on those hazards determined to be "high" or "moderate" risks to the Cape Fear Region, 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 counties and municipalities 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 the counties of Chatham, Lee, Harnett, Johnston, and Moore as well as their incorporated jurisdictions. **Table 1-1** indicates the participating jurisdictions.

Table 1-1: Participating Jurisdictions in the Cape Fear Regional Hazard Mitigation Plan

Chatham County	
Goldston	Siler City
Pittsboro	
Harnett County	
Angier	Erwin
Coats	Lillington
Dunn	
Johnston County	
Archer Lodge	Pine Level
Benson	Princeton
Clayton	Selma
Four Oaks	Smithfield
Kenly	Wilson's Mill
Micro	
Lee County	
Broadway	Sanford
Moore County	
Aberdeen	Robbins
Cameron	Southern Pines
Carthage	Taylortown

Foxfire Village	Vass
Pinebluff	Whispering Pines
Pinehurst	

1.4 Authority

The Cape Fear Regional Hazard Mitigation Plan has been developed in accordance with current state and federal rules and regulations governing local mitigation plans and has been adopted by each participating county and local 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;
- Flood Insurance Reform Act of 2004 (P.L. 108-264) and Biggert-Waters Flood Insurance Reform Act of 2012 (P.L. 112-141).

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 the Cape Fear region, 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 the Cape Fear Region. The risk assessment also attempts to define any hazard risks that may uniquely or exclusively affect specific areas of the Cape Fear Region.

The Risk Assessment begins by identifying hazards that threaten the region. 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 essence, the information generated through the risk assessment serves a critical function as the participating jurisdictions in the Cape Fear Region 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 the Cape Fear Region'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 ***Community Profile***, ***Risk Assessment***, and ***Capability Assessment*** collectively serve as a basis for determining the goals for the Cape Fear Regional 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 Cape Fear Regional 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 county and municipal department or agency 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 the Cape Fear Region 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 Cape Fear Regional 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 2: PLANNING PROCESS

This section describes the planning process undertaken to develop the Cape Fear Regional Hazard Mitigation Plan. It consists of the following eight subsections:

- 2.1 Overview of Hazard Mitigation Planning
- 2.2 History of Hazard Mitigation Planning in the Cape Fear Region
- 2.3 Preparing the Plan
- 2.4 The Cape Fear Regional Hazard Mitigation Planning Team
- 2.5 Community Meetings and Workshops
- 2.6 Involving the Public
- 2.7 Involving the Stakeholders
- 2.8 Documentation of Plan Progress

44 CFR Requirement
44 CFR Part 201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process and how the public was involved.

2.1 Overview of Hazard Mitigation Planning

Local hazard mitigation planning is the process of organizing community resources, identifying and assessing hazard risks, and determining how to best minimize or manage those risks. This process culminates in a hazard mitigation plan that identifies specific mitigation actions, each designed to achieve both short-term planning objectives and a long-term community vision.

To ensure the functionality of a hazard mitigation plan, responsibility is assigned for each proposed mitigation action to a specific individual, department, or agency along with a schedule or target completion date for its implementation (see Section 10: *Plan Maintenance*). Plan maintenance procedures are established for the routine monitoring of implementation progress, as well as the evaluation and enhancement of the mitigation plan itself. These plan maintenance procedures ensure that the Plan remains a current, dynamic, and effective planning document over time that becomes integrated into the routine local decision-making process.

Communities that participate in hazard mitigation planning have the potential to accomplish many benefits, including:

- saving lives and property,
- saving money,
- speeding recovery following disasters,
- reducing future vulnerability through wise development and post-disaster recovery and reconstruction,
- expediting the receipt of pre-disaster and post-disaster grant funding, and
- demonstrating a firm commitment to improving community health and safety.

Typically, communities that participate in mitigation planning are described as having the potential to produce long-term and recurring benefits by breaking the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that the investments made before a hazard event will significantly reduce the demand for post-disaster assistance by lessening the need for emergency response, repair,

recovery, and reconstruction. Furthermore, mitigation practices will enable local residents, businesses, and industries to re-establish themselves in the wake of a disaster, getting the community economy back on track sooner and with less interruption.

The benefits of mitigation planning go beyond solely reducing hazard vulnerability. Mitigation measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals, such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. Thus, it is vitally important that any local mitigation planning process be integrated with other concurrent local planning efforts, and any proposed mitigation strategies must consider other existing community goals or initiatives that will help complement or hinder their future implementation.

2.2 History of Hazard Mitigation Planning in the Cape Fear Region

Each of the five counties participated in this Plan has a previously adopted the Regional Hazard Mitigation Plan. The participating municipalities for each plan, are listed below:

- **Chatham County**
  - Town of Goldston
  - Town of Pittsboro
  - Town of Siler City
- **Harnett County**
  - Town of Angier
  - Town of Coats
  - City of Dunn
  - Town of Erwin
  - City of Lillington
- **Johnston County**
  - Town of Archer Lodge
  - Town of Benson
  - Town of Clayton
  - Town of Four Oaks
  - Town of Kenly
  - Town of Micro
  - Town of Pine Level
  - Town of Princeton
  - Town of Selma
  - Town of Smithfield
  - Town of Wilson's Mills
- **Lee County**
  - Town of Broadway
  - City of Sanford
- **Moore County**
  - Town of Aberdeen
  - Town of Cameron
  - Town of Carthage
  - Village of Foxfire Village
  - Town of Pinebluff
  - Village of Pinehurst

- Town of Robbins
- Town of Southern Pines
- Town of Taylortown
- Town of Vass
- Village of Whispering Pines

The Plan was developed using the multi-jurisdictional planning process recommended by the Federal Emergency Management Agency (FEMA). For this plan, all the aforementioned jurisdictions have joined to form a regional plan. All the jurisdictions that participated in previous planning efforts have participated in the development of this regional plan.

2.3 Preparing the Plan

Jurisdictions are required to update their hazard mitigation plans every five years so the jurisdictions can remain eligible for federal mitigation funding. To simplify planning efforts for the jurisdictions in the Cape Fear Region, Chatham County, Harnett County, Johnston County, Lee County, and Moore County decided to join to create the *Cape Fear Regional Hazard Mitigation Plan*. This allows resources to be shared amongst the participating jurisdictions and eases the administrative duties of all the participants by combining five existing county planning efforts into one multi-jurisdictional plan.

To prepare the Cape *Fear Regional Hazard Mitigation Plan*, AECOM was hired as an outside consultant to provide professional mitigation planning services. Kelly Keefe from AECOM served as the lead planner for this project.

Per the contractual scope of work, the consultant team followed the mitigation planning process recommended by FEMA (Publication Series 386 and Local Mitigation Plan Review Guide) and recommendations provided by North Carolina Division of Emergency Management (NCEM) mitigation planning staff[1]. The Local Mitigation Plan Review Tool, found in Appendix B, provides a detailed summary of FEMA's current minimum standards of acceptability for compliance with DMA 2000 and notes the location where each requirement is met within this Plan. These standards are based upon FEMA's Final Rule as published in the Federal Register in Part 201 of the Code of Federal Regulations (CFR). The planning team used FEMA's Local Mitigation Plan Review Guide (October 2011) for reference as they completed the Plan.

The process used to prepare this Plan included twelve major steps that were completed over the course of approximately ten months beginning in November 2019. Each of these planning steps (illustrated in **Figure 2-1**) resulted in critical work products and outcomes that collectively make up the Plan. Specific plan sections are further described in Section 1: *Introduction*.

Figure 2-1: Mitigation Planning Process for the Cape Fear Region

2.4 The Cape Fear Regional Hazard Mitigation Planning Team

In order to guide the development of this Plan, the participating jurisdictions (Chatham County, Harnett County, Johnston County, Lee County, and Moore County and participating municipal jurisdictions) created the Cape Fear Regional Hazard Mitigation Planning Team. The Regional Hazard Mitigation Planning Team represents a community-based planning team made up of representatives from various county departments, municipalities, and other key stakeholders identified to serve as critical partners in the planning process.

Beginning in November 2019, the Regional Hazard Mitigation Planning Team (Planning Team) members engaged in regular discussions as well as local meetings and planning workshops to discuss and complete tasks associated with preparing the Plan. This working group coordinated on all aspects of plan preparation and provided valuable input to the process. In addition to regular meetings, committee members routinely communicated and were kept informed through an e-mail distribution list.

Specifically, the tasks assigned to the Planning Team members included:

- participate in Planning Team meetings and workshops
- provide best available data as required for the risk assessment portion of the Plan

- provide information that will help complete the Capability Assessment section of the plan and provide copies of any mitigation or hazard-related documents for review and incorporation into the Plan
- support the development of the Mitigation Strategy, including the design and adoption of regional goal statements
- help design and propose appropriate mitigation actions for their department/agency for incorporation into the Mitigation Action Plan
- review and provide timely comments on all study findings and draft plan deliverables
- support the adoption of the *Cape Fear Regional Hazard Mitigation Plan*

Table 2-1 lists the members of the Planning Team who were responsible for participating in the development of the Plan. Although all Mitigation Planning Team members could not be present at every meeting, coordination was ongoing throughout the entire planning process. In particular, the towns of Cary, Goldston, Pittsboro, Broadway, Kenly, Micro, Princeton, Selma, Smithfield, Broadway, Sanford, Cameron, Carthage, Pinebluff, Robbins, Southern Pines, Taylortown and Vass participated in the planning process through emails and phone conversations and in direct contact with Chatham, Johnston, Harnett, Lee, and Moore as proxies. Also, these jurisdictions were provided planning process materials during the planning process.

Table 2-1: Members of the Cape Fear Regional Hazard Mitigation Planning Team

NAME	DEPARTMENT / AGENCY
Lee Barbee	Town of Clayton, Fire Chief
Scot Brooks*	Moore County, Emergency Manager
Landon Chandler	Harnett County Planning, Senior Planner
Debra Ensminger	Moore County, Zoning Administrator
Josh Holloman	Johnston County LEPC, EMS Chief
Kevin Hubbard	Johnston County Emergency Services, Fire Marshal
Bryan Phillips	MCDPS, Director
Shane Seagroves*	Lee County, Fire Marshal
Jay Sikes	Harnett County Planning, Manager of Planning Services
Sandy Wood*	Johnston County, Emergency Management Representative
Zach Shean	Harnett County, Emergency Management Coordinator
Colby Sawyer*	Chatham County, Emergency Management Specialist
Greg Frank*	Harnett County, Assistant Emergency Management Coordinator
Jonathan Pope	Johnston County, Assistant Emergency Management Coordinator
Theresa Thompson	Moore County, Planning Supervisor
Valerie Brookens	Town of Wilson Mills, Planning Administrator
Brenda Allen	Johnston County, Emergency Management Technician
Benjamin Rodriquez	Johnston County, Emergency Management Assistant
Edwardine Marrone	(FEMA) FIT-NC

NAME	DEPARTMENT / AGENCY
John Mello	NCEM/Hazard Mitigation Planner
Kimberly Pickett	Town of Benson, Assistant Town Manager
Snow Bowden	Town of Erwin, Town Manager
Elizabeth Jernigan	Town of Clayton, Administrative Coordinator
Joshua Perry	Town of Lillington, Planner & Building Inspector
Martha Garris	Town of Four Oaks, Town Clerk
Pauline Yetchum	Town of Four Oaks, Deputy Clerk
Been Wooten	NCEM
George Adler	City of Dunn, Planning Director
Aaron Bullard	Lee County, Fire Inspector
Bob Kissinger	Village of Whispering Pines, Public Works Director
Brannon Barbee	Town of Pine Level, Fire Chief
Mike Gordon	Town of Archer Lodge, First Town Administrator
Ashley Lassiter	Johnston County, Personal Property Manager
Rhoda Noris	GIS
Letitia Jones	Johnston County, GIS
Phillis Richards	Johnson County, Emergency Manager
Bradley Kinlaw	Harnett County, Emergency Services
Ryan Arbenson	Johnston County Sheriff's Office, Lieutenant
Jacazza Jones	NCEM Hazard Mitigation
Ronnie Padgett	Johnston County Area Transit System (JCATS), Fleet Supervisor
Jay Sikes	Harnett County, Development Services
Julie Maybee	Town of Archer Lodge, Town Planner
Lisa Kivett	Foxfire Village, Zoning Administrator
Darryn Burich	Village of Pinehurst, Planning Inspections Director
Matthew Boone	City of Dunn, Assistant Manager
Nick Holcomb	Town of Coats, City Manager
Carlton Cole	Village of Pinehurst, Fire Chief
Pauline Ketchum	Town of Four Oaks, Town Clerk
Chad Shue	Foxfire Village, Chief of Police
Gerry Vincent	Town of Angier, Town Manager
Philip Richardson	Town of Aberdeen, Fire Chief
Jack Meadows	Town of Siler, Planning Director

NAME	DEPARTMENT / AGENCY

* Served as the County's main Point of Contact

Table 2-2 lists points of contact for several of the jurisdictions who elected to designate their respective county officials to represent their jurisdiction on the planning team, generally because they did not have the time or staff to be able to attend on their own. Although these members designated county officials to represent them at in-person meetings, each was still contacted throughout the planning process and participated by providing suggestions and comments on the Plan via email and phone conversations.

Table 2-2: Members Designating Representatives to Cape Fear Regional Hazard Mitigation Planning Team

DEPARTMENT / AGENCY / TITLE	County Proxy
Town of Cary, Mayor	Chatham County
Town of Goldston, Mayor	Chatham County
Town of Pittsboro, Town Manager	Chatham County
Town of Kenly, Mayor	Johnston County
Town of Micro, Town Manager	Johnston County
Town of Princeton, Town Administrator	Johnston County
Town of Selma, Town Manager	Johnston County
Town of Smithfield, Fire Chief	Johnston County
Town of Broadway, Mayor	Lee County
City of Sanford, Mayor	Lee County
Town of Cameron, Mayor	Moore County
Town of Carthage, Town Clerk	Moore County
Town of Pinebluff, Chief Building Inspector	Moore County
Town of Robbins, Interim Town Manager	Moore County
Town of Southern Pines, Senior Planner Planning Director	Moore County
Town of Taylortown, Mayor	Moore County
Town of Vass, Mayor	Moore County

2.4.1 Multi-Jurisdictional Participation

The Cape Fear Regional Hazard Mitigation Plan includes five counties and thirty-two incorporated municipalities. To satisfy multi-jurisdictional participation requirements, each county and its participating jurisdictions were required to perform the following tasks:

- Participate in mitigation planning workshops;
- Identify completed mitigation projects, if applicable; and
- Develop (and/or update) and adopt their local Mitigation Action Plan.

Each jurisdiction participated in the planning process and has developed a local Mitigation Action Plan unique to their jurisdiction. Each jurisdiction will adopt their Mitigation Action Plan separately. This provides the means for jurisdictions to monitor and update their Plan on a regular basis.

2.5 Community Meetings and Workshops

The preparation of this Plan required a series of meetings and workshops for facilitating discussion, gaining consensus and initiating data collection efforts with local government staff, community officials, and other identified stakeholders. More importantly, the meetings and workshops prompted continuous input and feedback from relevant participants throughout the drafting stages of the Plan. The following is a summary of the key meetings and community workshops held during the development of the plan update. In many cases, routine discussions and additional meetings were held by local staff to accomplish planning tasks specific to their department or agency, such as the approval of specific mitigation actions for their department or agency to undertake and include in the Mitigation Action Plan.

NOVEMBER 21, 2019

First Regional Hazard Mitigation Planning Team Meeting – Johnston, NC

Ms. Kelly Keefe, Mr. Brent Edwards, and Ms. McKenzie Houston from AECOM led the meeting of the Planning Team and began by having attendees introduce themselves. The attendees included representatives from various departments and local jurisdictions within each of the counties participating in the plan update. Mr. Edwards and Ms. Keefe then provided an overview of the items to be discussed at the meeting and briefly reviewed each of the handouts that were distributed in the meeting packets (agenda, presentation slides, GIS data inventory, and Public Participation Survey).

Following the overview, Mr. Edwards, Ms. Keefe, and Ms. Houston led the group in an "icebreaker" exercise to introduce meeting participants to various mitigation techniques. He briefly explained the six different categories of mitigation techniques: emergency services; prevention; natural resource protection; structural projects; public education and awareness; and property protection. Each attendee was then given $20 in mock currency and asked to "spend" their mitigation money as they personally deemed appropriate among the six mitigation categories. Money was "spent" by placing it in cups labeled with each of the mitigation techniques. The results of the exercise were:

- Flood $260
- Hurricane $225
- Severe Weather $150
- Winter Weather $90
- Hazardous Material $75
- Tornado $70
- Drought/Extreme Heat $50
- Wildfire $45
- Dam/Levee Failure $20
- Earthquake $0

Following the icebreaker exercise, Mr. Edwards reviewed the key objectives of the project which are to:

- Complete update of existing plans to demonstrate progress and reflect current conditions;
- Increase public awareness and education;
- Maintain grant eligibility for participating jurisdictions; and
- Maintain compliance with State and Federal requirements.

Mr. Edwards and Ms. Keefe discussed the expiration dates for the previous plan and presented a list of all the participating jurisdictions. He confirmed the list of participating jurisdictions with the meeting attendees. Mr. Edwards and Ms. Keefe then explained the mitigation planning process and specific tasks to be accomplished for this project, including the planning process, risk assessment, capability assessment, mitigation strategy, mitigation action plan and plan maintenance procedures. For the risk assessment portion of the process, Mr. Edwards and Ms. Keefe asked each county to designate a point person to coordinate the gathering of GIS data required for the analysis. The project schedule was presented, and Mr. Edwards and Ms. Keefe noted that the ten-month schedule provided ample time to produce a quality plan and meet state and federal deadlines.

The project staffing chart was presented to demonstrate the number of experienced individuals that will be working on this project. Ms. Keefe reviewed the roles and responsibilities of AECOM, the County's leads, the participating jurisdictions and other stakeholders. The presentation concluded with a discussion of the next steps to be taken in the project development. He encouraged meeting participants to distribute the Public Participation Survey. An online version of the public survey was also made available and each jurisdiction was encouraged to make the link to the survey available on their local websites.

Ms. Keefe stated that the next Regional Hazard Mitigation Planning Committee meeting would be scheduled for January of 2020 to discuss the findings of the risk and capability assessments and begin proposing mitigation actions. Ms. Keefe asked each jurisdiction to review their existing mitigation actions in preparation for the next meeting.

JANUARY 29, 2020

Mitigation Strategy Meeting –, Moore, NC

Ms. Keefe and Mr. Edwards initiated the meeting with a review of the meeting handouts, which included an agenda, presentation slides. Mr. Edwards reviewed the project schedule and stated that a draft of the Hazard Mitigation Plan would be presented to the Planning Team in June.

Mr. Edwards with AECOM then presented the findings of the risk assessment. He reviewed the Presidential Disaster Declarations that have impacted the region. He then explained the process for preparing Hazard Profiles and discussed how each hazard falls into one of four basic categories: Atmospheric, Hydrologic, Geologic, and Other. He indicated that each hazard must be evaluated and formally ruled out if it is not applicable to the study area, even where it seems obvious (such as in the case of volcano).

Mr. Edwards and Ms. Keefe reviewed the Hazard Profiles, and the following bullets summarize the information presented:

- DROUGHT
- EXTREME HEAT
- SEVERE WEATHER
- TORNADOES

- HURRICANES AND TROPICAL STORMS
- WINTER STORM
- EARTHQUAKES
- LANDSLIDE There have been no recorded landslide events in the Cape Fear Region. Mr. Edwards and Ms. Keefe asked the Regional Hazard Mitigation Planning Team to provide local information on landslide events, if available. None were available. Hazard will not be considered in this update. Future occurrences are unlikely.
- DAM FAILURE
- FLOOD
- HAZARDOUS MATERIALS INCIDENTS
- WILDFIRE
- TERROR THREAT
- NUCLEAR ACCIDENT

In concluding the review of Hazard Profiles, Mr. Edwards stated if anyone had additional information for the hazard profiles, or disagreed with any of the data presented, they should call or email him with their concerns.

The results of the hazard identification process were used to generate a Priority Risk Index (PRI), which categorizes and prioritizes potential hazards as high, moderate or low risk based on probability, impact, spatial extent, warning time, and duration. The highest PRI was assigned to Severe Weather, followed by Flood, Hurricane, , and Tornado.

Mr. Edwards and Ms. Keefe presented the Capability Assessment Findings. AECOM has developed a scoring system that was used to rank the participating jurisdictions in terms of capability in four major areas (Planning and Regulatory; Administrative and Technical; Fiscal; Political). Important capability indicators include National Flood Insurance Program (NFIP) participation, Building Code Effective Grading Schedule (BCEGS) score, Community Rating System (CRS) participation, and the Local Capability Assessment Survey conducted by AECOM.

Mr. Edwards reviewed the Relevant Plans and Ordinances, Relevant Staff/Personnel Resources, and Relevant Fiscal Resources. All these categories were used to rate the overall capability of the participating counties and jurisdictions. Most jurisdictions are in the limited to moderate range for Planning and Regulatory Capability and for Fiscal Capability. There is variation between the jurisdictions for Administrative and Technical Capability, mainly with respect to availability of planners and staff skilled in GIS. Based upon the scoring methodology developed by AECOM, it was determined that over half of the participating jurisdictions have moderate capability to implement hazard mitigation programs and activities and each county has a high overall capability.

Mr. Edwards then advised the group that the next meeting would involve discussing the mitigation strategy in greater detail, so the planning team should begin to think about actions related to each of the above categories and prioritizing those actions. He then thanked the group for taking the time to attend and the meeting was adjourned.

MAY 28, 2020

Mitigation Strategy Meeting – Virtual, NC

Mr. Edwards and Mrs. Keefe began the meeting by reviewing the notes for the meeting including proposed goals for the regional plan, mitigation actions from each county, and mitigation action worksheets for collecting information for any new mitigation actions

Mr. Edwards and Mrs. Keefe with AECOM then reviewed the findings of the risk assessment since many of the stakeholder's present had not been able to attend the previous meeting. He focused in on two hazards that had been deemed to be high risk hazards at the previous meeting (flood and hurricane/tropical storm).

Mr. Edwards then discussed the results of the public participation survey that was posted on several of the participating counties' and municipal websites. As of the meeting date, 138 responses had been received. Based on preliminary survey results, respondents felt that hurricane posed the greatest threat to their neighborhood, followed by tornado, and severe weather.

Mr. Edwards gave an overview of Mitigation Strategy Development and presented the proposed goals for the regional plan based on a review of the goals in the previous plan. The Planning Team accepted the proposed goals for the regional plan. Mr. Edwards then provided an overview and examples of suggested mitigation actions specifically tailored for Chatham, Harnett, Johnston, Lee, and Moore Counties. Mr. Edwards then asked each county, and the municipalities to provide a status update for their existing mitigation actions (completed, deleted, to be continued, in progress or deferred) by June 25, 2020. Mr. Edwards also discussed the Mitigation Action Worksheets to be completed for any new mitigation actions and requested that all worksheets be returned by June 25, 2020.

Mr. Edwards and Mrs. Keefe thanked the group for taking the time to attend and the meeting was adjourned.

2.6 Involving the Public

44 CFR Requirement
44 CFR Part 201.6(b)(1): The planning process shall include an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.

An important component of the mitigation planning process involved public participation. Individual citizen and community-based input provides the entire planning team with a greater understanding of local concerns and increases the likelihood of successfully implementing mitigation actions by developing community "buy-in" from those directly affected by the decisions of public officials. As citizens become more involved in decisions that affect their safety, they are more likely to gain a greater appreciation of the hazards present in their community and take the steps necessary to reduce their impact. Public awareness is a key component of any community's overall mitigation strategy aimed at making a home, neighborhood, school, business or entire city safer from the potential effects of hazards.

Public involvement in the development of the *Cape Fear Regional Hazard Mitigation Plan* was sought using two methods: (1) public survey instruments were made available in hard copy and online; and (2) copies of the draft Plan deliverables were made available for public review on county and municipal websites and at government offices. The public was provided two opportunities to be involved in the development of the regional plan at two distinct periods during the planning process: (1) during the drafting stage of the Plan; and (2) upon completion of a final draft Plan, but prior to official plan approval and adoption. In addition, a public participation survey (discussed in greater detail in Section 2.6.1) was made available during the planning process at various locations throughout Chatham, Harnett, Johnston, Lee, and Moore Counties and on county and municipal websites.

Each of the participating jurisdictions will hold public meetings before the final plan is officially adopted by the local governing bodies. These meetings will occur at different times once FEMA has granted conditional approval of the Plan. Adoption resolutions will be included in Appendix A.

2.6.1 Public Participation Survey

The Planning Team was successful in getting citizens to provide input to the mitigation planning process through the use of the *Public Participation Survey*. The *Public Participation Survey* was designed to capture data and information from residents of the Cape Fear Region that might not be able to attend public meetings or participate through other means in the mitigation planning process.

Copies of the *Public Participation Survey* were distributed to the Regional Hazard Mitigation Planning Team to be made available for residents to complete at local public offices. A link to an electronic version of the survey was also posted on each county's and municipal websites.
There was a total of 152 surveys completed by the public. Of those 152 surveys, here are some key facts:

- 86% of residents have experienced or been impacted by a disaster.
    - Hurricane was the most common at 86% with Dam/Levee Failure at the least common at only 1%

- 54% of the residents stated they were very concerned about their community being impacted by Hurricane and 86% stated they were not concerned about Earthquake.

- When asked which assets are most important 85% said Fire, Police and EMS stations, and Hospitals and Medical Facilities.

- 91% stated that protecting critical facilities (hospitals, police stations, fire stations, etc.) is most important for planning against natural hazards.

- 68% of the residents stated that the internet (social media) is the best way for them to receive information about natural hazards. 60% also stated internet (web pages), mobile messages/alerts and mail were the best ways.

- Only 3% of the residents live in a floodplain.

- 37% of the residents have lived in the Cape Fear area for 20 years or more.

A detailed summary of the survey results (including questions and charts) and copy of the survey are provided in Appendix F.

2.7 Involving the Stakeholders

44 CFR Requirement
44 CFR Part 201.6(b)(2): The planning process shall include an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other non-profit interests to be involved in the planning process.

The Planning Team encouraged more open and widespread participation in the mitigation planning process. The Region also went above and beyond in its local outreach efforts through the design and

distribution of the *Public Participation Survey*. This opportunity was provided for local officials, residents, businesses, academia, and other private interests in the Cape Fear in Region to be involved and offer input throughout the local mitigation planning process.

2.8 Documentation of Plan Progress

Progress in hazard mitigation planning for the participating jurisdictions in the Cape Fear Region is documented in this plan update. Since hazard mitigation planning efforts officially began in the participating counties with the development of the initial Hazard Mitigation Plans in the late 1990s and early 2000s, many mitigation actions have been completed and implemented in the participating jurisdictions. These actions will help reduce the overall risk to natural hazards for the people and property in the Cape Fear Region. The actions that have been completed are documented in the Mitigation Action Plan found in Section 9.

In addition, community capability continues to improve with the implementation of new plans, policies and programs that help to promote hazard mitigation at the local level. The current state of local capabilities for the participating jurisdictions is captured in Section 7: *Capability Assessment*. The participating jurisdictions continue to demonstrate their commitment to hazard mitigation and hazard mitigation planning and have proven this by developing the Planning Team to update the Plan and by continuing to involve the public in the hazard mitigation planning process.

SECTION 3: COMMUNITY PROFILE

This section of the Plan provides a general overview of the Cape Fear Region. It consists of the following four subsections:

- 3.1 Geography and the Environment
- 3.2 Population and Demographics
- 3.3 Housing, Infrastructure, and Land Use
- 3.4 Employment and Industry

3.1 Geography and the Environment

The Cape Fear Region is located in central North Carolina, mostly in the Piedmont region but also partially in the Inner Coastal Plain region. The region is also situated between the Triad and Triangle, two of the state's three largest centers of population and commerce. For the purposes of this plan, the Cape Fear Region includes Chatham, Harnett, Johnston, Lee, and Moore Counties and their respective municipalities. An orientation map is provided as **Figure 3-1**.

The Cape Fear Region offers many recreational opportunities and tourist attractions including the Cape Fear River, Jordan Lake Recreation Area, Raven Rock State Park, regional parks, and numerous golf courses and resorts and horse farms. Residents are able to enjoy the predominately rural character of the region and small-town atmosphere while still being able to access the conveniences of being located close two major metropolitan areas. Over the past 30 years, there has also been steady growth in the retiree population as retirees, attracted to the quality of life through golf, horse country, and recreation, choose to relocate to the Cape Fear Region.

The total land area of each of the participating counties is presented in **Table 3-1**.

Table 3-1: Total Land Areas of Participating Counties

County	Total Land Area
Chatham County	682 square miles
Harnett County	595 square miles
Johnston County	791 square miles
Lee County	255 square miles
Moore County	698 square miles

Source: United States Census Bureau

According to the State Climate Office of North Carolina, the Cape Fear Region enjoys a moderate climate that is characterized by short winters and hot, humid summers. Precipitation is generally well distributed throughout the year and annual totals average 48 inches.

The region is partially protected by mountain ranges from masses of cold air, which flow southward from Canada during winter. From December to February, the average high temperature ranges from the lower to upper 50s and low temperatures average around 30°F. However, the temperature drops to 10°F or 12°F about once during an average winter over central North Carolina. The mountains also act as a barrier preventing most wintery precipitation from entering the region, and snow and sleet is usually light and occurs on average once or twice per year.

In spring, temperatures begin to rise and the increase in average temperature is greater in May than in any other month. In general, the days are warm, and the nights are cool during the spring months. Average high temperatures increase from the 60s in March to the upper 70s and lower 80s in May. There is a similar increase in average low temperatures, which are in the upper 30s in March and climb to the mid 50s in May. Additionally, tornadoes are most likely early in the spring, however North Carolina is outside the principal tornado area of the United States.

Tropical air over the region brings warm temperatures and rather high humidity during the summer. Average high temperatures range from the mid-80s to lower 90s and low temperatures average in the 60s. Summer precipitation is normally the greatest and July is the wettest month. Summer rainfall is also the most variable, and daily showers as well as periods of one to two weeks without rain are both common. Thunderstorms are also common events in the region during the summer months.

Autumn is the season typified by the most rapidly changing temperature. The drop-off is greatest in October and continues through November. Average high temperatures begin in the lower 80s in September and fall to the low to mid 60s by November. Average lows also drop significantly from 60°F to about 38°F from September to November. Autumn is the driest season and November is the driest month in the region.

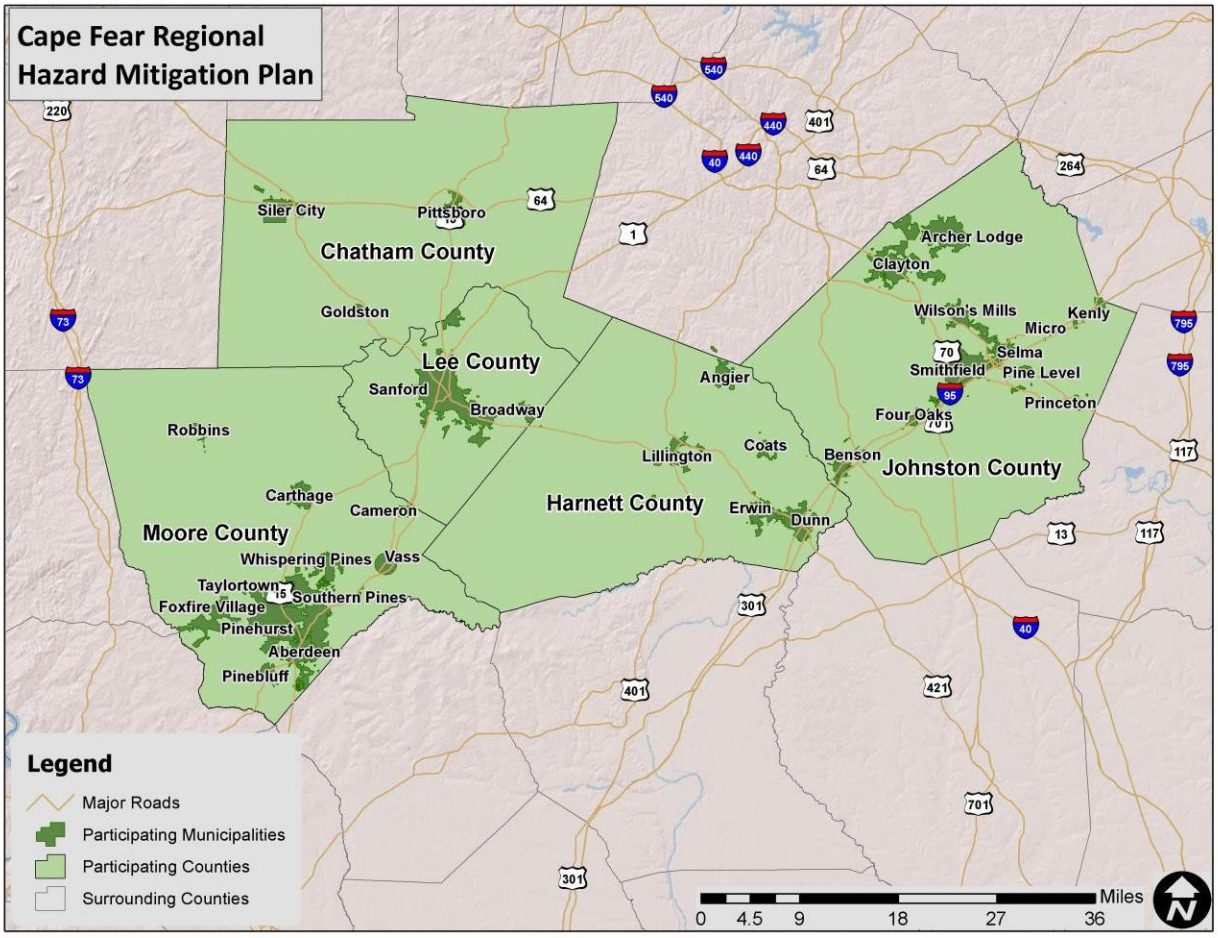


Figure 3-1: Cape Fear Region Orientation Map

3.2 Population and Demographics

Moore County is the largest participating county in the region by land area, and Harnett County is the largest county by population. Between 2000 and 2010, all of the participating counties experienced population growth. Johnston County had the most significant growth with a 38.5% increase. Population counts from the U.S. Census Bureau for 1990, 2000, and 2010 for each of the participating counties are presented in **Table 3-2**.

Table 3-2: Population Counts for Participating Counties

Jurisdiction	1990 Census Population	2000 Census Population	2010 Census Population	% Change 2000-2010
Chatham County	38,759	49,329	63,505	28.7%
Harnett County	67,822	91,025	114,678	26.0%
Johnston County	81,306	121,965	168,878	38.5%
Lee County	41,374	49,040	57,866	18.0%
Moore County	59,013	74,769	88,247	18.0%

Source: United States Census Bureau

Based on the 2010 Census, the median age of residents of the participating counties ranges from 33.5 to 45.0 years. The racial characteristics of the participating counties are presented in **Table 3-3**. Generally, whites make up the majority of the population in the region accounting for over two-thirds of the population.

Table 3-3: Demographics of Participating Counties

Jurisdiction	White, Percent (2010)	Black or African American, Percent (2010)	American Indian or Alaska Native, Percent (2010)	Asian, Percent (2010)	Native Hawaiian or Other Pacific Islander, Percent (2010)	Other Race, Percent (2010)	Two or More Races, percent (2010)	Persons of Hispanic Origin, Percent (2010)*
Chatham County	76.0%	13.2%	0.5%	1.1%	0.0%	7.3%	1.9%	13.0%
Harnett County	68.3%	20.9%	1.2%	0.9%	0.1%	5.5%	3.1%	10.8%
Johnston County	74.2%	15.1%	0.6%	0.6%	0.0%	7.5%	2.0%	12.9%
Lee County	66.9%	20.0%	0.7%	0.8%	0.0%	9.1%	2.4%	18.3%
Moore County	80.4%	13.4%	0.8%	0.9%	0.1%	2.7%	1.7%	6.0%

*Hispanics may be of any race, so also are included in applicable race categories
Source: United States Census Bureau

3.3 Housing, Infrastructure, and Land Use

3.3.1 Housing

According to the 2010 U.S. Census, there were 211,242 housing units in the Cape Fear Region, the majority of which are single family homes or mobile homes. Housing information for the four participating counties is presented in **Table 3-4**. As shown in the table, Moore County has a slightly higher percentage of seasonal housing units compared to the other counties.

Table 3-4: Housing Characteristics of Participating Counties

Jurisdiction	Housing Units (2000)	Housing Units (2010)	Seasonal Units, Percent (2010)	Median Home Value (2006-2010)
Chatham County	21,358	28,753	1.1%	$193,900
Harnett County	38,605	46,731	0.6%	$123,500
Johnston County	50,196	67,682	0.6%	$136,200
Lee County	19,909	24,136	0.6%	$127,800
Moore County	35,151	43,940	4.3%	$186,900

Source: United States Census Bureau

3.3.2 Infrastructure

Transportation

There are several major highways that cross the Cape Fear Region. Interstate 95 is one of two interstates that pass directly through the Cape Fear Region, traversing northeast to southwest through Dunn, Benson, Four Oaks, Smithfield, Selma, Kenly, and the easternmost corner of the region. The second interstate that passes through the region is Interstate 40, which travels northwest to southwest along the southwest edge of Johnston County. Interstate 73 also serves the region and runs north to south along the westernmost border of the region. US Route 1 connects the region to Wake County and the Triangle, passing northeast to southwest through Chatham, Lee, and Moore Counties. US-70 also connects the region to Wake County and the Triangle, traversing northwest to southeast through Johnston County. US-421 is another important highway which links the region to the Triad, crossing northwest to southeast through Chatham, Lee, and Harnett Counties. The major north-south thoroughfare in the region is US-15 which enters Chatham County and runs through Lee County on into Moore County. The major east-west thoroughfare is US-64 which traverses Chatham County, again connecting the region to the Triangle. Additionally, in Harnett County, Highway 210 runs between Angier and Lillington and south into Fayetteville. There are also several designated scenic byways in the Cape Fear Region, including Devil's Stompin' Ground Road in Chatham and Moore Counties, Pottery Road and Sandhills Scenic Drive in Moore County, Averasboro Battlefield Scenic Byway in Harnett County, and Blue-Gray Scenic Byway in Johnston County.

Raleigh-Durham International Airport (RDU) is the nearest commercial airport to the Cape Fear Region. The airport currently offers daily direct flights to 39 domestic and international cities. The RDU airport is about 50 miles from the center region. An additional relief airport, Raleigh Exec, is also located a few miles northeast of Sanford in Lee County to provide additional capacity to the RDU airport. Additional general aviation airports servicing the Cape Fear Region include the Harnett Regional Jetport, Johnston County Airport, Moore County Airport, and Siler City Municipal Airport.

Utilities

Electrical power in the Cape Fear Region is provided by one public utility, several electricity cooperatives, and several municipalities in Johnston County. Duke Energy Progress serves major portions of all five counties in the region. The electricity cooperatives servicing the region include Central Electric Membership Corporation in Chatham, Harnett, Lee, and Moore Counties; Randolph Electric Membership Corporation in both Chatham and Moore Counties; South River Electric Membership Corporation in Harnett County; South River Electric Membership Corporation, Tri-County Electric Membership Corporation, and Wake Electric Membership Corporation in Johnston County; and Pee Dee Electric Membership Corporation in Moore County. The Towns of Benson, Clayton, Selma, and Smithfield are all members of the North Carolina Eastern Municipal Power Association and are affiliated with ElectriCities of North Carolina; as such, they provide municipally owned and operated electric service to their residents.

Water and sewer service is provided by many of the municipalities as well as Chatham, Harnett, Johnston, and Moore Counties in the Cape Fear Region. Although some areas do require the use of wells and septic systems, much of the region is covered under either municipal or county providers.

Community Facilities

There are a number of public buildings and community facilities located throughout the Cape Fear Region. According to the data collected for the vulnerability assessment (Section 6.4.1), there are 91 fire stations, 44 police stations, and 194 public schools located within the study area.

There are several medical care facilities located in the Cape Fear Region. The largest is Moore Regional Hospital, a 395-bed acute care hospital, in Pinehurst which serves as the referral center for a 15-county region in North Carolina. The Johnston Medical Center in Smithfield, the Central Carolina Hospital in Sanford, and the Betsy Johnson Hospital in Dunn are three additional acute care hospitals with 199 beds, 137 beds, and 101 beds, respectively. There are also three smaller hospitals; Good Hope Hospital located in Erwin, Central Harnett Hospital located outside of Lillington, and Chatham Hospital located in Siler City.

There are also numerous parks and recreational areas in the Cape Fear Region. These include the Cape Fear River Trail Park, the Neuse River Greenway Trail, Jordan Lake Recreation Area, Raven Rock State Park, White Pines Nature Preserve, Weymouth Woods-Sandhills Nature Preserve, and Clemmons Educational State Forest, as well as numerous other parks, golf courses and resorts, and horse farms. These facilities offer recreational opportunities to the region's residents and many visitors each year.

3.3.3 Land Use

The Cape Fear Region is experiencing growth and development due to its proximity to the major metropolitan areas in the Triangle and Triad. As shown in **Figure 3-1** above, there are many incorporated municipalities located throughout the study area which make up most of the area's population. The incorporated areas are also where many businesses, commercial uses, and institutional uses are located. Land uses in the balance of the study area generally consist of residential and commercial development in the municipal areas with agricultural and recreational uses in the more rural unincorporated areas. Agriculture remains one of the largest land uses in the region and comprises a mix of cropland, pastureland, and woodland dispersed across the region. However, over the last two decades, the region has become more urbanized and there has been a decline in agriculture.

Local land use (and associated regulations) is further discussed in *Section 7: Capability Assessment.*

3.4 Employment and Industry

The Cape Fear Region's proximity to the Triangle and Triad continues to promote population and economic growth, especially in the northwestern portion of Johnston County and the northern and eastern parts of Chatham County. However, despite the urban growth that has occurred across the region, agriculture continues to play a critical role in the local economy.

According to the North Carolina Employment Security Commission, in 2012, Chatham County had an average annual employment of 31,537 workers and an average unemployment rate of 7.3 percent (compared to 8.0 percent for the state). In 2012, the Health Care and Social Assistance industry employed 17.4 percent of the county's workforce followed by Manufacturing (16.0%); Retail Trade (11.9%); and Education Services (11.3%). The American Community Survey (ACS) found the average annual median household income in Chatham County was $57,793 from 2008 to 2012 compared to $46,450 for the state of North Carolina.

In 2012, Harnett County had an average annual employment of 44,724 workers and an average unemployment rate of 10.6 percent. In 2012, according to NCESC, the Educational Services industry employed the most people, with 17.4 percent of the workforce, followed by Retail Trade (16.8%); Health Care and Social Assistance (14.4%); and Accommodation and Food Services (10.2%). The average annual median household income in Harnett County, according to the ACS, was $44,242 from 2008 to 2012.

Johnston County had an average annual employment of 74,971 workers and an average unemployment rate of 8.2 percent in 2012. According to NCESC, the Manufacturing industry employed 14.8 percent of the county's workforce followed closely by Retail Trade (14.3%) then Health Care and Social Assistance (12.2%) and Educational Services (11.8%) in 2012. The ACS found the average median household income was $50,132 in Johnston County from 2008 to 2012.

Lee County had an average annual employment of 23,626 workers and an average unemployment rate of 11.6 percent in 2012. According to NCESC, in 2012, the Manufacturing industry was the largest employment sector by fare with 33.3 percent of the county's workforce. The other leading industries were Retail Trade (11.8%); Health Care and Social Assistance (11.8%); and Educational Services (8.3%). From 2008 to 2012, the average annual median household income in Lee County was $45,284 according to the ACS.

The NCES reported Moore County had an average annual employment of 34,909 workers and an average unemployment rate of 8.6 percent in 2012. In 2012, the Health Care and Social Assistance industry was the largest employment sector with 25.8 percent of the county's workforce. The other leading industries were Accommodation and Food Services (14.0%); Retail Trade (13.1%); and Educational Services (8.8%). According to the ACS, the average annual median household income in Moore County was $48,238 from 2008 to 2012.

SECTION 4: HAZARD IDENTIFICATION

This section describes how the planning team identified the hazards to be included this plan. It consists of the following five subsections:

- 4.1 Overview
- 4.2 Description of Full Range of Hazards
- 4.3 Disaster Declarations
- 4.4 Hazard Evaluation
- 4.5 Hazard Identification Results

44 CFR Requirement
44 CFR Part 201.6(c)(2)(i): The risk assessment shall include a description of the type, location and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

4.1 Overview

The Cape Fear Region is vulnerable to a wide range of natural and human-caused hazards that threaten life and property. Current FEMA regulations and guidance under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is encouraged, though not required, for plan approval. The Cape Fear Region has included a comprehensive assessment of both types of hazards.

Upon a review of the full range of natural hazards suggested under FEMA planning guidance, the participating counties in the Cape Fear Region (Chatham, Harnett, Johnston, Lee, and Moore) have identified a number of hazards that are to be addressed in its Regional Hazard Mitigation Plan. These hazards were identified through an extensive process that utilized input from the Cape Fear Regional Hazard Mitigation Planning Team members, research of past disaster declarations in the participating counties, and review of the North Carolina State Hazard Mitigation Plan. Readily available information from reputable sources (such as federal and state agencies) was also evaluated to supplement information from these key sources.

Table 4-1 lists the full range of natural hazards initially identified for inclusion in the Plan and provides a brief description for each. This table includes 24 individual hazards. Some of these hazards are interrelated or cascading, but for preliminary hazard identification purposes these individual hazards are broken out separately.

Next, **Table 4-2** lists the disaster declarations in the Cape Fear Region

Next, **Table 4-3** documents the evaluation process used for determining which of the initially identified hazards are considered significant enough to warrant further evaluation in the risk assessment. For each hazard considered, the table indicates whether the hazard was identified as a significant hazard to be further assessed, how this determination was made, and why this determination was made. The table works to summarize not only those hazards that *were* identified (and why) but also those that *were not* identified (and why not). Hazard events not identified for inclusion at this time may be addressed during future evaluations and updates of the risk assessment if deemed necessary by the Regional Hazard Mitigation Planning Team during the plan update process.

Lastly, **Table 4-4** provides a summary of the hazard identification and evaluation process noting that 13 of the 24 initially identified hazards are considered significant enough for further evaluation through this Plan's risk assessment (marked with a "*").

4.2 Description of Full Range of Hazards

Table 4-1: Descriptions of the Full Range of Initially Identified Hazards

Hazard	Description
ATMOSPHERIC HAZARDS	
Avalanche	A rapid fall or slide of a large mass of snow down a mountainside.
Drought	A prolonged period of less than normal precipitation such that the lack of water causes a serious hydrologic imbalance. Common effects of drought include crop failure, water supply shortages, and fish and wildlife mortality. High temperatures, high winds, and low humidity can worsen drought conditions and make areas more susceptible to wildfire. Human demands and actions could hasten or mitigate drought-related impacts on local communities.
Hailstorm	Any storm that produces hailstones that fall to the ground; usually used when the amount or size of the hail is considered significant. Hail is formed when updrafts in thunderstorms carry raindrops into parts of the atmosphere where the temperatures are below freezing.
Extreme Heat	A heat wave may occur when temperatures hover 10 degrees or more above the average high temperature for the region and last for several weeks. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. A heat wave combined with a drought can be very dangerous and have severe economic consequences on a community.
Hurricane and Tropical Storm	Hurricanes and tropical storms are classified as cyclones and defined as any closed circulation developing around a low-pressure center in which the winds rotate counterclockwise in the Northern Hemisphere (or clockwise in the Southern Hemisphere) and with a diameter averaging 10 to 30 miles across. When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name, and is closely monitored by the National Hurricane Center. When sustained winds reach or exceed 74 miles per hour the storm is deemed a hurricane. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation and tornadoes. Coastal areas are also vulnerable to the additional forces of storm surge, wind-driven waves and tidal flooding which can be more destructive than cyclone wind. Most hurricanes and tropical storms form in the Atlantic Ocean, Caribbean Sea and Gulf of Mexico during the official Atlantic hurricane season, which extends from June through November.
Lightning	Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a "bolt" when the buildup of charges becomes strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes, but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes thunder. On average, 73 people are killed each year by lightning strikes in the United States.

Hazard	Description
Nor'easter	Similar to hurricanes, nor'easters are ocean storms capable of causing substantial damage to coastal areas in the Eastern United States due to their associated strong winds and heavy surf. Nor'easters are named for the winds that blow in from the northeast and drive the storm up the East Coast along the Gulf Stream, a band of warm water that lies off the Atlantic coast. They are caused by the interaction of the jet stream with horizontal temperature gradients and generally occur during the fall and winter months when moisture and cold air are plentiful. Nor'easters are known for dumping heavy amounts of rain and snow, producing hurricane-force winds, and creating high surf that causes severe beach erosion and coastal flooding.
Tornado	A tornado is a violently rotating column of air that has contact with the ground and is often visible as a funnel cloud. Its vortex rotates cyclonically with wind speeds ranging from as low as 40 mph to as high as 300 mph. Tornadoes are most often generated by thunderstorm activity when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The destruction caused by tornadoes ranges from light to catastrophic depending on the intensity, size and duration of the storm.
Severe Thunderstorm	Thunderstorms are caused by air masses of varying temperatures meeting in the atmosphere. Rapidly rising warm moist air fuels, the formation of thunderstorms. Thunderstorms may occur singularly, in lines, or in clusters. They can move through an area very quickly or linger for several hours. Thunderstorms may result in hail, tornadoes, or straight-line winds. Windstorms pose a threat to lives, property, and vital utilities primarily due to the effects of flying debris and can down trees and power lines.
Winter Storm	Winter storms may include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Blizzards, the most dangerous of all winter storms, combine low temperatures, heavy snowfall, and winds of at least 35 miles per hour, reducing visibility to only a few yards. Ice storms occur when moisture falls and freezes immediately upon impact on trees, power lines, communication towers, structures, roads and other hard surfaces. Winter storms and ice storms can down trees, cause widespread power outages, damage property, and cause fatalities and injuries to human life.
GEOLOGIC HAZARDS	
Earthquake	A sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the surface. This movement forces the gradual building and accumulation of energy. Eventually, strain becomes so great that the energy is abruptly released, causing the shaking at the earth's surface which we know as an earthquake. Roughly 90 percent of all earthquakes occur at the boundaries where plates meet, although it is possible for earthquakes to occur entirely within plates. Earthquakes can affect hundreds of thousands of square miles; cause damage to property measured in the tens of billions of dollars; result in loss of life and injury to hundreds of thousands of persons; and disrupt the social and economic functioning of the affected area.
Expansive Soils	Soils that will exhibit some degree of volume change with variations in moisture conditions. The most important properties affecting degree of volume change in a soil are clay mineralogy and the aqueous environment. Expansive soils will exhibit expansion caused by the intake of water and, conversely, will exhibit contraction when moisture is removed by drying. Generally speaking, they often appear sticky when wet, and are characterized by surface cracks when dry. Expansive soils become a problem when structures are built upon them without taking proper design precautions into account with regard to soil type. Cracking in walls and floors can be minor or can be severe enough for the home to be structurally unsafe.

Hazard	Description
Landslide	The movements of a mass of rock, debris, or earth down a slope when the force of gravity pulling down the slope exceeds the strength of the earth materials that comprise to hold it in place. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high.
Land Subsidence	The gradual settling or sudden sinking of the Earth's surface due to the subsurface movement of earth materials. Causes of land subsidence include groundwater pumpage, aquifer system compaction, drainage of organic soils, underground mining, hydro compaction, natural compaction, sinkholes, and thawing permafrost.
Tsunami	A series of waves generated by an undersea disturbance such as an earthquake. The speed of a tsunami traveling away from its source can range from up to 500 miles per hour in deep water to approximately 20 to 30 miles per hour in shallower areas near coastlines. Tsunamis differ from regular ocean waves in that their currents travel from the water surface all the way down to the sea floor. Wave amplitudes in deep water are typically less than one meter; they are often barely detectable to the human eye. However, as they approach shore, they slow in shallower water, basically causing the waves from behind to effectively "pile up", and wave heights to increase dramatically. As opposed to typical waves which crash at the shoreline, tsunamis bring with them a continuously flowing 'wall of water' with the potential to cause devastating damage in coastal areas located immediately along the shore.
Volcano	A mountain that opens downward to a reservoir of molten rock below the surface of the earth. While most mountains are created by forces pushing up the earth from below, volcanoes are different in that they are built up over time by an accumulation of their own eruptive products: lava, ash flows, and airborne ash and dust. Volcanoes erupt when pressure from gases and the molten rock beneath becomes strong enough to cause an explosion.
HYDROLOGIC HAZARDS	
Dam and Levee Failure	Dam failure is the collapse, breach, or other failure of a dam structure resulting in downstream flooding. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and severe property damage if development exists downstream of the dam. Dam failure can result from natural events, human-induced events, or a combination of the two. The most common cause of dam failure is prolonged rainfall that produces flooding. Failures due to other natural events such as hurricanes, earthquakes or landslides are significant because there is generally little or no advance warning.
Erosion	Erosion is the gradual breakdown and movement of land due to both physical and chemical processes of water, wind, and general meteorological conditions. Natural, or geologic, erosion has occurred since the Earth's formation and continues at a very slow and uniform rate each year.
Flood	The accumulation of water within a water body which results in the overflow of excess water onto adjacent lands, usually floodplains. The floodplain is the land adjoining the channel of a river, stream ocean, lake or other watercourse or water body that is susceptible to flooding. Most floods fall into the following three categories: riverine flooding, coastal flooding, or shallow flooding (where shallow flooding refers to sheet flow, ponding and urban drainage).

Hazard	Description
Storm Surge	A storm surge is a large dome of water often 50 to 100 miles wide and rising anywhere from four to five feet in a Category 1 hurricane up to more than 30 feet in a Category 5 storm. Storm surge heights and associated waves are also dependent upon the shape of the offshore continental shelf (narrow or wide) and the depth of the ocean bottom (bathymetry). A narrow shelf, or one that drops steeply from the shoreline and subsequently produces deep water close to the shoreline, tends to produce a lower surge but higher and more powerful storm waves. Storm surge arrives ahead of a storm's actual landfall and the more intense the hurricane is, the sooner the surge arrives. Storm surge can be devastating to coastal regions, causing severe beach erosion and property damage along the immediate coast. Further, water rise caused by storm surge can be very rapid, posing a serious threat to those who have not yet evacuated flood-prone areas.
OTHER HAZARDS	
Hazardous Materials Incident	Hazardous material (HAZMAT) incidents can apply to fixed facilities as well as mobile, transportation-related accidents in the air, by rail, on the nation's highways and on the water. HAZMAT incidents consist of solid, liquid and/or gaseous contaminants that are released from fixed or mobile containers, whether by accident or by design as with an intentional terrorist attack. A HAZMAT incident can last hours to days, while some chemicals can be corrosive or otherwise damaging over longer periods of time. In addition to the primary release, explosions and/or fires can result from a release, and contaminants can be extended beyond the initial area by persons, vehicles, water, wind and possibly wildlife as well.
Terror Threat	Terrorism is defined by FEMA as, "the use of force or violence against persons or property in violation of the criminal laws of the United States for purposes of intimidation, coercion, or ransom." Terrorist acts may include assassinations, kidnappings, hijackings, bomb scares and bombings, cyberattacks (computer- based), and the use of chemical, biological, nuclear and radiological weapons.
Wildfire	An uncontrolled fire burning in an area of vegetative fuels such as grasslands, brush, or woodlands. Heavier fuels with high continuity, steep slopes, high temperatures, low humidity, low rainfall, and high winds all work to increase risk for people and property located within wildfire hazard areas or along the urban/wildland interface. Wildfires are part of the natural management of forest ecosystems, but most are caused by human factors. Over 80 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly extinguishing campfires. The second most common cause for wildfire is lightning.
Nuclear Accident	The International Atomic Energy Agency (IAEA) classifies a nuclear incident or accident as an event that leads to significant consequences for people, the environment, or the facility. Typically, the effects of an incident are the release of radioactive substances that can cause damaging impacts. The IAEA uses a scale known as the International Nuclear and Radiological Event Scale (INES) to classify the level of impact that an event has on people and the environment.

4.3 Disaster Declarations

Disaster declarations provide initial insight into the hazards that may impact the Cape Fear Regional planning area. Since 1968, nine presidential disaster declarations have been reported in the Cape Fear Region. This includes four events related to winter storms, four storms related to hurricanes and tropical storms, and one event related to tornadoes and severe storms.

Table 4-2: Cape Fear Region Disaster Declarations

Year	Disaster Number	Description	Chatham County	Harnett County	Johnston County	Lee County	Moore County
1968	234	SEVERE ICE STORM		X	X	X	X
1996	1087	BLIZZARD OF 96	X	X	X	X	X
1996	1134	HURRICANE FRAN	X	X	X	X	X
1999	1292	HURRICANE FLOYD	X	X	X	X	X
2000	1312	SEVERE WINTER STORM	X	X	X	X	X
2002	1448	SEVERE ICE STORM	X	X	X	X	X
2003	1490	HURRICANE ISABEL		X	X		
2011	1969	SEVERE STORMS, TORNADOES, AND FLOODING		X	X	X	
2011	4019	HURRICANE IRENE			X		
2016	4285	HURRICANE MATTHEW	X	X	X	X	X
2018	4393	HURRICANE FLORENCE	X	X	X	X	X
2019	4285	TROPICAL STORM MICHAEL	X				

4.4 Hazard Evaluation

Table 4-3: Documentation of the Hazard Evaluation Process

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
ATMOSPHERIC HAZARDS			
Avalanche	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of the NC State Hazard Mitigation Plan • Review of previous Cape Fear county hazard mitigation plans • Review of US Forest Service National Avalanche Center website	• The United States avalanche hazard is limited to mountainous western states including Alaska as well as some areas of low risk in New England. • Avalanche hazard was removed from the North Carolina State Hazard Mitigation Plan after determining the mountain elevation in Western North Carolina did have enough snow not produce this hazard. • Avalanche is not included in any of the previous Cape Fear hazard mitigation plans.

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
			• There is no risk of avalanche events in North Carolina.
Drought	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of the NC State Hazard Mitigation Plan • Review of previous Cape Fear county hazard mitigation plans • Review of the North Carolina Drought Monitor website	• Drought is a normal part of virtually all climatic regimes, including areas with high and low average rainfall. • Droughts are discussed in the NC State Hazard Mitigation Plan as a lesser hazard. • The NC State Hazard Mitigation Plan lists drought as a top hazard for the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region (includes Moore County), and the Coastal Plain 7 Region (includes Johnston County). • Drought is included in all of the previous Cape Fear hazard mitigation plans. • There are reports of drought conditions in each of the last nineteen years in the Cape Fear Region, according to the North Carolina Drought Monitor.
Hailstorm	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database	• Although hailstorms occur primarily in the Midwestern states, they do occur in every state on the mainland U.S. Most inland regions experience hailstorms at least two or more days each year. • Hailstorm events are discussed in the state plan and regional plan under the severe weather hazard.
Extreme Heat	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of the North Carolina State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database	• Many areas of the United States are susceptible to heat waves, including North Carolina. • The NC State Hazard Mitigation Plan does not include Heat Wave as a top hazard for the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region (includes Moore County), the Coastal Plain 6 Region (includes Harnett County), or the Coastal Plain 7 Region (includes Johnston County). • The NC State Hazard Mitigation Plan reports the Piedmont Region as having

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
			moderate vulnerability compared to the rest of the state and the Coastal Plain Region as having the highest vulnerability compared to the rest of the state.
Hurricane and Tropical Storm	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Analysis of NOAA historical tropical cyclone tracks and National Hurricane Center Website • Review of NOAA NCDC Storm Events Database • Review of historical presidential disaster declarations	• The Atlantic and Gulf regions are most prone to landfall by hurricanes and tropical storms. • Hurricane and tropical storm events are discussed in the state plan and are listed as a top hazard in the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region (includes Moore County), the Coastal Plain 6 Region (includes Harnett County), and the Coastal Plain 7 Region (includes Johnston County).
Lightning	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database • Review of Vaisala's NLDN Lightning Flash Density Map	• The central region of the Florida has the highest density of lightning strikes in the mainland U.S.; however, lightning events are experienced in nearly every region. Lightning events are discussed in the state and regional plan as part of the severe thunderstorm/severe weather hazard.
Nor'easter	NO	• Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database	• Nor'easters are discussed in the state plan. The Piedmont Region (includes Chatham, Lee, and Moore Counties) has relatively low vulnerability compared to the state. The Coastal Plain Region (includes Harnett and Johnston Counties) has slightly higher vulnerability but nor'easter is not identified as a top hazard. • Nor'easter was included in two of the

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
			previous Cape Fear hazard mitigation plans under the hurricane or winter storm hazard. • NCDC does not report any nor'easter activity for the Cape Fear Region. However, nor'easters may have affected the region as severe winter storms. In this case, the activity would be reported under winter storm events.
Tornado	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database • Review of historical presidential disaster declarations.	• Tornado events are discussed in the NC State Hazard Mitigation Plan.
Severe Thunderstorm/Weather	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC Storm Events Database • Review of historical presidential disaster declarations.	• Over 100,000 thunderstorms are estimated to occur each year on the U.S. mainland, and they are experienced in nearly every region. • Severe thunderstorm events are discussed in the NC State Hazard Mitigation Plan and are identified a top hazard in the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region (includes Moore County), the Coastal Plain 6 Region (includes Harnett County), and the Coastal Plain 7 Region (includes Johnston County).
Winter Storm	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC	• Winter storms affect every state in the continental U.S. and Alaska. • Severe winter storms, including snowstorms and ice storms, are discussed in the state plan. They are listed as a top hazard in the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region (includes Moore County), and the

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
		Storm Events Database • Review of historical presidential disaster declarations.	Coastal Plain 7 Region (includes Johnston County).
GEOLOGIC HAZARDS			
Earthquake	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of the National Geophysical Data Center • USGS Earthquake Hazards Program website	• Although the zone of greatest seismic activity in the United States is along the Pacific Coast, eastern regions have experienced significant earthquakes. • Earthquake events are discussed in the state plan but none of the participating Cape Fear counties are in the region with the highest vulnerability to an earthquake event in the state. • Earthquakes have occurred in and around the State of North Carolina in the past. The state is affected by the Charleston and the New Madrid (near Missouri) Fault lines which have generated a magnitude 8.0 earthquake in the last 200 years.
Expansive Soils	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of USDA Soil Conservation Service's Soil Survey	• The effects of expansive soils are most prevalent in parts of the Southern, Central, and Western U.S. • Expansive soils are identified in the state plan. The Piedmont Region has the highest vulnerability compared to the rest of the state. • According to FEMA and USDA sources, parts of the Cape Fear Region are located in an area that consists of some clay having "slight to moderate" clay swelling potential (generally less than 50%).
Landslide	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of USGS Landslide	• And slides occur in every state in the U.S, and they are most common in the coastal ranges of California, the Colorado Plateau, the Rocky Mountains, and the Appalachian Mountains. • Landslide/debris flow events are discussed in the state plan but are not listed as a top hazard for the Piedmont 4 Region (includes Chatham and Lee Counties), the Piedmont 5 Region

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
		Incidence and Susceptibility Hazard Map • Review of the North Carolina Geological Survey database of historic landslides	(includes Moore County), the Coastal Plain Region (includes Harnett County), or the Coastal Plain 7 Region (includes Johnston County). • Data provided by NCGS indicate zero recorded landslide events in the Cape Fear Region.
Land Subsidence	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan	• Land subsidence affects at least 45 states, including North Carolina. However, because of the broad range of causes and impacts, there has been limited national focus on this hazard.
Tsunami	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear county hazard mitigation plans • Review of FEMA "How-to" mitigation planning guidance (Publication 386-2, "Understanding Your Risks – Identifying Hazards and Estimating Losses).	• No record exists of a catastrophic Atlantic basin tsunami impacting the mid-Atlantic coast of the United States. • Tsunami inundation zone maps are not available for communities located along the U.S. East Coast. • Tsunamis are discussed in the state plan and described as a "greater" hazard for the state. However, the Piedmont Region (includes Chatham, Lee, and Moore Counties) and the Coastal Plain Region (includes Harnett and Johnston Counties) scored a zero for tsunami hazard risk. • Tsunami was not analyzed as a hazard in any of the previous Cape Fear hazard mitigation plans. • FEMA mitigation planning guidance suggests that locations along the U.S. East Coast have a relatively low tsunami risk and need not conduct a tsunami risk assessment at this time.
Volcano	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of USGS Volcano Hazards Program website	• More than 65 potentially active volcanoes exist in the United States and most are located in Alaska. The Western states and Hawaii are also potentially affected by volcanic hazards. • There are no active volcanoes in North Carolina. • There has not been a volcanic eruption

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
			in North Carolina in over 1 million years. • No volcanoes are located near the Cape Fear Region.
HYDROLOGIC HAZARDS			
Dam and Levee Failure	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of North Carolina Division of Land Management website	• The National Inventory of Dams shows dams are in every state. • Dam failure is discussed in the state plan and is listed as a top hazard for Piedmont 5 Region (includes Moore County). • Of the 518 dams reported on the North Carolina Inventory of Dams, 124 are high hazard (High hazard is defined as "where failure or mis- operation will probably cause loss of human life.")
		•	•
Flood	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear county hazard mitigation plans • Review of NOAA NCDC Storm Events Database • Review of historical disaster declarations • Review of FEMA DFIRM data • Review of FEMA's NFIP Community Status Book and Community Rating System (CRS)	• Floods occur in all 50 states and in the U.S. territories. • The flood hazard is thoroughly discussed in the state plan. The Cape Fear Region was found to have relatively moderate vulnerability compared to the state. • Roughly 11.5% of the Cape Fear Region is in an identified floodplain (100 or 500 year). •
Storm Surge	NO	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of NOAA NCDC	• Given the inland location of the Cape Fear Region, storm surge would not affect the area. • Storm surge is discussed in the state plan under the hurricane hazard. The Piedmont Region (includes Chatham, Lee, and Moore Counties) and the Coastal Plain region (includes Harnett and Johnston Counties) have zero vulnerability to storm surge.

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
		Storm Events Database	• No historical events were reported by NCDC
OTHER HAZARDS			
Hazardous Materials Incident	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of previous Cape Fear county hazard mitigation plans	• Cities, counties, and towns where hazardous materials fabrication, processing, and storage sites are located, and those where hazardous waste treatment, storage or disposal facilities operate are at risk for hazardous materials events.
Terror Threat	YES	• Review of previous Cape Fear county hazard mitigation plans • Review of local official knowledge	• Terrorism was not included in any of the previous Cape Fear hazard mitigation plans. • There are some potential targets in the areas.
Wildfire	YES	• Review of FEMA's Multi-Hazard Identification and Risk Assessment • Review of NC State Hazard Mitigation Plan • Review of previous Cape Fear hazard mitigation plan • Review of Southern Wildfire Risk Assessment (SWRA) Data • Review of the NC Division of Forest Resources website	• Wildfires occur in virtually all parts of the United States. Wildfire hazard risks will increase as low-density development along the urban/wildland interface increases. • Wildfires are discussed in the state plan as a "greater" hazard of concern and is identified as a top hazard in the Coastal Plain 6 Region (includes Harnett County). However, the Piedmont Region (includes Chatham, Lee, and Moore Counties) shares the lowest vulnerability in the state. • A review of SWRA data indicates that there are some areas of elevated concern in the Cape Fear Region, particularly in the southern half of the region. • According to the North Carolina Division of Forest Resources from 2003 to 2019, the Cape Fear Region experienced an average of 418 fires each year which burn a combined average of 989 acres.
Nuclear Accident	YES	• Review of IAEA list of fixed nuclear power stations in the United States • Review of previous Cape Fear hazard mitigation	• The Shearon Harris Nuclear Power Station is located in Wake and Chatham County. • Local officials expressed a desire to address it in this plan. • Nuclear events can sometimes be

Natural Hazards Considered	Was this hazard identified as a significant hazard to be addressed in the plan at this time? (Yes or No)	How was this determination made?	Why was this determination made?
		plan • Discussion with local officials about location of nuclear power stations	caused by natural hazards and deserve some attention in this plan due to some areas of the region being in the 10-mile evacuation zone for the Shearon Harris Nuclear Power Station.

4.5 Hazard Identification Results

Table 4-4: Summary Results of the Hazard Identification and Evaluation Process

ATMOSPHERIC HAZARDS	GEOLOGIC HAZARDS
• Avalanche • Drought* • Hailstorm • Heat Wave* • Hurricane and Tropical Storm* • Lightning • Nor'easter • Tornado* • Severe Weather* • Winter Storm*	• Earthquake* • Expansive Soils • Landslide • Land Subsidence • Tsunami • Volcano
	HYDROLOGIC HAZARDS
	• Dam and Levee Failure* • Erosion • Flood* • Storm Surge
	OTHER HAZARDS
	• Hazardous Materials Incident* • Terror Threat* • Wildfire* • Nuclear Accident*

* Hazard considered significant enough for further evaluation in the Cape Fear Region hazard risk assessment.

SECTION 5: HAZARD PROFILES

This section includes detailed hazard profiles for each of the hazards identified in the previous section (*Hazard Identification*) as significant enough for further evaluation in the Cape Fear Regional Hazard Mitigation Plan. It contains the following subsections:

44 CFR Requirement
44 CFR Part 201.6(c)(2)(i): The risk assessment shall include a description of the type, location and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events

5.1 Overview

This section includes detailed hazard profiles for each of the hazards identified in the previous section (*Hazard Identification*) as significant enough for further evaluation in the Cape Fear Region hazard risk assessment by creating a hazard profile. Each hazard profile includes a general description of the hazard, its location and extent, notable historical occurrences, and the probability of future occurrences. Each profile also includes specific items noted by members of the Cape Fear Regional Hazard Mitigation Planning Team (Planning Team) as it relates to unique historical or anecdotal hazard information for the counties in the Cape Fear Region, or a participating municipality within them.

The following hazards were identified:

- **Atmospheric**
  - Drought
  - Extreme Heat
  - Hurricane and Tropical Storm
  - Severe Weather
  - Tornado
  - Winter Storm
- **Geologic**
  - Earthquake
- **Hydrologic**
  - Dam and Levee Failure
  - Flood
- **Other**
  - Hazardous Materials Incident

- Wildfire
- Nuclear Accident
- Terror Threat

5.2 Study Area

The Cape Fear Region includes five counties: Chatham, Harnett, Johnston, Lee, and Moore. **Table 5-1** provides a summary table of the participating jurisdictions within each county. In addition, **Figure 5-1** provides a base map, for reference, of the Cape Fear Region.

Table 5-1: Participating Jurisdictions in the Cape Fear Regional Hazard Mitigation Plan

Chatham County	
Goldston	Siler City
Pittsboro	
Harnett County	
Angier	Erwin
Coats	Lillington
Dunn	
Johnston County	
Archer Lodge	Pine Level
Benson	Princeton
Clayton	Selma
Four Oaks	Smithfield
Kenly	Wilson's Mills
Micro	
Lee County	
Broadway	Sanford
Moore County	
Aberdeen	Robbins
Cameron	Southern Pines
Carthage	Taylortown
Foxfire Village	Vass
Pinebluff	Whispering Pines
Pinehurst	

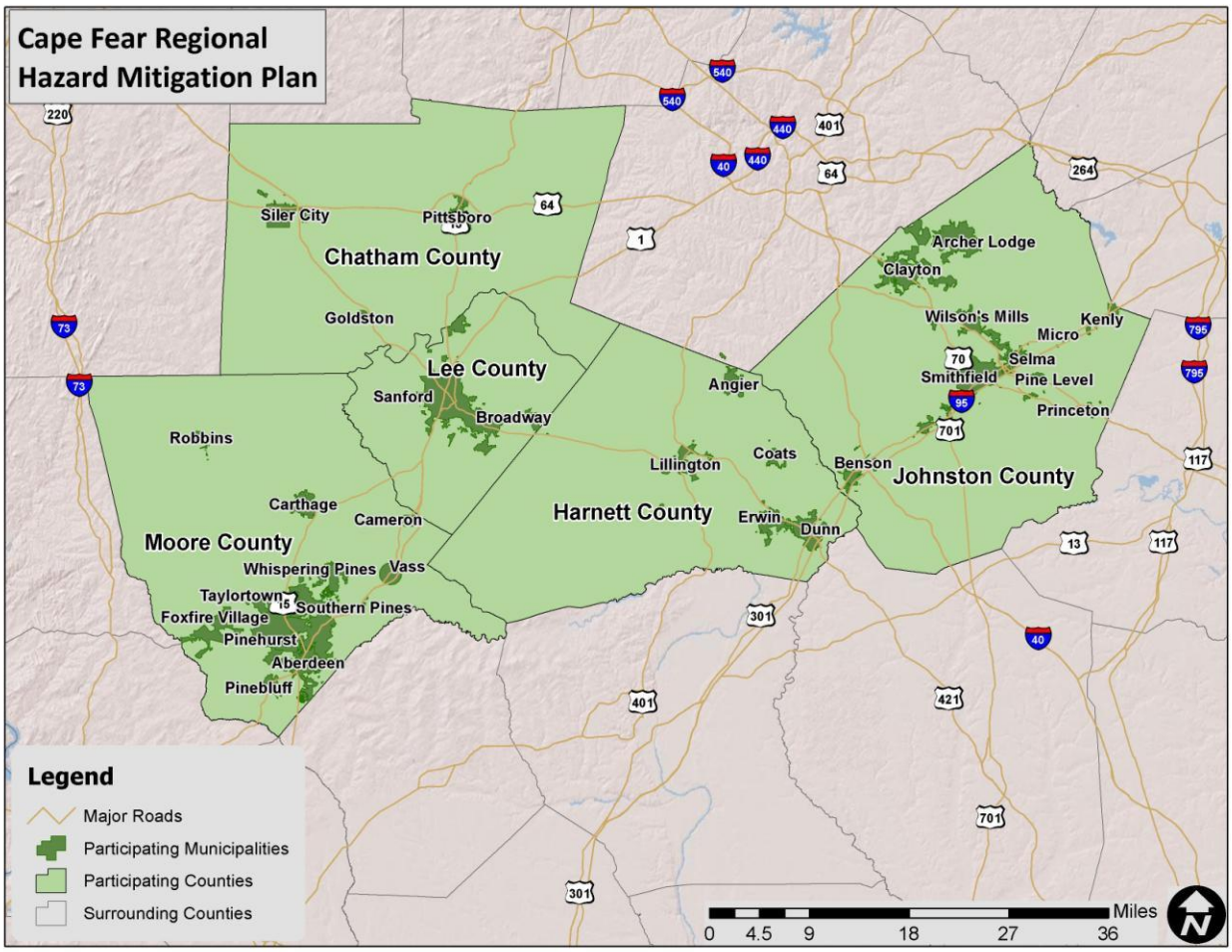


Figure 5-1: Cape Fear Region Base Map

Table 5-2 lists each significant hazard for the Cape Fear Region and identifies whether or not it has been determined to be a specific hazard of concern for the thirty-two municipal jurisdictions and each of the five county's unincorporated areas. This is the based on the best available data and information from the Planning Team. (● = hazard of concern)

Table 5-2: Summary of Identified Hazard Events in the Cape Fear Region

Jurisdiction	Atmospheric						Geologic	Hydrologic		Other			
	Drought	Extreme Heat	Hurricane and Tropical Storm	Thunderstorm	Tornado	Winter Storm	Earthquake	Dam and Levee Failure	Flood	HAZMAT	Wildfire	Nuclear	Terror Threat
Chatham County													
Goldston	●	●	●	●	●	●	●	●	●	●	●	●	●
Pittsboro	●	●	●	●	●	●	●	●	●	●	●	●	●
Siler City	●	●	●	●	●	●	●	●	●	●	●	●	●

Jurisdiction	Atmospheric						Geologic	Hydrologic		Other			
	Drought	Extreme Heat	Hurricane and Tropical Storm	Thunderstorm	Tornado	Winter Storm	Earthquake	Dam and Levee Failure	Flood	HAZMAT	Wildfire	Nuclear	Terror Threat
Unincorporated Area	●	●	●	●	●	●	●	●	●	●	●	●	●
Harnett County													
Angier	●	●	●	●	●	●	●	●	●	●	●	●	●
Coats	●	●	●	●	●	●	●	●	●	●	●	●	●
Dunn	●	●	●	●	●	●	●	●	●	●	●	●	●
Erwin	●	●	●	●	●	●	●	●	●	●	●	●	●
Lillington	●	●	●	●	●	●	●	●	●	●	●	●	●
Unincorporated Area	●	●	●	●	●	●	●	●	●	●	●	●	●
Johnston County													
Archer Lodge	●	●	●	●	●	●	●	●	●	●	●	●	●
Benson	●	●	●	●	●	●	●	●	●	●	●	●	●
Clayton	●	●	●	●	●	●	●	●	●	●	●	●	●
Four Oaks	●	●	●	●	●	●	●	●	●	●	●	●	●
Kenly	●	●	●	●	●	●	●	●	●	●	●	●	●
Micro	●	●	●	●	●	●	●	●	●	●	●	●	●
Pine Level	●	●	●	●	●	●	●	●	●	●	●	●	●
Princeton	●	●	●	●	●	●	●	●	●	●	●	●	●
Selma	●	●	●	●	●	●	●	●	●	●	●	●	●
Smithfield	●	●	●	●	●	●	●	●	●	●	●	●	●
Wilson's Mills	●	●	●	●	●	●	●	●	●	●	●	●	●
Unincorporated Area	●	●	●	●	●	●	●	●	●	●	●	●	●
Lee County													
Broadway	●	●	●	●	●	●	●	●	●	●	●	●	●
Sanford	●	●	●	●	●	●	●	●	●	●	●	●	●
Unincorporated Area	●	●	●	●	●	●	●	●	●	●	●	●	●
Moore County													
Aberdeen	●	●	●	●	●	●	●	●	●	●	●	●	●
Cameron	●	●	●	●	●	●	●	●	●	●	●	●	●
Cartage	●	●	●	●	●	●	●	●	●	●	●	●	●

Jurisdiction	Atmospheric						Geologic	Hydrologic		Other			
	Drought	Extreme Heat	Hurricane and Tropical Storm	Thunderstorm	Tornado	Winter Storm	Earthquake	Dam and Levee Failure	Flood	HAZMAT	Wildfire	Nuclear	Terror Threat
Foxfire Village	●	●	●	●	●	●	●	●	●	●	●	●	●
Pinebluff	●	●	●	●	●	●	●	●	●	●	●	●	●
Pinehurst	●	●	●	●	●	●	●	●	●	●	●	●	●
Robbins	●	●	●	●	●	●	●	●	●	●	●	●	●
Southern Pines	●	●	●	●	●	●	●	●	●	●	●	●	●
Taylortown	●	●	●	●	●	●	●	●	●	●	●	●	●
Vass	●	●	●	●	●	●	●	●	●	●	●	●	●
Whispering Pines	●	●	●	●	●	●	●	●	●	●	●	●	●
Unincorporated Area	●	●	●	●	●	●	●	●	●	●	●	●	●

ATMOSPHERIC HAZARDS

5.3 Drought

5.3.1 Background

Drought is a normal part of virtually all climatic regions, including areas with high and low average rainfall. Drought is the consequence of a natural reduction in the amount of precipitation expected over an extended period of time, usually a season or more in length. High temperatures, high winds, and low humidity can exacerbate drought conditions. In addition, human actions and demands for water resources can hasten drought-related impacts. Drought may also lead to more severe wildfires.

Droughts are typically classified into one of four types: 1) meteorological, 2) hydrologic, 3) agricultural, or 4) socioeconomic. **Table 5-3** presents definitions for these types of drought.

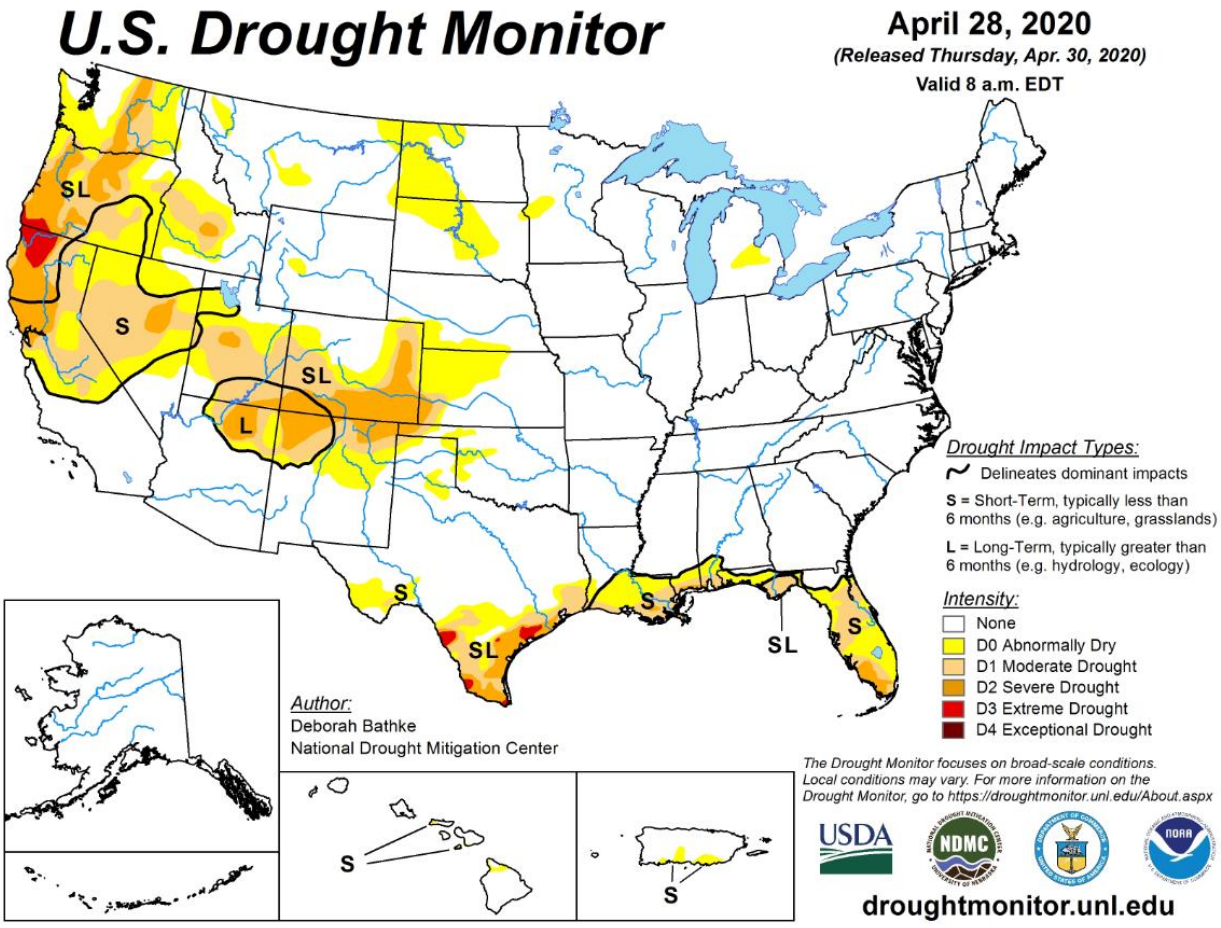
Table 5-3: Drought Classification Definitions

Meteorological Drought	The degree of dryness or departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.
Hydrologic Drought	The effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic Drought	The effect of demands for water exceeding the supply as a result of a weather-related supply shortfall.

Source: Multi-Hazard Identification and Risk Assessment: A Cornerstone of the National Mitigation Strategy, FEMA

Droughts are slow-onset hazards, but, over time, can have very damaging affects to crops, municipal water supplies, recreational uses, and wildlife. If drought conditions extend over a number of years, the direct and indirect economic impact can be significant.

The Palmer Drought Severity Index (PDSI) is based on observed drought conditions and range from -0.5 (incipient dry spell) to -4.0 (extreme drought). Evident in **Figure 5-2**, the Palmer Drought Severity Index Summary Map for the United Stated, drought affects most areas of the United States, but is less severe in the Eastern United States.



Source: National Drought Mitigation Center

Figure 5-2: Palmer Drought Severity Index Summary Map for the United States

5.3.2 Location and Spatial Extent

Drought typically covers a large area and cannot be confined to any geographic or political boundaries. According to the Palmer Drought Severity Index (**Figure 5-2**), Central North Carolina has a relatively low risk for drought hazard. However, local areas may experience much more severe and/or frequent drought events than what is represented on the Palmer Drought Severity Index map. Furthermore, it is assumed that the Cape Fear Region would be uniformly exposed to drought, making the spatial extent potentially widespread. It is also notable that drought conditions typically do not cause significant damage to the built environment.

The United States Drought Monitor reports data on North Carolina drought conditions from 2000 to 2019. It classifies drought by County on a scale of D0 to D4 where:

D0: Abnormally Dry;
D1: Moderate Drought;
D2: Severe Drought;
D3: Extreme Drought; and
D4: Exceptional Drought.

Category	Impact
D0	Pastures are dry; mild crop stress is noted; irrigation increases
	Lawns are brown
D1	Crop stress increases
	Hay production is reduced; producers feed hay to cattle early
	Wildfire danger is higher than the seasonal normal
	Increased signs of wildlife; trees and landscape are drought stressed
	Streamflow is reduced; lake and reservoirs levels decline
	Voluntary water conservation begins
D2	Dryland crop yields are low
	Wildfires are difficult to extinguish
	Swimming areas and boat ramps begin to close
	Voluntary and mandatory water use restrictions are implemented, people are asked to refrain from nonessential water use

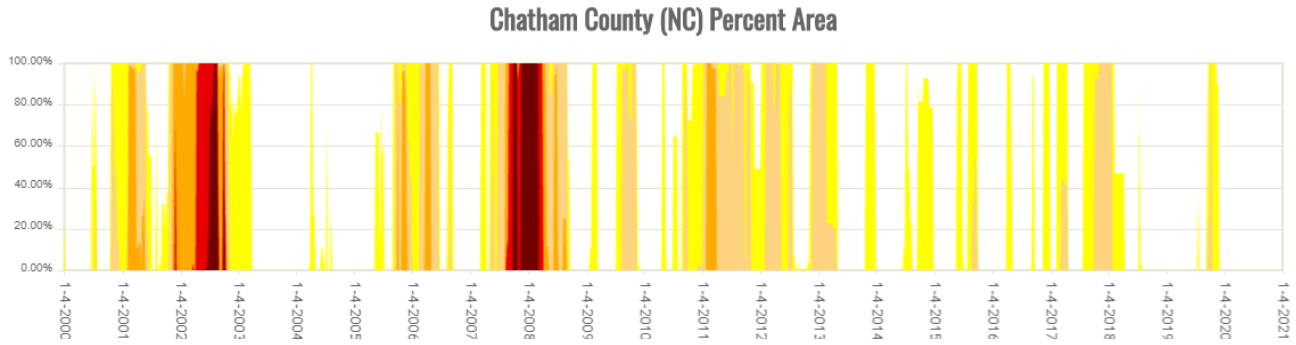
Category	Impact
D3	Hay is scarce, producers are purchasing outside of state; nitrate levels in forage are high
	Outdoor burn bans are implemented; wildfires are widespread
	Landscaping and greenhouse businesses lose revenue
	Aquatic wildlife is dying; fewer trout are stocked
	Hydropower generation decreases
	Voluntary conservation is requested even in sufficient water level areas; mandatory restrictions become more severe and fines are given to violators; stream levels are extremely low
D4	Producers sell cattle; hay shortages and crop loss occur; farmers are stressed
	Daily life is affected for all citizens; people pray for rain; drought education seminars increase
	Epizootic hemorrhagic disease is widespread in deer
	Reservoirs are low; officials are counting the days of remaining water supply; well water is low; residents are hauling water

5.3.3 Extent

According to the North Carolina Drought Monitor, all of the counties in the Cape Fear Region experienced 19 years' worth of drought occurrences (including abnormally dry) during the last 19 years (2000-2019) Since last plan update no exceptional droughts have been recorded (**Table 5-5** It should be noted that the North Carolina Drought Monitor also estimates what percentage of the county is in each classification of drought severity. For example, the most severe classification reported may be exceptional, but a majority of the county may actually be in a less severe condition.

Table 5-4: Drought Extent

Location	Number Years with Drought Occurrences	Number Years with Exceptional Drought Occurrences
Chatham County	19	3
Harnett County	19	3
Johnston County	19	2
Lee County	19	3
Moore County	19	3


Chatham County (NC) Percent Area
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1-4-2000
1-4-2001
1-4-2002
1-4-2003
1-4-2004
1-4-2005
1-4-2006
1-4-2007
1-4-2008
1-4-2009
1-4-2010
1-4-2011
1-4-2012
1-4-2013
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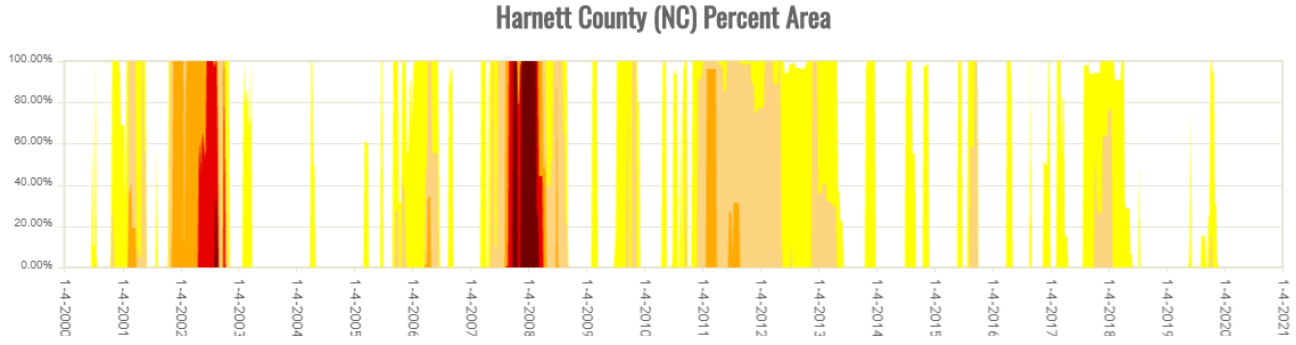
1-4-2019
1-4-2020
1-4-2021


Harnett County (NC) Percent Area
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1-4-2000
1-4-2001
1-4-2002
1-4-2003
1-4-2004
1-4-2005
1-4-2006
1-4-2007
1-4-2008
1-4-2009
1-4-2010
1-4-2011
1-4-2012
1-4-2013
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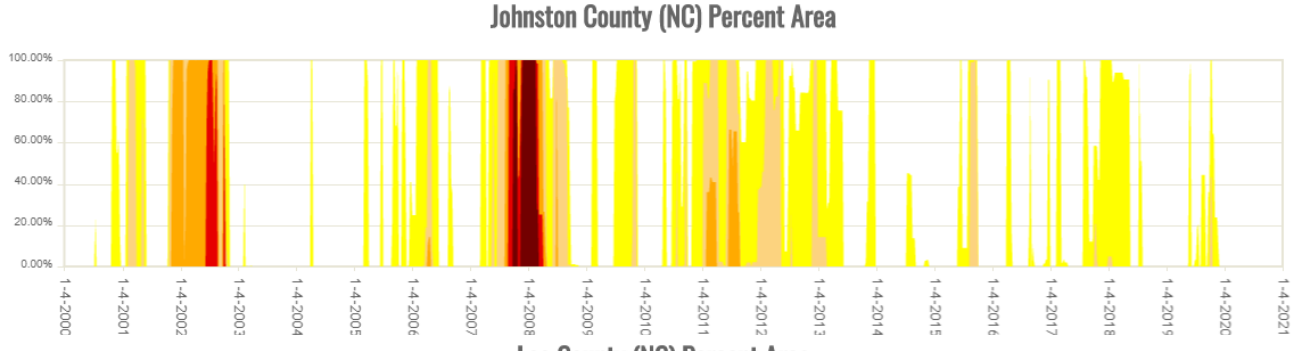
1-4-2016
1-4-2017
1-4-2018
1-4-2019
1-4-2020
1-4-2021


Johnston County (NC) Percent Area
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1-4-2000
1-4-2001
1-4-2002
1-4-2003
1-4-2004
1-4-2005
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1-4-2007
1-4-2008
1-4-2009
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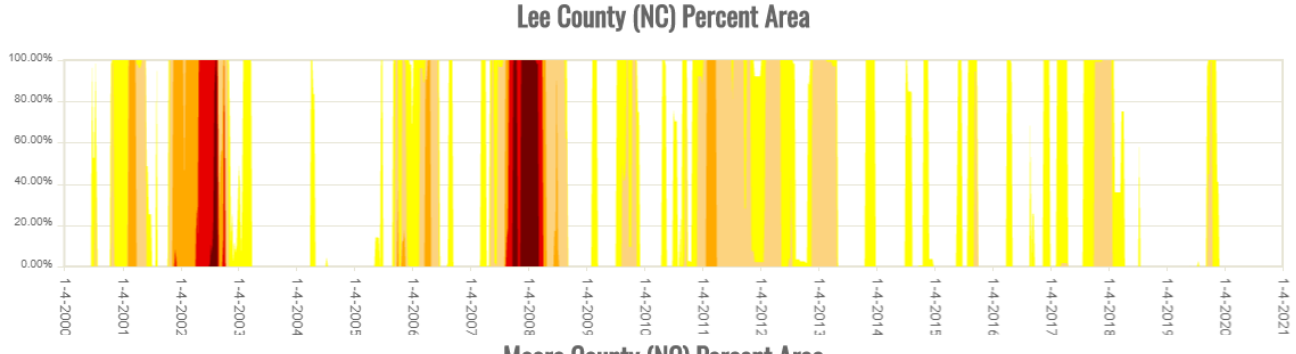
1-4-2020
1-4-2021


Lee County (NC) Percent Area
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1-4-2000
1-4-2001
1-4-2002
1-4-2003
1-4-2004
1-4-2005
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1-4-2007
1-4-2008
1-4-2009
1-4-2010
1-4-2011
1-4-2012
1-4-2013
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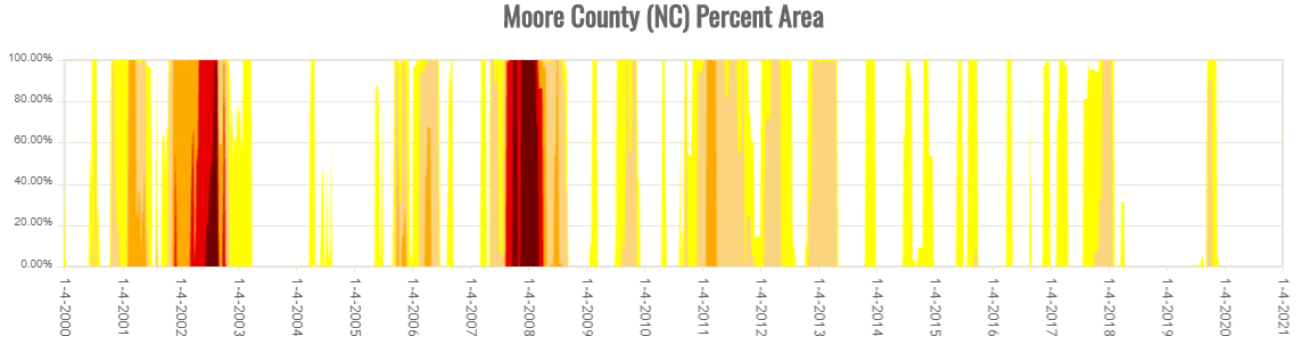
1-4-2019
1-4-2020
1-4-2021


Moore County (NC) Percent Area
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
1-4-2000
1-4-2001
1-4-2002
1-4-2003
1-4-2004
1-4-2005
1-4-2006
1-4-2007
1-4-2008
1-4-2009
1-4-2010
1-4-2011
1-4-2012
1-4-2013
1-4-2014
1-4-2015
1-4-2016
1-4-2017
1-4-2018
1-4-2019
1-4-2020
1-4-2021

5.3.4 Historical Occurrences

Data from the North Carolina Drought Management Advisory Council and National Climatic Data Center (NCDC) were used to ascertain historical drought events in the Cape Fear Region.

According to the North Carolina Drought Monitor, all of the counties in the Cape Fear Region experienced 19 years' worth of drought occurrences (including abnormally dry) during the last 19 years (2000-2019) (**Table 5-5**). It should be noted that the North Carolina Drought Monitor also estimates what percentage of the county is in each classification of drought severity. For example, the most severe classification reported may be exceptional, but a majority of the county may actually be in a less severe condition.

Table 5-5: Summary of Drought Occurrences in the Cape Fear Region

Location	Number Years with Drought Occurrences	Number Years with Exceptional Drought Occurrences
Chatham County	19	3
Harnett County	19	3
Johnston County	19	2
Lee County	19	3
Moore County	19	3

Source: North Carolina Drought Monitor

5.3.5 Probability of Future Occurrences

The probability of future Drought is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability

Jurisdiction	Self-Assessment
Chatham County (Unincorporated Area)	Medium
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium

Jurisdiction	Self-Assessment
Town of Angier	Medium
Town of Archer Lodge	Medium
Town of Benson	Medium
Town of Broadway	Medium
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Medium
Town of Coats	Medium
Town of Erwin	Medium
Town of Four Oaks	Medium
Town of Goldston	Medium
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Medium
Town of Pine Level	Medium
Town of Pinebluff	Medium
Town of Pittsboro	Medium
Town of Princeton	Medium
Town of Robbins	Medium
Town of Selma	Medium
Town of Siler City	Medium
Town of Smithfield	Medium
Town of Southern Pines	Medium
Town of Taylortown	Medium
Town of Vass	Medium
Town of Wilson's Mills	Medium
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Based on historical occurrence information, it is assumed that all of the Cape Fear Region has a probability level of likely (10 to 100 percent annual probability) for future drought events. This hazard may vary slightly by location, but each area has an equal probability of experiencing a drought.

However, historical information also indicates that there is a much lower probability for extreme, long-lasting drought conditions.

5.3.6 Impact

People

Drought can affect people's health and safety. Examples of drought impacts on society include anxiety or depression about economic losses, conflicts when there is not enough water, reduced incomes, fewer recreational activities, higher incidents of heat stroke, and even loss of human life all of the jurisdictions are vulnerable in this respect.

First Responders

The overall effect on first responders would be relatively limited when compared to other hazards. Exceptional drought conditions may impact the amount of water immediately available to respond to wildfires.

Continuity of Operations

Drought would have minimal impacts on continuity of operations due to the relatively long warning time that would allow for plans to be made to maintain continuity of operations.

Built Environment

Drought has the potential to affect water supply for residential, commercial, institutional, industrial, and government-owned areas. Drought can reduce water supply in wells and reservoirs. When drought conditions persist with no relief, local or State governments must often institute water restrictions.

Economy

Examples of economic impacts include farmers who lose money because drought destroyed their crops or who may have to spend more money to feed and water their animals. Businesses that depend on farming, like companies that make tractors and food, may lose business when drought damages crops or livestock. Extreme drought also has the potential to impact local businesses such as landscaping, recreation and tourism, and public utilities. Businesses that sell boats and fishing equipment may not be able to sell some of their goods because drought has dried up lakes and other water sources.

Natural Environment

Plants and animals depend on water, just as people do. Drought can shrink their food supplies and damage their habitats. Sometimes this damage is only temporary, and other times it is irreversible.

Drought conditions can also provide a substantial increase in wildfire risk. As plants and trees wither and die from a lack of precipitation, increased insect infestations, and diseases—all of which are associated with drought—they become fuel for wildfires. Long periods of drought can equate to more wildfires and more intense wildfires, which affect the economy, the environment, and society in many ways such as by destroying neighborhoods, crops, and habitats.

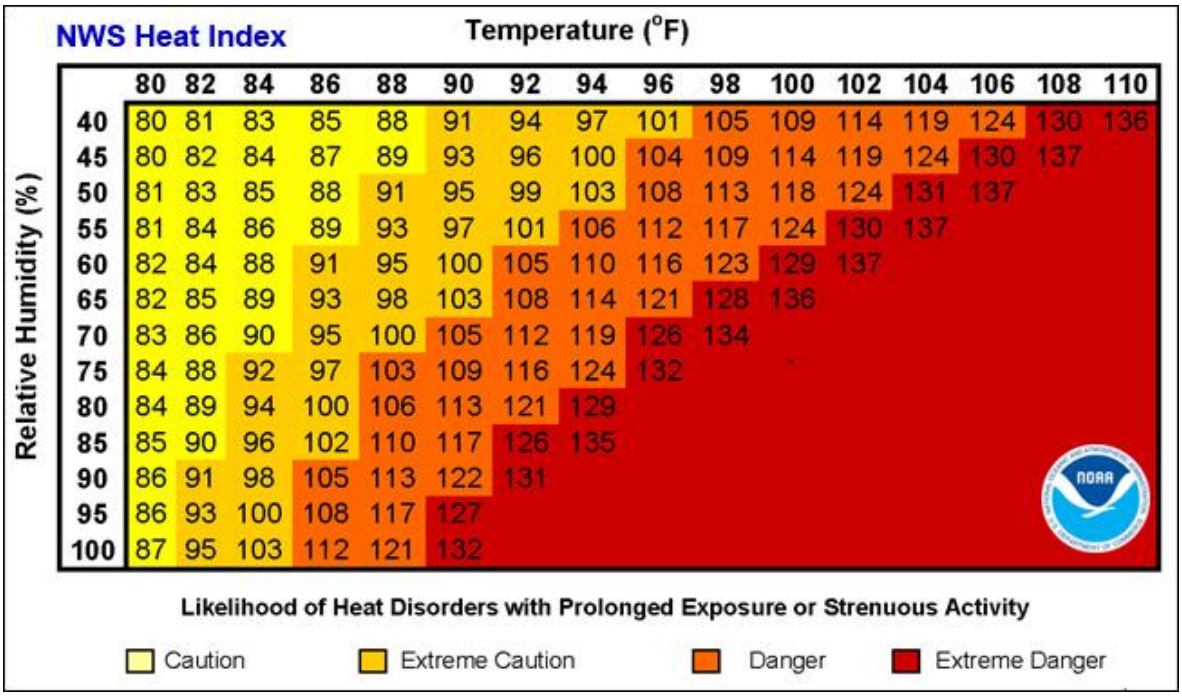
5.4 Extreme Heat

5.4.1 Background

Extreme heat, like drought, poses little risk to property. However, extreme heat can have devastating effects on health. Extreme heat is often referred to as a "heat wave." According to the National Weather Service, there is no universal definition for a heat wave, but the standard U.S. definition is any event lasting at least three days where temperatures reach ninety degrees Fahrenheit or higher. However, it

may also be defined as an event at least three days long where temperatures are ten degrees greater than the normal temperature for the affected area. Heat waves are typically accompanied by humidity but may also be very dry. These conditions can pose serious health threats causing an average of over 600 deaths each summer in the United States.[1]

According to the National Oceanic and Atmospheric Administration, heat is the number one weather-related killer among natural hazards, followed by frigid winter temperatures.[1] The National Weather Service devised the Heat Index as a mechanism to better inform the public of heat dangers. The Heat Index Chart, shown in **Figure 5-3**, uses air temperature and humidity to determine the heat index or apparent temperature. **Table 5-6** shows the dangers associated with different heat index temperatures. Some populations, such as the elderly and young, are more susceptible to heat danger than other segments of the population.



Source: National Oceanic and Atmospheric Administration

Figure 5-3: Heat Index Chart

Table 5-6: Heat Disorders Associated with Heat Index Temperature

Heat Index Temperature (Fahrenheit)	Description of Risks
80°- 90°	Fatigue possible with prolonged exposure and/or physical activity
90°- 105°	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and/or physical activity
105°- 130°	Sunstroke, heat cramps, and heat exhaustion likely, and heatstroke possible with prolonged exposure and/or physical activity
130° or higher	Heatstroke or sunstroke is highly likely with continued exposure

[1] https://www.c2es.org/content/heat-waves-and-climate-change/

Heat Index Temperature (Fahrenheit)	Description of Risks

Source: National Weather Service; National Oceanic and Atmospheric Administration

In addition, NOAA has seventeen metropolitan areas participating in the Heat HealthWatch/Warning System in order to better inform and warn the public of heat dangers. A Heat HealthWatch is issued when conditions are favorable for an excessive heat event in the next 12 to 48 hours. A Heat Warning is issued when an excessive heat event is expected in the next 36 hours. Furthermore, a warning is issued when the conditions are occurring, imminent, or have a high likelihood of occurrence. Urban areas participate in the Heat Health Watch/Warning System because urban areas are at greater risk to heat affects. Stagnant atmospheric conditions trap pollutants, thus adding unhealthy air to excessively hot temperatures. In addition, the "urban heat island effect" can produce significantly higher nighttime temperatures because asphalt and concrete (which store heat longer) gradually release heat at night.

5.4.2 Location and Spatial Extent

Excessive heat typically impacts a large area and cannot be confined to any geographic or political boundaries. The entire Cape Fear Region is susceptible to extreme heat conditions.

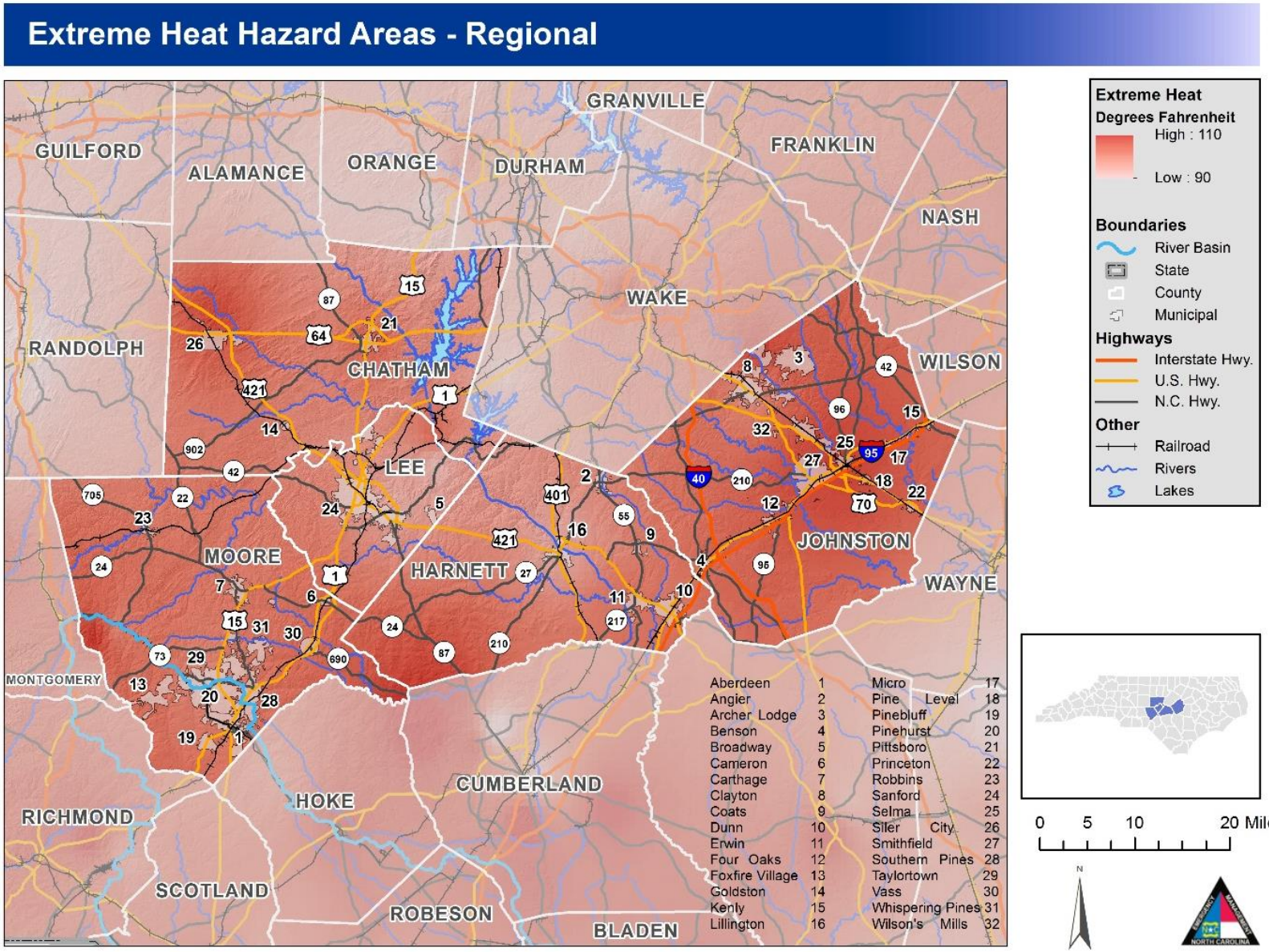


Figure 5-4: Extreme Heat Hazard Areas - Regional

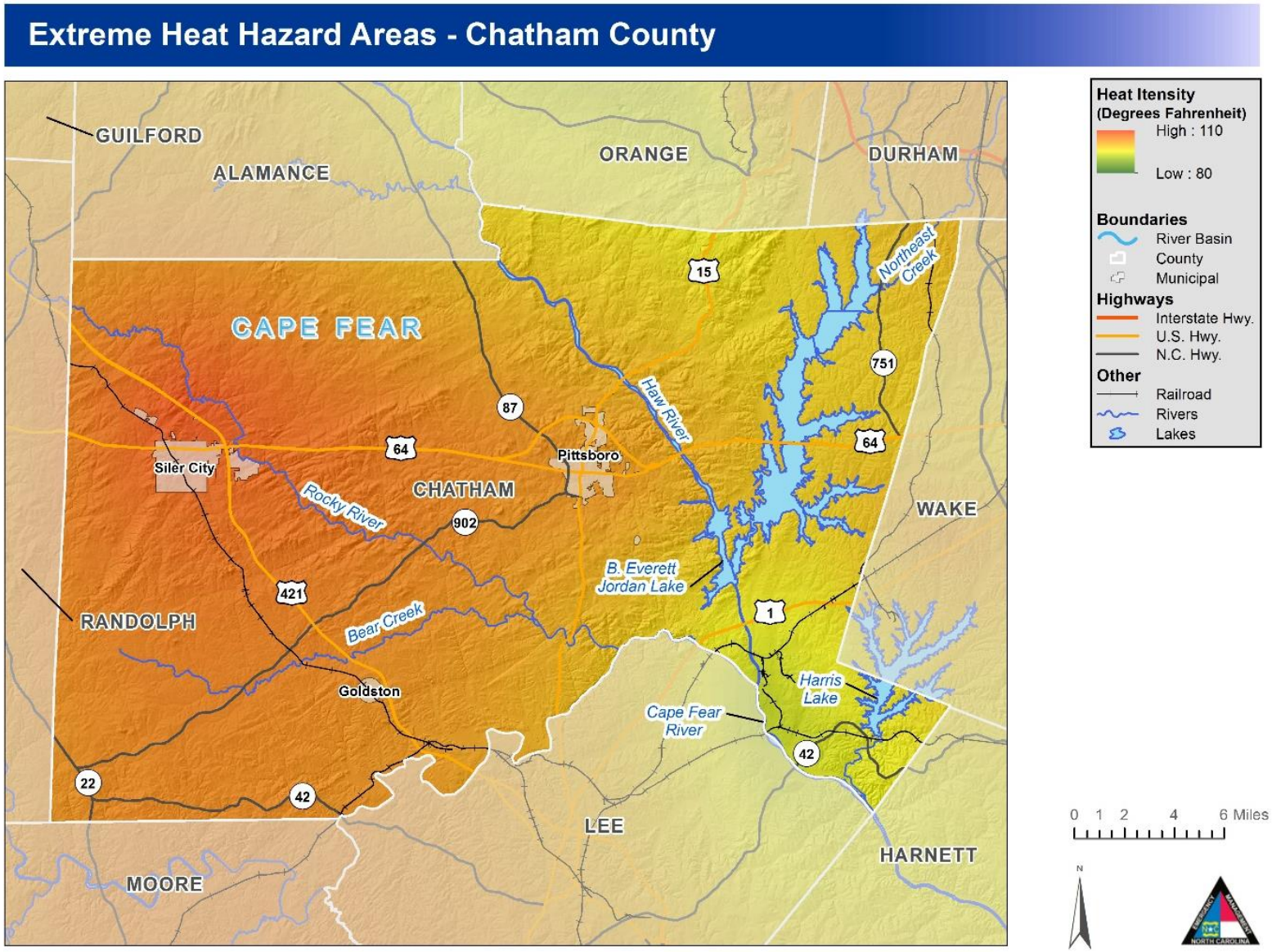


Figure 5-5: Extreme Heat Hazard Areas – Chatham County

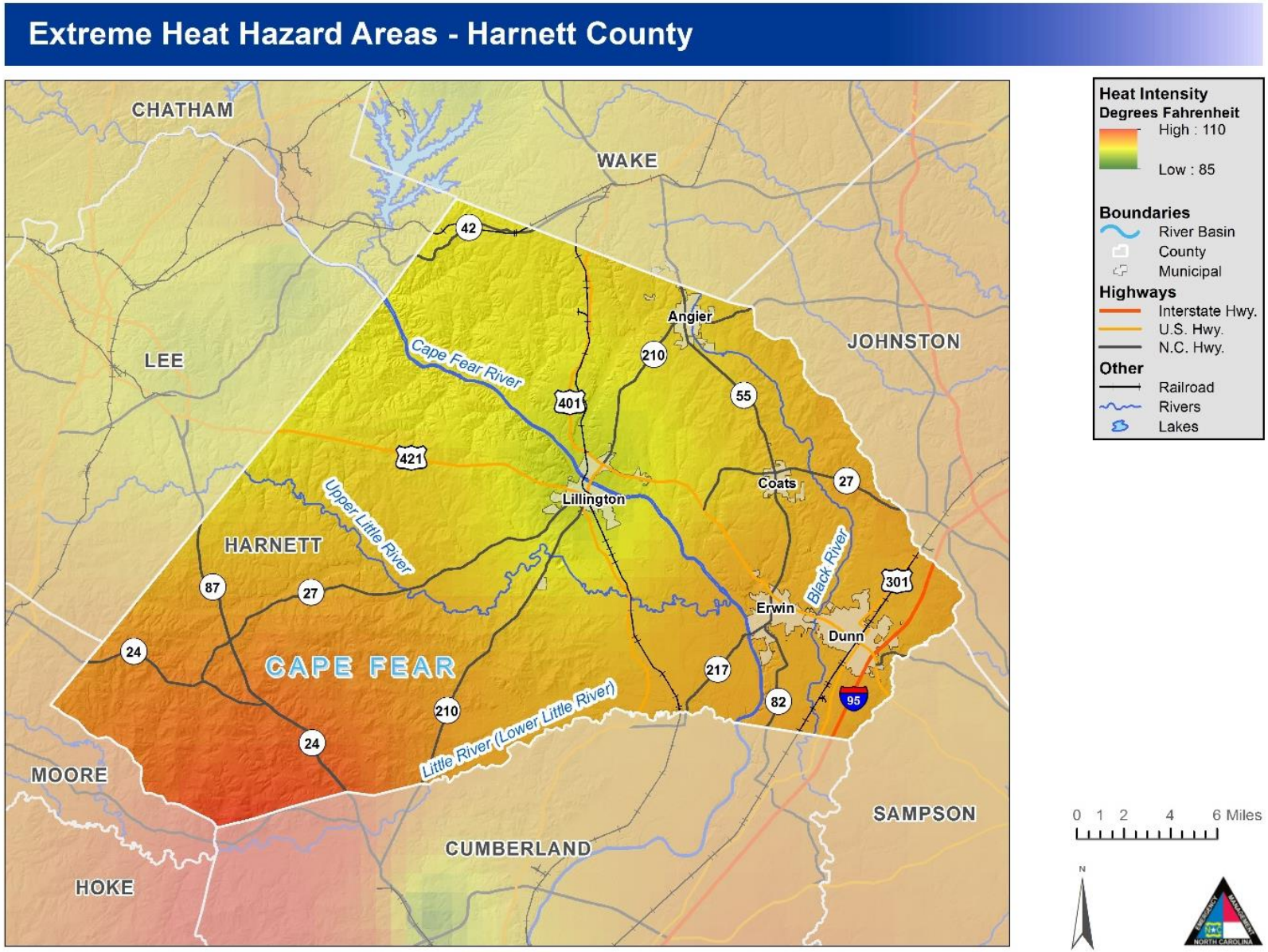


Figure 5-6: Extreme Heat Hazard Areas – Harnett County

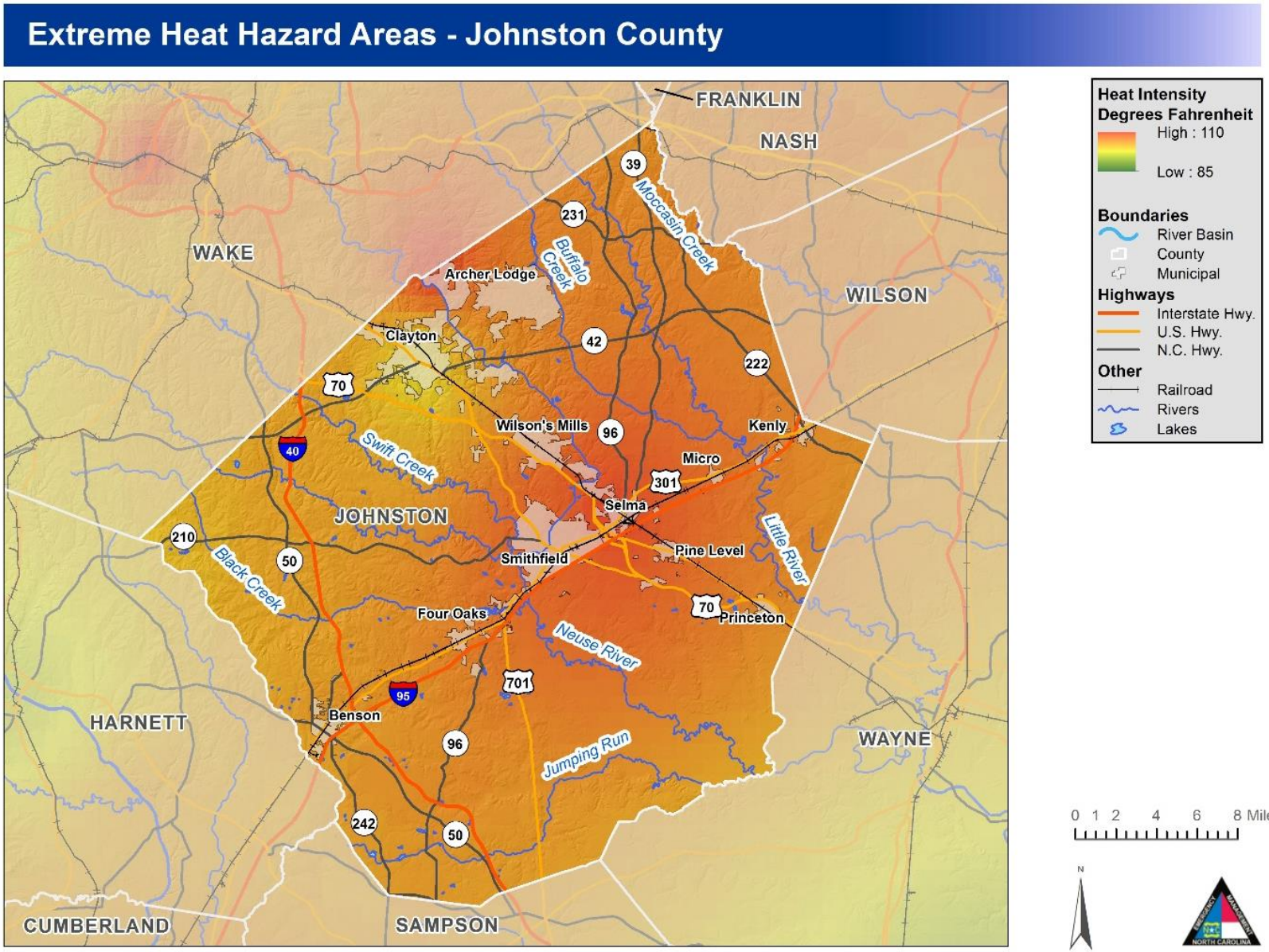


Figure 5-7: Extreme Heat Hazard Areas – Johnston County

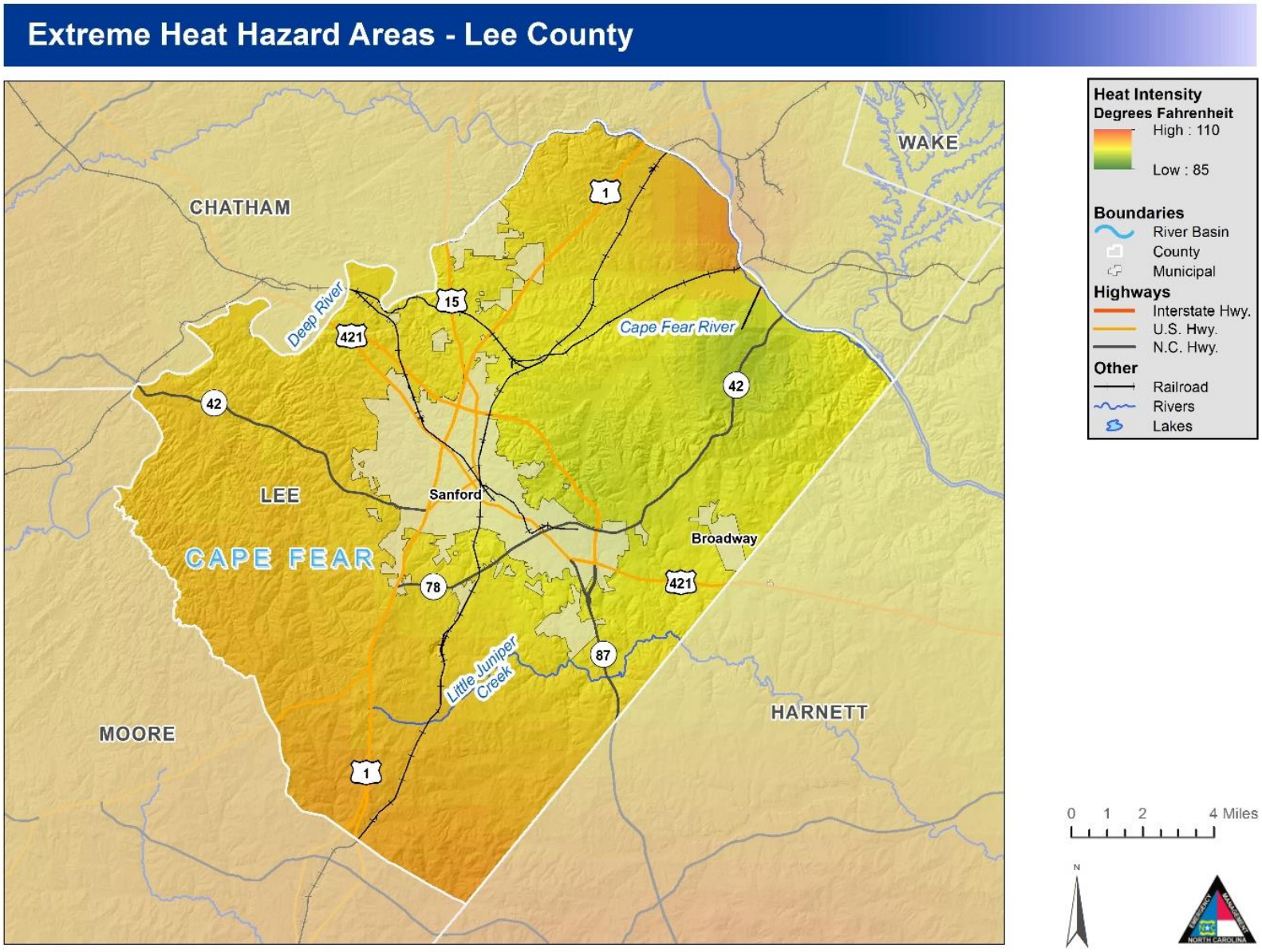


Figure 5-8: Extreme Heat Hazard Areas – Lee County

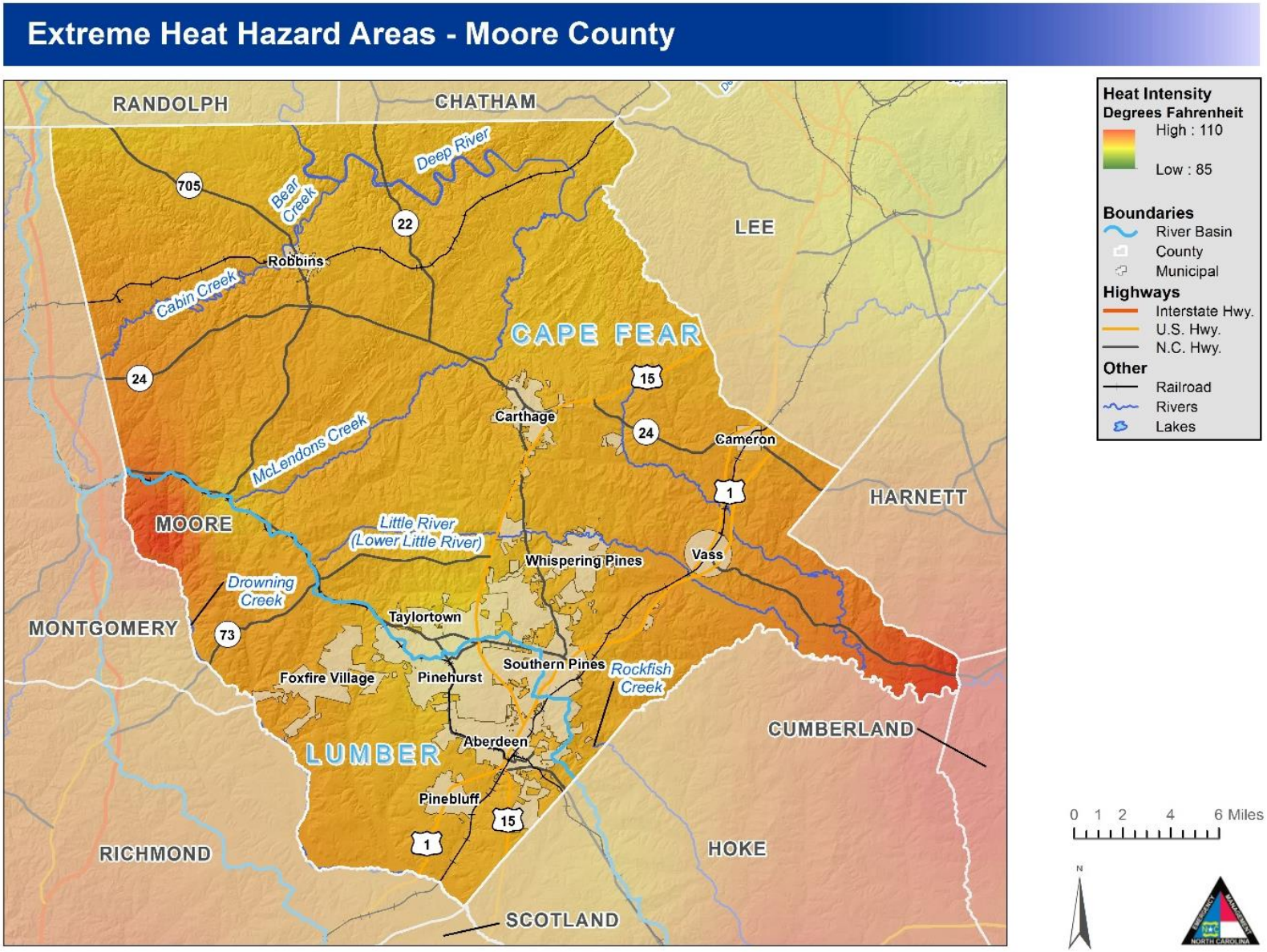


Figure 5-9: Extreme Heat Hazard Areas – Moore County

5.4.3 Extent

The extent of extreme heat can be defined by the maximum temperature reached. The highest temperature recorded in the Cape Fear Region is 108 degrees Fahrenheit (reported on July 27, 1940) in Chatham County.

Location	Date	Temperature (°F)
Chatham County	7/27/1940	108
Harnett County	8/22/1983	108
Johnston County	8/18/1988	107
Lee County	8/18/1988	107
Moore County	6/23/1981	107

5.4.4 Historical Occurrences

Data from the National Climatic Data Center was used to determine historical extreme heat and heat wave events in the Cape Fear Region. Zero events were reported for each of the five counties in the region.In addition, information from the State Climate Office of North Carolina was reviewed to obtain historical temperature records in the region. Temperature information has been reported since 1940. The recorded maximum for each county can be found below in **Table 5-7**:

Table 5-7: Highest Recorded Temperature in the Cape Fear Region

Location	Date	Temperature (°F)
Chatham County	7/27/1940	108
Harnett County	8/22/1983	108
Johnston County	8/18/1988	107
Lee County	8/18/1988	107
Moore County	6/23/1981	107
Cape Fear Region Maximum	**--**	**108**

Source: State Climate Office of North Carolina

5.4.5 Probability of Future Occurrences

The probability of future Extreme Heat is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability

Jurisdiction	Self Assessment
Chatham County (Unincorporated Area)	Medium
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium
Town of Angier	Medium
Town of Archer Lodge	Medium
Town of Benson	Medium
Town of Broadway	Medium
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Medium
Town of Coats	Medium
Town of Erwin	Medium
Town of Four Oaks	Medium
Town of Goldston	Medium
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Medium
Town of Pine Level	Medium
Town of Pinebluff	Medium
Town of Pittsboro	Medium
Town of Princeton	Medium
Town of Robbins	Medium
Town of Selma	Medium
Town of Siler City	Medium
Town of Smithfield	Medium
Town of Southern Pines	Medium
Town of Taylortown	Medium

Jurisdiction	Self Assessment
Town of Vass	Medium
Town of Wilson's Mills	Medium
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Based on historical occurrence information, it is assumed that all of the Cape Fear Region has a probability level of likely (10 to 100 percent annual probability) for future extreme heat events to impact the region.

5.4.6 Impact

People

Extreme heat can affect people's health and leads to higher incidents of heat stroke, and even loss of human life. Staying hydrated and avoiding strenuous exercise outdoors during extreme heat patterns can prevent adverse health risks. Individuals with underlying health issues or those located in rural areas may be vulnerable due to medical access issues.

Built Environment

Updating building codes and landscape best management practices can increase energy efficiency during extreme heat phases. Local governments could provide public drinking fountains, cooling shelters, and swimming pools to keep individuals cooled off.

Economy

All jurisdictions in the Region are vulnerable to extreme heat whereas employees are less likely to be productive during extreme heat events. Lower productivity levels are associated with heat exhaustion.

Agriculture

Livestock are susceptible to heat-related illnesses during bouts of extreme heat. In addition, crop yields may be negatively impacted if extreme heat occurs during key development stages. Jurisdictions most vulnerable to this would be Johnston and Moore County along with their jurisdictions of Archer Lodge, Benson, Clayton, Four Oaks, Kenly, Micro, Pine Level, Princeton, Selma, Smithfield, and Wilson's Mills.

Natural Environment

When trees are replaced with impervious surfaces and materials in urban areas it contributes to the heat island effect. Urban forests (street trees and wooded areas) can mitigate heat islands, reducing local air temperatures by up to 9°Farenheit.[2]

5.5 Hurricane and Tropical Storm

5.5.1 Background

Hurricanes and tropical storms are classified as cyclones and defined as any closed circulation developing around a low-pressure center in which the winds rotate counterclockwise in the Northern

[2] U.S. Department of Health and Human Services Centers for Disease Control and Prevention. Extreme Heat Can Impact Our Health in Many Ways. Retrieved from: https://www.cdc.gov/climateandhealth/pubs/EXTREME-HEAT-Final_508.pdf

Hemisphere (or clockwise in the Southern Hemisphere) and whose diameter averages 10 to 30 miles across. A tropical cyclone refers to any such circulation that develops over tropical waters. Tropical cyclones act as a "safety-valve," limiting the continued build-up of heat and energy in tropical regions by maintaining the atmospheric heat and moisture balance between the tropics and the pole-ward latitudes. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation, and tornadoes.

The key energy source for a tropical cyclone is the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, warm sea surface temperature, rotational force from the spinning of the earth, and the absence of wind shear in the lowest 50,000 feet of the atmosphere. The majority of hurricanes and tropical storms form in the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico during the official Atlantic hurricane season, which encompasses the months of June through November. The peak of the Atlantic hurricane season is in early to mid-September and the average number of storms that reach hurricane intensity per year in the Atlantic basin is about six.

As an incipient hurricane develops, barometric pressure (measured in millibars or inches) at its center falls and winds increase. If the atmospheric and oceanic conditions are favorable, it can intensify into a tropical depression. When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name, and is closely monitored by the National Hurricane Center in Miami, Florida. When sustained winds reach or exceed 74 miles per hour the storm is deemed a hurricane. Hurricane intensity is further classified by the Saffir-Simpson Scale (**Table 5-8**), which rates hurricane intensity on a scale of 1 to 5, with 5 being the most intense.

Table 5-8: Saffir-Simpson Scale

Category	Maximum Sustained Wind Speed (MPH)	Minimum Surface Pressure (Millibars)
1	74–95	Greater than 980
2	96–110	979–965
3	111–129	964–945
4	130–156	944–920
5	157 +	Less than 920

Source: National Hurricane Center

The Saffir-Simpson Scale categorizes hurricane intensity linearly based upon maximum sustained winds and barometric pressure, which are combined to estimate potential damage. Categories 3, 4, and 5 are classified as "major" hurricanes and, while hurricanes within this range comprise only 20 percent of total tropical cyclone landfalls, they account for over 70 percent of the damage in the United States. **Table 5-9** describes the damage that could be expected for each category of hurricane. Damage during hurricanes may also result from spawned tornadoes, storm surge, and inland flooding associated with heavy rainfall that usually accompanies these storms.

Table 5-9: Hurricane Damage Classifications

Storm Category	Damage Level	Description of Damages	Photo Example
1	MINIMAL	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal flooding and minor pier damage.	
2	MODERATE	Some roofing material, door, and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small craft in unprotected moorings may break their moorings.	
3	EXTENSIVE	Some structural damage to small residences and utility buildings, with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures, with larger structures damaged by floating debris. Terrain may be flooded well inland.	
4	EXTREME	More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.	
5	CATASTROPHIC	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.	

Source: National Hurricane Center; Federal Emergency Management Agency

5.5.2 Location and Spatial Extent

Hurricanes and tropical storms threaten the entire Atlantic and Gulf seaboard of the United States. While coastal areas are most directly exposed to the brunt of landfalling storms, their impact is often felt hundreds of miles inland and they can affect the Cape Fear Region. All areas in the Cape Fear Region are equally susceptible to hurricanes and tropical storms.

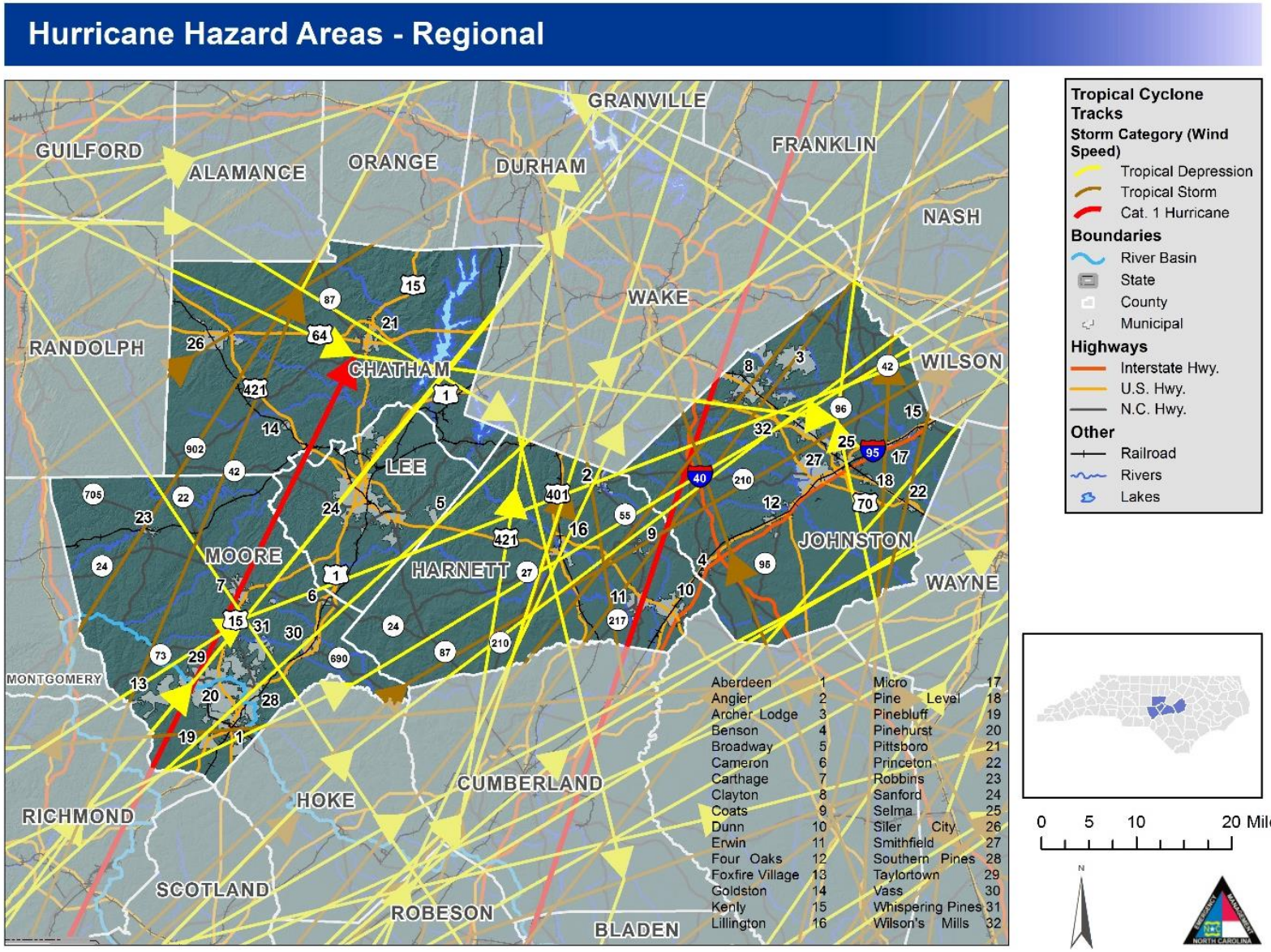


Figure 5-10: Hurricane Hazard Areas - Regional

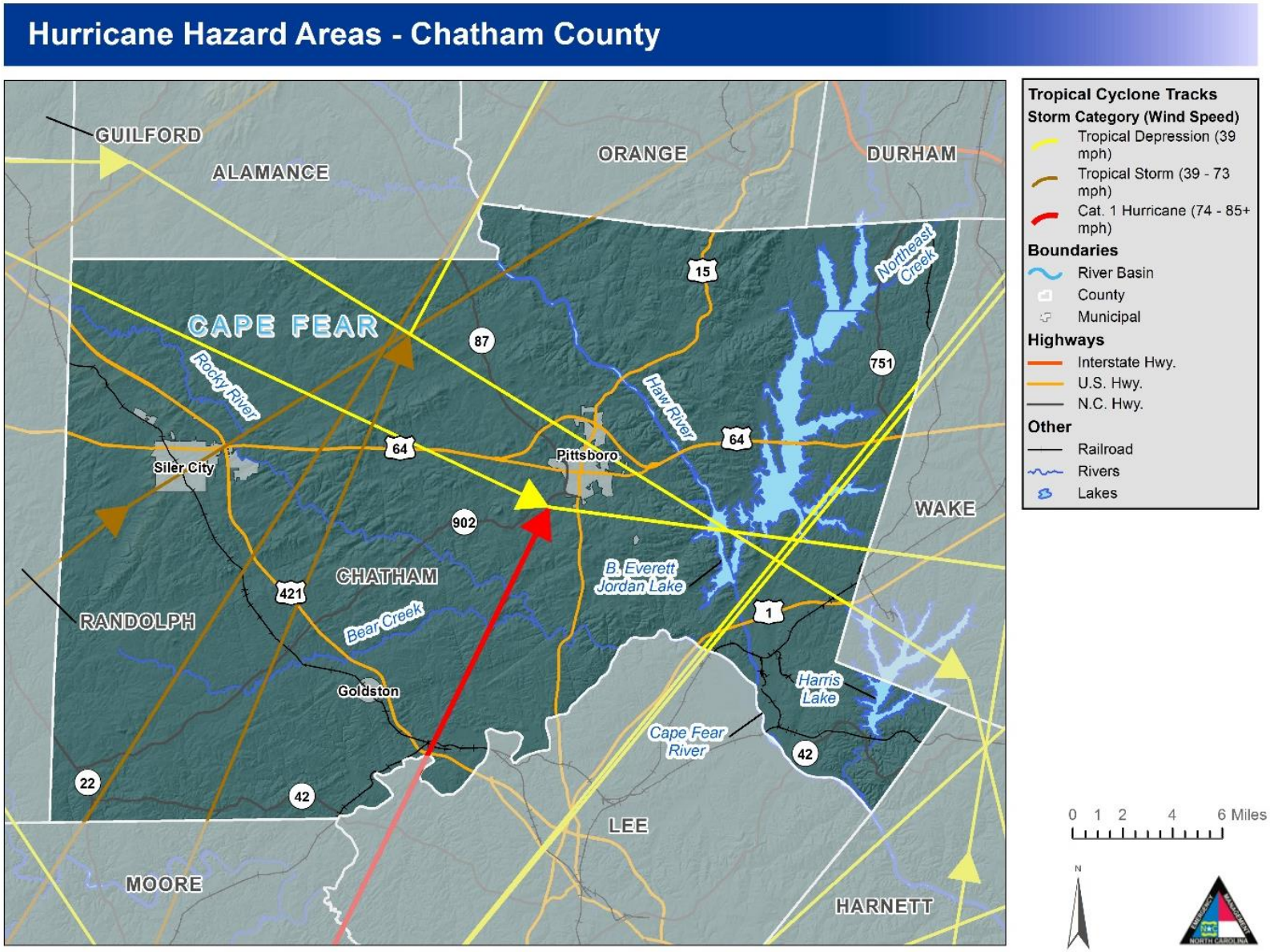


Figure 5-11: Hurricane Hazard Areas – Chatham County

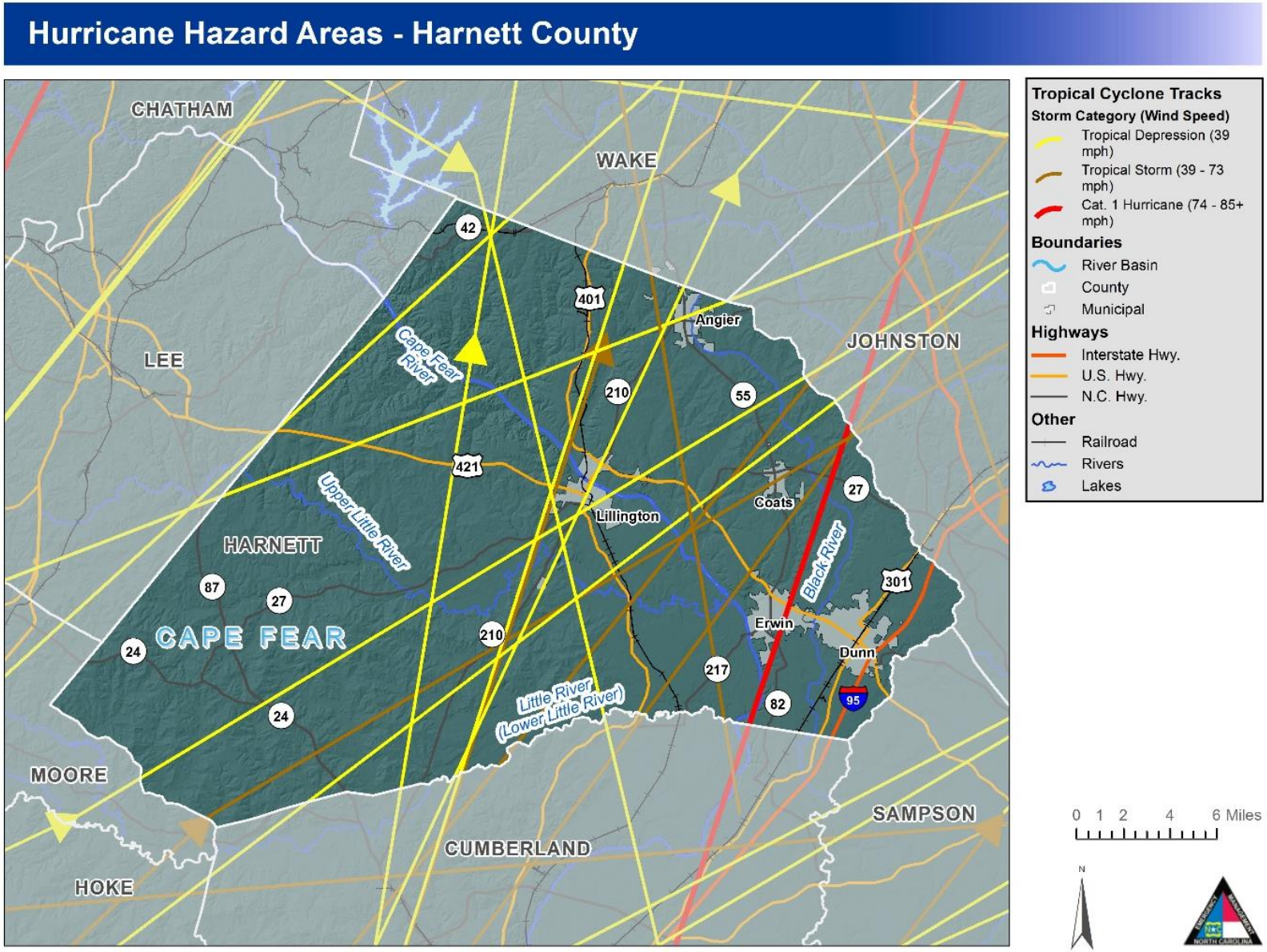


Figure 5-12: Hurricane Hazard Areas – Harnett County

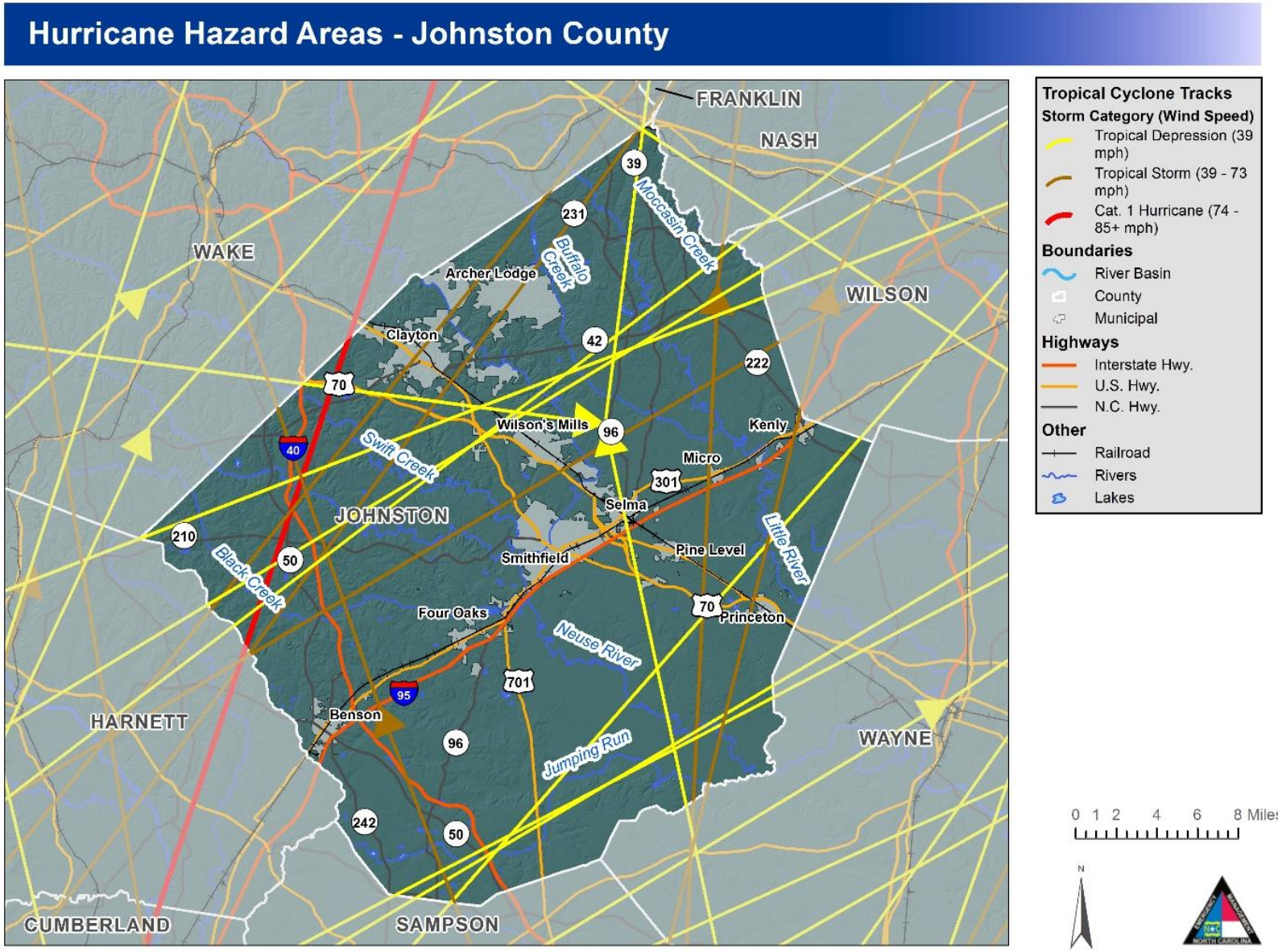


Figure 5-13: Hurricane Hazard Areas – Johnston County

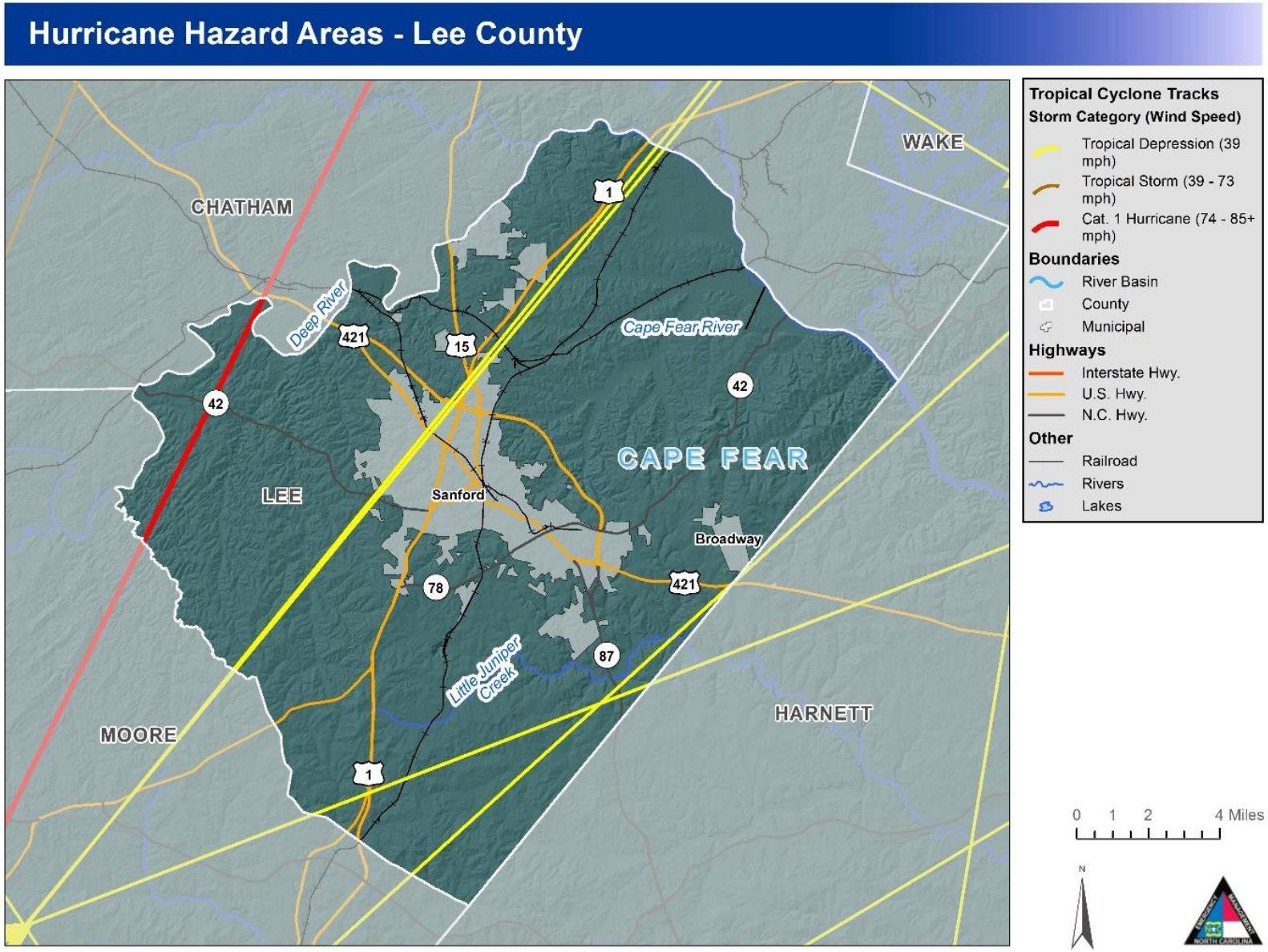


Figure 5-14: Hurricane Hazard Areas – Lee County

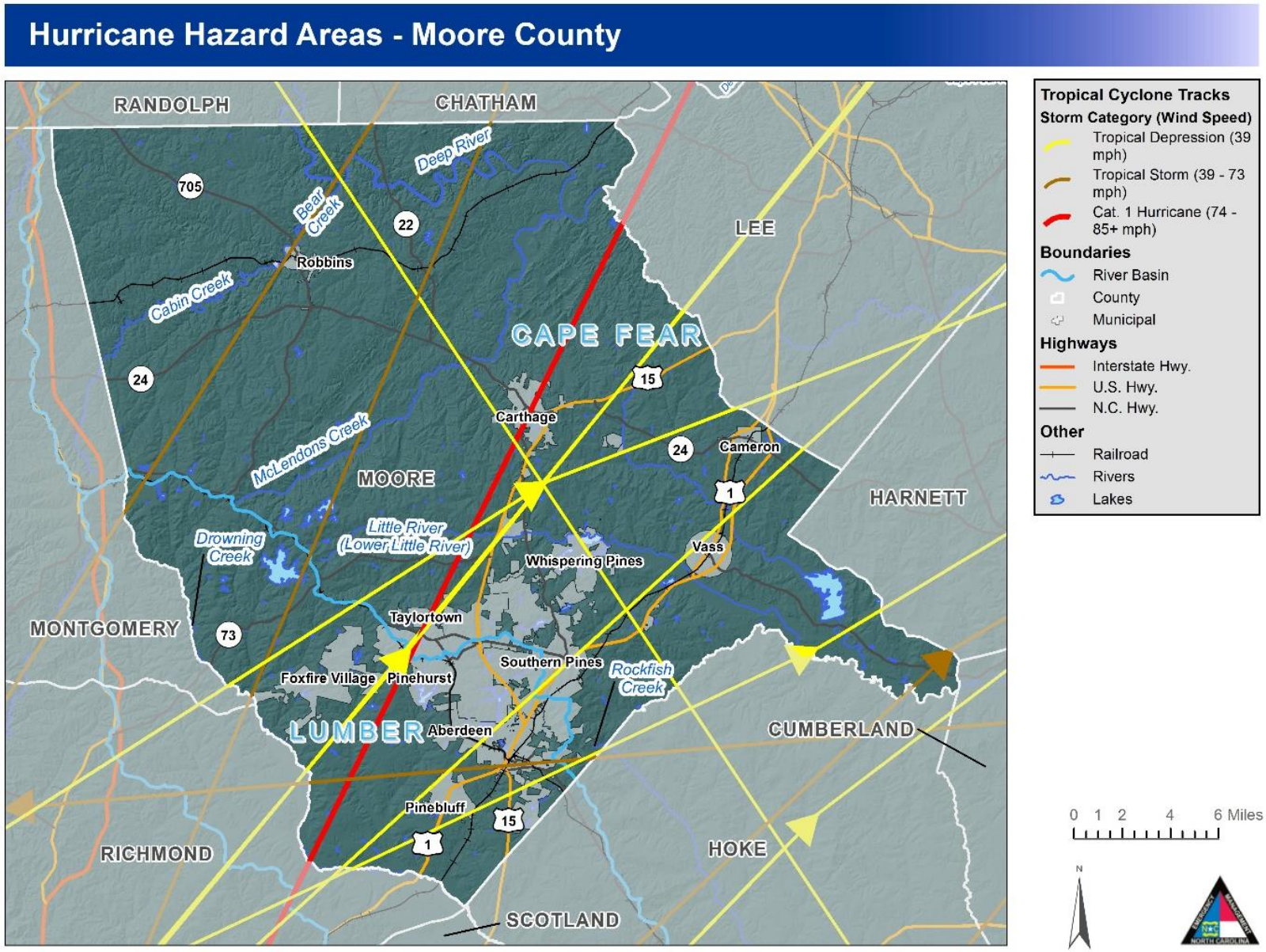


Figure 5-15: Hurricane Hazard Areas – Moore County

5.5.3 Extent

Hurricane extent is defined by the Saffir-Simpson Scale which classifies hurricanes into Category 1 through Category 5. The greatest classification of hurricane to traverse directly through the Cape Fear Region was an Unnamed Category 3 storm which reached a maximum wind speed of 70 knots in the Region in 1893. The following lists the greatest extent of hurricane winds to pass through the area, though it should be noted that strongest storms could impact the region without a direct hit:

- Chatham County: Unnamed 1896 Storm, Category 3 Hurricane (62 knots)
- Harnett County: Unnamed 1893 Storm, Category 3 Hurricane (70 knots)
- Johnston County: Unnamed 1893 Storm, Category 3 Hurricane (70 knots)
- Lee County: Unnamed 1896 Storm, Category 3 Hurricane (62 knots)
- Moore County: Unnamed 1896 Storm, Category 3 Hurricane (62 knots)

5.5.4 Historical Occurrences

According to the National Hurricane Center's historical storm track records, 68 hurricane or tropical storm tracks have passed within 75 miles of the Cape Fear Region since 1851.[3] This includes 43 hurricanes, 14 tropical storms, and 10 tropical depressions (based on the maximum storm category reached by the storm).

Of the recorded storm events, 40 have traversed directly through the Cape Fear Region. **Table 5-10** provides the date of occurrence, name (if applicable), maximum wind speed (as recorded within 75 miles of the Cape Fear Region) and Maximum Category of the storm (based on the Saffir-Simpson Scale) for each event.

Table 5-10: Historical Storm Tracks Within 75 Miles of the Cape Fear Region (1850–2019)

Date of Occurrence	Storm Name	Maximum Wind Speed Within Buffer Area (knots)	Maximum Storm Category Achieved
8/25/1851	NOT NAMED	35	Tropical Storm (TS)
9/10/1854	NOT NAMED	57	Tropical Depression (TD)
1859	NOT NAMED	-	Tropical Depression (TD)
9/17/1859	NOT NAMED	35	Hurricane: Category 1 (H1)
6/23/1867	NOT NAMED	35	Hurricane: Category 1 (H1)
10/4/1877	NOT NAMED	48	Hurricane: Category 3 (H3)
9/13/1878	NOT NAMED	44	Hurricane: Category 2 (H2)
9/12/1883	NOT NAMED	44	Hurricane: Category 3 (H3)
10/13/1885	NOT NAMED	35	Tropical Depression (TD)
7/2/1886	NOT NAMED	31	Hurricane: Category 2 (H2)
6/22/1886	NOT NAMED	35	Tropical Depression (TD)
1886	NOT NAMED	53	Tropical Depression (TD)
1887	NOT NAMED	-	Hurricane: Category 1 (H1)

[3] These storm track statistics do not include extra-tropical storms. Though these related hazard events are less severe in intensity, they may cause significant local impact in terms of rainfall and high winds.

Date of Occurrence	Storm Name	Maximum Wind Speed Within Buffer Area (knots)	Maximum Storm Category Achieved
9/10/1888	NOT NAMED	31	Tropical Storm (TS)
9/24/1889	NOT NAMED	35	Hurricane: Category 2 (H2)
1891	NOT NAMED	-	Tropical Depression (TD)
10/4/1893	NOT NAMED	70	Hurricane: Category 3 (H3)
10/13/1893	NOT NAMED	35	Hurricane: Category 4 (H4)
9/30/1896	NOT NAMED	62	Hurricane: Category 3 (H3)
10/31/1899	NOT NAMED	66	Hurricane: Category 2 (H2)
7/13/1901	NOT NAMED	31	Hurricane: Category 1 (H1)
6/16/1902	NOT NAMED	31	Tropical Storm (TS)
9/14/1904	NOT NAMED	53	Hurricane: Category 1 (H1)
8/31/1911	NOT NAMED	22	Hurricane: Category 2 (H2)
6/14/1912	NOT NAMED	31	Tropical Storm (TS)
9/4/1913	NOT NAMED	66	Hurricane: Category 1 (H1)
10/10/1913	NOT NAMED	35	Hurricane: Category 1 (H1)
5/16/1916	NOT NAMED	31	Tropical Storm (TS)
9/6/1916	NOT NAMED	31	Tropical Storm (TS)
9/23/1920	NOT NAMED	31	Hurricane: Category 1 (H1)
9/30/1924	NOT NAMED	53	Hurricane: Category 1 (H1)
1927	NOT NAMED	44	Tropical Storm (TS)
8/11/1928	NOT NAMED	26	Hurricane: Category 2 (H2)
10/2/1929	NOT NAMED	35	Hurricane: Category 4 (H4)
9/6/1935	NOT NAMED	48	Hurricane: Category 5 (H5)
8/15/1940	NOT NAMED	62	Tropical Depression (TD)
8/2/1944	NOT NAMED	31	Hurricane: Category 1 (H1)
10/20/1944	NOT NAMED	48	Hurricane: Category 3 (H3)
9/18/1945	NOT NAMED	35	Hurricane: Category 4 (H4)
10/9/1946	NOT NAMED	22	Hurricane: Category 4 (H4)
9/25/1947	NOT NAMED	53	Tropical Storm (TS)
10/15/1954	HAZEL	35	Hurricane: Category 4 (H4)
8/17/1955	DIANE	53	Hurricane: Category 3 (H3)
9/26/1956	IVY	35	Hurricane: Category 1 (H1)
7/10/1959	CINDY	26	Hurricane: Category 1 (H1)

Date of Occurrence	Storm Name	Maximum Wind Speed Within Buffer Area (knots)	Maximum Storm Category Achieved
8/31/1964	CLEO	26	Hurricane: Category 4 (H4)
6/16/1965	UNNAMED	35	Tropical Storm (TS)
6/10/1968	CELESTE	31	Tropical Storm (TS)
5/26/1970	ALMA	22	Hurricane: Category 1 (H1)
9/13/1971	HEIDI	40	Tropical Depression (TD)
10/1/1971	UNNAMED	40	Tropical Storm (TS)
6/21/1972	AGNES	26	Hurricane: Category 1 (H1)
9/15/1976	UNNAMED	53	Tropical Storm (TS)
9/5/1979	DAVID	35	Hurricane: Category 5 (H5)
9/14/1984	DIANA	40	Hurricane: Category 4 (H4)
8/18/1985	ONE-C	22	Tropical Depression (TD)
9/8/1987	UNNAMED	53	Tropical Depression (TD)
9/6/1996	FRAN	57	Hurricane: Category 3 (H3)
7/24/1997	DANNY	31	Hurricane: Category 1 (H1)
9/4/1998	EARL	66	Hurricane: Category 2 (H2)
9/5/1999	DENNIS	26	Hurricane: Category 2 (H2)
9/16/1999	FLOYD*	66	Hurricane: Category 1 (H1)
9/19/2000	GORDON	35	Tropical Storm (TS)
9/23/2000	HELENE	35	Hurricane: Category 1 (H1)
8/30/2004	GASTON	35	Hurricane: Category 3 (H3)
9/27/2004	JEANNE	-	Tropical Storm (TS)
6/13/2006	ALBERTO	35	Hurricane: Category 1 (H1)
9/6/2008	HANNA	40	Tropical Depression (TD)
9/01/2016	HERMINE	55	Tropical Storm (TS)
6/5/2013	ANDREA	40	Tropical Storm (TS)
10/8/2016	MATTHEW*	70	Hurricane: Category 1 (H1)
8/6/2018	MICHAEL	45	Tropical Storm (TS)
9/05/2019	DORIAN*	90	Hurricane: Category 2 (H2)

*Although Hurricane Floyd's track traversed just outside of the 75-mile buffer area, it was included in the hazard history since a federal disaster area was declared for all five Cape Fear counties as a result of the storm's impact.
Source: National Hurricane Center

Federal records also indicate that six disaster declarations were made in 1996 (Hurricane Fran), 1999 (Hurricane Floyd), 2003 (Hurricane Isabel), 2011 (Hurricane Irene), 2018 (Hurricane Michael), and 2019 (Hurricane Matthew) for the Region.[4]

Flooding and high winds are both hazards of concern with hurricane and tropical storm events in the Cape Fear region as evidenced by the difference in impacts caused by Hurricanes Fran and Floyd. Whereas Floyd's effects were primarily due to flooding, Fran's high winds caused damage throughout the county in conjunction with flooding impacts. Some anecdotal information is available for the major storms that have impacted the area as found below:

Hurricane Fran – September 5-6, 1996

After being saturated with rain just a few weeks earlier by Hurricane Bertha, the Cape Fear region was impacted by the one of the most devastating storms to ever make landfall along the Atlantic Coast. Fran dropped more than 10 inches of rain in many areas and had sustained winds of around 115 miles per hour as it hit the coast and began its path along the I-40 corridor central North Carolina. In the end, over 3 billion dollars in damages were reported in the state. Damages to infrastructure and agriculture added to the overall toll and more than 1.7 million people in the state were left without power.

Hurricane Floyd – September 16-17, 1999

Much like Hurricane Fran, Hurricane Floyd hit the North Carolina coast just 10 days after Tropical Storm Dennis dropped more than 10 inches of rain in many areas of the state. As a result, the ground was heavily saturated when Floyd dumped an additional 15 to 20 inches in some areas. Although much of the heavy damage from the storm was found further east, the Cape Fear region suffered significant damage from the storm. Across the state more than 6 billion dollars in property damage was recorded and agricultural impacts were extremely high.

Hurricane Ivan – September 16-17, 2004

Just a week and a half following Tropical Storm Frances, the remnants of Hurricane Ivan hit western North Carolina when many streams and rivers were already well above flood stage. The widespread flooding forced many roads to be closed and landslides were common across the mountain region. Wind gusts reached between forty and sixty MPH across the higher elevations of the Appalachian Mountains resulting in numerous downed trees. More than $13.8 million of federal aid was dispersed across North Carolina following Ivan.

Hurricane Matthew - October 8, 2016

Hurricane Matthew, a category 1, moved up the eastern seaboard, bringing very heavy rain and strong winds. Rainfall amounts over 12 inches occurred in multiple areas of the county. Wind gusts were surprisingly high, with a gust to 67 mph at the Lumberton Airport. Tropical storm force winds and flooded ground caused widespread tree and power line damage. The river gauge at the Lumber River at Lumberton failed, however the high watermark data from the U.S. Geological Survey indicated the water level may have reached over 25 feet. This exceeded the previous record by over 4 feet. This level bypassed the levee that protects parts of Lumberton from the river due to water passing under I-95 via VFR road. One elderly male died in his home on West Fifth Street on 10/9. The man had a heart condition and when power was lost, he was without oxygen. The family believes he may have died of a heart attack and then fell into flood waters which had overtaken his home from the Lumber River. The Lumber River also exceeded record levels at Boardman by about 2.5 feet. This resulted in the closure of U. S. Route 74, the main route between Wilmington and Lumberton. Numerous water rescues were

[4] A complete listing of historical disaster declarations can be found in Section 4: Hazard Identification.

required along and near the Lumber River. Many homes were flooded in Pembroke. This was one of the hardest hit counties due to the historic river flooding. The offices of the Robesonian Newspaper were flooded.

Hurricane Florence – September 2018

Hurricane Florence began as a tropical storm September 1st over the Cape Verde islands off the coast of West Africa. It peaked as a Category 4 hurricane with sustained winds of 140 mph. It made landfall as a Category 1 hurricane the morning of Friday, September 14 over Wrightsville Beach, North Carolina. Florence produced extensive wind damage along the North Carolina coast from Cape Lookout, across Carteret, Onslow, Pender, and New Hanover Counties. Thousands of downed trees caused widespread power outages to nearly all of eastern North Carolina. The historic legacy of Hurricane Florence will be record breaking storm surge of 9 to 14 feet devastating rainfall of 20 to 30 inches, which produced catastrophic and life-threatening flooding.

Hurricane Michael – October 8, 2018

Michael originated as a Category 5 hurricane that came up the Gulf of Mexico and first hit land around the Florida/Georgia border. Tropical storm Michael gradually weakened as it tracked from the South Carolina Midlands through portions of the South Carolina and North Carolina Piedmont throughout the 11th. Gusty winds increased during the daylight hours on the east side of the storm track, with numerous trees blown, especially across the Piedmont. Flooding continued east for days after the storm hit. Davidson and Randolph counties were included in the Presidential Disaster Declaration. Hurricane Michael caused multiple flash flooding events and multiple power outages in the region due to high winds.

5.5.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Hurricane Winds is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Less Than 0.2% Annual Probability Of 50-Year Event
- Between 0.2% And 2% Annual Probability Of 50-Year Event
- More Than 2% Annual Probability Of 50-Year Event

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Medium
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium
Town of Angier	Medium

Jurisdiction	Calculated Probability (IRISK)
Town of Archer Lodge	Medium
Town of Benson	Medium
Town of Broadway	Medium
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Low
Town of Coats	Medium
Town of Erwin	Medium
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Medium
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Medium
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Medium
Town of Taylortown	Medium
Town of Vass	Medium
Town of Wilson's Mills	Low
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Given the inland location of the region, the Cape Fear counties are less likely to be affected by a hurricane or tropical storm system than counties closer to the coast. However, given the region's location in the eastern part of the state, hurricanes and tropical storms still remain a real threat. Based on historical evidence, the probability level of future occurrence is likely (between 10 and 100 percent annual probability). Given the regional nature of the hazard, all areas are equally exposed to this hazard.

When the region is impacted, the damage could be significant, threatening lives and property throughout the planning area.

5.5.6 Impact

People

Hurricanes may affect human beings in a number of ways including causing deaths, causing injury, loss of property, outbreak of diseases, mental trauma and destroying livelihoods. During a hurricane, residential, commercial, and public buildings, as well as critical infrastructure such as transportation, water, energy, and communication systems may be damaged or destroyed by several of the impacts associated with hurricanes. The wind and flooding hazards associated with hurricanes can be tremendously destructive and deadly. Power outages and flooding are likely to displace people from their homes. The towns of Four Oaks, Selma and Smithfield are more vulnerable due to the flood risk in their area. Furthermore, water can become polluted making it undrinkable, and if consumed, diseases and infection can be easily spread.

First Responders

First responders responding to the impacts of a tropical storm or hurricane face many risks to their health and life safety. Responders face risk of injury or death during a storm event by flooding and high winds. Personnel or families of personnel may be harmed which would limit their response capability. Downed trees, power lines and flood waters may prevent access to areas in need which prolongs response time. Furthermore, hurricanes typically impact a large area which amplifies the number of emergency responses required.

Continuity of Operations

Continuity of operations may be affected if a hurricane event damages a critical facility or causes a loss of power. Hurricane events typically have ample lead time to prepare for and maintain continuity of operations.

Built Environment

Depending on the strength of a tropical storm or hurricane, structural damage to buildings may occur. A weak tropical storm may cause no damage whatsoever. The most likely impact from a category 1 or greater hurricane is the loss of glass windows and doors by high winds and debris. Loss of roof coverings, partial wall collapses, and other damages requiring significant repairs are possible in a major (category 3 to 5) hurricane. The level of damage is commensurate with the strength of the storm, as explained by the Saffir-Simpson Hurricane Wind Scale.

Loss of electric power, potable water, telecommunications, wastewater and other critical utilities is very possible during a hurricane. Some damage can be so severe that it may take days to weeks to restore.

Economy

Economic damages include property damage from wind, rain and flood, and also include intangibles such as business interruption and additional living expenses. Damage to infrastructure utilities include roads, water and power, and municipal buildings and all jurisdictions in the Region are vulnerable to this impact.

Natural Environment

Hurricanes can devastate wooded ecosystems and remove all the foliation from forest canopies, and they can change habitats so drastically that the indigenous animal populations suffer as a result. Specific foods can be taken away as high winds will often strip fruits, seeds and berries from bushes and trees.

Secondary impacts may occur as well. For example, high winds and debris may result in damage to an above-ground fuel tank, resulting in a significant chemical spill.

It is certain that more events have impacted the Region. Many of the reported events are those that caused damage, and it should be expected that damages are likely much higher for this hazard than what is reported.

5.6 Severe Weather

5.6.1 Background

Severe Weather can produce a variety of accompanying hazards including wind hail, and lightning. Although severe weather generally affects a small area, it is very dangerous and may cause substantial property damage.

Three conditions need to occur for a thunderstorm to form. First, it needs moisture to form clouds and rain. Second, it needs unstable air, such as warm air that can rise rapidly (this often referred to as the "engine" of the storm). Third, thunderstorms need lift, which comes in the form of cold or warm fronts, sea breezes, mountains, or the sun's heat. When these conditions occur simultaneously, air masses of varying temperatures meet, and a thunderstorm is formed. These storm events can occur singularly, in lines, or in clusters. Furthermore, they can move through an area very quickly or linger for several hours.

According to the National Weather Service, more than 100,000 thunderstorms occur each year, though only about 10 percent of these storms are classified as "severe." A severe thunderstorm occurs when the storm produces at least one of these three elements: 1) hail at least one inch in diameter, 2) a tornado, or 3) winds of at least 58 miles per hour.

Thunderstorm events have the capability of producing straight-line winds that can cause severe destruction to communities and threaten the safety of a population. Such wind events, sometimes separate from a thunderstorm event, are common throughout the Cape Fear Region. Therefore, high winds are also reported in this section.

High winds can form due to pressure of the Northeast coast that combines with strong pressure moving through the Ohio Valley. This creates a tight pressure gradient across the region, resulting in high winds which increase with elevation. It is common for gusts of 30 to 60 miles per hour during the winter months.

Downbursts are also possible with thunderstorm events. Such events are an excessive burst of wind in excess of 125 miles per hour. They are often confused with tornadoes. Downbursts are caused by down drafts from the base of a convective thunderstorm cloud. It occurs when rain-cooled air within the cloud becomes heavier than its surroundings. Thus, air rushes towards the ground in a destructive yet isolated manner. There are two types of downbursts. Downbursts less than 2.5 miles wide, duration less than 5 minutes, and winds up to 168 miles per hour are called "microbursts." Larger events greater than 2.5 miles at the surface and longer than 5 minutes with winds up to 130 miles per hour are referred to as "macrobursts."

Hailstorms are a potentially damaging outgrowth of severe weather. Early in the developmental stages of a hailstorm, ice crystals form within a low-pressure front due to the rapid rising of warm air into the upper atmosphere and the subsequent cooling of the air mass. Frozen droplets gradually accumulate on the ice crystals until they develop to a sufficient weight and fall as precipitation. Hail typically takes the form of spheres or irregularly shaped masses greater than 0.75 inches in diameter. The size of hailstones is a direct function of the size and severity of the storm. High velocity updraft winds are required to keep hail in suspension in thunderclouds. The strength of the updraft is a function of the intensity of heating

at the Earth's surface. Higher temperature gradients relative to elevation above the surface result in increased suspension time and hailstone size. **Table 5-11** shows the TORRO Hailstorm Intensity Scale which is a way of measuring hail severity.

Table 5-11: TORRO Hailstorm Intensity Scale

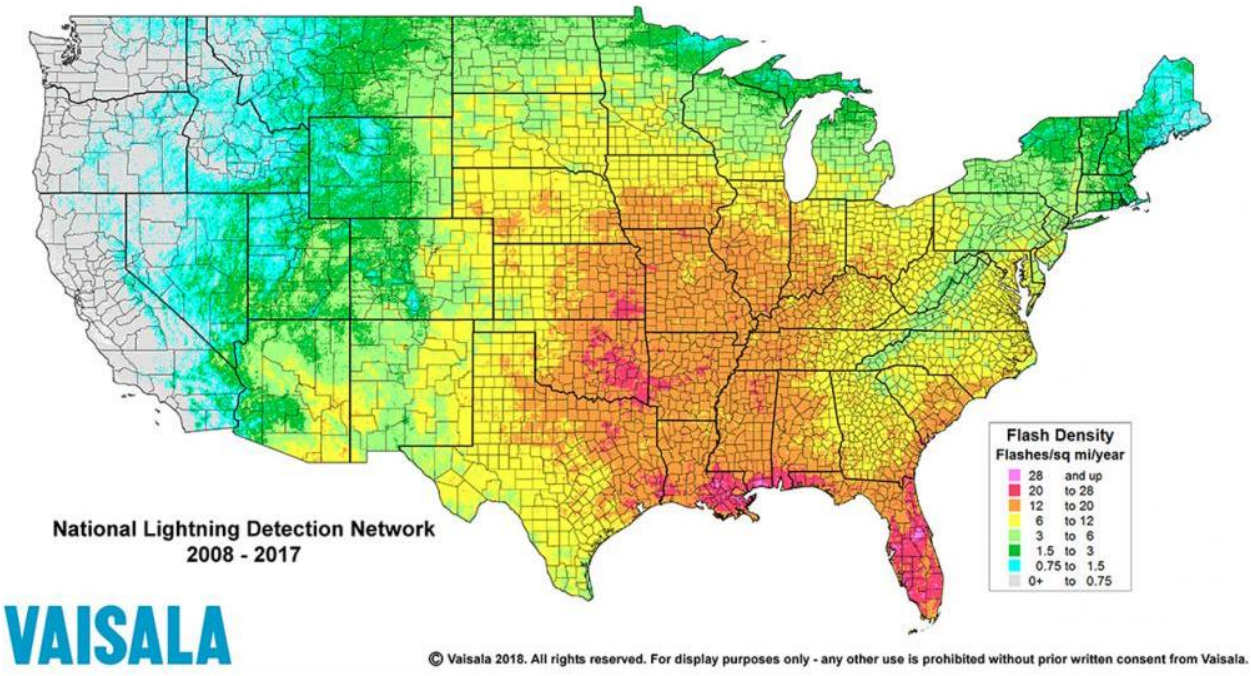
	Intensity Category	Typical Hail Diameter (mm)*	Probable Kinetic Energy, J-m^2	mm to inch conversion (inches)	Typical Damage Impacts
H0	Hard Hail	5	0-20	0 - 0.2	No damage
H1	Potentially Damaging	5-15	>20	0.2 - 0.6	Slight general damage to plants, crops
H2	Significant	10-20	>100	0.4 - 0.8	Significant damage to fruit, crops, vegetation
H3	Severe	20-30	>300	0.8 - 1.2	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-40	>500	1.0 - 1.6	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-50	>800	1.2 - 2.0	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40-60		1.6 - 2.4	Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	50-75		2.0 - 3.0	Severe roof damage, risk of serious injuries
H8	Destructive	60-90		1.6 - 3.5	(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100		3.0 - 3.9	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100			Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Source: http://www.torro.org.uk/site/hscale.php

Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a "bolt" when the buildup of charges becomes strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes the thunder which often accompanies lightning strikes. While most often affiliated with severe thunderstorms, lightning may also strike outside of heavy rain and might occur as far as 10 miles away from any rainfall.

Lightning strikes occur in very small, localized areas. For example, they may strike a building, electrical transformer, or even a person. According to the National Center for Biotechnology Information, lightning injures an average of 400 people and kills 40 people each year in the United States. Direct lightning strikes also have the ability to cause significant damage to buildings, critical facilities, and infrastructure largely by igniting a fire. Lightning is also responsible for igniting wildfires that can result in widespread damages to property.

Figure 5-16 shows a lightning flash density map for the years 2008-2017 based upon data provided by Vaisala's U.S. National Lightning Detection Network (NLDN®).



Source: Vaisala United States National Lightning Detection Network

Figure 5-16: Lightning Flash Density in the United States

5.6.2 Location and Spatial Extent

A wind event is an atmospheric hazard, and thus has no geographic boundaries. It is typically a widespread event that can occur in all regions of the United States. However, thunderstorms are most common in the central and southern states because atmospheric conditions in those regions are favorable for generating these powerful storms. Also, the Cape Fear Region typically experiences several straight-line wind events each year. These wind events can and have caused significant damage. It is assumed that the Cape Fear Region has uniform exposure to a severe weather event and the spatial extent of an impact could be large. Hailstorms frequently accompany thunderstorms, so their locations and spatial extents coincide. (Maps provided below Figures 5-17 – 5-34) It is assumed that the Cape Fear Region is uniformly exposed to severe thunderstorms; therefore, all areas of the region are equally exposed to hail which may be produced by such storms. Lightning occurs randomly, therefore it is impossible to predict where and with what frequency it will strike. It is assumed that all of the Cape Fear Region is uniformly exposed to lightning The figures (5-18) below show the average annual cloud-to-ground lightning strikes in the Region with "High" being greater than 100 strikes per year, "Medium" 99-50 strikes per year and "Low" being less than50 strikes per year. Figures 5-17 – 5-34 show the locations for recorded thunderstorm and lightning events with the data ranging from 1987 – present. Per the National Weather Service Instruction 10-1605, a lightning event is defined as a sudden electrical

discharge from a thunderstorm, resulting in a fatality, injury, and/or damage, so each point represented on map for event type “lightning” records exact location of lightning strike/strikes that result in a fatality, injury, and/or damage. The same manual defines Thunderstorm Winds as winds arising from convection (occurring within 30 minutes of lightning being observed or detected), with speeds of at least 50 knots (58 mph), or winds of any speed (non-severe thunderstorm winds below 50 knots) producing a fatality, injury, or damage.

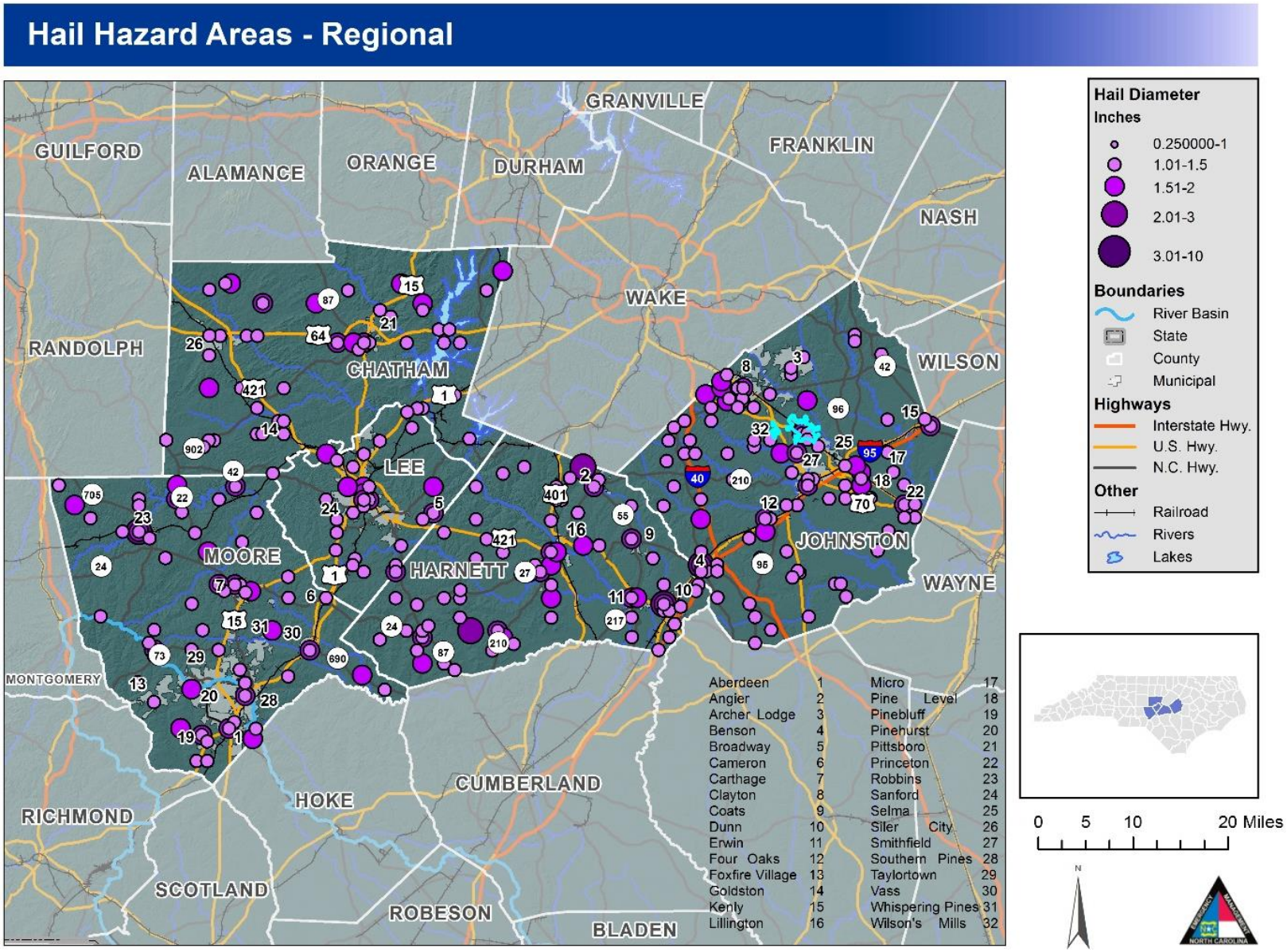


Figure 5-17: Hail Hazard Areas – Regional

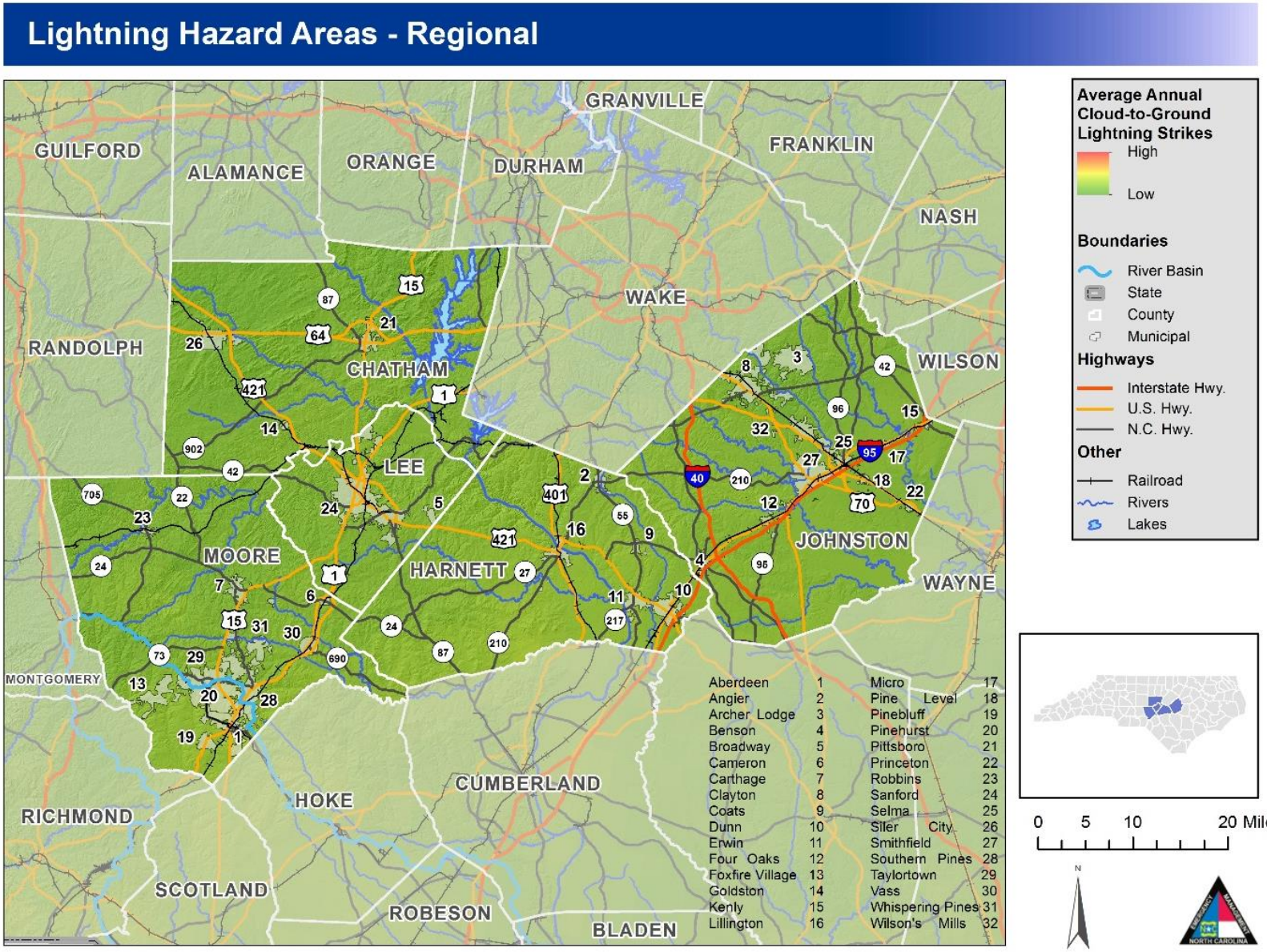


Figure 5-18: Lightning Hazard Areas - Regional

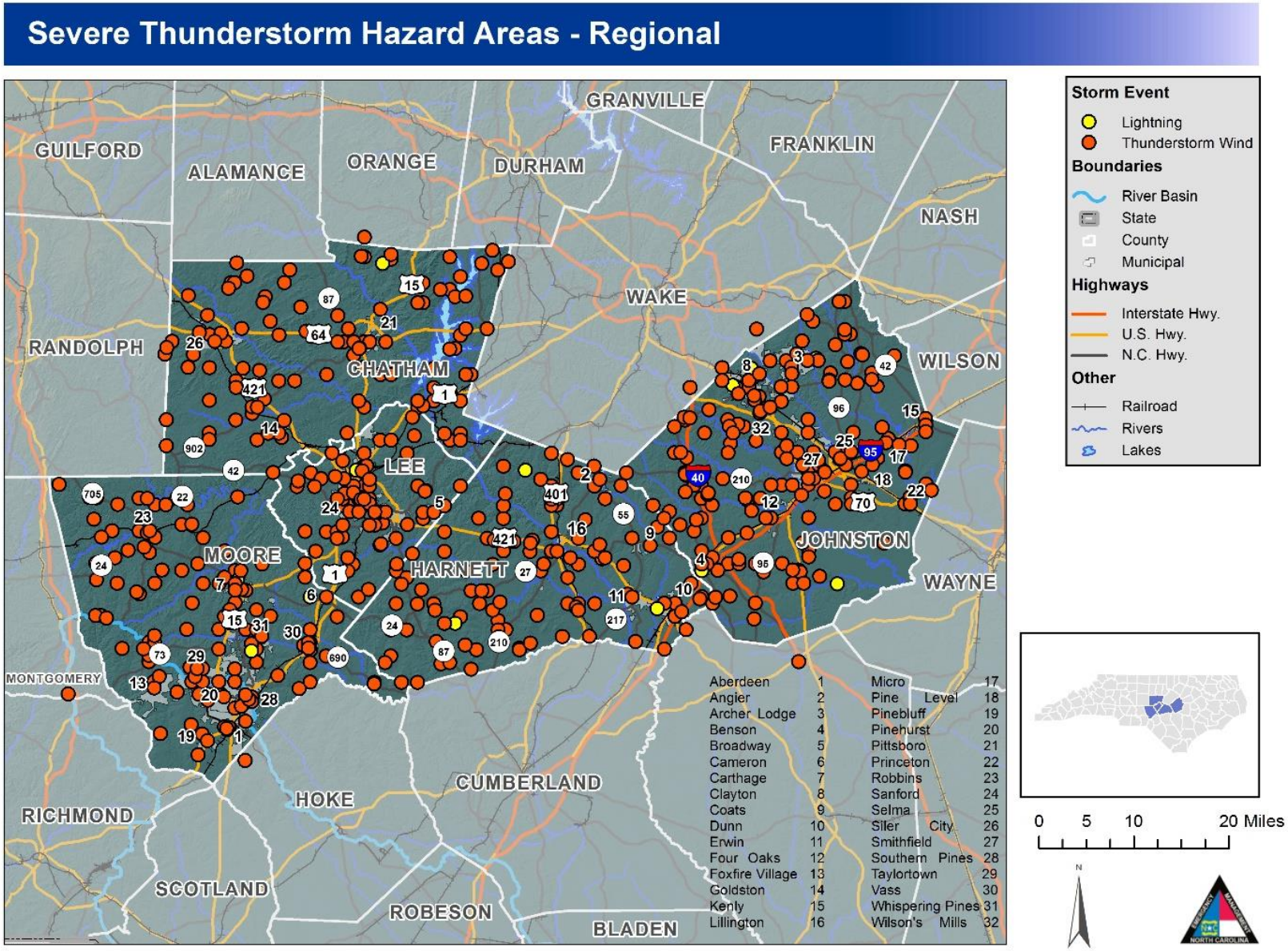


Figure 5-19: Severe Thunderstorm Hazard Areas - Regional

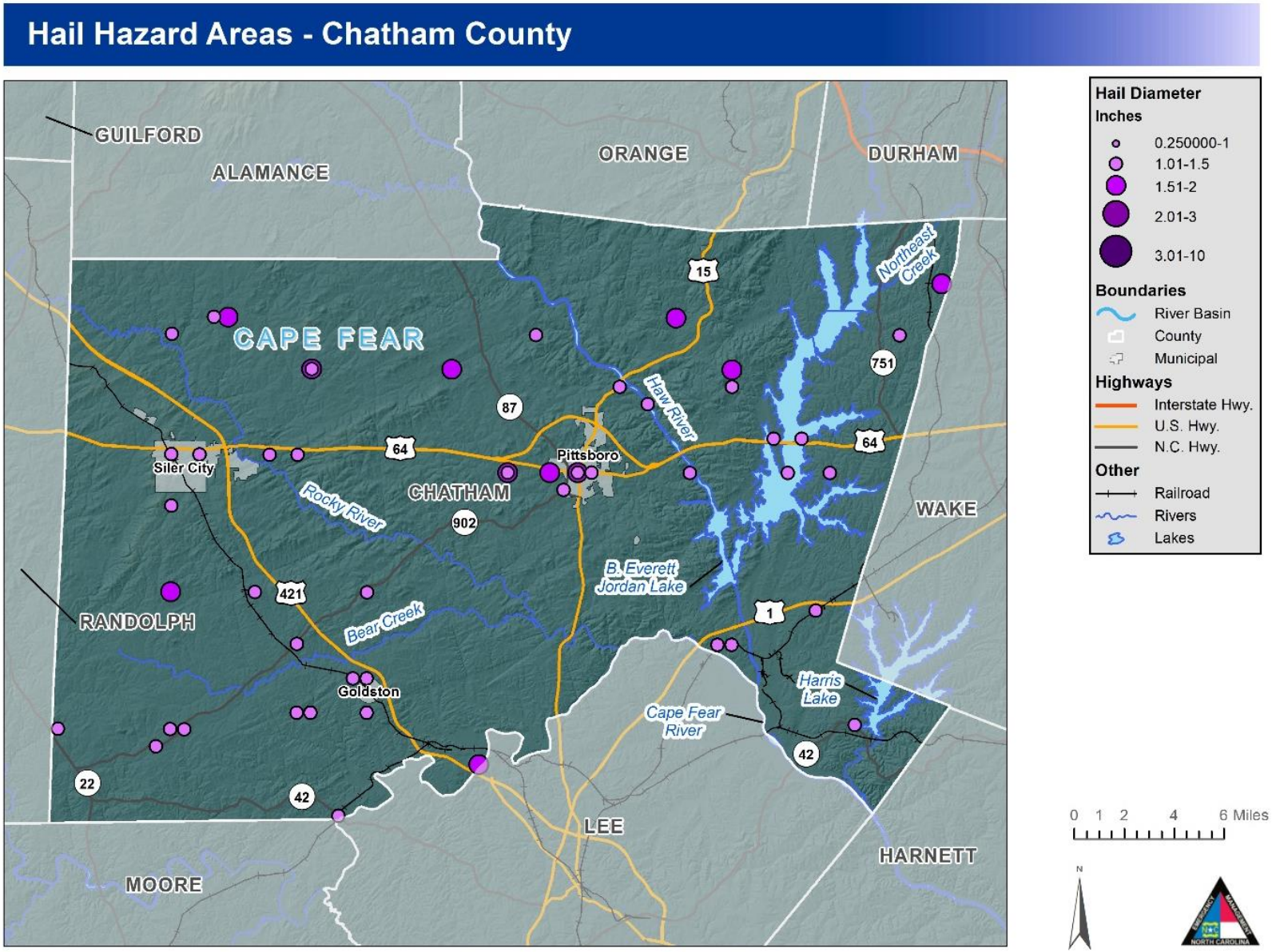


Figure 5-20: Hail Hazard Areas – Chatham County

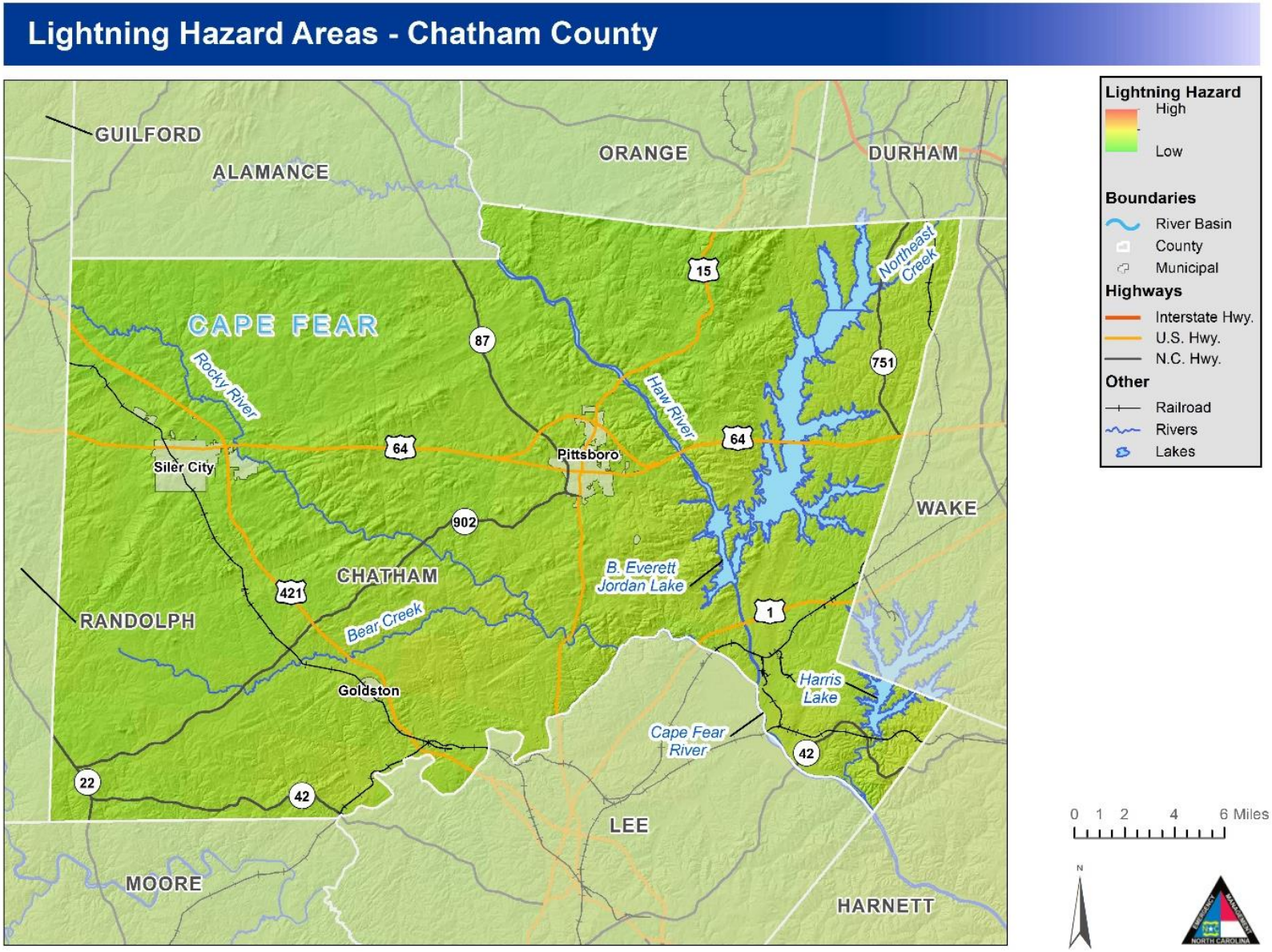


Figure 5-21: Lightning Hazard Areas – Chatham County

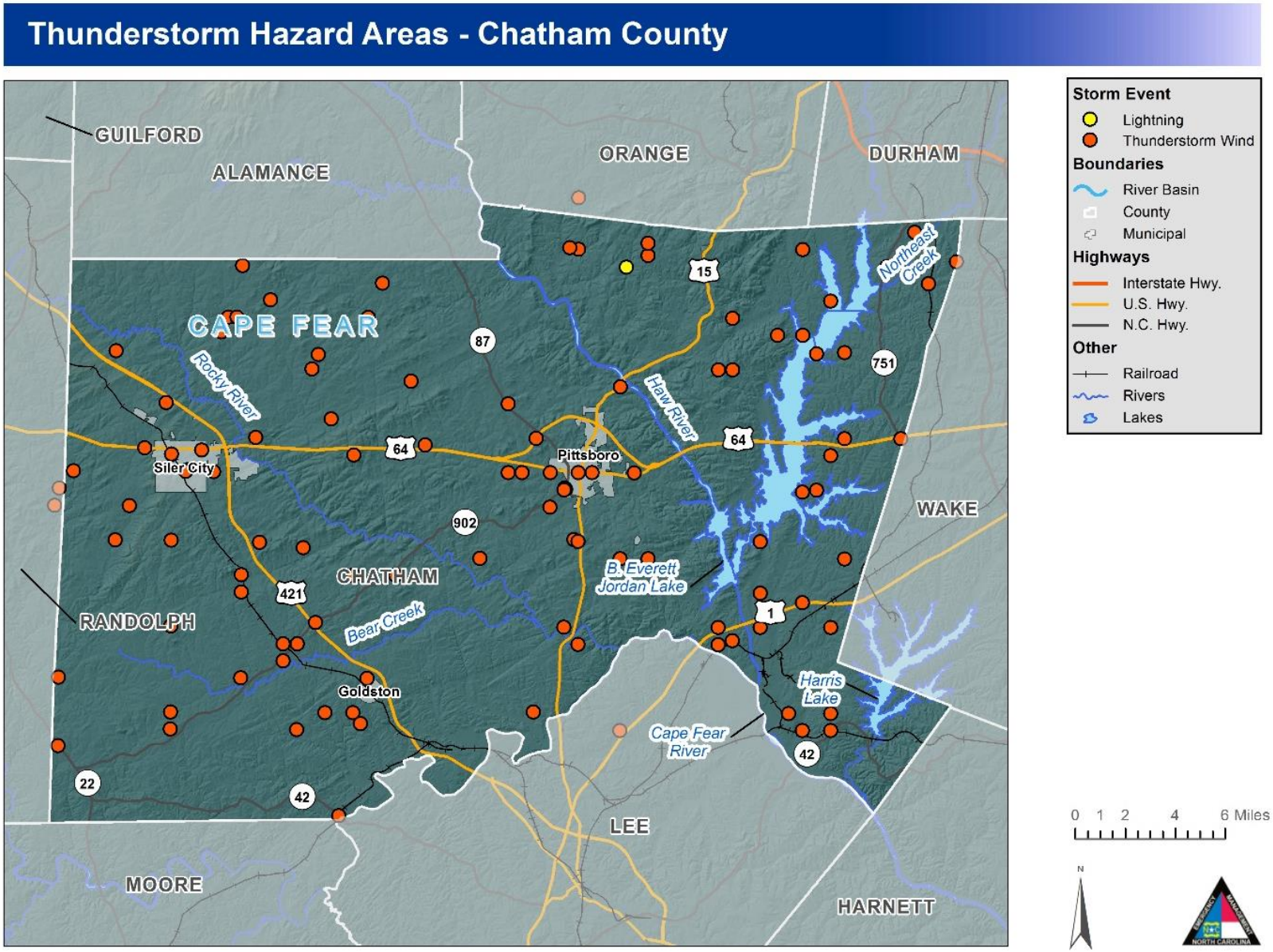


Figure 5-22: Thunderstorm Hazard Areas – Chatham County

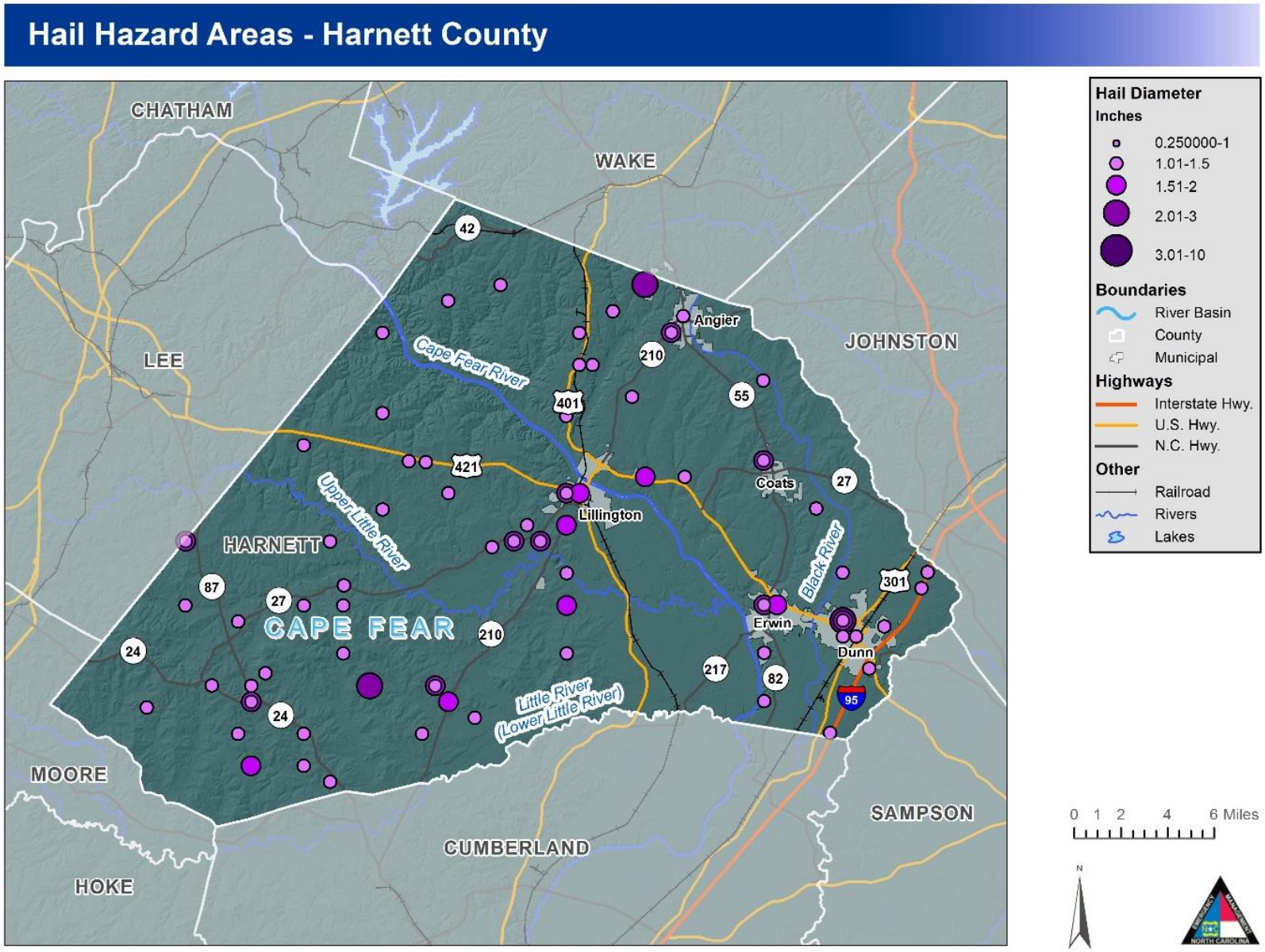


Figure 5-23: Hail Hazard Areas – Harnett County

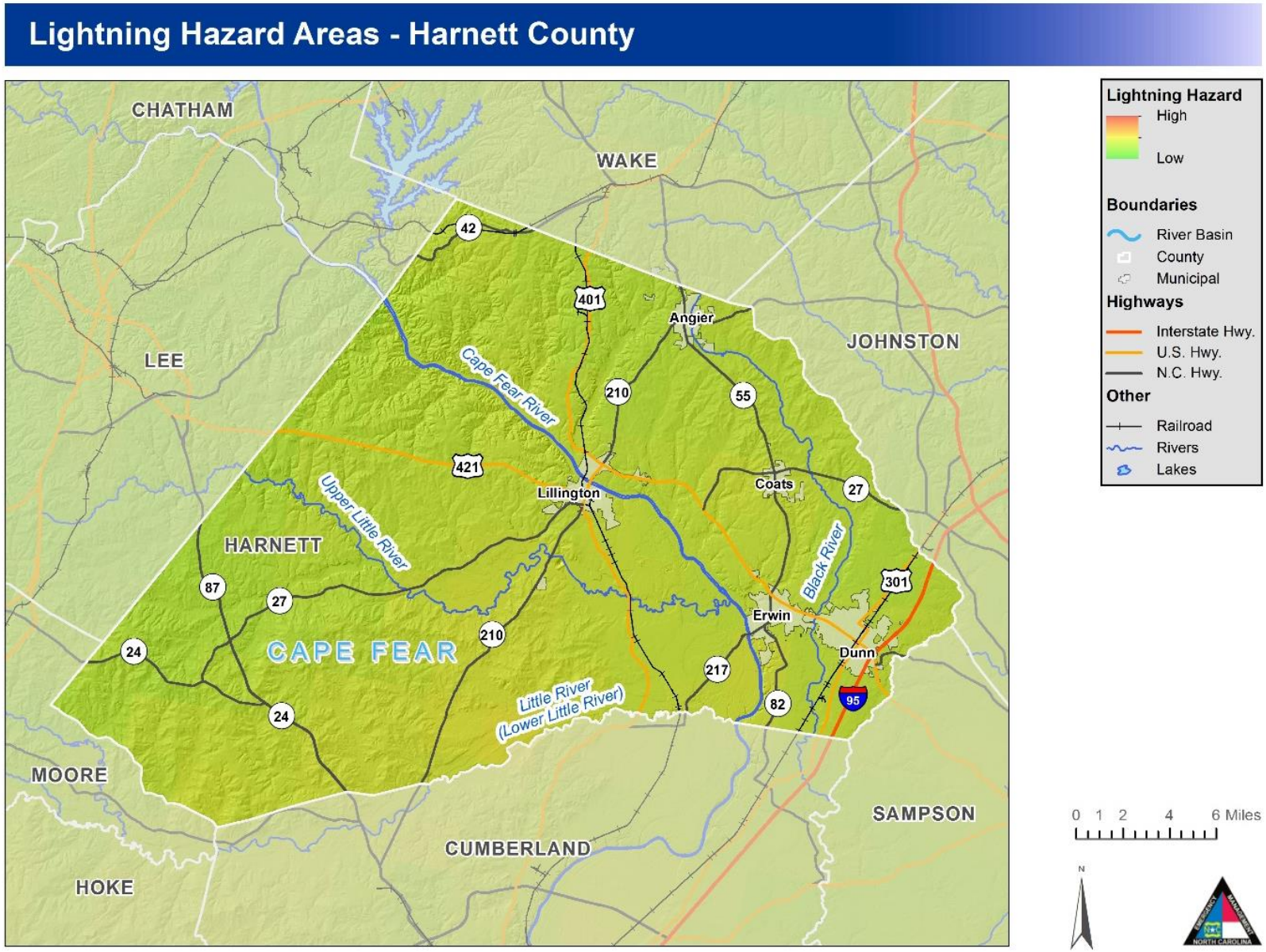


Figure 5-24: Lightning Hazard Areas – Harnett County

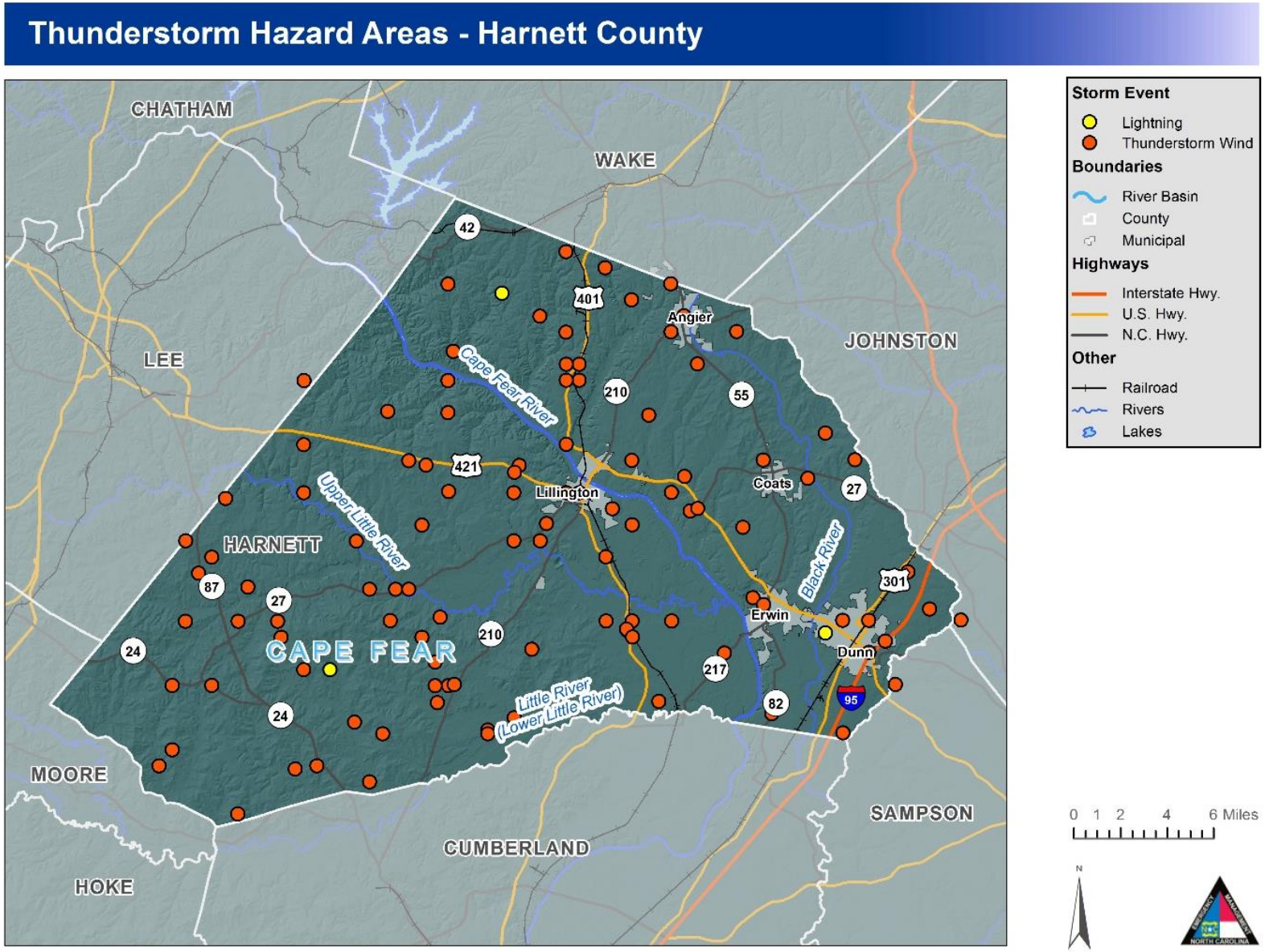


Figure 5-25: Thunderstorm Hazard Areas – Harnett County

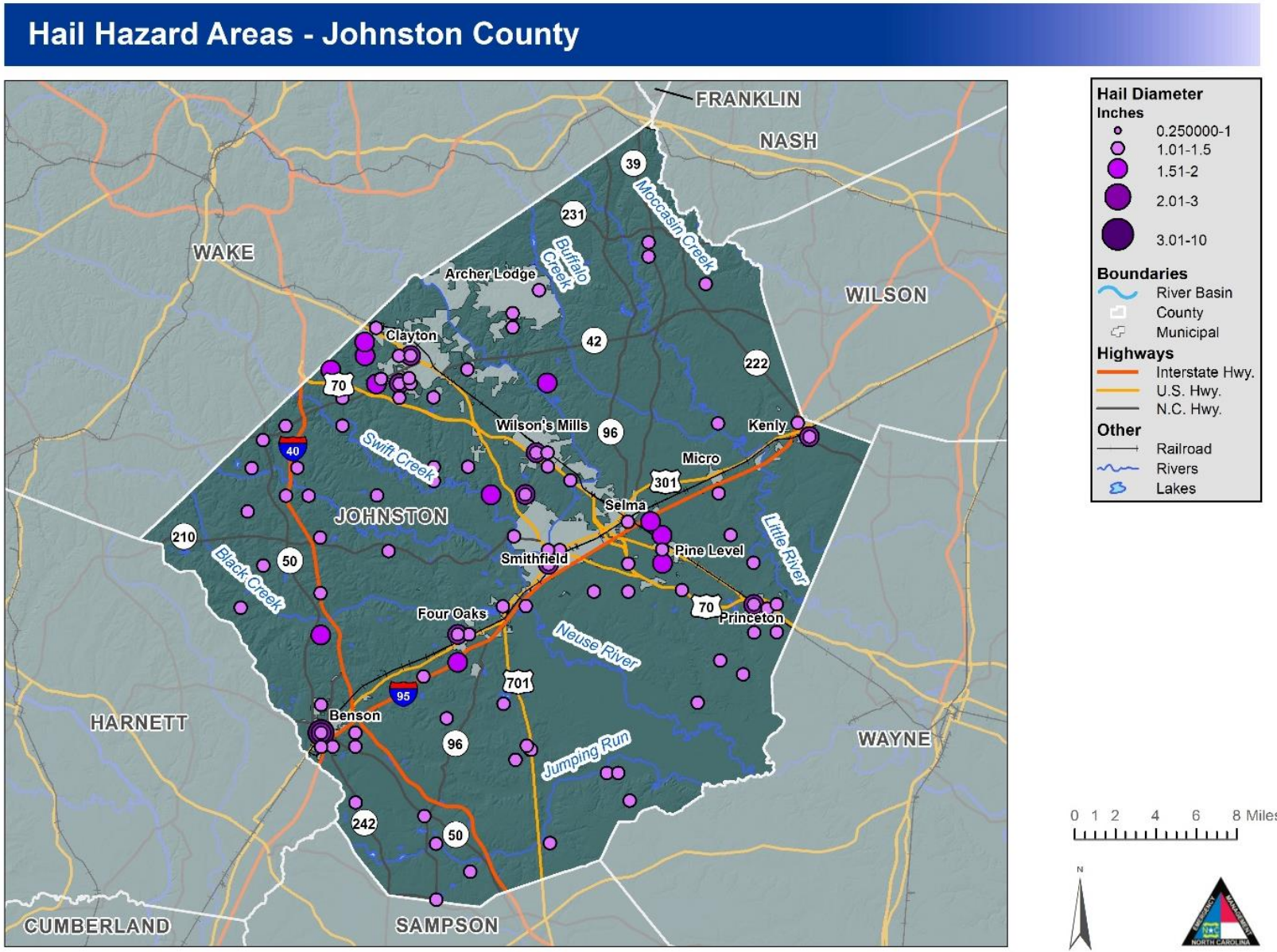


Figure 5-26: Hail Hazard Areas – Johnston County

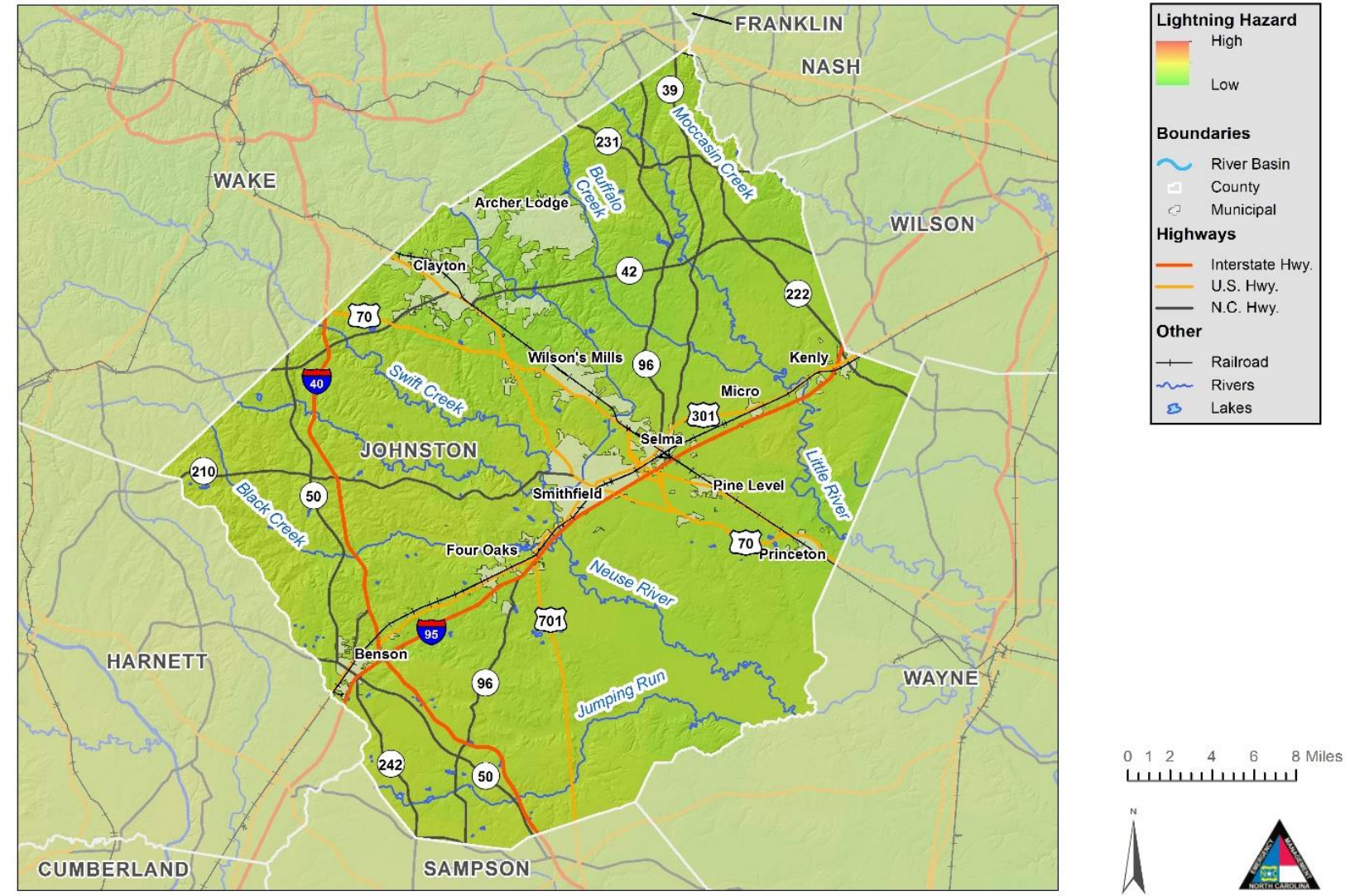


Figure 5-27: Lightning Hazard Areas – Johnston County

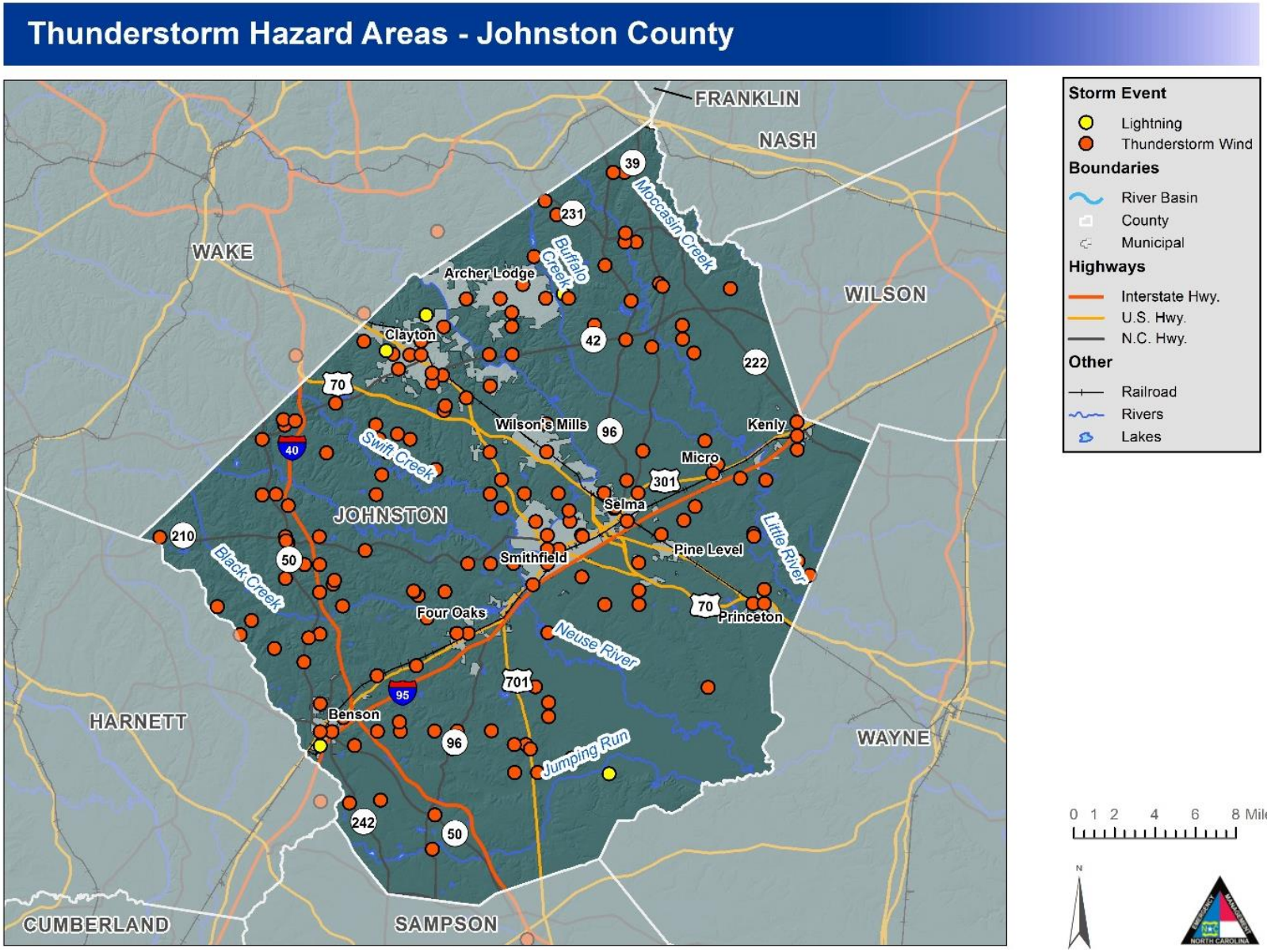


Figure 5-28: Thunderstorm Hazard Areas – Johnston County

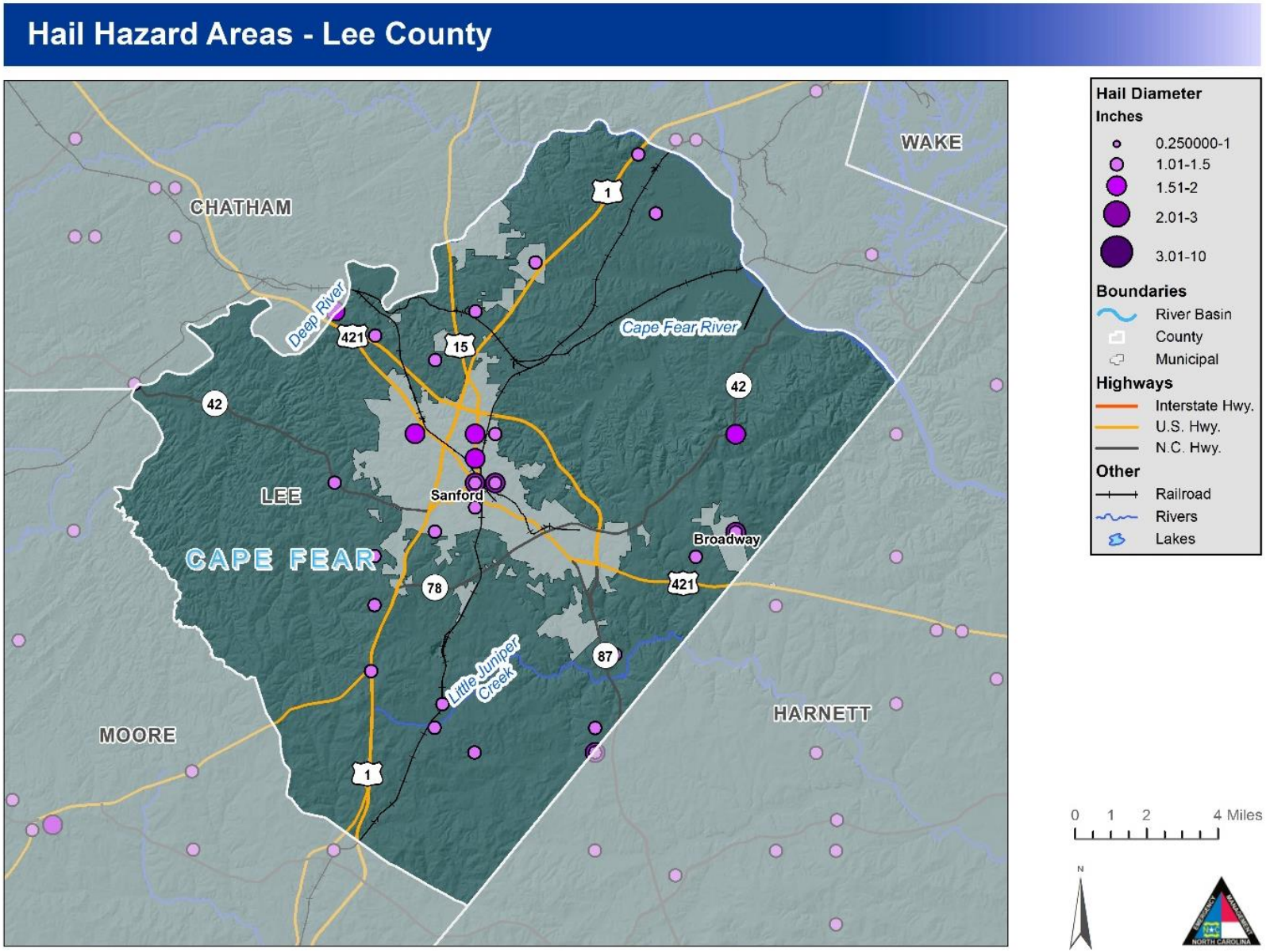


Figure 5-29: Hail Hazard Areas – Lee County

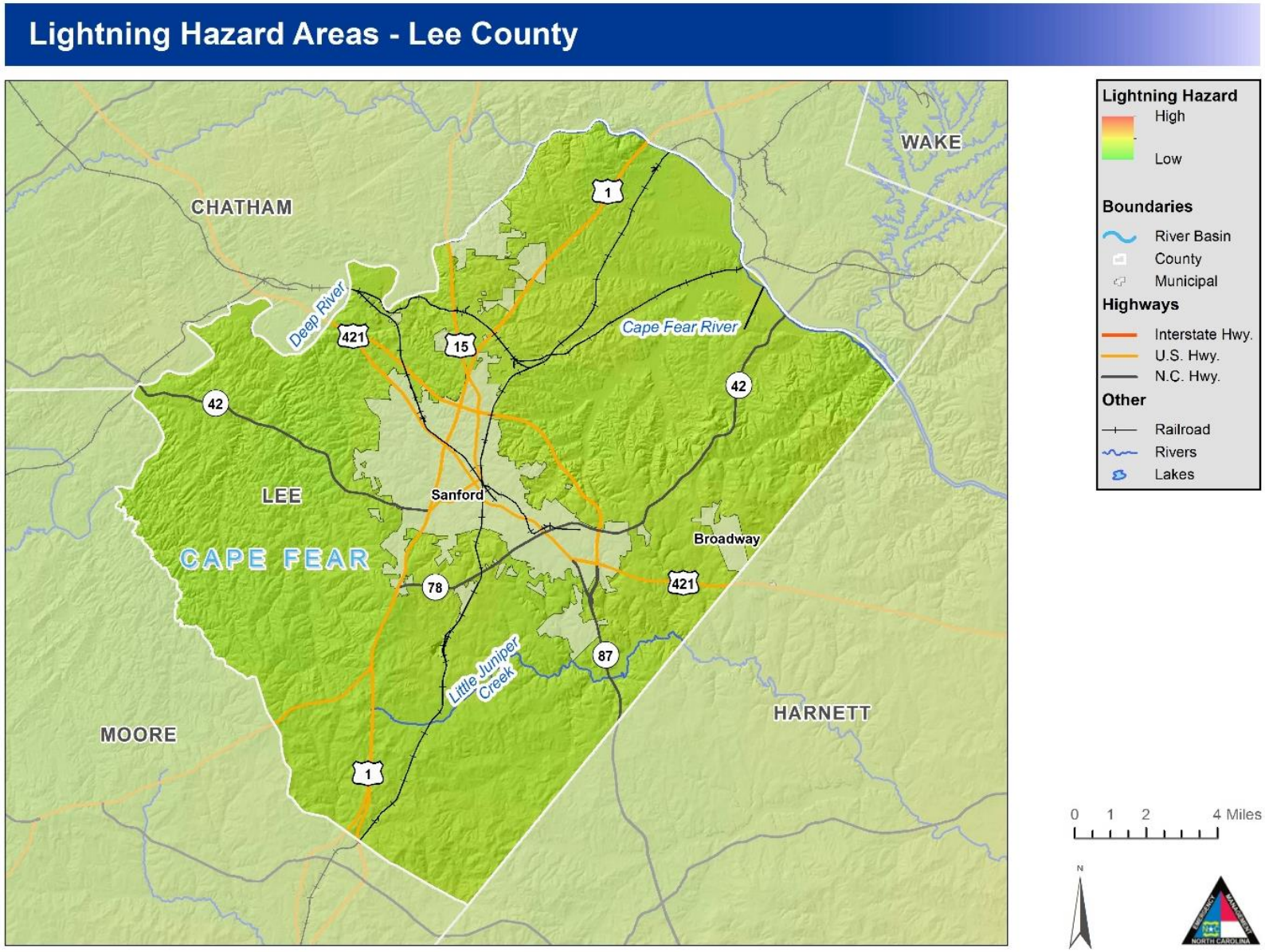


Figure 5-30: Lightning Hazard Areas – Lee County

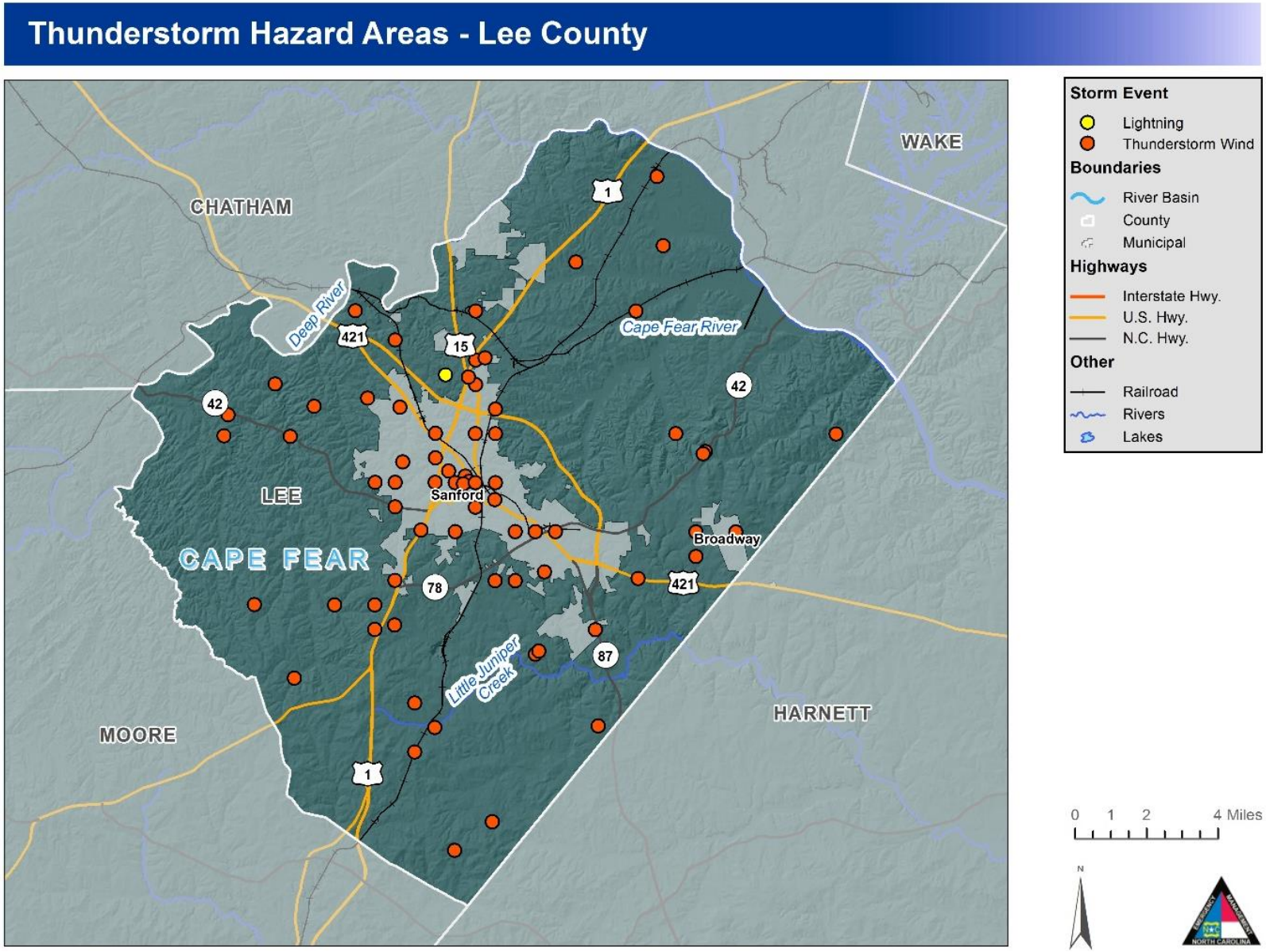


Figure 5-31: Thunderstorm Hazard Areas – Lee County

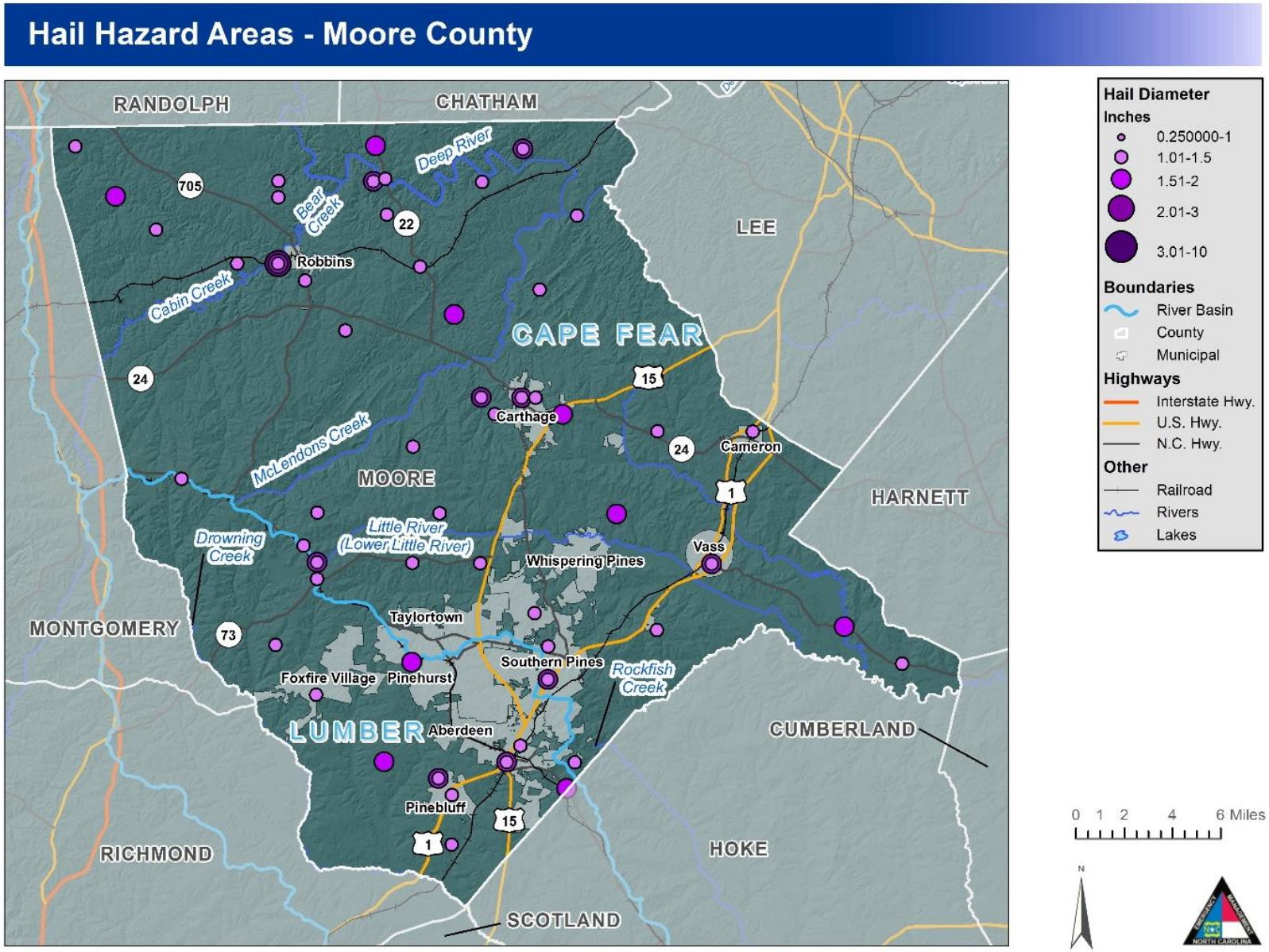


Figure 5-32: Hail Hazard Areas – Moore County

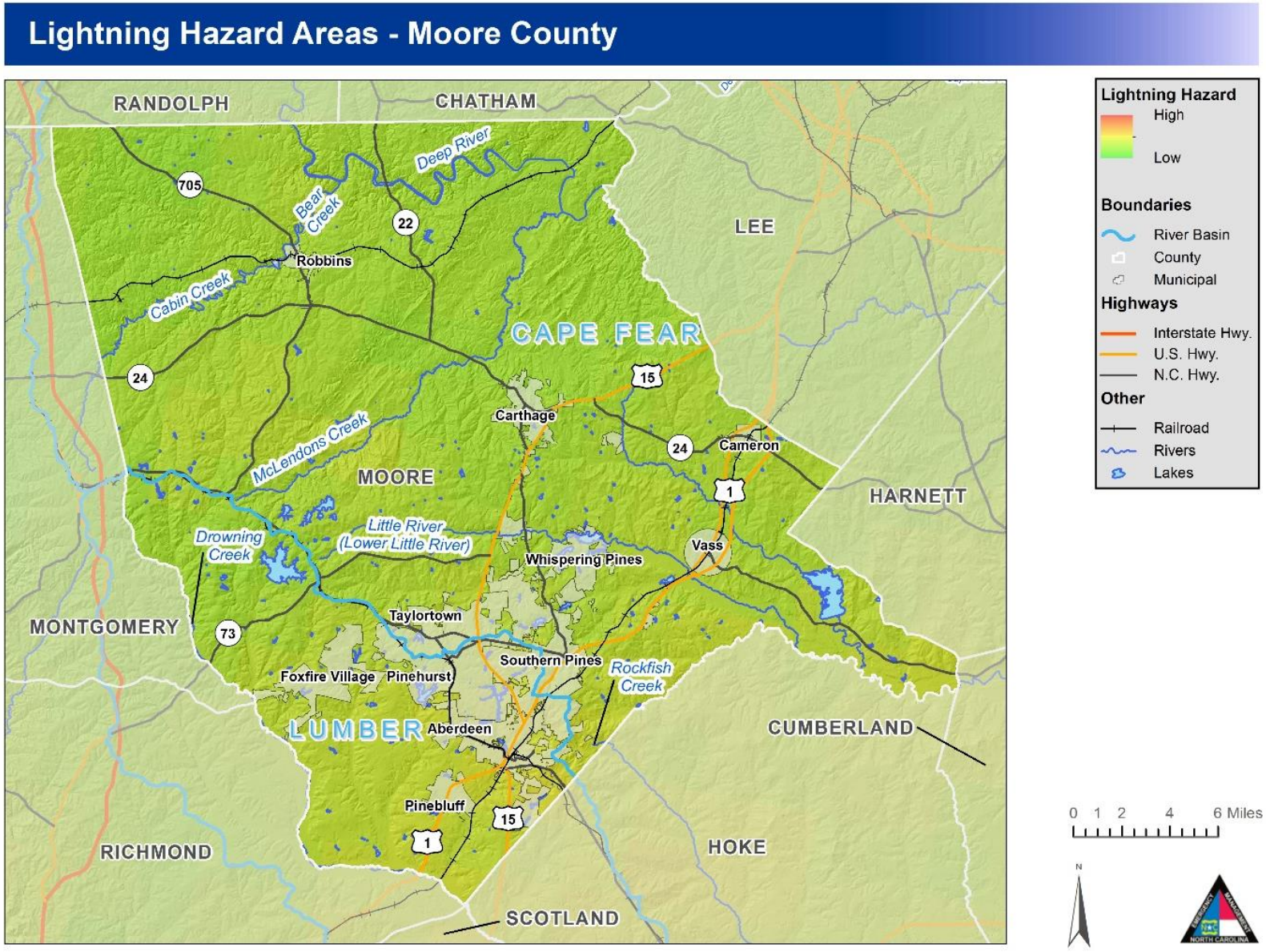


Figure 5-33: Lightning Hazard Areas – Moore County

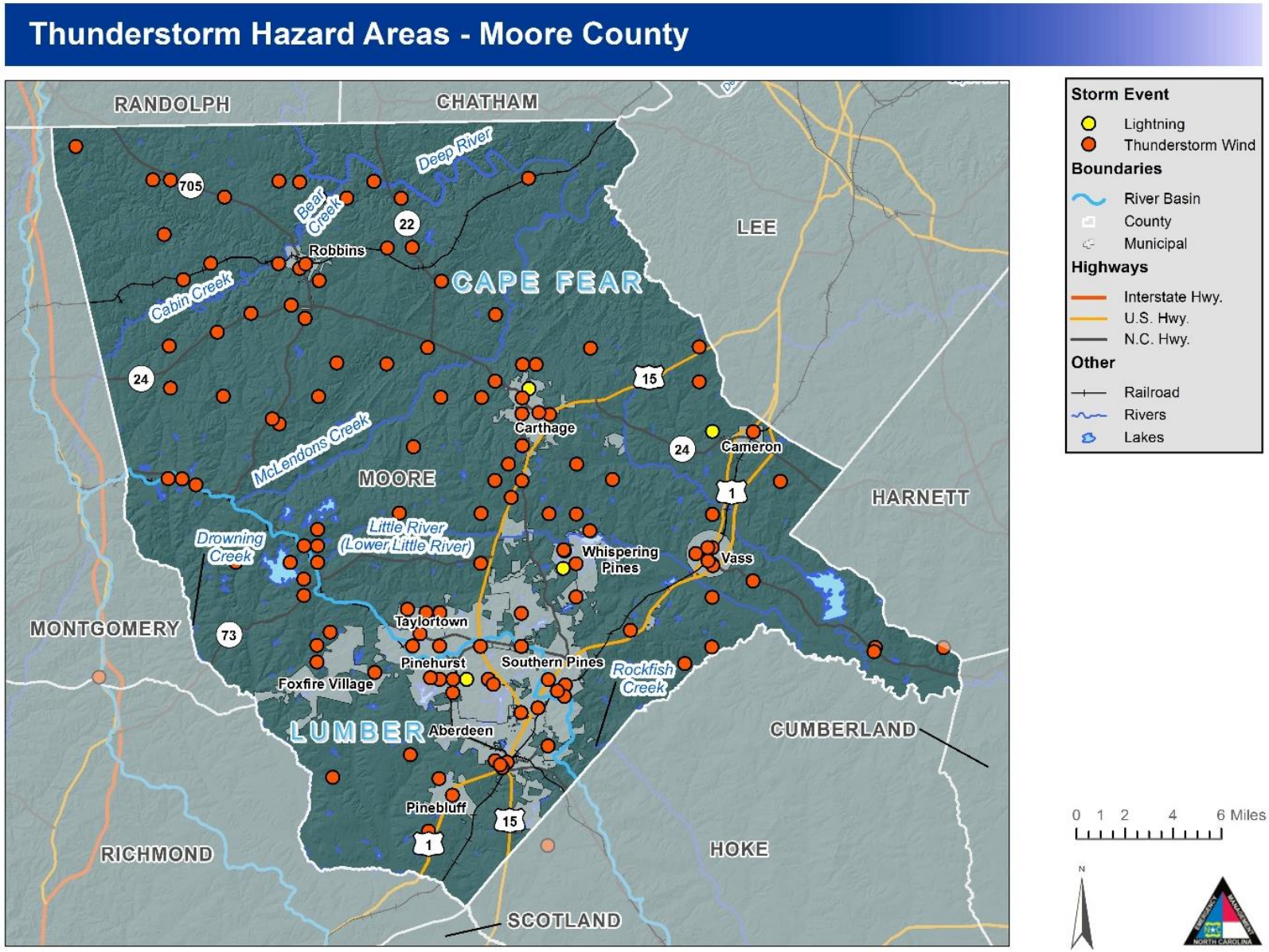


Figure 5-34: Thunderstorm Hazard Areas – Moore County

5.6.3 Extent

Thunderstorm extent is defined by the number of thunder events and wind speeds reported. According to a 69-year history from the National Climatic Data Center, the strongest recorded wind event in the Region was reported on July 22, 2008 at 62 knots (approximately 71 mph). It should be noted that future events may exceed these historical occurrences.

Location	Date	Type	Mag
High Falls	3/4/2008	Thunderstorm Wind	50 kts. EG
Smithfield	3/4/2008	Thunderstorm Wind	52 kts. EG
West End	3/4/2008	Thunderstorm Wind	52 kts. EG
Addor	5/20/2008	Thunderstorm Wind	50 kts. EG
Pittsboro	5/20/2008	Thunderstorm Wind	60 kts. EG
Pinebluff	7/6/2008	Thunderstorm Wind	50 kts. EG
Archers Lodge	7/21/2008	Lightning	
Brickhaven	7/22/2008	Thunderstorm Wind	50 kts. EG
Pineview	7/22/2008	Thunderstorm Wind	62 kts. MG
Blackman Xrds	1/7/2009	Thunderstorm Wind	51 kts. EG
Mc Connell	7/20/2009	Thunderstorm Wind	50 kts. EG
Buies Creek Stwrt Ar	6/22/2010	Thunderstorm Wind	50 kts. EG
Mamers	6/29/2010	Thunderstorm Wind	50 kts. EG
Rockefeller Estates	6/29/2010	Thunderstorm Wind	50 kts. EG
Chalybeate	7/29/2010	Thunderstorm Wind	50 kts. EG
Pinehurst	2/28/2011	Thunderstorm Wind	50 kts. EG
Bagley	4/5/2011	Thunderstorm Wind	50 kts. EG
Rains Xrds	4/5/2011	Thunderstorm Wind	50 kts. EG
Corinth	6/28/2011	Thunderstorm Wind	50 kts. EG
Swann	7/13/2011	Thunderstorm Wind	50 kts. EG
Bonlee	7/24/2011	Thunderstorm Wind	50 kts. EG
Bennett	3/3/2012	Thunderstorm Wind	56 kts. EG
Flat Branch	6/25/2012	Thunderstorm Wind	50 kts. EG
Rawls	6/29/2012	Thunderstorm Wind	50 kts. EG
Haywood	7/5/2012	Thunderstorm Wind	50 kts. EG
Glendon	7/24/2012	Thunderstorm Wind	50 kts. EG
Eagle Spgs	7/28/2012	Thunderstorm Wind	50 kts. EG
Kenly	8/2/2012	Thunderstorm Wind	50 kts. EG
Angier	6/13/2013	Thunderstorm Wind	52 kts. EG
Robbins	6/13/2013	Thunderstorm Wind	60 kts. EG

Location	Date	Type	Mag
Sanford	6/13/2013	Thunderstorm Wind	60 kts. EG
Mt Vernon Spgs	2/21/2014	Thunderstorm Wind	50 kts. EG
Princeton	2/21/2014	Thunderstorm Wind	50 kts. EG
Jackson Spgs	6/16/2014	Thunderstorm Wind	50 kts. EG
Parkwood	9/2/2014	Thunderstorm Wind	50 kts. EG
Overhills	6/2/2015	Thunderstorm Wind	50 kts. EG
Anderson Creek	6/25/2015	Thunderstorm Wind	50 kts. EG
Luart	6/25/2015	Thunderstorm Wind	50 kts. EG
Boone Trail	6/27/2015	Thunderstorm Wind	50 kts. EG
Cumnock	6/27/2015	Thunderstorm Wind	50 kts. EG
Lowell Mill	6/27/2015	Thunderstorm Wind	50 kts. EG
Southern Pines	6/27/2015	Thunderstorm Wind	50 kts. EG
Erwin	7/18/2015	Thunderstorm Wind	50 kts. EG
Siler City Arpt	8/6/2015	Thunderstorm Wind	50 kts. EG
Jonesboro	8/11/2015	Thunderstorm Wind	50 kts. EG
Selma	8/11/2015	Thunderstorm Wind	50 kts. EG
Bunnlevel	8/19/2015	Thunderstorm Wind	50 kts. EG
Bear Creek	2/24/2016	Thunderstorm Wind	50 kts. EG
Niagara	6/24/2016	Thunderstorm Wind	50 kts. EG
Rains Xrds	6/29/2016	Thunderstorm Wind	50 kts. EG
Archers Lodge	7/5/2016	Thunderstorm Wind	50 kts. EG
Flowers	7/8/2016	Thunderstorm Wind	50 kts. EG
Vina Vista	7/8/2016	Thunderstorm Wind	50 kts. EG
Clayton Flowers Arpt	7/16/2016	Thunderstorm Wind	50 kts. EG
Broadway	7/22/2016	Thunderstorm Wind	50 kts. EG
Johnsonville	7/22/2016	Thunderstorm Wind	50 kts. EG
Buies Creek	7/31/2016	Thunderstorm Wind	50 kts. EG
Seaforth	7/31/2016	Thunderstorm Wind	50 kts. EG
Cameron	8/21/2016	Thunderstorm Wind	50 kts. EG
Southern Pines Arpt	8/27/2016	Thunderstorm Wind	50 kts. EG
Aberdeen Arpt	5/5/2017	Thunderstorm Wind	50 kts. EG
Lemon Spgs	5/5/2017	Thunderstorm Wind	50 kts. EG
Barclaysville	6/19/2017	Thunderstorm Wind	50 kts. EG
Roseland	6/19/2017	Thunderstorm Wind	50 kts. EG
Murdocksville	7/1/2017	Thunderstorm Wind	50 kts. EG

Location	Date	Type	Mag
Spout Spgs	7/6/2017	Thunderstorm Wind	56 kts. EG
Duncan	7/16/2017	Thunderstorm Wind	50 kts. EG
Midtown	7/23/2017	Thunderstorm Wind	50 kts. EG
Colon	4/15/2018	Thunderstorm Wind	50 kts. EG
Sanford Muni Arpt	4/15/2018	Thunderstorm Wind	50 kts. EG
Turlington	4/15/2018	Thunderstorm Wind	50 kts. EG
Wilsonville	4/15/2018	Thunderstorm Wind	50 kts. EG
Bentonville	5/6/2018	Thunderstorm Wind	50 kts. EG
Tramway	5/10/2018	Thunderstorm Wind	50 kts. EG
Cokesbury	6/20/2018	Thunderstorm Wind	50 kts. EG
Erwin Arpt	6/24/2018	Thunderstorm Wind	50 kts. EG
Leaman	6/25/2018	Thunderstorm Wind	50 kts. EG
Taylortown	6/25/2018	Thunderstorm Wind	50 kts. EG
Micro	7/6/2018	Thunderstorm Wind	50 kts. EG
Dunn	7/17/2018	Thunderstorm Wind	50 kts. EG
Garren Hill	7/21/2018	Thunderstorm Wind	50 kts. EG
Coats	7/22/2018	Thunderstorm Wind	50 kts. EG
Lillington	7/27/2018	Thunderstorm Wind	50 kts. EG
Carthage	8/2/2018	Thunderstorm Wind	50 kts. EG
Four Oaks	8/8/2018	Thunderstorm Wind	50 kts. EG
Parkers Mill	8/8/2018	Thunderstorm Wind	50 kts. EG
Terrells	8/8/2018	Thunderstorm Wind	50 kts. EG
Hill Crest	8/11/2018	Thunderstorm Wind	50 kts. EG
Vass	8/11/2018	Thunderstorm Wind	50 kts. EG
Aberdeen	4/8/2019	Thunderstorm Wind	50 kts. EG
Farrington	4/8/2019	Thunderstorm Wind	50 kts. EG
Goldston	4/8/2019	Thunderstorm Wind	50 kts. EG
Kipling	4/8/2019	Thunderstorm Wind	52 kts. EG
Norrington Xrds	4/8/2019	Thunderstorm Wind	50 kts. EG
Merry Oaks	4/12/2019	Thunderstorm Wind	50 kts. EG
Manly	4/14/2019	Thunderstorm Wind	50 kts. EG
Hallison	4/15/2019	Thunderstorm Wind	50 kts. EG
Brogden	4/19/2019	Thunderstorm Wind	50 kts. EG
Howard Mill	4/19/2019	Thunderstorm Wind	50 kts. EG
Selma Arpt	4/19/2019	Thunderstorm Wind	50 kts. EG

Location	Date	Type	Mag
Lobelia	5/4/2019	Thunderstorm Wind	50 kts. EG
Spies	5/4/2019	Thunderstorm Wind	50 kts. EG
Senter	6/5/2019	Thunderstorm Wind	50 kts. EG
Harpers Xrds	6/20/2019	Thunderstorm Wind	50 kts. EG
Rosser	6/20/2019	Thunderstorm Wind	50 kts. EG
Silk Hope	6/20/2019	Thunderstorm Wind	50 kts. EG
Peacocks Xrds	7/4/2019	Thunderstorm Wind	50 kts. EG
Coats Xrds	7/17/2019	Thunderstorm Wind	50 kts. EG
Seminole	7/17/2019	Thunderstorm Wind	50 kts. EG
Wilsons Mills	7/17/2019	Thunderstorm Wind	50 kts. EG
Gulf	7/20/2019	Thunderstorm Wind	50 kts. EG
Northview	7/20/2019	Thunderstorm Wind	50 kts. EG
Drug Store	7/22/2019	Thunderstorm Wind	50 kts. EG
Haw Branch	7/23/2019	Thunderstorm Wind	50 kts. EG
Osgood	7/23/2019	Thunderstorm Wind	50 kts. EG
Lakeview	8/1/2019	Thunderstorm Wind	50 kts. EG
White Hill	8/7/2019	Thunderstorm Wind	50 kts. EG
Clayton	8/13/2019	Thunderstorm Wind	50 kts. EG
Benson	8/15/2019	Thunderstorm Wind	50 kts. EG
Olivia	8/19/2019	Thunderstorm Wind	50 kts. EG
Eastwood	10/31/2019	Thunderstorm Wind	50 kts. EG
Harris	10/31/2019	Thunderstorm Wind	50 kts. EG
Mt Pleasant	10/31/2019	Thunderstorm Wind	50 kts. EG
Samarcand	10/31/2019	Thunderstorm Wind	50 kts. EG
Siler City	1/11/2020	Thunderstorm Wind	50 kts. EG
Archer	1/12/2020	Thunderstorm Wind	50 kts. EG
Emit	1/12/2020	Thunderstorm Wind	50 kts. EG
Bynum	2/6/2020	Thunderstorm Wind	50 kts. EG
Crutchfield Xrds	2/6/2020	Thunderstorm Wind	50 kts. EG
Moncure	2/6/2020	Thunderstorm Wind	50 kts. EG
Totals:			

5.6.4 Historical Occurrences

Severe storms were at least partially responsible for one disaster declaration in the Cape Fear Region in 2011. According to NCDC, there have been 258 reported thunderstorm wind and high wind events since 2008 in the Cape Fear Region. These events caused over $30.0 million in damages.

There were also reports of 3 injuries and 2 fatalities. The following historical occurrences have been identified based on the NCDC Storm Events database **Table 5-12** from 2008-2020. It should be noted that only those historical occurrences listed in the NCDC database are shown here and that other, unrecorded or unreported events may have occurred within the planning area during this timeframe.

Table 5-12: Historical Occurrences of Thunderstorm, Lightning and Hail (2008-2020)

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
High Falls	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bonlee	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
West End	03/04/2008	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Pittsboro	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pineview	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	03/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	03/04/2008	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
Clayton	03/04/2008	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Smithfield	03/04/2008	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
West End	03/15/2008	Hail	1.00 in.	0	0	0.00K	0.00K
West End	04/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	04/04/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Carthage	04/04/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Four Oaks	04/12/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Sanford	04/20/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Pittsboro	04/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Broadway	04/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Benson	04/21/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Sanford	05/09/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Northview	05/09/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Bonlee	05/09/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Sanford	05/09/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Carthage	05/09/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Luart	05/09/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Dunn	05/09/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Bynum	05/09/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Clayton	05/10/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsons Mills	05/10/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Wilsons Mills	05/10/2008	Hail	0.88 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Smithfield	05/10/2008	Hail	1.50 in.	0	0	0.00K	0.00K
Smithfield	05/10/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Bear Creek	05/11/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	05/11/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Crutchfield Xrds	05/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Pittsboro	05/20/2008	Thunderstorm Wind	60 kts. EG	0	0	125.00K	0.00K
Pittsboro	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Coats Xrds	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Drug Store	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Drug Store	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsons Mills	05/20/2008	Hail	1.25 in.	0	0	0.00K	0.00K
Selma	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Smithfield	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Cumnock	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Addor	05/20/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cumnock	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Garren Hill	05/20/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Princeton	05/20/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Pinebluff	05/20/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Addor	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Aberdeen	05/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Lillington	05/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Lillington	05/20/2008	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Lillington	05/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Buies Creek	05/20/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Erwin	05/20/2008	Hail	1.75 in.	0	0	0.00K	0.00K
Pinebluff	06/09/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pine Level	06/11/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Emit	06/11/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Buies Creek	06/14/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Emit	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Wilsons Mills	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkwood	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkwood	06/14/2008	Hail	0.88 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Benson	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Tramway	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/14/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Norrington Xrds	06/20/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Benson	06/22/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Buies Creek	06/22/2008	Hail	2.00 in.	0	0	0.00K	0.00K
Four Oaks	06/22/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Coats Xrds	06/28/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bells	06/29/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Siler City	07/04/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Glendon	07/05/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Selma Arpt	07/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pinebluff	07/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	07/06/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Vass	07/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	07/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Broadway	07/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	07/08/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Eagle Spgs	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bear Creek	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Midtown	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vina Vista	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford Muni Arpt	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	07/08/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Bynum	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Chalybeate	07/08/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Four Oaks	07/08/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archers Lodge	07/21/2008	Lightning		0	0	180.00K	0.00K
Brickhaven	07/22/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pineview	07/22/2008	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
Archers Lodge	07/22/2008	Hail	0.88 in.	0	0	0.00K	0.00K
Robbins	07/22/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Carthage	07/22/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsons Mills	07/22/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	07/22/2008	Hail	1.75 in.	0	0	0.00K	0.00K
West End	07/23/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Sanford	07/27/2008	Hail	1.00 in.	0	0	0.00K	0.00K
Sanford	07/27/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	07/27/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Broadway	07/31/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin Arpt	07/31/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin	07/31/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	08/02/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Smithfield	08/02/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	08/06/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	08/07/2008	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Lemon Spgs	08/07/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Olivia	08/07/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Boone Trail	08/07/2008	Hail	0.75 in.	0	0	0.00K	0.00K
Colon	08/10/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Wilsonville	08/15/2008	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	01/07/2009	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K
Princeton	04/06/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Spies	04/14/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Blackman Xrds	04/20/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Norrington Xrds	04/24/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Anderson Creek	04/24/2009	Hail	2.75 in.	0	0	30.00K	0.00K
Anderson Creek	04/24/2009	Hail	1.25 in.	0	0	0.00K	0.00K
Pine Level	05/06/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Blackman Xrds	05/07/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Princeton	05/07/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Emit	05/07/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Silk Hope	05/09/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Taylortown	05/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	05/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenly	05/29/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Murdocksville	06/02/2009	Hail	0.88 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Wilsons Mills	06/09/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Smithfield	06/09/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Smithfield	06/09/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Selma Arpt	06/09/2009	Hail	1.75 in.	0	0	0.00K	0.00K
Four Oaks	06/09/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkers Mill	06/09/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Leaman	06/09/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	06/09/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Samarcand	07/13/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Broadway	07/13/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats	07/16/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats	07/16/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	07/16/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Dunn	07/16/2009	Lightning		0	0	1.00K	0.00K
Emit	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spout Spgs	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Dunn	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	07/17/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
High Falls	07/20/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Mc Connell	07/20/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Glendon	07/20/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Glendon	07/20/2009	Hail	0.88 in.	0	0	0.00K	0.00K
West End	07/20/2009	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Harris	07/20/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Norrington Xrds	07/23/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkers Mill	07/23/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Coats Xrds	07/23/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Clayton	07/25/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Selma Arpt	07/25/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rains Xrds	07/25/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lowell Mill	07/25/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Leaman	07/27/2009	Hail	0.88 in.	0	0	0.00K	0.00K
High Falls	07/27/2009	Hail	1.75 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Tramway	07/27/2009	Hail	0.88 in.	0	0	0.00K	0.00K
Lillington	07/27/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Dunn	07/27/2009	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Bentonville	07/27/2009	Lightning		0	1	0.00K	0.00K
Blackman Xrds	07/27/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Flowers	07/27/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Southern Pines	07/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Manly	07/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	07/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Boone Trail	07/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	07/31/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin	07/31/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rosser	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Corinth	08/05/2009	Hail	1.00 in.	0	0	0.00K	0.00K
Kipling	08/05/2009	Hail	0.75 in.	0	0	0.00K	0.00K
Roseland	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vass	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lillington	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	08/05/2009	Hail	1.25 in.	0	0	0.00K	0.00K
Lemon Spgs	08/05/2009	Hail	1.25 in.	0	0	0.00K	0.00K
Robbins	08/05/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	08/22/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	08/22/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	08/22/2009	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Sanford	08/22/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	09/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	09/28/2009	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	01/25/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	01/25/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	01/25/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	01/25/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cokesbury	03/28/2010	Lightning		0	0	75.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Cameron	05/15/2010	Hail	0.75 in.	0	0	0.00K	0.00K
Rosser	05/16/2010	Hail	0.75 in.	0	0	0.00K	0.00K
Pittsboro	05/16/2010	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Pittsboro	05/16/2010	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Manly	05/16/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkers Mill	05/23/2010	Hail	1.00 in.	0	0	0.00K	0.00K
Tramway	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cumnock	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Northview	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Goldston	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Terrells	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	05/28/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	06/14/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hallison	06/14/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vina Vista	06/14/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	06/15/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	06/15/2010	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Buies Creek Stwrt Ar	06/22/2010	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Clayton	06/23/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	06/26/2010	Hail	1.00 in.	0	0	0.00K	0.00K
Southern Pines Arpt	06/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Southern Pines Arpt	06/26/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Vina Vista	06/26/2010	Lightning		0	0	10.00K	0.00K
Aberdeen	06/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vina Vista	06/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Roseland	06/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cameron	06/29/2010	Lightning		0	0	1.00K	0.00K
Carthage	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Rockefeller Estates	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Mamers	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Luart	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Luart	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Coats Xrds	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Bear Creek	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Cumnock	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cumnock	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Northview	06/29/2010	Lightning		0	0	20.00K	0.00K
Sanford	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Micro	07/08/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	07/08/2010	Lightning		0	0	15.00K	0.00K
Anderson Creek	07/08/2010	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Spies	07/09/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Midtown	07/16/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Drug Store	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Colon	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hardy Xrds	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Smithfield	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Drug Store	07/20/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenly	07/20/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Chalybeate	07/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kipling	07/29/2010	Hail	1.00 in.	0	0	0.00K	0.00K
Carthage	08/19/2010	Lightning		0	0	400.00K	0.00K
West End	10/25/2010	Hail	1.00 in.	0	0	0.00K	0.00K
Silk Hope	11/16/2010	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Wilsons Mills	11/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	11/17/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	11/17/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Crutchfield Xrds	12/01/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	12/01/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pinehurst	02/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	03/06/2011	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Siler City	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Norrington Xrds	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	40.00K	0.00K
Bagley	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Bunnlevel	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Rains Xrds	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Silk Hope	05/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Goldston	05/13/2011	Thunderstorm Wind	50 kts. EG	0	0	1.75K	0.00K
Broadway	05/13/2011	Hail	1.75 in.	0	0	0.00K	0.00K
Bunnlevel	05/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Dunn	05/13/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Archer	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Flowers	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Overhills	05/27/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Buies Creek	05/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	06/10/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	06/10/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Swann	06/10/2011	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Taylortown	06/10/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	06/11/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
West End	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Tramway	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	06/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Broadway	06/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	06/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Rosser	06/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Aberdeen	06/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
West End	06/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Sanford Muni Arpt	06/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Norrington Xrds	06/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Smithfield	06/23/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Osgood	06/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archer	06/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Broadway	06/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Corinth	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Tramway	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hardy Xrds	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Swann	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford Muni Arpt	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vass	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Midtown	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Southern Pines	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Aberdeen	07/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	07/23/2011	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Selma	07/23/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Drug Store	07/23/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Northview	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bonlee	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Smithfield	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archers Lodge	07/25/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	08/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bear Creek	08/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	08/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	08/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	08/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	08/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Swann	08/21/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Pittsboro	08/29/2011	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
Merry Oaks	08/29/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Haywood	08/29/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	09/06/2011	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Hardy Xrds	09/06/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	12/07/2011	Thunderstorm Wind	50 kts. EG	0	1	0.00K	0.00K
Parkers Mill	12/07/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bennett	03/03/2012	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
Spies	03/25/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Archers Lodge	05/04/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Wilsons Mills	05/04/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Princeton	05/15/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Boone Trail	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Boone Trail	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Goldston	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Dunn	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Dunn	05/22/2012	Hail	0.88 in.	0	0	0.00K	0.00K
Benson	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Peacocks Xrds	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Blackman Xrds	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Blackman Xrds	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Princeton	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Rains Xrds	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Four Oaks	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Mt Pleasant	05/23/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Johnsonville	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Coats Xrds	05/23/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Coats Xrds	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Drug Store	05/23/2012	Hail	1.75 in.	0	0	0.00K	0.00K
Clayton	05/23/2012	Hail	1.75 in.	0	0	5.00K	0.00K
Clayton	05/23/2012	Hail	1.75 in.	0	0	0.00K	0.00K
Clayton	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Southern Pines Arpt	05/23/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Pinehurst	05/23/2012	Hail	1.75 in.	0	0	0.00K	0.00K
Southern Pines	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Vass	05/23/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Blackman Xrds	06/01/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Smithfield	06/01/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Colon	06/22/2012	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Olivia	06/22/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cameron	06/22/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Flat Branch	06/25/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Rawls	06/29/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Clayton	07/01/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Clayton	07/01/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsons Mills	07/01/2012	Hail	1.75 in.	0	0	0.00K	0.00K
Mt Pleasant	07/04/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Pittsboro	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Haywood	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Smithfield	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Sanford Muni Arpt	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Senter	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Bunnlevel	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Hallison	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Southern Pines Arpt	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	07/06/2012	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
Bunnlevel	07/09/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Southern Pines	07/09/2012	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Bynum	07/21/2012	Lightning		0	0	50.00K	0.00K
Aberdeen	07/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsonville	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	6.00K	0.00K
Merry Oaks	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Carthage	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Vass	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Coats Xrds	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bynum	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Farrington	07/24/2012	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
Glendon	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Cokesbury	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Jonesboro	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Jonesboro	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Archer	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Luart	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Pineview	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bentonville	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bentonville	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Siler City	07/27/2012	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Siler City Arpt	07/27/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Eagle Spgs	07/28/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	07/28/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	07/28/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
West End	07/28/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	07/28/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Addor	08/02/2012	Hail	1.25 in.	0	0	0.00K	0.00K
Kenly	08/02/2012	Hail	1.75 in.	0	0	0.00K	0.00K
Kenly	08/02/2012	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Mc Connell	08/02/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Sanford	08/08/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Flowers	08/08/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Southern Pines	08/17/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	08/17/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	09/06/2012	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
Goldston	09/08/2012	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
Clayton Flowers Arpt	09/08/2012	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
Benson	09/18/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	04/12/2013	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Siler City	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	04/19/2013	Thunderstorm Wind	52 kts. EG	0	0	8.00K	0.00K
Sanford Muni Arpt	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Olivia	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Wilsonville	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Siler City	06/13/2013	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Sanford	06/13/2013	Thunderstorm Wind	60 kts. EG	0	0	25.00K	0.00K
Robbins	06/13/2013	Thunderstorm Wind	60 kts. EG	0	0	100.00K	0.00K
Clayton	06/13/2013	Thunderstorm Wind	52 kts. EG	0	0	300.00K	0.00K
Angier	06/13/2013	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
Johnsonville	06/23/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/25/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	06/25/2013	Hail	1.25 in.	0	0	0.00K	0.00K
Clayton	06/25/2013	Hail	1.00 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Southern Pines	06/26/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Angier	06/27/2013	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Goldston	06/28/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Brogden	06/28/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	07/09/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	08/10/2013	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Smithfield	08/10/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Micro	08/22/2013	Hail	1.00 in.	0	0	0.00K	5.00K
Norrington Xrds	09/03/2013	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Siler City	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Cumnock	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Bentonville	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Blackman Xrds	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Wilsons Mills	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	0.20K	0.00K
Princeton	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Robbins	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Vernon Spgs	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Princeton	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	03/12/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Turlington	04/25/2014	Hail	1.00 in.	0	0	0.00K	0.00K
Wilsons Mills	04/25/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Buies Creek	04/29/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hallison	05/23/2014	Hail	1.00 in.	0	0	0.00K	0.00K
Robbins	05/27/2014	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Addor	05/29/2014	Hail	1.50 in.	0	0	0.00K	0.00K
Pittsboro	06/11/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	06/11/2014	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
White Hill	06/12/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
West End	06/16/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Garren Hill	06/16/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Jackson Spgs	06/16/2014	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
West End	06/16/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bear Creek	06/16/2014	Hail	1.00 in.	0	0	0.00K	0.00K
Smithfield	06/19/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Jonesboro	07/09/2014	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Clayton	08/18/2014	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Coats Xrds	08/18/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Micro	08/18/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	08/23/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Norrington Xrds	08/23/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Parkwood	09/02/2014	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Southern Pines Arpt	09/02/2014	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Anderson Creek	09/16/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Eastwood	09/16/2014	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Jonesboro	01/04/2015	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Hardy Xrds	01/04/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Flowers	01/04/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rockefeller Estates	04/09/2015	Lightning		1	0	0.00K	0.00K
Pittsboro	04/20/2015	Hail	1.00 in.	0	0	0.00K	0.00K
Goldston	04/20/2015	Hail	1.00 in.	0	0	0.00K	0.00K
Johnsonville	06/02/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Overhills	06/02/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	06/17/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/17/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Angier	06/17/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	06/19/2015	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Angier	06/25/2015	Hail	1.00 in.	0	0	0.00K	0.00K
Luart	06/25/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	5.00K
Anderson Creek	06/25/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Drug Store	06/26/2015	Hail	1.00 in.	0	0	0.00K	0.00K
Spies	06/26/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	06/26/2015	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Aberdeen	06/26/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City Arpt	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cumnock	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Moncure	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Southern Pines	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Boone Trail	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Drug Store	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lowell Mill	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bennett	06/30/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	06/30/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	06/30/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	06/30/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	07/05/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City Arpt	07/05/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	07/05/2015	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Hardy Xrds	07/05/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archer	07/05/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	07/08/2015	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Lakeview	07/08/2015	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Clayton	07/08/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Selma	07/08/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archer	07/18/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	07/18/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin	07/18/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	07/18/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Selma	07/23/2015	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Siler City Arpt	08/06/2015	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Gulf	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Archers Lodge	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Jonesboro	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Selma	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Bunnlevel	08/19/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bunnlevel	08/19/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bear Creek	02/24/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Bear Creek	02/24/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sanford	02/24/2016	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Harpers Xrds	03/14/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Kipling	04/28/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Emit	04/28/2016	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Seaforth	04/28/2016	Hail	1.00 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Archers Lodge	05/03/2016	Hail	1.50 in.	0	0	0.00K	0.00K
Hardy Xrds	05/03/2016	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Robbins	05/12/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Moncure	05/21/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Terrells	06/23/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Niagara	06/24/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Merry Oaks	06/29/2016	Hail	1.25 in.	0	0	0.00K	0.00K
Merry Oaks	06/29/2016	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Kipling	06/29/2016	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Rains Xrds	06/29/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	07/04/2016	Thunderstorm Wind	50 kts. EG	0	0	3.00K	1.00K
Norrington Xrds	07/04/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	5.00K
Archers Lodge	07/05/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	1.00K
Clayton	07/05/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	2.00K
Benson	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin Arpt	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	3.00K
Four Oaks	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	2.00K
Southern Pines Arpt	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	3.00K
Spout Spgs	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Flowers	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Spies	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Aberdeen	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hardy Xrds	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Vina Vista	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Peacocks Xrds	07/08/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Vass	07/15/2016	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Erwin Arpt	07/15/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Clayton	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Drug Store	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Cameron	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton Flowers Arpt	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Clayton	07/16/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Broadway	07/22/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Broadway	07/22/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	07/22/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Johnsonville	07/22/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	07/26/2016	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Buies Creek	07/31/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Seaforth	07/31/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Carthage	08/21/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Midtown	08/21/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	08/21/2016	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
Vass	08/21/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cameron	08/21/2016	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Pineview	08/21/2016	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Southern Pines Arpt	08/27/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Benson	09/01/2016	Lightning		0	0	5.00K	0.00K
Emit	09/28/2016	Hail	0.75 in.	0	0	0.00K	0.00K
Emit	09/28/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Dunn	09/28/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Southern Pines Arpt	09/28/2016	Lightning		0	0	40.00K	0.00K
Pittsboro	03/01/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Vass	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lemon Spgs	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Carthage	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bynum	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Aberdeen Arpt	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Wilsons Mills	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	05/11/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Emit	05/11/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	05/24/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Anderson Creek	05/31/2017	Hail	1.00 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Barclaysville	06/19/2017	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Roseland	06/19/2017	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Murdocksville	07/01/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spout Spgs	07/06/2017	Thunderstorm Wind	56 kts. EG	0	0	1.00K	0.00K
Bennett	07/08/2017	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Clayton	07/08/2017	Hail	1.00 in.	0	0	0.00K	0.00K
Drug Store	07/08/2017	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Duncan	07/16/2017	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Jonesboro	07/18/2017	Lightning		1	0	0.00K	0.00K
Midtown	07/23/2017	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Smithfield	08/23/2017	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Smithfield	08/23/2017	Thunderstorm Wind	50 kts. EG	0	1	10.00K	0.00K
Smithfield	08/23/2017	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Smithfield	08/23/2017	Thunderstorm Wind	50 kts. EG	0	0	100.00K	0.00K
West End	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Tramway	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
Sanford	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	75.00K	0.00K
Jonesboro	09/01/2017	Hail	1.00 in.	0	0	0.00K	0.00K
Angier	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
Carthage	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Angier	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Angier	09/01/2017	Hail	2.75 in.	0	0	2.000M	0.00K
Hardy Xrds	09/01/2017	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Robbins	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Siler City	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Pittsboro	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Moncure	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Sanford Muni Arpt	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Colon	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Wilsonville	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Sanford Muni Arpt	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Turlington	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
Four Oaks	05/06/2018	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Bentonville	05/06/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Siler City	05/10/2018	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Spies	05/10/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Tramway	05/10/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Wilsons Mills	05/10/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Bells	05/23/2018	Hail	0.75 in.	0	0	0.00K	0.00K
Crutchfield Xrds	06/01/2018	Thunderstorm Wind	50 kts. EG	0	0	7.00K	0.00K
Mamers	06/11/2018	Hail	1.00 in.	0	0	0.00K	0.00K
Benson	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	06/11/2018	Lightning		0	0	3.00K	0.00K
Kipling	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Dunn	06/11/2018	Hail	1.00 in.	0	0	0.00K	0.00K
Dunn	06/11/2018	Hail	1.00 in.	0	0	0.00K	0.00K
Four Oaks	06/17/2018	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Cokesbury	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
Drug Store	06/20/2018	Lightning		0	0	15.00K	0.00K
Drug Store	06/20/2018	Lightning		0	0	15.00K	0.00K
Four Oaks	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Eastwood	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Eastwood	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Micro	06/22/2018	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
Benson	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Benson	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Erwin Arpt	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kipling	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Farrington	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Spies	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spies	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Leaman	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Robbins	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Taylortown	06/25/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Micro	07/06/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Dunn	07/17/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats	07/17/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Coats	07/17/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Dunn	07/17/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Garren Hill	07/21/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spout Spgs	07/21/2018	Hail	1.00 in.	0	0	0.00K	0.00K
Angier	07/21/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	07/21/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats	07/22/2018	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
Crutchfield Xrds	07/22/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Siler City	07/22/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lillington	07/27/2018	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Carthage	08/02/2018	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Bynum	08/02/2018	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Goldston	08/02/2018	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Coats Xrds	08/06/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Emit	08/06/2018	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Harpers Xrds	08/06/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harpers Xrds	08/06/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Crutchfield Xrds	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Crutchfield Xrds	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Terrells	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bennett	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Four Oaks	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	300.00K	0.00K
Harris	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Parkers Mill	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hill Crest	08/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Cameron	08/11/2018	Hail	0.88 in.	0	0	0.00K	0.00K
Vass	08/11/2018	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Cokesbury	08/18/2018	Lightning		0	0	25.00K	0.00K
Sanford	08/18/2018	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Harris	08/18/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	08/18/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Aberdeen	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Goldston	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Spout Spgs	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Norrington Xrds	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Kipling	04/08/2019	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Clayton	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Clayton	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Farrington	04/08/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Bennett	04/12/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Merry Oaks	04/12/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Harris	04/14/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Manly	04/14/2019	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
Hallison	04/15/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	04/15/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Howard Mill	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Selma Arpt	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Brogden	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clayton	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Coats Xrds	04/26/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spies	05/04/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lobelia	05/04/2019	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Seminole	05/04/2019	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Bynum	05/13/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Gulf	05/31/2019	Hail	1.25 in.	0	0	0.00K	0.00K
Goldston	05/31/2019	Hail	1.25 in.	0	0	0.00K	0.00K
Osgood	05/31/2019	Hail	1.00 in.	0	0	0.00K	0.00K
Micro	05/31/2019	Hail	1.00 in.	0	0	0.00K	0.00K
Senter	06/05/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Angier	06/05/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Benson	06/05/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Silk Hope	06/20/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Harpers Xrds	06/20/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Rosser	06/20/2019	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Clayton	06/30/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Peacocks Xrds	07/04/2019	Thunderstorm Wind	50 kts. EG	0	0	30.00K	10.00K
Seminole	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Wilsons Mills	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Coats Xrds	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Clayton	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Clayton	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Wilsons Mills	07/17/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Northview	07/20/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Gulf	07/20/2019	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Drug Store	07/22/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Haw Branch	07/23/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Osgood	07/23/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Lakeview	08/01/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
White Hill	08/07/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Clayton	08/13/2019	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Benson	08/15/2019	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Benson	08/15/2019	Thunderstorm Wind	50 kts. EG	0	0	25.000M	0.00K
Moncure	08/15/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Moncure	08/15/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Pittsboro	08/15/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Olivia	08/19/2019	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Pittsboro	08/22/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Samarcand	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Siler City	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Robbins	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harris	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Eastwood	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Eastwood	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	10/31/2019	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Siler City	01/11/2020	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Archer	01/12/2020	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Emit	01/12/2020	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Pineview	01/12/2020	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Crutchfield Xrds	02/06/2020	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Moncure	02/06/2020	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Bynum	02/06/2020	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Moncure	02/06/2020	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Totals:				**2**	**3**	**30.601M**	**37.00K**

According to NCDC 1,055 recorded instances of Thunderstorm Winds conditions have affected the planning area since 1957 causing an estimated $3,197,800 in losses to property, $32,000 in losses to agricultural crops, 1 death(s), and 16 injury(ies).

Table 5-13 provides a summary of this historical information by participating jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

Table 5-13: Summary of Historical Thunderstorm Winds Occurrences by Participating Jurisdiction

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham							
Chatham County (Unincorporated Area)	124	0	2	$264,000	$56,161	$0	$0
Town of Goldston	8	0	0	$10,000	$3,425	$0	$0
Town of Pittsboro	39	0	0	$213,000	$44,862	$0	$0
Town of Siler City	38	0	1	$226,000	$25,847	$0	$0
Subtotal Chatham	*209*	*0*	*3*	*$713,000*	*$130,296*	*$0*	*$0*
Harnett							
City of Dunn	16	0	0	$25,000	$4,946	$0	$0
Harnett County (Unincorporated Area)	131	0	2	$362,000	$60,591	$13,000	$2,176
Town of Angier	10	0	0	$14,000	$4,794	$0	$0
Town of Coats	8	0	0	$8,000	$2,302	$0	$0
Town of Erwin	7	0	0	$0	$0	$0	$0
Town of Lillington	21	1	5	$30,500	$6,424	$0	$0
Subtotal Harnett	*193*	*1*	*7*	*$439,500*	*$79,057*	*$13,000*	*$2,176*
Johnston							
Johnston County (Unincorporated Area)	146	0	0	$362,850	$42,907	$12,000	$1,419
Town of Archer Lodge	5	0	0	$15,500	$6,786	$0	$0
Town of Clayton	40	0	0	$313,750	$73,620	$1,000	$235
Town of Four Oaks	12	0	0	$31,500	$10,776	$2,000	$684
Town of Kenly	9	0	0	$15,000	$4,675	$0	$0
Town of Micro	5	0	0	$1,500	$748	$0	$0
Town of Pine Level	2	0	0	$0	$0	$0	$0

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Princeton	12	0	0	$13,000	$4,447	$0	$0
Town of Selma	16	0	0	$49,500	$13,356	$0	$0
Town of Smithfield	61	0	1	$470,200	$83,441	$0	$0
Town of Wilson's Mills	3	0	0	$0	$0	$0	$0
Subtotal Johnston	*311*	*0*	*1*	*$1,272,800*	*$240,757*	*$15,000*	*$2,338*
Lee							
City of Sanford	61	0	0	$164,500	$23,871	$0	$0
Lee County (Unincorporated Area)	48	0	1	$238,500	$33,507	$0	$0
Subtotal Lee	*109*	*0*	*1*	*$403,000*	*$57,378*	*$0*	*$0*
Moore							
Moore County (Unincorporated Area)	115	0	3	$109,000	$16,580	$1,000	$152
Town of Aberdeen	10	0	0	$3,000	$898	$0	$0
Town of Cameron	1	0	0	$0	$0	$0	$0
Town of Carthage	27	0	1	$20,000	$4,105	$0	$0
Town of Pinebluff	4	0	0	$10,000	$4,877	$0	$0
Town of Robbins	17	0	0	$135,000	$27,690	$0	$0
Town of Southern Pines	22	0	0	$73,500	$21,995	$3,000	$898
Town of Taylortown	1	0	0	$0	$0	$0	$0
Town of Vass	16	0	0	$8,500	$2,636	$0	$0
Village of Foxfire	2	0	0	$0	$0	$0	$0
Village of Pinehurst	14	0	0	$0	$0	$0	$0
Village of Whispering Pines	4	0	0	$10,500	$7,444	$0	$0
Subtotal Moore	*233*	*0*	*4*	*$369,500*	*$86,227*	*$4,000*	*$1,050*
TOTAL PLAN	**1,055**	**1**	**16**	**$3,197,800**	**$593,715**	**$32,000**	**$5,564**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

According to NCDC, 467 recorded instances of thunderstorm, lightning, and hail conditions have affected the planning area causing an estimated $2,725,000 in property damages, $705,000 in crop damages, 0 death(s), and 0 reported injuries.

Table 5-14 provides a summary of this historical information by participating jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

Table 5-14: Summary of Historical Hail Occurrences by Participating Jurisdiction

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham							
Chatham County (Unincorporated Area)	44	0	0	$0	$0	$0	$0
Town of Goldston	6	0	0	$0	$0	$0	$0
Town of Pittsboro	16	0	0	$0	$0	$0	$0
Town of Siler City	7	0	0	$0	$0	$0	$0
Subtotal Chatham	*73*	*0*	*0*	*$0*	*$0*	*$0*	*$0*
Harnett							
City of Dunn	11	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	73	0	0	$2,030,000	$431,847	$0	$0
Town of Angier	5	0	0	$50,000	$15,561	$0	$0
Town of Coats	5	0	0	$0	$0	$0	$0
Town of Erwin	10	0	0	$0	$0	$0	$0
Town of Lillington	11	0	0	$0	$0	$0	$0
Subtotal Harnett	*115*	*0*	*0*	*$2,080,000*	*$447,408*	*$0*	*$0*
Johnston							
Johnston County (Unincorporated Area)	59	0	0	$0	$0	$5,000	$1,171
Town of Archer Lodge	4	0	0	$0	$0	$0	$0
Town of Clayton	21	0	0	$5,000	$1,561	$0	$0

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Four Oaks	10	0	0	$0	$0	$0	$0
Town of Kenly	7	0	0	$600,000	$191,747	$500,000	$159,789
Town of Micro	1	0	0	$0	$0	$0	$0
Town of Pine Level	2	0	0	$0	$0	$0	$0
Town of Princeton	11	0	0	$0	$0	$0	$0
Town of Selma	3	0	0	$0	$0	$0	$0
Town of Smithfield	18	0	0	$40,000	$7,998	$200,000	$39,992
Town of Wilson's Mills	4	0	0	$0	$0	$0	$0
Subtotal Johnston	*140*	*0*	*0*	*$645,000*	*$201,307*	*$705,000*	*$200,952*
Lee							
City of Sanford	19	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	24	0	0	$0	$0	$0	$0
Subtotal Lee	*43*	*0*	*0*	*$0*	*$0*	*$0*	*$0*
Moore							
Moore County (Unincorporated Area)	45	0	0	$0	$0	$0	$0
Town of Aberdeen	6	0	0	$0	$0	$0	$0
Town of Cameron	4	0	0	$0	$0	$0	$0
Town of Carthage	10	0	0	$0	$0	$0	$0
Town of Pinebluff	2	0	0	$0	$0	$0	$0
Town of Robbins	11	0	0	$0	$0	$0	$0
Town of Southern Pines	11	0	0	$0	$0	$0	$0

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Vass	5	0	0	$0	$0	$0	$0
Village of Foxfire	1	0	0	$0	$0	$0	$0
Village of Pinehurst	1	0	0	$0	$0	$0	$0
Subtotal Moore	*96*	*0*	*0*	*$0*	*$0*	*$0*	*$0*
TOTAL PLAN	**467**	**0**	**0**	**$2,725,000**	**$648,715**	**$705,000**	**$200,952**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

5.6.5 Probability of Future Occurrences

The probability of future Hail is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability

Jurisdiction	Self Assessment
Chatham County (Unincorporated Area)	Medium
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium
Town of Angier	Medium
Town of Archer Lodge	Medium
Town of Benson	Medium
Town of Broadway	Medium
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Medium

Jurisdiction	Self Assessment
Town of Coats	Medium
Town of Erwin	Medium
Town of Four Oaks	Medium
Town of Goldston	Medium
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Medium
Town of Pine Level	Medium
Town of Pinebluff	Medium
Town of Pittsboro	Medium
Town of Princeton	Medium
Town of Robbins	Medium
Town of Selma	Medium
Town of Siler City	Medium
Town of Smithfield	Medium
Town of Southern Pines	Medium
Town of Taylortown	Medium
Town of Vass	Medium
Town of Wilson's Mills	Medium
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Given the high number of previous events, it is certain that wind events, including straight-line wind and thunderstorm wind, will occur in the future. This results in a probability level of highly likely (100 percent annual probability) for future wind events for the entire planning area.

Based on historical occurrence information, it is assumed that the probability of future hail occurrences is highly likely (100 percent annual probability). Since hail is an atmospheric hazard (coinciding with thunderstorms), it is assumed that the entire Cape Fear Region has equal exposure to this hazard. It can be expected that future hail events will continue to cause minor damage to property and vehicles throughout the region.

Although there was not a high number of historical lightning events reported throughout the Cape Fear Region via NCDC data, it is considered a regular occurrence, especially accompanied by thunderstorms. In fact, lightning events will assuredly happen on an annual basis, though not all events will cause damage. According to Vaisala's U.S. National Lightning Detection Network (NLDN®), the Cape Fear Region is located in an area of the country that experienced an average of 3 to 5 lightning flashes per

square kilometer per year between 2008 and 2017. Therefore, the probability of future events is highly likely (100 percent annual probability). It can be expected that future lightning events will continue to threaten life and cause minor property damages throughout the region.

5.6.6 Impact

People

Thunderstorms are generally associated with hazards such as high wind, lightning and hail. High wind can cause trees to fall and potentially result in injuries or death and lightning can lead to house fires and serious injury. Hail can cause injury as well as severe property damage to homes and automobiles all jurisdictions in the Region are vulnerable to this impact

First Responders

First responders can be impacted in the same way as the general public. Downed trees, power lines and flood waters may prevent access to areas in need which prolongs response time.

Continuity of Operations

Thunderstorm events can result in a loss of power which may impact operations. Downed trees, power lines and flash flooding may prevent access to critical facilities and/or emergency equipment.

Built Environment

Thunderstorms can cause damage to commercial buildings and homes due to strong winds, lightning strikes and hail. Heavy rains associated with thunderstorm events may also lead to flash flooding which can damage roads and bridges.

Economy

Economic damages include property damage from wind, lightning and hail, and also include intangibles such as business interruption and additional living expenses. Johnston County, the cities of Kenly and Smithfield are most vulnerable to crop damage from hail.

Natural Environment

Thunderstorms have a huge impact on the environment. One of the most dangerous outcomes for the environment is when lightning causes sparks to flare up in surrounding forests or immense shrubs. This is often the cause of bush fires, which then spread quickly due to the fast winds that accompany the storm. High winds can also damage crops and trees. Flooding can kill animals and cause soil erosion.

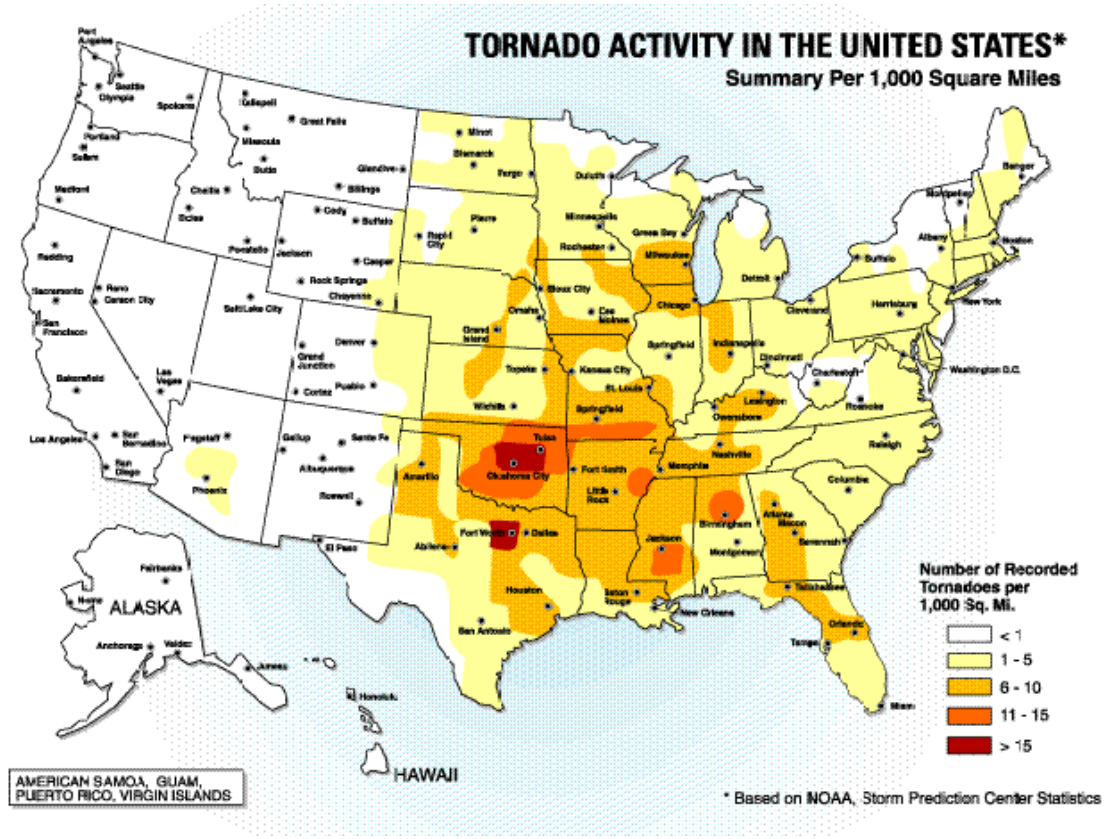
5.7 Tornado

5.7.1 Background

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. Tornadoes are most often generated by thunderstorm activity (but sometimes result from hurricanes and other tropical storms) when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The damage caused by a tornado is a result of the high wind velocity and wind-blown debris, also accompanied by lightning or large hail. According to the National Weather Service, tornado wind speeds normally range from 40 miles per hour to more than 300 miles per hour. The most violent tornadoes have rotating winds of 250 miles per hour or more and are capable of causing extreme destruction and turning normally harmless objects into deadly missiles.

Each year, an average of over 1200tornadoes are reported nationwide, resulting in an average of 80 deaths and 1,500 injuries. According to the NOAA Storm Prediction Center (SPC), the highest

concentration of tornadoes in the United States has been in Oklahoma, Texas, Kansas, and Florida respectively. Although the Great Plains region of the Central United States does favor the development of the largest and most dangerous tornadoes (earning the designation of "tornado alley"), Florida experiences the greatest number of tornadoes per square mile of all United States (SPC, 2002). **Figure 5-35** shows tornado activity in the United States based on the number of recorded tornadoes per 1,000 square miles.



Source: Federal Emergency Management Agency

Figure 5-35: Tornado Activity in the United States

Tornadoes are more likely to occur during the months of March through May and are most likely to form in the late afternoon and early evening. Most tornadoes are a few dozen yards wide and touch down briefly, but even small short-lived tornadoes can inflict tremendous damage. Highly destructive tornadoes may carve out a path over a mile wide and several miles long.

The destruction caused by tornadoes ranges from light to inconceivable depending on the intensity, size, and duration of the storm. Typically, tornadoes cause the greatest damage to structures of light construction, including residential dwellings (particularly mobile homes). Tornadic magnitude is reported according to the Fujita and Enhanced Fujita Scales. Tornado magnitudes prior to 2005 were determined using the traditional version of the Fujita Scale (**Table 5-15**). Tornado magnitudes that were determined in 2005 and later were determined using the Enhanced Fujita Scale (**Table 5-16**).

Table 5-15: The Fujita Scale (Effective Prior to 2005)

F-SCALE NUMBER	INTENSITY	WIND SPEED	TYPE OF DAMAGE DONE
F0	GALE TORNADO	40–72 MPH	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign boards.
F1	MODERATE TORNADO	73–112 MPH	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
F2	SIGNIFICANT TORNADO	113–157 MPH	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
F3	SEVERE TORNADO	158–206 MPH	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
F4	DEVASTATING TORNADO	207–260 MPH	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated.
F5	INCREDIBLE TORNADO	261–318 MPH	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.
F6	INCONCEIVABLE TORNADO	319–379 MPH	These winds are very unlikely. The small area of damage they might produce would probably not be recognizable along with the mess produced by F4 and F5 wind that would surround the F6 winds. Missiles, such as cars and refrigerators would do serious secondary damage that could not be directly identified as F6 damage. If this level is ever achieved, evidence for it might only be found in some manner of ground swirl pattern, for it may never be identifiable through engineering studies.

Source: National Weather Service

Table 5-16: The Enhanced Fujita Scale (Effective 2005 and Later)

EF-SCALE NUMBER	INTENSITY PHRASE	3 SECOND GUST (MPH)	TYPE OF DAMAGE DONE
EF0	GALE	65–85	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign boards.

EF-SCALE NUMBER	INTENSITY PHRASE	3 SECOND GUST (MPH)	TYPE OF DAMAGE DONE
EF1	MODERATE	86–110	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
EF2	SIGNIFICANT	111–135	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
EF3	SEVERE	136–165	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
EF4	DEVASTATING	166–200	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated.
EF5	INCREDIBLE	Over 200	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.

Source: National Weather Service

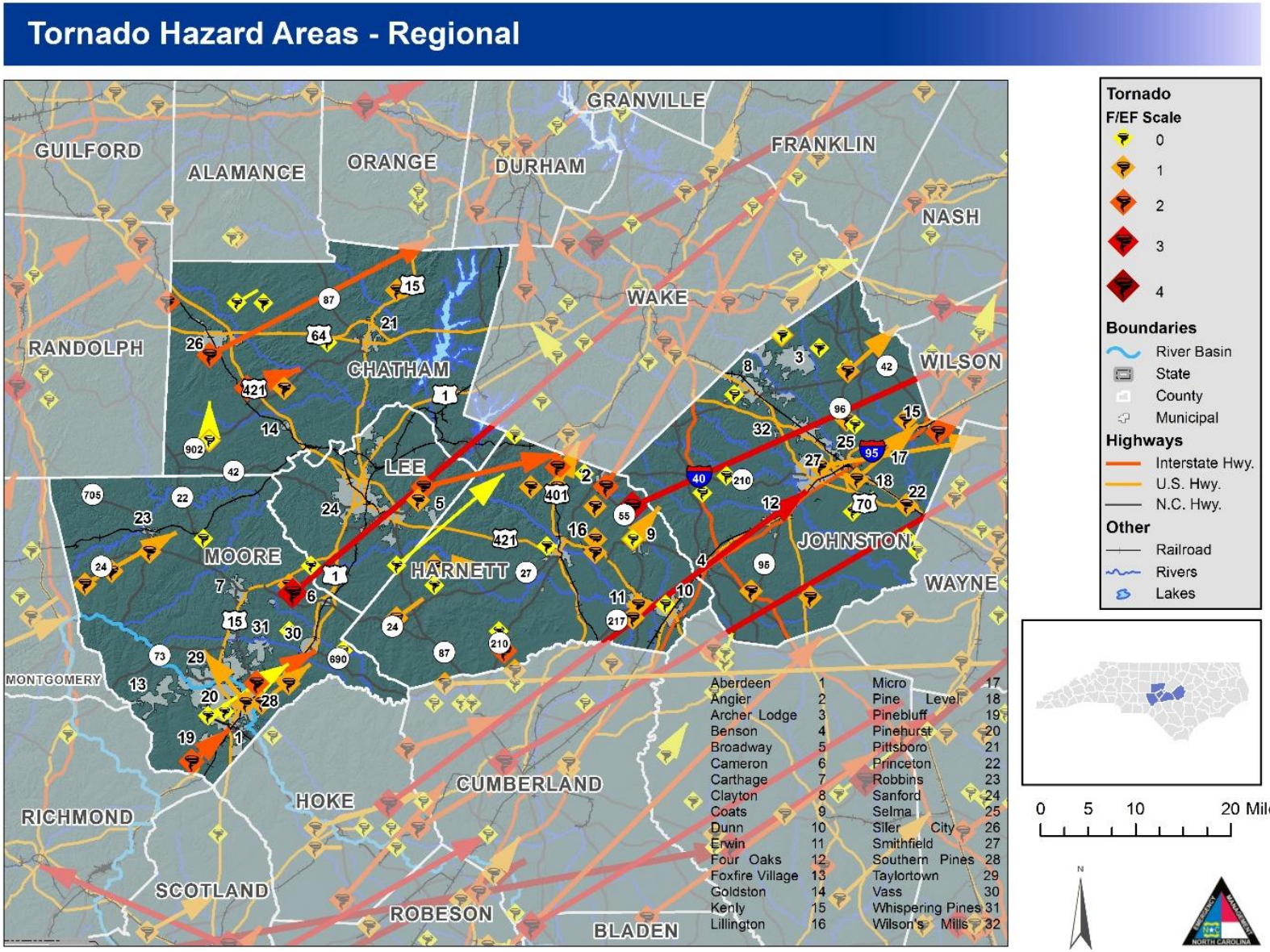


Figure 5-36: Tornado Hazard Areas - Regional

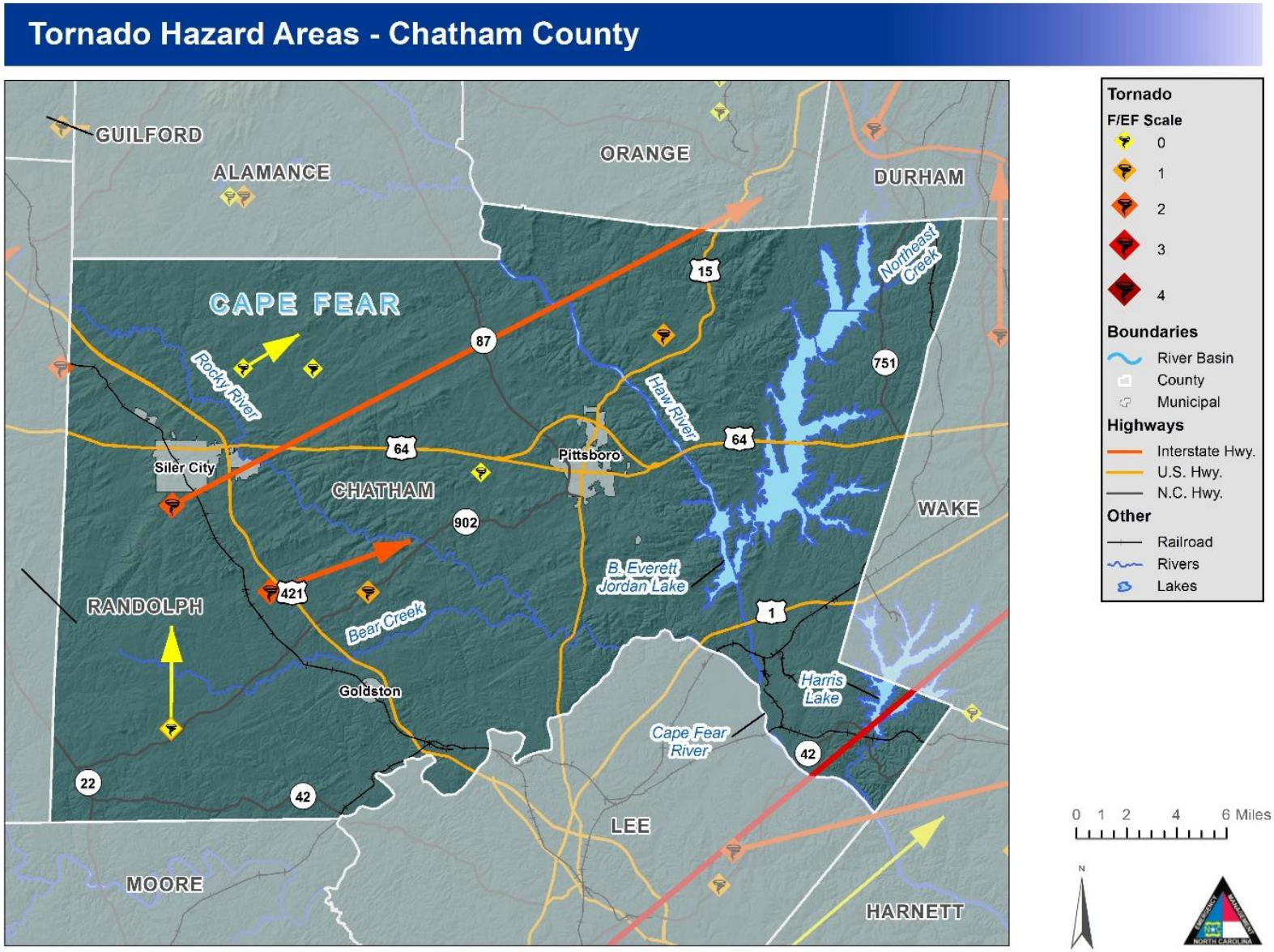


Figure 5-37: Tornado Hazard Areas – Chatham County

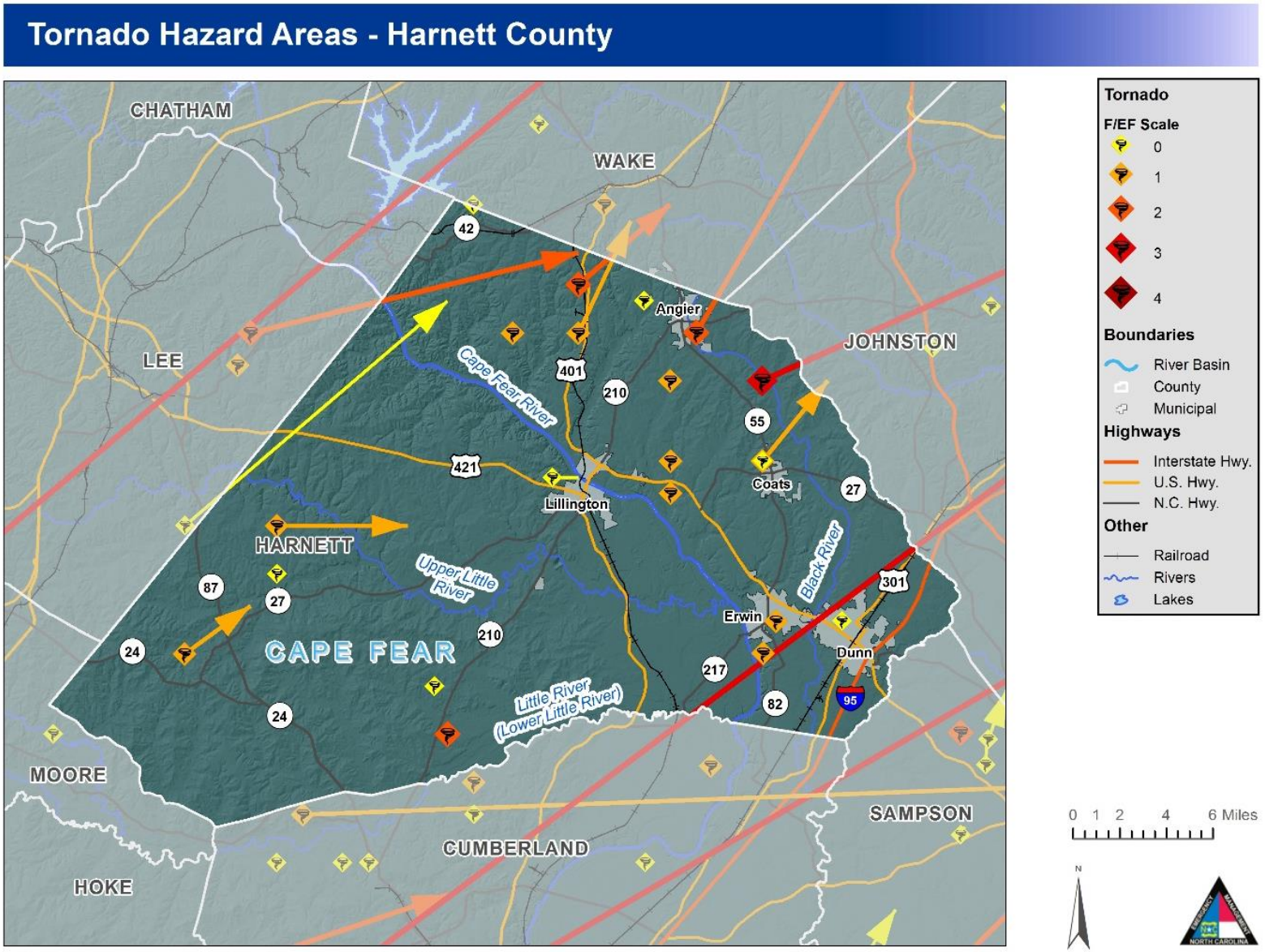


Figure 5-38: Tornado Hazard Areas – Harnett County

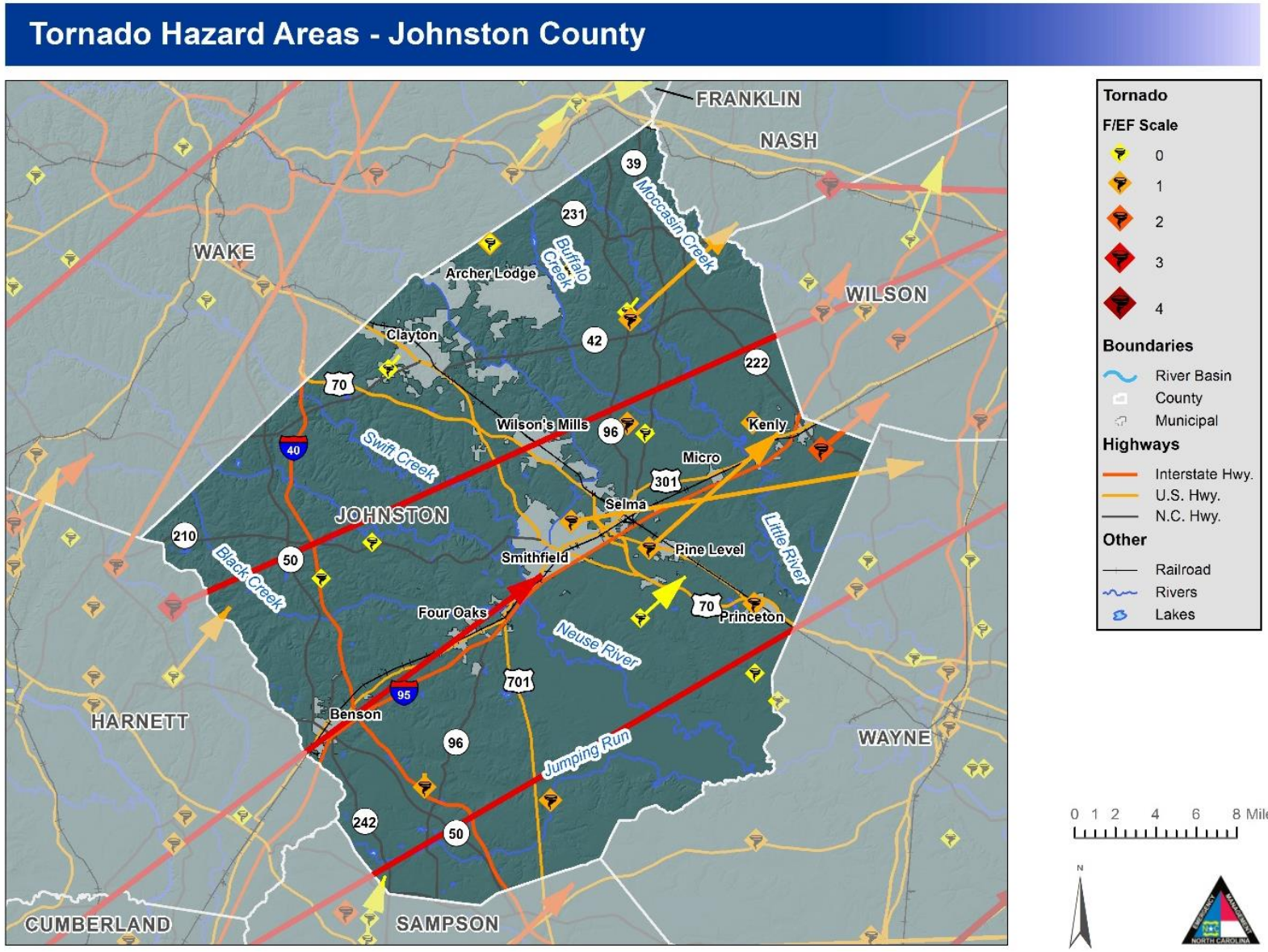


Figure 5-39: Tornado Hazard Areas – Johnston County

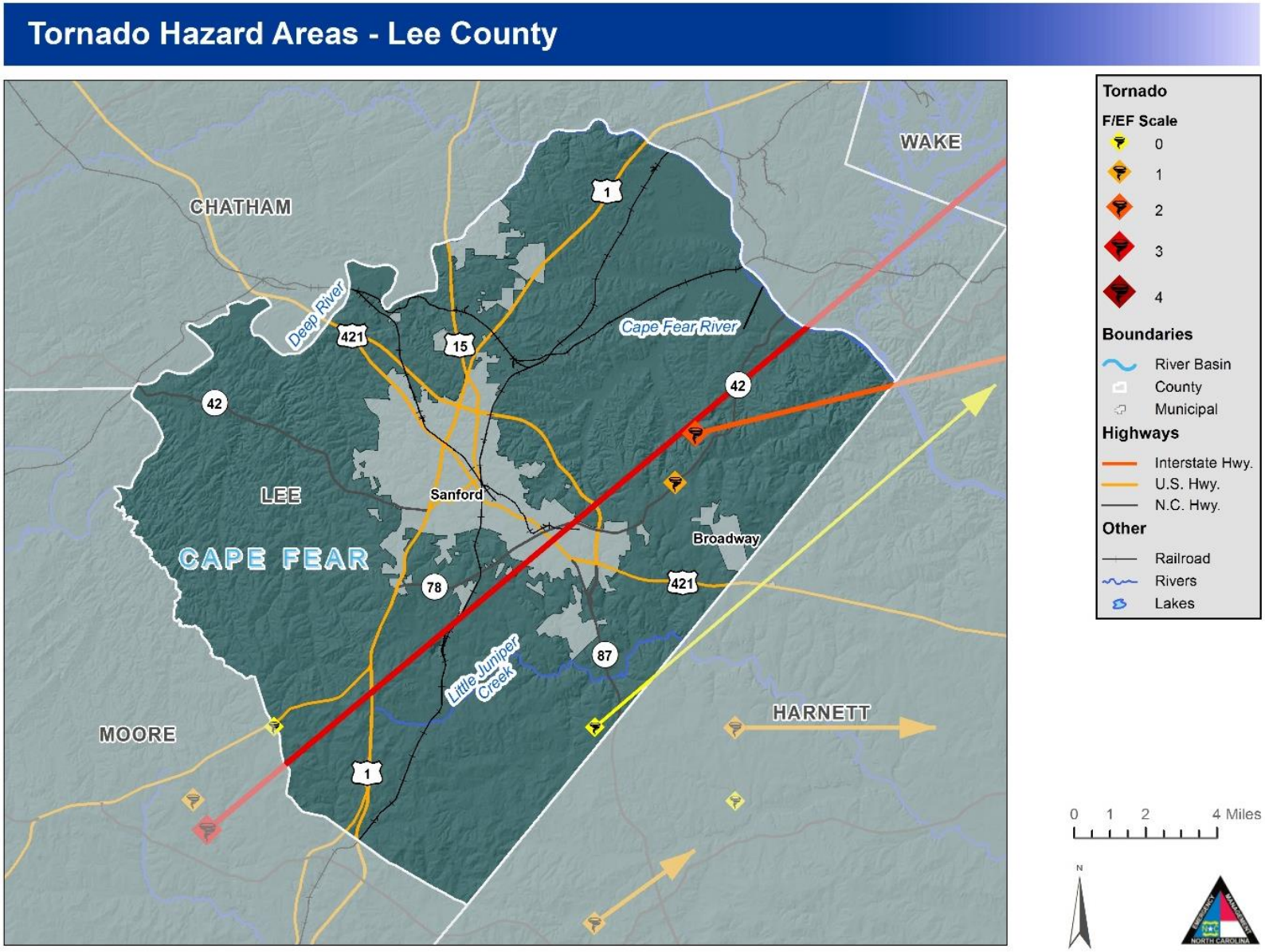


Figure 5-40: Tornado Hazard Areas – Lee County

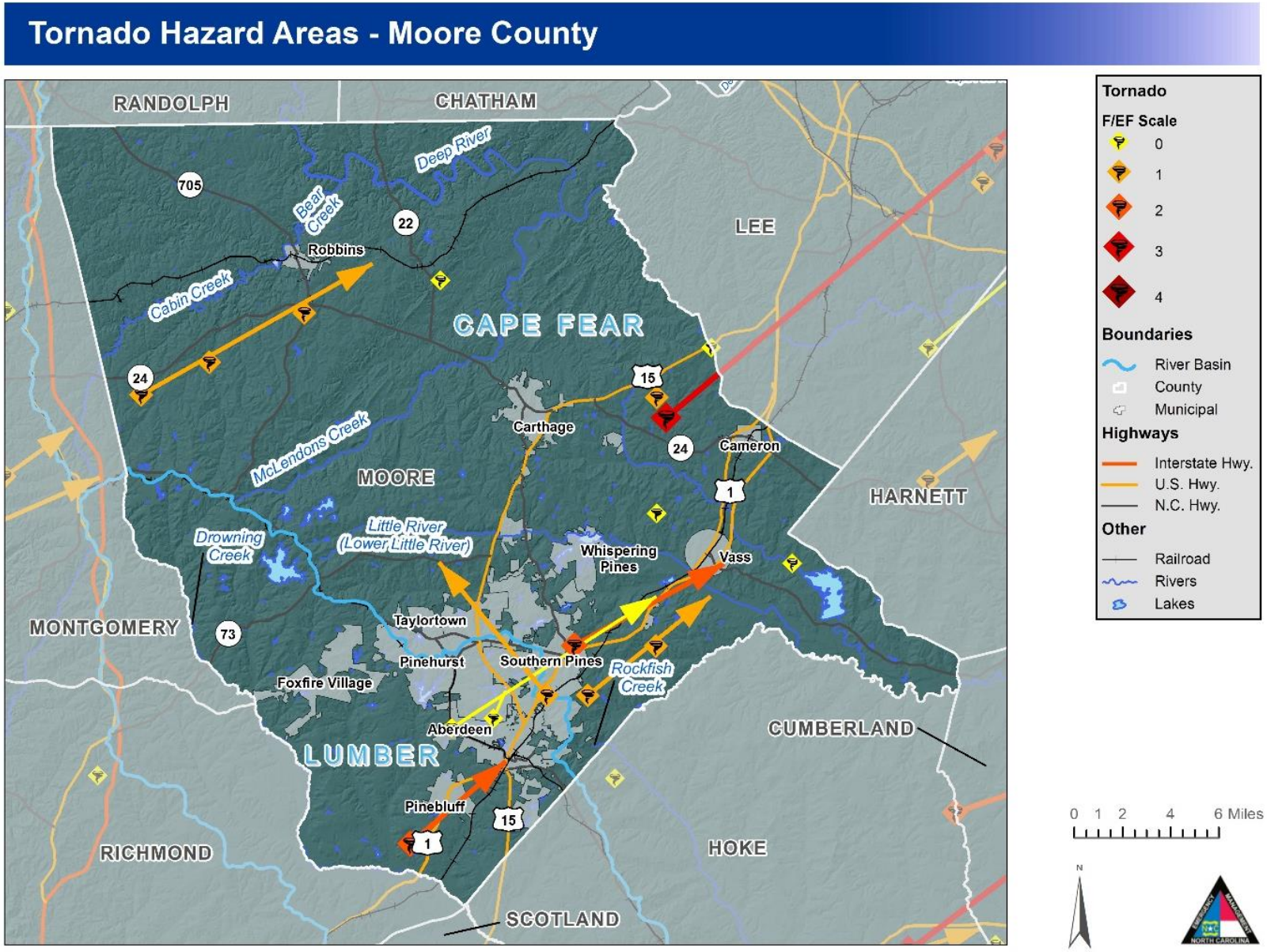


Figure 5-41: Tornado Hazard Areas – Moore County

5.7.2 Location and Spatial Extent

Tornadoes occur throughout the state of North Carolina, and thus in the Cape Fear Region. Tornadoes typically impact a relatively small area, but damage may be extensive. Event locations are completely random, and it is not possible to predict specific areas that are more susceptible to tornado strikes over time. Therefore, it is assumed that the Cape Fear Region is uniformly exposed to this hazard.

5.7.3 Extent

Location	Date	Magnitude
Chatham County (Unincorporated Area)	10/7/1965	EF2
Town of Pittsboro	9/17/2004	EF0
Town of Siler City	3/29/1991	EF2
Harnett County (Unincorporated Area)	11/23/1992	EF3
Town of Angier	11/2/1966	EF2
Town of Coats	6/12/1989	EF1
Town of Erwin	5/15/1975	EF1
Town of Lillington	9/14/2007	EF0
Johnston County (Unincorporated Area)	11/23/1992	EF3
Town of Clayton	9/14/2007	EF0
Town of Kenly	11/15/2008	EF2
Town of Pine Level	4/16/2011	EF1
Town of Princeton	3/4/1977	EF1
Town of Smithfield	5/29/1973	EF1
Lee County (Unincorporated Area)	4/16/2011	EF3
Moore County (Unincorporated Area)	2/11/1981	EF2
Town of Aberdeen	7/2/2003	EF0
Town of Southern Pines	2/11/1981	EF2
Village of Pinehurst	9/6/2011	EF0

Source: National Weather Service Storm Prediction Center

5.7.4 Historical Occurrences

The following historical occurrences ranging from 1950 to 2019 have been identified based on the NCDC Storm Events database **Table 5-17**. It should be noted that only those historical occurrences listed in the NCDC database are shown here and that other, unrecorded or unreported events may have occurred within the planning area during this timeframe.

Table 5-17: Historical Occurrences of Tornado (1950 to 2019)

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham								
Chatham County (Unincorporated Area)	10/07/65	EF2	0	0	$25,000	$3,803	$0	$0
Chatham County (Unincorporated Area)	05/15/75	EF1	0	0	$25,000	$5,291	$0	$0
Chatham County (Unincorporated Area)	07/27/77	EF1	0	0	$250	$57	$0	$0
Chatham County (Unincorporated Area)	08/17/85	EF0	0	0	$25,000	$7,533	$0	$0
Chatham County (Unincorporated Area)	06/28/89	EF1	0	0	$0	$0	$0	$0
Chatham County (Unincorporated Area)	05/31/03	EF0	0	0	0	$0	0	$0
Chatham County (Unincorporated Area)	08/27/08	EF0	0	0	$20,000	$13,313	$0	$0
Chatham County (Unincorporated Area)	04/16/11	EF0	0	0	$75,000	$54,671	$0	$0
Chatham County (Unincorporated Area)	06/27/15	EF1	0	0	$25,000	$21,057	$0	$0
Town of Pittsboro	09/17/04	EF0	0	0	0	$0	0	$0
Town of Siler City	03/29/91	EF2	0	0	$250,000	$91,398	$0	$0
Town of Siler City	04/19/19	EF1	0	0	$100,000	$96,022	$0	$0
Subtotal Chatham	**12 Events**		**0**	**0**	**$545,250**	**$293,145**	**$0**	**$0**

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Harnett								
Harnett County (Unincorporated Area)	02/18/60	EF1	0	0	$25,000	$3,132	$0	$0
Harnett County (Unincorporated Area)	01/05/71	EF2	0	0	$250,000	$45,540	$0	$0
Harnett County (Unincorporated Area)	05/17/73	EF1	0	0	$25,000	$4,941	$0	$0
Harnett County (Unincorporated Area)	06/16/82	EF2	0	0	$250,000	$67,547	$0	$0
Harnett County (Unincorporated Area)	07/01/86	EF1	0	0	$25,000	$7,762	$0	$0
Harnett County (Unincorporated Area)	07/01/86	EF0	0	0	$2,500	$776	$0	$0
Harnett County (Unincorporated Area)	10/23/90	EF1	0	0	$25,000	$9,002	$0	$0
Harnett County (Unincorporated Area)	11/23/92	EF3	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	12/17/00	EF0	0	0	0	$0	0	$0
Harnett County (Unincorporated Area)	05/02/04	EF1	0	0	0	$0	0	$0
Harnett County (Unincorporated Area)	08/12/04	EF1	0	4	0	$0	0	$0
Harnett County (Unincorporated Area)	08/29/04	EF0	0	0	0	$0	0	$0
Harnett County (Unincorporated Area)	09/08/04	EF0	0	0	0	$0	0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Harnett County (Unincorporated Area)	07/07/05	EF0	0	0	0	$0	0	$0
Harnett County (Unincorporated Area)	09/14/07	EF0	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	04/16/11	EF2	1	24	$16,000,000	$11,663,212	$0	$0
Harnett County (Unincorporated Area)	04/12/19	EF0	0	0	$10,000	$9,596	$0	$0
Town of Angier	11/02/66	EF2	0	0	$250,000	$39,454	$0	$0
Town of Angier	11/02/66	EF2	0	9	$250,000	$39,454	$0	$0
Town of Coats	06/12/89	EF1	0	0	$25,000	$8,591	$0	$0
Town of Coats	12/17/00	EF0	0	0	0	$0	0	$0
Town of Erwin	05/15/75	EF1	0	6	$25,000	$5,291	$0	$0
Town of Erwin	11/04/92	EF1	0	0	$2,500	$966	$0	$0
Town of Lillington	09/14/07	EF0	0	0	$0	$0	$0	$0
Subtotal Harnett	*24 Events*		*1*	*43*	*$17,165,000*	*$11,905,264*	*$0*	*$0*
Johnston								
Johnston County (Unincorporated Area)	05/12/50	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	05/12/50	EF1	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	11/04/92	EF1	0	0	$2,500	$966	$0	$0
Johnston County (Unincorporated Area)	11/04/92	EF1	0	0	$0	$0	$0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Johnston County (Unincorporated Area)	11/23/92	EF3	0	12	$2,500,000	$967,356	$0	$0
Johnston County (Unincorporated Area)	09/27/04	EF0	0	0	0	$0	0	$0
Johnston County (Unincorporated Area)	09/14/07	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/14/07	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/14/07	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/14/07	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	08/27/08	EF0	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	11/15/08	EF1	0	0	$30,000	$20,122	$0	$0
Johnston County (Unincorporated Area)	11/15/08	EF0	0	0	$75,000	$50,304	$0	$0
Johnston County (Unincorporated Area)	03/27/09	EF0	0	0	$0	$0	$15,000	$10,186
Johnston County (Unincorporated Area)	05/05/09	EF0	0	0	$28,000	$19,086	$0	$0
Johnston County (Unincorporated Area)	05/05/09	EF1	0	0	$200,000	$136,331	$0	$0
Johnston County (Unincorporated Area)	04/16/11	EF2	0	67	$25,000,000	$18,223,769	$0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Johnston County (Unincorporated Area)	02/26/13	EF0	0	0	$45,000	$34,982	$0	$0
Johnston County (Unincorporated Area)	04/19/19	EF1	0	0	$400,000	$384,088	$0	$0
Johnston County (Unincorporated Area)	07/23/19	EF1	0	0	$0	$0	$0	$0
Town of Clayton	09/14/07	EF0	0	0	$0	$0	$0	$0
Town of Kenly	11/15/08	EF2	1	2	$500,000	$335,361	$200,000	$134,144
Town of Kenly	11/15/08	EF2	0	0	$0	$0	$0	$0
Town of Pine Level	04/16/11	EF1	0	0	$0	$0	$0	$0
Town of Princeton	03/04/77	EF1	0	0	$25,000	$5,631	$0	$0
Town of Smithfield	05/29/73	EF1	0	0	$25,000	$4,946	$0	$0
Town of Smithfield	09/05/19	EF0	0	0	$50,000	$48,643	$0	$0
Subtotal Johnston	*27 Events*		*1*	*81*	*$28,880,500*	*$20,231,584*	*$215,000*	*$144,331*
Lee								
Lee County (Unincorporated Area)	04/06/56	EF2	0	0	$25,000	$2,742	$0	$0
Lee County (Unincorporated Area)	05/14/06	EF1	0	0	0	$0	0	$0
Lee County (Unincorporated Area)	04/16/11	EF3	2	36	$57,000,000	$41,550,193	$0	$0
Subtotal Lee	*3 Events*		*2*	*36*	*$57,025,000*	*$41,552,934*	*$0*	*$0*

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Moore								
Moore County (Unincorporated Area)	05/24/73	EF1	0	0	$250,000	$49,442	$0	$0
Moore County (Unincorporated Area)	03/04/77	EF1	0	0	$25,000	$5,631	$0	$0
Moore County (Unincorporated Area)	08/05/78	EF1	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	02/11/81	EF2	0	0	$2,500,000	$644,822	$0	$0
Moore County (Unincorporated Area)	06/10/82	EF1	0	1	$25,000	$6,750	$0	$0
Moore County (Unincorporated Area)	03/29/91	EF1	0	2	$250,000	$91,398	$0	$0
Moore County (Unincorporated Area)	09/08/04	EF0	0	0	0	$0	0	$0
Moore County (Unincorporated Area)	09/08/04	EF0	0	0	0	$0	0	$0
Moore County (Unincorporated Area)	09/17/04	EF0	0	0	0	$0	0	$0
Moore County (Unincorporated Area)	09/27/04	EF0	0	0	0	$0	0	$0
Moore County (Unincorporated Area)	04/16/11	EF0	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	04/19/19	EF1	0	0	$200,000	$192,044	$0	$0
Town of Aberdeen	07/02/03	EF0	0	0	0	$0	0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Southern Pines	02/11/81	EF2	0	0	$250,000	$64,482	$0	$0
Town of Southern Pines	06/16/82	EF1	0	0	$2,500	$675	$0	$0
Village of Pinehurst	09/06/11	EF0	0	0	$10,000	$7,388	$0	$0
Subtotal Moore	*16 Events*		*0*	*3*	*$3,512,500*	*$1,062,632*	*$0*	*$0*
TOTAL PLAN	**82 Events**		**4**	**163**	**$107,128,250**	**$75,045,559**	**$215,000**	**$144,331**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

According to the information provided in the preceding table, 82 recorded instances of Tornado have affected the planning area since 1950, causing an estimated $107,128,250 in property damage, $215,000 in crop damages, 4 death(s), and 163 injury(ies). The highest magnitude tornado on record is an EF3. The lowest magnitude tornado on record is an EF0

Table 5-18 provides a summary of this historical information by participating jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

Table 5-18: Summary of Historical Tornado Occurrences by Participating Jurisdiction

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham							
Chatham County (Unincorporated Area)	9	0	0	$195,250	$29,700	$0	$0
Town of Pittsboro	1	0	0	$0	$0	$0	$0
Town of Siler City	2	0	0	$350,000	$127,957	$0	$0
Subtotal Chatham	*12*	*0*	*0*	*$545,250*	*$157,657*	*$0*	*$0*
Harnett							
Harnett County (Unincorporated Area)	17	1	28	$16,612,500	$2,081,310	$0	$0
Town of Angier	2	0	9	$500,000	$78,908	$0	$0
Town of Coats	2	0	0	$25,000	$8,591	$0	$0
Town of Erwin	2	0	6	$27,500	$5,820	$0	$0
Town of Lillington	1	0	0	$0	$0	$0	$0
Subtotal Harnett	*24*	*1*	*43*	*$17,165,000*	*$2,174,629*	*$0*	*$0*
Johnston							
Johnston County (Unincorporated Area)	20	0	79	$28,280,500	$2,530,883	$15,000	$1,342
Town of Clayton	1	0	0	$0	$0	$0	$0
Town of Kenly	2	1	2	$500,000	$335,361	$200,000	$134,144
Town of Pine Level	1	0	0	$0	$0	$0	$0
Town of Princeton	1	0	0	$25,000	$5,631	$0	$0
Town of Smithfield	2	0	0	$75,000	$14,838	$0	$0
Subtotal Johnston	*27*	*1*	*81*	*$28,880,500*	*$2,886,713*	*$215,000*	*$135,487*

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Lee							
Lee County (Unincorporated Area)	3	2	36	$57,025,000	$6,253,855	$0	$0
Subtotal Lee	*3*	*2*	*36*	*$57,025,000*	*$6,253,855*	*$0*	*$0*
Moore							
Moore County (Unincorporated Area)	12	0	3	$3,250,000	$642,752	$0	$0
Town of Aberdeen	1	0	0	$0	$0	$0	$0
Town of Southern Pines	2	0	0	$252,500	$65,127	$0	$0
Village of Pinehurst	1	0	0	$10,000	$7,388	$0	$0
Subtotal Moore	*16*	*0*	*3*	*$3,512,500*	*$715,267*	*$0*	*$0*
TOTAL PLAN	**82**	**4**	**163**	**$107,128,250**	**$12,188,121**	**$215,000**	**$135,487**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

5.7.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Tornado is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Less Than 1% Annual Probability of EF2 Event
- Between 1% And 10% Annual Probability of EF2 Event
- More Than 10% Annual Probability of EF2 Event

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
City of Dunn	Low
City of Sanford	Low
Harnett County (Unincorporated Area)	Low
Johnston County (Unincorporated Area)	Low
Lee County (Unincorporated Area)	Low
Moore County (Unincorporated Area)	Low
Town of Aberdeen	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Angier	Low
Town of Archer Lodge	Low
Town of Benson	Low
Town of Broadway	Low
Town of Cameron	Low
Town of Carthage	Low
Town of Clayton	Low
Town of Coats	Low
Town of Erwin	Low
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Low
Town of Lillington	Low
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Low
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Low
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Low
Town of Taylortown	Low
Town of Vass	Low
Town of Wilson's Mills	Low
Village of Foxfire	Low
Village of Pinehurst	Low
Village of Whispering Pines	Low

According to historical information, tornado events are not an annual occurrence for the region. However, given the Region's location in the southeastern United States and history of tornadoes, an occurrence is possible every few years. While the majority of the reported tornado events are small in terms of size, intensity, and duration, they do pose a significant threat should the Cape Fear Region

experience a direct tornado strike. The probability of future tornado occurrences affecting the Cape Fear Region is likely (10 to 100 percent annual probability).

5.7.6 Impact

People

The rate of onset of tornado events is rapid, giving those in danger minimal time to seek shelter. The current average lead time according to NOAA is 13 minutes. Injury may result from the direct impact of a tornado, or it may occur afterward when people walk among debris and enter damaged buildings. A study of injuries after a tornado in Marion, Illinois, showed that 50 percent of the tornado-related injuries were suffered during rescue attempts, cleanup, and other post-tornado activities. Common causes of injury included falling objects and heavy, rolling objects. Because tornadoes often damage power lines, gas lines, or electrical systems, there is a risk of fire, electrocution, or an explosion.

First Responders

Due to the rapid onset of tornado events, first responders could be critically affected by tornado events through direct impact of the tornado itself or injury received during response efforts. Response may be hindered as responders may be unable to access those that have been affected if storm conditions persist or if they are unable to safely enter affected areas. As mentioned above, a large percentage of tornado-related injuries are suffered during rescue attempts, cleanup, and other post-tornado activities due to walking among debris and entering damaged buildings.

Continuity of Operations

Continuity of operations could be greatly impacted by a tornado. Personnel or families of personnel may be harmed which would limit their response capability. Critical facilities and resources could also be damaged or destroyed during a tornado.

Built Environment

The weakest tornadoes, EF0, can cause minor roof damage and strong tornadoes can destroy frame buildings and even badly damage steel reinforced concrete structures. Most building codes in the United States do not include provisions that provide protection against tornadic winds. Given the strength of the wind impact and construction techniques, buildings are vulnerable to direct impact, including potential destruction, from tornadoes and also from wind borne debris that tornadoes turn into missiles. All jurisdictions in the Region are vulnerable to building damages. Mobile homes particularly susceptible to damage and fatalities during tornadoes, the counties of Moore and Lee have more manufactured housing than other counties in the Region.

Economy

The largest impact of tornadoes is the economic damage caused by widespread destruction along their paths. More directly, there are many people killed by these storms, and to a lesser extent pets and farm animals. The major damage is the complete destruction of homes, buildings, and farms, the wrecking of cars and trucks, and the loss of power distribution systems. Winds as high as 300 mph blow down walls, tear up trees, and throw debris in every direction at high speeds. Indirect losses include workers who cannot report to jobs and commercial entities that most close to repair damages.

Natural Environment

There is no defense for plants and animals from a direct impact from a tornado. Plants and animals in the path of the tornado will receive significant damage or be killed. Strong tornados can shred trees and lift grass from the ground.

5.8 Winter Storm

5.8.1 Background

A winter storm can range from a moderate snow over a period of a few hours to blizzard conditions with blinding wind-driven snow that lasts for several days. Events may include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Some winter storms might be large enough to affect several states, while others might affect only localized areas. Occasionally, heavy snow might also cause significant property damages, such as roof collapses on older buildings.

All winter storm events have the potential to present dangerous conditions to the affected area. Larger snowfalls pose a greater risk, reducing visibility due to blowing snow and making driving conditions treacherous. A heavy snow event is defined by the National Weather Service as an accumulation of 4 of more inches in 12 hours or less. A blizzard is the most severe form of winter storm. It combines low temperatures, heavy snow, and winds of 35 miles per hour or more, which reduces visibility to a quarter mile or less for at least 3 hours. Winter storms are often accompanied by sleet, freezing rain, or an ice storm. Such freeze events are particularly hazardous as they create treacherous surfaces.

Ice storms are defined as storms with significant amounts of freezing rain and are a result of cold air damming (CAD). CAD is a shallow, surface-based layer of relatively cold, stably stratified air entrenched against the eastern slopes of the Appalachian Mountains. With warmer air above, falling precipitation in the form of snow melts, then becomes either super-cooled (liquid below the melting point of water) or re-freezes. In the former case, super-cooled droplets can freeze on impact (freezing rain), while in the latter case, the re-frozen water particles are ice pellets (or sleet). Sleet is defined as partially frozen raindrops or refrozen snowflakes that form into small ice pellets before reaching the ground. They typically bounce when they hit the ground and do not stick to the surface. However, it does accumulate like snow, posing similar problems and has the potential to accumulate into a layer of ice on surfaces. Freezing rain, conversely, usually sticks to the ground, creating a sheet of ice on the roadways and other surfaces. All of the winter storm elements – snow, low temperatures, sleet, ice, etcetera – have the potential to cause significant hazard to a community. Even small accumulations can down power lines and trees limbs and create hazardous driving conditions. Furthermore, communication and power may be disrupted for days.

5.8.2 Location and Spatial Extent

Nearly the entire continental United States is susceptible to winter storm and freeze events. Some ice and winter storms may be large enough to affect several states, while others might affect limited, localized areas. The degree of exposure typically depends on the normal expected severity of local winter weather. The Cape Fear Region is accustomed to severe winter weather conditions and often receives winter weather during the winter months. Given the atmospheric nature of the hazard, the entire region has uniform exposure to a winter storm.

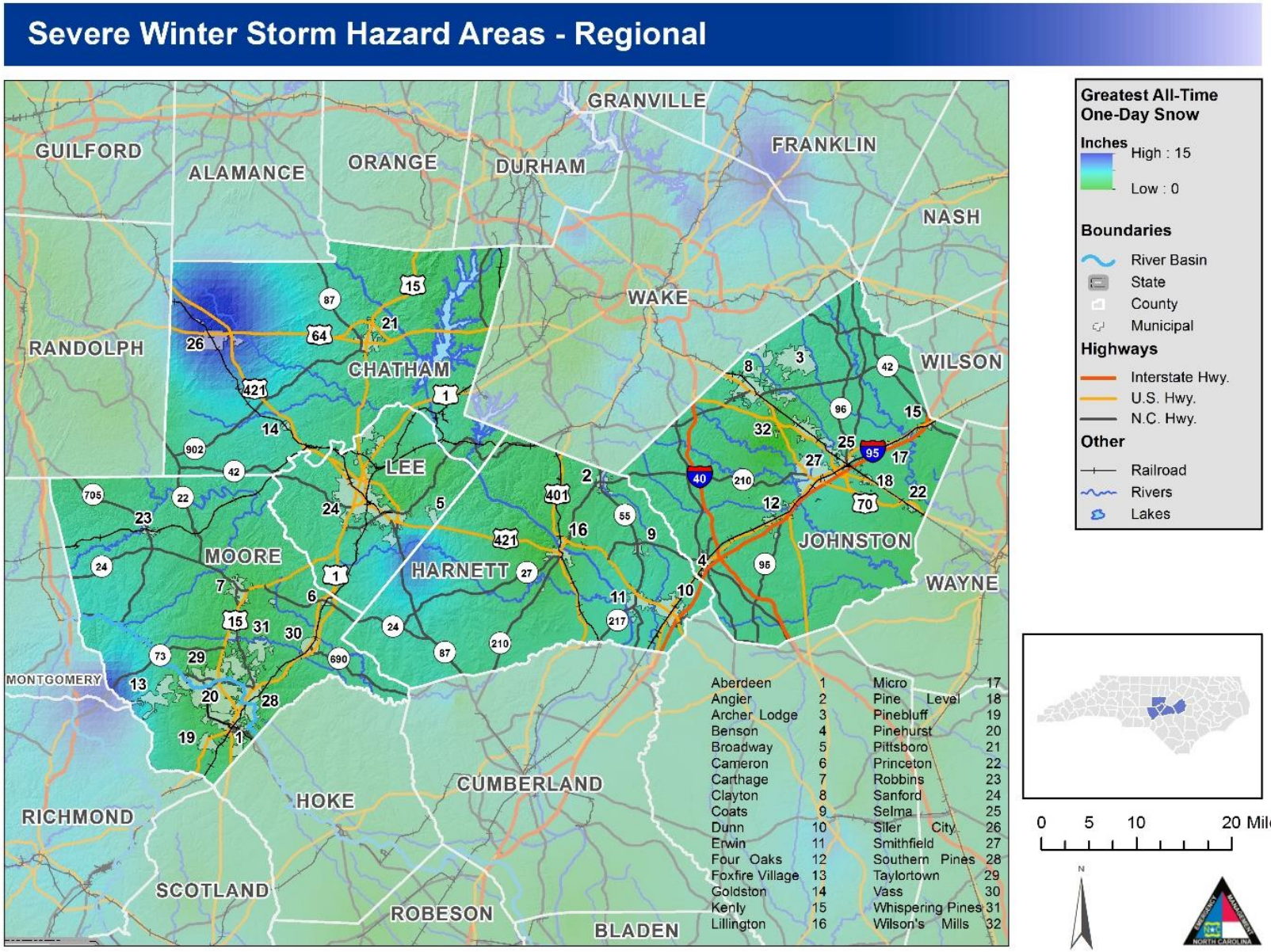


Figure 5-42: Severe Winter Storm Hazard Areas - Regional

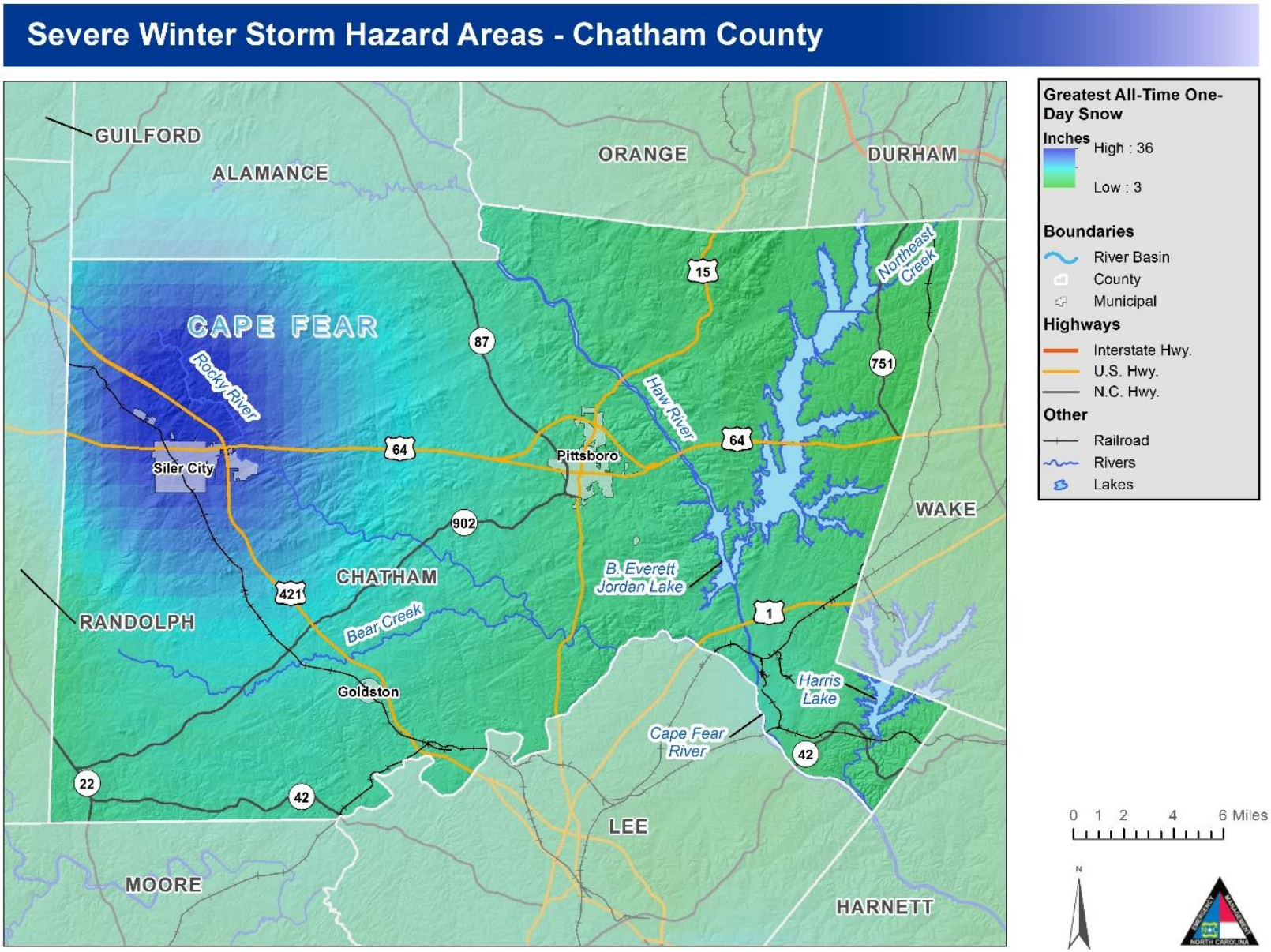


Figure 5-43: Severe Winter Storm Hazard Areas – Chatham County

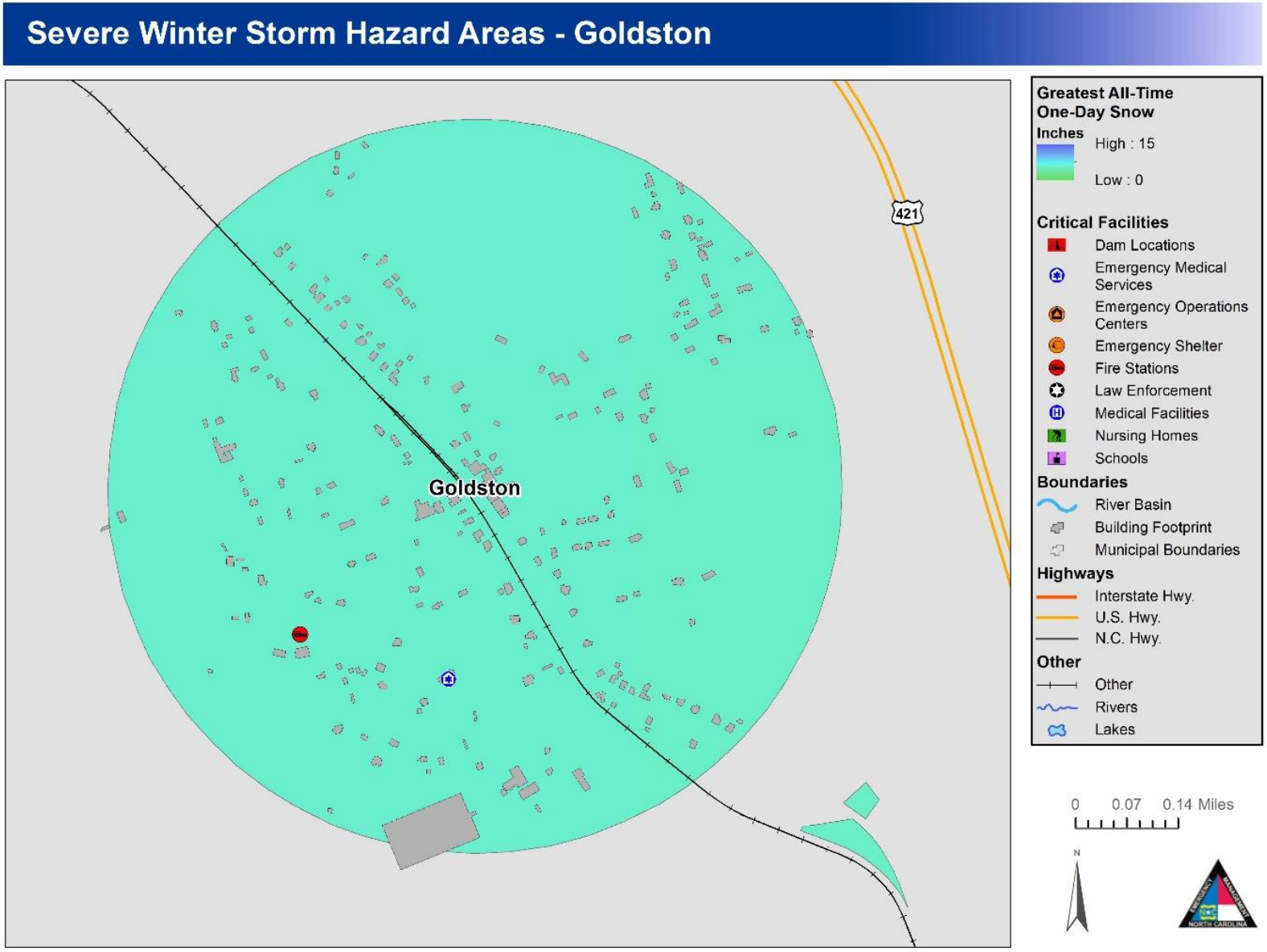


Figure 5-44: Severe Winter Storm Hazard Areas - Goldston

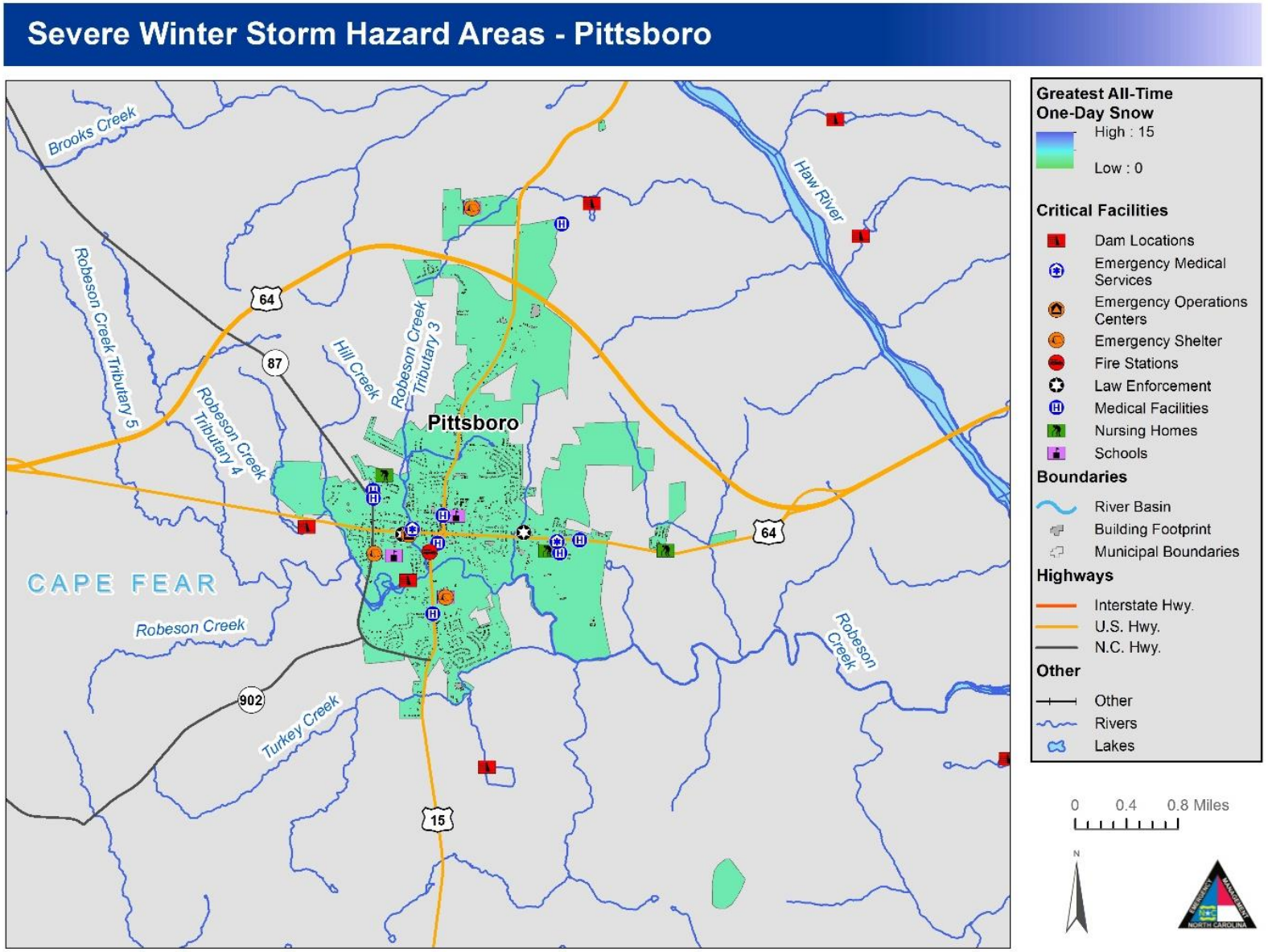


Figure 5-45: Severe Winter Storm Hazard Areas - Pittsboro

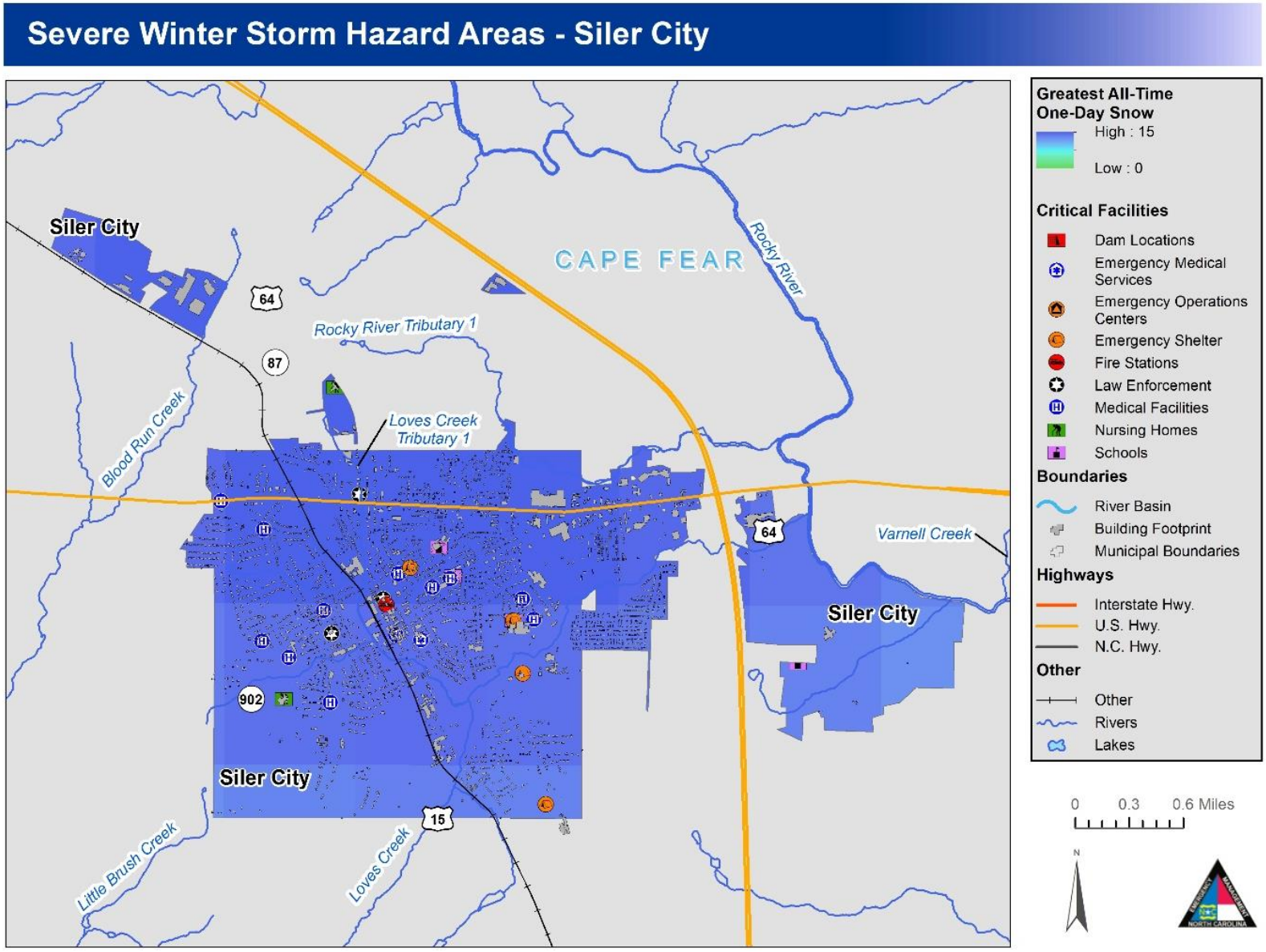


Figure 5-46: Severe Winter Storm Hazard Areas – Siler City

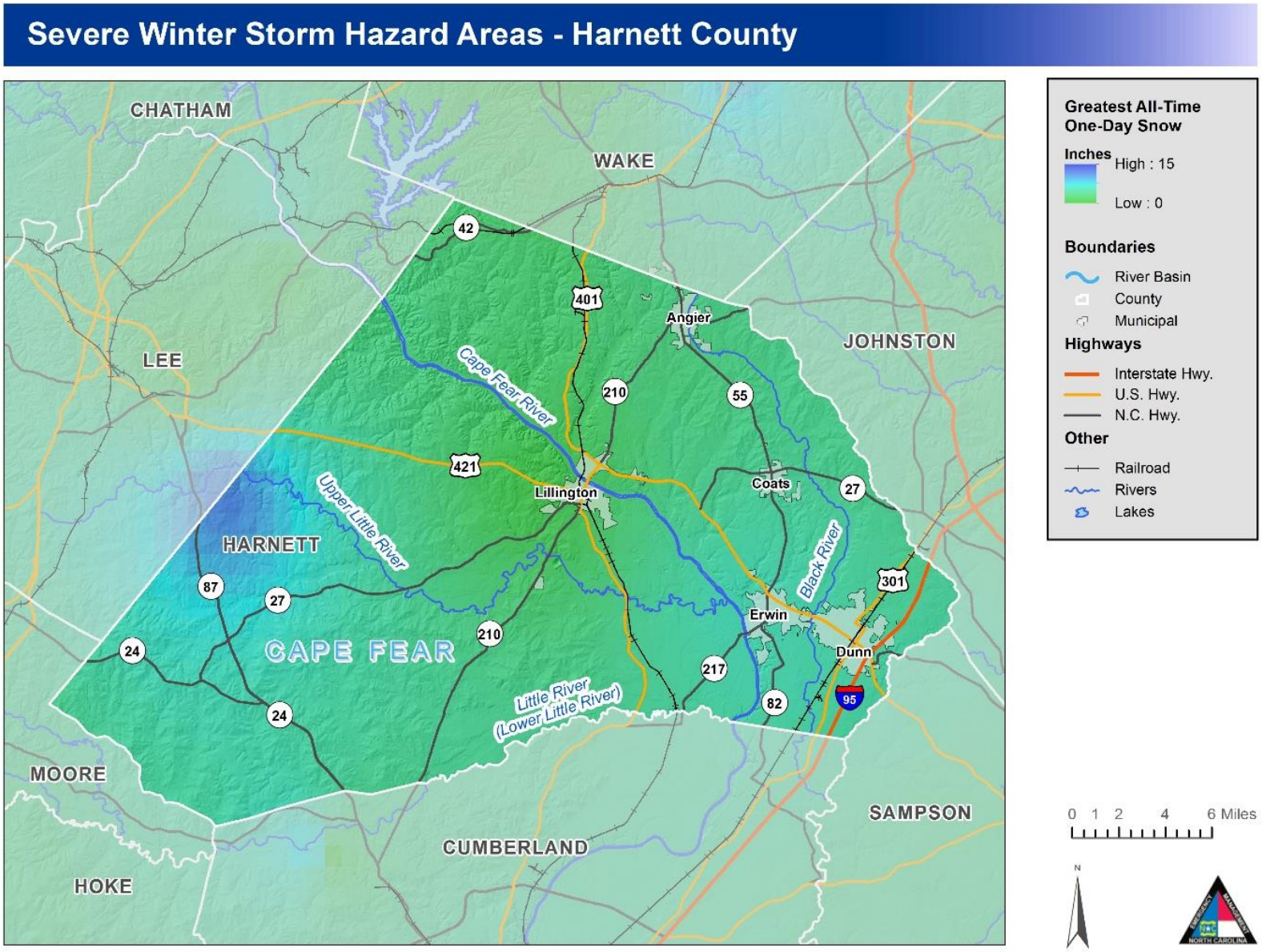


Figure 5-47: Severe Winter Storm Hazard Areas – Harnett County

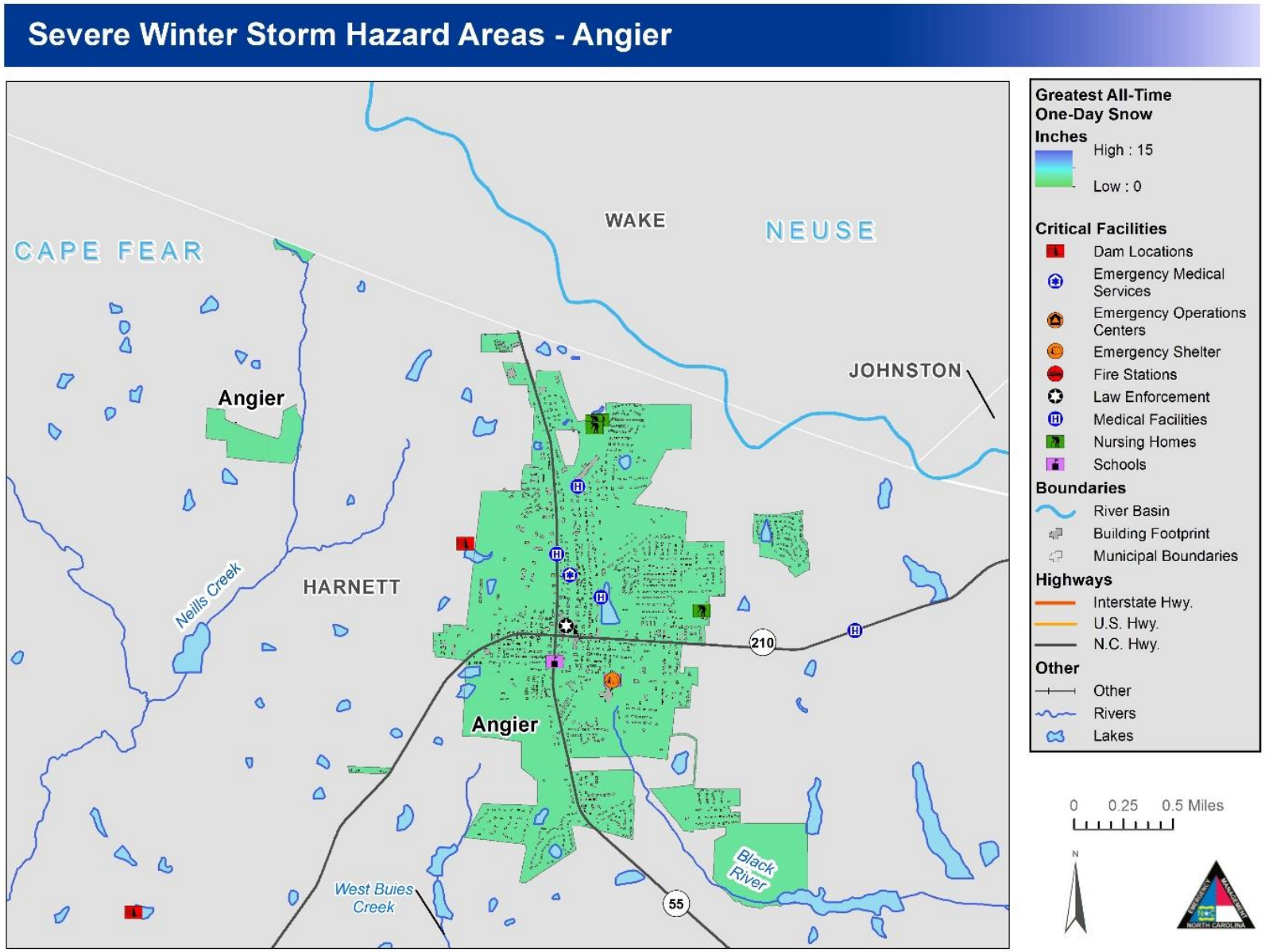


Figure 5-48: Severe Winter Storm Hazard Areas - Angier

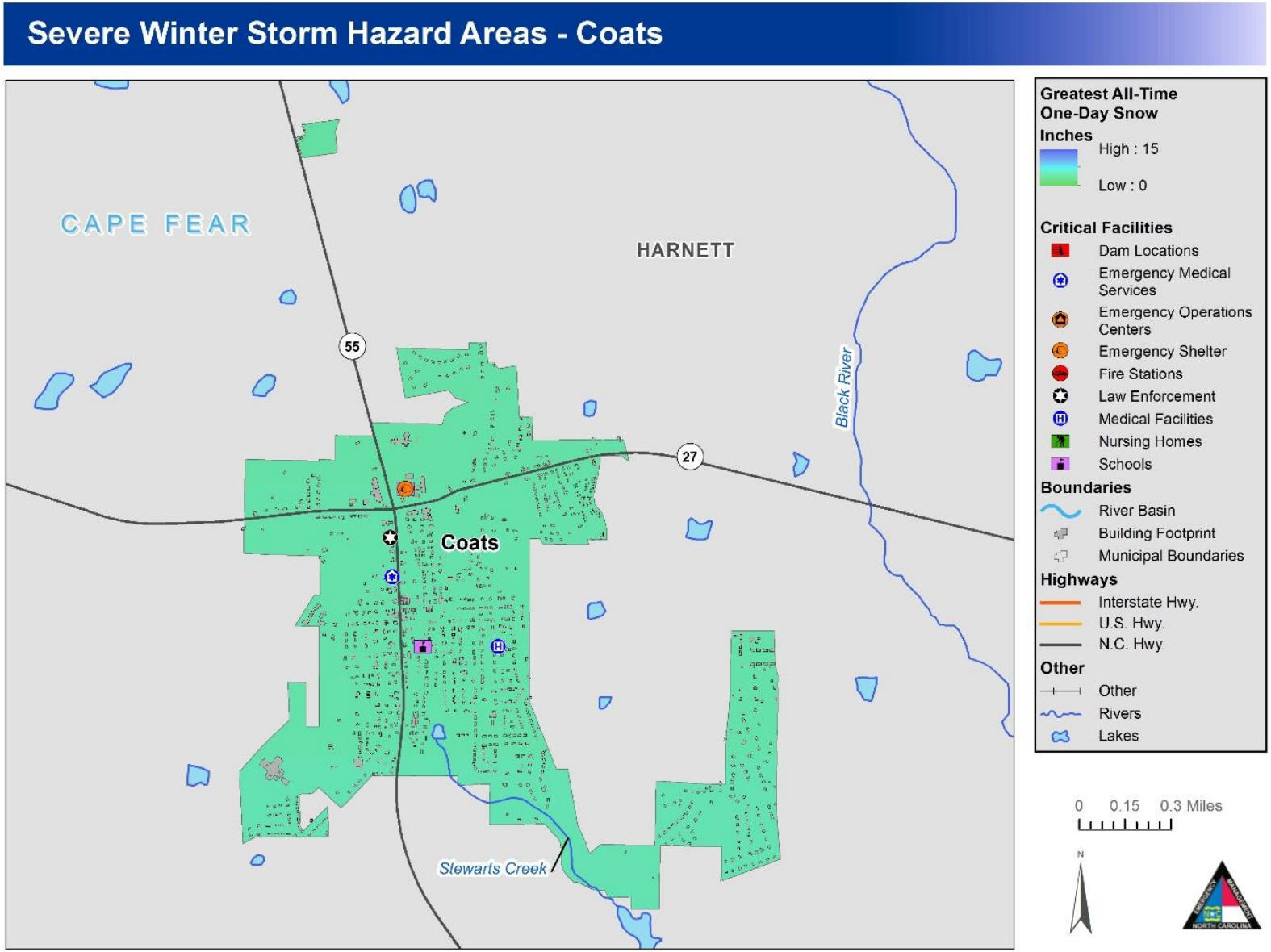


Figure 5-49: Severe Winter Storm Hazard Areas - Coats

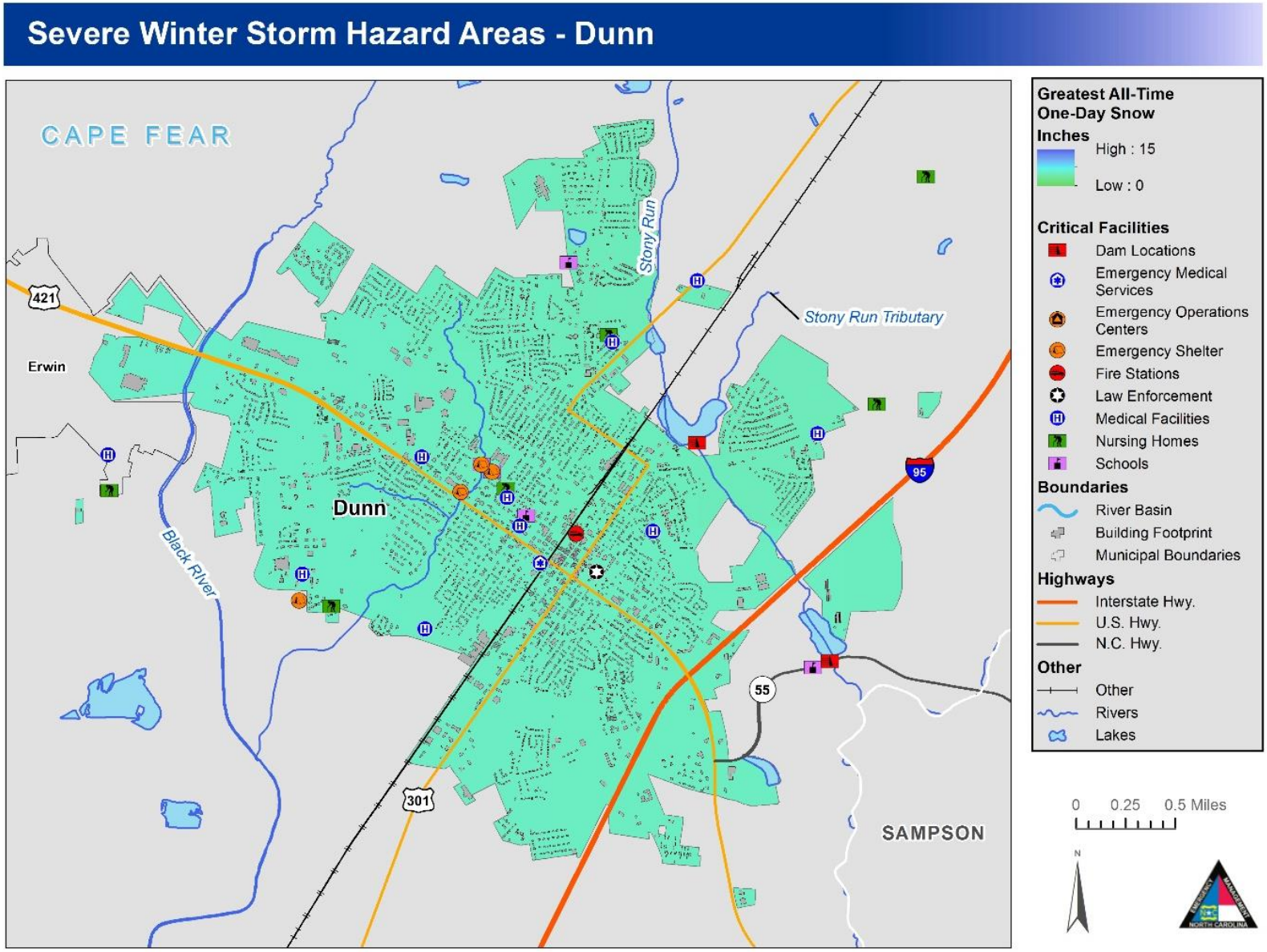


Figure 5-50: Severe Winter Storm Hazard Areas - Dunn

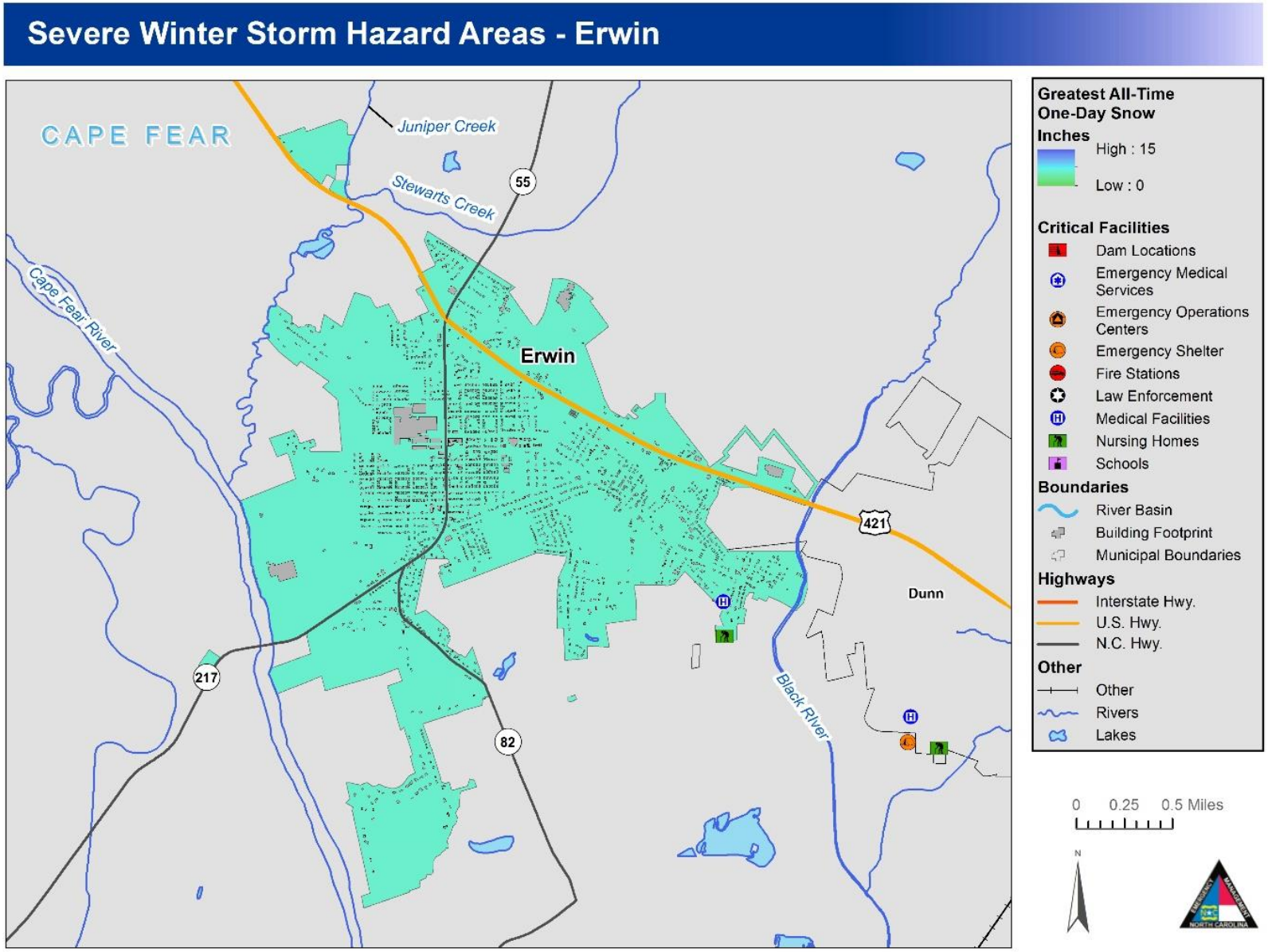


Figure 5-51: Severe Winter Storm Hazard Areas - Erwin

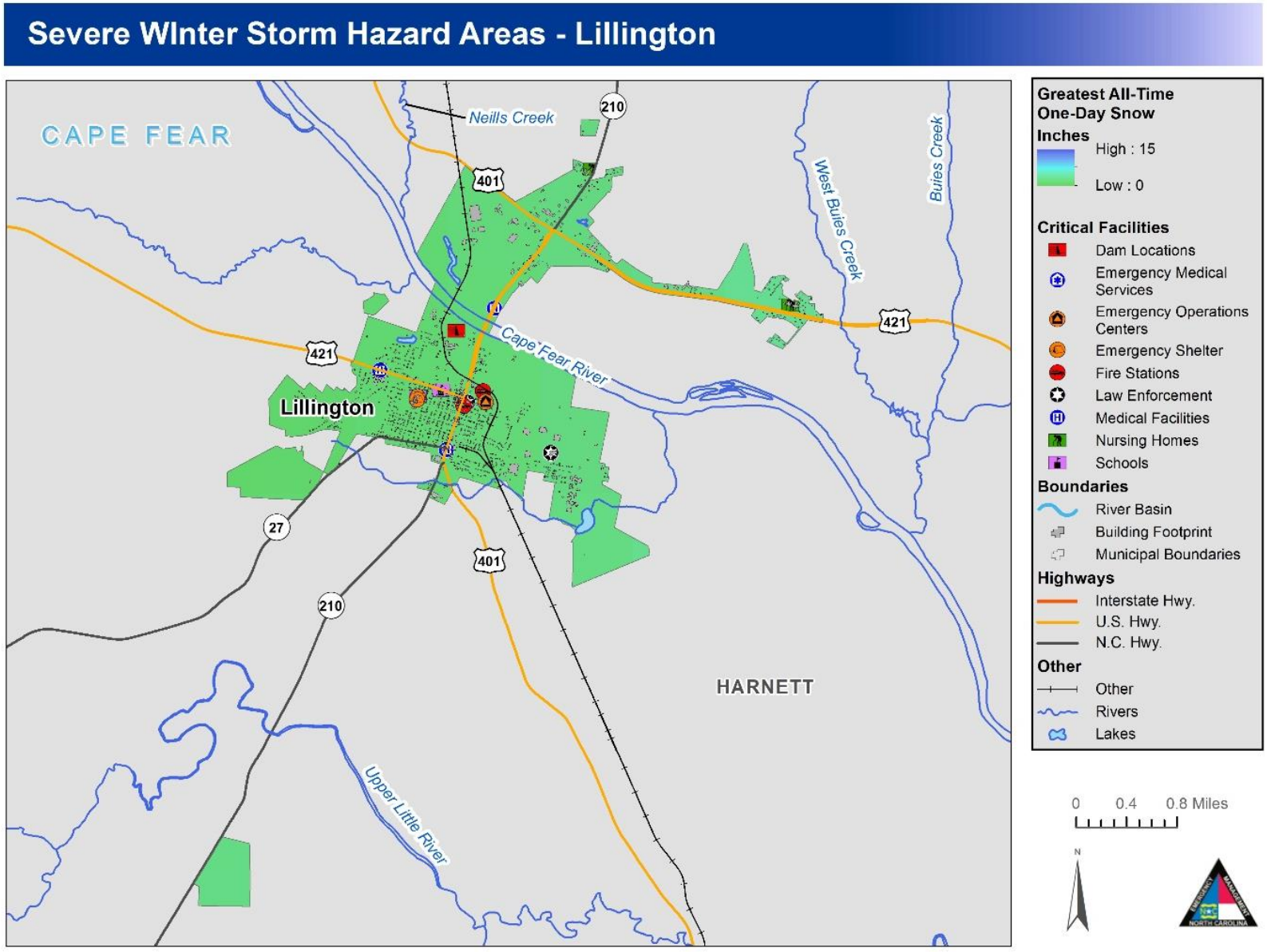


Figure 5-52: Severe Winter Storm Hazard Areas - Lillington

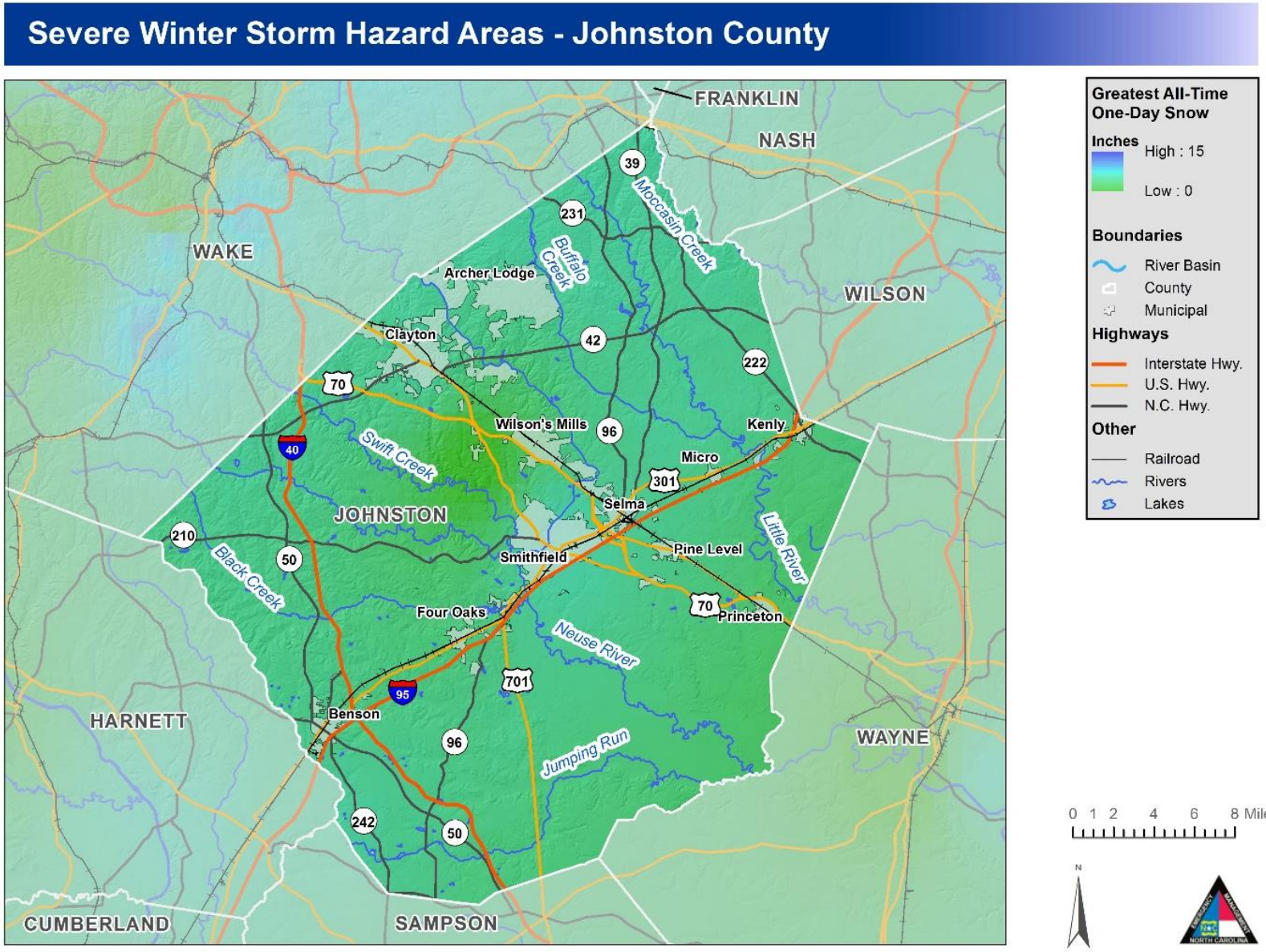


Figure 5-53: Severe Winter Storm Hazard Areas – Johnston County

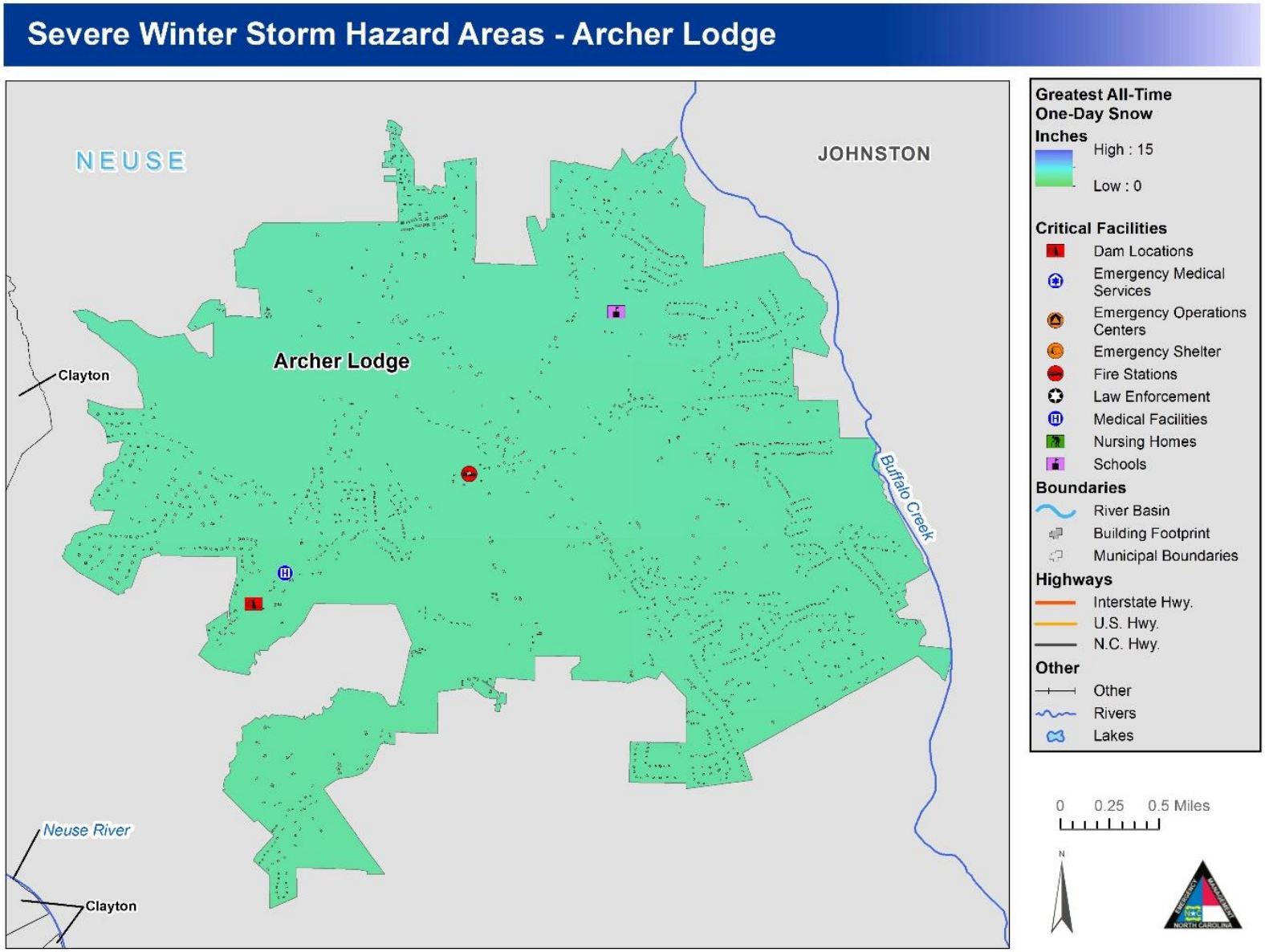


Figure 5-54: Severe Winter Storm Hazard Areas – Archer Lodge

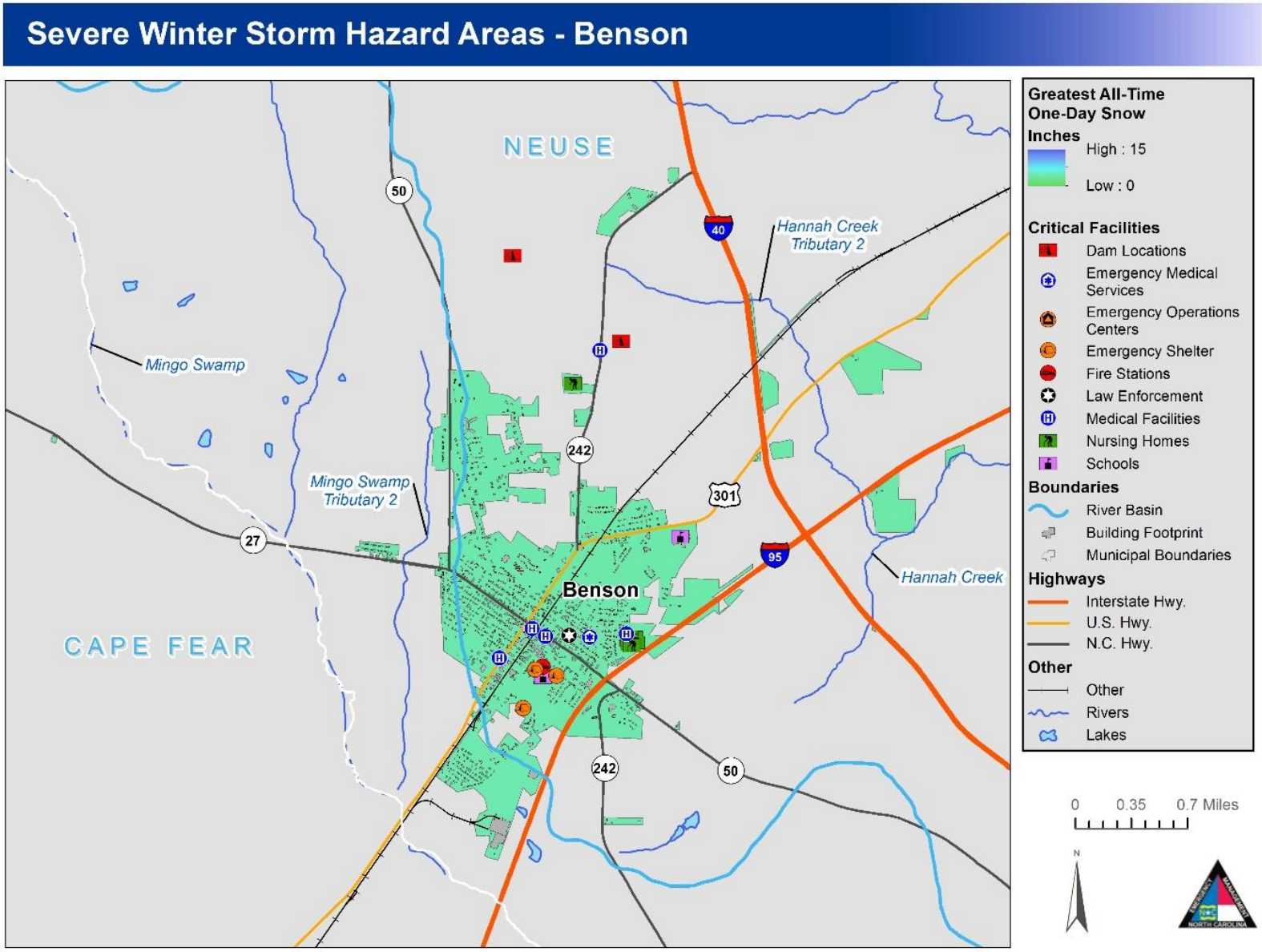


Figure 5-55: Severe Winter Storm Hazard Areas - Benson

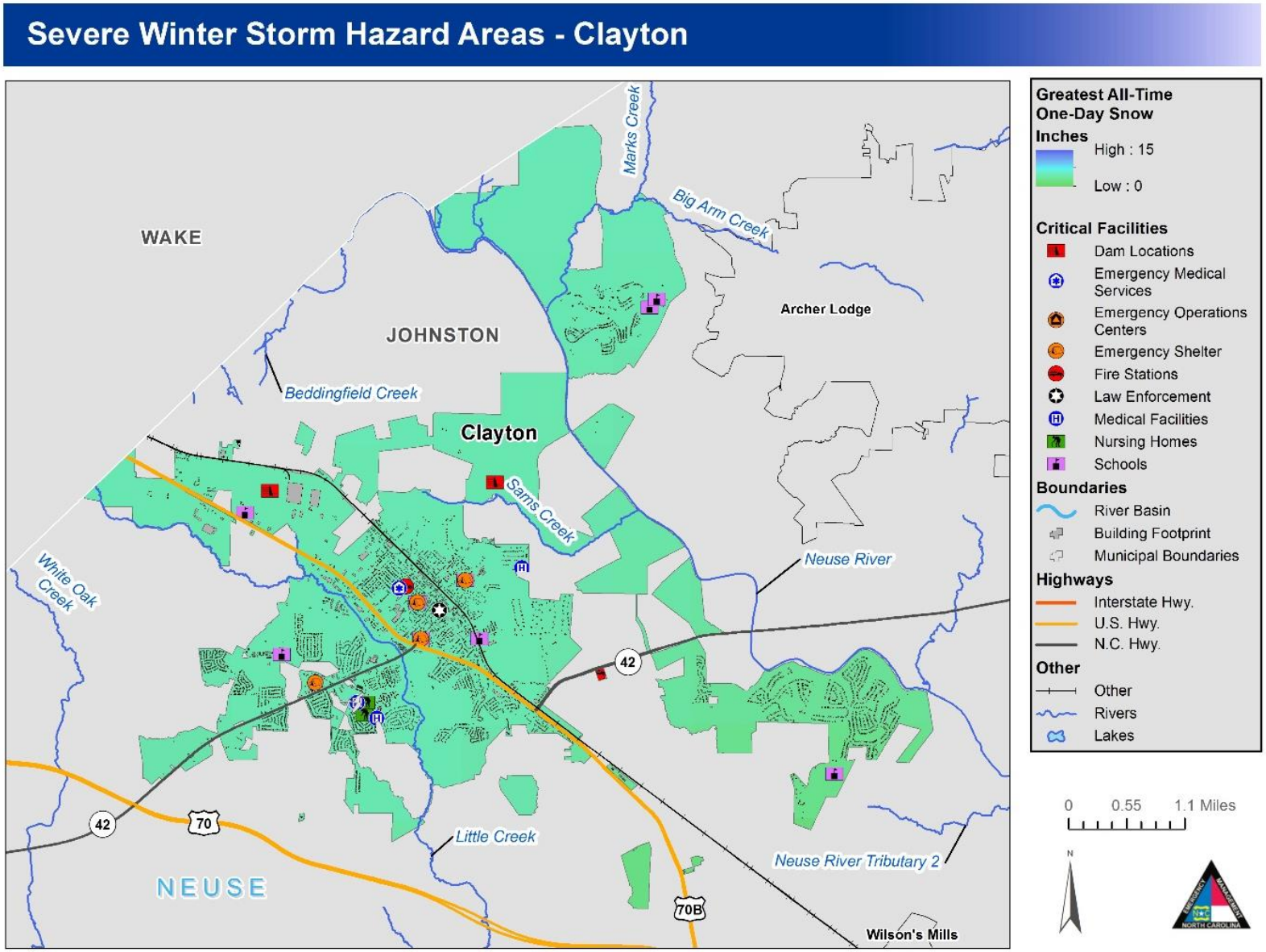


Figure 5-56: Severe Winter Storm Hazard Areas - Clayton

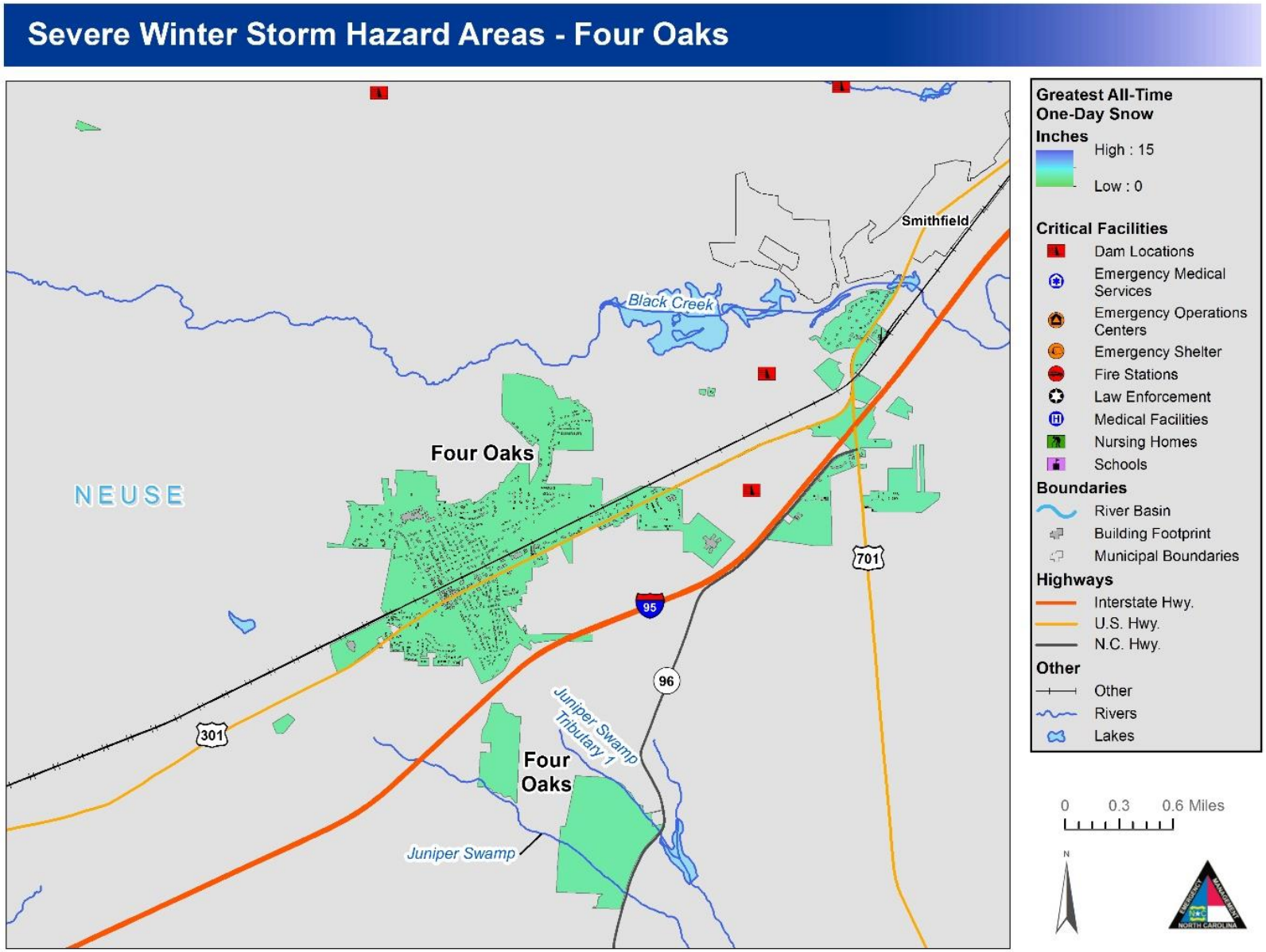


Figure 5-57: Severe Winter Storm Hazard Areas – Four Oaks

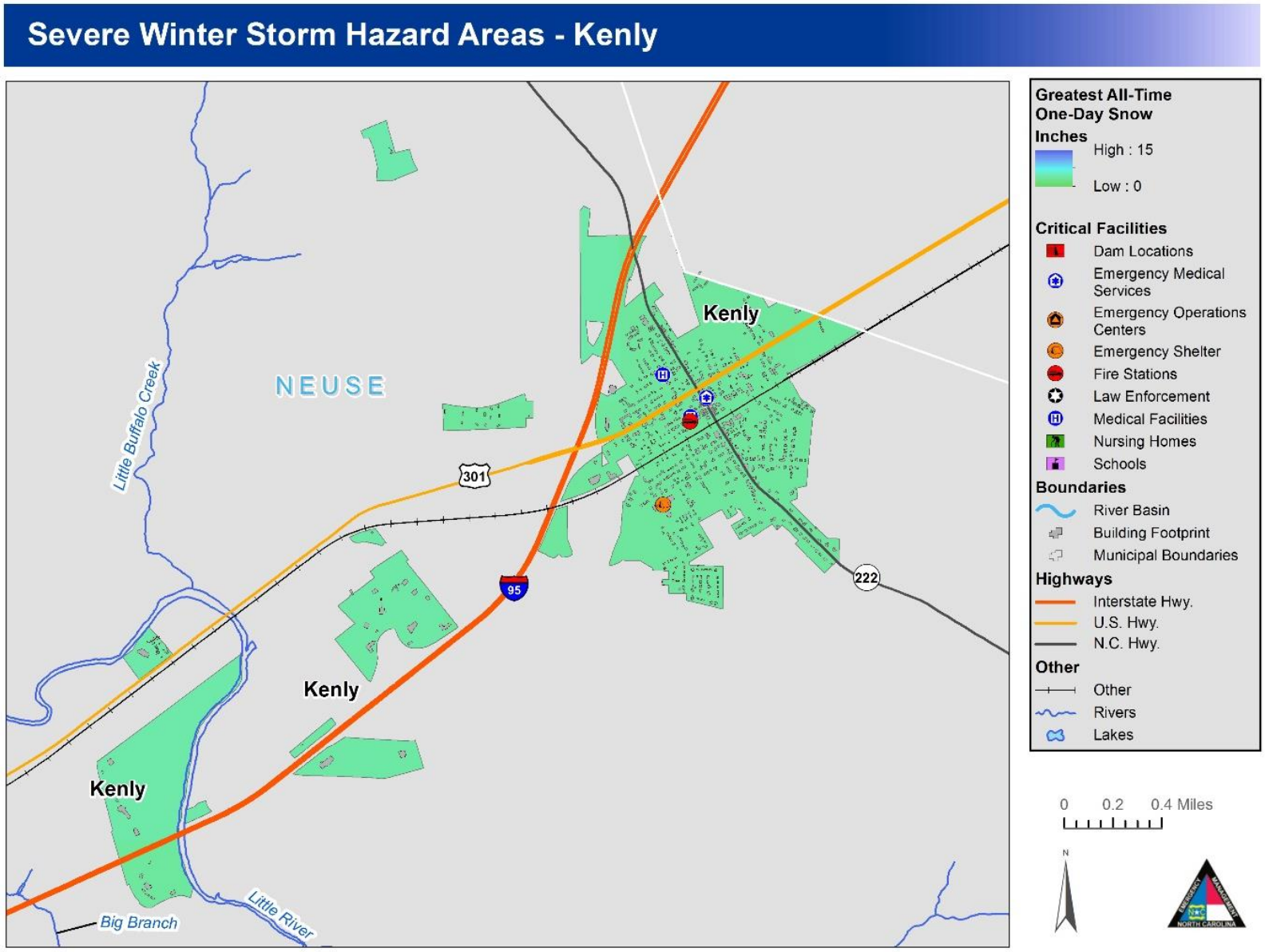


Figure 5-58: Severe Winter Storm Hazard Areas - Kenly

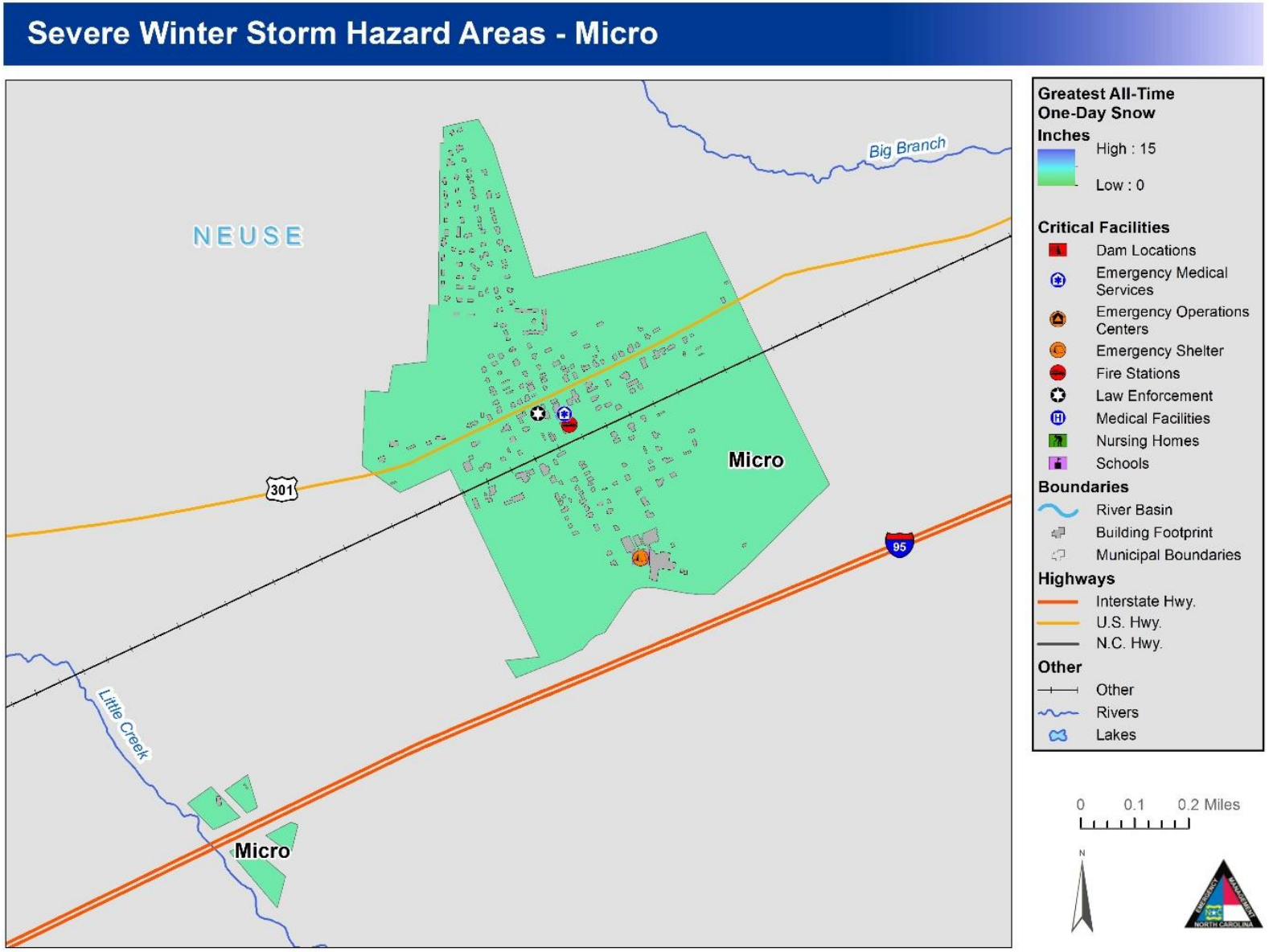


Figure 5-59: Severe Winter Storm Hazard Areas - Micro

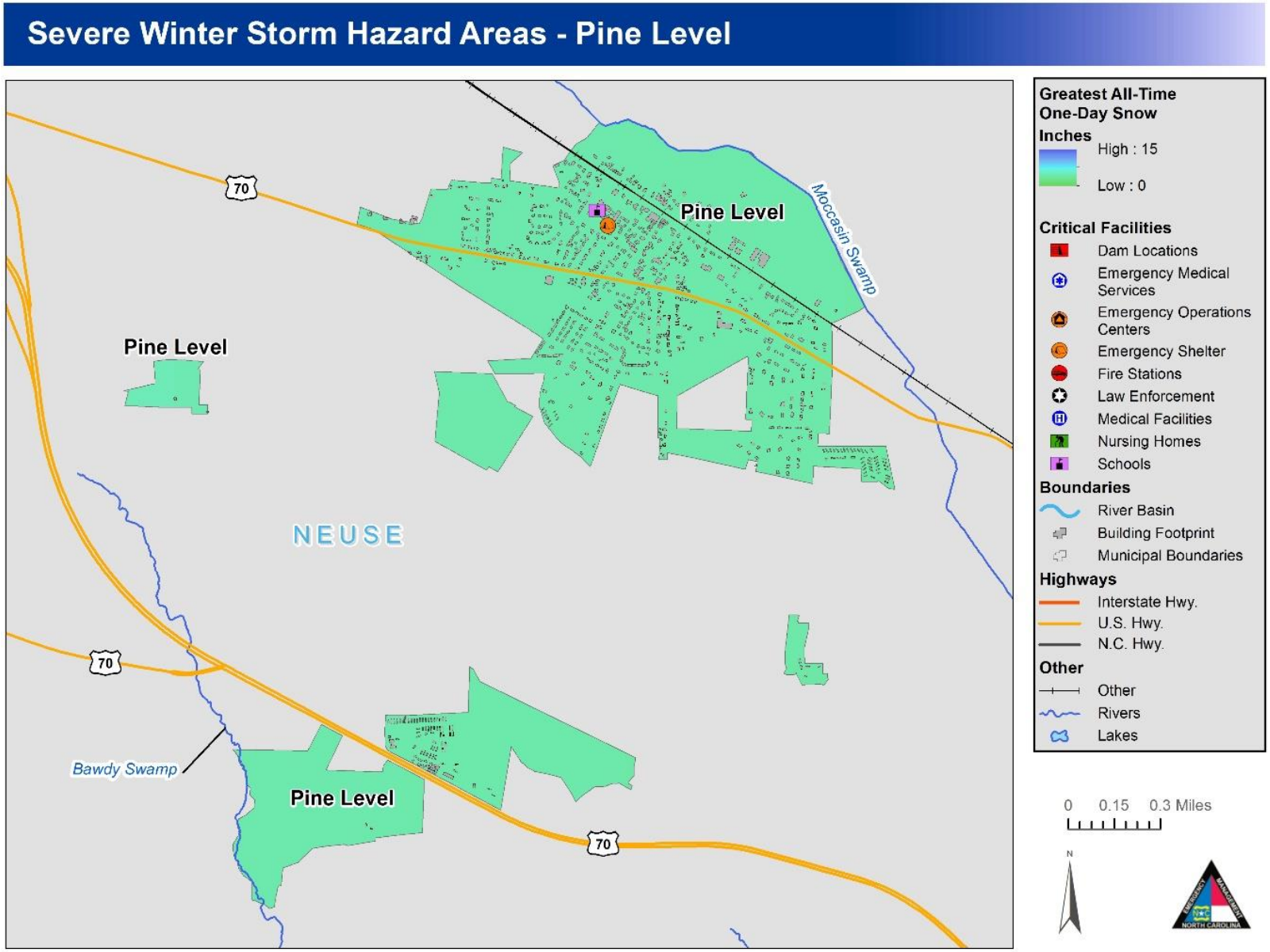


Figure 5-60: Severe Winter Storm Hazard Areas – Pine Level

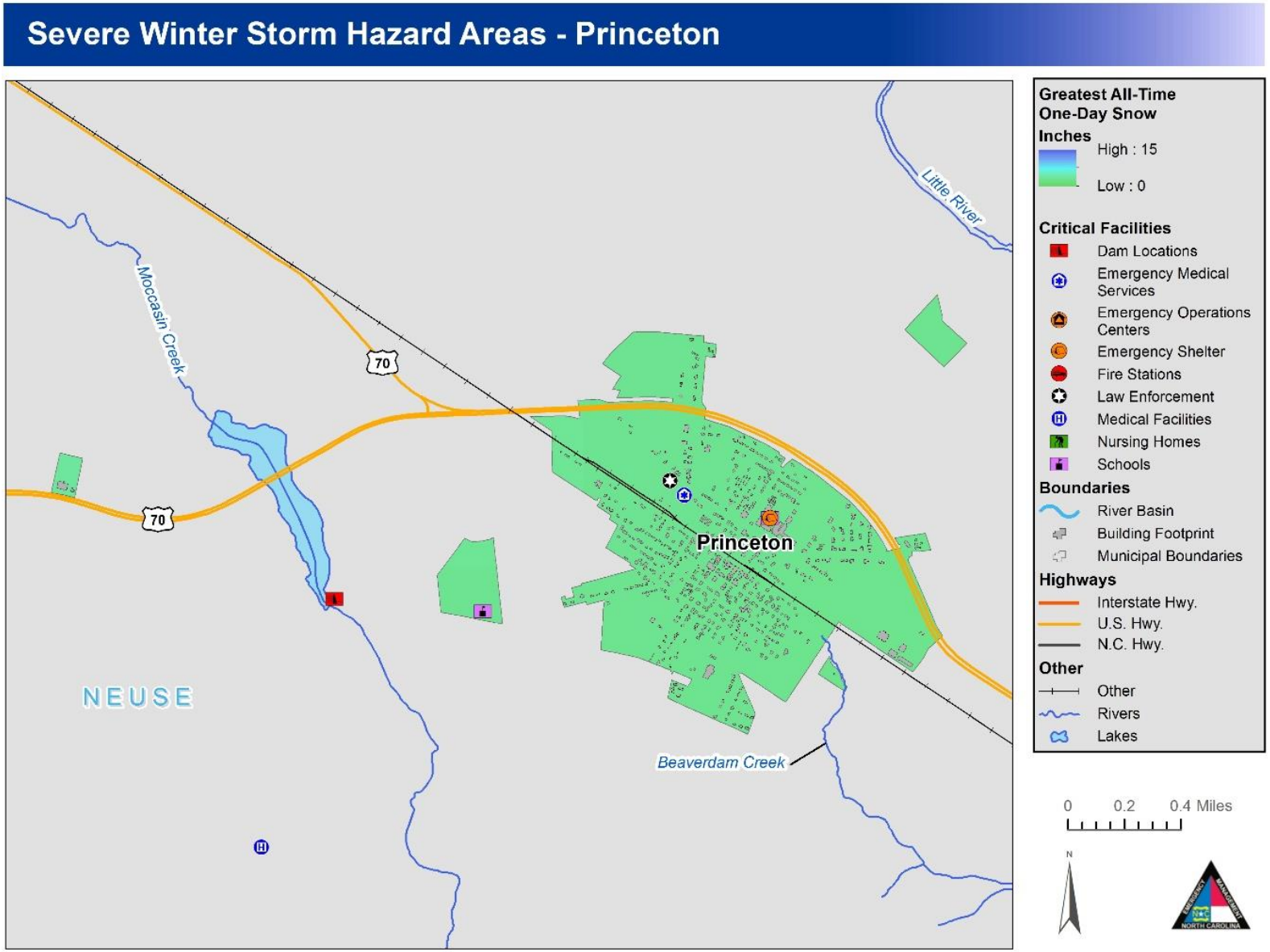


Figure 5-61: Severe Winter Storm Hazard Areas - Princeton

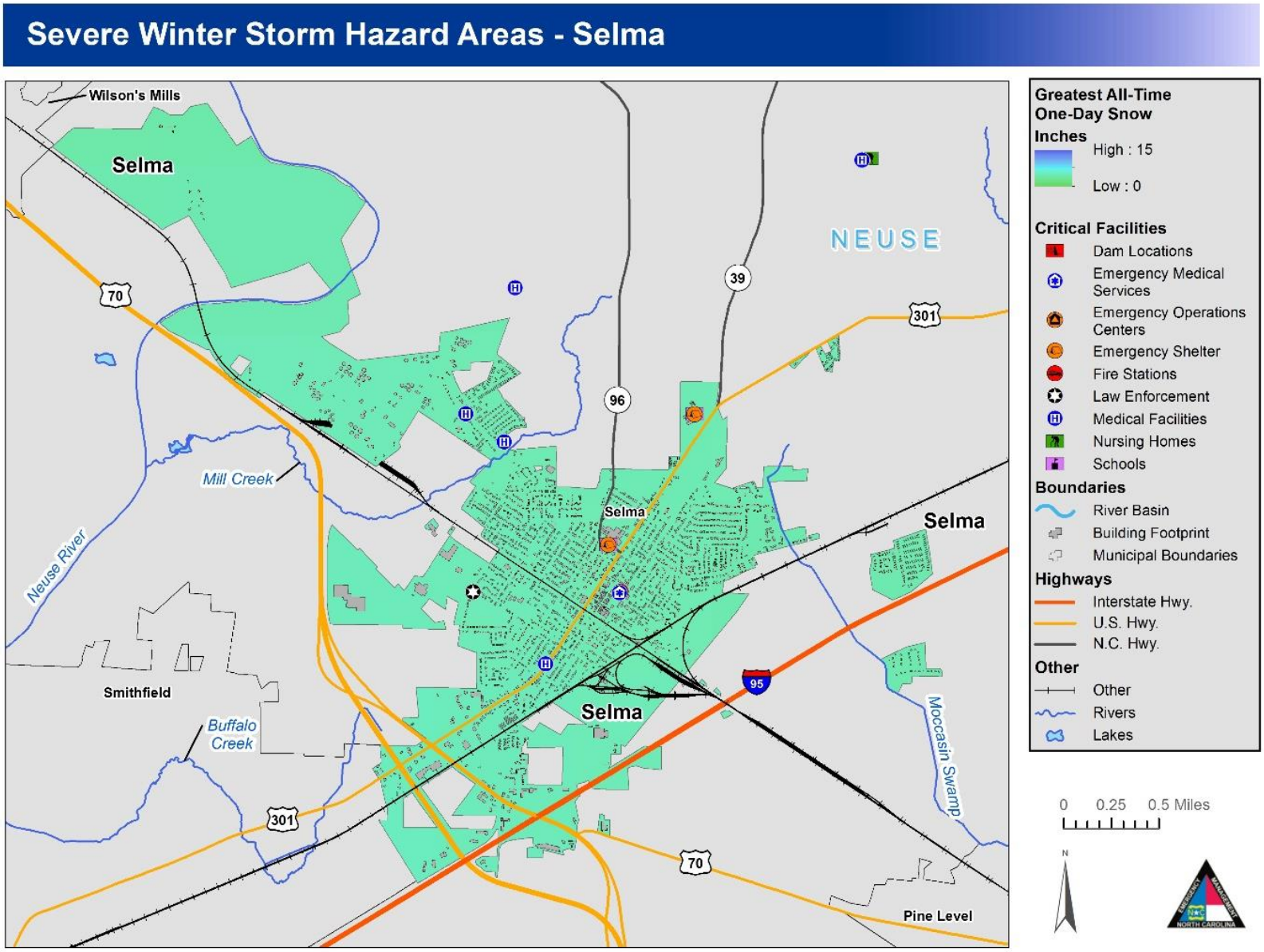


Figure 5-62: Severe Winter Storm Hazard Areas - Selma

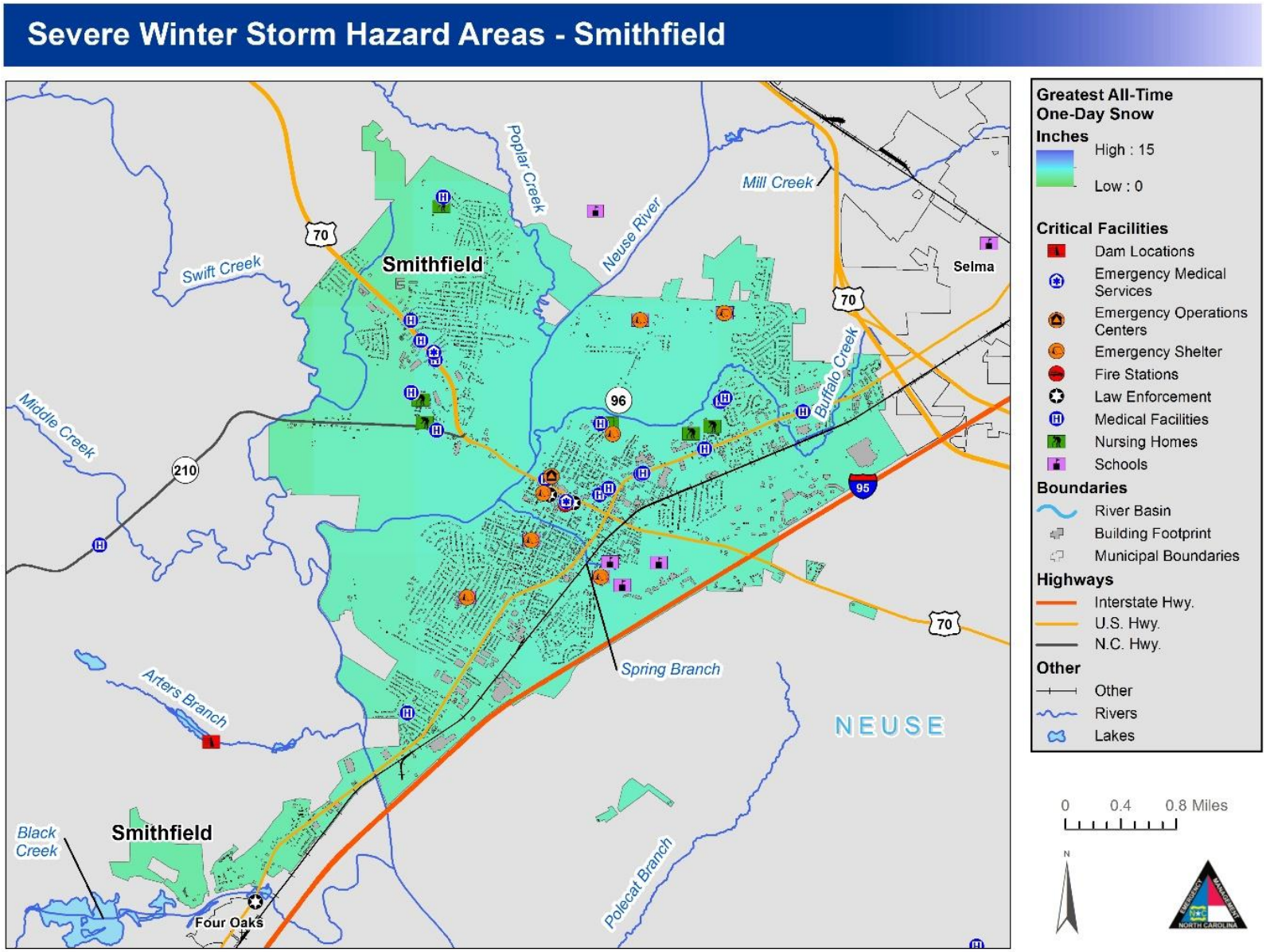


Figure 5-63: Severe Winter Storm Hazard Areas - Smithfield

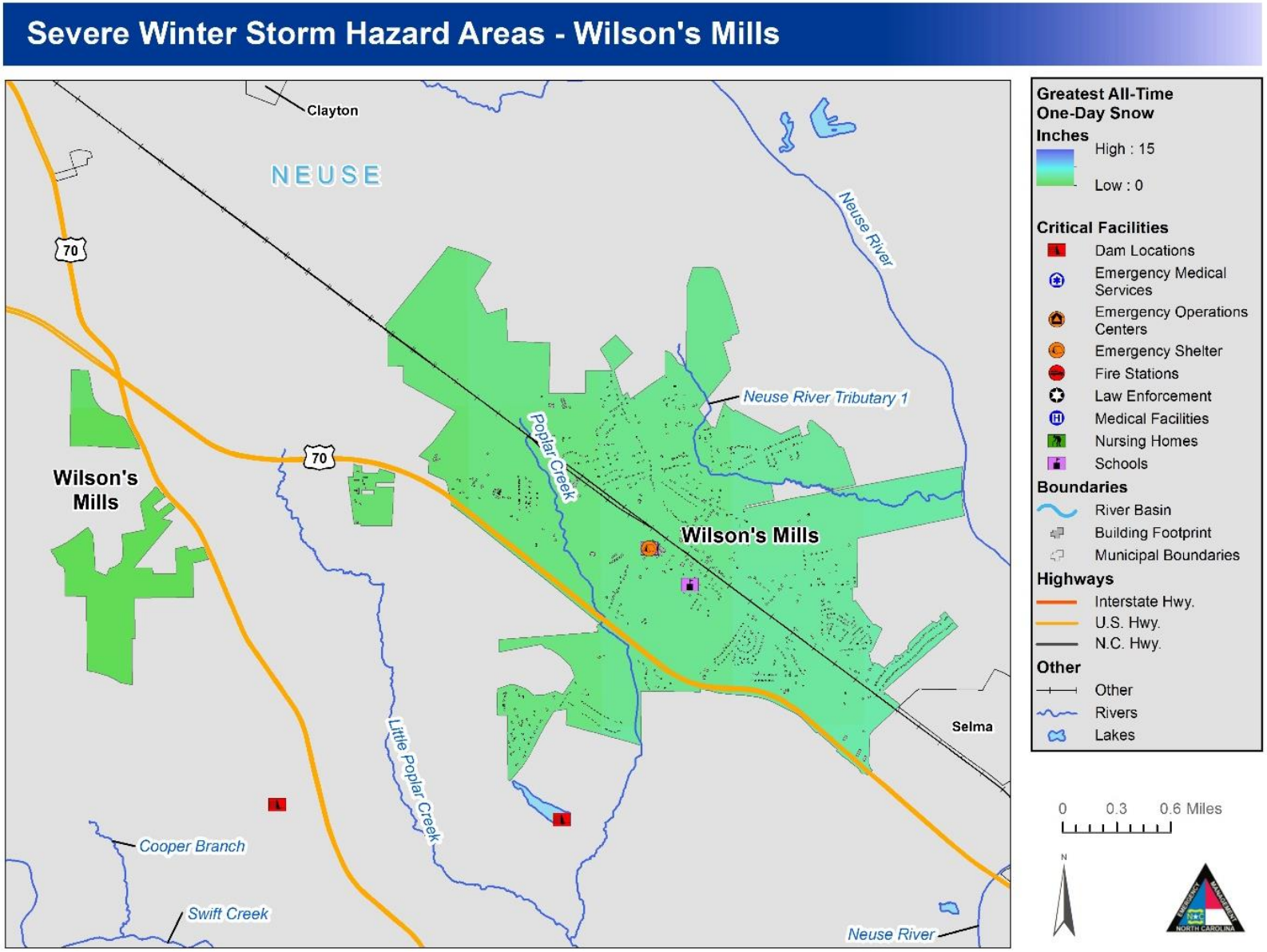


Figure 5-64: Severe Winter Storm Hazard Areas – Wilson's Mills

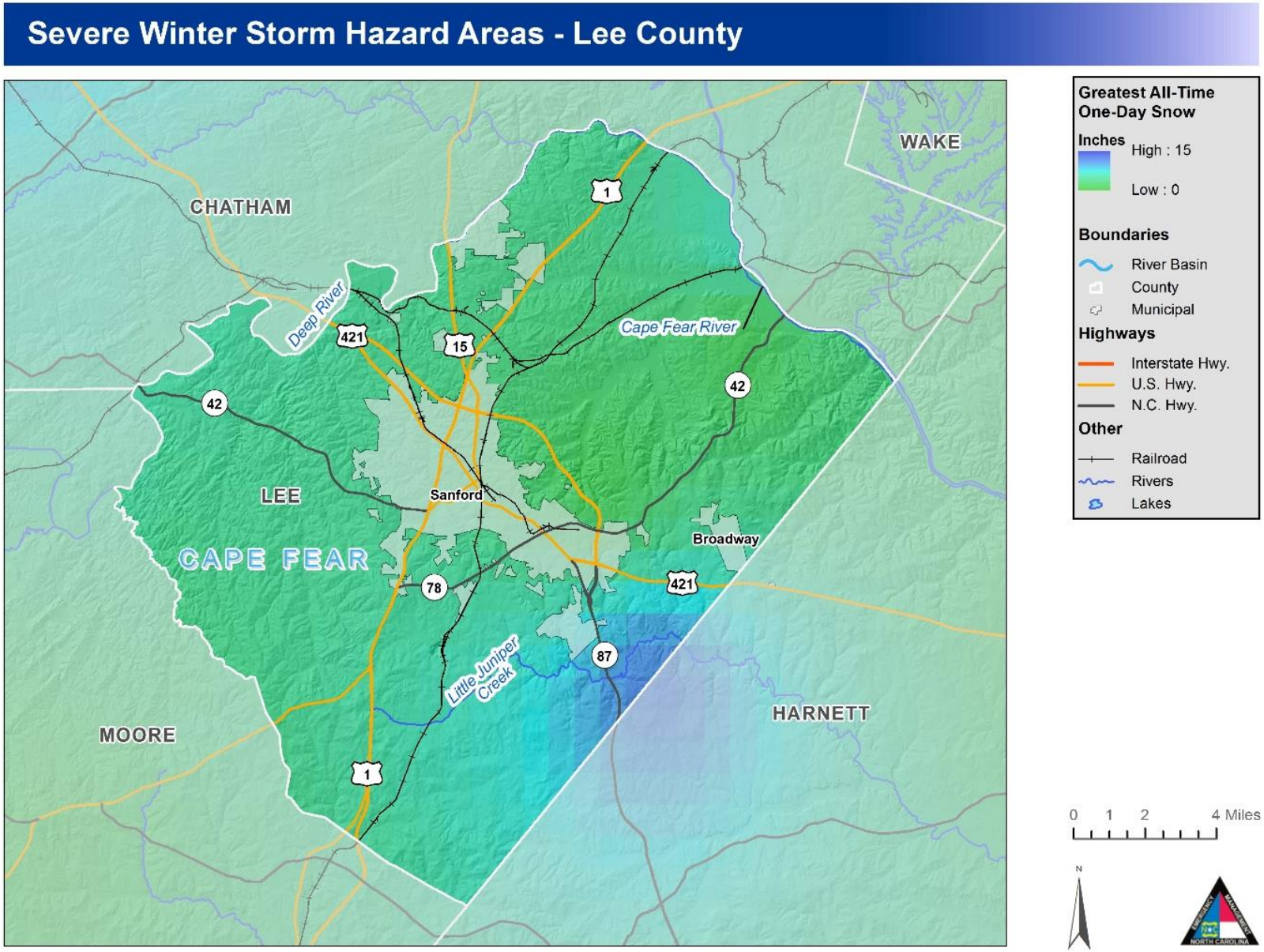


Figure 5-65: Severe Winter Storm Hazard Areas – Lee County

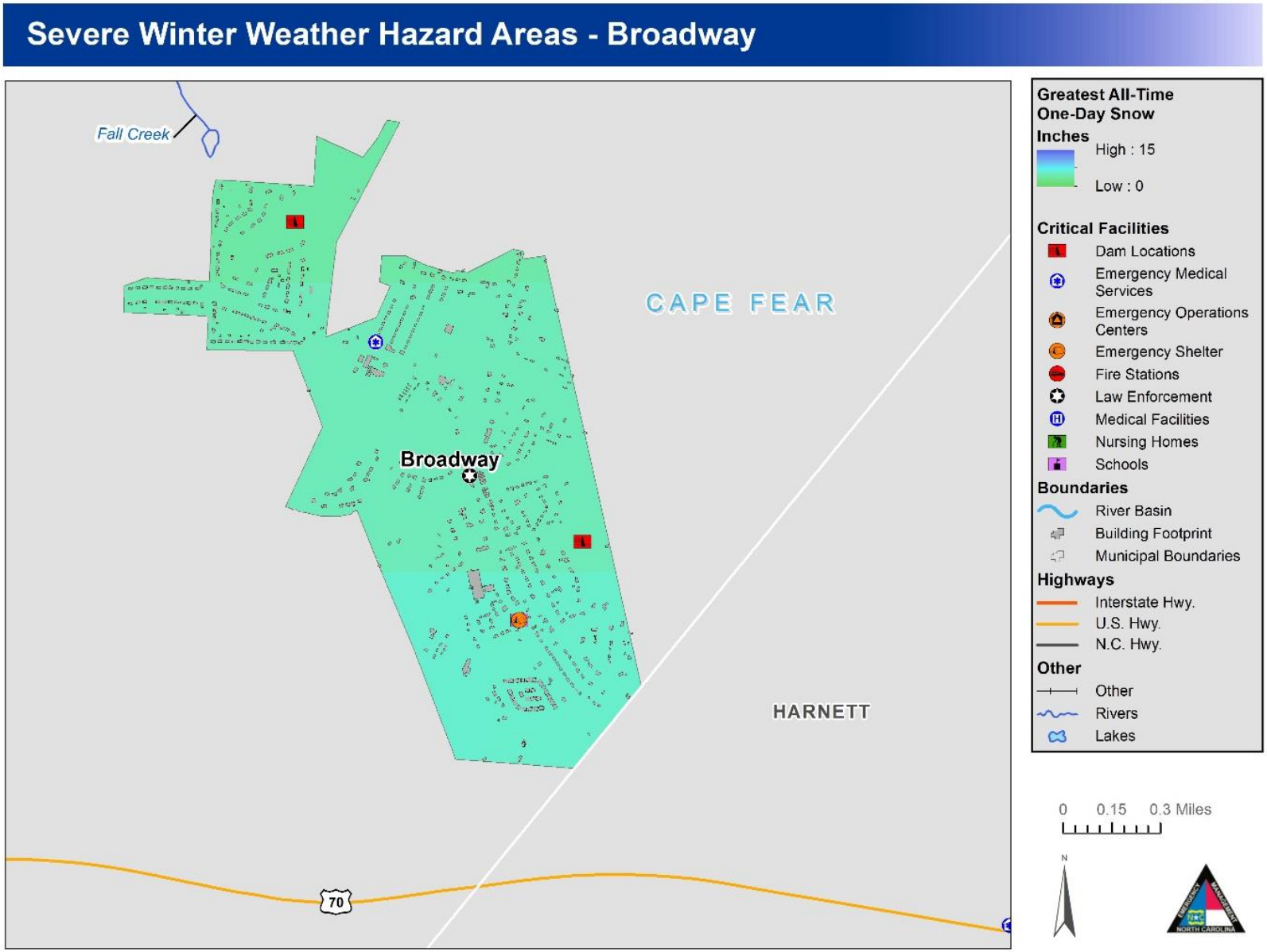


Figure 5-66: Severe Winter Storm Hazard Areas - Broadway

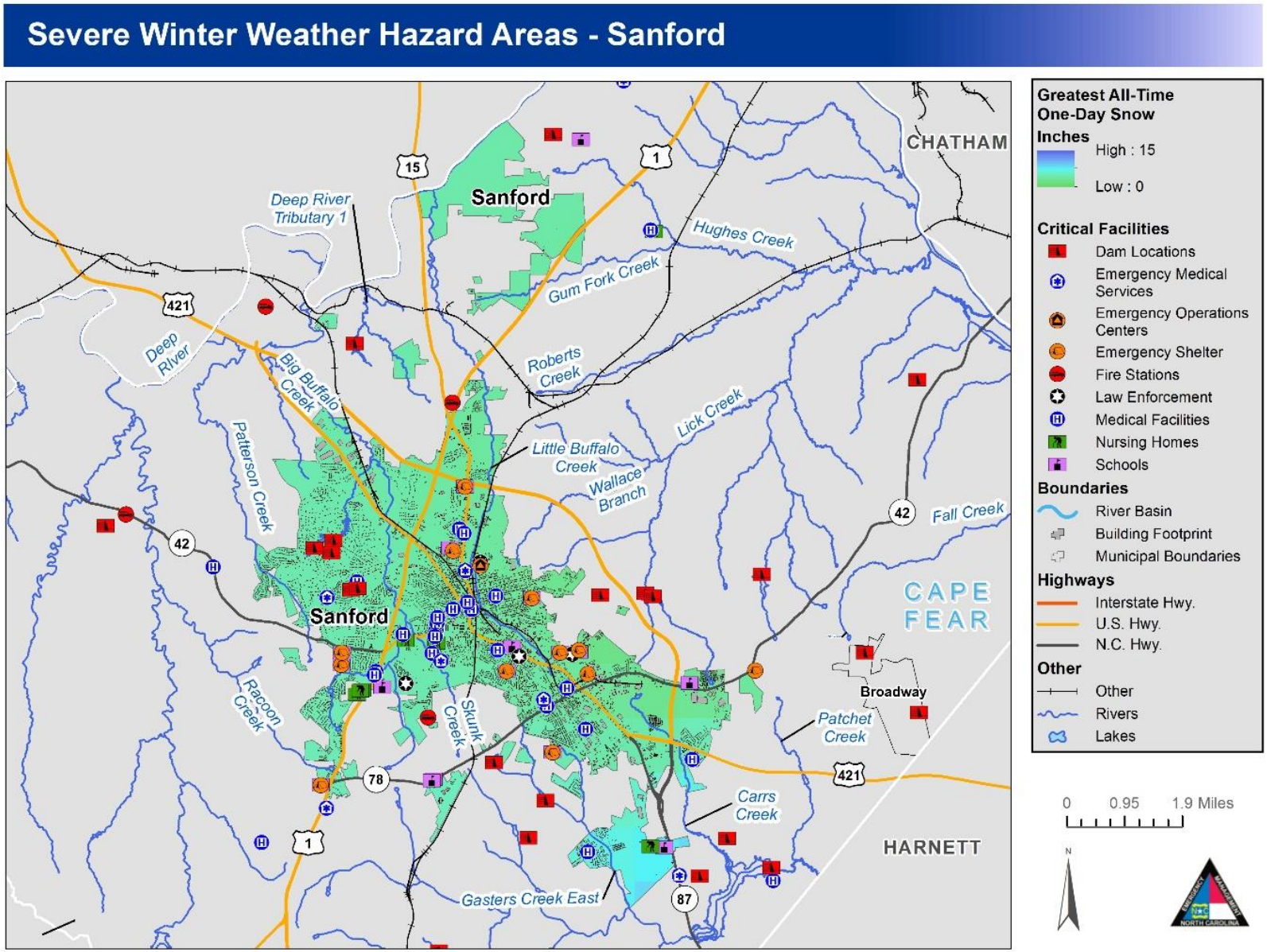


Figure 5-67: Severe Winter Storm Hazard Areas - Sanford

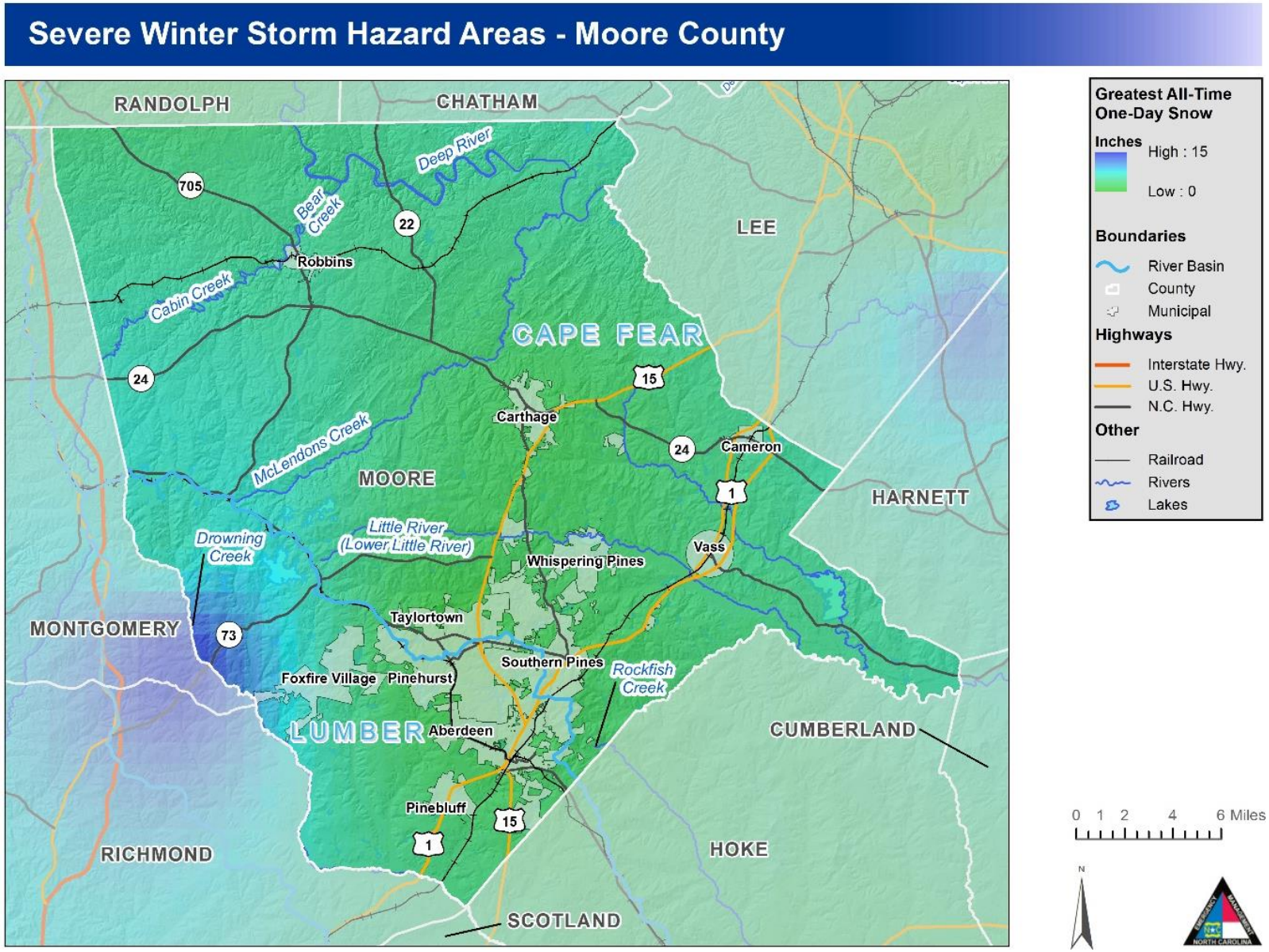


Figure 5-68: Severe Winter Storm Hazard Areas – Moore County

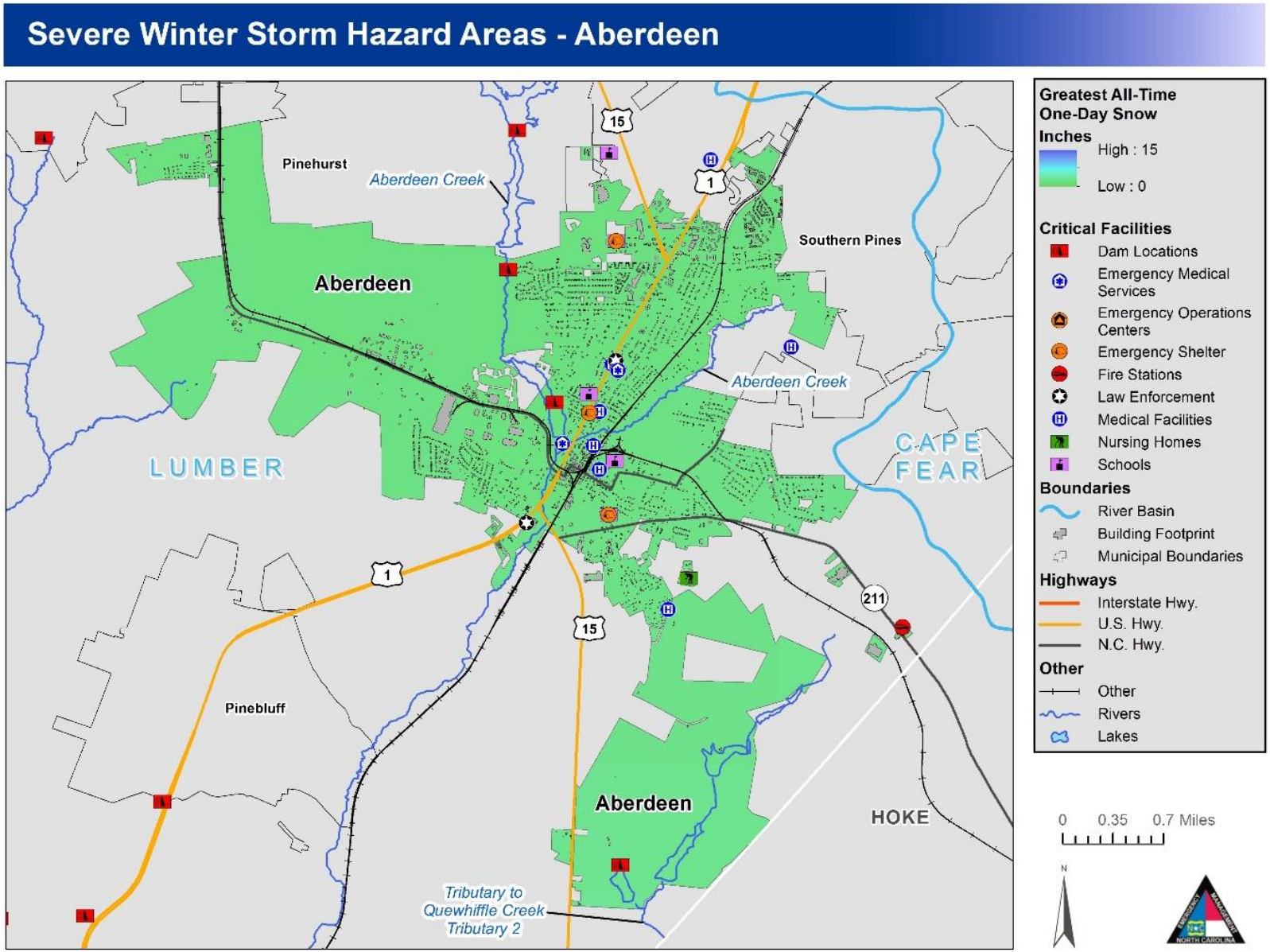


Figure 5-69: Severe Winter Storm Hazard Areas - Aberdeen

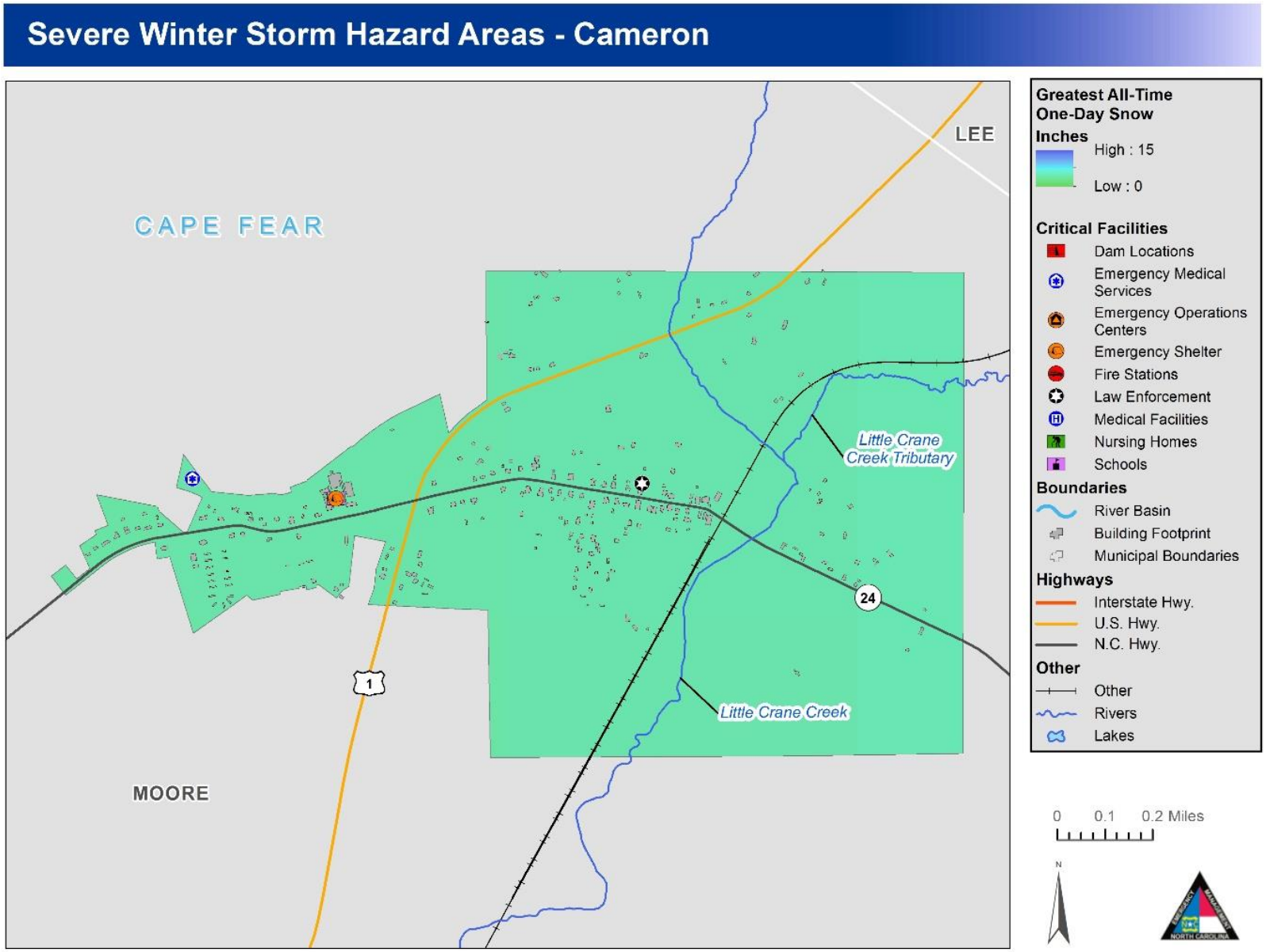


Figure 5-70: Severe Winter Storm Hazard Areas - Cameron

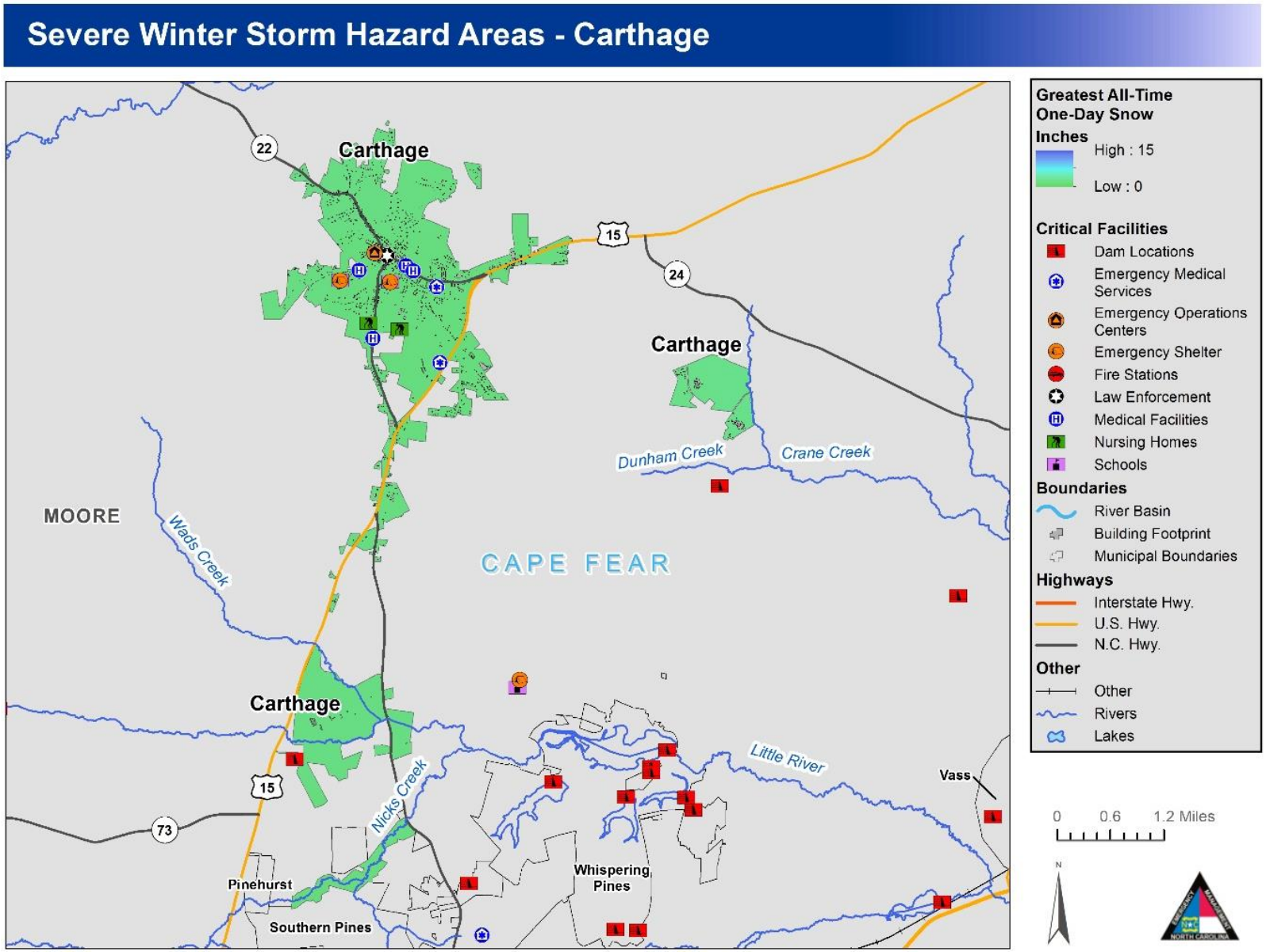


Figure 5-71: Severe Winter Storm Hazard Areas - Carthage

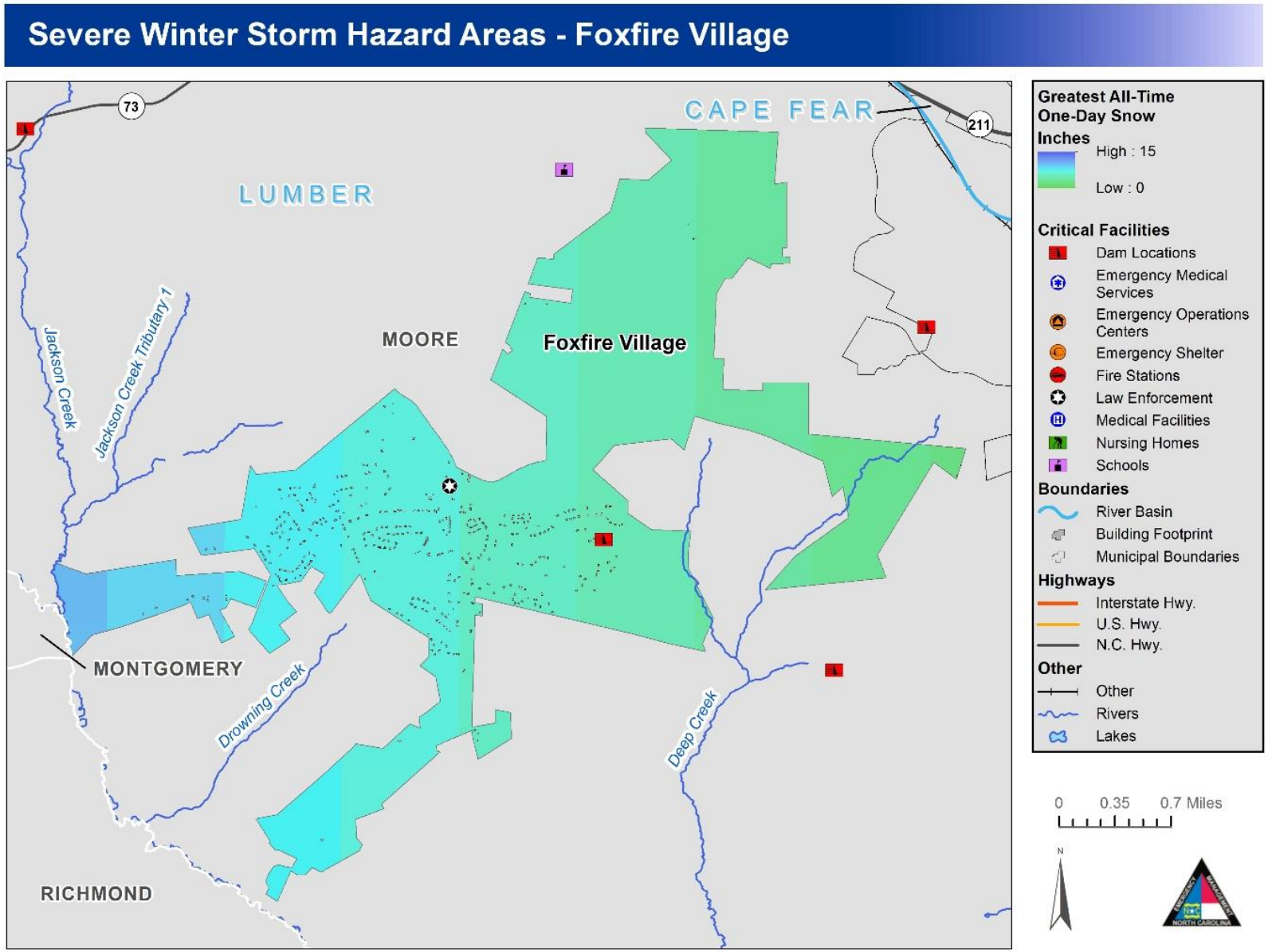


Figure 5-72: Severe Winter Storm Hazard Areas – Foxfire Village

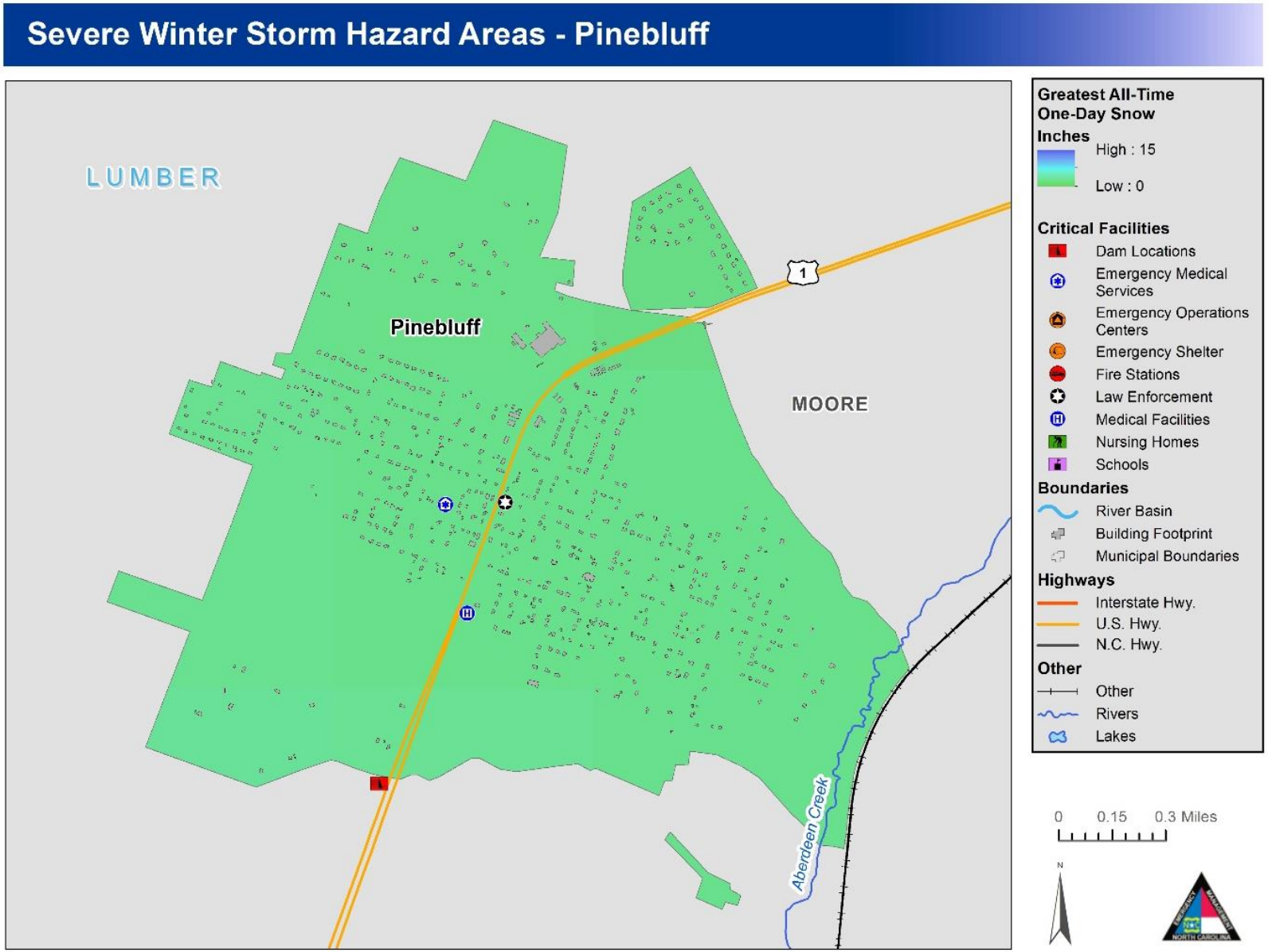


Figure 5-73: Severe Winter Storm Hazard Areas - Pinebluff

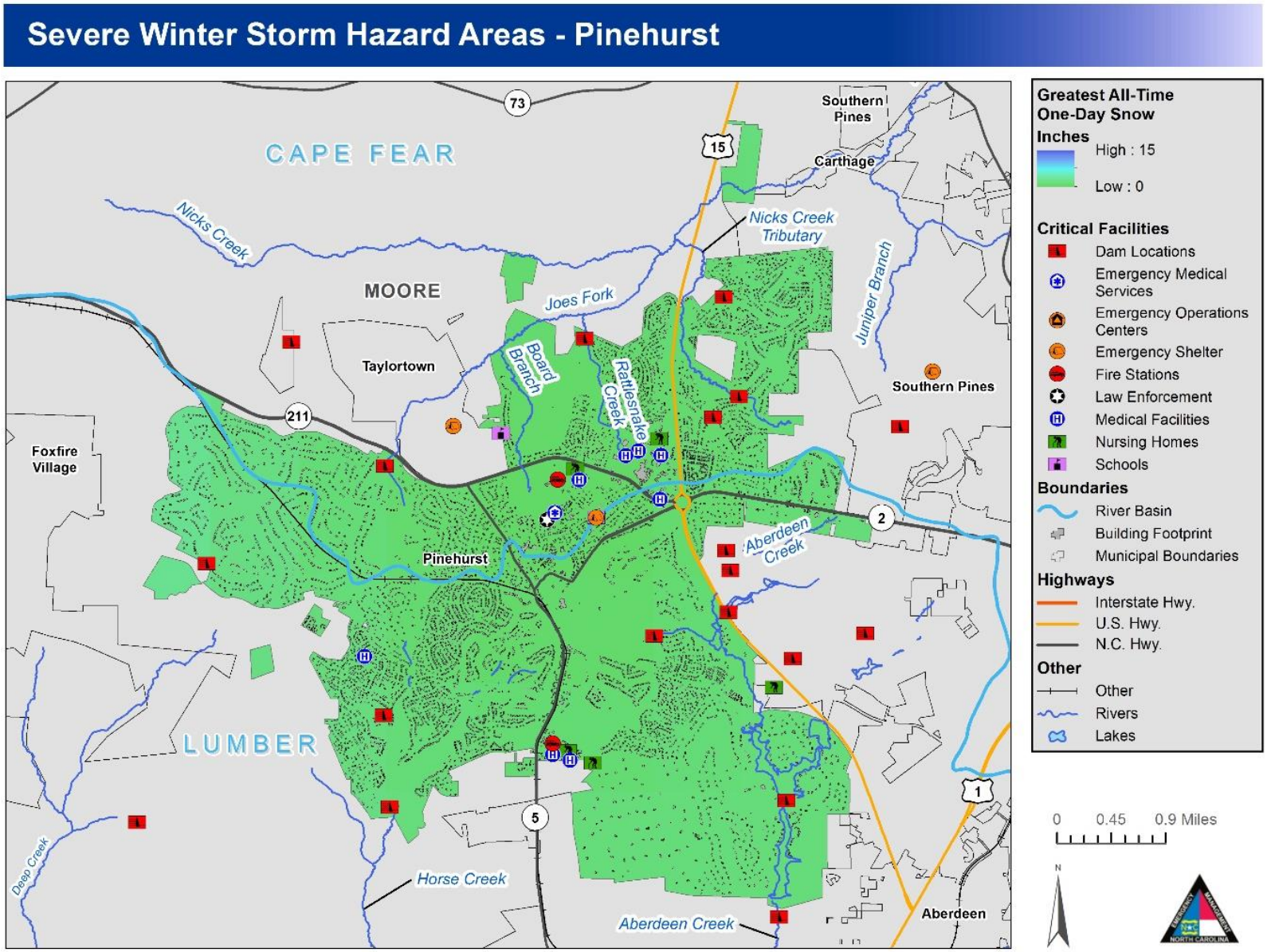


Figure 5-74: Severe Winter Storm Hazard Areas - Pinehurst

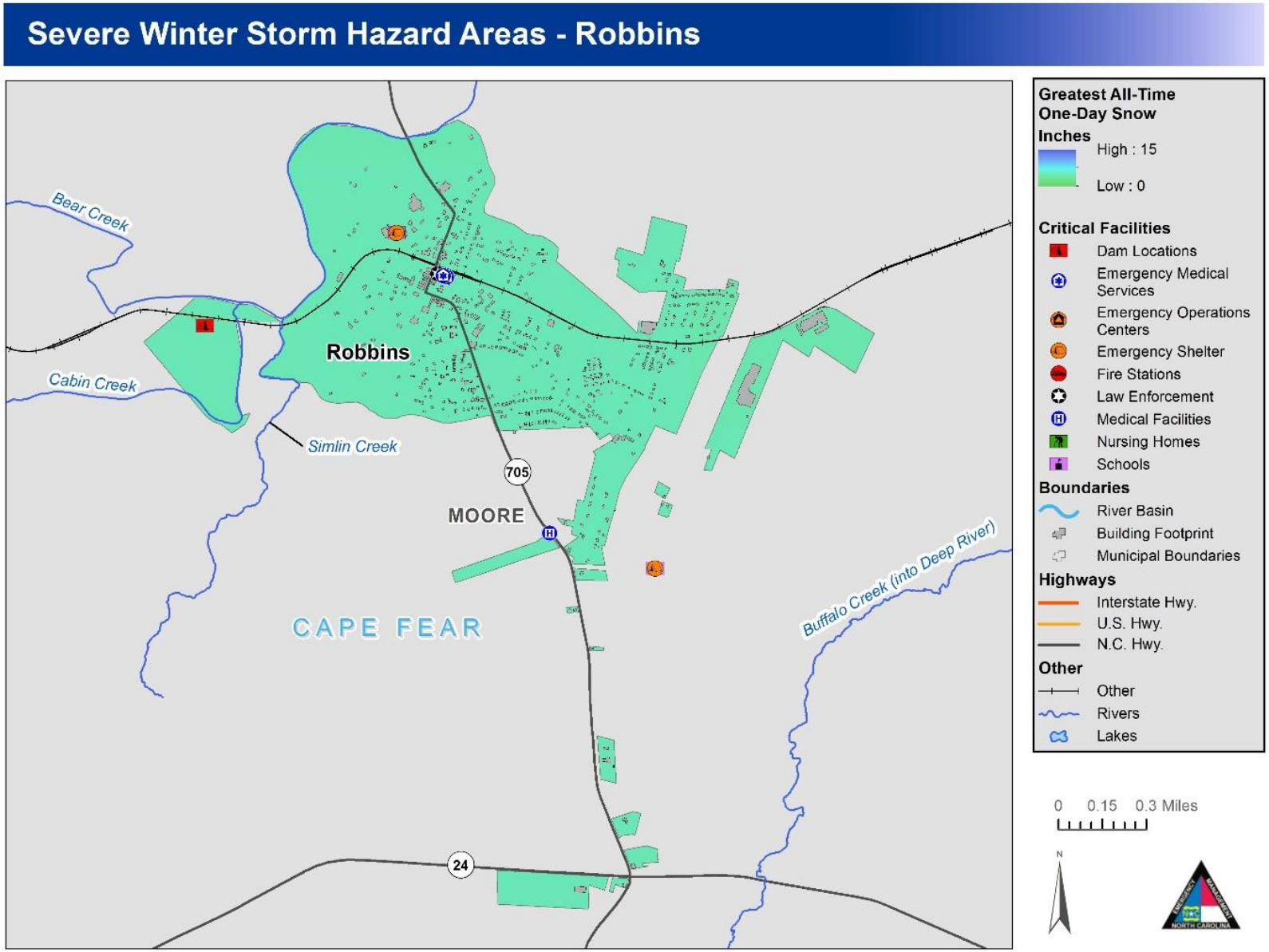


Figure 5-75: Severe Winter Storm Hazard Areas - Robbins

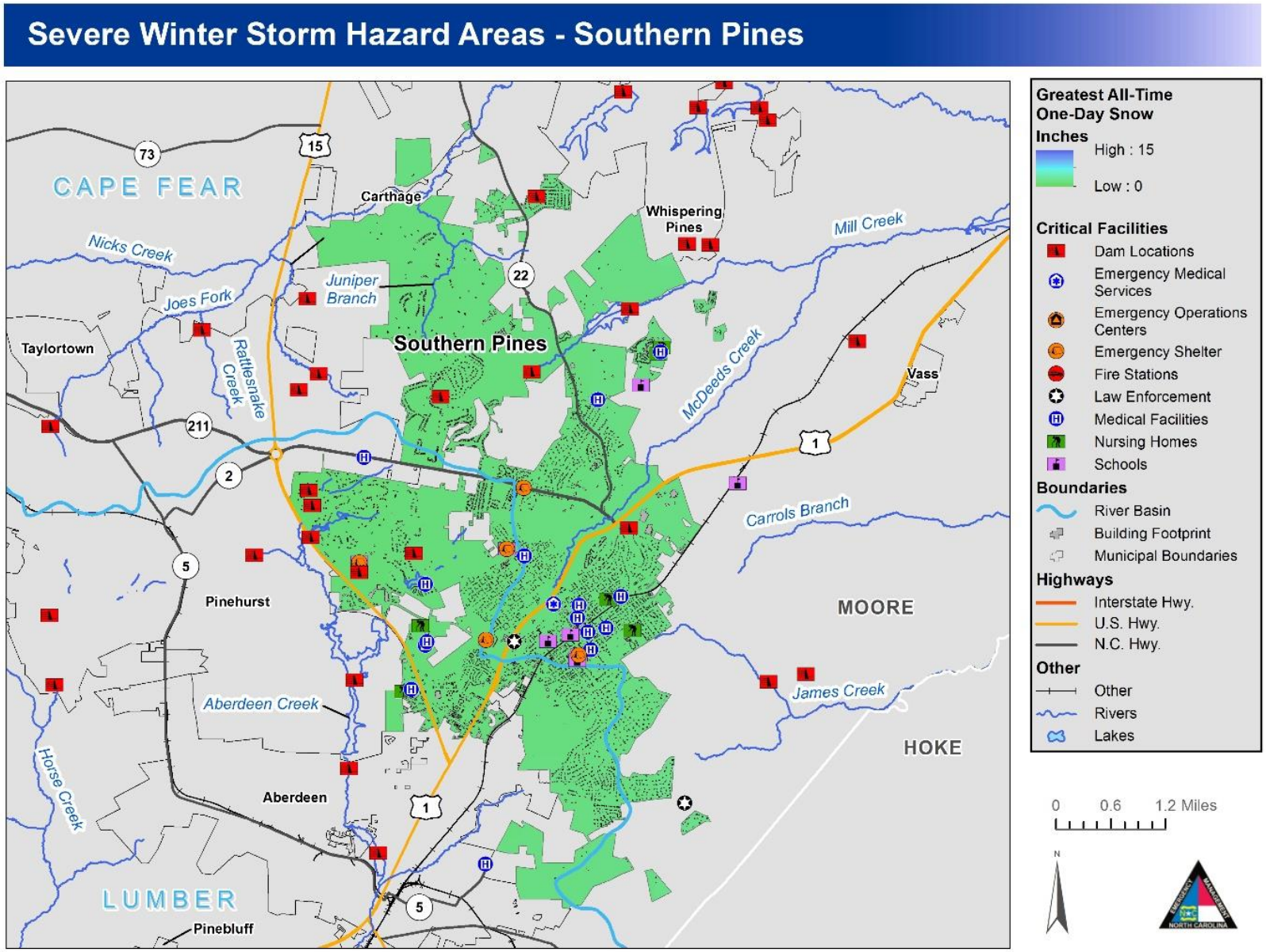


Figure 5-76: Severe Winter Storm Hazard Areas – Southern Pines

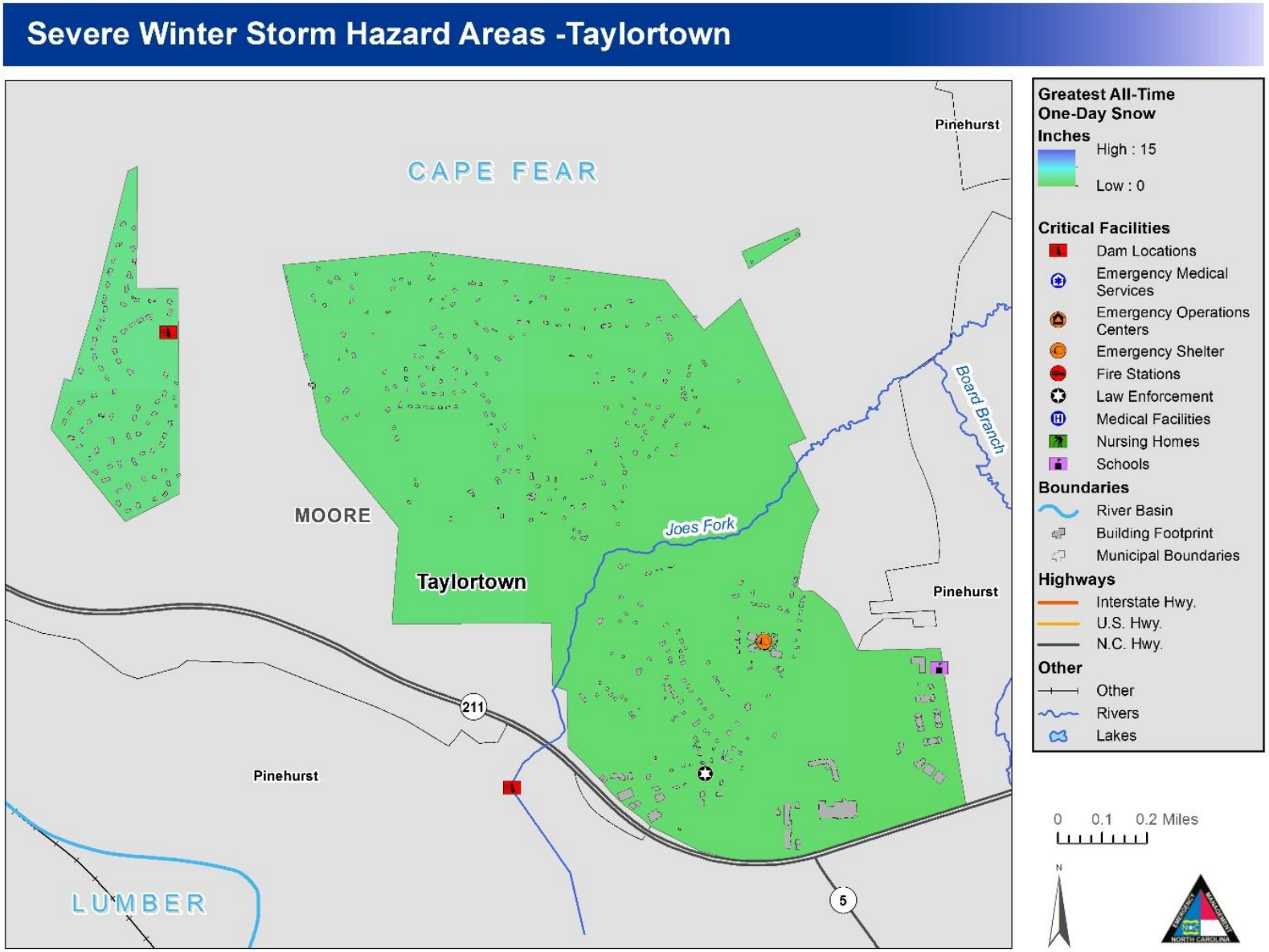


Figure 5-77: Severe Winter Storm Hazard Areas - Taylortown

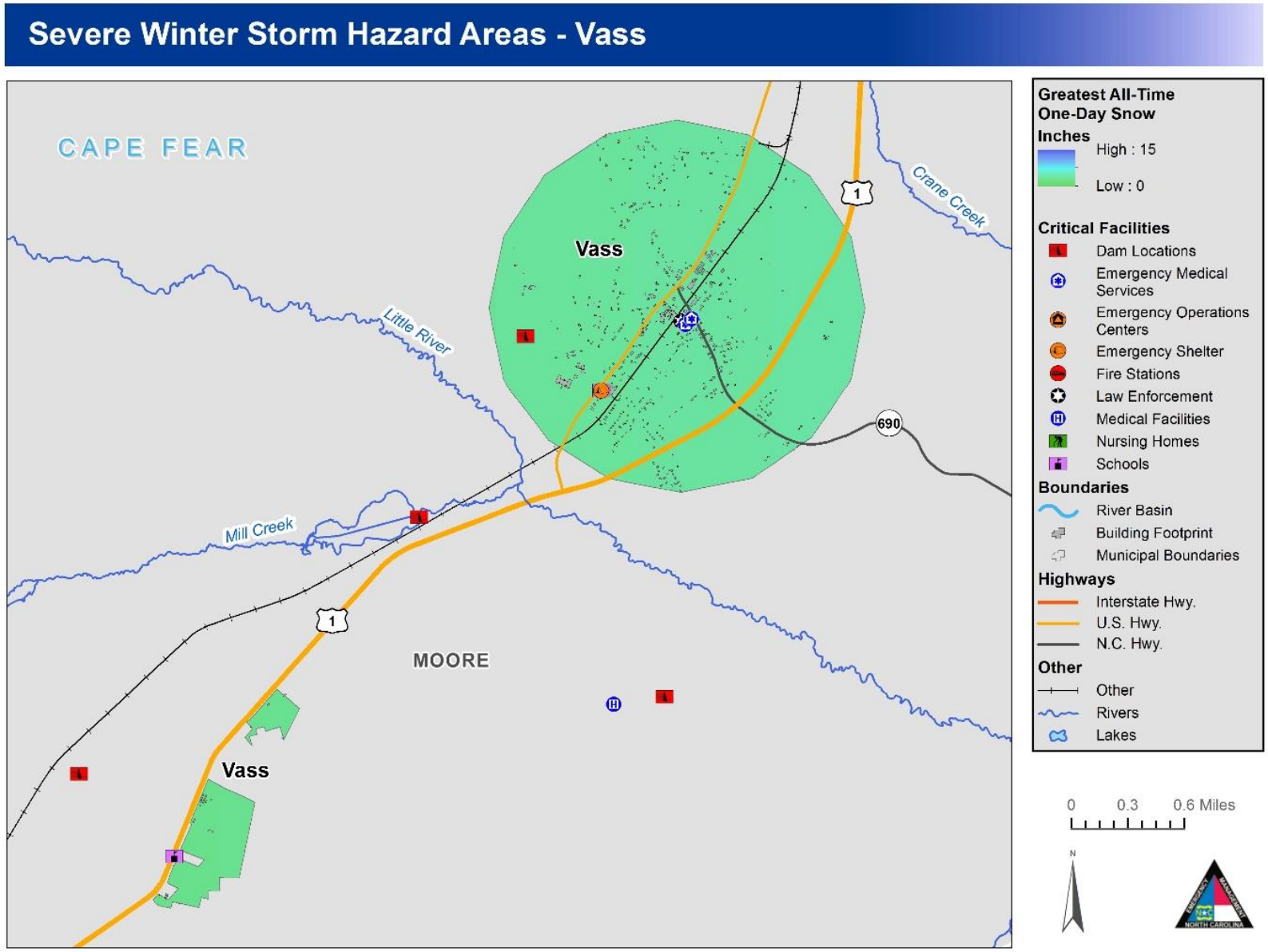


Figure 5-78: Severe Winter Storm Hazard Areas - Vass

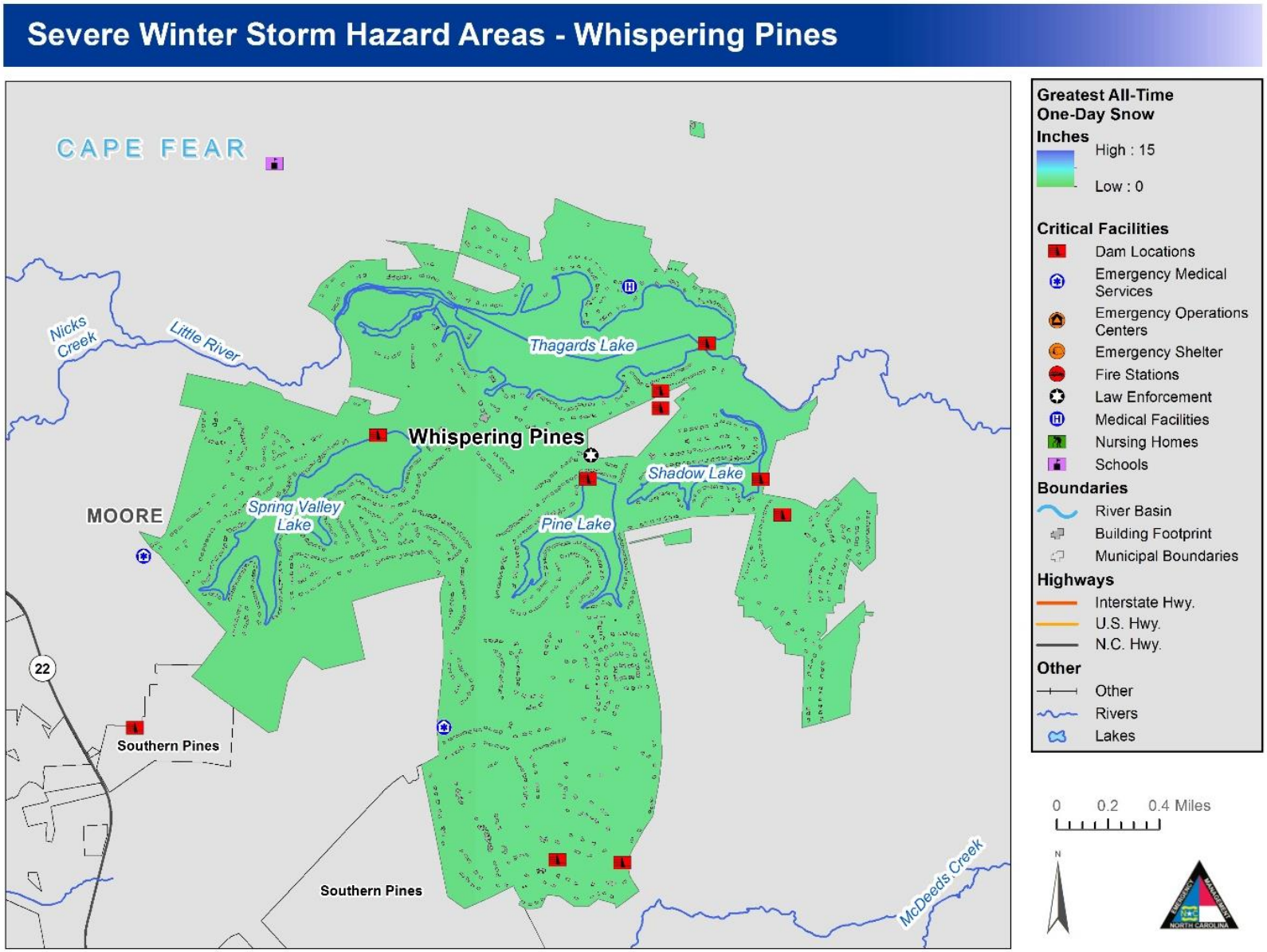


Figure 5-79: Severe Winter Storm Hazard Areas – Whispering Pines

5.8.3 Extent

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Chatham (Zone)	02/25/2015	Winter Storm	0	0	500.00K	0.00K
Johnston (Zone)	02/25/2015	Winter Storm	0	0	500.00K	0.00K
Johnston (Zone)	02/07/2016	Winter Weather	0	0	20.00K	0.00K
Harnett (Zone)	02/07/2016	Winter Weather	0	0	10.00K	0.00K
Moore (Zone)	01/03/2018	Winter Storm	0	0	10.00K	0.00K
Totals:			**0**	**0**	**1.040M**	**0.00K**

5.8.4 Historical Occurrences

According to the National Climatic Data Center, there have been a total of 59 recorded winter storm events in the Cape Fear Region since 1993 (**Table 5-19**).[5] These events resulted in over $1.0 million in damages.

Table 5-19: Historical Occurrences of Winter Weather (1993 to 2019)

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Harnett (Zone)	01/06/1996	Ice Storm	0	0	0.00K	0.00K
Lee (Zone)	01/06/1996	Ice Storm	0	0	0.00K	0.00K
Moore (Zone)	01/06/1996	Ice Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/06/1996	Ice Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/06/1996	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/11/1996	Ice Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/11/1996	Ice Storm	0	0	0.00K	0.00K
Lee (Zone)	01/11/1996	Ice Storm	0	0	0.00K	0.00K
Moore (Zone)	01/11/1996	Ice Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/11/1996	Ice Storm	0	0	0.00K	0.00K
Moore (Zone)	02/02/1996	Ice Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/02/1996	Ice Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/02/1996	Ice Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/02/1996	Ice Storm	0	0	0.00K	0.00K
Lee (Zone)	02/02/1996	Ice Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/16/1996	Heavy Snow	0	0	0.00K	0.00K

[5] These ice and winter storm events are only inclusive of those reported by the National Climatic Data Center (NCDC). It is likely that additional winter storm conditions have affected the Cape Fear Region. In addition, the 102 are reported by county, so many of these storms likely affected all of the counties.

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Lee (Zone)	02/16/1996	Heavy Snow	0	0	0.00K	0.00K
Johnston (Zone)	02/16/1996	Heavy Snow	0	0	0.00K	0.00K
Harnett (Zone)	02/16/1996	Heavy Snow	0	0	0.00K	0.00K
Moore (Zone)	01/19/1998	Heavy Snow	0	0	0.00K	0.00K
Harnett (Zone)	01/19/1998	Heavy Snow	0	0	0.00K	0.00K
Johnston (Zone)	01/19/1998	Heavy Snow	0	0	0.00K	0.00K
Lee (Zone)	01/19/1998	Heavy Snow	0	0	0.00K	0.00K
Chatham (Zone)	12/23/1998	Ice Storm	0	0	0.00K	0.00K
Moore (Zone)	12/23/1998	Ice Storm	0	0	0.00K	0.00K
Lee (Zone)	12/23/1998	Ice Storm	0	0	0.00K	0.00K
Harnett (Zone)	12/23/1998	Ice Storm	0	0	0.00K	0.00K
Johnston (Zone)	12/23/1998	Ice Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/18/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/18/2000	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/18/2000	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/18/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/18/2000	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/20/2000	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/20/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/20/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/20/2000	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/22/2000	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/22/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/22/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/22/2000	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/22/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/24/2000	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/24/2000	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/24/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/24/2000	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/24/2000	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/28/2000	Winter Storm	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Johnston (Zone)	01/28/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/28/2000	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/28/2000	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/28/2000	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	11/19/2000	Heavy Snow	0	0	0.00K	0.00K
Harnett (Zone)	11/19/2000	Heavy Snow	0	0	0.00K	0.00K
Lee (Zone)	11/19/2000	Heavy Snow	0	0	0.00K	0.00K
Johnston (Zone)	11/19/2000	Heavy Snow	0	0	0.00K	0.00K
Chatham (Zone)	11/19/2000	Heavy Snow	0	0	0.00K	0.00K
Harnett (Zone)	12/03/2000	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	12/03/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	12/03/2000	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/03/2002	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/03/2002	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/03/2002	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/03/2002	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/03/2002	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	12/04/2002	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	12/04/2002	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	12/04/2002	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	12/04/2002	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	12/04/2002	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/16/2003	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/16/2003	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	02/16/2003	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/16/2003	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/16/2003	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/27/2003	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/26/2004	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/26/2004	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/26/2004	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/26/2004	Winter Storm	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Johnston (Zone)	01/26/2004	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/26/2004	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/26/2004	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/26/2004	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	02/26/2004	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/30/2005	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/18/2007	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/18/2007	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	01/18/2007	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/18/2007	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	01/18/2007	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/01/2007	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	02/01/2007	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/01/2007	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	02/01/2007	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/01/2007	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	12/07/2007	Winter Weather	0	0	20.00K	0.00K
Harnett (Zone)	12/07/2007	Winter Weather	0	0	15.00K	0.00K
Johnston (Zone)	12/07/2007	Winter Weather	0	0	50.00K	0.00K
Johnston (Zone)	01/17/2008	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/17/2008	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/17/2008	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/17/2008	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	01/17/2008	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/19/2008	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	01/19/2008	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/19/2008	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/19/2008	Winter Weather	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Moore (Zone)	01/19/2008	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	01/20/2009	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/20/2009	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/20/2009	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/20/2009	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/20/2009	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/04/2009	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	02/04/2009	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/04/2009	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/04/2009	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	03/01/2009	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	03/02/2009	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	03/02/2009	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	03/02/2009	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	12/18/2009	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	12/30/2009	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/29/2010	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/29/2010	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/29/2010	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/29/2010	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/30/2010	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/12/2010	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/12/2010	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/12/2010	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/12/2010	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/12/2010	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	03/02/2010	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	03/02/2010	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	03/02/2010	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	03/02/2010	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	03/02/2010	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	12/04/2010	Winter Weather	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Johnston (Zone)	12/04/2010	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/10/2011	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/10/2011	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/10/2011	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/10/2011	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/10/2011	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	01/21/2014	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/21/2014	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/21/2014	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/21/2014	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/28/2014	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/28/2014	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/28/2014	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/28/2014	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/28/2014	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/11/2014	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	02/11/2014	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/11/2014	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/11/2014	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	02/11/2014	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/12/2014	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/12/2014	Winter Storm	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Johnston (Zone)	02/12/2014	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/12/2014	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/12/2014	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	03/17/2014	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	03/17/2014	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	03/17/2014	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	03/17/2014	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/13/2015	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	01/13/2015	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/13/2015	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/13/2015	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	02/16/2015	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	02/16/2015	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/16/2015	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	02/16/2015	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	02/16/2015	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	02/24/2015	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	02/24/2015	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/24/2015	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	02/24/2015	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/24/2015	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	02/25/2015	Winter Storm	0	0	500.00K	0.00K
Moore (Zone)	02/25/2015	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	02/25/2015	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/25/2015	Winter Storm	0	0	500.00K	0.00K
Johnston (Zone)	03/01/2015	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/22/2016	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/22/2016	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/22/2016	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/22/2016	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/22/2016	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	02/07/2016	Winter Weather	0	0	20.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Harnett (Zone)	02/07/2016	Winter Weather	0	0	10.00K	0.00K
Lee (Zone)	02/07/2016	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/15/2016	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	02/15/2016	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/15/2016	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	01/07/2017	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	01/03/2018	Winter Storm	0	0	10.00K	0.00K
Lee (Zone)	01/03/2018	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/03/2018	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	01/03/2018	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/03/2018	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	01/17/2018	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	01/17/2018	Winter Storm	0	0	0.00K	0.00K
Lee (Zone)	01/17/2018	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	01/17/2018	Winter Storm	0	0	0.00K	0.00K
Johnston (Zone)	01/17/2018	Winter Storm	0	0	0.00K	0.00K
Harnett (Zone)	03/12/2018	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	03/12/2018	Winter Weather	0	0	0.00K	0.00K
Johnston (Zone)	12/09/2018	Winter Storm	0	0	0.00K	0.00K
Chatham (Zone)	12/09/2018	Winter Storm	0	0	0.00K	0.00K
Moore (Zone)	12/09/2018	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	12/09/2018	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	12/09/2018	Winter Weather	0	0	0.00K	0.00K
Harnett (Zone)	02/20/2020	Winter Weather	0	0	0.00K	0.00K
Lee (Zone)	02/20/2020	Winter Weather	0	0	0.00K	0.00K
Chatham (Zone)	02/20/2020	Winter Weather	0	0	0.00K	0.00K
Moore (Zone)	02/20/2020	Winter Weather	0	0	0.00K	0.00K

Location	Date	Type	Death	Injuries	Property Damage	Crop Damage
Johnston (Zone)	02/20/2020	Winter Storm	0	0	0.00K	0.00K
Totals:			**0**	**0**	**1.125M**	**0.00K**

There have been several severe winter weather events in the Cape Fear Region. The text below describes two of the major events and associated impacts on the region. Similar impacts can be expected with severe winter weather.

1996 Winter Storm – January 6-8, 1996

This storm left two feet of snow in some areas and several thousand citizens without power for up to nine days. Although shelters were opened, some roads were impassible for many days. This event caused considerable disruption to business, industry, schools, and government services.

Winter storms throughout the planning area have several negative externalities including hypothermia, cost of snow and debris cleanup, business and government service interruption, traffic accidents, and power outages. Furthermore, citizens may resort to using inappropriate heating devices that could to fire or an accumulation of toxic fumes.

2002 Ice Storm – December 4-5, 2002

An ice storm produced up to an inch of freezing rain in central North Carolina impacting 40 counties. A total of 24 people were killed, and as many as 1.8 million people were left without electricity. Additionally, property damage was estimated at almost $100 million. New records were also set for traffic accidents and school closing durations. The scale of destruction was comparable to that of hurricanes that have impacted the state, such as Hurricane Fran in 1996. The storm cost the state $97.2 million in response and recovery.

5.8.5 Probability of Future Occurrences

The probability of future Snow is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability

Jurisdiction	Self Assessment
Chatham County (Unincorporated Area)	Medium
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium

Jurisdiction	Self Assessment
Town of Aberdeen	Medium
Town of Angier	Medium
Town of Archer Lodge	Medium
Town of Benson	Medium
Town of Broadway	Medium
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Medium
Town of Coats	Medium
Town of Erwin	Medium
Town of Four Oaks	Medium
Town of Goldston	Medium
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Medium
Town of Pine Level	Medium
Town of Pinebluff	Medium
Town of Pittsboro	Medium
Town of Princeton	Medium
Town of Robbins	Medium
Town of Selma	Medium
Town of Siler City	Medium
Town of Smithfield	Medium
Town of Southern Pines	Medium
Town of Taylortown	Medium
Town of Vass	Medium
Town of Wilson's Mills	Medium
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Winter storm events will remain a regular occurrence in the Cape Fear Region. According to historical information, the Cape Fear Region generally experiences one winter storm events each year. Therefore, the annual probability is likely (10 to 100 percent).

5.8.6 Impact

People

Winter storms are considered to be deceptive killers because most deaths are indirectly related to the storm event. The leading cause of death during winter storms is from automobile or other transportation accidents. Exhaustion and heart attacks caused by overexertion are the two most likely causes of winter storm-related deaths.

Power outages during very cold winter storm conditions can result in a potentially dangerous situation. Elderly people account for the largest percentage of hypothermia victims. In addition, if the power is out for an extended period, residents are forced to find alternative means to heat their homes. The danger arises from carbon monoxide released from improperly ventilated heating sources such as space or kerosene heaters, furnaces, and blocked chimneys. House fires also occur more frequently in the winter due to lack of proper safety precautions when using an alternative heating source. Chatham County's elevated elderly population leaves it more vulnerable to this type of impact.

First Responders

Adverse impact expected to be severe for unprotected personnel and moderate to light for trained, equipped, and protected personnel.

Fire suppression during winter storms may present a great danger because water supplies may freeze, and it may be difficult for firefighting equipment to get to the fire.

Clearing ice- or snow-covered roads is also a problem; with limited equipment in North Carolina due to the relative infrequency of events, priority is given to main thoroughfares and secondary roads are largely untouched during the initial hours after a storm has passed.

Continuity of Operations

Winter storm events can result in a loss of power which may impact operations. All jurisdictions are equally vulnerable to loss of power in a winter event. Downed trees, power lines and icy road conditions may prevent access to critical facilities and/or emergency equipment.

Built Environment

Localized impact to facilities and infrastructure in the areas of the incident. Power lines and roads most adversely affected.

Economy

Local economy and finances may be adversely affected, depending on damage. Utility companies will strive to restore power as quickly as possible; however, businesses without power may be forced to close for an extended period, resulting in financial losses for the local economy.

Natural Environment

Winter storm events may include ice or snow accumulation on trees which can cause large limbs, or even whole trees, to snap and potentially fall on residential homes, cars, or power lines. This potential for winter debris creates a dangerous environment to be outside in; significant injury may occur if a large limb snaps while a local resident is out driving or walking underneath it.

GEOLOGIC HAZARDS

5.9 Earthquake

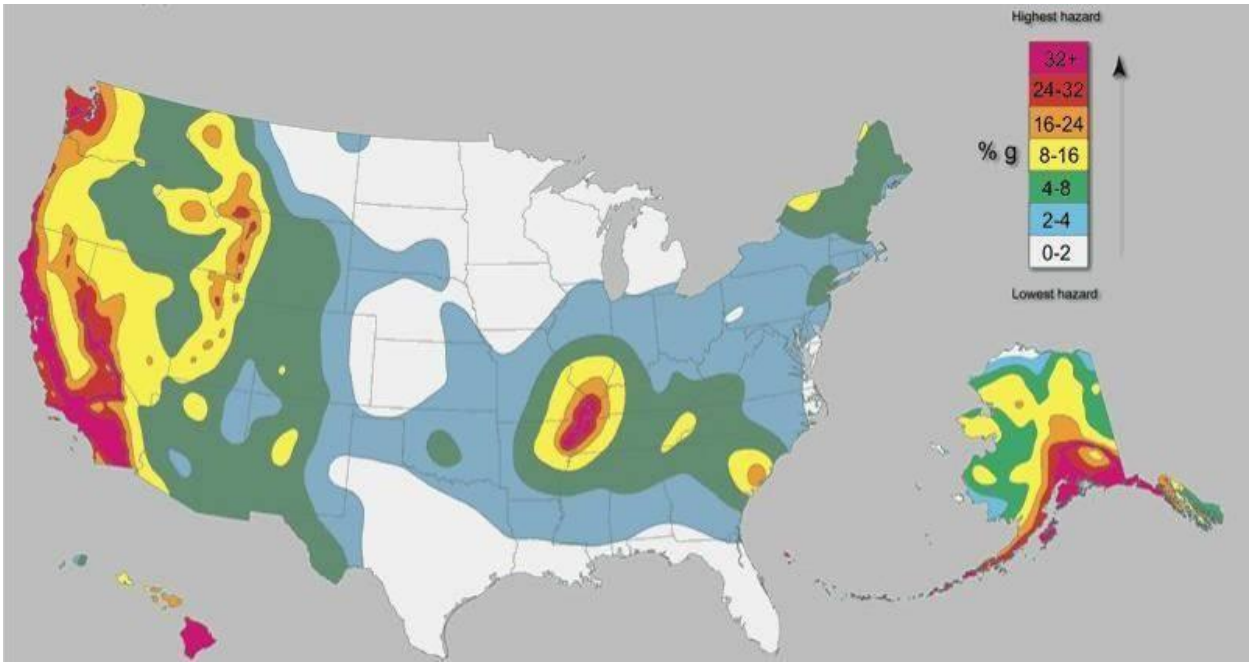
5.9.1 Background

An earthquake is movement or trembling of the ground produced by sudden displacement of rock in the Earth's crust. Earthquakes result from crustal strain, volcanism, landslides, or the collapse of caverns. Earthquakes can affect hundreds of thousands of square miles, cause damage to property measured in the tens of billions of dollars, result in loss of life and injury to hundreds of thousands of persons, and disrupt the social and economic functioning of the affected area.

Most property damage and earthquake-related deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the amplitude and duration of the shaking, which are directly related to the earthquake size, distance from the fault, site, and regional geology. Other damaging earthquake effects include landslides, the down-slope movement of soil and rock (mountain regions and along hillsides), and liquefaction, in which ground soil loses the ability to resist shear and flows much like quicksand. In the case of liquefaction, anything relying on the substrata for support can shift, tilt, rupture, or collapse.

Most earthquakes are caused by the release of stresses accumulated as a result of the rupture of rocks along opposing fault planes in the Earth’s outer crust. These fault planes are typically found along borders of the Earth's 10 tectonic plates. The areas of greatest tectonic instability occur at the perimeters of the slowly moving plates, as these locations are subjected to the greatest strains from plates traveling in opposite directions and at different speeds. Deformation along plate boundaries causes strain in the rock and the consequent buildup of stored energy. When the built-up stress exceeds the rocks' strength a rupture occurs. The rock on both sides of the fracture is snapped, releasing the stored energy and producing seismic waves, generating an earthquake.

The greatest earthquake threat in the United States is along tectonic plate boundaries and seismic fault lines located in the central and western states; however, the Eastern United State does face moderate risk to less frequent, less intense earthquake events. **Figure 5-80** shows relative seismic risk for the United States.



Source: United States Geological Survey

Figure 5-80: United States Earthquake Hazard Map

Earthquakes are measured in terms of their magnitude and intensity. Magnitude is measured using the Richter Scale, an open-ended logarithmic scale that describes the energy release of an earthquake through a measure of shock wave amplitude (**Table 5-20**). Each unit increase in magnitude on the Richter Scale corresponds to a 10-fold increase in wave amplitude, or a 32-fold increase in energy. Intensity is most commonly measured using the Modified Mercalli Intensity (MMI) Scale based on direct and indirect measurements of seismic effects. The scale levels are typically described using roman numerals, ranging from "I" corresponding to imperceptible (instrumental) events to "XII" for catastrophic (total destruction). A detailed description of the Modified Mercalli Intensity Scale of earthquake intensity and its correspondence to the Richter Scale is given in **Table 5-21**.

Table 5-20: Richter Scale

RICHTER MAGNITUDES	EARTHQUAKE EFFECTS
< 3.5	Generally, not felt, but recorded.
3.5 - 5.4	Often felt, but rarely causes damage.
5.4 - 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1 - 6.9	Can be destructive in areas up to about 100 kilometers across where people live.
7.0 - 7.9	Major earthquake. Can cause serious damage over larger areas.
8 or >	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

Source: Federal Emergency Management Agency

Table 5-21: Modified Mercalli Intensity Scale for Earthquakes

SCALE	INTENSITY	DESCRIPTION OF EFFECTS	CORRESPONDING RICHTER SCALE MAGNITUDE
I	INSTRUMENTAL	Detected only on seismographs.	
II	FEEBLE	Some people feel it.	< 4.2
III	SLIGHT	Felt by people resting; like a truck rumbling by.	
IV	MODERATE	Felt by people walking.	
V	SLIGHTLY STRONG	Sleepers awake; church bells ring.	< 4.8
VI	STRONG	Trees sway; suspended objects swing, objects fall off shelves.	< 5.4
VII	VERY STRONG	Mild alarm; walls crack; plaster falls.	< 6.1
VIII	DESTRUCTIVE	Moving cars uncontrollable; masonry fractures, poorly constructed buildings damaged.	
IX	RUINOUS	Some houses collapse; ground cracks; pipes break open.	< 6.9
X	DISASTROUS	Ground cracks profusely; many buildings destroyed; liquefaction and landslides widespread.	< 7.3
XI	VERY DISASTROUS	Most buildings and bridges collapse; roads, railways, pipes and cables destroyed; general triggering of other hazards.	< 8.1
XII	CATASTROPHIC	Total destruction; trees fall; ground rises and falls in waves.	> 8.1

Source: Federal Emergency Management Agency

5.9.2 Location and Spatial Extent

Approximately two-thirds of North Carolina is subject to earthquakes, with the western and southeast region most vulnerable to a very damaging earthquake. The state is affected by both the Charleston Fault in South Carolina and New Madrid Fault in Tennessee. Both of these faults have generated earthquakes measuring greater than 8 on the Richter Scale during the last 200 years. In addition, there are several smaller fault lines throughout North Carolina. **Figure 5.9** is a map showing geological and seismic information for North Carolina.

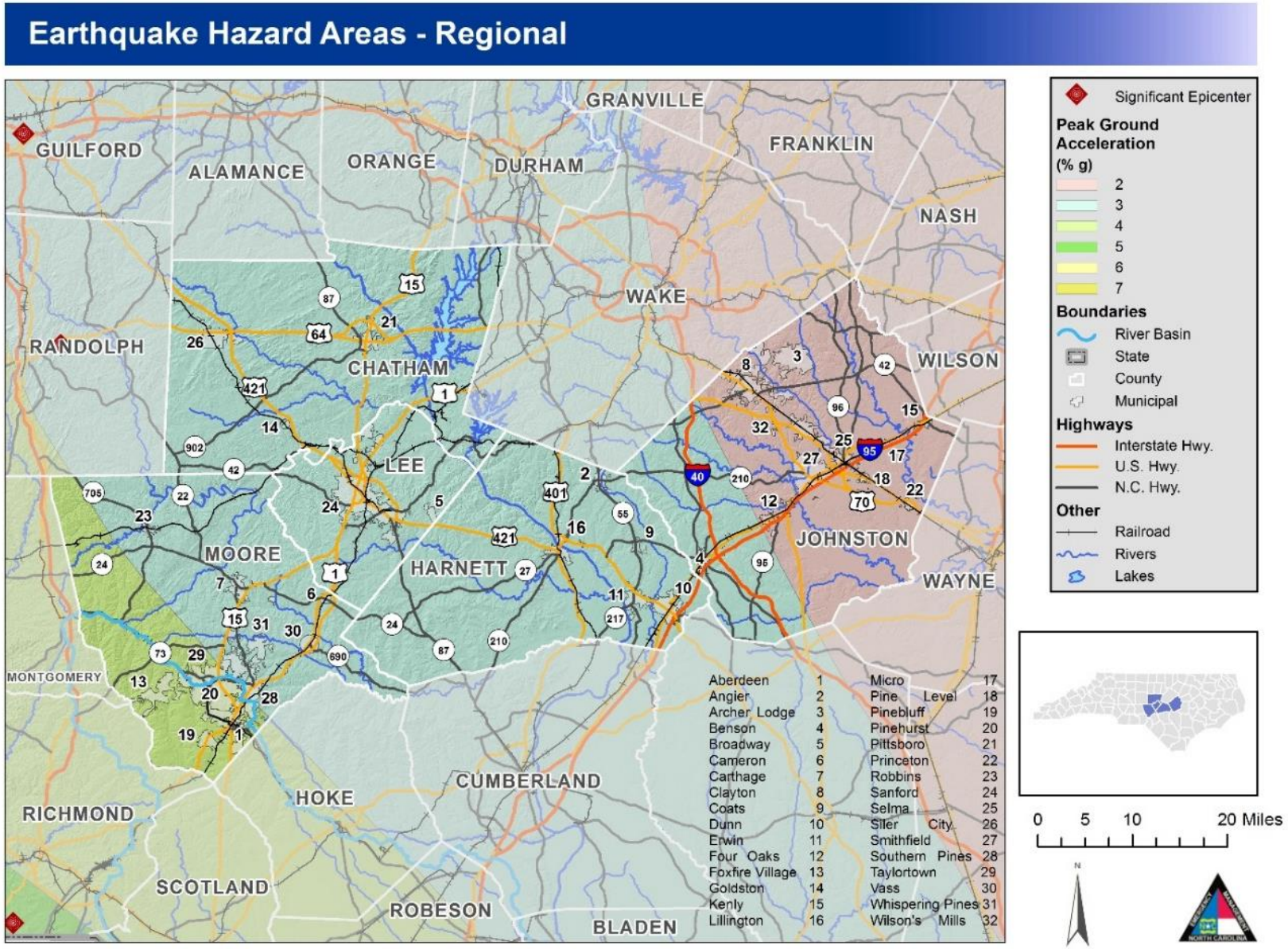


Figure 5-81: Earthquake Hazard Areas – Regional

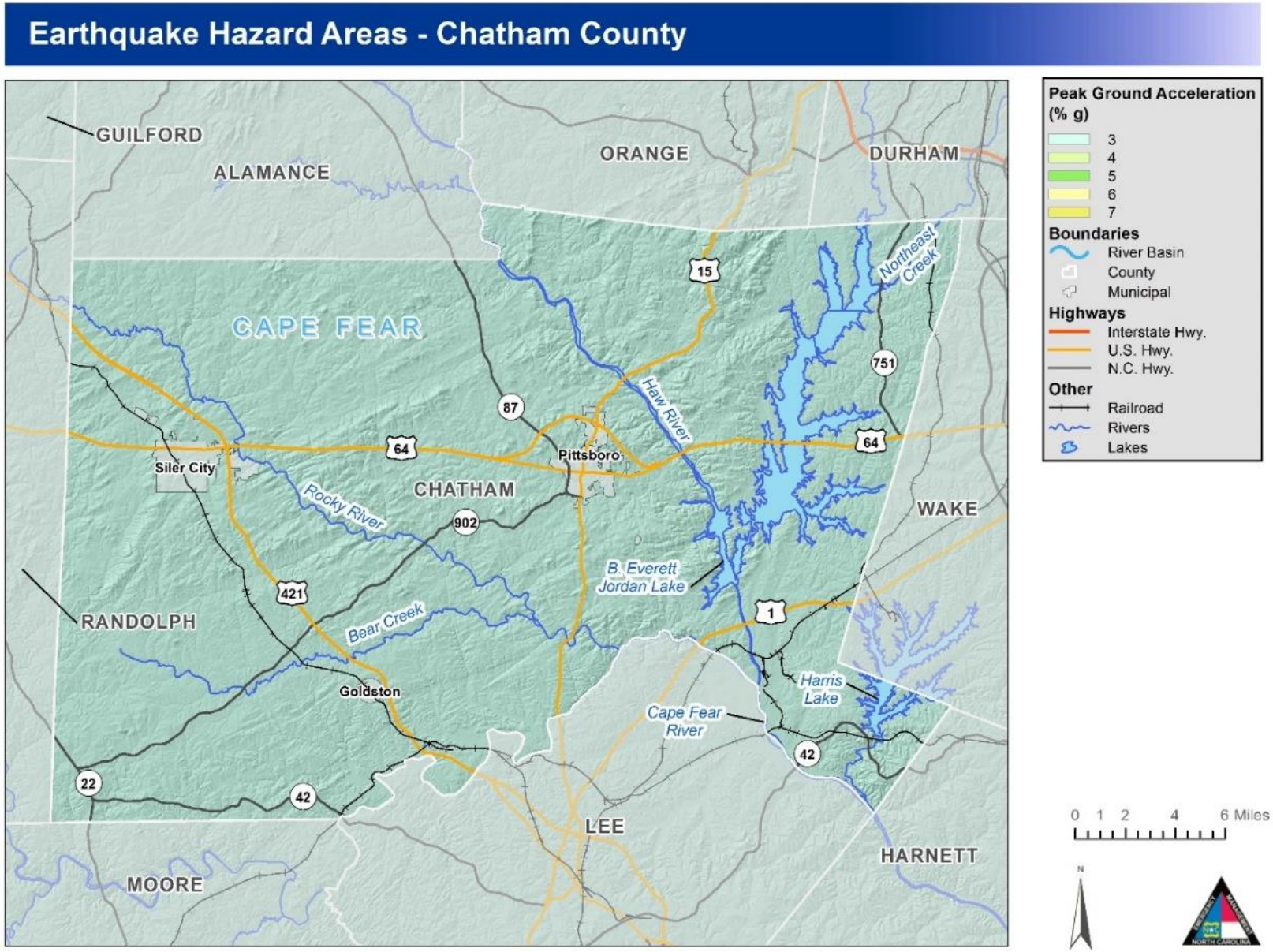


Figure 5-82: Earthquake Hazard Areas – Chatham County

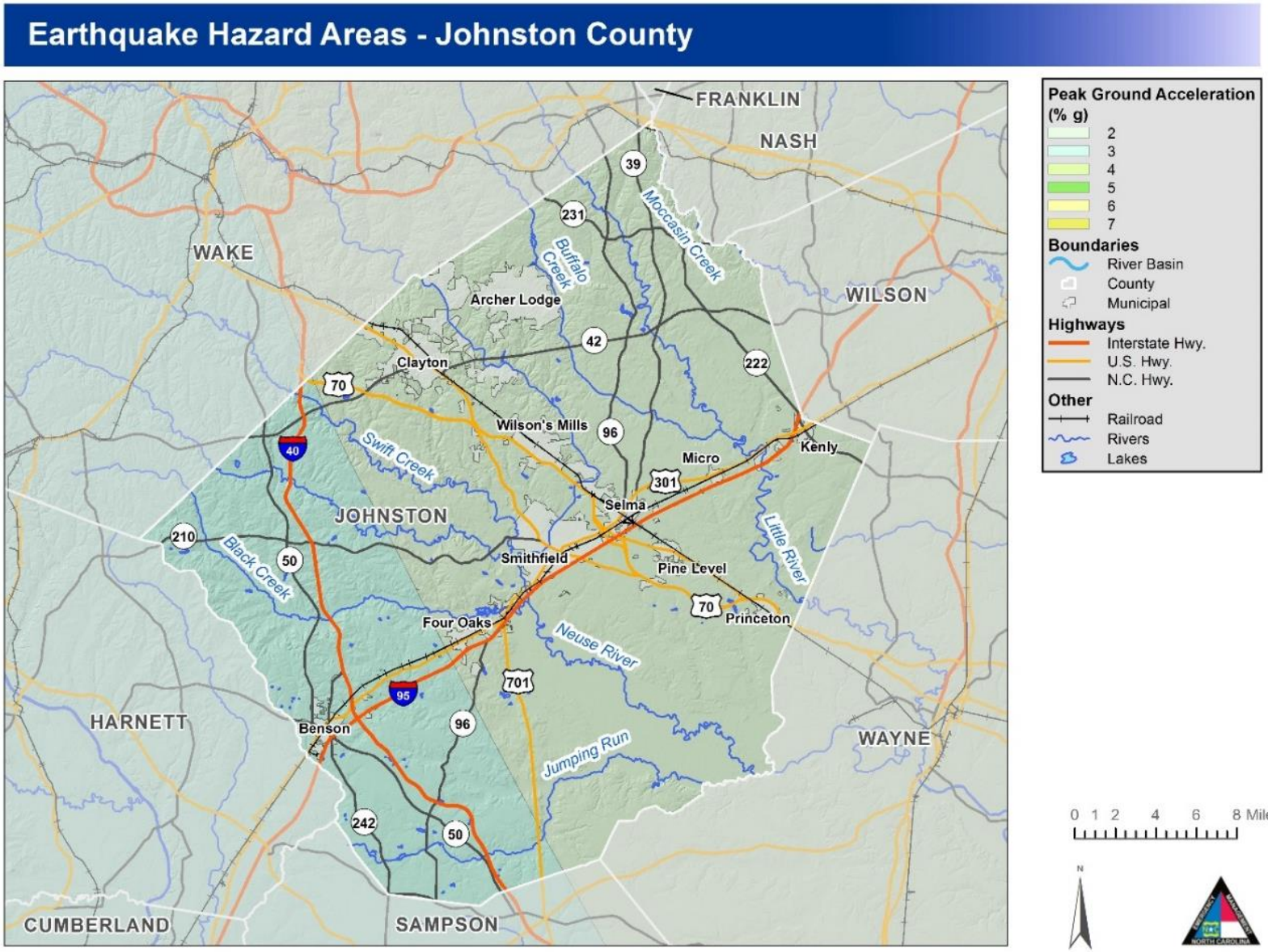


Figure 5-83: Earthquake Hazard Areas – Johnston County

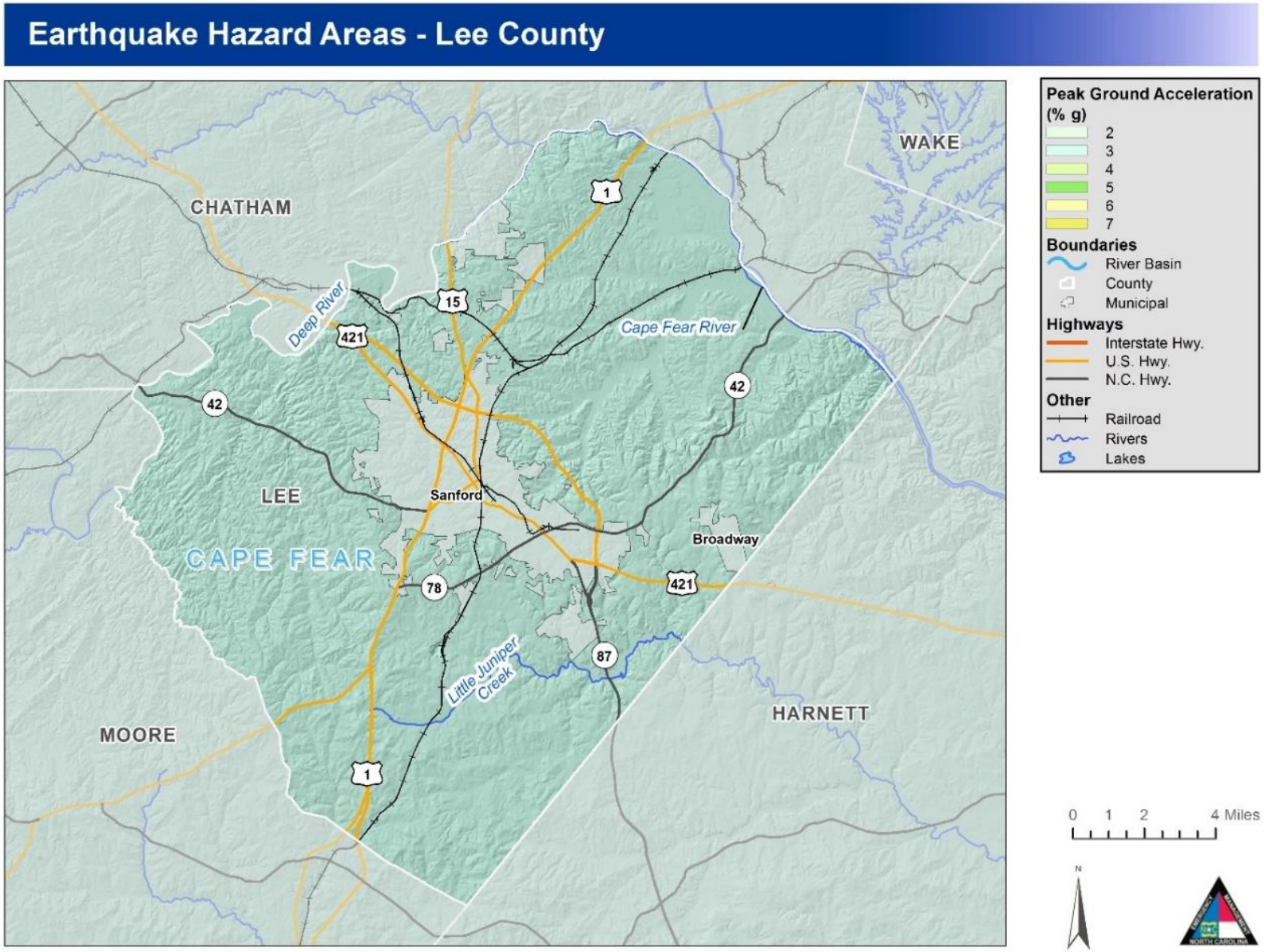


Figure 5-84: Earthquake Hazard Areas – Lee County

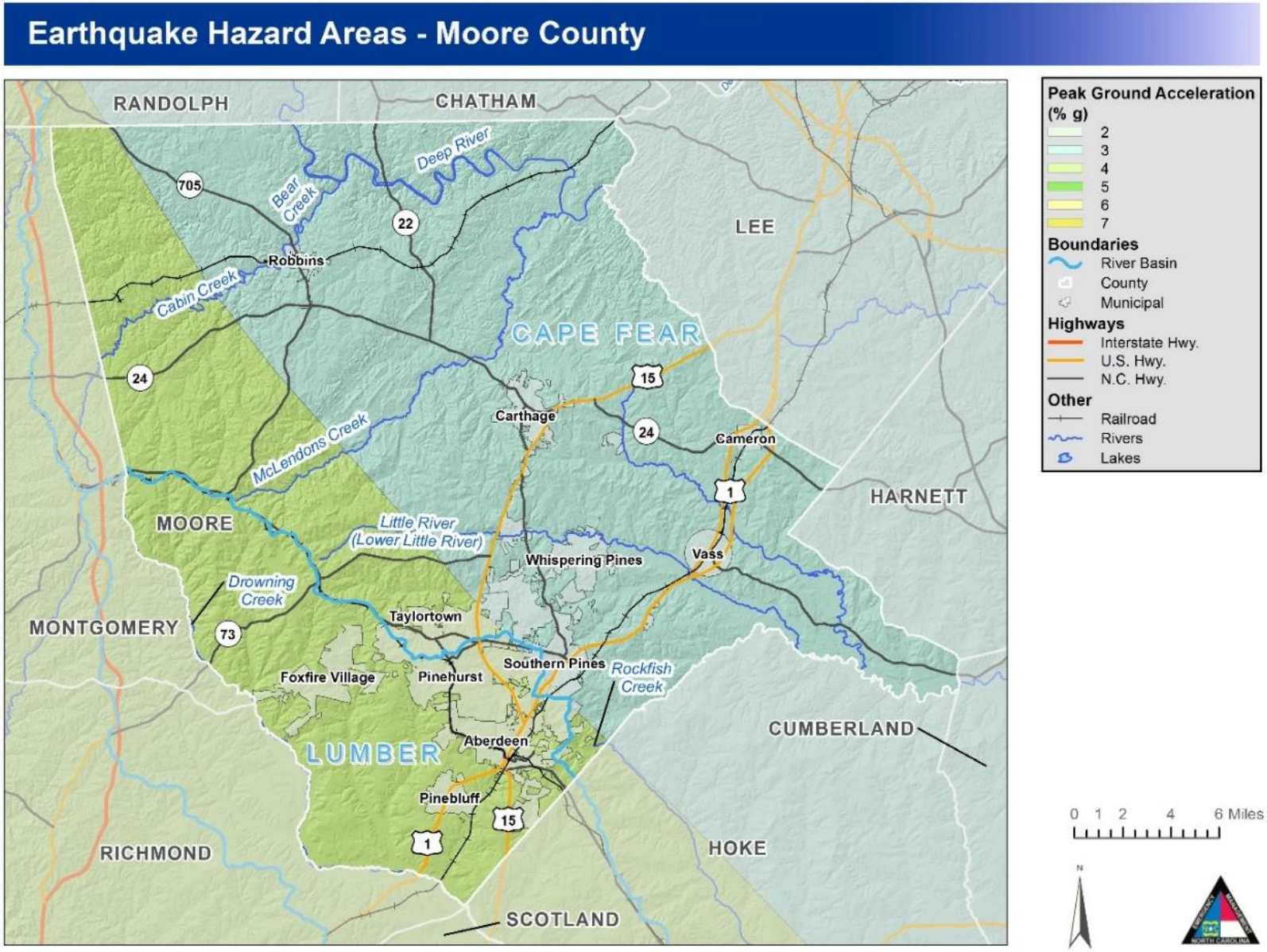
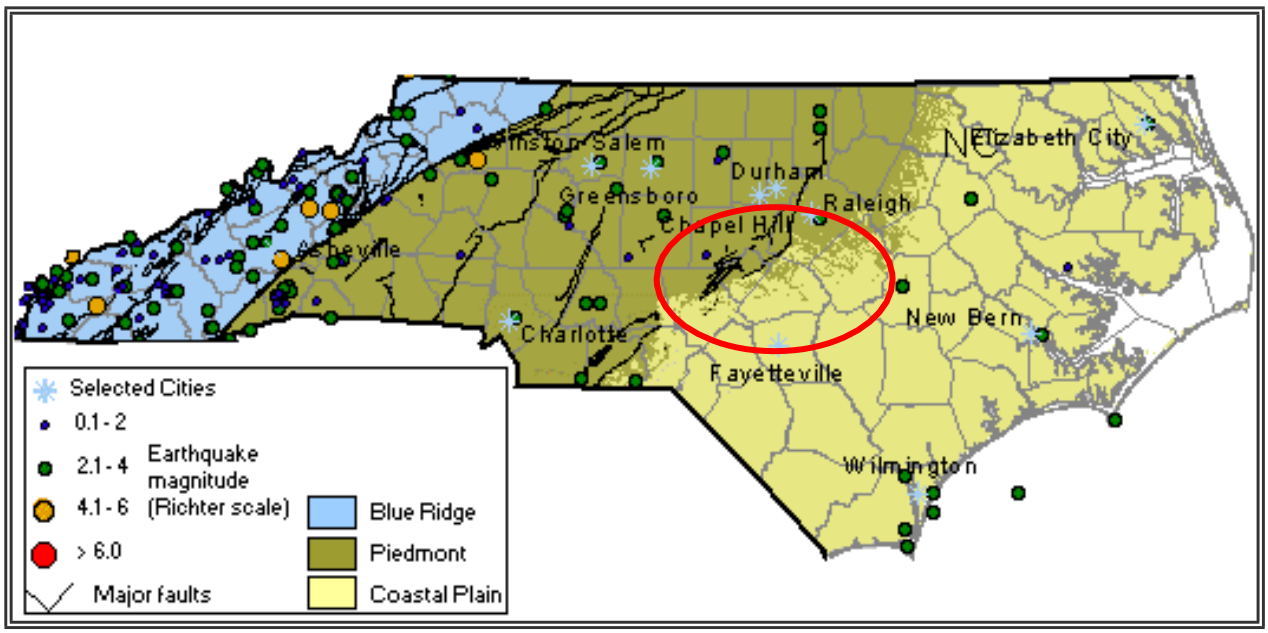


Figure 5-85: Earthquake Hazard Areas – Moore County

5.9.3 Extent

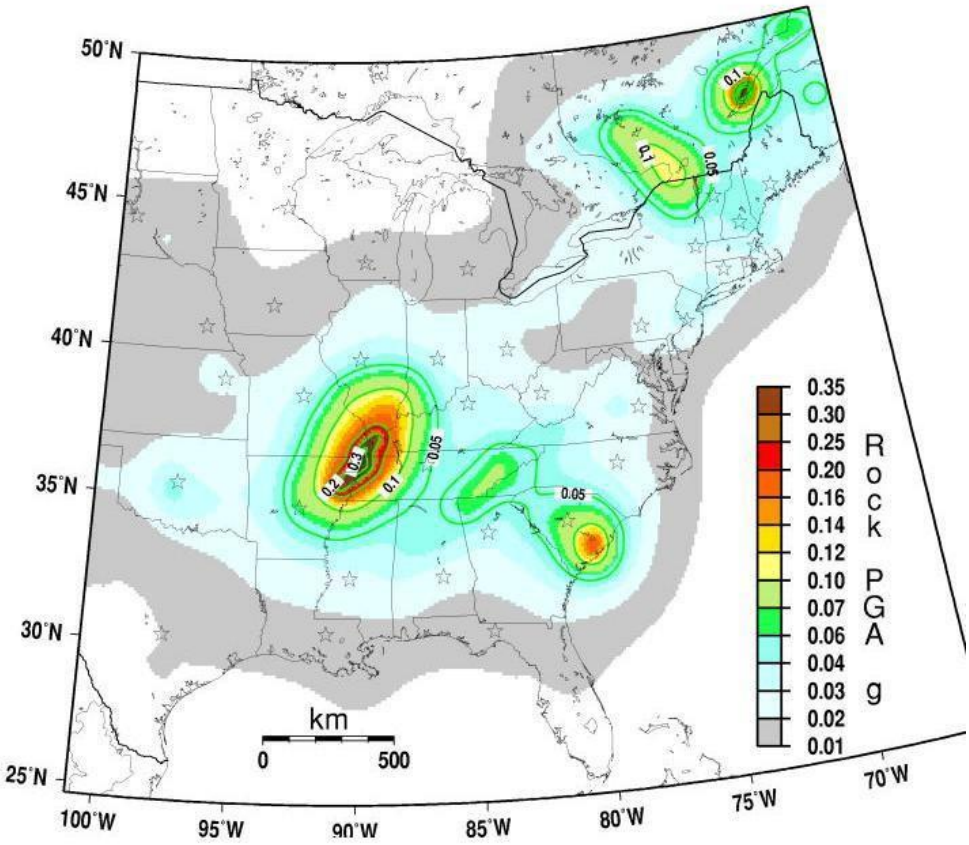
Location	Number of Occurrences	Greatest MMI Reported	Richter Scale Equivalent
Johnston County	1	IV	< 4.8
Selma	1	IV	< 4.8
Lee County	1	V	< 4.8
Unincorporated Area	1	V	< 4.8
Moore County	2	V	--
Carthage	1	V	< 4.8
Pinehurst	1	II	< 4.2
Cape Fear Regional Total	**4**	**V**	**< 4.8**



Source: North Carolina Geological Survey

Figure 5-86: Geological and Seismic Information for North Carolina

Figure 5-87 shows the intensity level associated with the Cape Fear Region, based on the national USGS map of peak acceleration with 10 percent probability of exceedance in 50 years. It is the probability that ground motion will reach a certain level during an earthquake. The data show peak horizontal ground acceleration (the fastest measured change in speed, for a particle at ground level that is moving horizontally due to an earthquake) with a 10 percent probability of exceedance in 50 years. The map was compiled by the U.S. Geological Survey (USGS) Geologic Hazards Team, which conducts global investigations of earthquake, geomagnetic, and landslide hazards. According to this map, all of the Cape Fear Region lies within an approximate zone of level "2" to "4" ground acceleration. This indicates that the region exists within an area of low to moderate seismic risk.



Source: United States Geological Survey, 2008

Figure 5-87: Peak Acceleration with 10 Percent Probability of Exceedance in 50 Years

5.9.4 Historical Occurrences

At least three earthquakes are known to have affected the Cape Fear Region since 1886. The strongest of these measured a V on the Modified Mercalli Intensity (MMI) scale. **Table 5-22** provides a summary of earthquake events reported by the National Geophysical Data Center between 1638 and 1985.

[17] Due to reporting mechanisms, not all earthquakes events were recorded during this time. Furthermore, some are missing data, such as the epicenter location, due to a lack of widely used technology. In these instances, a value of "unknown" is reported.

Table 5-22: Summary of Seismic Activity in Cape Fear Region

Location	Number of Occurrences	Greatest MMI Reported	Richter Scale Equivalent
Chatham County	**0**	**--**	**--**
Goldston	0	--	--
Pittsboro	0	--	--
Siler City	0	--	--
Unincorporated Area	0	--	--
Harnett County	**0**	**--**	**--**
Angier	0	--	--
Coats	0	--	--
Dunn	0	--	--
Erwin	0	--	--
Lillington	0	--	--
Unincorporated Area	0	--	--
Johnston County	**1**	**IV**	**< 4.8**
Archer Lodge	0	--	--
Benson	0	--	--
Clayton	0	--	--
Four Oaks	0	--	--
Kenly	0	--	--
Micro	0	--	--
Pine Level	0	--	--
Princeton	0	--	--
Selma	1	IV	< 4.8
Smithfield	0	--	--
Wilson's Mills	0	--	--
Unincorporated Area	0	--	--
Lee County	**0**	**--**	**--**
Broadway	0	--	--
Sanford	0	--	--
Unincorporated Area	0	--	---
Moore County	**2**	**V**	**--**
Aberdeen	0	--	--
Cameron	0	--	--

Location	Number of Occurrences	Greatest MMI Reported	Richter Scale Equivalent
Carthage	1	V	< 4.8
Foxfire Village	0	--	--
Pinebluff	0	--	--
Pinehurst	1	II	< 4.2
Robbins	0	--	--
Southern Pines	0	--	--
Taylortown	0	--	--
Vass	0	--	--
Whispering Pines	0	--	--
Unincorporated Area	0	--	--
Cape Fear Regional Total	**3**	**V**	**< 4.8**

Source: National Geophysical Data Center

In addition to those earthquakes specifically affecting the Cape Fear Region, a list of earthquakes that have caused damage throughout North Carolina is presented below in **Table 5-23.**

Table 5-23: Earthquakes Which Have Caused Damage in North Carolina

Date	Location	Richter Scale (Magnitude)	MMI (Intensity)	MMI in North Carolina
12/16/1811 - 1	NE Arkansas	8.5	XI	VI
12/16/1811 - 2	NE Arkansas	8.0	X	VI
12/18/1811 - 3	NE Arkansas	8.0	X	VI
01/23/1812	New Madrid, MO	8.4	XI	VI
02/071812	New Madrid, MO	8.7	XII	VI
04/29/1852	Wytheville, VA	5.0	VI	VI
08/31/1861	Wilkesboro, NC	5.1	VII	VII
12/23/1875	Central Virginia	5.0	VII	VI
08/31/1886	Charleston, SC	7.3	X	VII
05/31/1897	Giles County, VA	5.8	VIII	VI
01/01/1913*	Union County, SC	4.8	VII	VI
02/21/1916*	Asheville, NC	5.5	VII	VII
07/08/1926	Mitchell County, NC	5.2	VII	VII
11/03/1928*	Newport, TN	4.5	VI	VI
05/13/1957*	McDowell County, NC	4.1	VI	VI

Date	Location	Richter Scale (Magnitude)	MMI (Intensity)	MMI in North Carolina
07/02/1957	Buncombe County, NC	3.7	VI	VI
11/24/1957	Jackson County, NC	4.0	VI	VI
10/27/1959 **	Chesterfield, SC	4.0	VI	VI
07/13/1971	Newry, SC	3.8	VI	VI
11/30/1973*	Alcoa, TN	4.6	VI	VI
11/13/1976	Southwest Virginia	4.1	VI	VI
05/05/1981	Henderson County, NC	3.5	VI	VI

*This event is accounted for in the Cape Fear occurrences.
** Conflicting reports on this event, intensity in North Carolina could have been either V or VI
Source: This information compiled by Dr. Kenneth B. Taylor and provided by Tiawana Ramsey of NCEM. Information was compiled from the National Earthquake Center, Earthquakes of the US by Carl von Hake (1983), and a compilation of newspaper reports in the Eastern Tennessee Seismic Zone compiled by Arch Johnston, CERI, Memphis State University (1983).

5.9.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Earthquake is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Less Than 4% Annual Probability Of 500-Year Earthquake
- Between 4% And 20% Annual Probability Of 500-Year Earthquake
- More Than 20% Annual Probability Of 500-Year Earthquake

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
City of Dunn	Low
City of Sanford	Low
Harnett County (Unincorporated Area)	Low
Johnston County (Unincorporated Area)	Low
Lee County (Unincorporated Area)	Low
Moore County (Unincorporated Area)	Low
Town of Aberdeen	Low
Town of Angier	Low
Town of Archer Lodge	Low
Town of Benson	Low
Town of Broadway	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Cameron	Low
Town of Carthage	Low
Town of Clayton	Low
Town of Coats	Low
Town of Erwin	Low
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Low
Town of Lillington	Low
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Low
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Low
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Low
Town of Taylortown	Low
Town of Vass	Low
Town of Wilson's Mills	Low
Village of Foxfire	Low
Village of Pinehurst	Low
Village of Whispering Pines	Low

The probability of significant, damaging earthquake events affecting the Cape Fear Region is unlikely. It is also unlikely that future earthquakes resulting in light to moderate perceived shaking and damages ranging from none to very light will affect the region. The annual probability level for the region is estimated less than 1 percent (unlikely).

5.9.6 Impact

People

Earthquakes in the region generally are not high impact events that cause injury or death. The public may typically experience some shaking in these events and the greatest threat to health and well-being

is often from objects falling from shelves. All jurisdictions in the Region are equally vulnerable to this impact.

First Responders

A moderate earthquake is unlikely to damage infrastructure such as roads, bridges, or gas/power/water lines. Therefore, there would be little impact to first responders in the event of a moderate earthquake in the Region.

Continuity of Operations

There would likely be little disruption to services or operations due to a moderate earthquake.

Built Environment

Buildings can be damaged by the shaking itself or by the ground beneath them settling to a different level than it was before the earthquake (subsidence). Buildings can even sink into the ground if soil liquefaction occurs. If a structure (a building, road, etc.) is built across a fault, the ground displacement during an earthquake could seriously damage that structure. An earthquake can also break dams or levees along a river. The water from the river or the reservoir would then flood the area, damaging buildings and possibly drowning people. Finally, fires can be started by broken gas lines and power lines. Fires can be a serious problem, especially if the water lines that feed the fire hydrants have been damaged as well. Historically, the Region has not been impacted by an earthquake with more than a moderate intensity so damage to the built environment is unlikely.

Economy

Economic losses associated with an earthquake include property damage, business interruption costs, and costs to repair damaged utilities and infrastructure. Historically, there have been no economic losses associated with earthquakes in the Region.

Natural Environment

A moderate earthquake is unlikely to cause substantial impacts to the natural environment in the Region. Impacts to the built environment (e.g. ruptured gas line) could damage the surrounding environment. However, this type damage is unlikely based on historical occurrences.

HYDROLOGIC HAZARDS

5.10 Dam and Levee Failure

5.10.1 Background

Worldwide interest in dam and levee safety has risen significantly in recent years. Aging infrastructure, new hydrologic information, and population growth in floodplain areas downstream from dams and near levees have resulted in an increased emphasis on safety, operation, and maintenance.

There are approximately 84,000 dams in the United States today, the majority of which are privately owned. Other owners include state and local authorities, public utilities, and federal agencies. The benefits of dams are numerous: they provide water for drinking, navigation, and agricultural irrigation. Dams also provide hydroelectric power, create lakes for fishing and recreation, and save lives by preventing or reducing floods.

Though dams have many benefits, they also can pose a risk to communities if not designed, operated, and maintained properly. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and great property damage if development exists

downstream. If a levee breaks, scores of properties may become submerged in floodwaters and residents may become trapped by rapidly rising water. The failure of dams and levees has the potential to place large numbers of people and great amounts of property in harm's way.

5.10.2 Location and Spatial Extent

The North Carolina Division of Energy, Mineral, and Land Resources provides information on dams, including a hazard potential classification. There are three hazard classifications—high, intermediate, and low—that correspond to qualitative descriptions and quantitative guidelines. **Table 5-24** explains these classifications.

Table 5-24: North Carolina Dam Hazard Classifications

Hazard Classification	Description	Quantitative Guidelines
Low	Interruption of road service, low volume roads	Less than 25 vehicles per day
	Economic damage	Less than $30,000
Intermediate	Damage to highways, Interruption of service	25 to less than 250 vehicles per day
	Economic damage	$30,000 to less than $200,000
High	Loss of human life*	Probable loss of 1 or more human lives
	Economic damage	More than $200,000
	*Probable loss of human life due to breached roadway or bridge on or below the dam.	250 or more vehicles per day

Source: North Carolina Division of Energy, Mineral, and Land Resources

The figures below show counts and locations of high and intermediate hazard dams in each participating jurisdiction.

Table 5-25: Counts of High Hazard and Intermediate Hazard Dams by Jurisdiction

Jurisdiction	High	Intermediate
Chatham		
Chatham County (Unincorporated Area)	12	5
Town of Pittsboro	0	1
Town of Siler City	2	0
Subtotal Chatham	*14*	*6*
Harnett		
City of Dunn	2	0
Harnett County (Unincorporated Area)	16	1
Town of Angier	1	0
Town of Benson	0	1
Town of Broadway	0	2

Jurisdiction	High	Intermediate
Town of Lillington	2	0
Subtotal Harnett	*21*	*4*
Johnston		
Johnston County (Unincorporated Area)	3	8
Town of Archer Lodge	0	1
Town of Four Oaks	2	0
Subtotal Johnston	*5*	*9*
Lee		
City of Sanford	4	3
Lee County (Unincorporated Area)	4	3
Subtotal Lee	*8*	*6*
Moore		
Moore County (Unincorporated Area)	18	0
Town of Aberdeen	2	0
Town of Pinebluff	1	0
Town of Southern Pines	11	0
Town of Taylortown	1	0
Town of Vass	1	0
Village of Pinehurst	8	0
Village of Whispering Pines	7	0
Subtotal Moore	*49*	*0*
TOTAL PLAN	**97**	**25**

Source: North Carolina Dams Program, North Carolina Department of Environment and Natural Resources (NCDENR).

According to the North Carolina Division of Energy, Mineral, and Land Resources, there are 518 dams in the Cape Fear Region.[6] **Figure 5-88** shows the dam location and the corresponding hazard ranking for each. Of these dams, 124 are classified as high hazard potential. These high hazard dams are summarized by county in **Table 5-26**

Table 5-26: Summary of High Hazard Dam Location

[6] The dam inventory (as of 11/19/19) for North Carolina was obtained from the North Carolina Division of Energy, Mineral, and Land Resources at https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/dam-safety.

Location	Number High Hazard Dams
Chatham County	20
Harnett County	28
Johnston County	10
Lee County	10
Moore County	55
Cape Fear Region Total	**124**

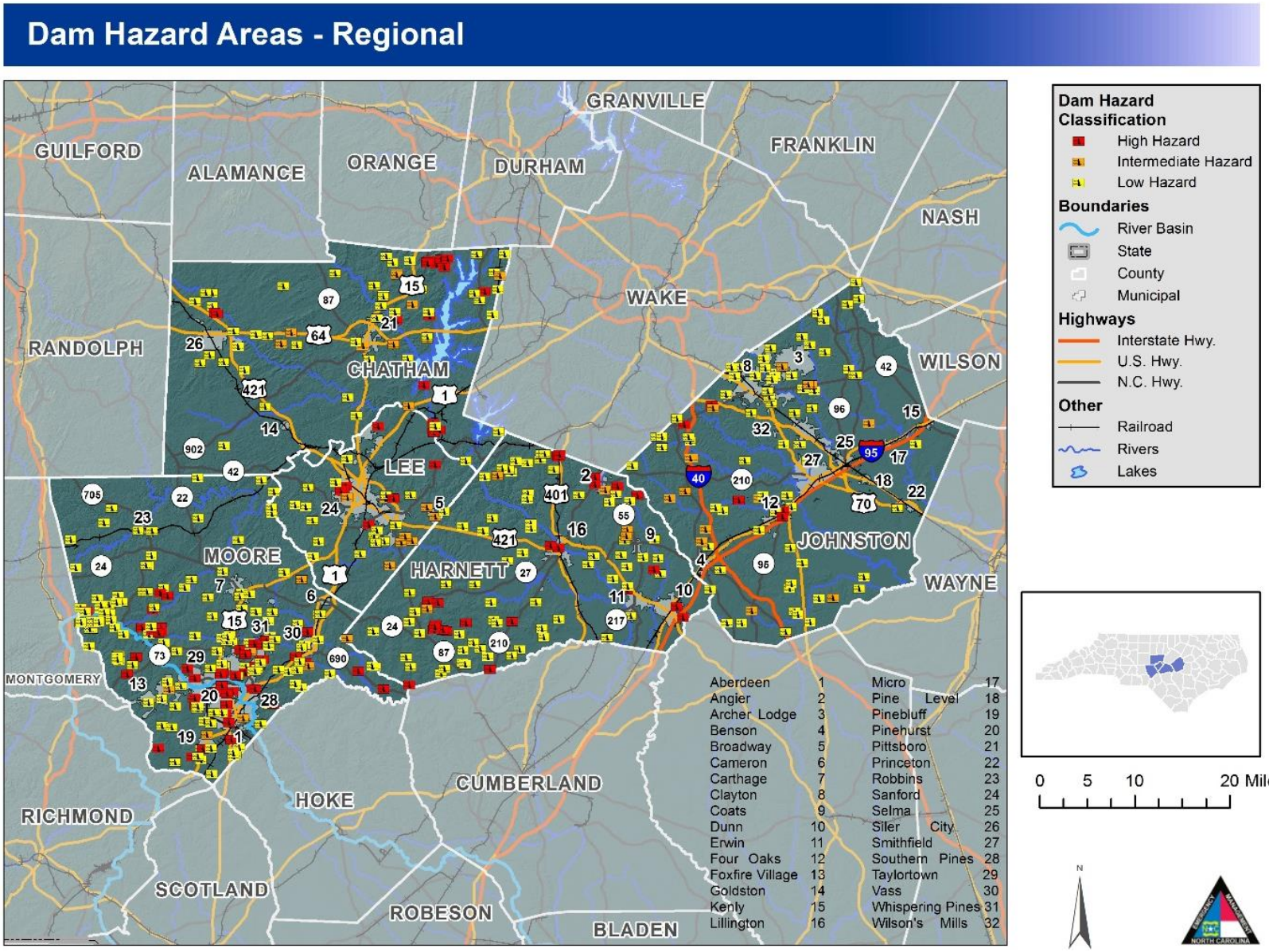


Figure 5-88: Cape Fear Region Dam Location and Hazard Ranking

It should be noted that dam regulations for classifying dams was recently changed. As a result, generally more dams are classified as high hazard.

5.10.3 Extent

Two factors influence the potential severity of a dam failure: the amount of water impounded, and the density, type, and value of development and infrastructure located downstream. The potential extent of dam failure may be classified according to their "hazard potential," meaning the probable damage that would occur if the structure failed, in terms of loss of human life and economic loss or environmental damage. The State of North Carolina classifies dam structures under its regulations according to hazard potential as described in **Table 5-27** It is important to note that these classifications are not based on the adequacy or structural integrity of existing dam structures. There were no reported dam failures in the Region and all its jurisdictions. Mitigation strategy regarding dam identification and mapping will be considered in future mitigation actions for the Region.

Table 5-27: North Carolina Dam Hazard Classifications

Hazard Classification	Description	Quantitative Guidelines
Low	Interruption of road service, low volume roads	Less than 25 vehicles per day
	Economic damage	Less than $30,000
Intermediate	Damage to highways, Interruption of service	25 to less than 250 vehicles per day
	Economic damage	$30,000 to less than $200,000
High	Loss of human life*	Probable loss of 1 or more human lives
	Economic damage	More than $200,000
	*Probable loss of human life due to breached roadway or bridge on or below the dam.	250 or more vehicles per day

Source: North Carolina Division of Land Resources

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
Harnett County (Unincorporated Area)	Low
Johnston County (Unincorporated Area)	Low
Lee County (Unincorporated Area)	Low
Moore County (Unincorporated Area)	Low

5.10.4 Historical Occurrences

There have been two dam breaches reported in the Cape Fear Region, both in Johnston County. Although no damage was reported with these events, several breach scenarios in the region could be catastrophic.

Additionally, according to the North Carolina State Hazard Mitigation Plan, there were 15 dam breaks reported across Eastern North Carolina following Hurricane Fran in 1996 and another 36 failures as a result of Hurricane Floyd in 1999. County-specific information is not available to determine if any of these breaks occurred in the Cape Fear Region.

The information below identifies additional historical anecdotal information reported by the jurisdictions.

Chatham County

No dam failures have been reported in Chatham County; however, failure of one or more of the high hazard dams due to high rain precipitation or other events could result in significant damage to downstream properties and the possible loss of human life.

Harnett County

No information on past dam failure events in the county was provided.

Johnston County

Two dam breaches were reported, one at Keen Lake Dam #1 and one at Austin Lake Dam. There is little information provided about these two events and no date of occurrence or damage associated with these dam failures is identified.

Lee County

No information on past dam failure events in the county was provided.

Moore County

No information on past dam failure events in the county was provided.

5.10.5 Probability of Future Occurrence

Based on the analyses performed in IRISK, the probability of future Dam Failure is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
City of Dunn	Low
City of Sanford	Low
Harnett County (Unincorporated Area)	Low
Johnston County (Unincorporated Area)	Low
Lee County (Unincorporated Area)	Low
Moore County (Unincorporated Area)	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Aberdeen	Low
Town of Angier	Low
Town of Archer Lodge	Low
Town of Benson	Low
Town of Broadway	Low
Town of Cameron	Low
Town of Carthage	Low
Town of Clayton	Low
Town of Coats	Low
Town of Erwin	Low
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Low
Town of Lillington	Low
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Low
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Low
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Low
Town of Taylortown	Low
Town of Vass	Low
Town of Wilson's Mills	Low
Village of Foxfire	Low
Village of Pinehurst	Low
Village of Whispering Pines	Low

Given the current dam inventory and historic data, a dam breach is unlikely (less than 1 percent annual probability) in the future. However, as has been demonstrated in the past, regular monitoring is

necessary to prevent these events. No further analysis will be completed in Section 6: *Vulnerability Assessment* as more sophisticated dam breach plans (typically completed by the U.S. Army Corp of Engineers) have been completed for dams of concern in the region.

5.10.6 Impact

People

A person's immediate vulnerability to a dam failure is directly associated with the person's distance downstream of the dam as well as proximity to the stream carrying the floodwater from the failure. For dams that have an Emergency Action Plan (EAP), the vulnerability off loss of life for persons in their homes or on their property may be mitigated by following the EAP evacuation procedures; however, the displaced persons may still incur sheltering costs. For persons located on the river (e.g. for recreation) the vulnerability of loss of life is significant.

The dams in the Region do not provide drinking water supply. As a result, the Region is not at risk of major public health threats posed by the disruption of drinking water supply from dam failure. However, the population is vulnerable to minor impacts including the loss of the aesthetic or recreational use of the lakes upstream of dams following failure. Johnston County and the jurisdictions of Four Oaks and Benson are most vulnerable to dam breaches due to past occurrences.

First Responders

For dams that fail slowly, first responders will be impacted similarly to other events that have advance warning. For dams that fail without prior warning, the impact is rapid and severe, requiring rapid response to the impacts. Although the response is generally restricted to the stream below the dam, the location of impact moves rapidly downstream requiring multiple response locations.

Continuity of Operations

Unless critical infrastructure or facilities essential to the operation of government are located in the impact area of the inundation area downstream of the dam, continuity of operations will likely not be disrupted. Emergency response, emergency management and law enforcement officials may have resources stretched or overwhelmed in the failure of a large dam.

Built Environment

Vulnerability to the built environment includes damage to the dam itself and any man-made feature located within the inundation area caused by the dam failure. Downstream of the dam, vulnerability includes potential damage to homes, personal property, commercial buildings and property, and government owned buildings and property; destruction of bridge or culvert crossings; weakening of bridge supports through scour; and damage or destruction of public or private infrastructure that cross the stream such as water and sewer lines, gas lines and power lines. Water dependent structures on the lake upstream of the dam, such as docks/piers, floating structures or water intake structures, may be damaged by the rapid reduction in water level during the failure.

Economy

Economic impact from small dams is generally small and impact is often limited to dam owner and the cost of first responder activities. Large failures can disrupt the economy through displacement of workers, damage to commercial employment centers or destruction of infrastructure that impacts commercial activities or access to other economic drivers.

Natural Environment

Aquatic species within the lake will either be displaced or destroyed. The velocity of the flood wave will likely destroy riparian and instream vegetation and destroy wetland function. The flood wave will like cause erosion within and adjacent to the stream. Deposition of eroded deposits may choke instream habitat or disrupt riparian areas. Sediments within the lake bottom and any low oxygen water from within the lake will be dispersed, potentially causing fish kills or releasing heavy metals found in the lake sediment layers.

5.11 Flood

5.11.1 Background

According to the Natural Resources Defense Council (NRDR), floods are the most common (and often most deadly) natural disasters in the United States. Between 2019 and 2018, North Carolina alone experienced 47 flood fatalities.[7] The effects of floods account for nearly 90 percent of damage resulting from natural disasters. In addition, floods represent the majority of Presidential disaster declarations.[8]

Floods generally result from excessive precipitation and can be classified under two categories: general floods, precipitation over a given river basin for a long period of time along with storm-induced wave action, and flash floods, the product of heavy localized precipitation in a short time period over a given location. The severity of a flooding event is typically determined by a combination of several major factors, including stream and river basin topography and physiography, precipitation and weather patterns, recent soil moisture conditions, and the degree of vegetative clearing and impervious surface.

General floods are usually long-term events that may last for several days. The primary types of general flooding include riverine, coastal, and urban flooding. Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, and other large coastal storms. Urban flooding occurs where manmade development has obstructed the natural flow of water and decreased the ability of natural groundcover to absorb and retain surface water runoff.

Most flash flooding is caused by slow-moving thunderstorms in a local area or by heavy rains associated with hurricanes and tropical storms. However, flash flooding events may also occur from a dam or levee failure within minutes or hours of heavy amounts of rainfall or from a sudden release of water held by a retention basin or other stormwater control facility. Although flash flooding occurs most often along mountain streams, it is also common in urbanized areas where much of the ground is covered by impervious surfaces.

The periodic flooding of lands adjacent to rivers, streams, and shorelines (land known as a floodplain) is a natural and inevitable occurrence that can be expected to take place based upon established recurrence intervals. The recurrence interval of a flood is defined as the average time interval, in years, expected between a flood event of a particular magnitude and an equal or larger flood. Flood magnitude increases with increasing recurrence interval.

Floodplains are designated by the frequency of the flood that is large enough to cover them. For example, the 10-year floodplain will be covered by the 10-year flood and the 100-year floodplain by the 100-year flood. Flood frequencies, such as the 100-year flood, are determined by plotting a graph of the

[7] 2010-2018 Flood Fatalities in the United States, NOAA/National Weather Service. Retrieved from: https://www.weather.gov/arx/usflood

[8] U.S. Geological Survey Water-supply Paper, 1991, Issue 2375.

size of all known floods for an area and determining how often floods of a particular size occur. Another way of expressing the flood frequency is the chance of occurrence in a given year, which is the percentage of the probability of flooding each year. For example, the 100-year flood has a 1 percent chance of occurring in any given year and the 500-year flood has a 0.2 percent chance of occurring in any given year.

5.11.2 Location and Spatial Extent

There are areas in the Cape Fear Region that are susceptible to flood events. Special flood hazard areas in the Cape Fear Region were mapped using Geographic Information System (GIS) and FEMA Digital Flood Insurance Rate Maps (DFIRM). This includes Zone A (1-percent annual chance floodplain), Zone AE (1-percent annual chance floodplain with elevation), Zone X500 (0.2-percent annual chance floodplain). According to GIS analysis, of the 3,070 square miles that make up the Cape Fear Region (including the area of Chatham County, Harnett County, Johnston County, Lee County, and Moore County), there are 330.7 square miles of land in zones A and AE (1-percent annual chance floodplain/100-year floodplain) and 21.4 square miles of land in zone X500 (0.2-percent annual chance floodplain/500-year floodplain). The county totals are presented below in **Table 5-26**.

Table 5-28: Summary of Floodplain Areas in the Cape Fear Region

Location	100-year area (square miles)	500-year area (square miles)
Chatham County	73.1	0.4
Harnett County	52.9	11.8
Johnston County	126.0	7.8
Lee County	24.5	0.3
Moore County	54.2	1.1
Cape Fear Region Total	**330.7**	**21.4**

These flood zone values account for 11.5 percent of the total land area in the Cape Fear Region. It is important to note that while FEMA digital flood data is recognized as best available data for planning purposes, it does not always reflect the most accurate and up-to-date flood risk. Flooding and flood-related losses often do occur outside of delineated special flood hazard areas. **Figure 5-89** illustrates the location and extent of currently mapped special flood hazard areas for the Cape Fear Region based on best available FEMA DFIRM data. The Town of Goldston dooes not have a Special Flood Hazard Area and therefore have not been mapped.

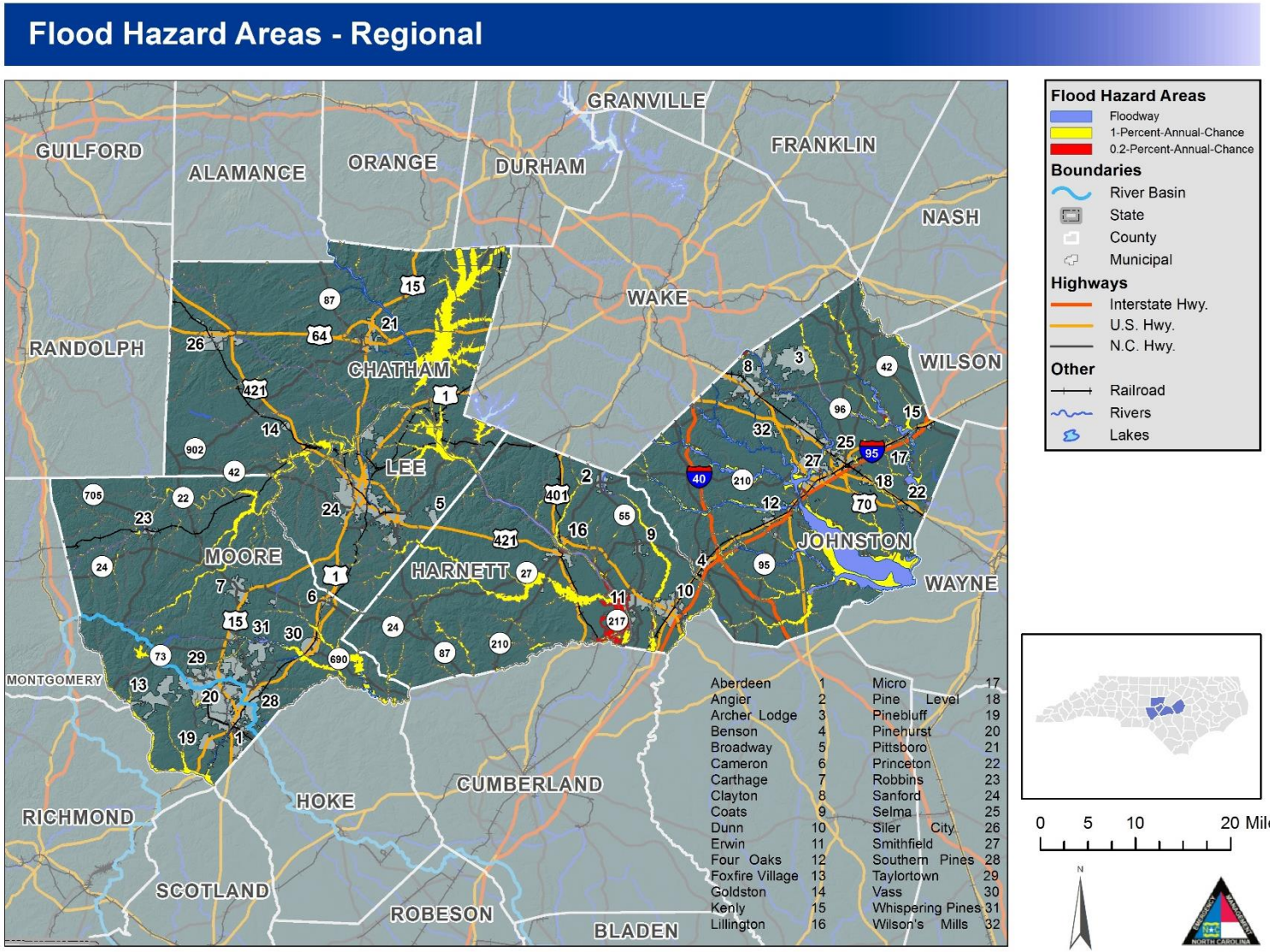


Figure 5-89: Special Flood Hazard Areas in the Cape Fear Region

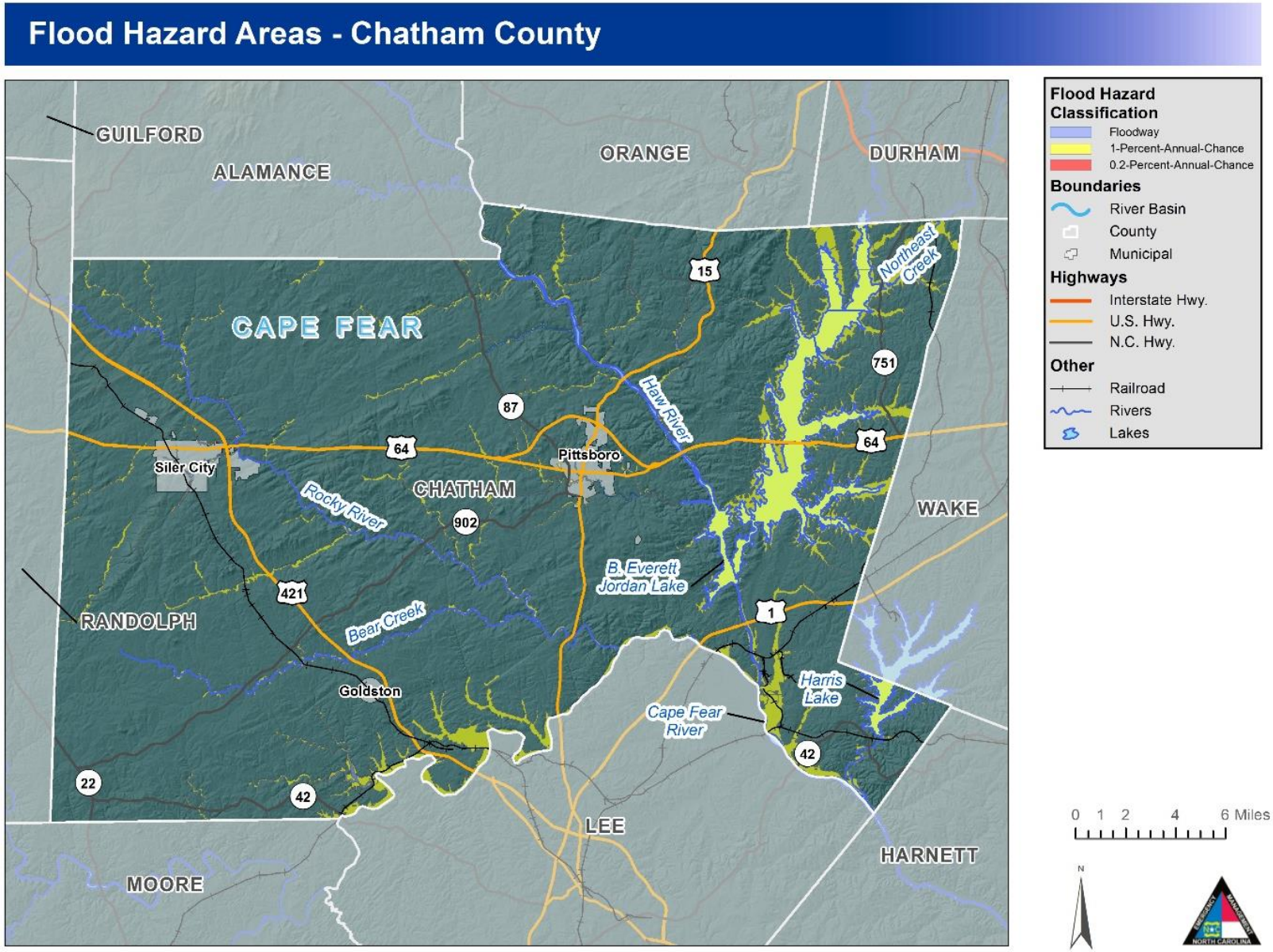


Figure 5-90: Flood Hazard Areas – Chatham County

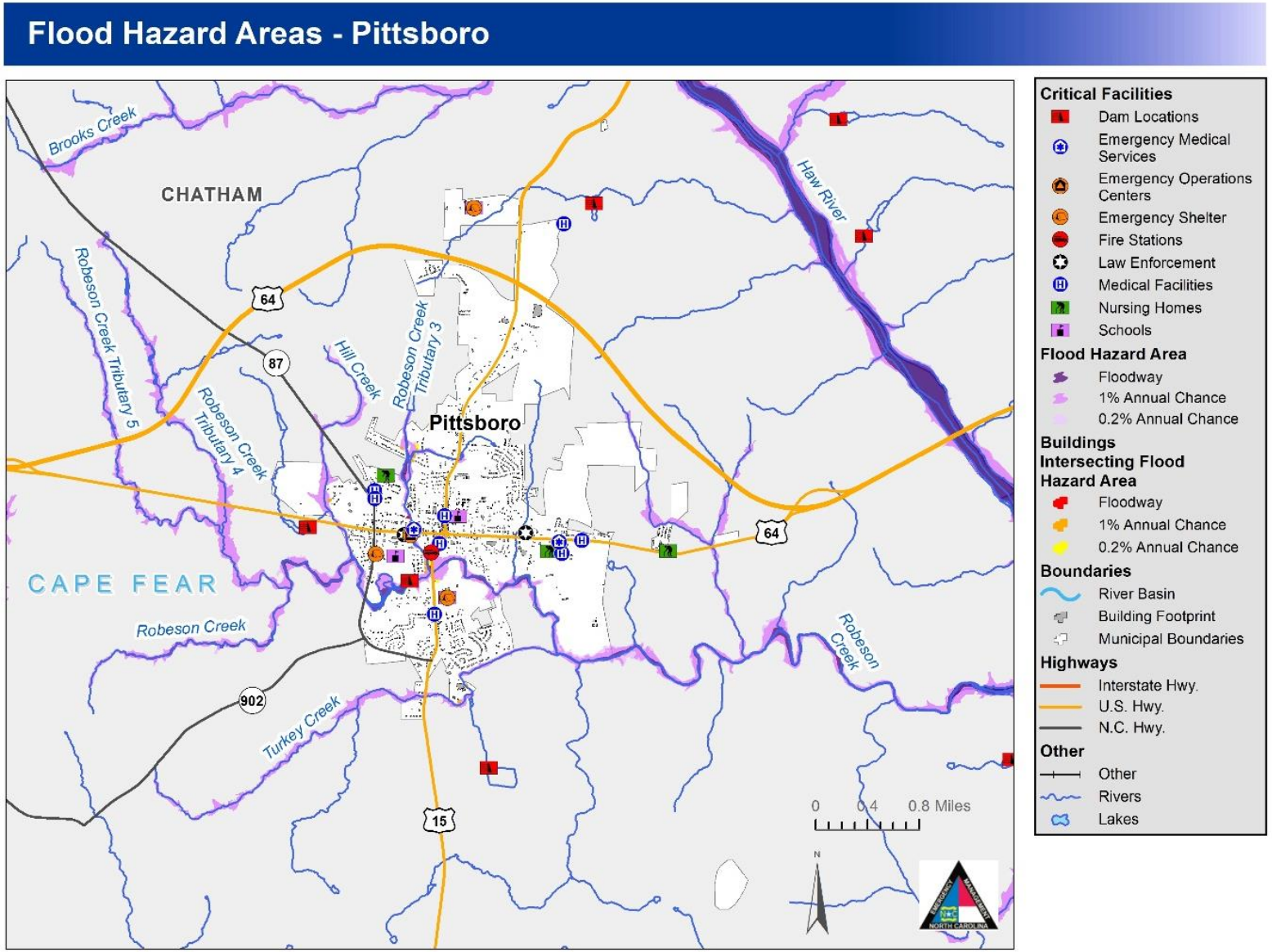


Figure 5-91: Flood Hazard Areas - Pittsboro

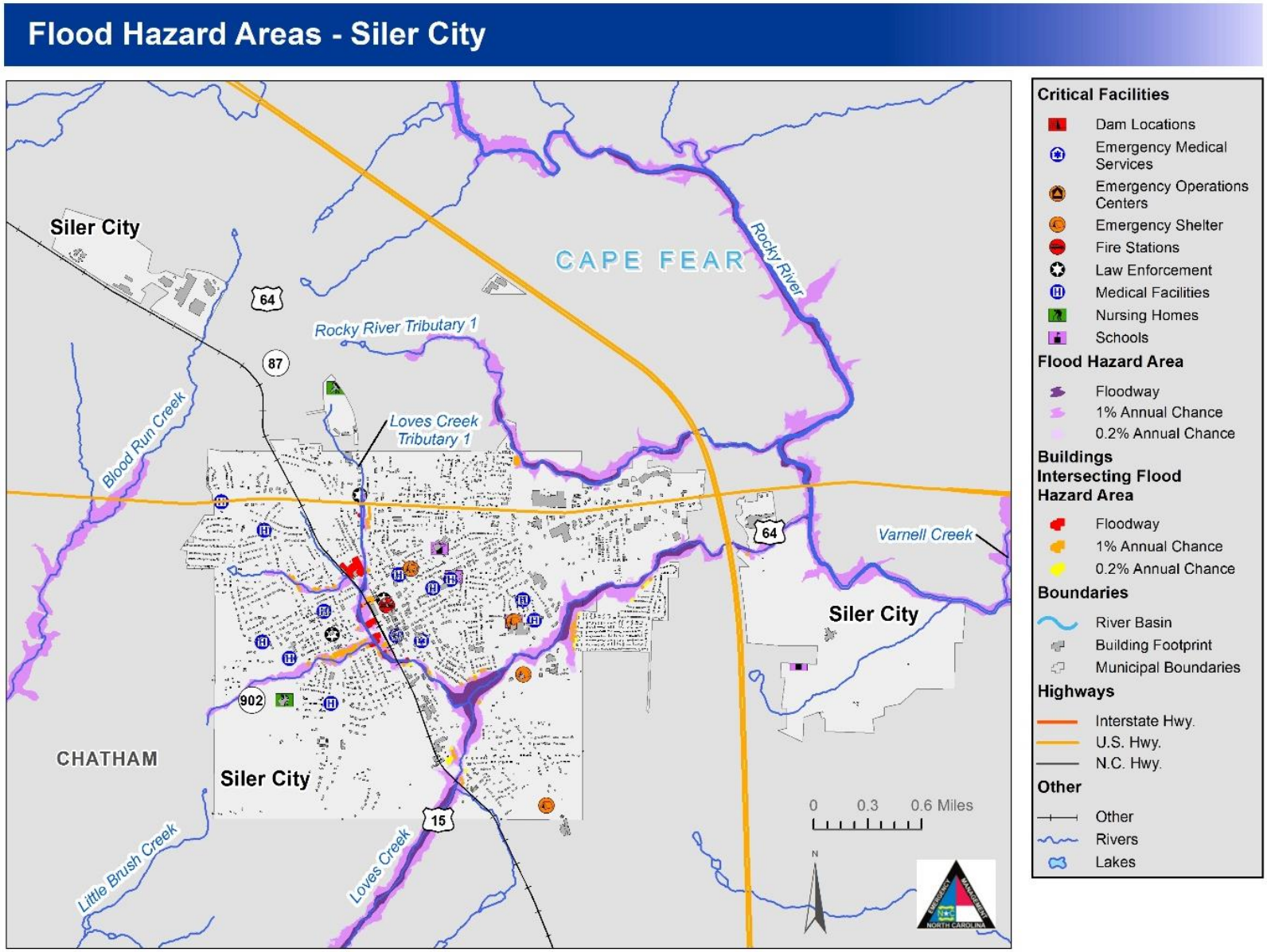


Figure 5-92: Flood Hazard Areas – Siler City

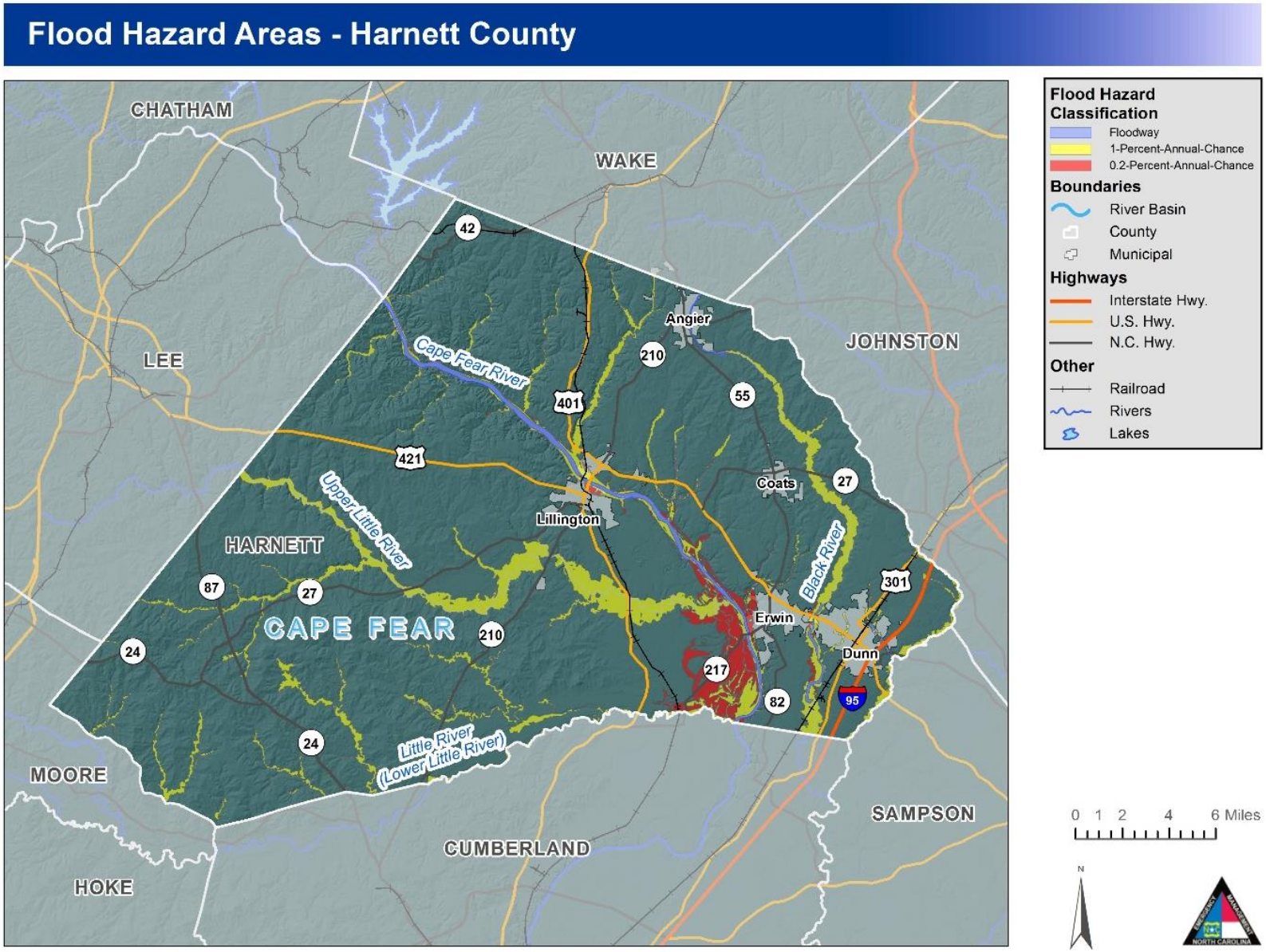


Figure 5-93: Flood Hazard Areas – Harnett County

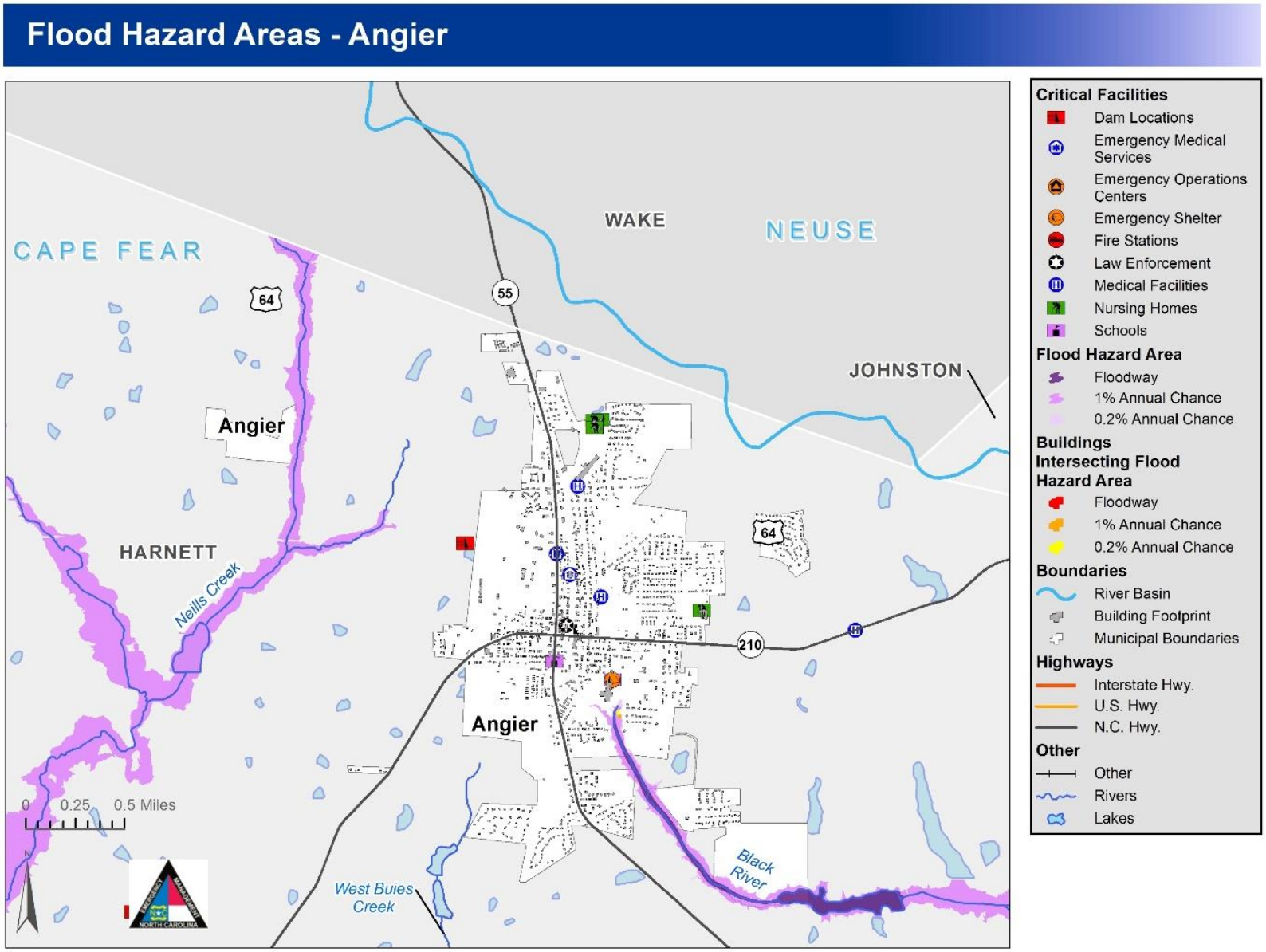


Figure 5-94: Flood Hazard Areas – Angier

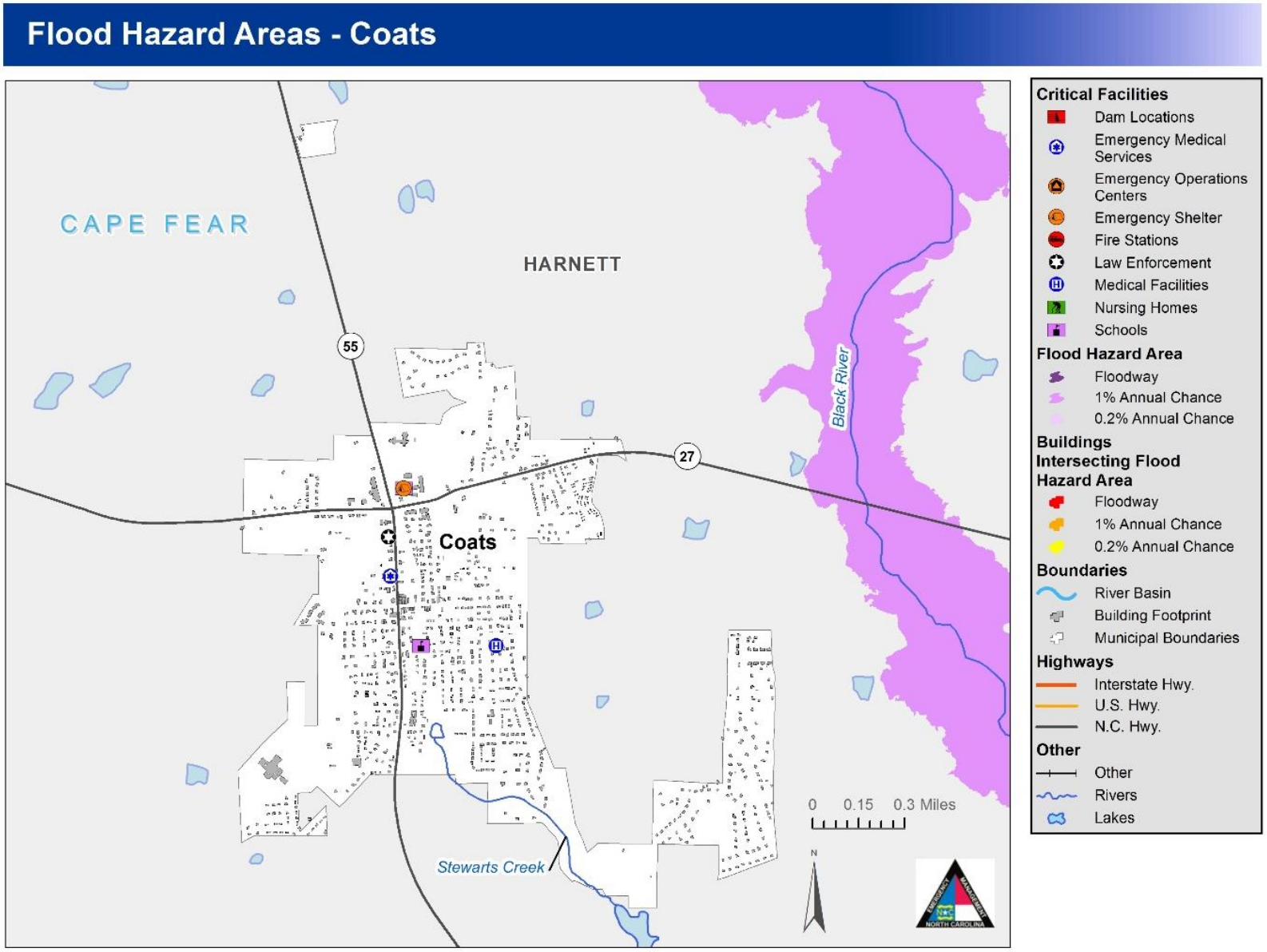


Figure 5-95: Flood Hazard Areas – Coats

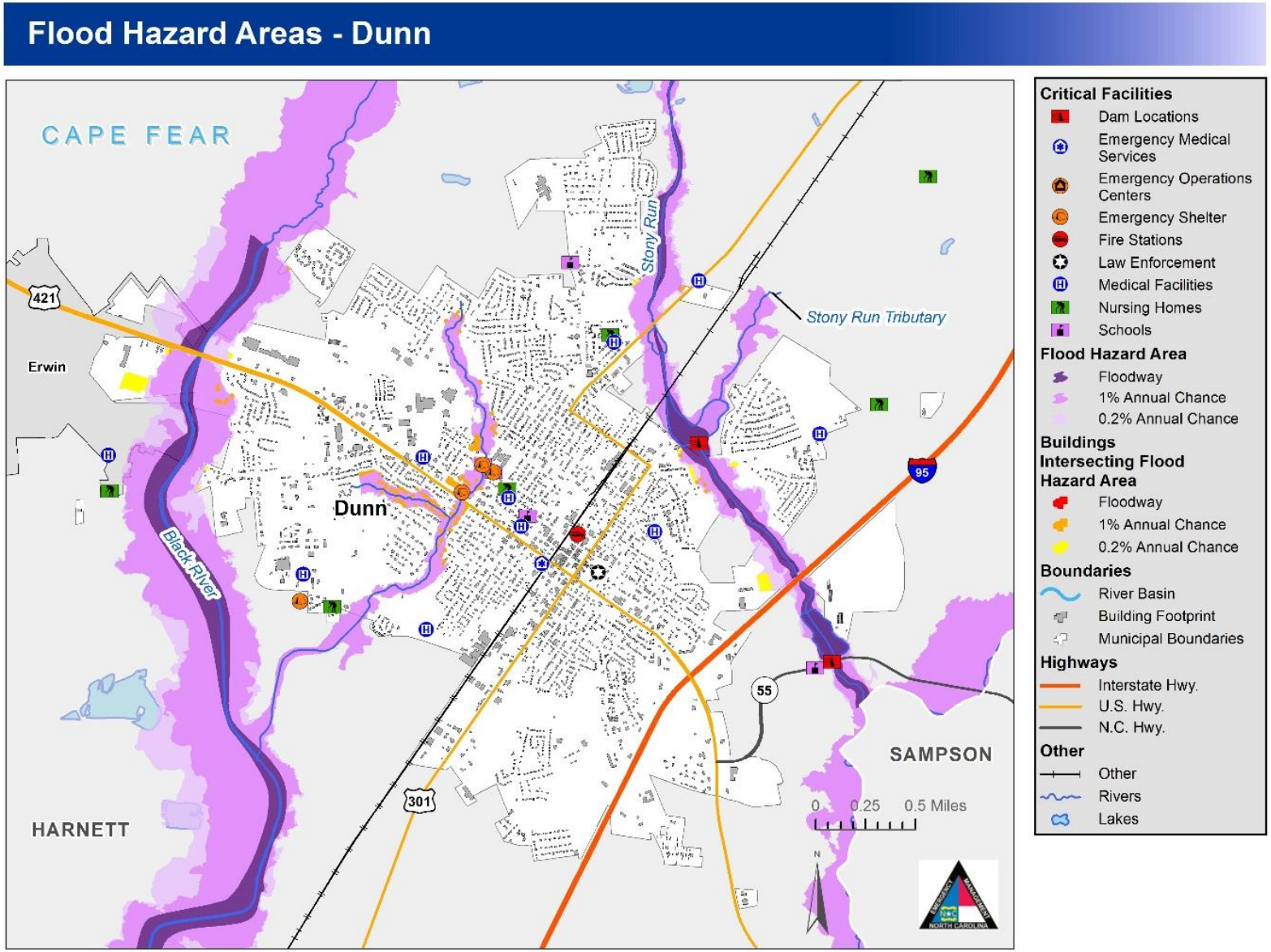


Figure 5-96: Flood Hazard Areas – Dunn

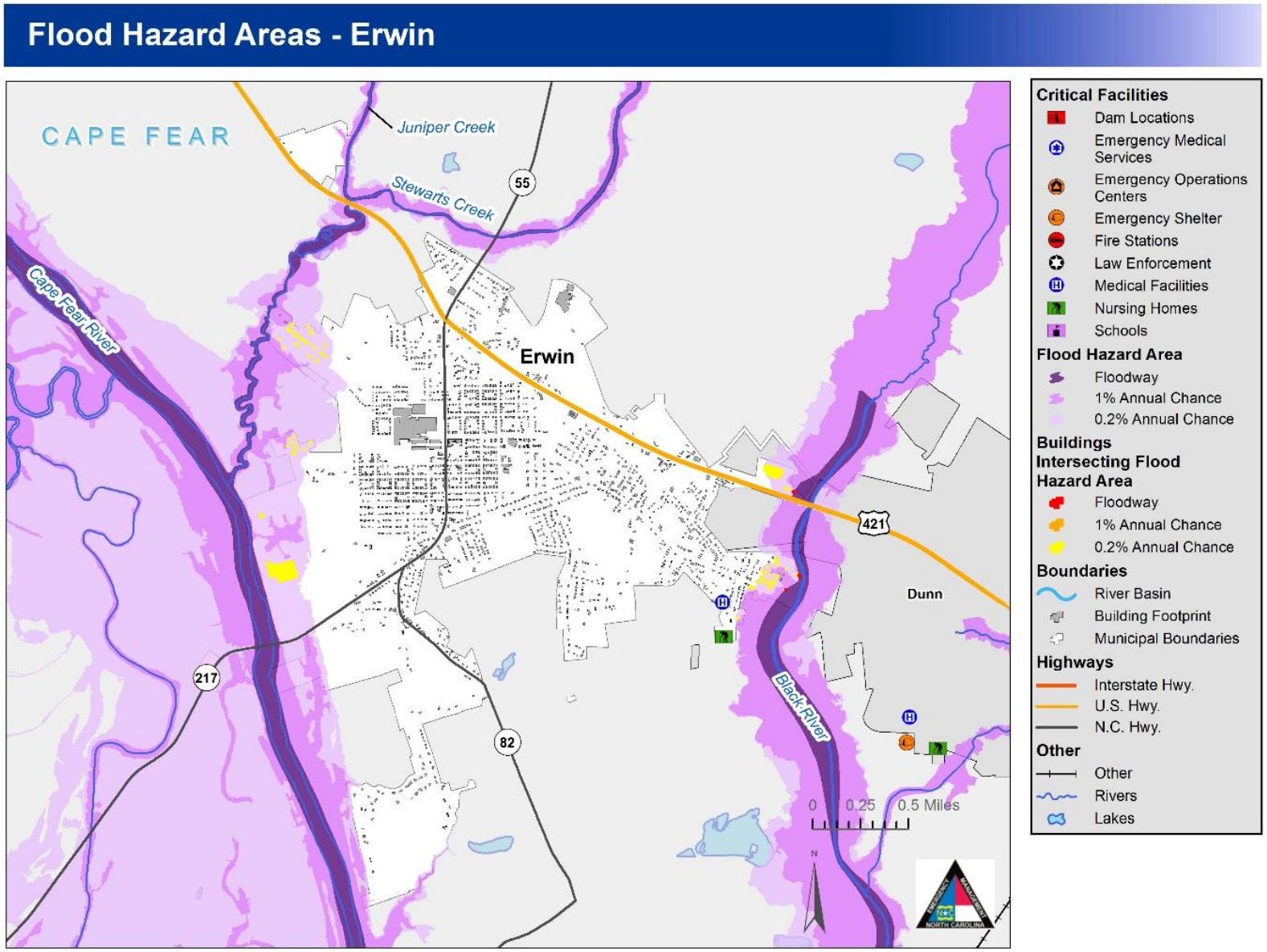


Figure 5-97: Flood Hazard Areas – Erwin

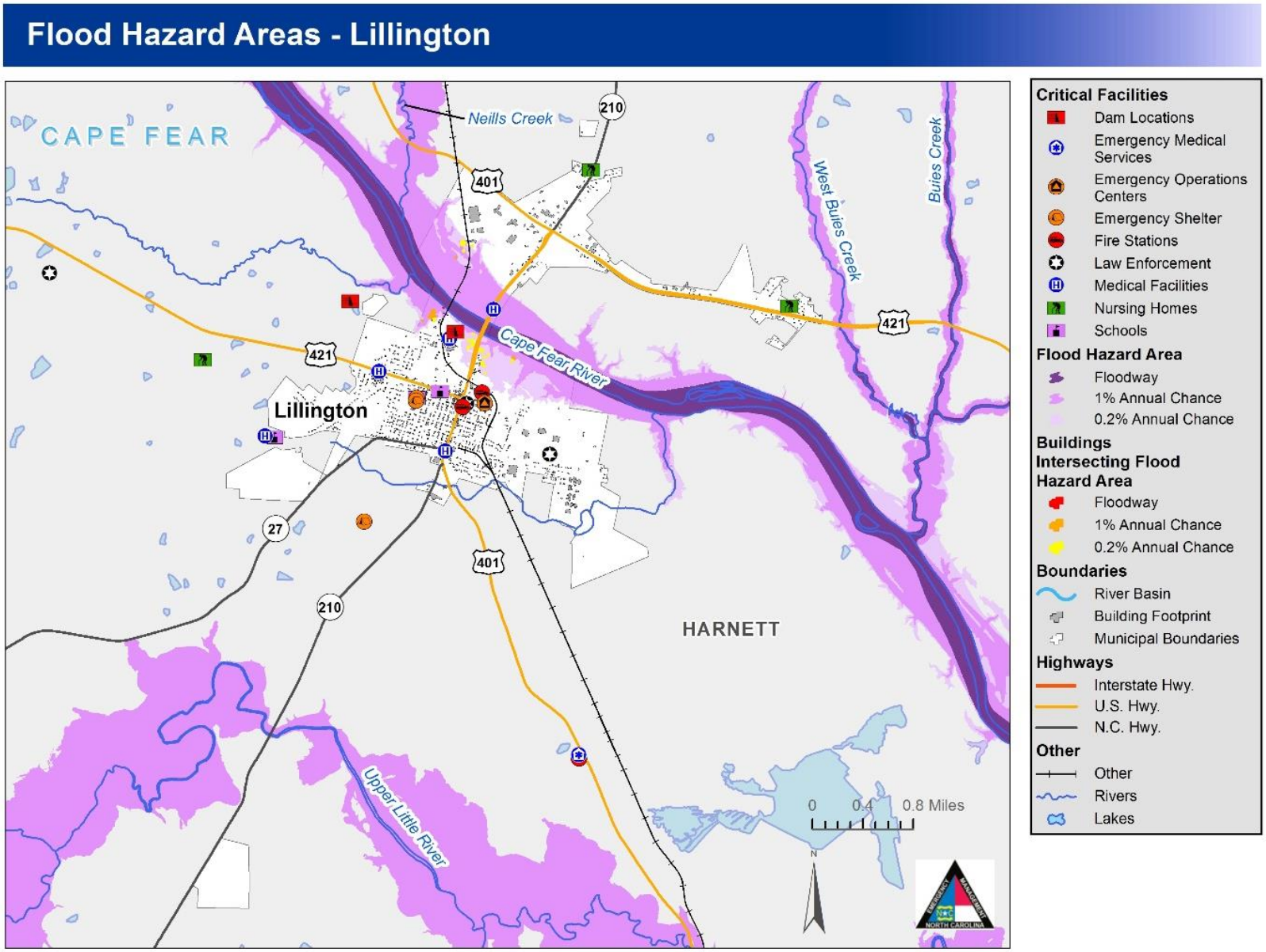


Figure 5-98: Flood Hazard Areas – Lillington

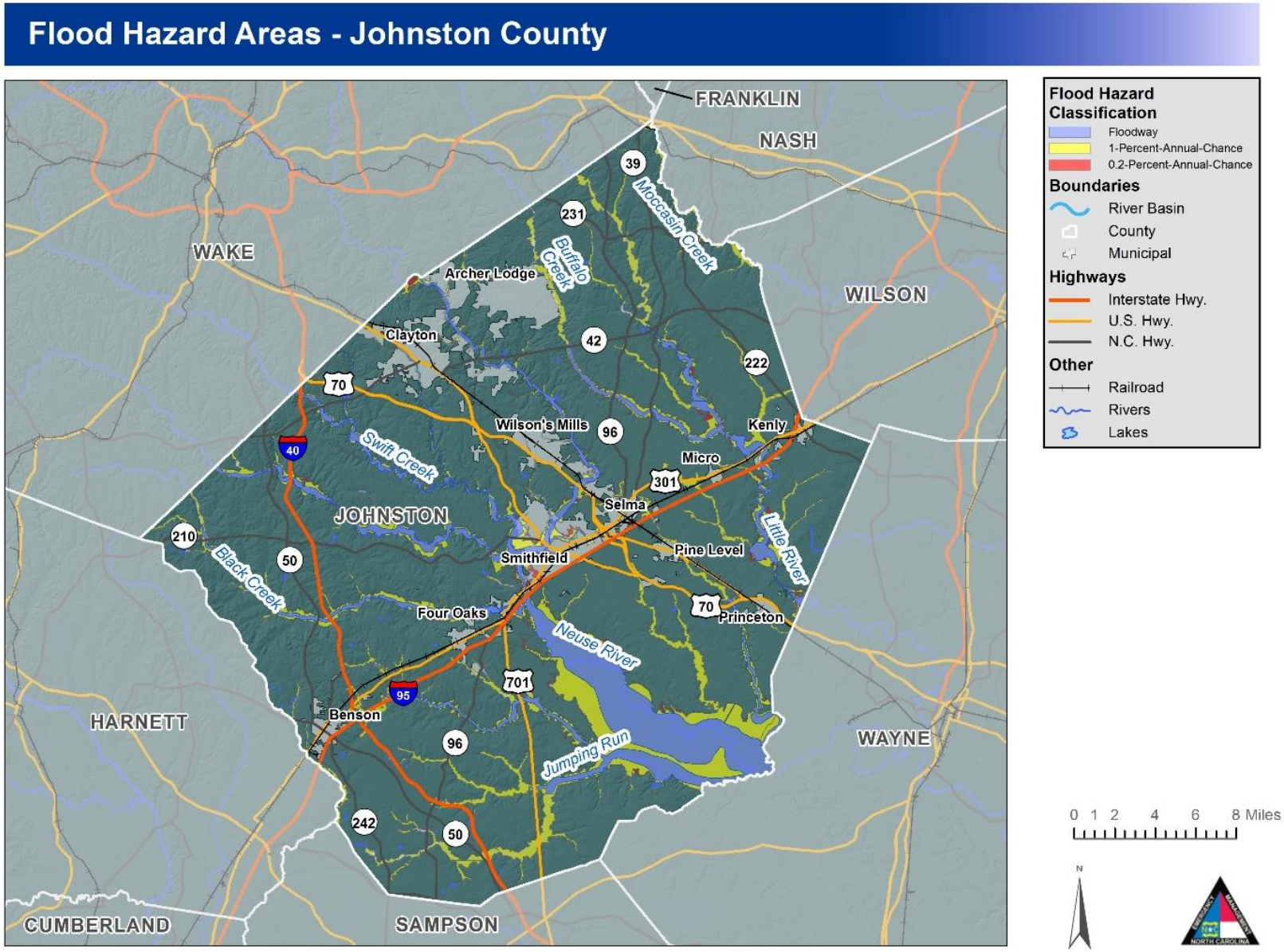


Figure 5-99: Flood Hazard Areas – Johnston County

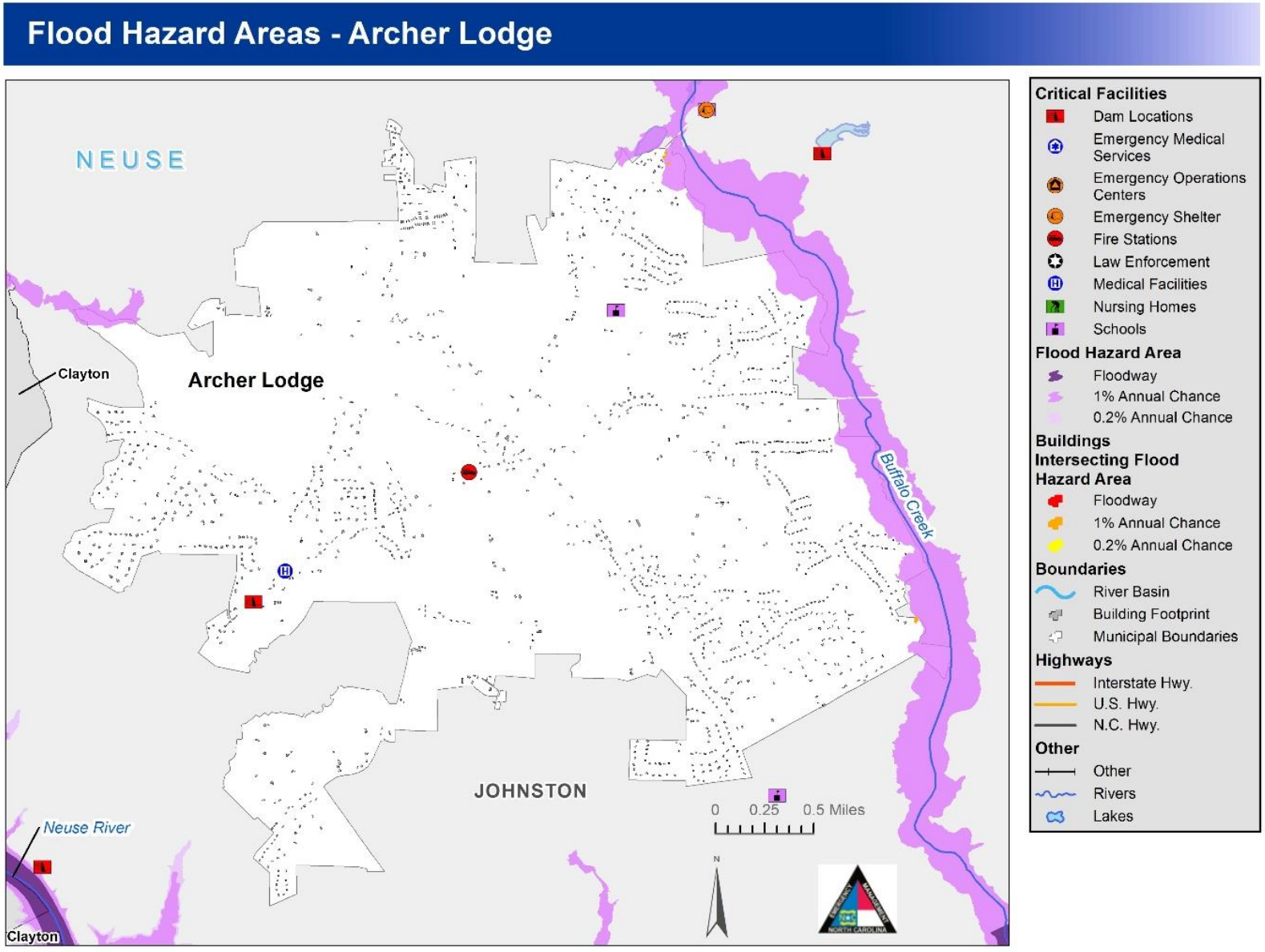


Figure 5-100: Flood Hazard Areas – Archer Lodge

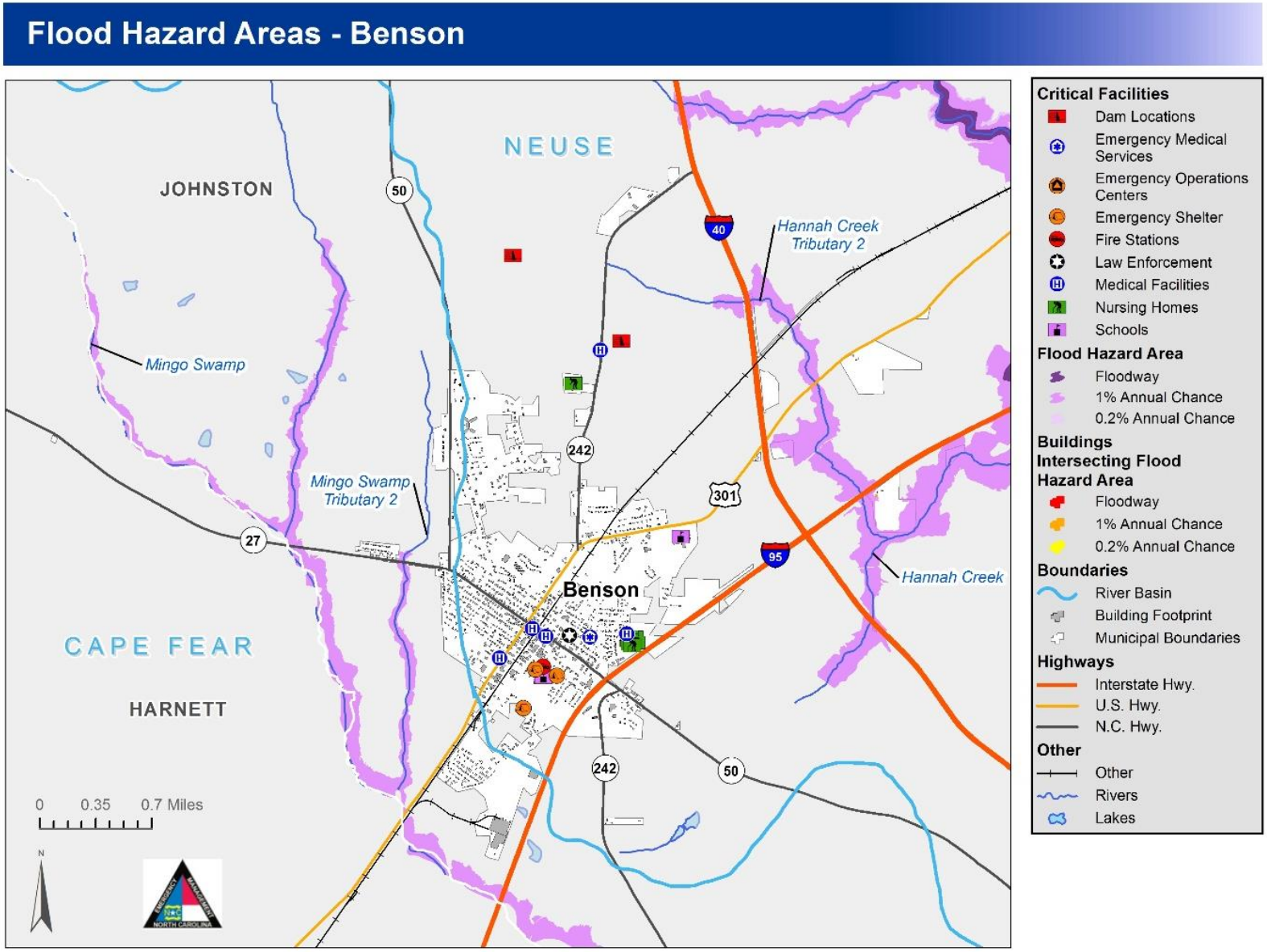


Figure 5-101: Flood Hazard Areas – Benson

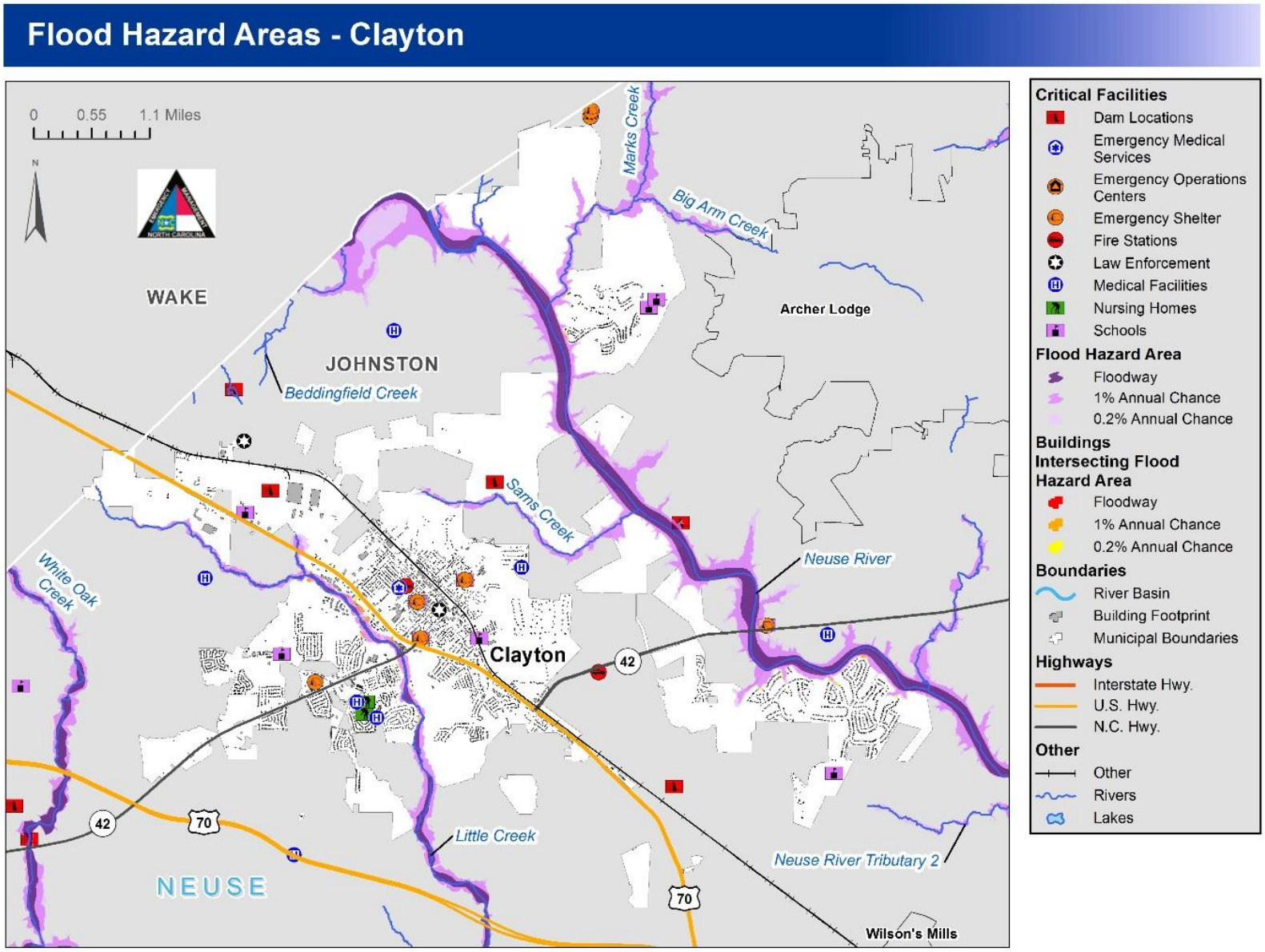


Figure 5-102: Flood Hazard Areas – Clayton

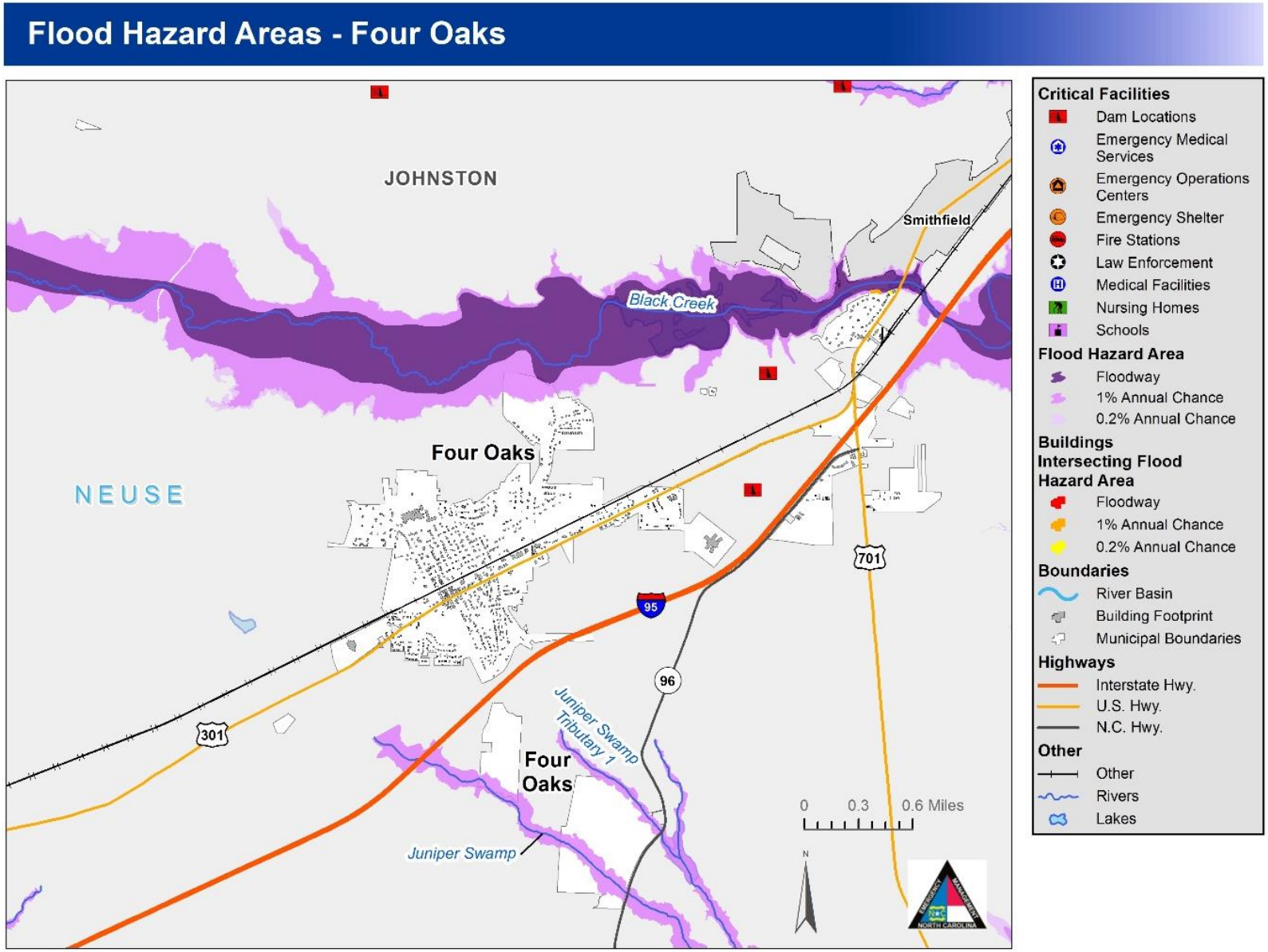


Figure 5-103: Flood Hazard Areas – Four Oaks

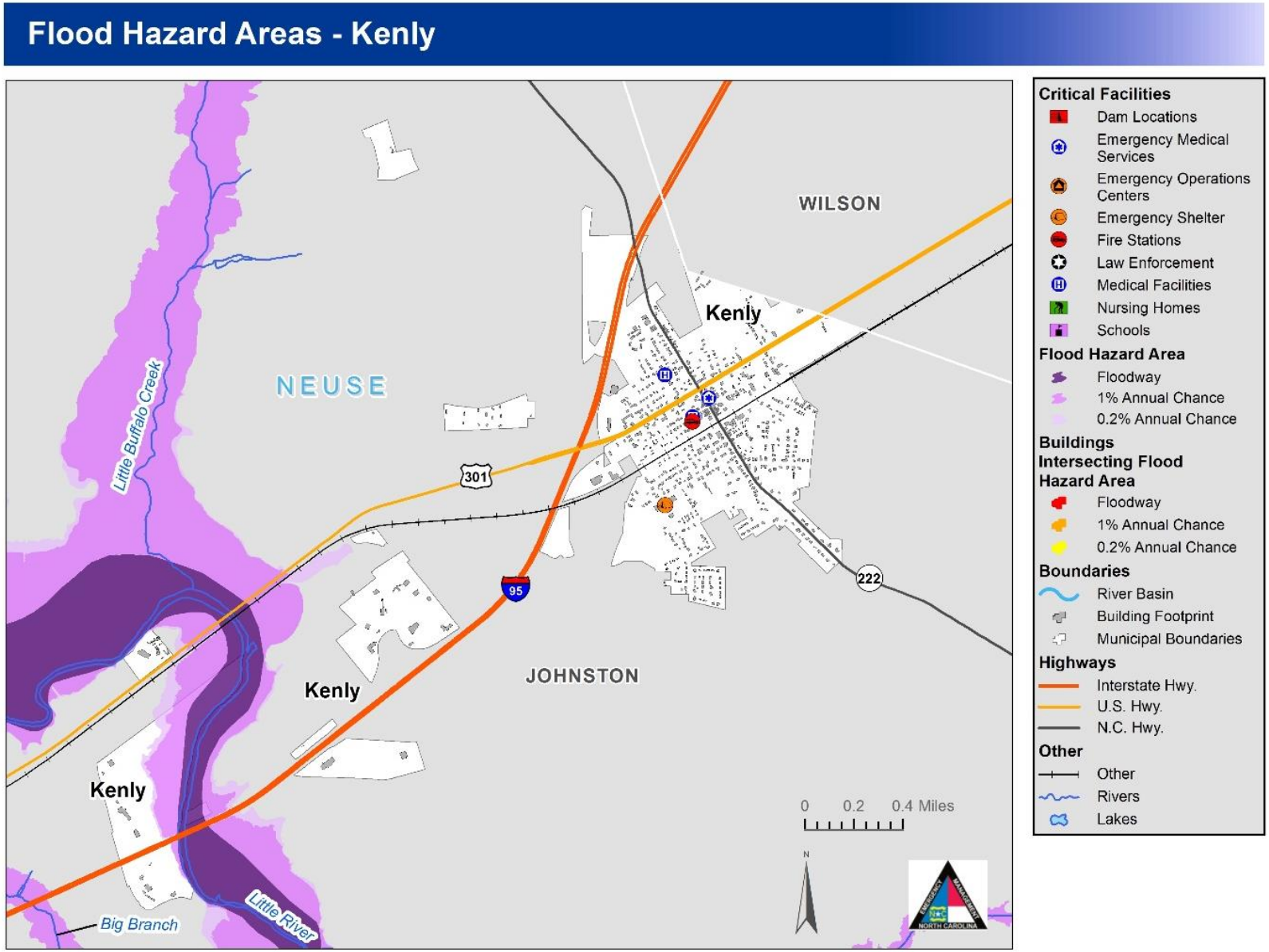


Figure 5-104: Flood Hazard Areas – Kenly

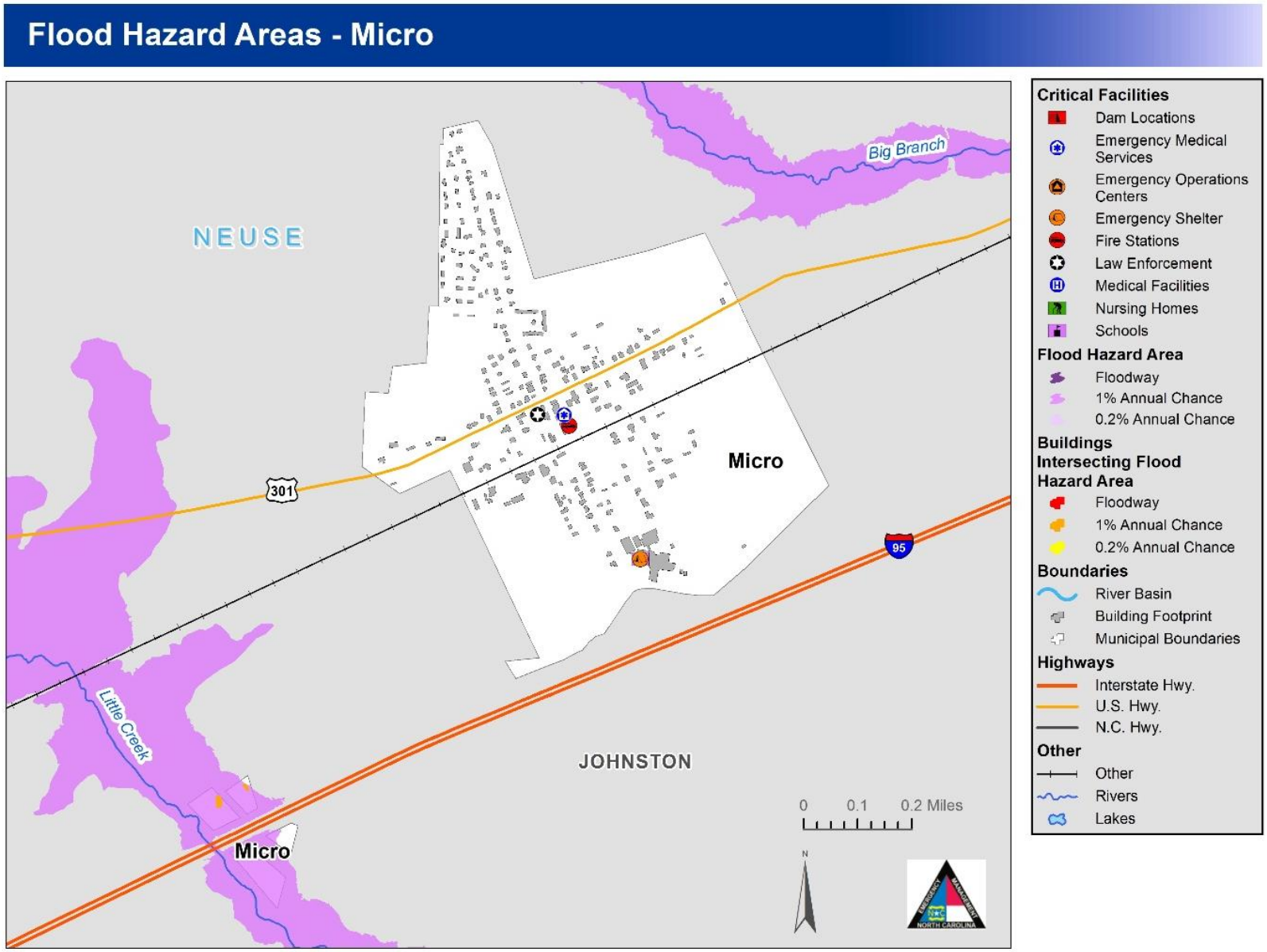


Figure 5-105: Flood Hazard Areas – Micro

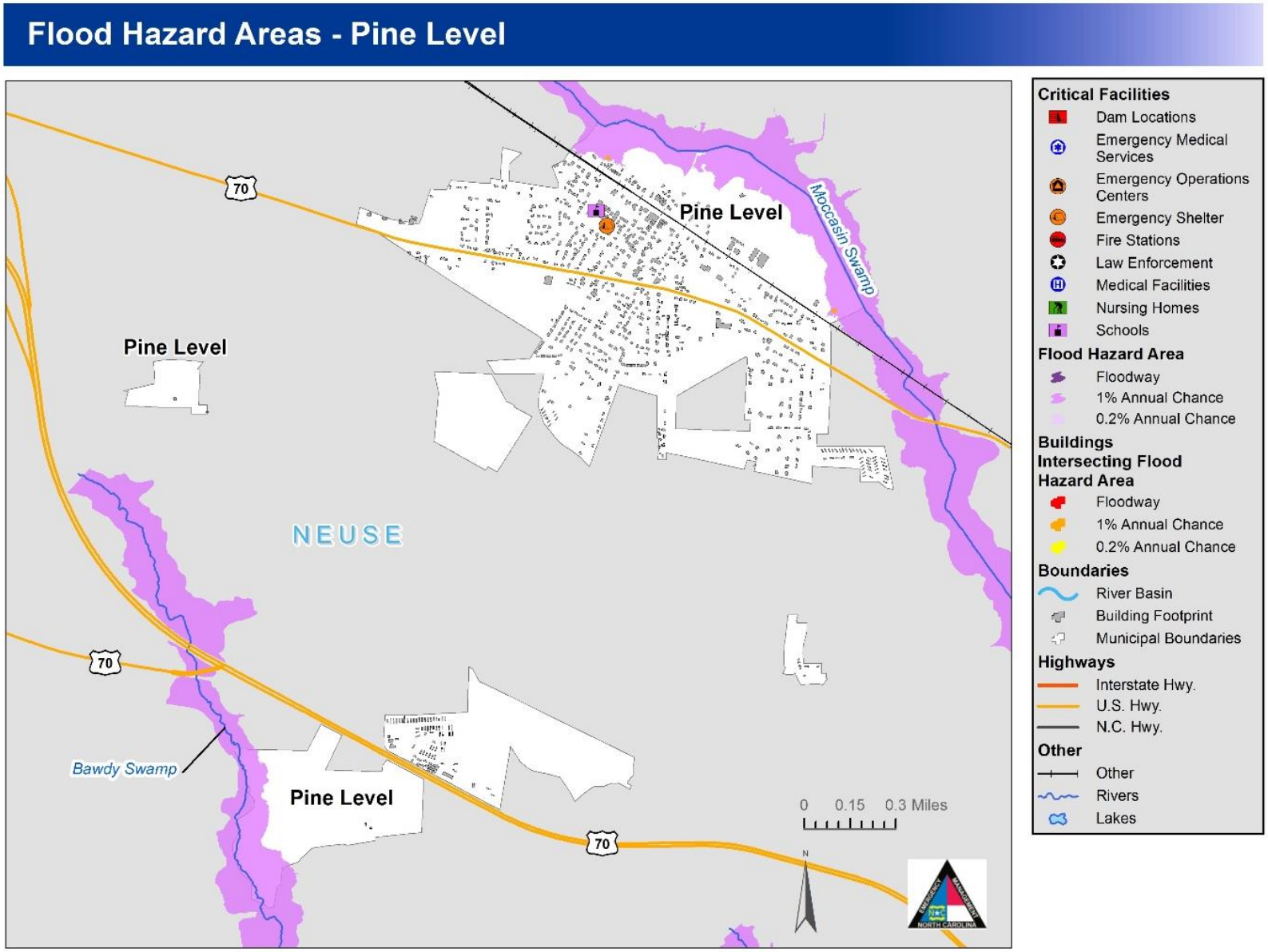


Figure 5-106: Flood Hazard Areas – Pine Level

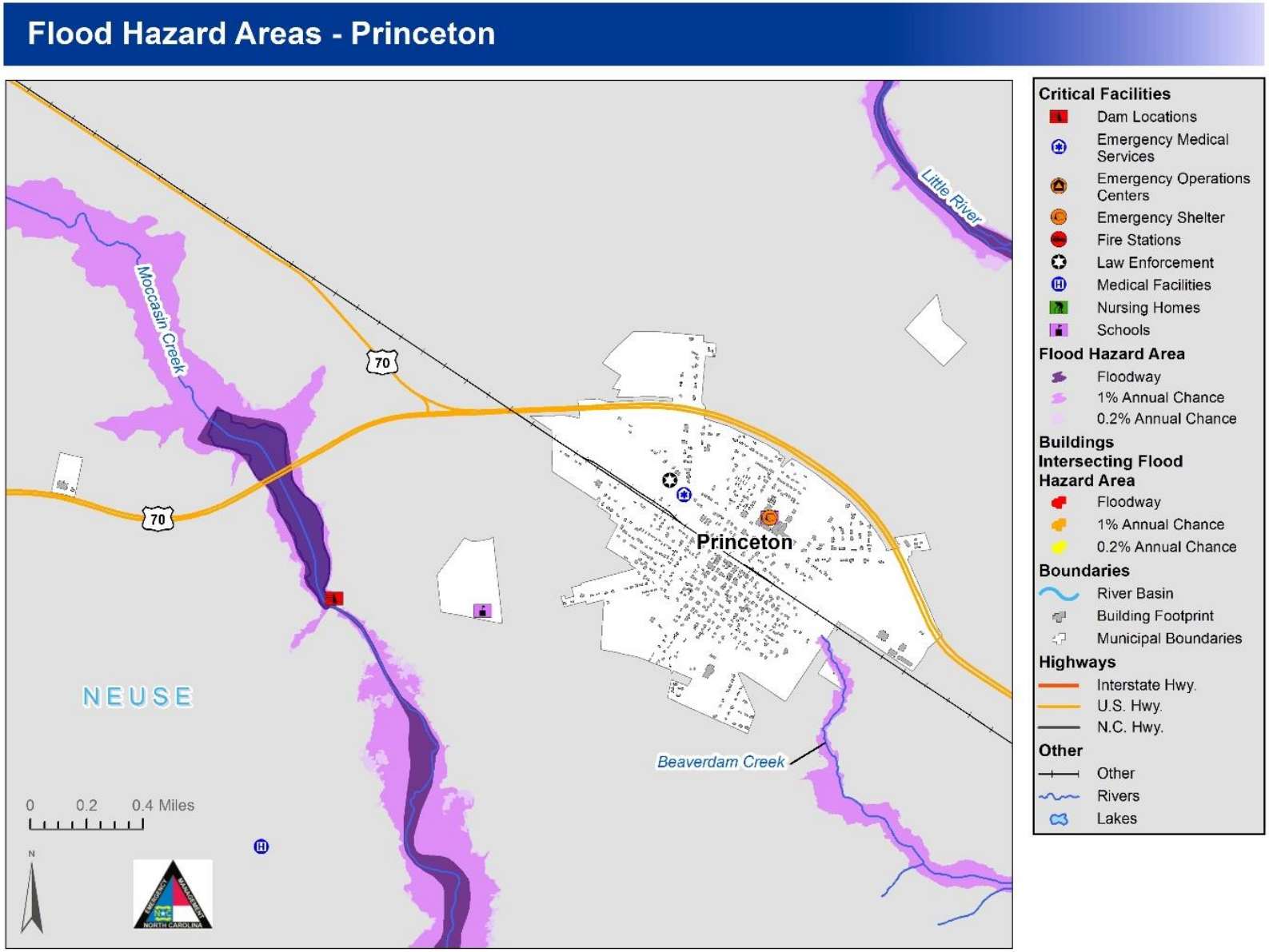


Figure 5-107: Flood Hazard Areas – Princeton

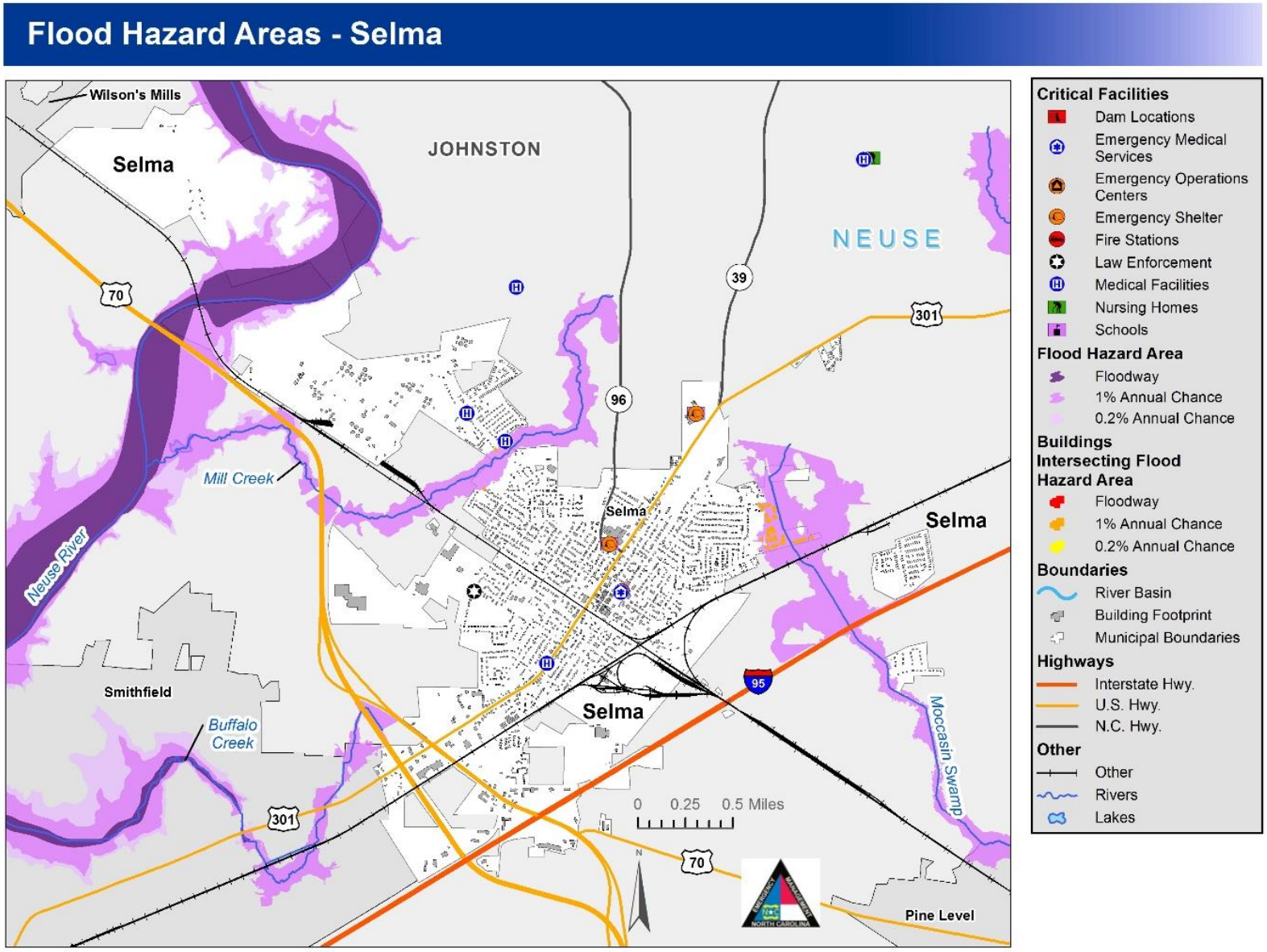


Figure 5-108: Flood Hazard Areas – Selma

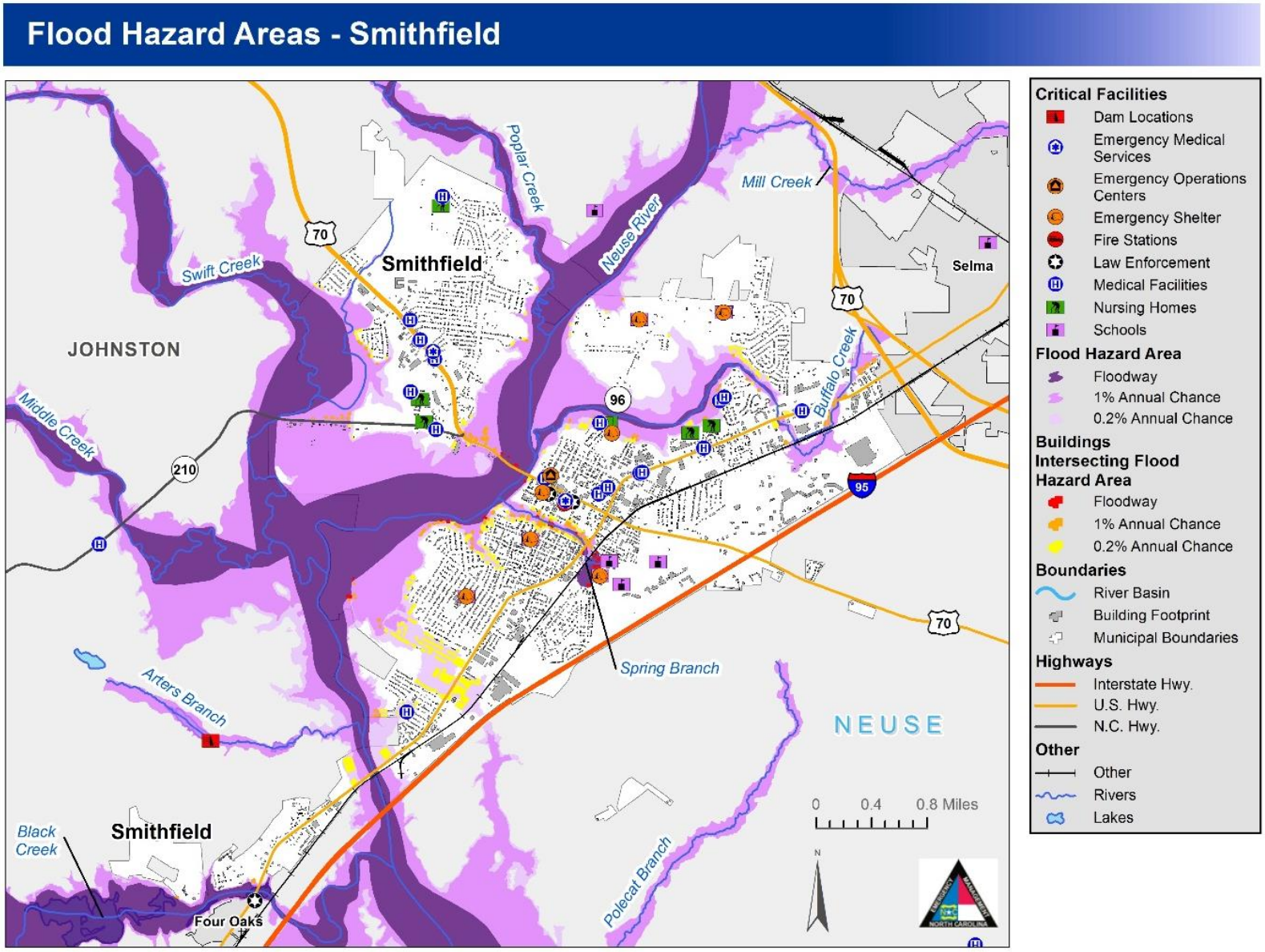


Figure 5-109: Flood Hazard Areas – Smithfield

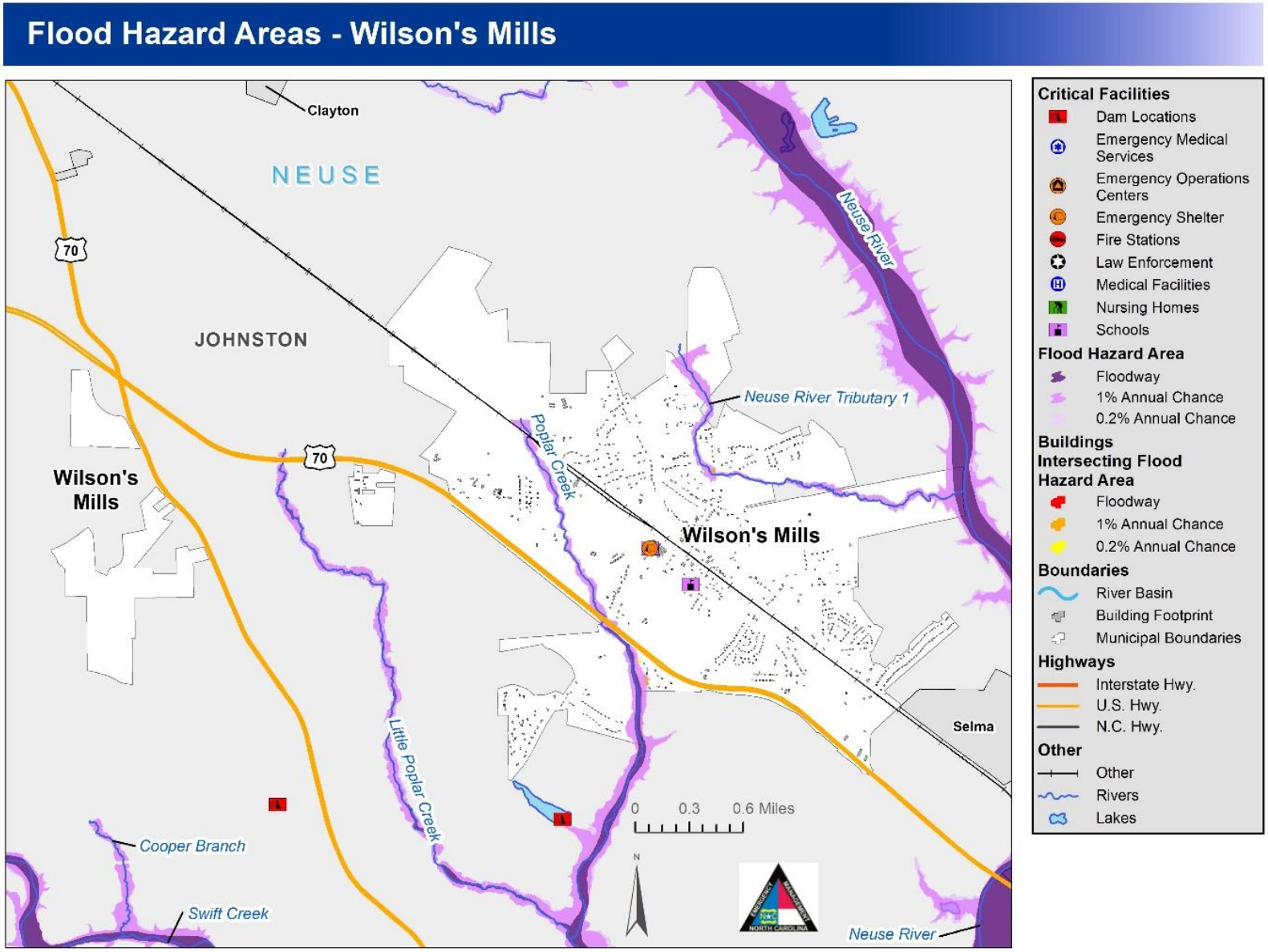


Figure 5-110: Flood Hazard Areas – Wilson's Mills

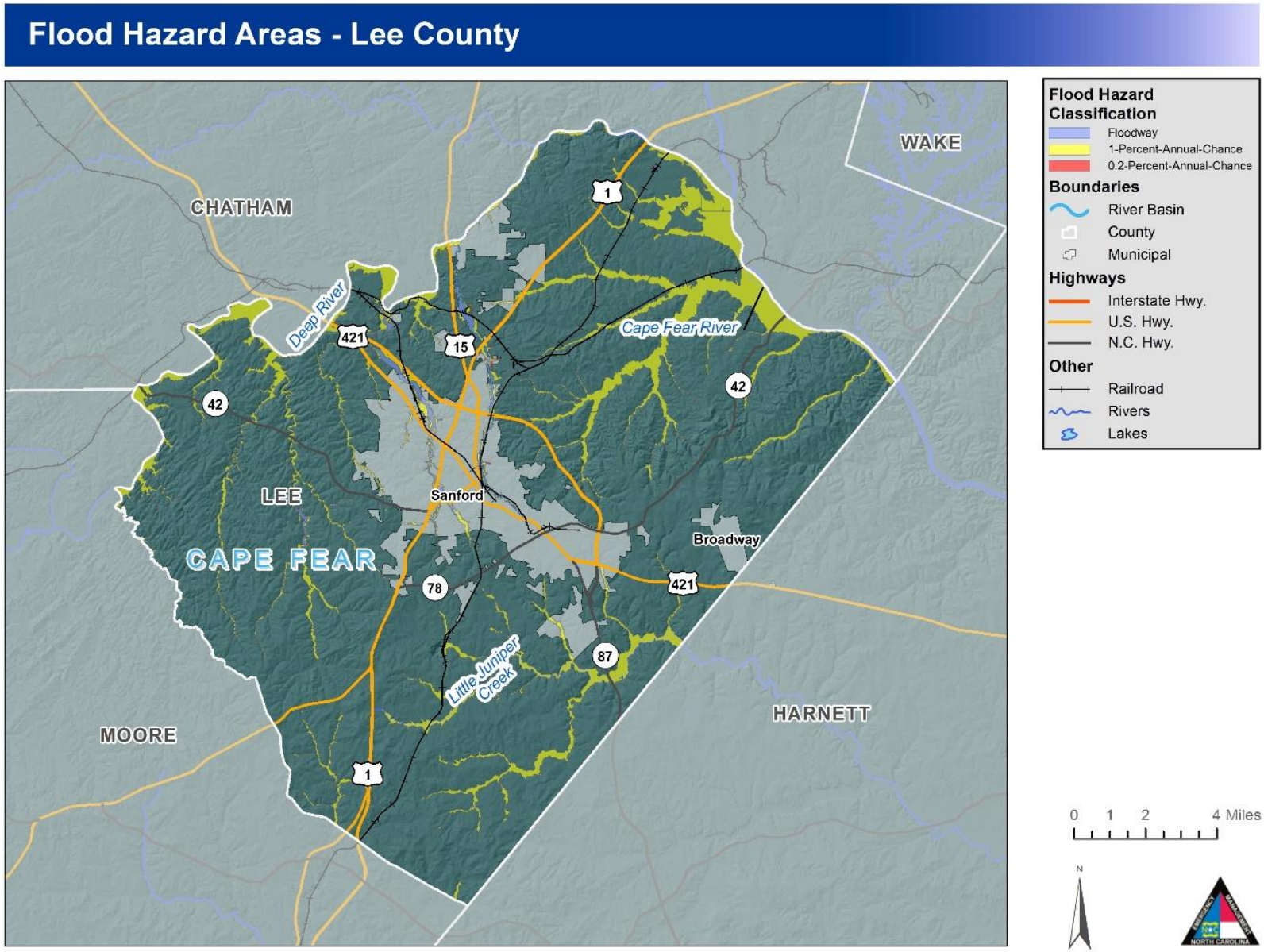


Figure 5-111: Flood Hazard Areas – Lee County

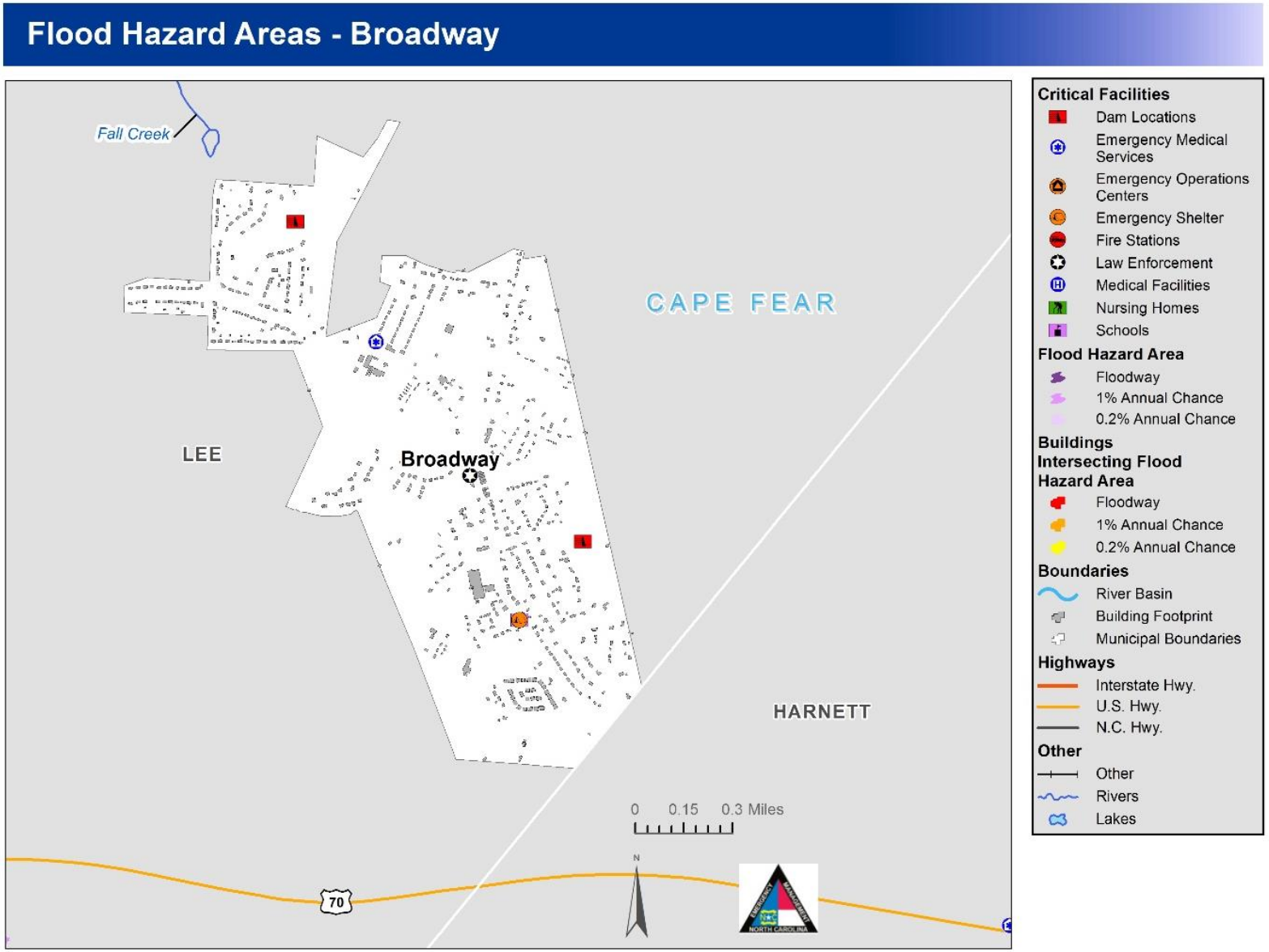


Figure 5-112: Flood Hazard Areas – Broadway

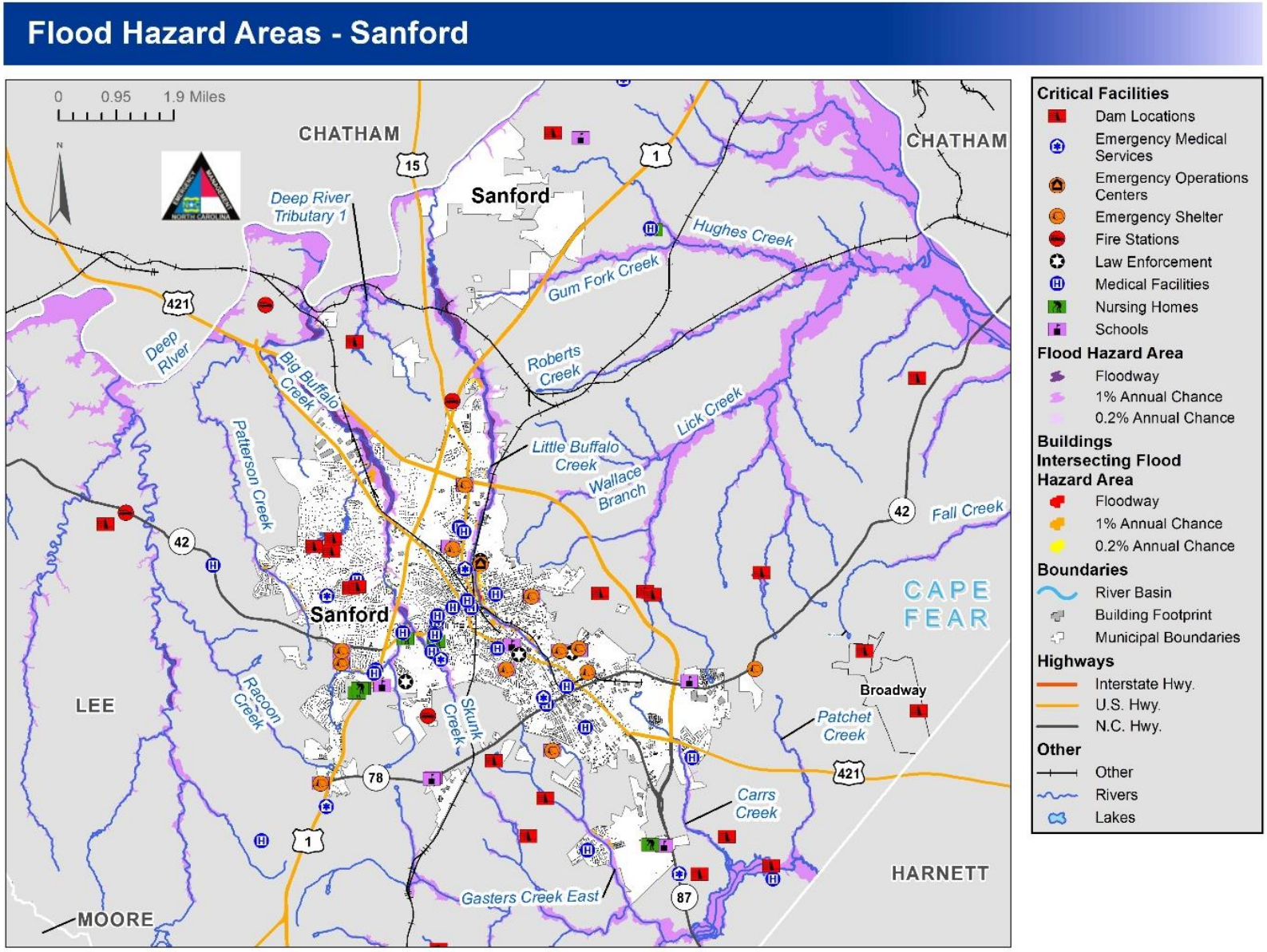


Figure 5-113: Flood Hazard Areas – Sanford

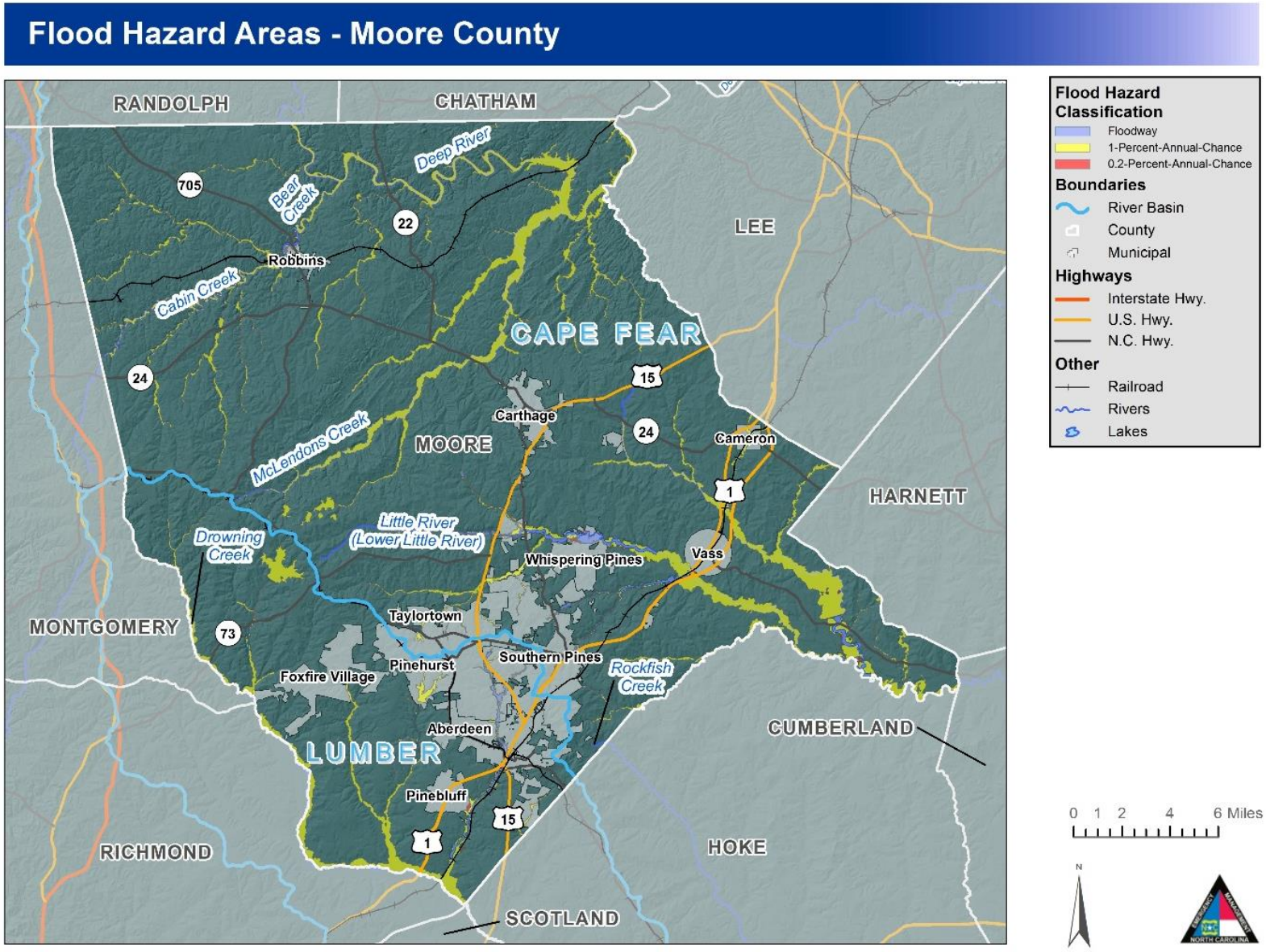


Figure 5-114: Flood Hazard Areas – Moore County

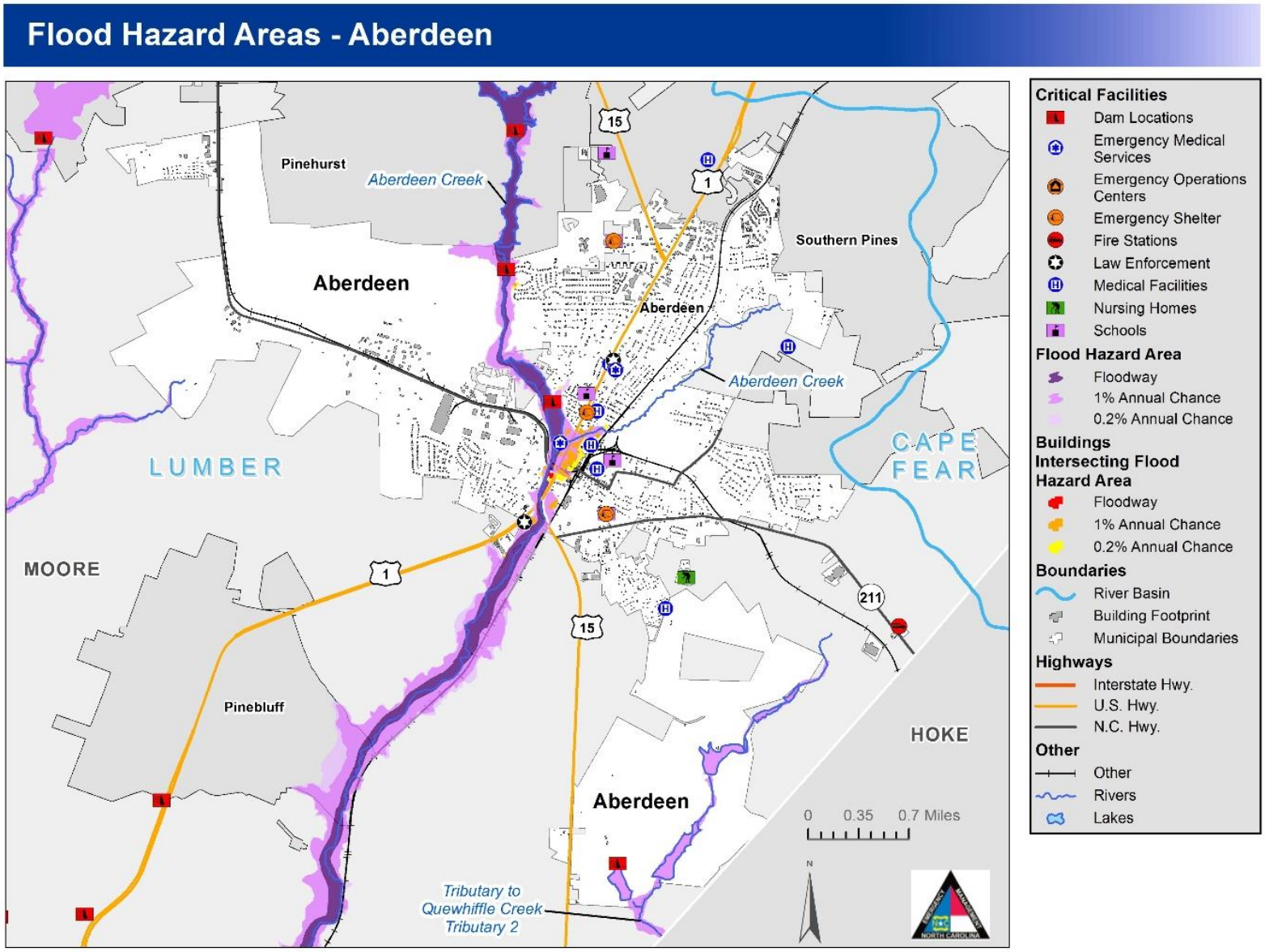


Figure 5-115: Flood Hazard Areas – Aberdeen

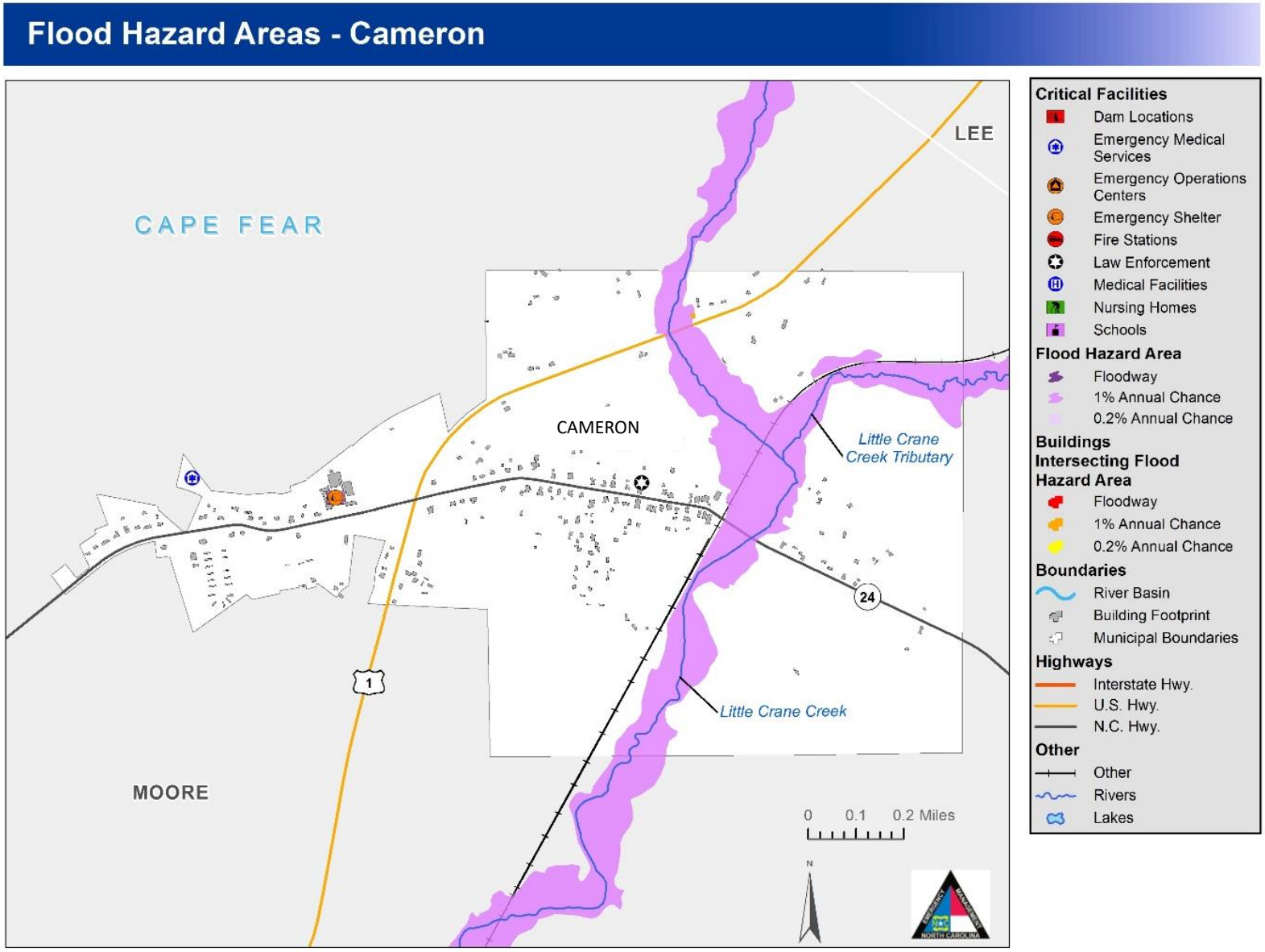


Figure 5-116: Flood Hazard Areas – Cameron

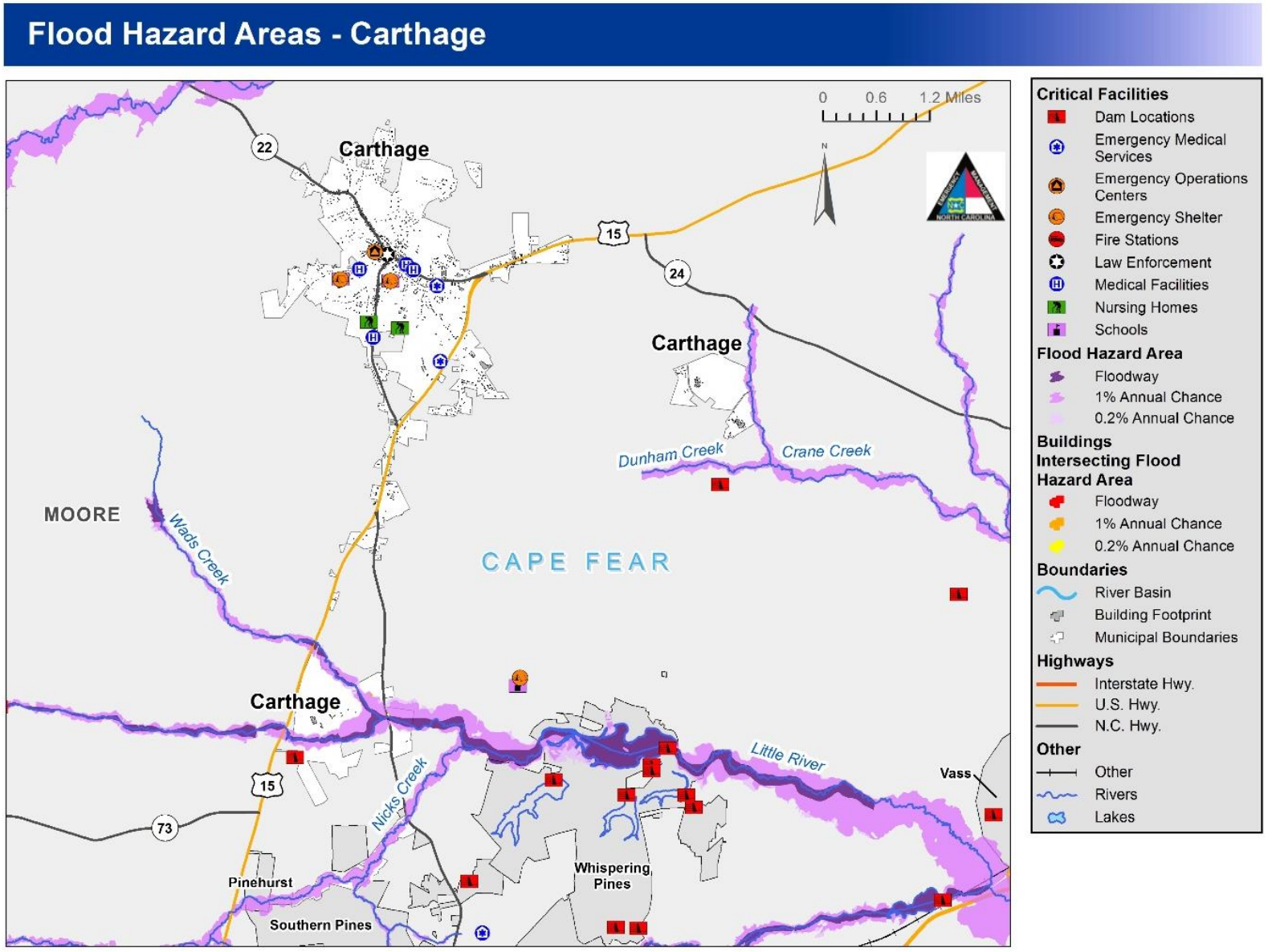


Figure 5-117: Flood Hazard Areas – Carthage

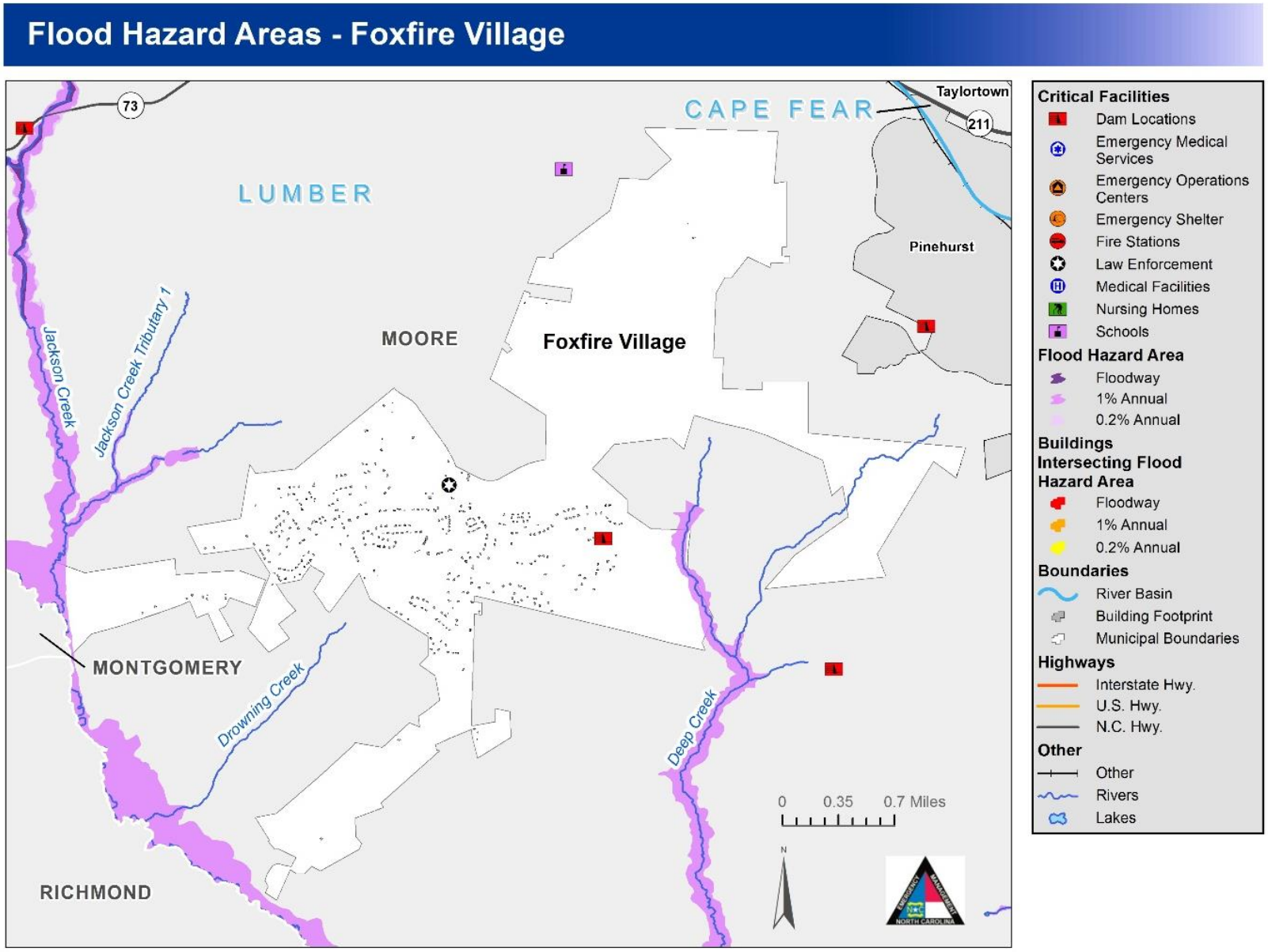


Figure 5-118: Flood Hazard Areas – Foxfire Village

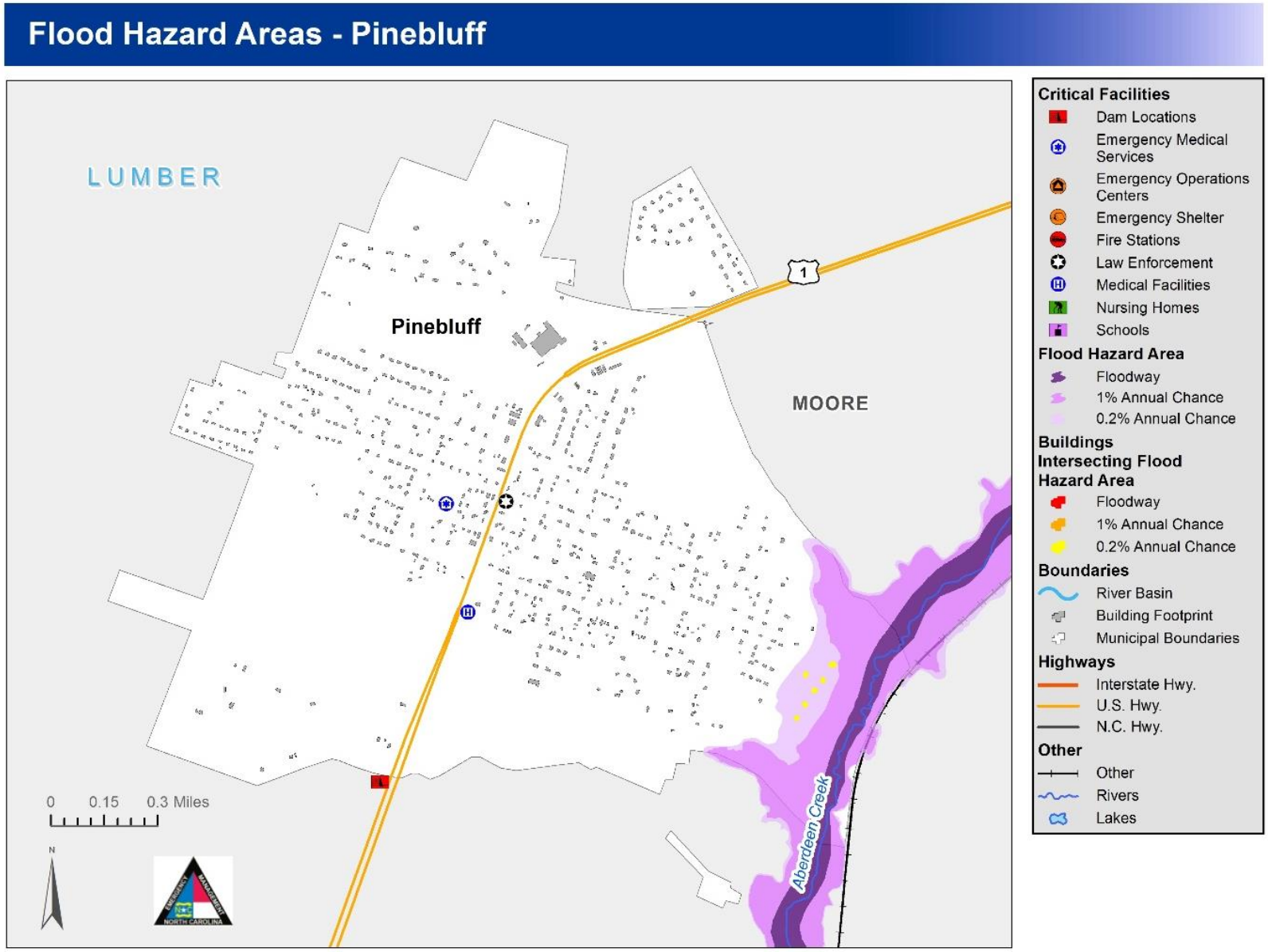


Figure 5-119: Flood Hazard Areas – Pinebluff

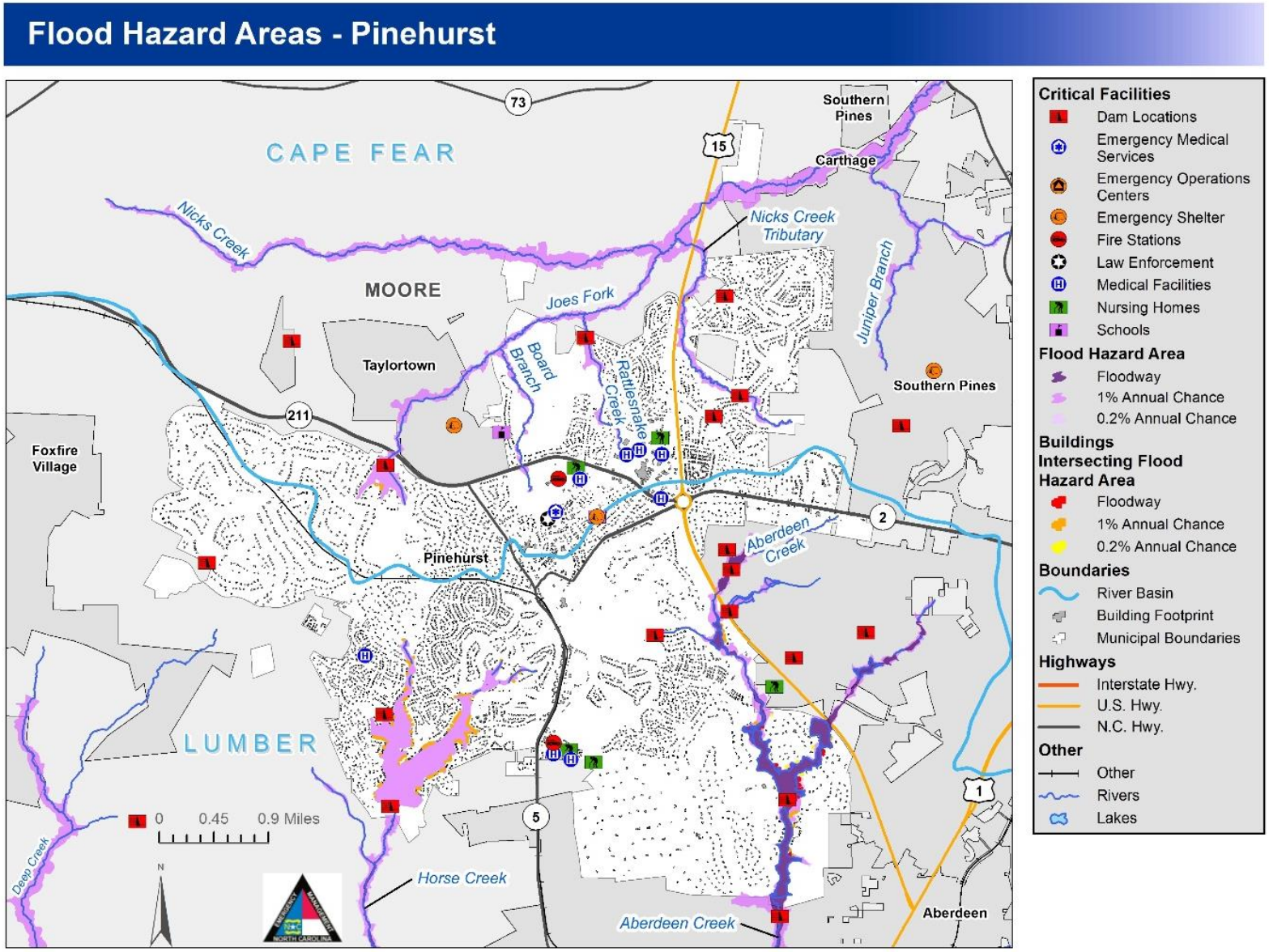


Figure 5-120: Flood Hazard Areas – Pinehurst

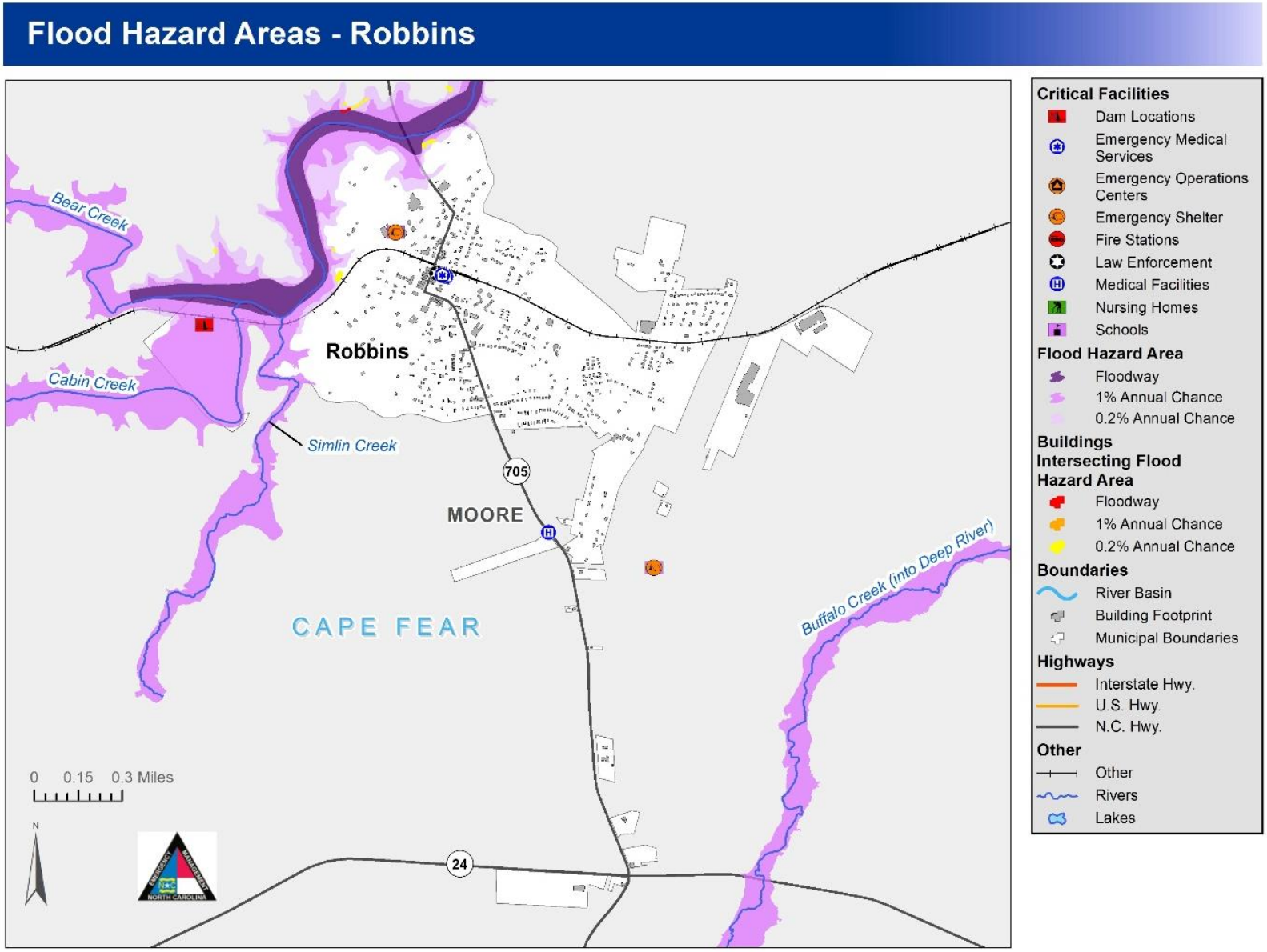


Figure 5-121: Flood Hazard Areas – Robbins

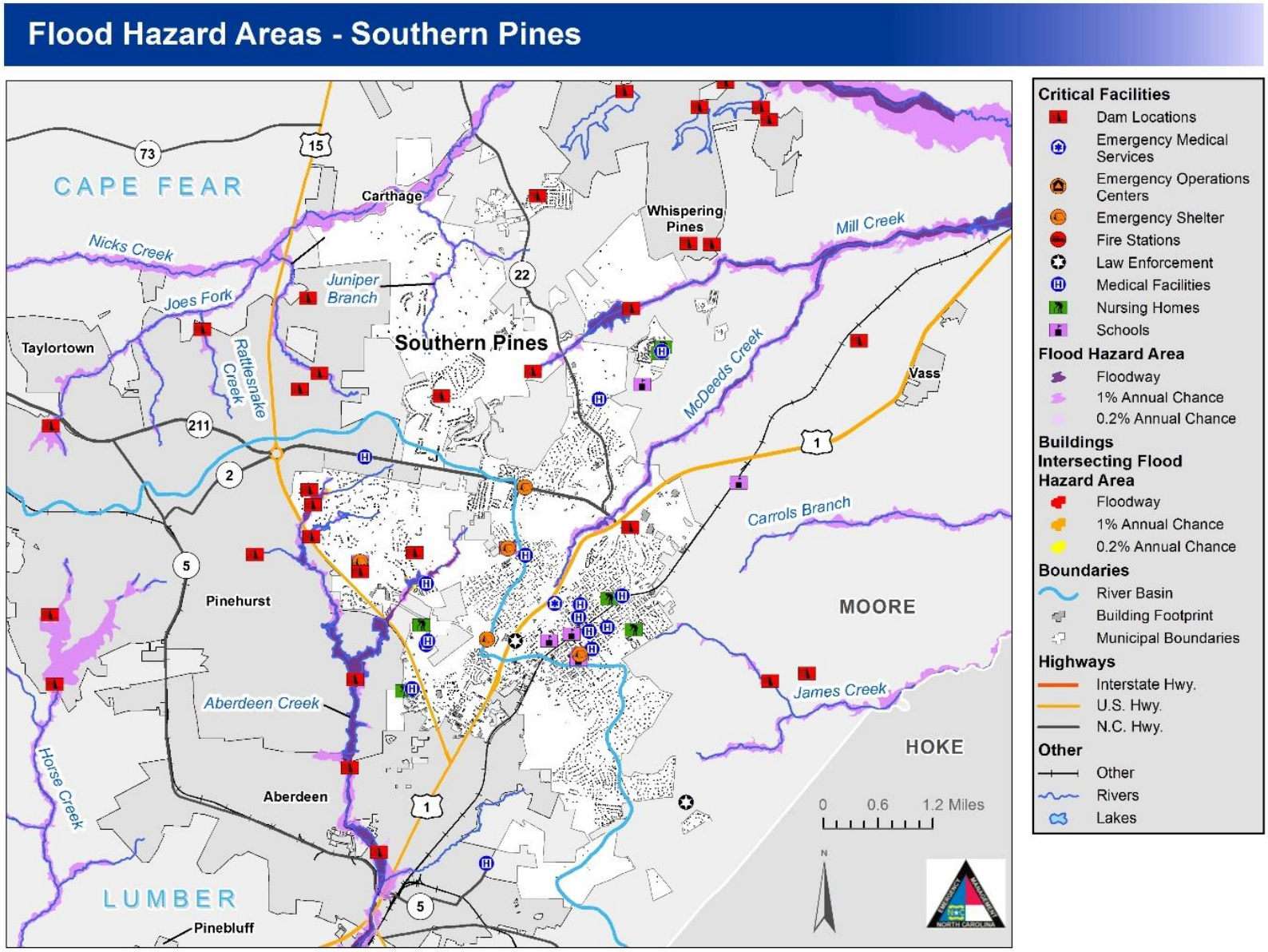


Figure 5-122: Flood Hazard Areas – Southern Pines

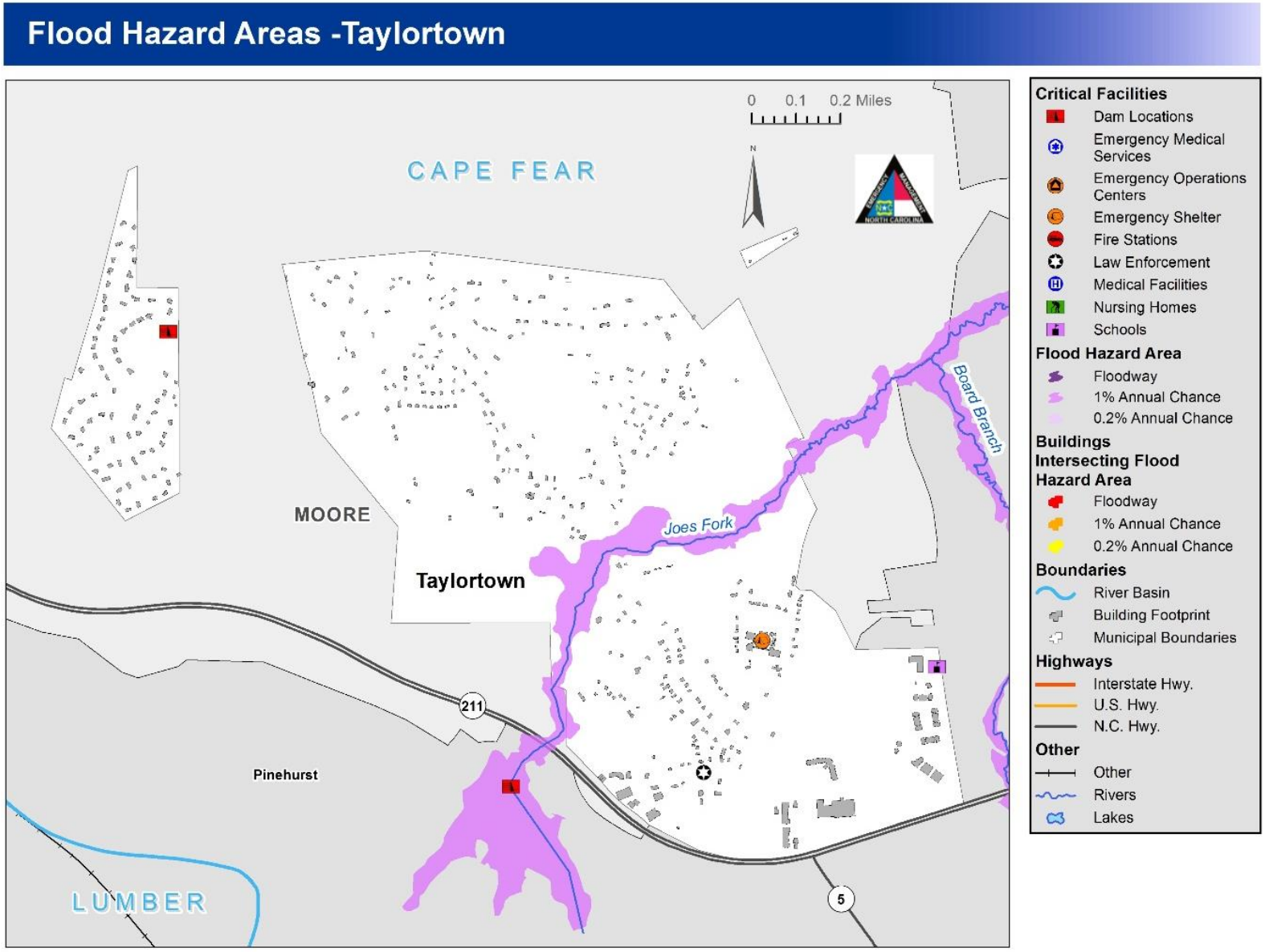


Figure 5-123: Flood Hazard Areas – Taylortown

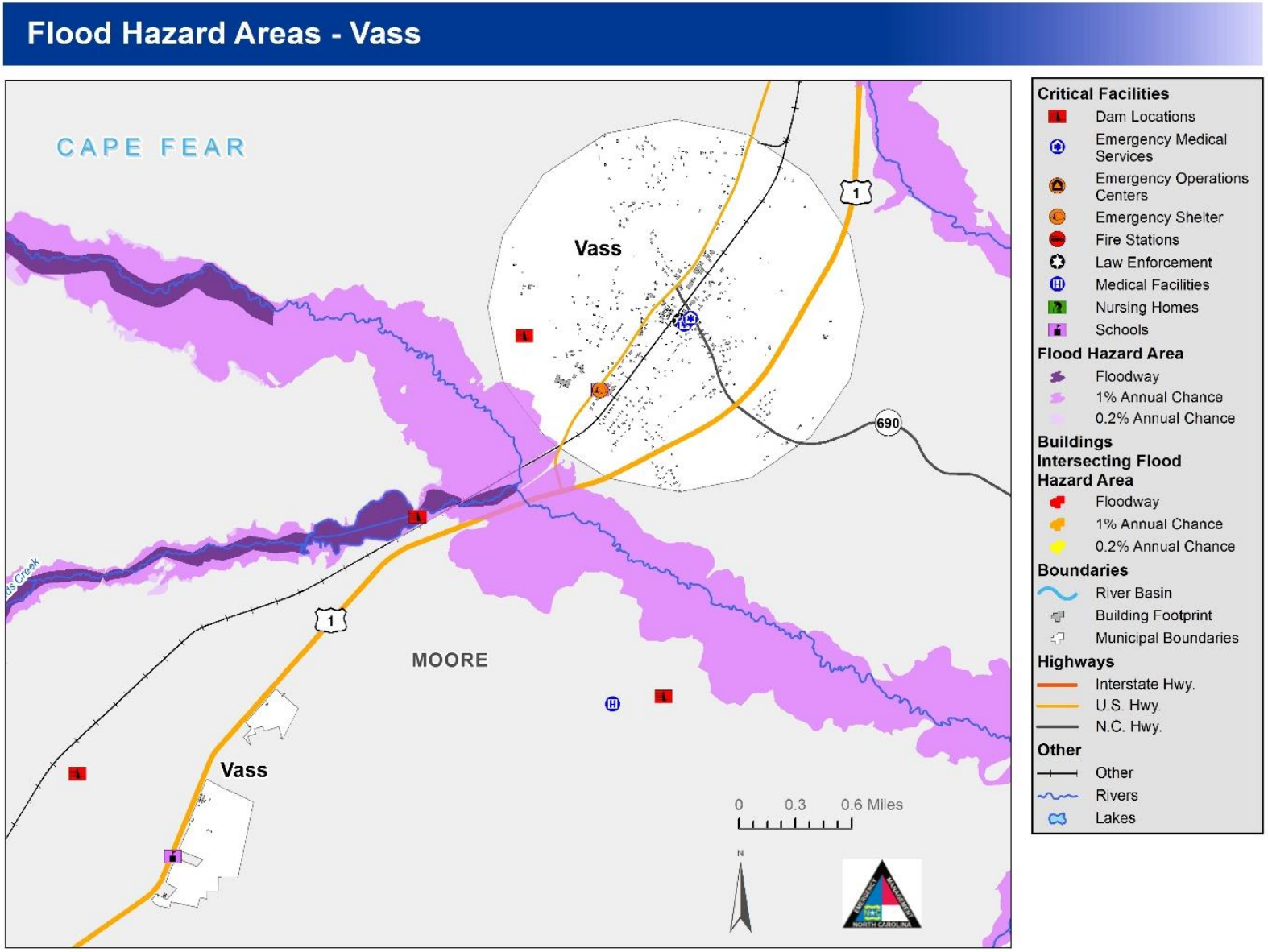
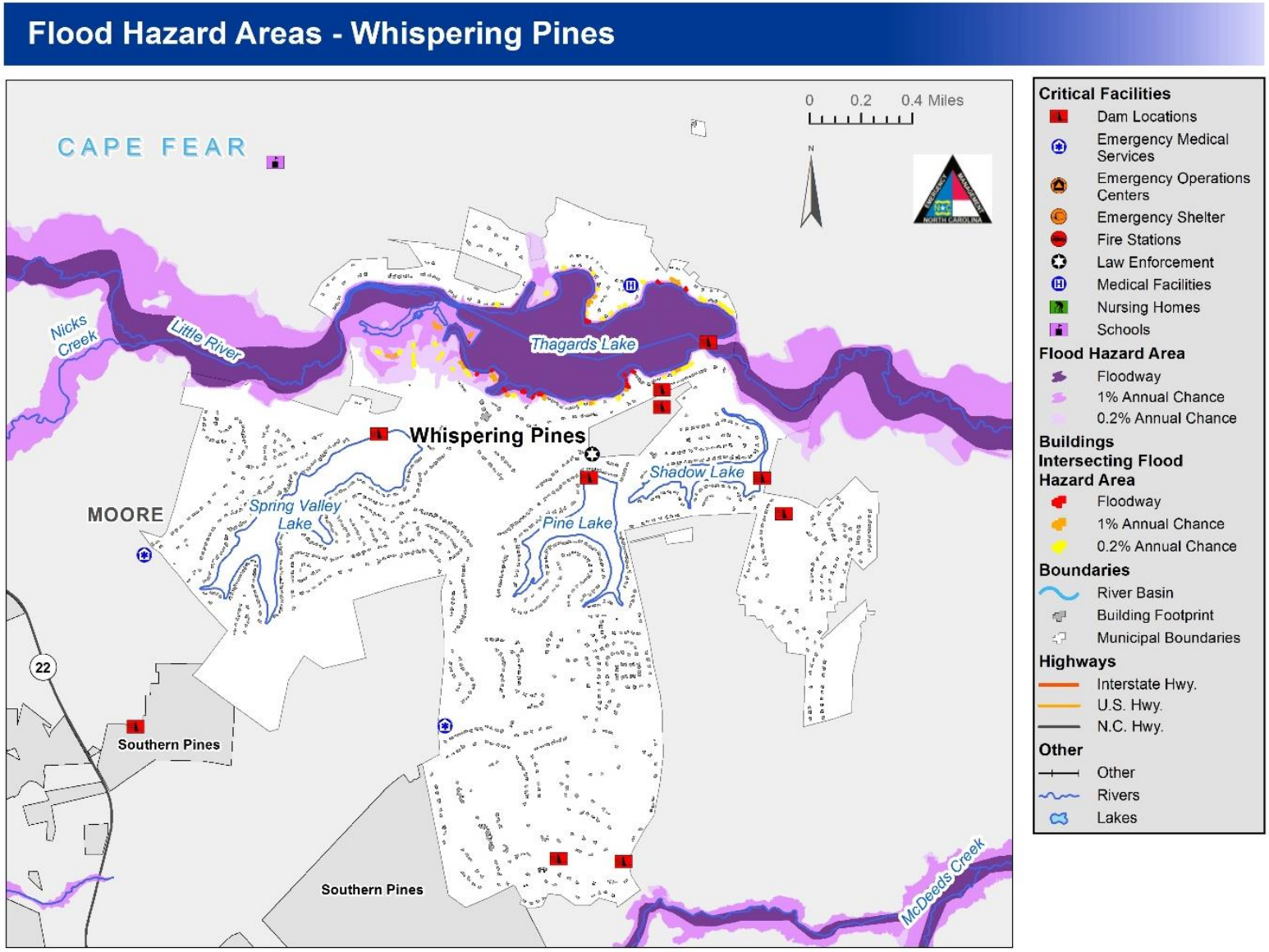


Figure 5-124: Flood Hazard Areas – Vass



Source: Federal Emergency Management Agency

Figure 5-125: Flood Hazard Areas – Whispering Pines

5.11.3 Extent

The following table provide peak river stage data according to USGS which shows the highest recorded peak river stage for all jurisdictions.

Community	Flood Extent (Peak streamflow or Highest BFE) & NRI Flood Risk Index	Source (National Risk Index is a source for all)	Anecdotal recollections of first responders and public works engineers
Chatham			
Chatham County	641.2 ft	FIRM Panel 3710874400K	Between 3ft to 4ft of backwater flooding street and local roadways
Goldston	No BFE's	N/A	No Recollections
Pittsboro	510.9 ft	FIRM Panel 3710974200K	Between 3ft to 4ft of backwater flooding street and local roadways
Siler City	666.1 ft	FIRM Panel 3710875100J	Between 3ft to 4ft of backwater flooding street and local roadways
Harnett			
Harnett County	408.9 ft	FIRM Panel 3710954600L	Between 3ft to 4ft of backwater flooding street and local roadways
Angier	259.9 ft	FIRM Panel 3720066200J	Between 1ft to 2ft of backwater flooding street and local roadways
Broadway	Mapped mainly in Lee County	N/A	No Recollections
Coats	No BFE's	N/A	No Recollections
Dunn	212.6 ft	FIRM Panel 3720150600J	Between 1ft to 2ft of backwater flooding street and local roadways
Erwin	176.3 ft	FIRM Panel 3720150600J	Less than 1ft of backwater flooding street and local roadways
Lillington	130.3 ft	FIRM Panel 3720064000J	Less than 1ft of backwater flooding street and local roadways
Johnston			
Johnston County	273.6 ft	FIRM Panel 3720270200J	Between 1ft to 2ft of backwater flooding street and local roadways

Community	Flood Extent (Peak streamflow or Highest BFE) & NRI Flood Risk Index	Source (National Risk Index is a source for all)	Anecdotal recollections of first responders and public works engineers
Archer Lodge	217.0 ft	FIRM Panel 3720178000J	Between 1ft to 2ft of backwater flooding street and local roadways
Benson	242.6 ft	FIRM Panel 3720152800K	Between 1ft to 2ft of backwater flooding street and local roadways
Clayton	319.7 ft	FIRM Panel 3720164900J	
Four Oaks	120.4 ft	FIRM Panel 3720166200K	Less than 1ft of backwater flooding street and local roadways
Kenly	No BFE's	N/A	No Recollections
Micro	182.5 ft	FIRM Panel 3720263600K	Less than 1ft of backwater flooding street and local roadways
Pine Level	158.8 ft	FIRM Panel 3720262400K	Less than 1ft of backwater flooding street and local roadways
Princeton	140.6 ft	FIRM Panel 3720265200K	Less than 1ft of backwater flooding street and local roadways
Selma	184.2 ft	FIRM Panel 3720262600K	Less than 1ft of backwater flooding street and local roadways
Smithfield	152.1 ft	FIRM Panel 3720168500K	Less than 1ft of backwater flooding street and local roadways
Wilson's Mills	238.8 ft	FIRM Panel 3720167700K	Between 1ft to 2ft of backwater flooding street and local roadways
Lee			
Lee County	476.2 ft	FIRM Panel 3710960000K	Between 3ft to 4ft of backwater flooding street and local roadways
Broadway	No BFE's	N/A	No Recollections
Sanford	405.8 ft	FIRM Panel 3710965200J	Between 3ft to 4ft of backwater flooding street and local roadways
Moore			

Community	Flood Extent (Peak streamflow or Highest BFE) & NRI Flood Risk Index	Source (National Risk Index is a source for all)	Anecdotal recollections of first responders and public works engineers
Moore County	672.1 ft	FIRM Panel 3710758600K	Between 3ft to 4ft of backwater flooding street and local roadways
Aberdeen	400.8 ft	FIRM Panel 3710854000J	Between 3ft to 4ft of backwater flooding street and local roadways
Cameron	316.9 ft	FIRM Panel 3710952700K	Between 1ft to 2ft of backwater flooding street and local roadways
Carthage	330.0 ft	FIRM Panel 3710857500J	Between 1ft to 2ft of backwater flooding street and local roadways
Foxfire	393.8 ft	FIRM Panel 3710852200J	Between 3ft to 4ft of backwater flooding street and local roadways
Pinebluff	310.5 ft	FIRM Panel 3710846900J	Between 1ft to 2ft of backwater flooding street and local roadways
Pinehurst	456.1 ft	FIRM Panel 3710854200J	Between 3ft to 4ft of backwater flooding street and local roadways
Robbins	361.8 ft	FIRM Panel 3710861100J	Between 3ft to 4ft of backwater flooding street and local roadways
Southern Pines	442.1 ft	FIRM Panel 3710857200J	Between 3ft to 4ft of backwater flooding street and local roadways
Taylortown	395.2 ft	FIRM Panel 3710854200J	Between 3ft to 4ft of backwater flooding street and local roadways
Vass	256.3 ft	FIRM Panel 3710950400J	Between 1ft to 2ft of backwater flooding street and local roadways
Whispering Pines	314.3 ft	FIRM Panel 3710857400J	Between 1ft to 2ft of backwater flooding street and local roadways

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham								
Chatham County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$50,000	$44,009	$0	$0
Chatham County (Unincorporated Area)	09/17/18	Flood	0	0	$26,400,000	$24,849,000	$5,000,000	$4,706,250
Town of Pittsboro	08/02/18	Flash Flood	0	0	$50,000	$46,853	$0	$0
Subtotal Chatham	*10 Events*		*0*	*0*	*$26,500,000*	*$24,939,861*	*$5,000,000*	*$4,706,250*
Harnett								
Harnett County (Unincorporated Area)	09/29/16	Flash Flood	0	0	$25,000	$21,989	$0	$0
Harnett County (Unincorporated Area)	10/09/16	Flood	1	0	$9,100,000	$8,009,634	$0	$0
Harnett County (Unincorporated Area)	09/17/18	Flood	0	0	$5,420,000	$5,101,575	$20,000,000	$18,825,000
Subtotal Harnett	*15 Events*		*1*	*0*	*$14,545,000*	*$13,133,199*	*$20,000,000*	*$18,825,000*
Johnston								
Town of Selma	08/12/14	Flash Flood	0	0	$5,000	$4,087	$0	$0
Town of Smithfield	08/12/14	Flood	0	0	$5,000	$4,087	$0	$0
Town of Smithfield	07/12/19	Flash Flood	0	0	$50,000	$48,392	$0	$0
Town of Wilson's Mills	08/12/14	Flash Flood	0	0	$5,000	$4,087	$0	$0
Subtotal Johnston	*28 Events*		*0*	*0*	*$65,000*	*$60,654*	*$0*	*$0*

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Lee								
Lee County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$535,000	$470,896	$0	$0
Subtotal Lee	*8 Events*		*0*	*0*	*$535,000*	*$470,896*	*$0*	*$0*
Moore								
Moore County (Unincorporated Area)	09/29/16	Flash Flood	0	0	$100,000	$87,957	$0	$0
Moore County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$3,900,000	$3,432,700	$0	$0
Moore County (Unincorporated Area)	09/17/18	Flood	0	0	$7,580,000	$7,134,675	$20,000,000	$18,825,000
Town of Southern Pines	09/06/08	Flash Flood	0	0	$200,000	$133,270	$0	$0
Village of Pinehurst	07/23/17	Flash Flood	0	0	$5,000	$4,522	$0	$0
Subtotal Moore	*22 Events*		*0*	*0*	*$11,785,000*	*$10,793,125*	*$20,000,000*	*$18,825,000*
TOTAL PLAN	**83 Events**		**1**	**0**	**$53,430,000**	**$49,397,735**	**$45,000,000**	**$42,356,250**

5.11.4 Historical Occurrences

The following historical occurrences ranging from 2005 to 2019 have been identified based on the National Climatic Data Center (NCDC) Storm Events database **Table 5-29**. It should be noted that only those historical occurrences listed in the NCDC database are shown here and that other, unrecorded or unreported events may have occurred within the planning area during this timeframe.

Table 5-29: Historical Occurrences of River Flooding (2005 to 2019)

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham								
Chatham County (Unincorporated Area)	01/25/10	Flash Flood	0	0	$0	$0	$0	$0
Chatham County (Unincorporated Area)	07/28/12	Flash Flood	0	0	$0	$0	$0	$0
Chatham County (Unincorporated Area)	09/18/12	Flash Flood	0	0	$0	$0	$0	$0
Chatham County (Unincorporated Area)	06/30/13	Flash Flood	0	0	$0	$0	$0	$0
Chatham County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$50,000	$44,009	$0	$0
Chatham County (Unincorporated Area)	09/17/18	Flood	0	0	$26,400,000	$24,849,000	$5,000,000	$4,706,250
Town of Pittsboro	05/27/11	Flash Flood	0	0	$0	$0	$0	$0
Town of Pittsboro	08/02/18	Flash Flood	0	0	$50,000	$46,853	$0	$0
Town of Siler City	08/27/08	Flash Flood	0	0	$0	$0	$0	$0
Town of Siler City	09/15/18	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Chatham	*10 Events*		*0*	*0*	*$26,500,000*	*$24,939,861*	*$5,000,000*	*$4,706,250*
Harnett								
City of Dunn	06/07/13	Flash Flood	0	0	$0	$0	$0	$0
City of Dunn	09/28/16	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	09/14/07	Flash Flood	0	0	$0	$0	$0	$0

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Harnett County (Unincorporated Area)	09/22/09	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	09/29/16	Flash Flood	0	0	$25,000	$21,989	$0	$0
Harnett County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	10/09/16	Flood	1	0	$9,100,000	$8,009,634	$0	$0
Harnett County (Unincorporated Area)	07/17/18	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	07/22/18	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	09/14/18	Flash Flood	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	09/17/18	Flood	0	0	$5,420,000	$5,101,575	$20,000,000	$18,825,000
Town of Coats	07/23/18	Flash Flood	0	0	$0	$0	$0	$0
Town of Lillington	09/06/08	Flash Flood	0	0	$0	$0	$0	$0
Town of Lillington	07/17/18	Flash Flood	0	0	$0	$0	$0	$0
Town of Lillington	07/17/18	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Harnett	*15 Events*		*1*	*0*	*$14,545,000*	*$13,133,199*	*$20,000,000*	*$18,825,000*
Johnston								
Johnston County (Unincorporated Area)	03/29/10	Flash Flood	0	0	$0	$0	$0	$0

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Johnston County (Unincorporated Area)	05/28/10	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	05/28/10	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	06/07/13	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	06/07/13	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	07/08/13	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	07/12/13	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/08/14	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/08/14	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	07/22/18	Flash Flood	0	0	$0	$0	$0	$0
Johnston County (Unincorporated Area)	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Town of Archer Lodge	02/05/10	Flood	0	0	$0	$0	$0	$0
Town of Clayton	08/24/10	Flash Flood	0	0	$0	$0	$0	$0
Town of Clayton	06/10/13	Flash Flood	0	0	$0	$0	$0	$0
Town of Clayton	08/12/14	Flash Flood	0	0	$0	$0	$0	$0

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Clayton	09/01/17	Flash Flood	0	0	$0	$0	$0	$0
Town of Clayton	09/14/18	Flash Flood	0	0	$0	$0	$0	$0
Town of Pine Level	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Town of Princeton	09/30/10	Flash Flood	0	0	$0	$0	$0	$0
Town of Princeton	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Town of Selma	08/12/14	Flash Flood	0	0	$5,000	$4,087	$0	$0
Town of Smithfield	09/14/07	Flash Flood	0	0	$0	$0	$0	$0
Town of Smithfield	08/12/14	Flood	0	0	$5,000	$4,087	$0	$0
Town of Smithfield	07/12/19	Flash Flood	0	0	$50,000	$48,392	$0	$0
Town of Smithfield	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Town of Wilson's Mills	07/12/13	Flash Flood	0	0	$0	$0	$0	$0
Town of Wilson's Mills	08/12/14	Flash Flood	0	0	$5,000	$4,087	$0	$0
Subtotal Johnston	*28 Events*		*0*	*0*	*$65,000*	*$60,654*	*$0*	*$0*
Lee								
City of Sanford	08/27/08	Flash Flood	0	0	$0	$0	$0	$0
City of Sanford	09/06/08	Flash Flood	0	0	$0	$0	$0	$0
City of Sanford	04/15/18	Flash Flood	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	07/27/10	Flash Flood	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	06/07/13	Flash Flood	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$535,000	$470,896	$0	$0

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Lee County (Unincorporated Area)	08/19/18	Flash Flood	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	09/15/18	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Lee	*8 Events*		*0*	*0*	*$535,000*	*$470,896*	*$0*	*$0*
Moore								
Moore County (Unincorporated Area)	06/09/05	Flash Flood	0	0	0	$0	0	$0
Moore County (Unincorporated Area)	06/18/09	Flash Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	06/07/13	Flash Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	03/07/14	Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	09/29/16	Flash Flood	0	0	$100,000	$87,957	$0	$0
Moore County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$3,900,000	$3,432,700	$0	$0
Moore County (Unincorporated Area)	09/14/18	Flash Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	09/15/18	Flash Flood	0	0	$0	$0	$0	$0
Moore County (Unincorporated Area)	09/17/18	Flood	0	0	$7,580,000	$7,134,675	$20,000,000	$18,825,000

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Aberdeen	08/13/11	Flash Flood	0	0	$0	$0	$0	$0
Town of Cameron	12/30/15	Flash Flood	0	0	$0	$0	$0	$0
Town of Carthage	06/29/07	Flash Flood	0	0	$0	$0	$0	$0
Town of Carthage	01/25/10	Flash Flood	0	0	$0	$0	$0	$0
Town of Robbins	10/03/15	Flash Flood	0	0	$0	$0	$0	$0
Town of Southern Pines	09/06/08	Flash Flood	0	0	$0	$0	$0	$0
Town of Southern Pines	09/06/08	Flash Flood	0	0	$200,000	$133,270	$0	$0
Town of Vass	06/26/10	Flash Flood	0	0	$0	$0	$0	$0
Village of Pinehurst	09/29/16	Flash Flood	0	0	$0	$0	$0	$0
Village of Pinehurst	07/23/17	Flash Flood	0	0	$5,000	$4,522	$0	$0
Village of Pinehurst	05/29/18	Flash Flood	0	0	$0	$0	$0	$0
Village of Whispering Pines	09/29/16	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Moore	*22 Events*		*0*	*0*	*$11,785,000*	*$10,793,125*	*$20,000,000*	*$18,825,000*
TOTAL PLAN	**83 Events**		**1**	**0**	**$53,430,000**	**$49,397,735**	**$45,000,000**	**$42,356,250**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

According to NCDC 83 recorded instances of River Flooding conditions have affected the planning area since 2005 to 2019 causing an estimated $53,430,000 in losses to property, $45,000,000 in losses to agricultural crops, 1 death(s), and 0 injury(ies).

Table 5-30 provides a summary of this historical information by participating jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

Table 5-30: Summary of Historical River Flooding Occurrences by Participating Jurisdiction

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Chatham							
Chatham County (Unincorporated Area)	6	0	0	$26,450,000	$18,488,285	$5,000,000	$3,494,950
Town of Pittsboro	2	0	0	$50,000	$36,586	$0	$0
Town of Siler City	2	0	0	$0	$0	$0	$0
Subtotal Chatham	*10*	*0*	*0*	*$26,500,000*	*$18,524,871*	*$5,000,000*	*$3,494,950*
Harnett							
City of Dunn	2	0	0	$0	$0	$0	$0
Harnett County (Unincorporated Area)	9	1	0	$14,545,000	$9,370,787	$20,000,000	$12,885,234
Town of Coats	1	0	0	$0	$0	$0	$0
Town of Lillington	3	0	0	$0	$0	$0	$0
Subtotal Harnett	*15*	*1*	*0*	*$14,545,000*	*$9,370,787*	*$20,000,000*	*$12,885,234*
Johnston							
Johnston County (Unincorporated Area)	12	0	0	$0	$0	$0	$0
Town of Archer Lodge	1	0	0	$0	$0	$0	$0
Town of Clayton	5	0	0	$0	$0	$0	$0
Town of Pine Level	1	0	0	$0	$0	$0	$0
Town of Princeton	2	0	0	$0	$0	$0	$0
Town of Selma	1	0	0	$5,000	$4,087	$0	$0
Town of Smithfield	4	0	0	$55,000	$35,434	$0	$0

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Wilson's Mills	2	0	0	$5,000	$3,937	$0	$0
Subtotal Johnston	*28*	*0*	*0*	*$65,000*	*$43,458*	*$0*	*$0*
Lee							
City of Sanford	3	0	0	$0	$0	$0	$0
Lee County (Unincorporated Area)	5	0	0	$535,000	$380,448	$0	$0
Subtotal Lee	*8*	*0*	*0*	*$535,000*	*$380,448*	*$0*	*$0*
Moore							
Moore County (Unincorporated Area)	10	0	0	$11,580,000	$6,900,114	$20,000,000	$11,917,296
Town of Aberdeen	1	0	0	$0	$0	$0	$0
Town of Cameron	1	0	0	$0	$0	$0	$0
Town of Carthage	2	0	0	$0	$0	$0	$0
Town of Robbins	1	0	0	$0	$0	$0	$0
Town of Southern Pines	2	0	0	$200,000	$133,270	$0	$0
Town of Vass	1	0	0	$0	$0	$0	$0
Village of Pinehurst	3	0	0	$5,000	$4,398	$0	$0
Village of Whispering Pines	1	0	0	$0	$0	$0	$0
Subtotal Moore	*22*	*0*	*0*	*$11,785,000*	*$7,037,783*	*$20,000,000*	*$11,917,296*
TOTAL PLAN	**83**	**1**	**0**	**$53,430,000**	**$35,357,347**	**$45,000,000**	**$28,297,481**

Source: National Climatic Data Center (NCDC) Storm Events Database and or potential user entered data.

Table 5-31 in Section 5: *Capability Assessment* lists the number of insured losses and total claims payments for historical flood damages in each jurisdiction as recorded under the NFIP. **Table 5-31** below provides the NFIP entry date for each participating jurisdiction. As explained in subsection 4.3, the NFIP entry date for each jurisdiction was used to determine buildings that were built pre - FIRM and are therefore assumed to be at greater risk to the flood hazard.

Table 5-31: NFIP Entry Dates

Jurisdiction	NFIP Entry Date
Chatham County (Unincorporated Area)	07/16/91
Town of Goldston	02/02/07
Town of Pittsboro	02/02/07
Town of Siler City	07/02/87
City of Dunn	09/04/96
Harnett County (Unincorporated Area)	04/16/90
Town of Angier	04/16/90
Town of Benson	10/20/00
Town of Broadway	09/06/06
Town of Coats	10/03/06
Town of Erwin	04/16/90
Town of Lillington	09/04/86
Johnston County (Unincorporated Area)	09/30/83
Town of Clayton	04/01/82
Town of Four Oaks	10/20/00
Town of Kenly	10/20/00
Town of Micro	10/20/00
Town of Pine Level	10/20/00
Town of Princeton	09/30/83
Town of Selma	10/20/00
Town of Smithfield	04/01/82
Town of Wilson's Mills	10/20/00
City of Sanford	09/06/89
Lee County (Unincorporated Area)	09/06/89
Moore County (Unincorporated Area)	12/15/89
Town of Aberdeen	05/15/86
Town of Cameron	12/15/89
Town of Carthage	10/17/06

Jurisdiction	NFIP Entry Date
Town of Pinebluff	07/17/86
Town of Robbins	06/03/86
Town of Southern Pines	03/04/88
Town of Taylortown	10/17/06
Town of Vass	10/17/06
Village of Foxfire	12/15/89
Village of Pinehurst	12/15/89
Village of Whispering Pines	12/15/89

Source: Federal Emergency Management Agency Community Status Book Report: Communities Participating in the National Flood Program

5.11.5 Repetitive Loss Properties

FEMA defines a repetitive loss property as any insurable building for which two or more claims of more than $1,000 were paid by the NFIP within any rolling 10-year period, since 1978. A repetitive loss property may or may not be currently insured by the NFIP.

Without mitigation these properties will likely continue to experience flood loses. **Table 5-32** presents a summary these figures for the Cape Fear Region.

Table 5-32: Summary of Residential Repetitive Loss Properties in the Cape Fear Region

Location	Number of Properties	Number of Losses	Total Payments
Chatham County	**2**	**5**	**$156,179**
Goldston*	--	--	$--
Pittsboro	--	--	$--
Siler City	1	2	$128,419
Unincorporated Area	1	3	$27,760
Harnett County	**8**	**16**	**$404,524**
Angier	--	--	$--
Coats*	--	--	$--
Dunn	1	2	$3,024
Erwin	--	--	$--
Lillington	--	--	$--
Unincorporated Area	7	14	$401,500
Johnston County	**37**	**205**	**$3,660,650**
Archer Lodge	--	--	$--
Benson	--	--	$--
Clayton	--	--	$--

Location	Number of Properties	Number of Losses	Total Payments
Four Oaks	--	--	$--
Kenly	1	2	$40,736
Micro	--	--	$--
Pine Level	--	--	$--
Princeton	--	--	$--
Selma	--	--	$--
Smithfield	18	65	$2,649,438
Wilson's Mills	--	--	$--
Unincorporated Area	18	71	$970,476
Lee County	**6**	**13**	**$356,847**
Broadway	--	--	$--
Sanford	3	6	$82,382
Unincorporated Area	3	7	$274,465
Moore County	**7**	**17**	**$448,642**
Aberdeen	--	--	$--
Cameron	--	--	$--
Carthage	--	--	$--
Foxfire Village	--	--	$--
Pinebluff	--	--	$--
Pinehurst	2	6	$209,645
Robbins	--	--	$--
Southern Pines	--	--	$--
Taylortown*	--	--	$--
Vass	--	--	$--
Whispering Pines	--	--	$--
Unincorporated Area	5	11	$238,998
Cape Fear Regional Total	**60**	**256**	**$5,026,842**

* These communities do not participate in the National Flood Insurance Program. Therefore, no values are reported.
Source: National Flood Insurance Program

5.11.6 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future River Flooding is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less than 1% annual probability
- Medium: Between 1% and 10% annual probability
- High: Greater than 10% annual probability
-

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
City of Dunn	Medium
City of Sanford	Medium
Harnett County (Unincorporated Area)	Low
Johnston County (Unincorporated Area)	Low
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium
Town of Angier	Medium
Town of Archer Lodge	Medium
Town of Benson	Low
Town of Broadway	Low
Town of Cameron	Low
Town of Carthage	Low
Town of Clayton	Low
Town of Coats	Low
Town of Erwin	Low
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Low
Town of Lillington	Low
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Low
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Low
Town of Taylortown	Low
Town of Vass	Low
Town of Wilson's Mills	Low
Village of Foxfire	Low
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Flood events will remain a threat in the Cape Fear Region, and the probability of future occurrences will remain likely (between 10 and 100 percent annual probability). The probability of future flood events based on magnitude and according to best available data is illustrated in the figures above**,** which indicates those areas susceptible to the 1-percent annual chance flood (100-year floodplain) and the 0.2-percent annual chance flood (500-year floodplain).

It can be inferred from the floodplain location maps, previous occurrences, and repetitive loss properties that risk varies throughout the Cape Fear Region. For example, Angier, Broadway, Carthage, Coats, Foxfire Village, Goldston, and Vass have less floodplain and thus a lower risk of flood than other municipalities. Flood is not the greatest hazard of concern but will continue to occur and cause damage. Therefore, mitigation actions may be warranted, particularly for repetitive loss properties.

5.11.7 Impact

People

Certain health hazards are common to flood events. While such problems are often not reported, three general types of health hazards accompany floods. The first comes from the water itself. Floodwaters carry anything that was on the ground that the upstream runoff picked up, including dirt, oil, animal waste, and lawn, farm and industrial chemicals. Pastures and areas where farm animals are kept, or their wastes are stored can contribute polluted waters to the receiving streams.

Floodwaters also saturate the ground, which leads to infiltration into sanitary sewer lines. When wastewater treatment plants are flooded, there is nowhere for the sewage to flow. Infiltration and lack of treatment can lead to overloaded sewer lines that can back up into low-lying areas and homes. Even when it is diluted by flood waters, raw sewage can be a breeding ground for bacteria such as E. coli and other disease-causing agents. All jurisdictions in the Region are suspectible to this type of impact.

The second type of health problem arises after most of the water has gone. Stagnant pools can become breeding grounds for mosquitoes, and wet areas of a building that have not been properly cleaned breed mold and mildew. A building that is not thoroughly cleaned becomes a health hazard, especially for small children and the elderly.

Another health hazard occurs when heating ducts in a forced air system are not properly cleaned after inundation. When the furnace or air conditioner is turned on, the sediments left in the ducts are circulated throughout the building and breathed in by the occupants. If the City water system loses pressure, a boil order may be issued to protect people and animals from contaminated water.

The third problem is the long-term psychological impact of having been through a flood and seeing one ‘s home damaged and personal belongings destroyed. The cost and labor needed to repair a flood-damaged home puts a severe strain on people, especially the unprepared and uninsured. There is also a long-term problem for those who know that their homes can be flooded again. The resulting stress on floodplain residents takes its toll in the form of aggravated physical and mental health problems.

First Responders

First responders are at risk when attempting to rescue people from their homes. They are subject to the same health hazards as the public mentioned above. Flood waters may prevent access to areas in need of response or the flood may prevent access to the critical facilities themselves which may prolong response time.

Continuity of Operations

Floods can severely disrupt normal operations, especially when there is a loss of power. For a detailed analysis of critical facilities at risk to flooding, see Chapter 6 Vulnerability Assessment.

Built Environment

Residential, commercial, and public buildings, as well as critical infrastructure such as transportation, water, energy, and communication systems may be damaged or destroyed by flood waters. Johnston County appears to be most vulnerable to flooding, especially the cities of Four Oaks, Selma and Smitfield. For a detailed analysis of properties at risk to flooding, see Chapter 6 Vulnerability Assessment.

Economy

During floods (especially flash floods), roads, bridges, farms, houses and automobiles are destroyed. Additionally, the local government must deploy firemen, police and other emergency response personnel and equipment to help the affected area. It may take years for the affected communities to be re-built and business to return to normal.

Natural Environment

During a flood event, chemicals and other hazardous substances may end up contaminating local water bodies. Flooding kills animals and in general disrupts the ecosystem. Snakes and insects may also make their way to the flooded areas.

OTHER HAZARDS

5.12 Hazardous Materials Incidents

5.12.1 Background

Hazardous materials can be found in many forms and quantities that can potentially cause death; serious injury; long-lasting health effects; and damage to buildings, homes, and other property in varying degrees. Such materials are routinely used and stored in many homes and businesses and are also shipped daily on the nation’s highways, railroads, waterways, and pipelines. This subsection on the hazardous material hazard is intended to provide a general overview of the hazard, and the threshold

for identifying fixed and mobile sources of hazardous materials is limited to general information on rail, highway, and FEMA-identified fixed HAZMAT sites determined to be of greatest significance as appropriate for the purposes of this plan.

Hazardous material (HAZMAT) incidents can apply to fixed facilities as well as mobile, transportation-related accidents in the air, by rail, on the nation's highways, and on the water. Approximately 6,774 HAZMAT events occur each year, 5,517 of which are highway incidents, 991 are railroad incidents, and 266 are due to other causes.[9] In essence, HAZMAT incidents consist of solid, liquid, and/or gaseous contaminants that are released from fixed or mobile containers, whether by accident or by design as with an intentional terrorist attack. A HAZMAT incident can last hours to days, while some chemicals can be corrosive or otherwise damaging over longer periods of time. In addition to the primary release, explosions and/or fires can result from a release, and contaminants can be extended beyond the initial area by persons, vehicles, water, wind, and possibly wildlife as well.

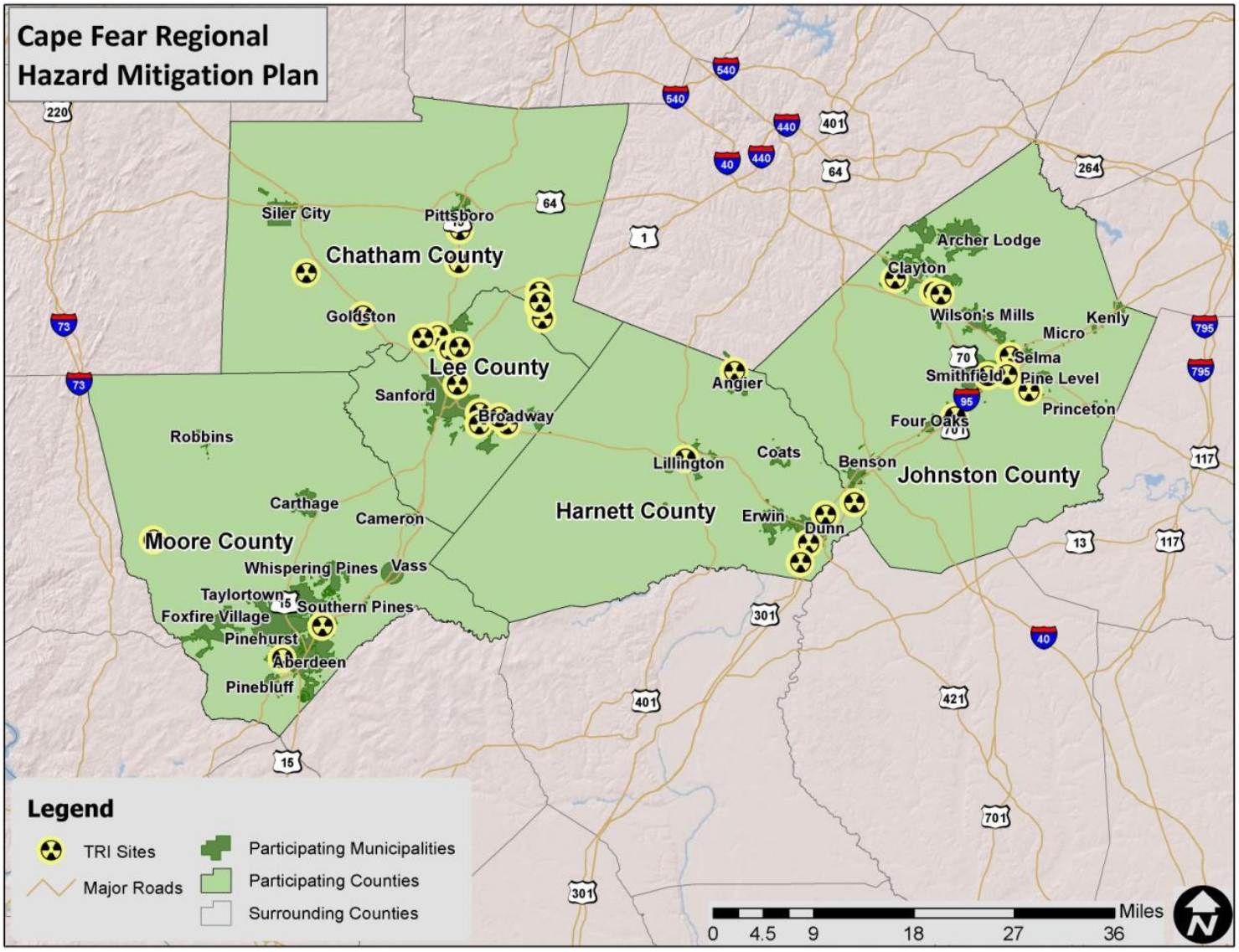
HAZMAT incidents can also occur as a result of or in tandem with natural hazard events, such as floods, hurricanes, tornadoes, and earthquakes, which in addition to causing incidents can also hinder response efforts. In the case of Hurricane Floyd in September 1999, communities along the Eastern United States were faced with flooded junkyards, disturbed cemeteries, deceased livestock, floating propane tanks, uncontrolled fertilizer spills, and a variety of other environmental pollutants that caused widespread toxicological concern.

Hazardous material incidents can include the spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of a hazardous material, but exclude: (1) any release which results in exposure to poisons solely within the workplace with respect to claims which such persons may assert against the employer of such persons; (2) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine; (3) release of source, byproduct, or special nuclear material from a nuclear incident; and (4) the normal application of fertilizer.

5.12.2 Location and Spatial Extent

As a result of the 1986 Emergency Planning and Community Right to Know Act (EPCRA), the Environmental Protection Agency provides public information on hazardous materials. One facet of this program is to collect information from industrial facilities on the releases and transfers of certain toxic agents. This information is then reported in the Toxic Release Inventory (TRI). TRI sites indicate where such activity is occurring. The Cape Fear Region has 36 TRI sites. These sites are shown in **Figure 5-126.**

[9] FEMA, 1997.



Source: Environmental Protection Agency

Figure 5-126: Toxic Release Inventory (TRI) Sites in the Cape Fear Region

In addition to "fixed" hazardous materials locations, hazardous materials may also impact the region via roadways and rail. Many roads in the region are subject to hazardous materials transport and all roads that permit hazardous material transport are considered potentially at risk to an incident.

5.12.3 Extent

Location	Number of Occurrences	Deaths / Injuries	Property Damage (2013)
Chatham County	**16**	**0/4**	**$0**
Goldston	2	0/0	$0
Pittsboro	2	0/0	$0
Siler City	5	0/1	$0
Unincorporated Area	7	0/3	$0
Harnett County	**11**	**1/1**	**$16,607**
Coats	1	0/0	$0
Dunn	4	1/1	$0
Erwin	1	0/0	$0
Lillington	5	0/0	$16,607
Unincorporated Area	0	0/0	$0
Johnston County	**76**	**2/2**	**$23,280**
Archer Lodge	0	0/0	$0
Benson	3	0/0	$2,144
Clayton	7	0/0	$0
Four Oaks	1	0/0	$0
Kenly	10	0/1	$5,597
Pine Level	1	0/0	$0
Princeton	2	0/0	$2,356
Selma	36	2/1	$11,918
Smithfield	14	0/0	$0
Wilson's Mills	1	0/0	$0
Unincorporated Area	1	0/0	$1,266
Lee County	**32**	**0/1**	**$1,661**
Broadway	1	0/0	$0
Sanford	30	0/1	$1,661
Unincorporated Area	1	0/0	$0

Location	Number of Occurrences	Deaths / Injuries	Property Damage (2013)
Moore County	**24**	**0/0**	**$596**
Aberdeen	14	0/0	$0
Carthage	2	0/0	$0
Pinehurst	1	0/0	$0
Robbins	3	0/0	$596
Southern Pines	4	0/0	$0
Cape Fear Regional Total	**159**	**3/8**	**$42,144**

Source: United States Department of Transportation Pipeline and Hazardous Materials Safety Administration

5.12.4 Historical Occurrences

The U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) lists historical occurrences throughout the nation. A "serious incident" is a hazardous materials incident that involves:

- a fatality or major injury caused by the release of a hazardous material,
- the evacuation of 25 or more persons as a result of release of a hazardous material or exposure to fire,
- a release or exposure to fire which results in the closure of a major transportation artery,
- the alteration of an aircraft flight plan or operation,
- the release of radioactive materials from Type B packaging,
- the release of over 11.9 galls or 88.2 pounds of a severe marine pollutant, or
- the release of a bulk quantity (over 199 gallons or 882 pounds) of a hazardous material.

However, prior to 2002, a hazardous material "serious incident" was defined as follows:

- a fatality or major injury due to a hazardous material,
- closure of a major transportation artery or facility or evacuation of six or more person due to the presence of hazardous material, or
- a vehicle accident or derailment resulting in the release of a hazardous material.

There has been a total of 159 recorded HAZMAT incidents in the Cape Fear Region since 1971. These events resulted in over $42,000 (2013 dollars) in property damages as well as three fatalities and eight injuries. **Table 5-33** summarizes the HAZMAT incidents reported in the Cape Fear Region.

Table 5-33: Summary of Hazmat Incidents in the Cape Fear Region

Location	Number of Occurrences	Deaths / Injuries	Property Damage (2013)
Chatham County	**16**	**0/4**	**$0**
Goldston	2	0/0	$0
Pittsboro	2	0/0	$0
Siler City	5	0/1	$0
Unincorporated Area	7	0/3	$0
Harnett County	**11**	**1/1**	**$16,607**
Angier	0	0/0	$0
Coats	1	0/0	$0
Dunn	4	1/1	$0
Erwin	1	0/0	$0
Lillington	5	0/0	$16,607
Unincorporated Area	0	0/0	$0
Johnston County	**76**	**2/2**	**$23,280**
Archer Lodge	0	0/0	$0
Benson	3	0/0	$2,144
Clayton	7	0/0	$0
Four Oaks	1	0/0	$0
Kenly	10	0/1	$5,597
Micro	0	0/0	$0
Pine Level	1	0/0	$0
Princeton	2	0/0	$2,356
Selma	36	2/1	$11,918
Smithfield	14	0/0	$0
Wilson's Mills	1	0/0	$0
Unincorporated Area	1	0/0	$1,266
Lee County	**32**	**0/1**	**$1,661**
Broadway	1	0/0	$0
Sanford	30	0/1	$1,661
Unincorporated Area	1	0/0	$0
Moore County	**24**	**0/0**	**$596**
Aberdeen	14	0/0	$0
Cameron	0	0/0	$0

Location	Number of Occurrences	Deaths / Injuries	Property Damage (2013)
Carthage	2	0/0	$0
Foxfire Village	0	0/0	$0
Pinebluff	0	0/0	$0
Pinehurst	1	0/0	$0
Robbins	3	0/0	$596
Southern Pines	4	0/0	$0
Taylortown	0	0/0	$0
Vass	0	0/0	$0
Whispering Pines	0	0/0	$0
Unincorporated Area	0	0/0	$0
Cape Fear Regional Total	**159**	**3/8**	**$42,144**

Source: United States Department of Transportation Pipeline and Hazardous Materials Safety Administration

5.12.5 Probability of Future Occurrence

Given the location of 36 toxic release inventory sites in the Cape Fear Region and prior rail and roadway incidents it is likely that a hazardous material incident may occur in the region (between 10 and 100 percent annual probability). County and municipal officials are mindful of this possibility and take precautions to prevent such an event from occurring. Furthermore, there are detailed plans in place to respond to an occurrence.

5.12.6 Impact

5.13 Wildfire

5.13.1 Background

A wildfire is any outdoor fire (i.e. grassland, forest, brush land) that is not under control, supervised, or prescribed.[10] Wildfires are part of the natural management of forest ecosystems, but may also be caused by human factors.

Nationally, over 80 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly extinguishing campfires. The second most common cause for wildfire is lightning. In North Carolina, a majority of fires are caused by debris burning.

There are three classes of wildland fires: surface fire, ground fire, and crown fire. A surface fire is the most common of these three classes and burns along the floor of a forest, moving slowly and killing or

[10] Prescription burning, or "controlled burn," undertaken by land management agencies is the process of igniting fires under selected conditions, in accordance with strict parameters.

damaging trees. A ground fire (muck fire) is usually started by lightning or human carelessness and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around.

Wildfire probability depends on local weather conditions, outdoor activities such as camping, debris burning, and construction, and the degree of public cooperation with fire prevention measures. Drought conditions and other natural hazards (such as tornadoes, hurricanes, etc.) increase the probability of wildfires by producing fuel in both urban and rural settings.

Many individual homes and cabins, subdivisions, resorts, recreational areas, organizational camps, businesses, and industries are located within high wildfire hazard areas. Furthermore, the increasing demand for outdoor recreation places more people in wildlands during holidays, weekends, and vacation periods. Unfortunately, wildland residents and visitors are rarely educated or prepared for wildfire events that can sweep through the brush and timber and destroy property within minutes.

Wildfires can result in severe economic losses as well. Businesses that depend on timber, such as paper mills and lumber companies, experience losses that are often passed along to consumers through higher prices and sometimes jobs are lost. The high cost of responding to and recovering from wildfires can deplete state resources and increase insurance rates. The economic impact of wildfires can also be felt in the tourism industry if roads and tourist attractions are closed due to health and safety concerns.

State and local governments can impose fire safety regulations on home sites and developments to help curb wildfire. Land treatment measures such as fire access roads, water storage, helipads, safety zones, buffers, firebreaks, fuel breaks, and fuel management can be designed as part of an overall fire defense system to aid in fire control. Fuel management, prescribed burning, and cooperative land management planning can also be encouraged to reduce fire hazards.

5.13.2 Location and Spatial Extent

The entire region is at risk to a wildfire occurrence. However, several factors such as drought conditions or high levels of fuel on the forest floor, may make a wildfire more likely. Furthermore, areas in the urban-wildland interface are particularly susceptible to fire hazard as populations abut formerly undeveloped areas. The Fire Occurrence Areas in the figure below give an indication of historic locations impacted.

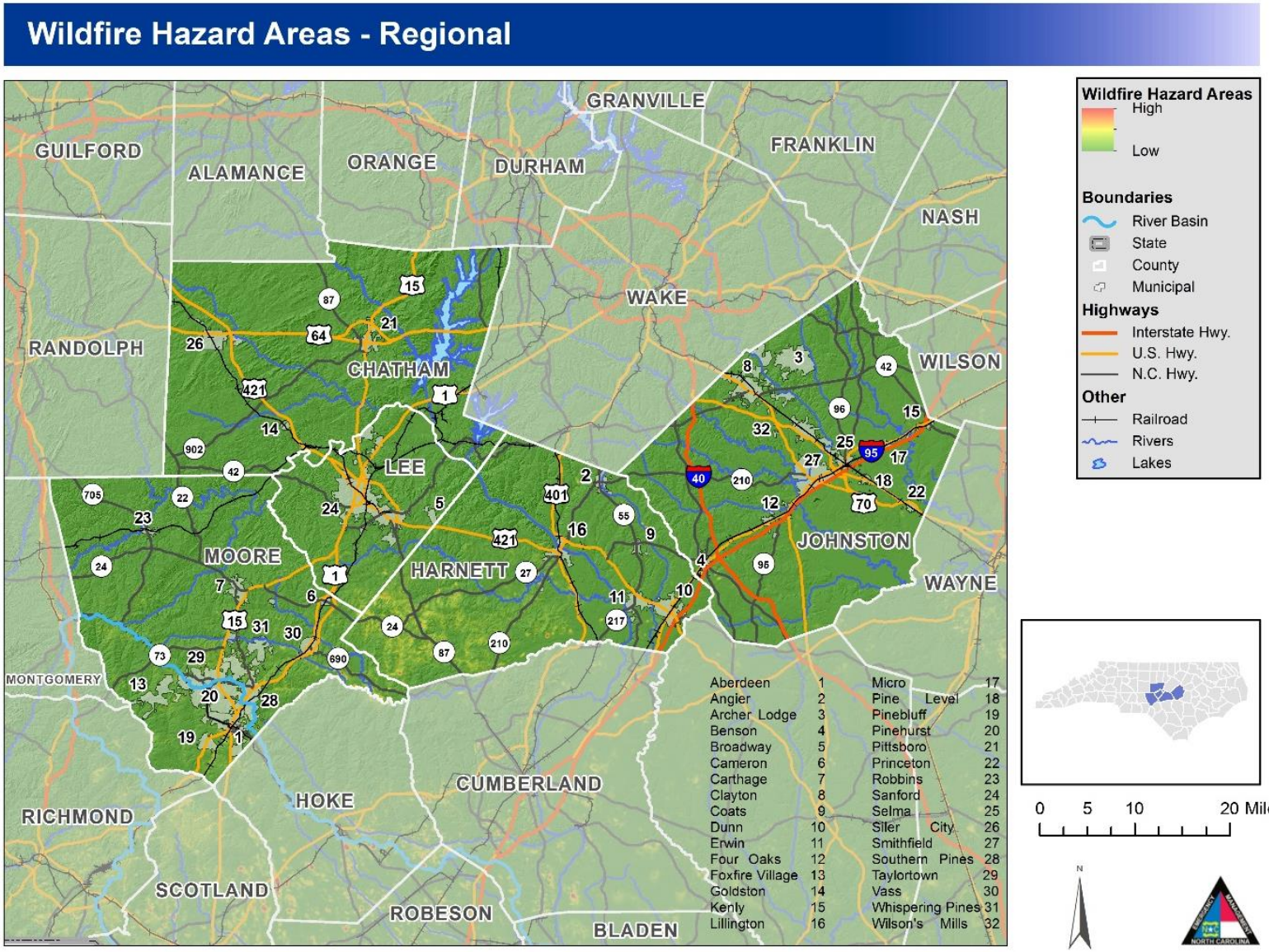


Figure 5-127: Wildfire Hazard Areas - Regional

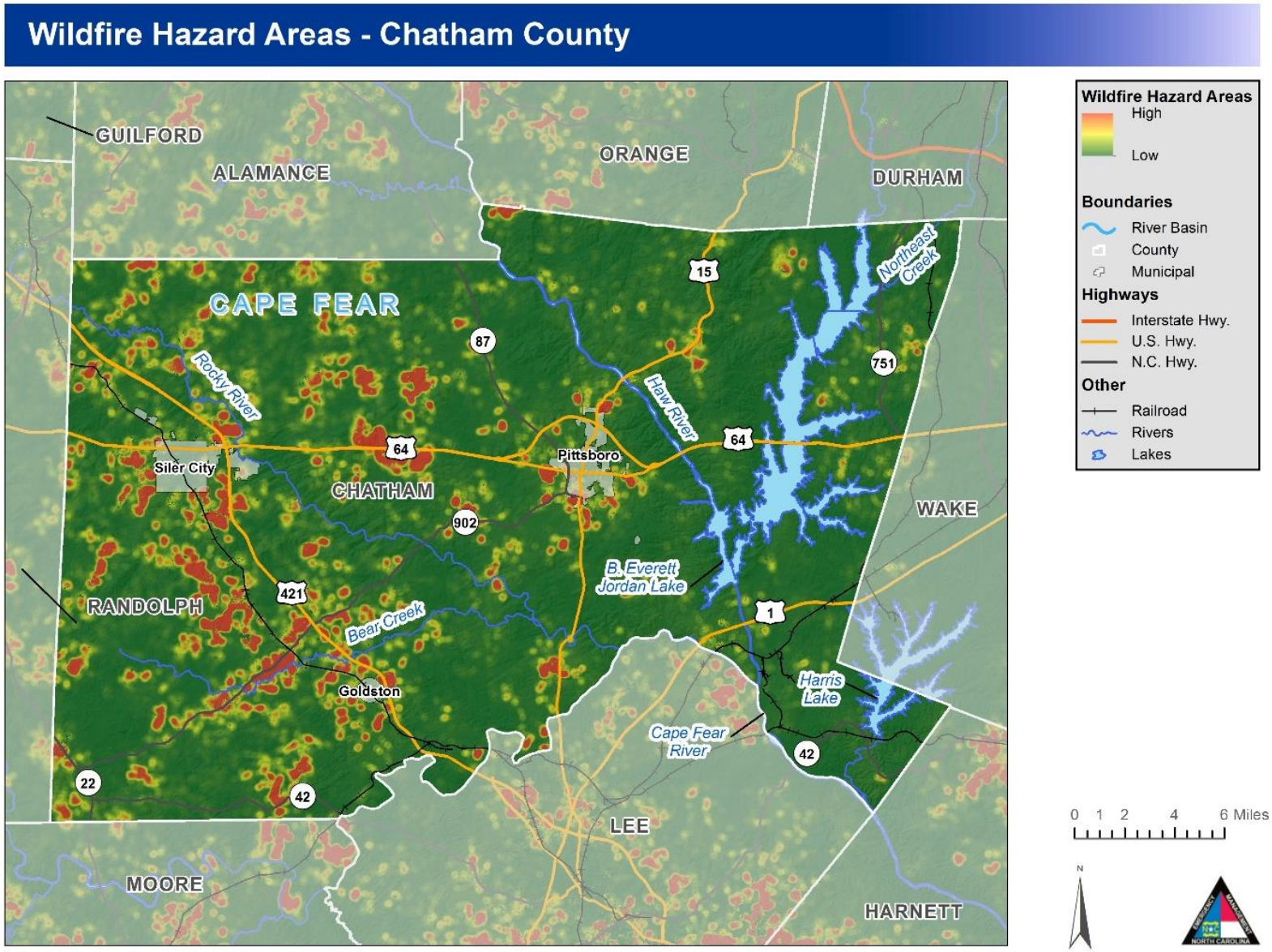


Figure 5-128: Wildfire Hazard Areas – Chatham County

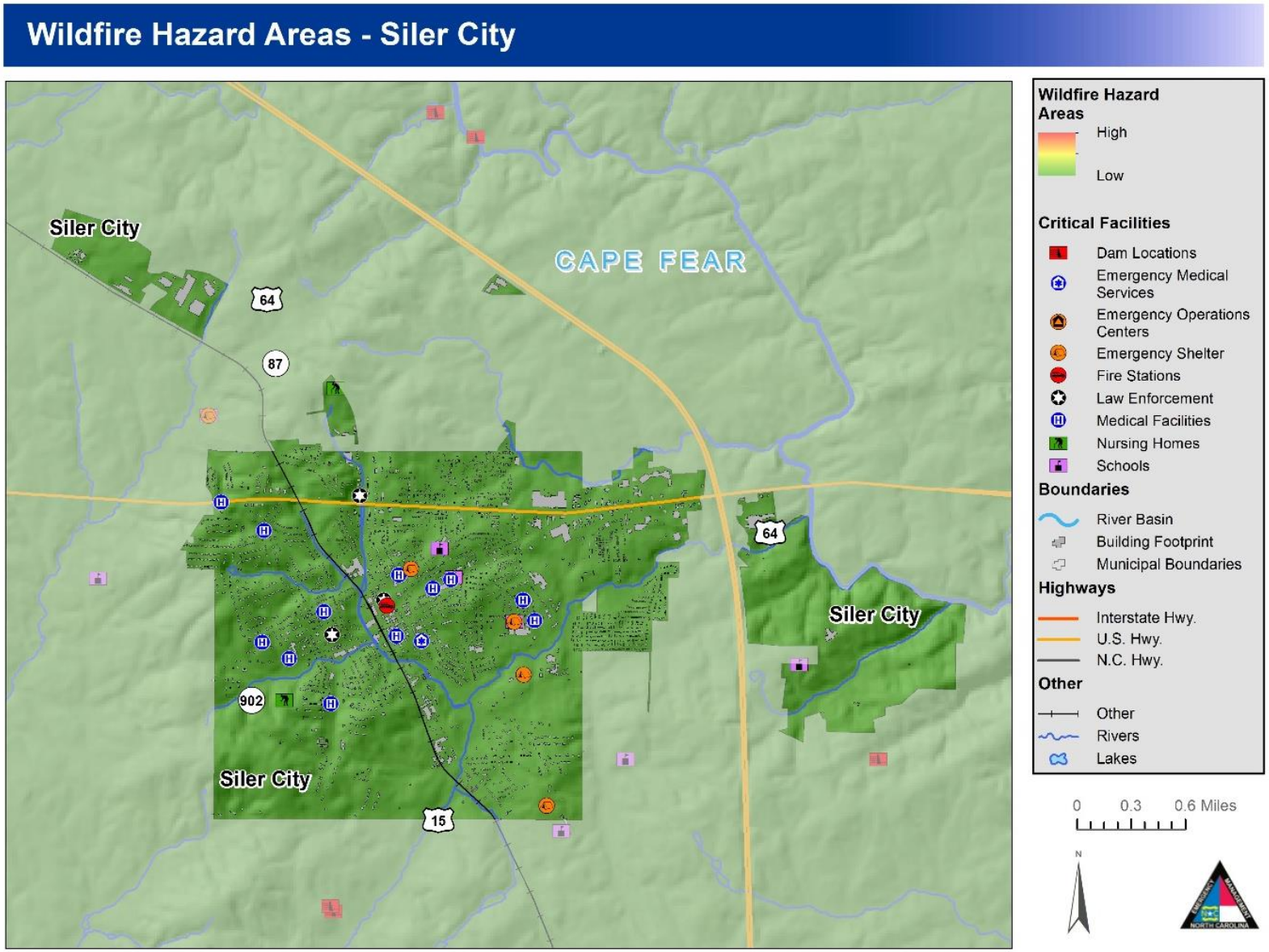


Figure 5-129: Wildfire Hazard Areas – Siler City

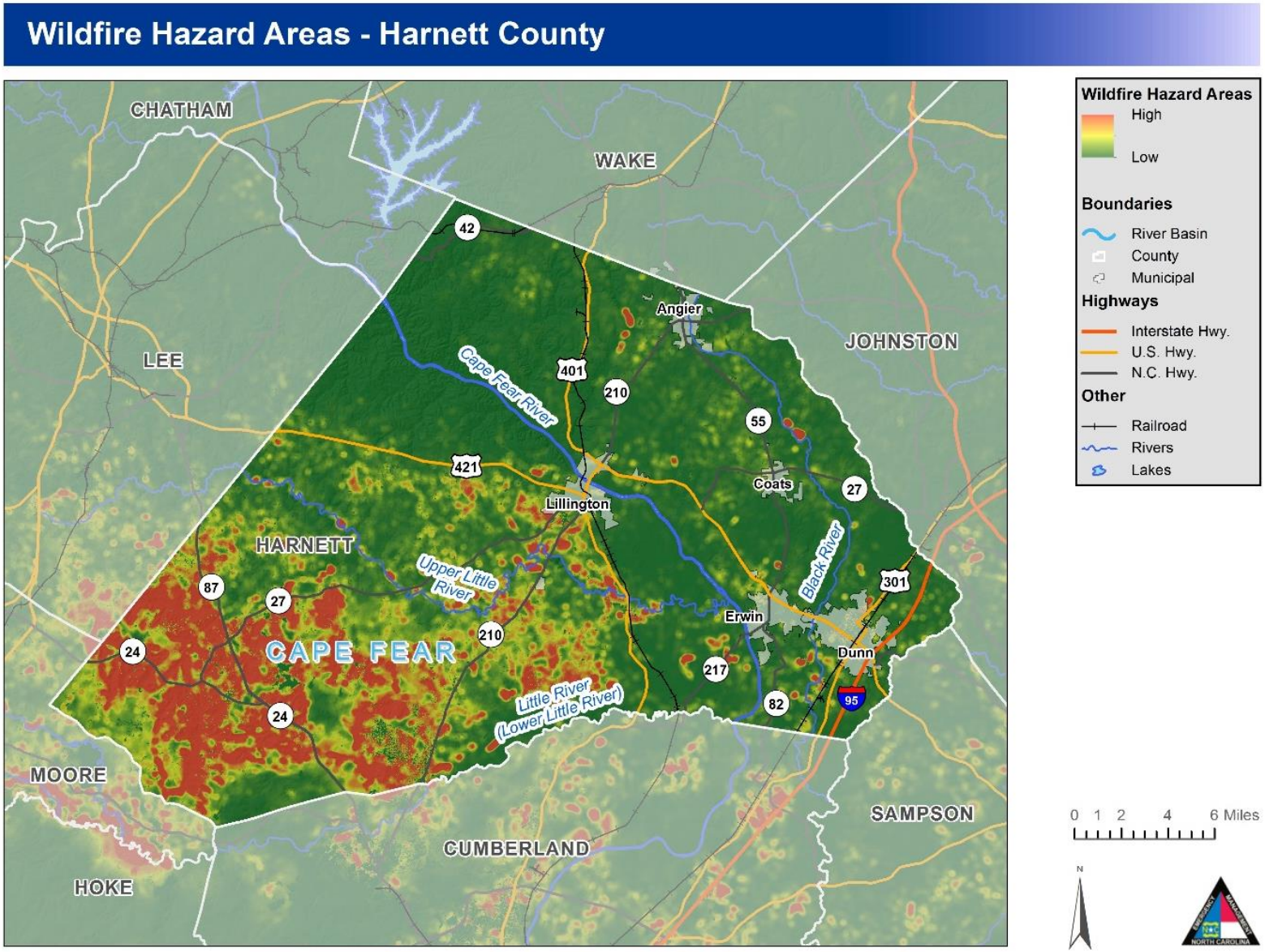


Figure 5-130: Wildfire Hazard Areas – Harnett County

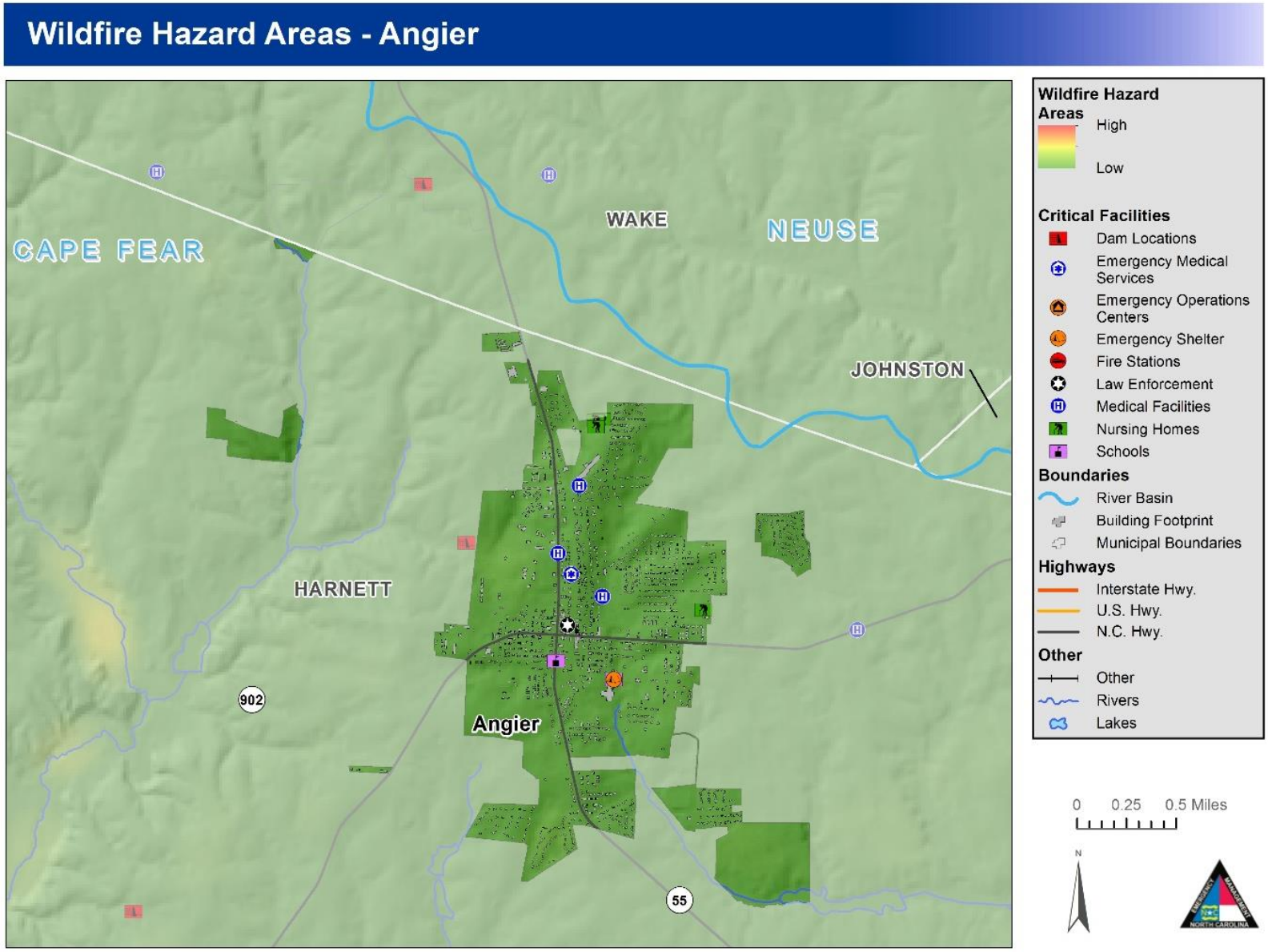


Figure 5-131: Wildfire Hazard Areas - Angier

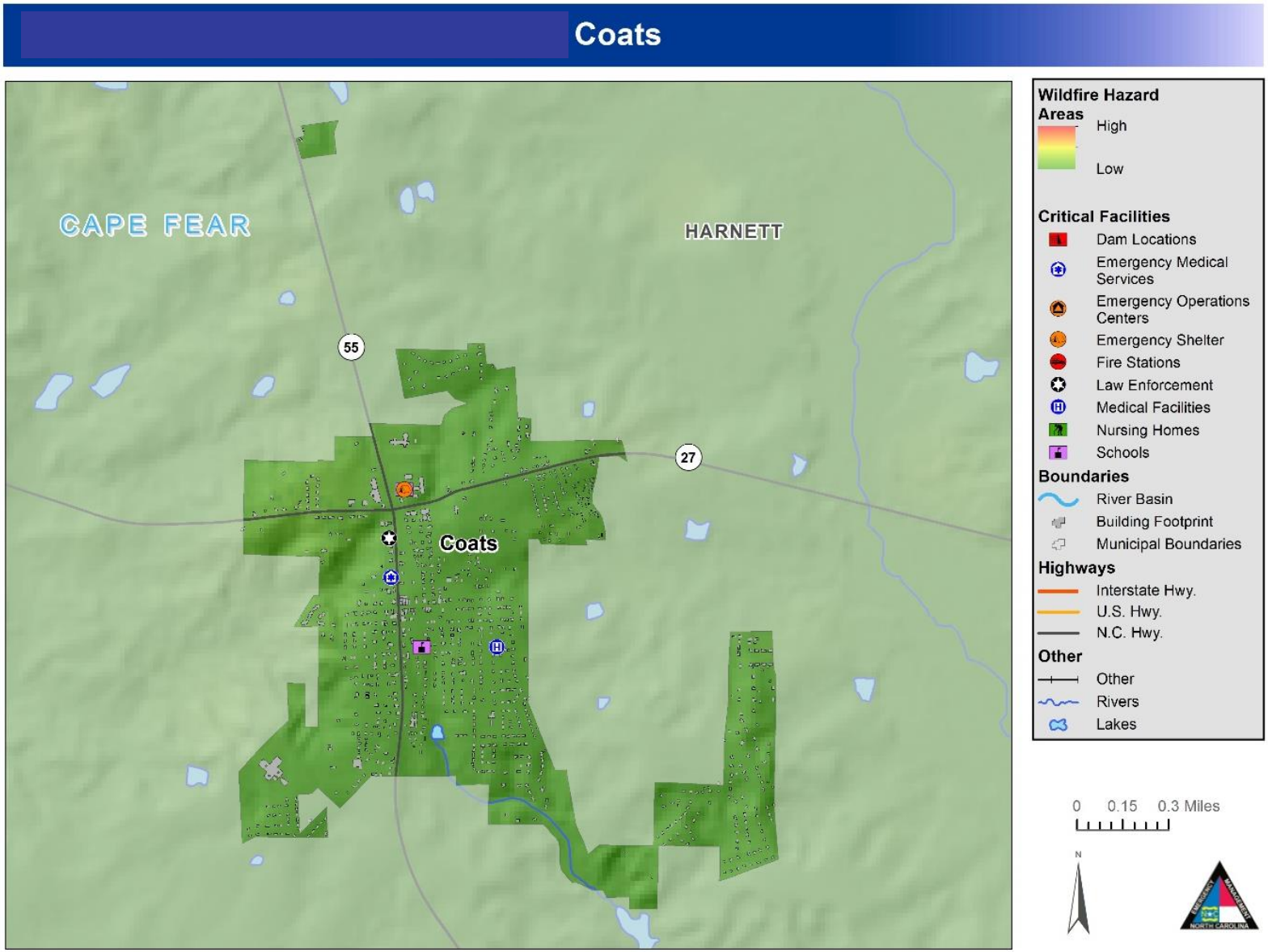


Figure 5-132: Wildfire Hazard Areas - Coats

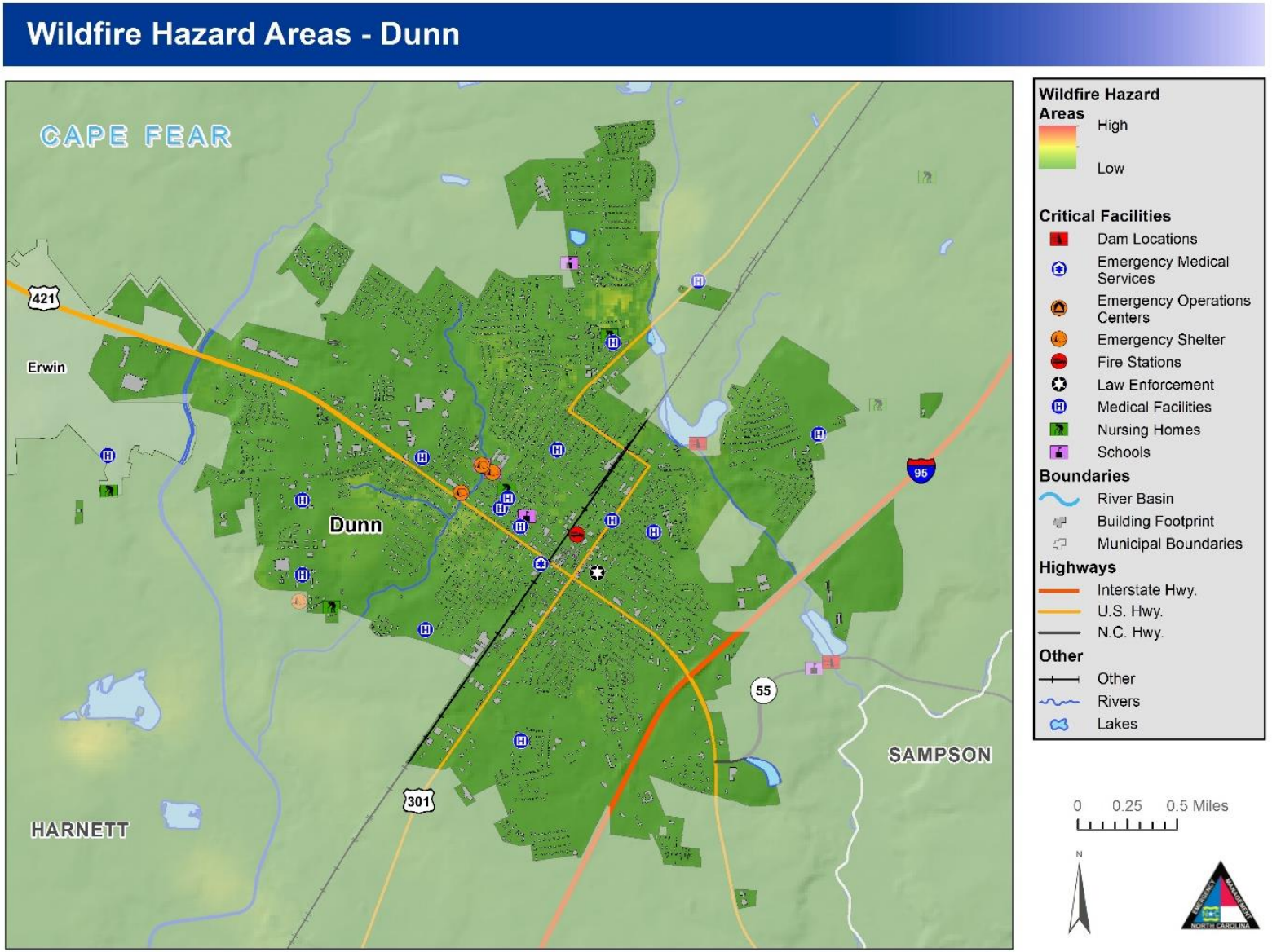


Figure 5-133: Wildfire Hazard Areas - Dunn

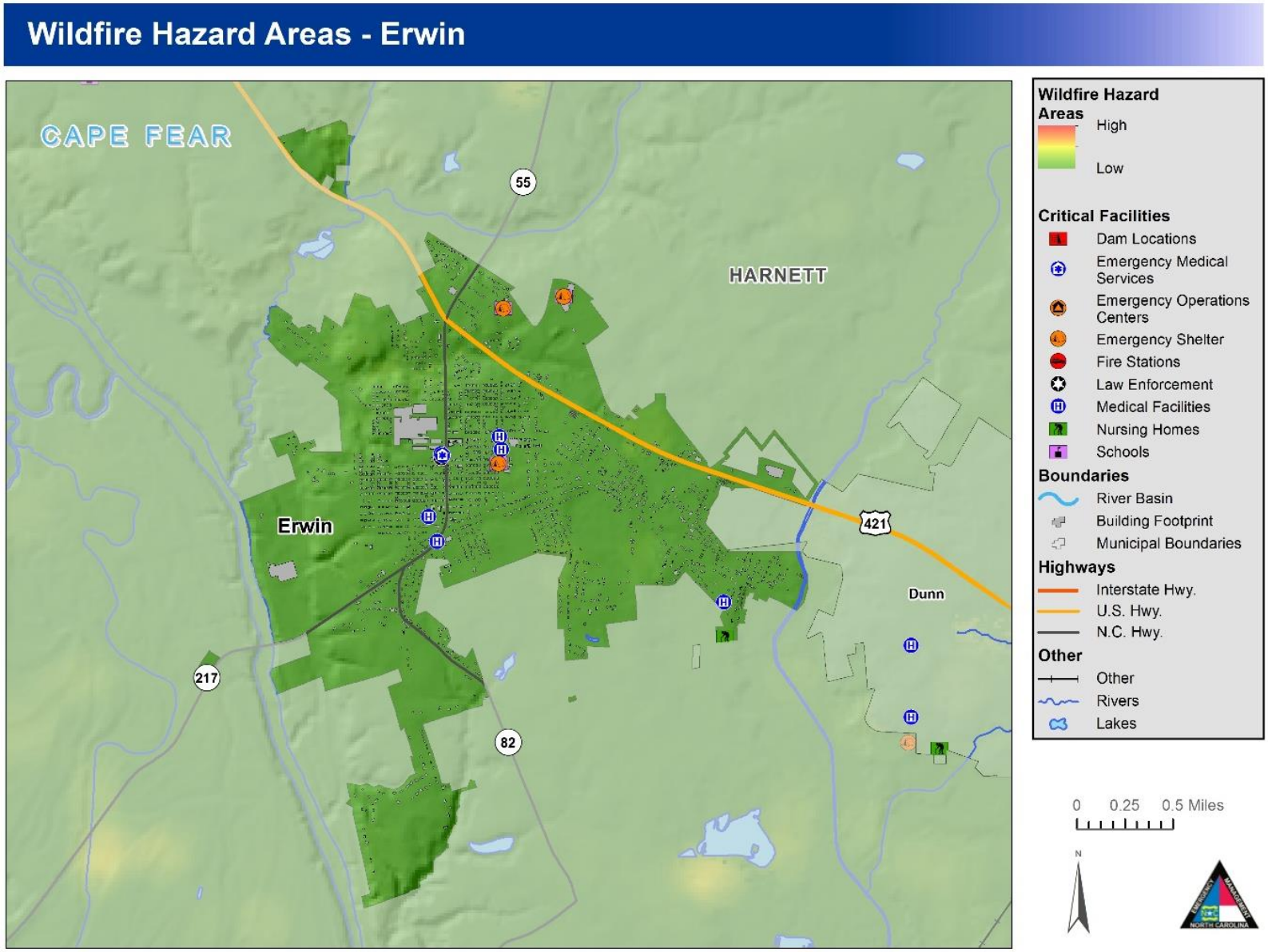


Figure 5-134: Wildfire Hazard Areas - Erwin

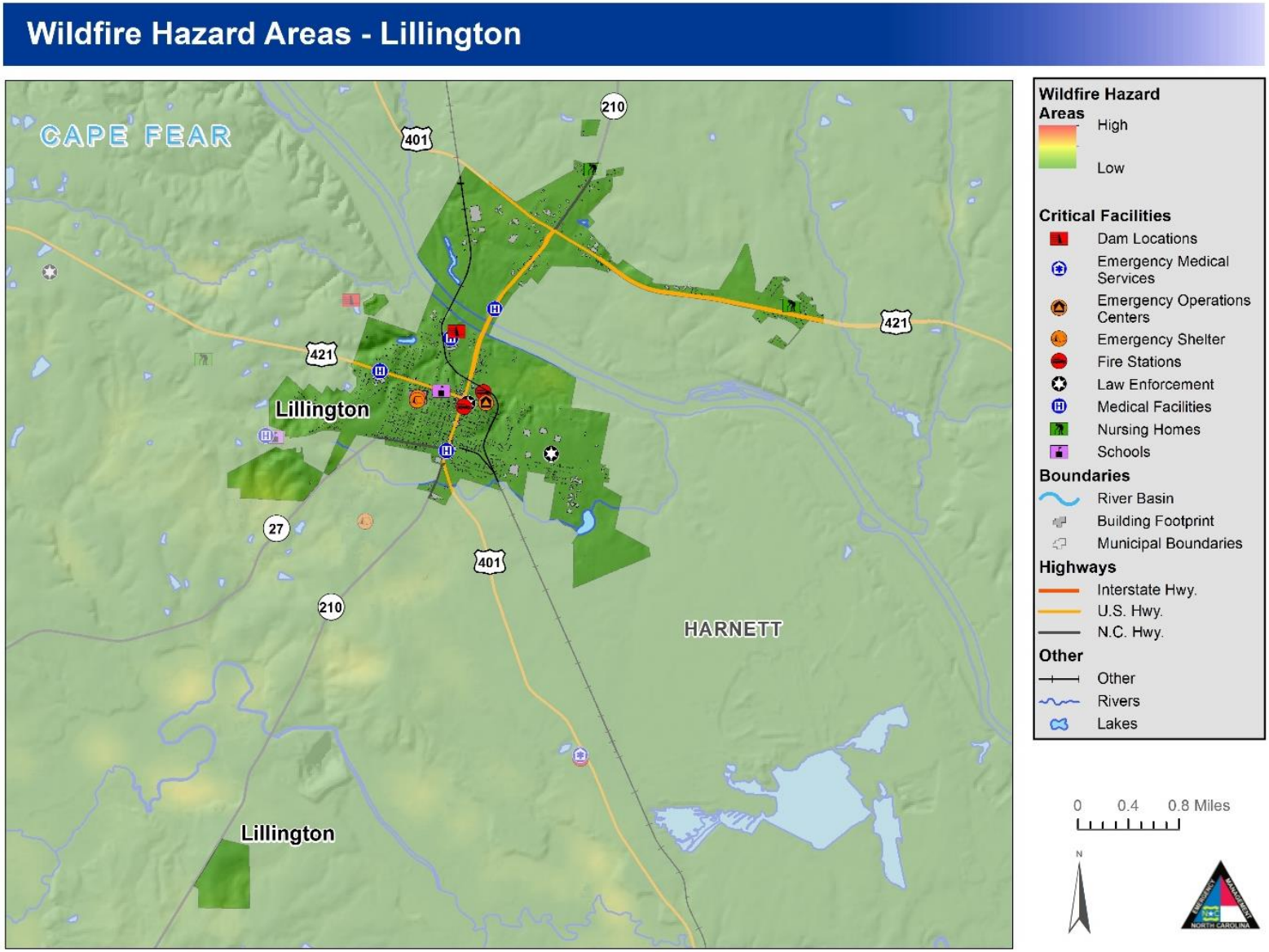


Figure 5-135: Wildfire Hazard Areas - Lillington

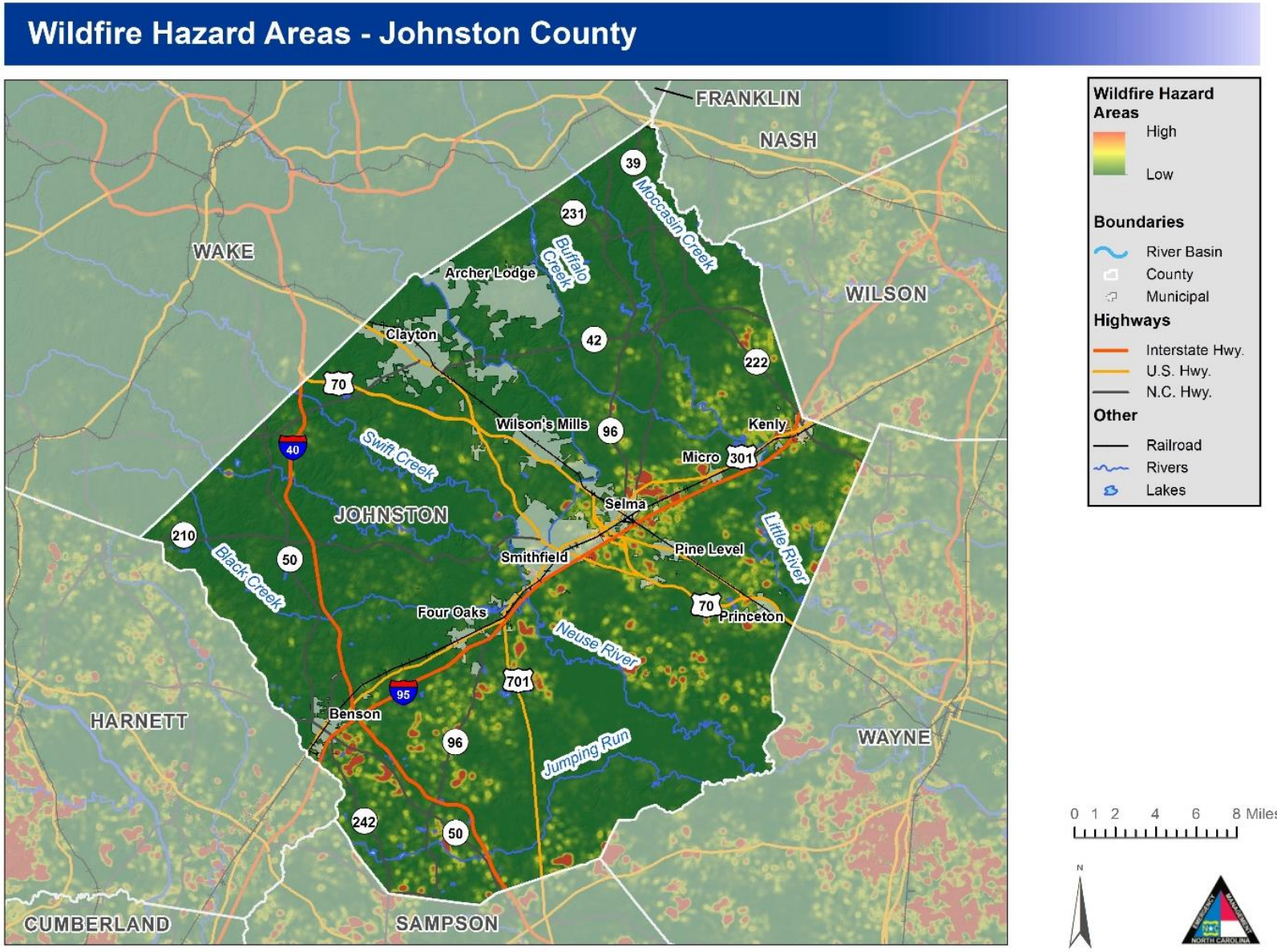


Figure 5-136: Wildfire Hazard Areas – Johnston County

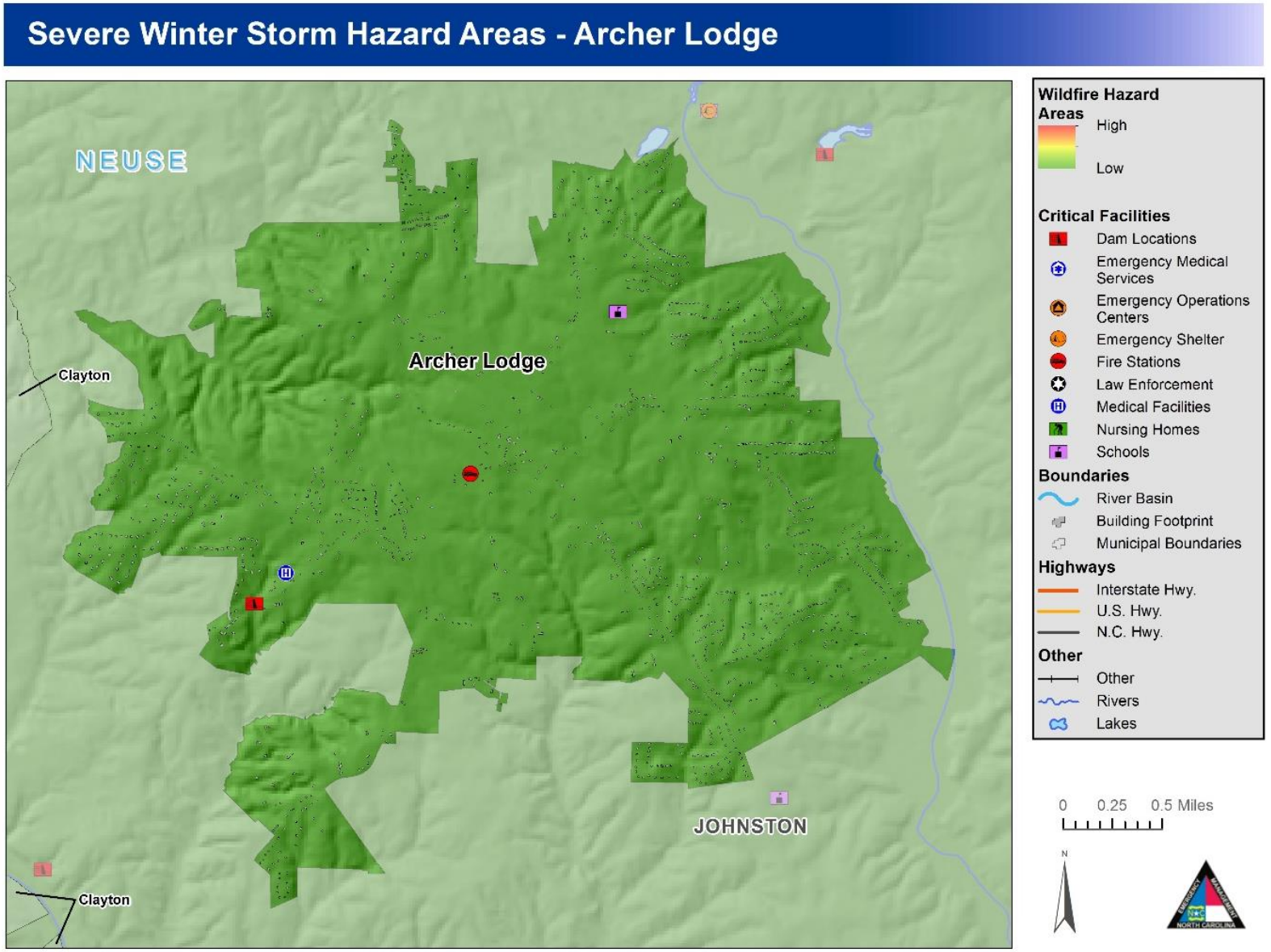


Figure 5-137: Severe Winter Storm Hazard Areas – Archer Lodge

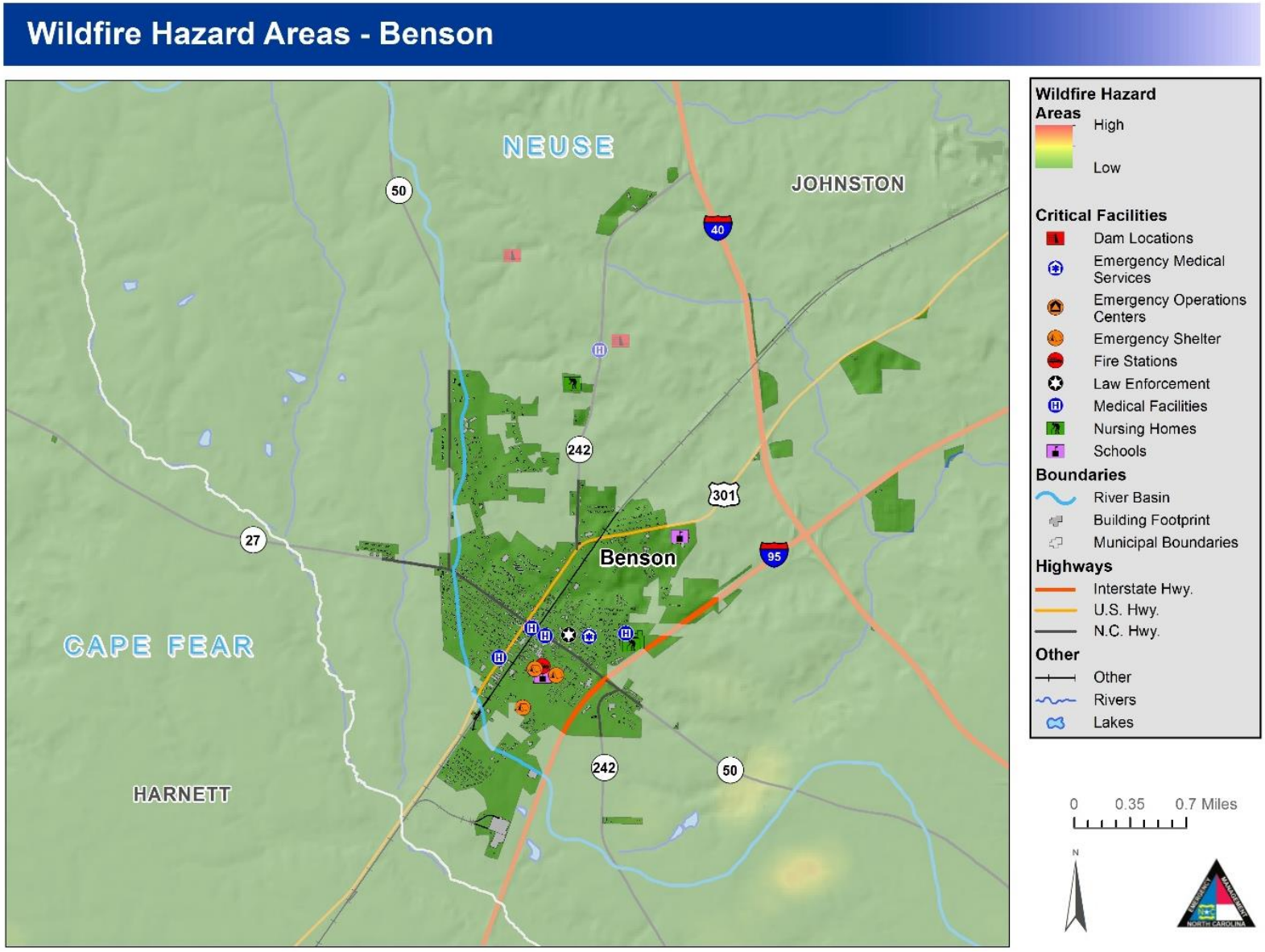


Figure 5-138: Wildfire Hazard Areas - Benson

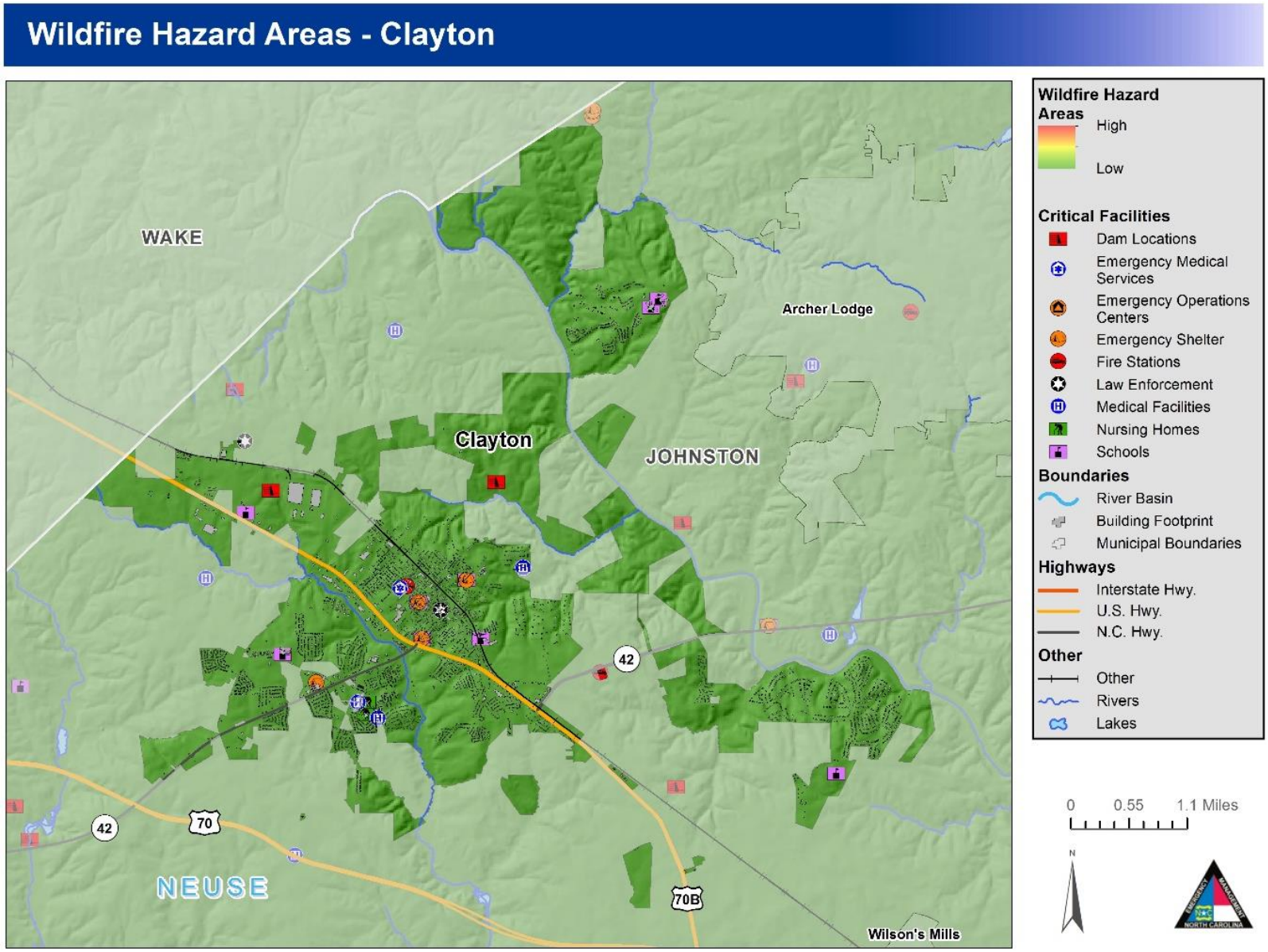


Figure 5-139: Wildfire Hazard Areas - Clayton

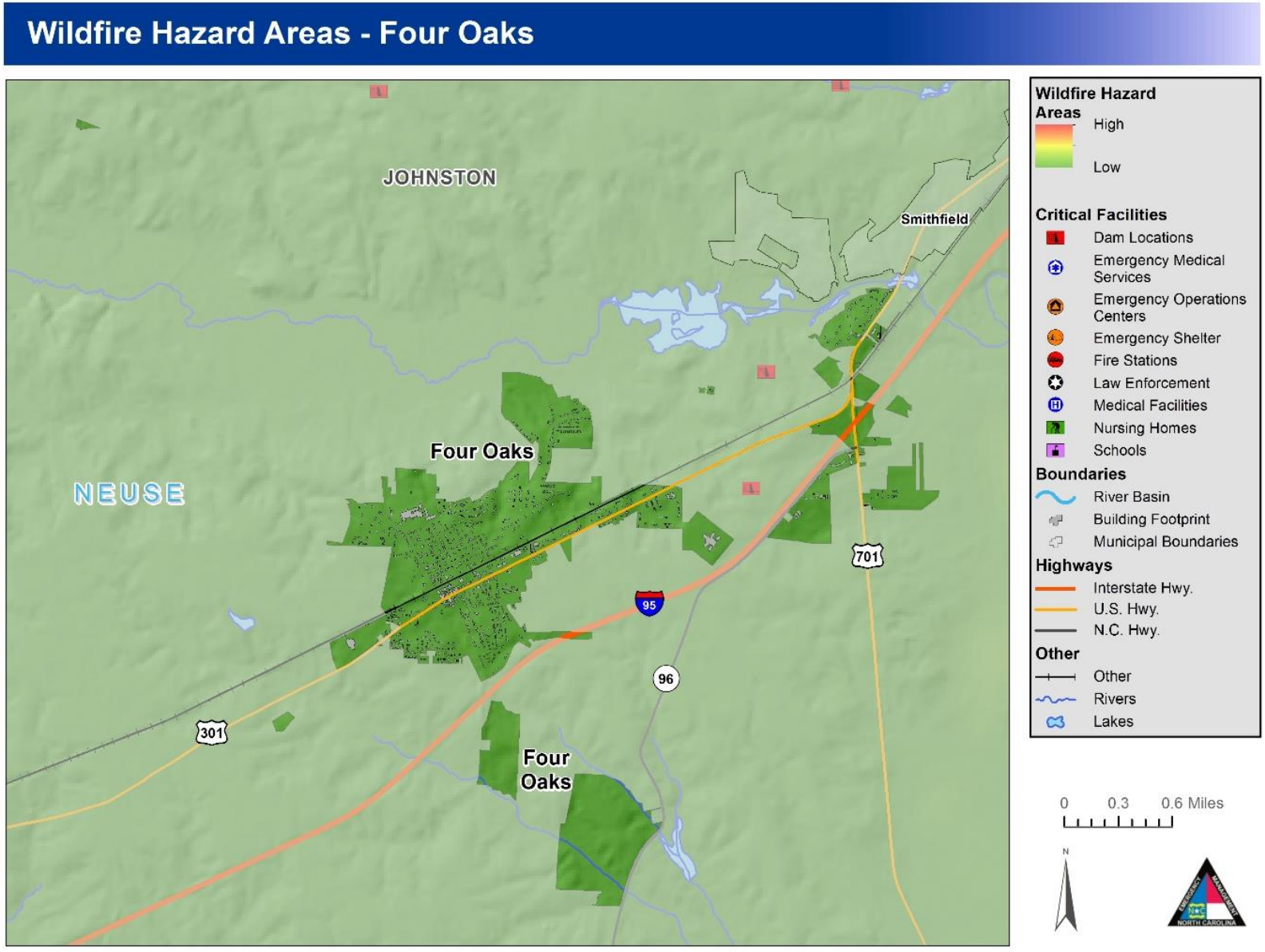


Figure 5-140: Wildfire Hazard Areas – Four Oaks

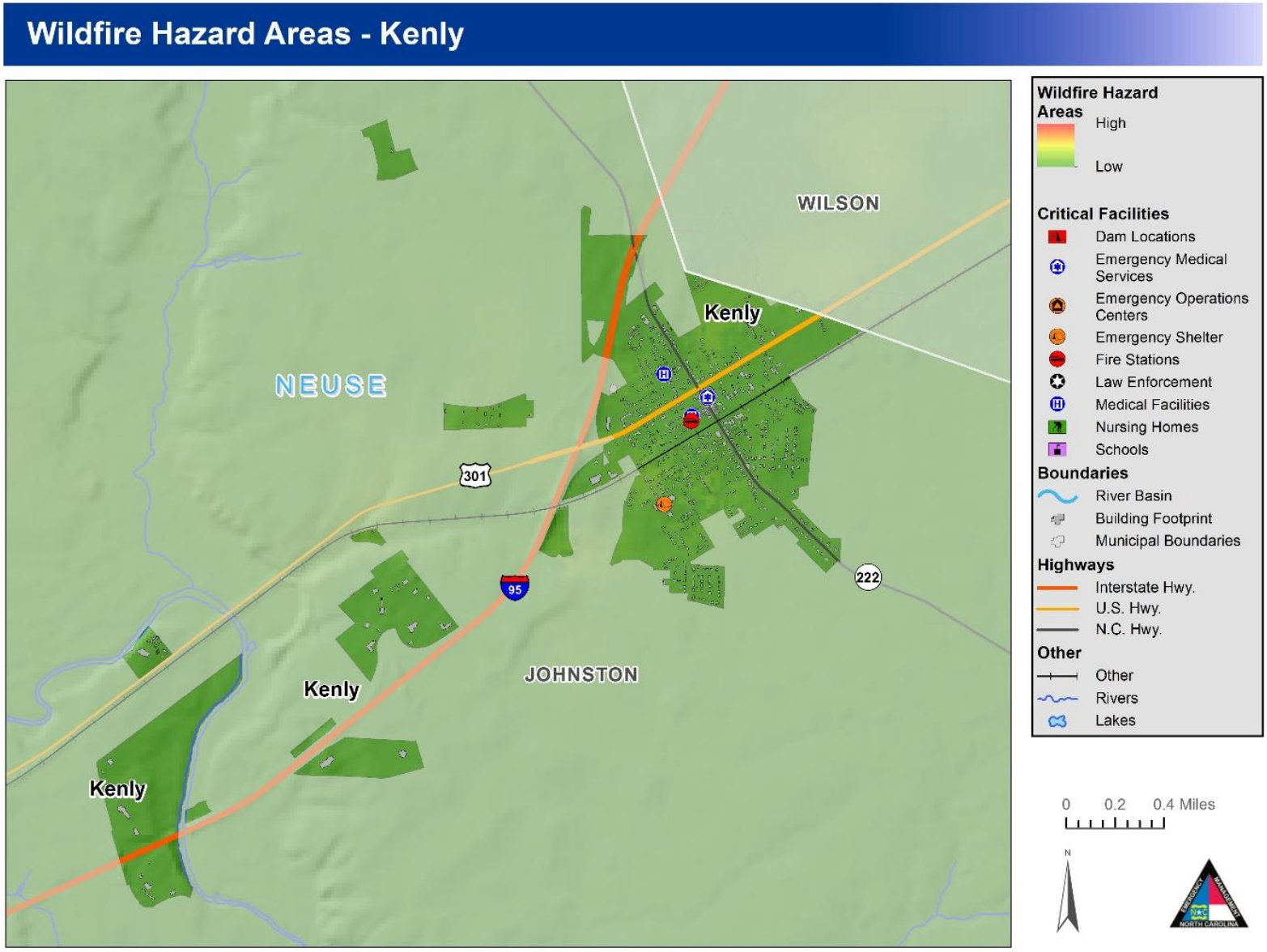


Figure 5-141: Wildfire Hazard Areas - Kenly

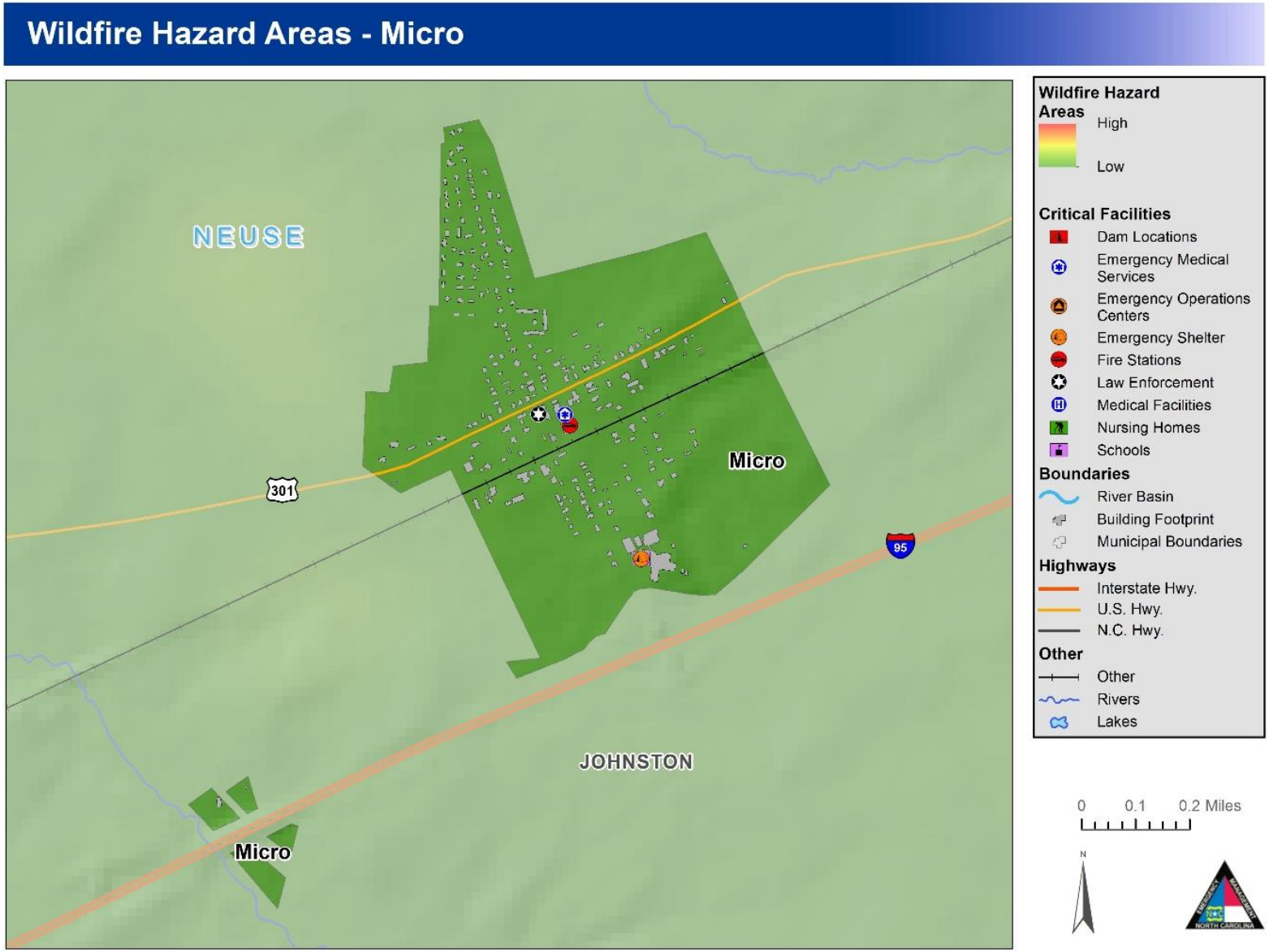


Figure 5-142: Wildfire Hazard Areas - Micro

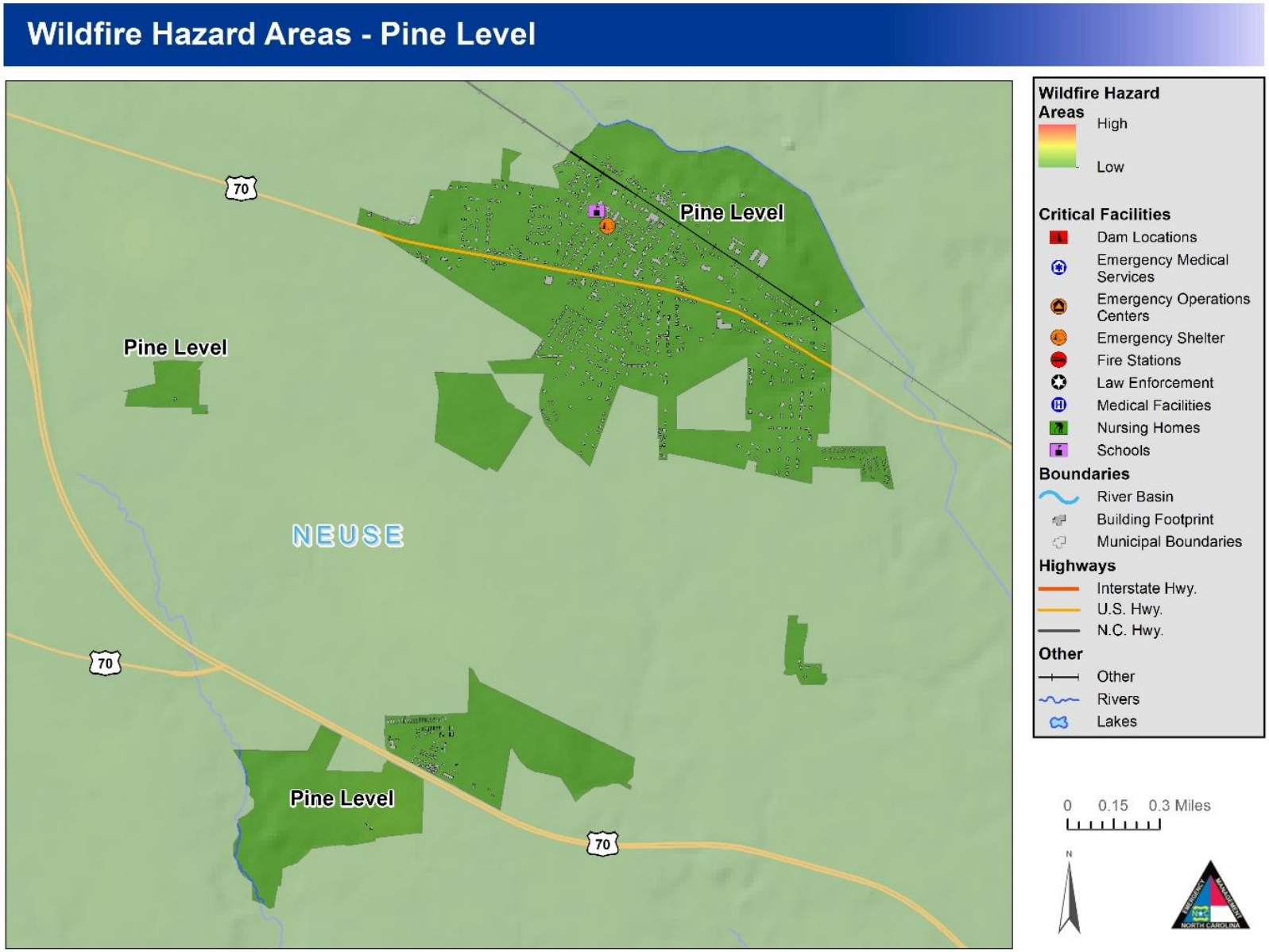


Figure 5-143: Wildfire Hazard Areas – Pine Level

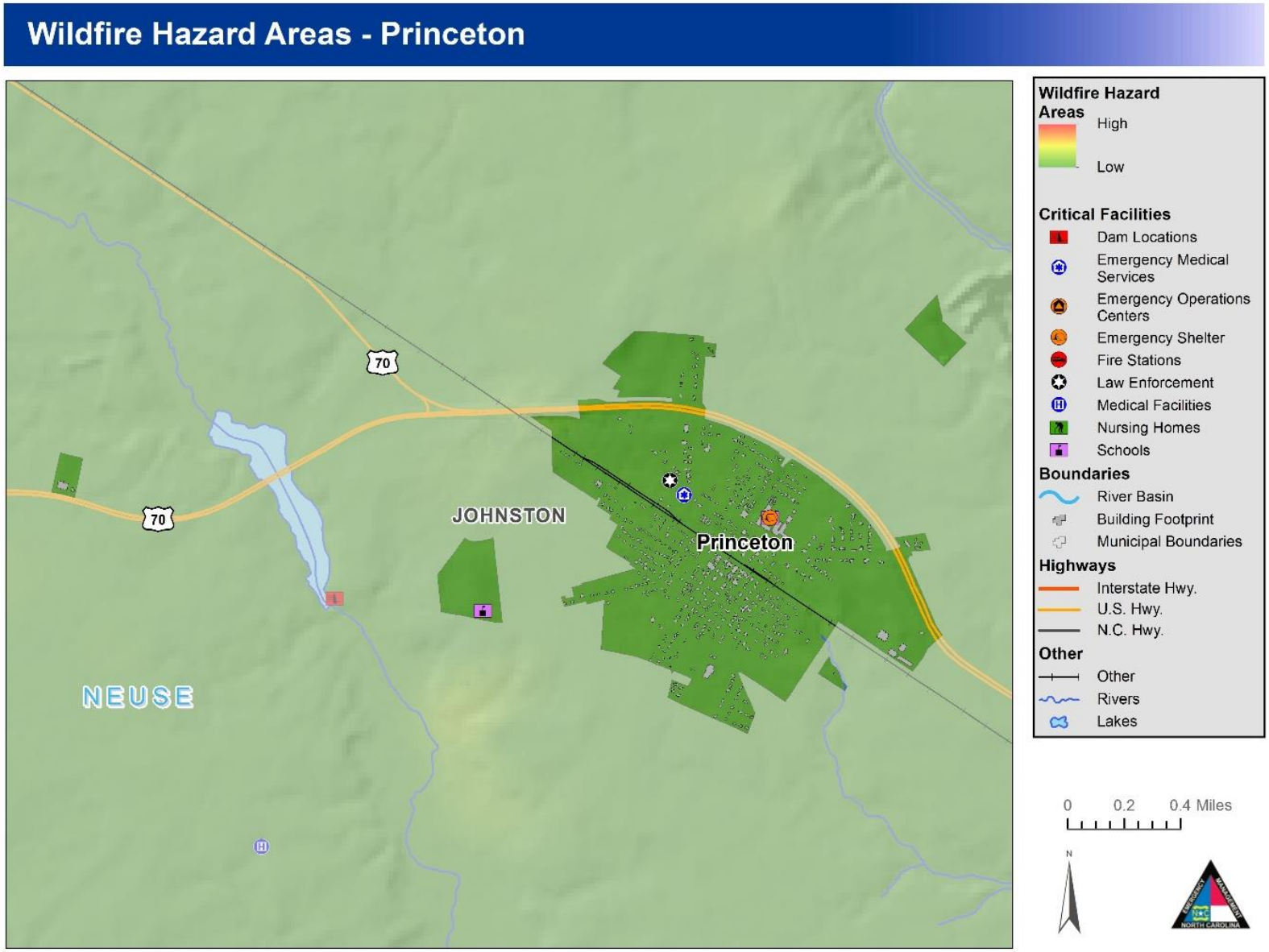


Figure 5-144: Wildfire Hazard Areas - Princeton

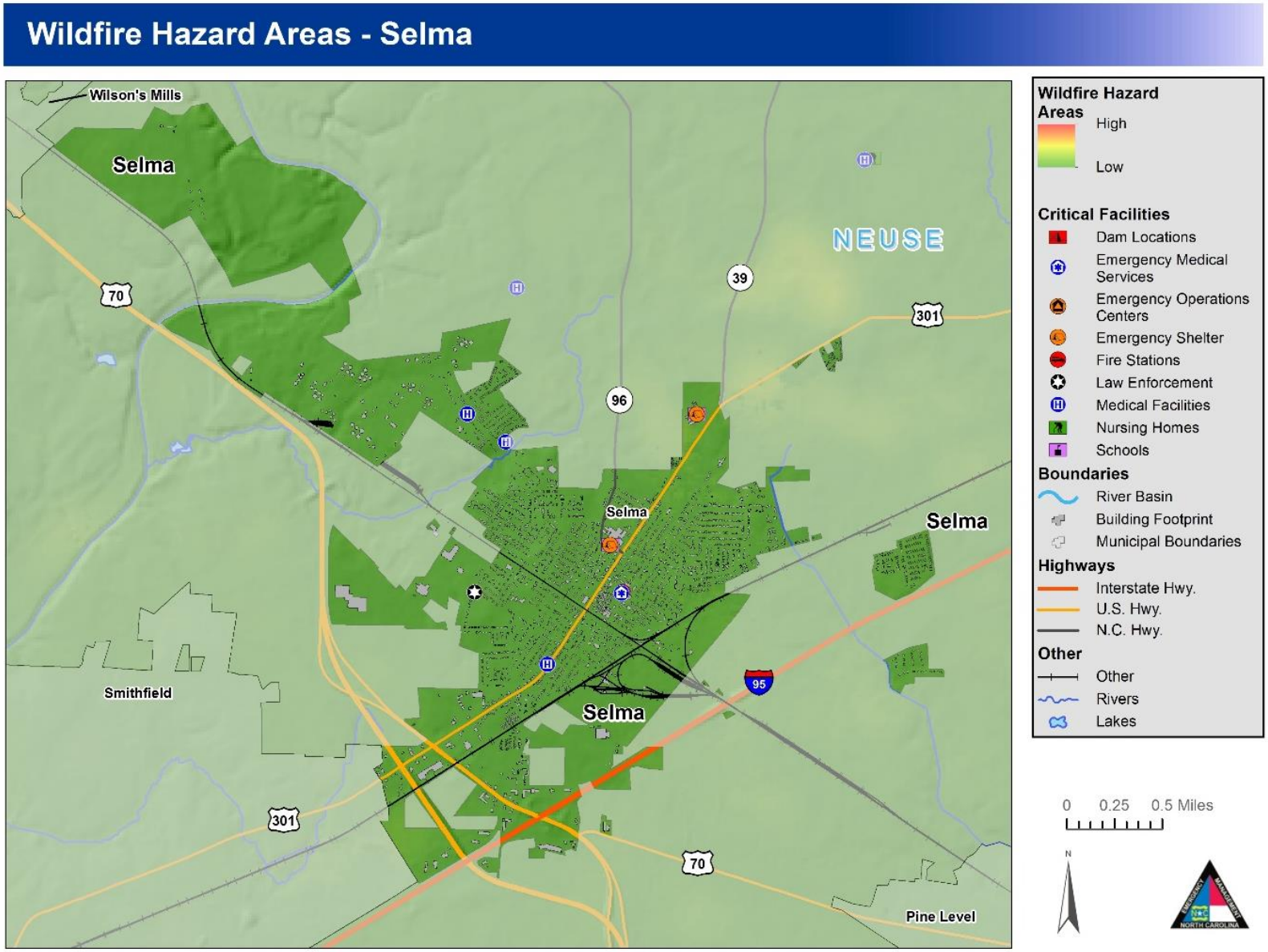


Figure 5-145: Wildfire Hazard Areas - Selma

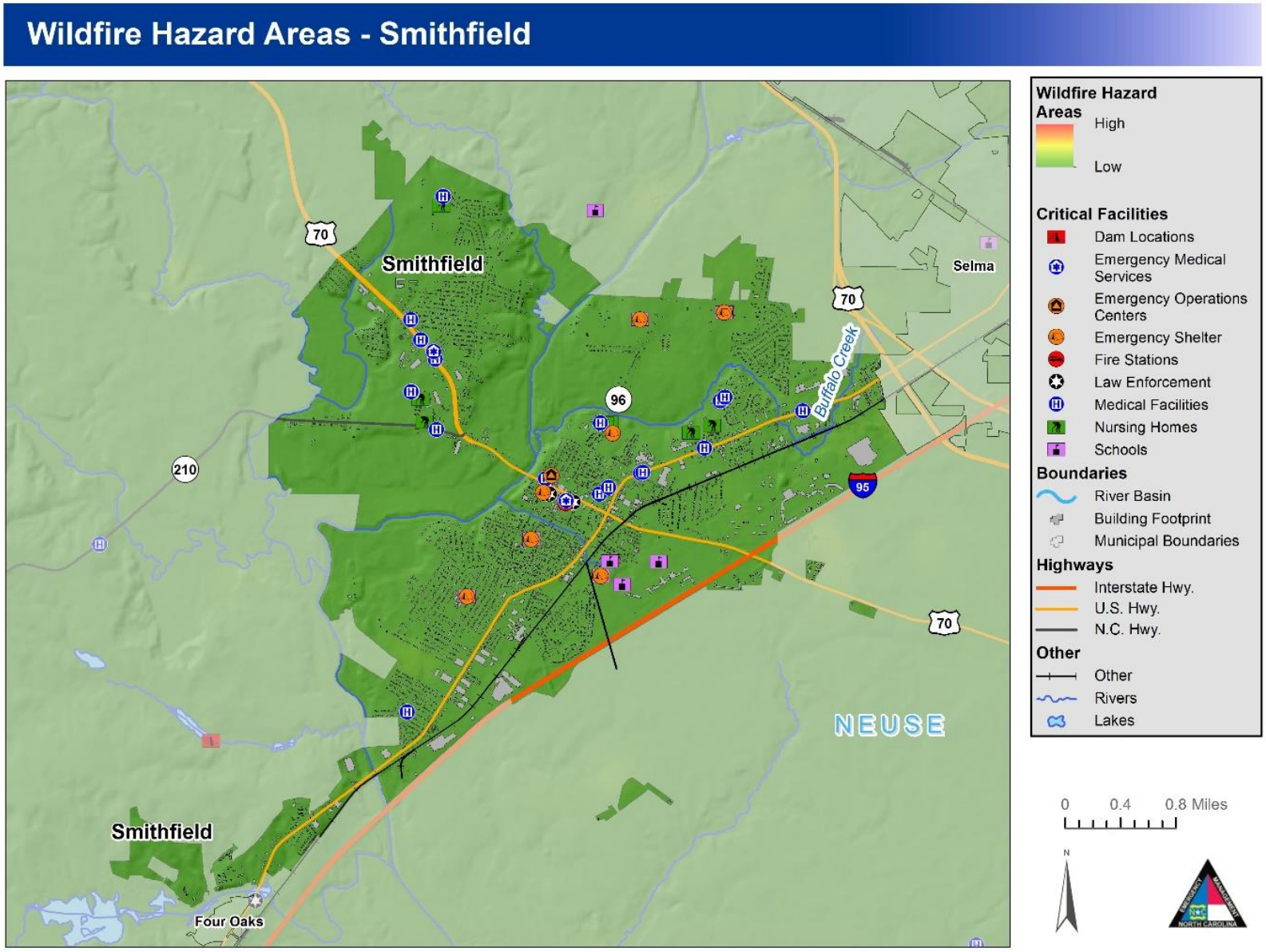


Figure 5-146: Wildfire Hazard Areas - Smithfield

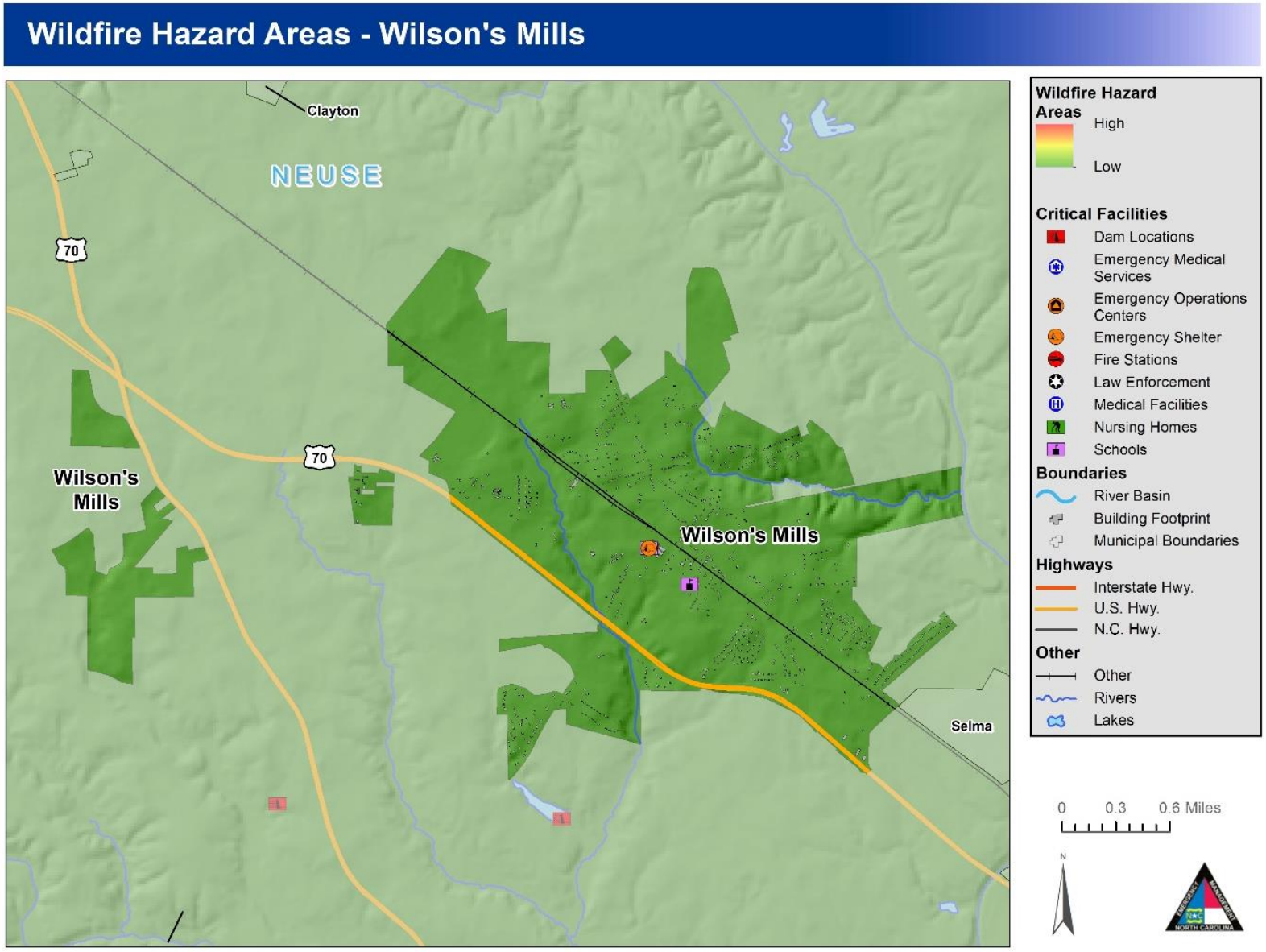


Figure 5-147: Wildfire Hazard Areas – Wilson's Mills

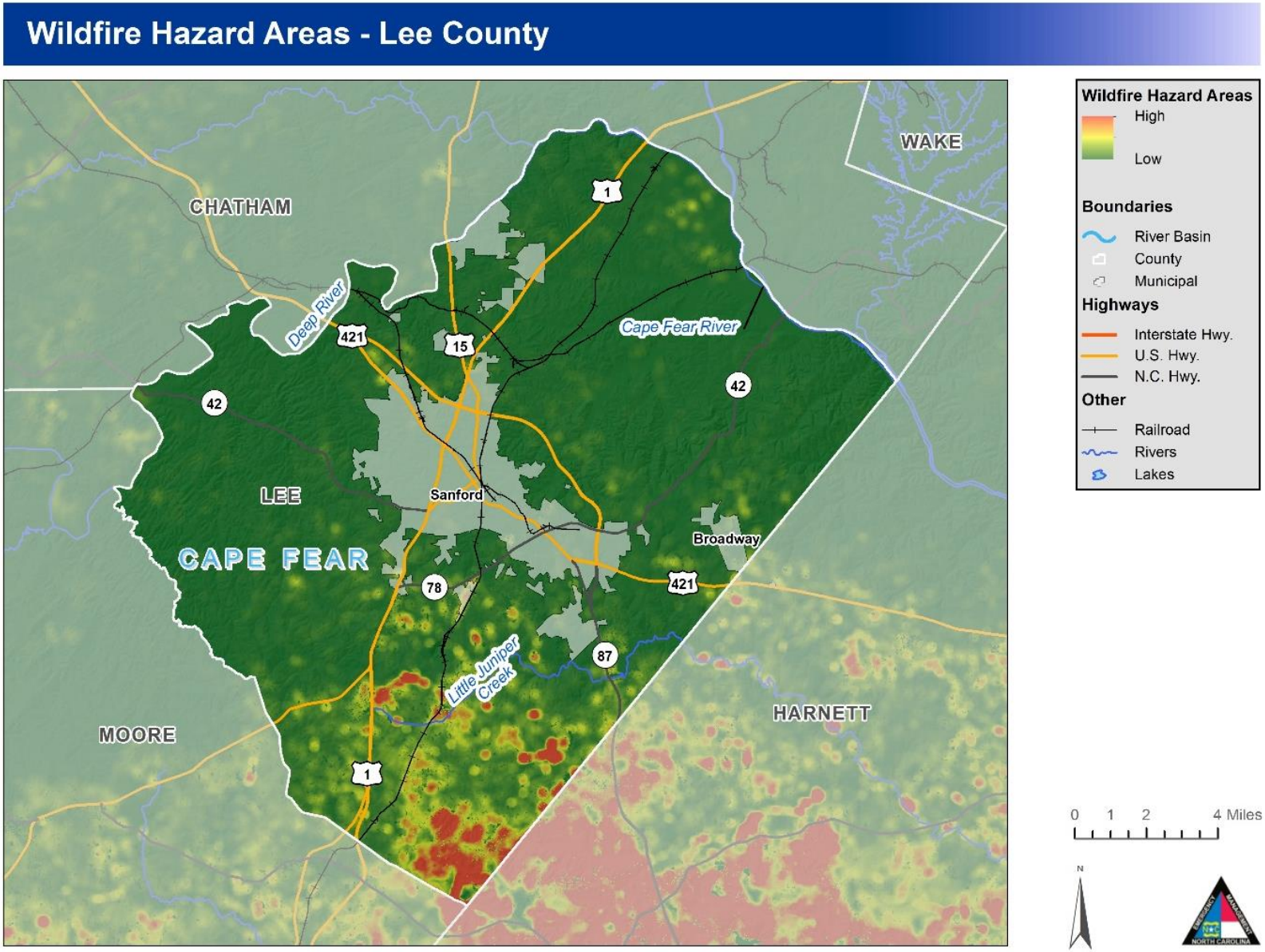


Figure 5-148: Wildfire Hazard Areas – Lee County

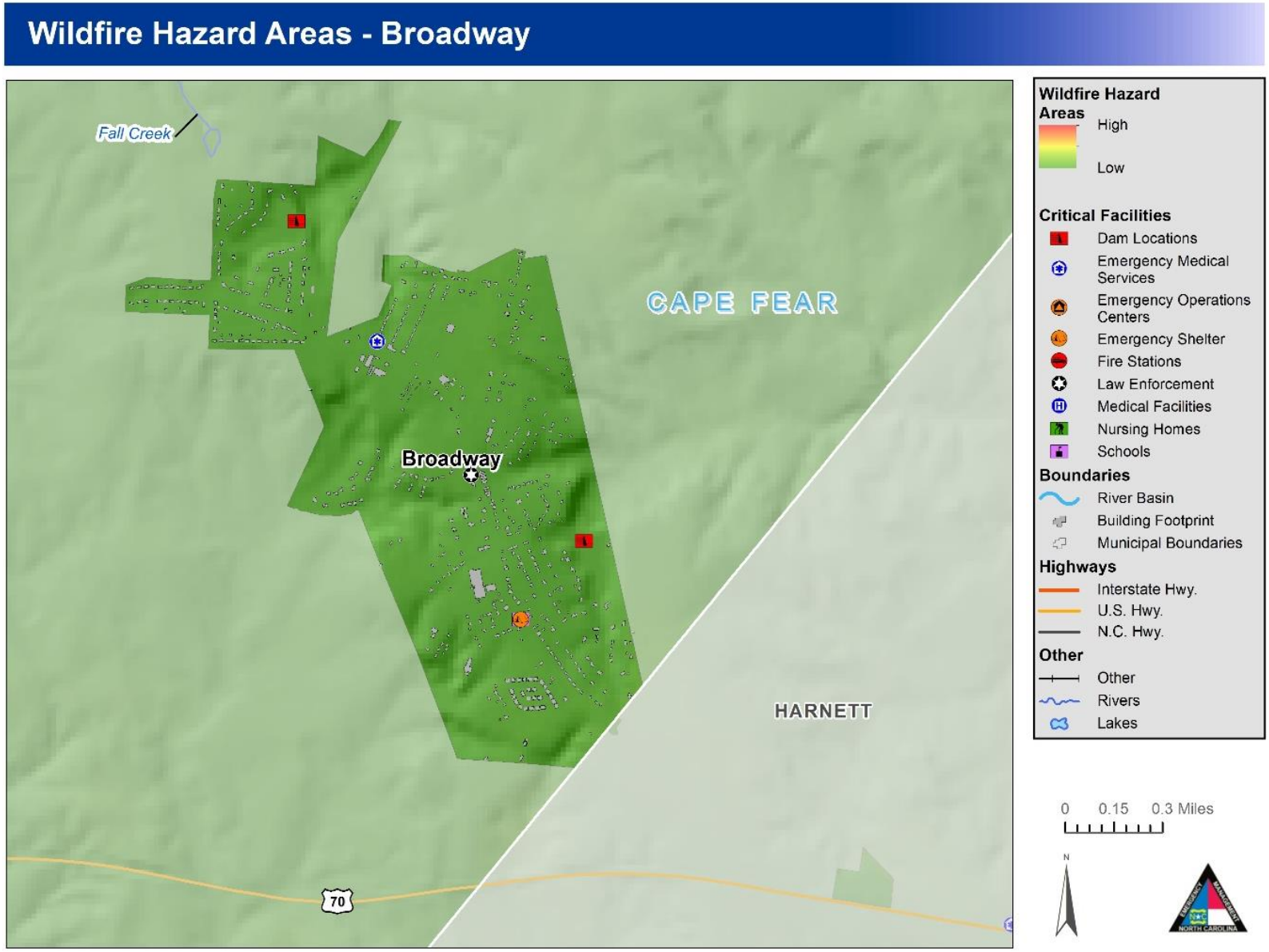


Figure 5-149: Wildfire Hazard Areas - Broadway

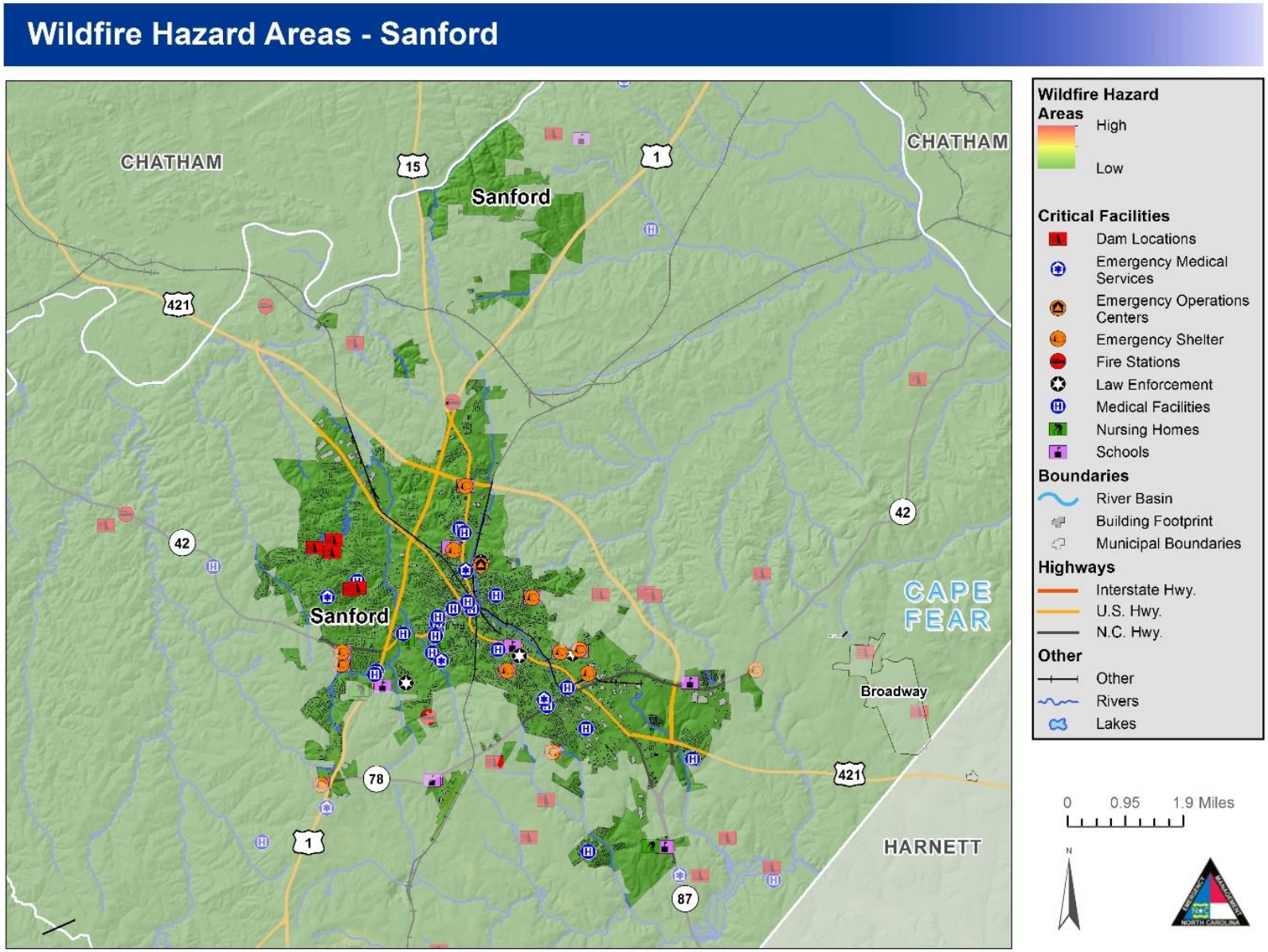


Figure 5-150: Wildfire Hazard Areas - Sanford

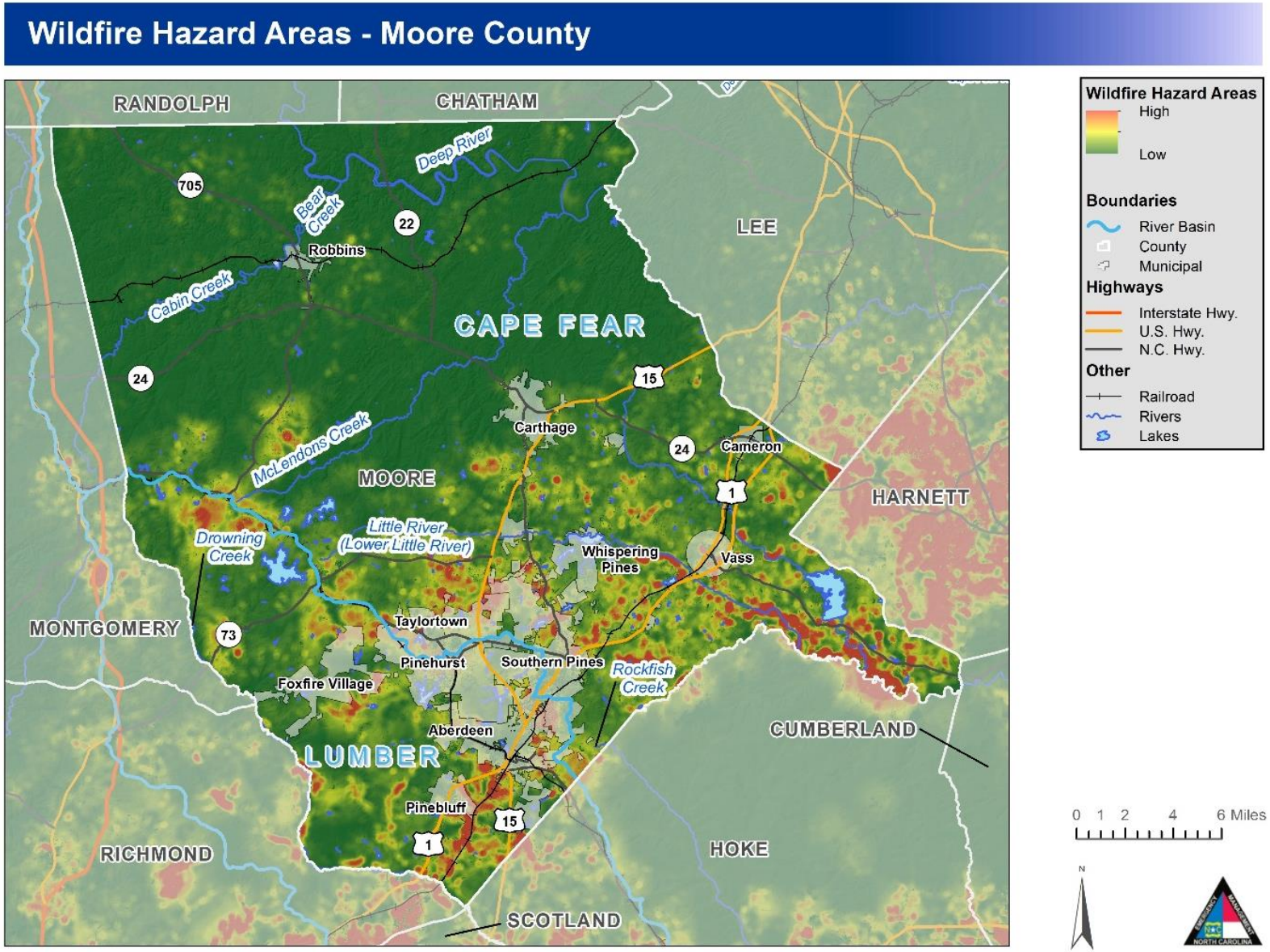


Figure 5-151: Wildfire Hazard Areas – Moore County

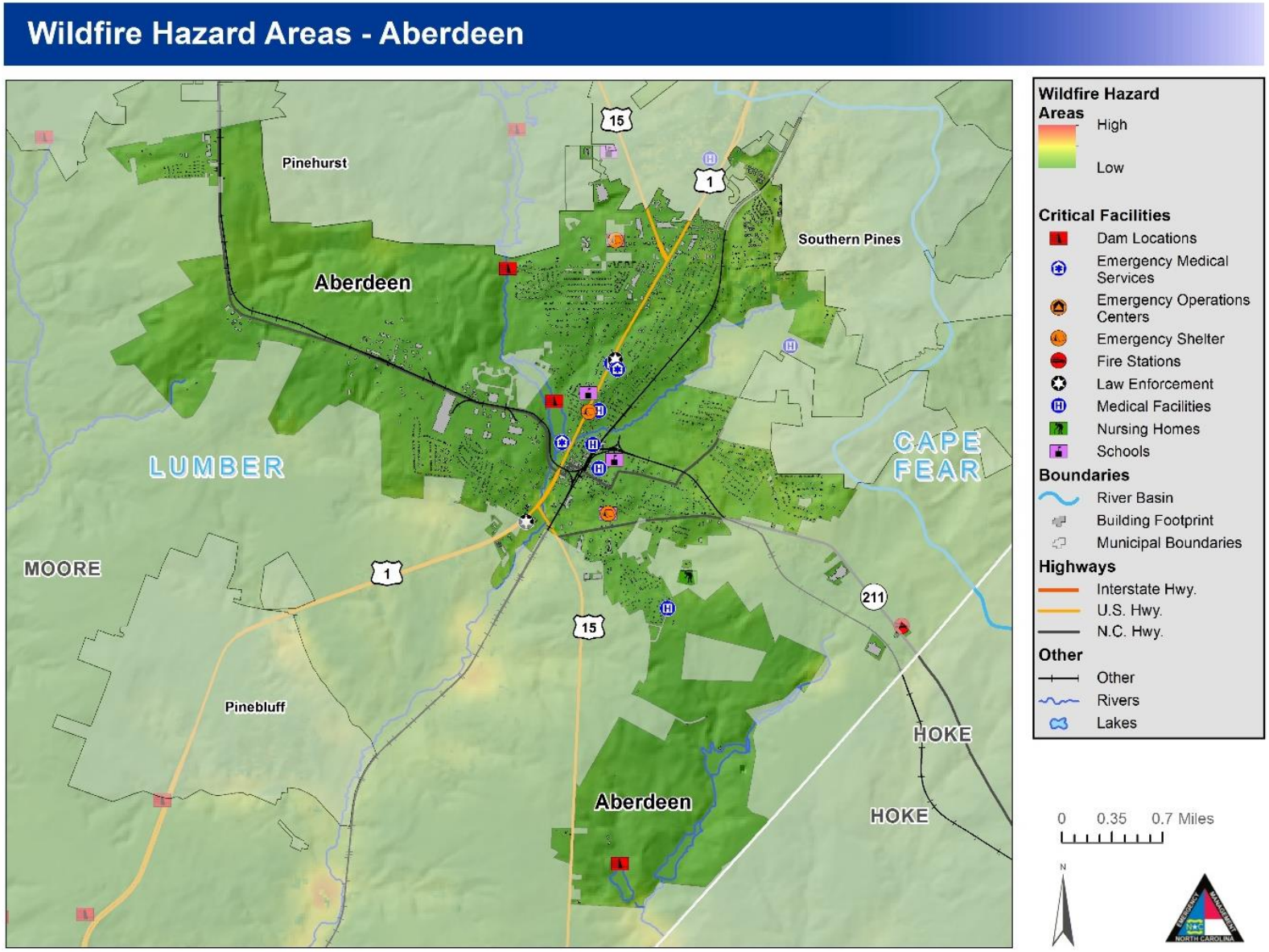


Figure 5-152: Wildfire Hazard Areas - Aberdeen

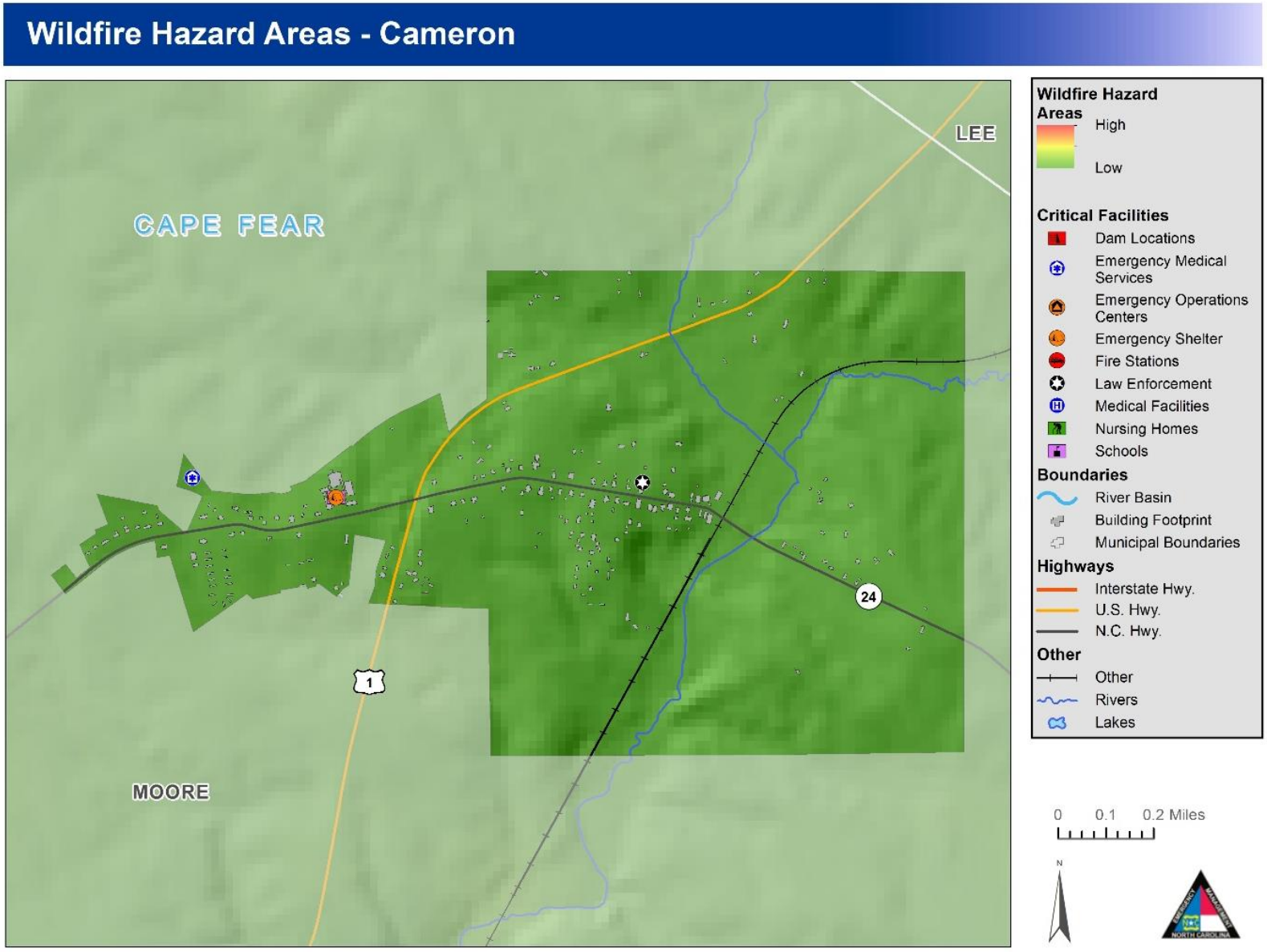


Figure 5-153: Wildfire Hazard Areas - Cameron

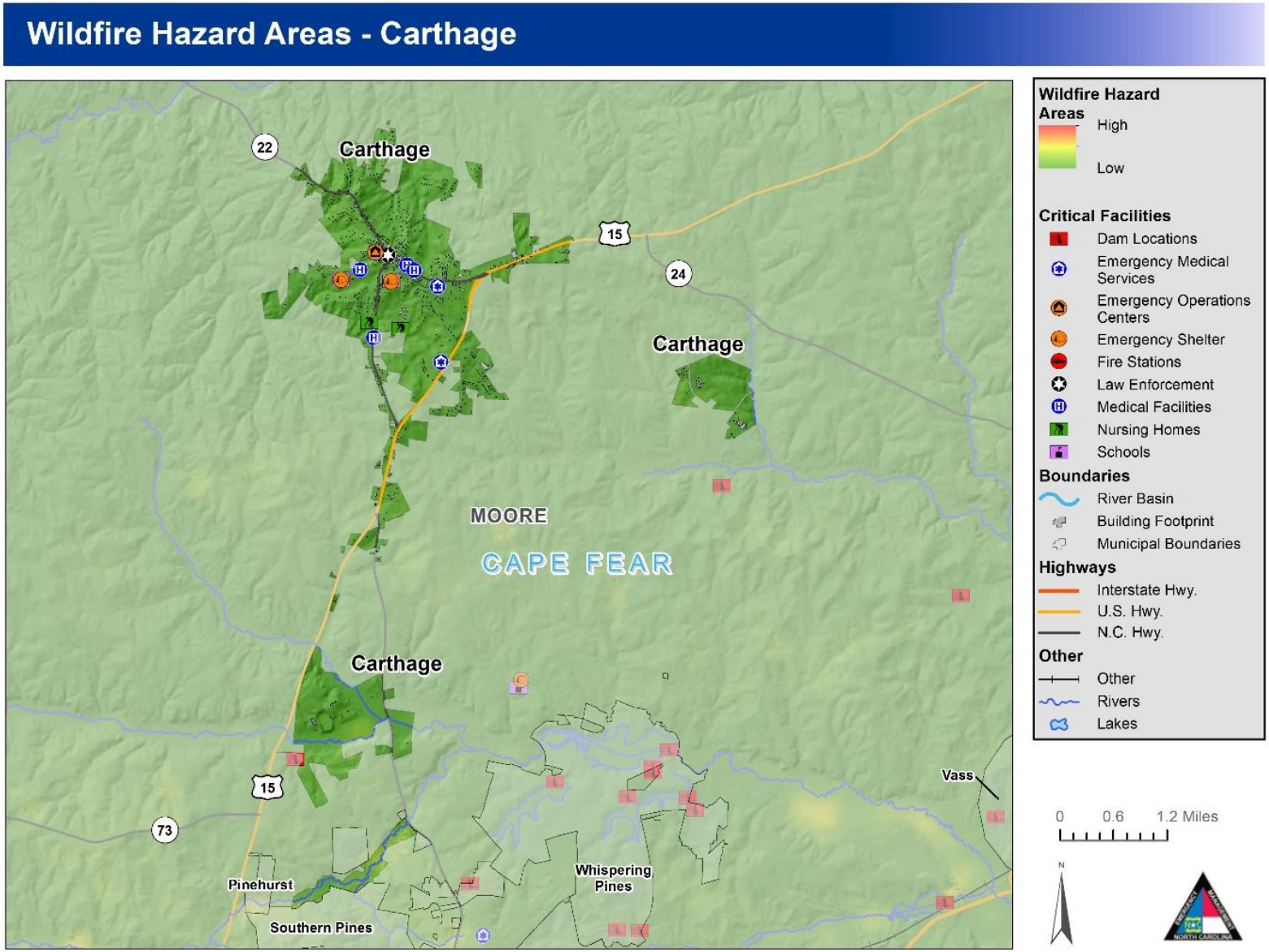


Figure 5-154: Wildfire Hazard Areas - Carthage

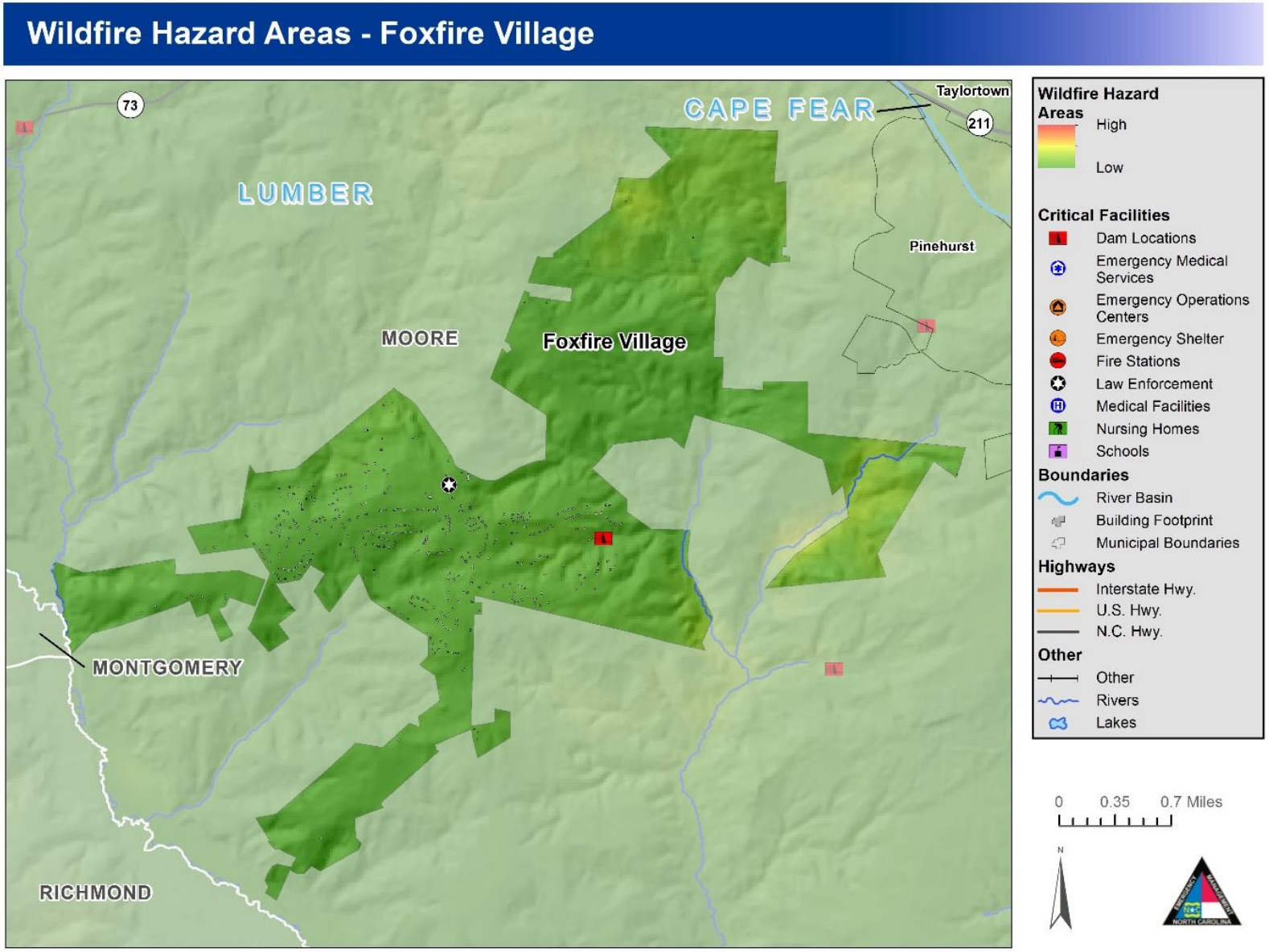


Figure 5-155: Wildfire Hazard Areas – Foxfire Village

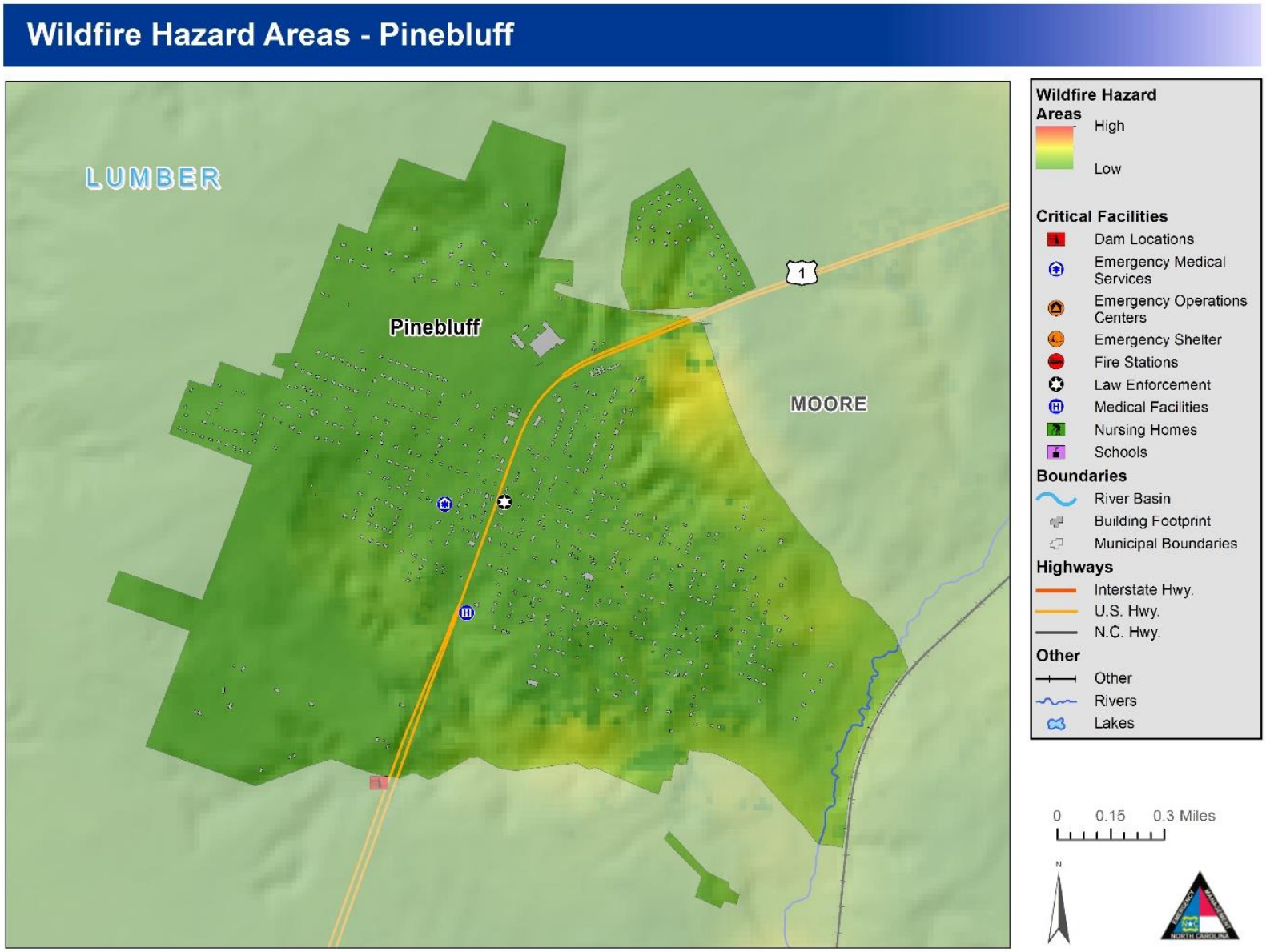


Figure 5-156: Wildfire Hazard Areas - Pinebluff

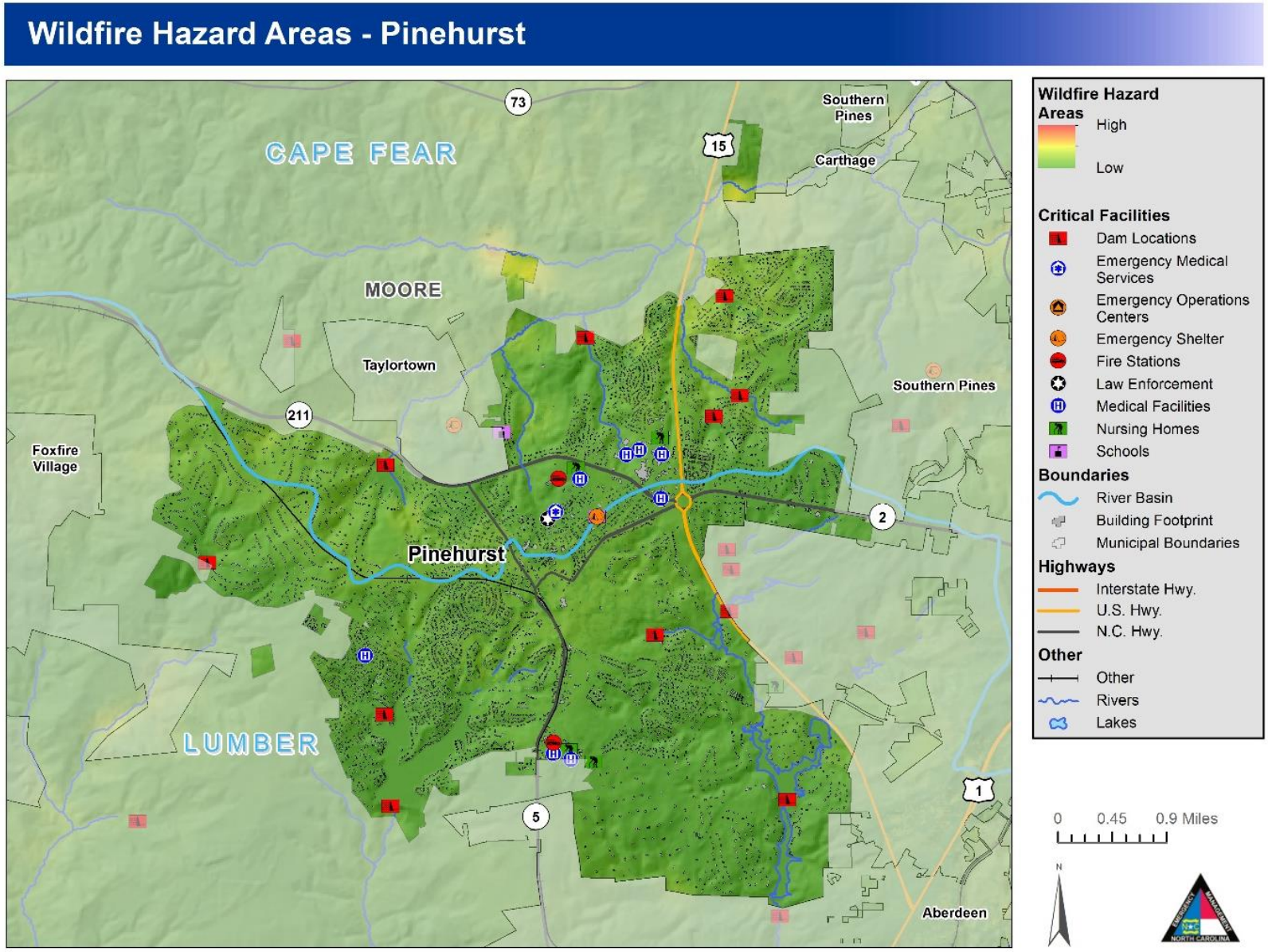


Figure 5-157: Wildfire Hazard Areas - Pinehurst

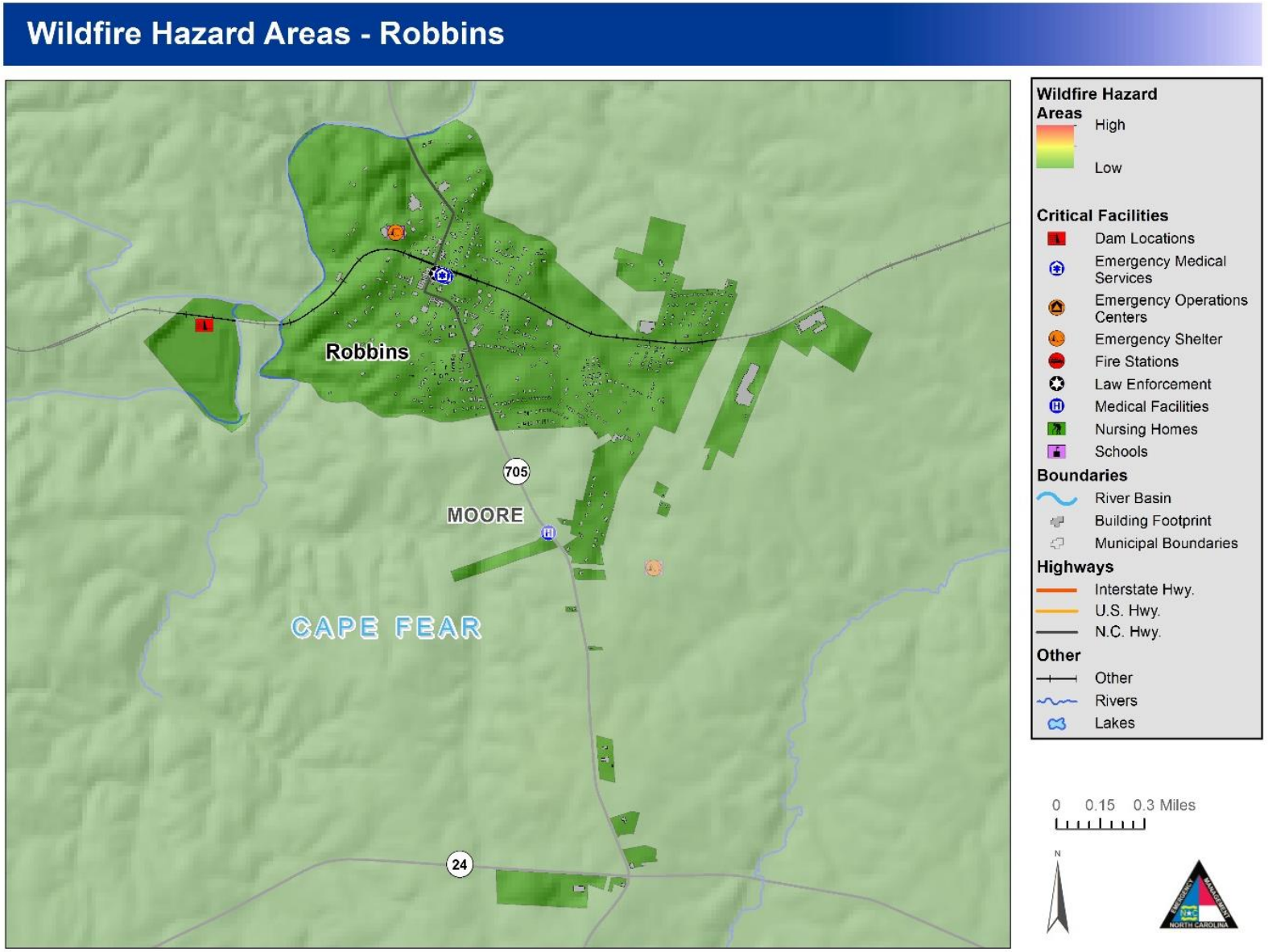


Figure 5-158: Wildfire Hazard Areas - Robbins

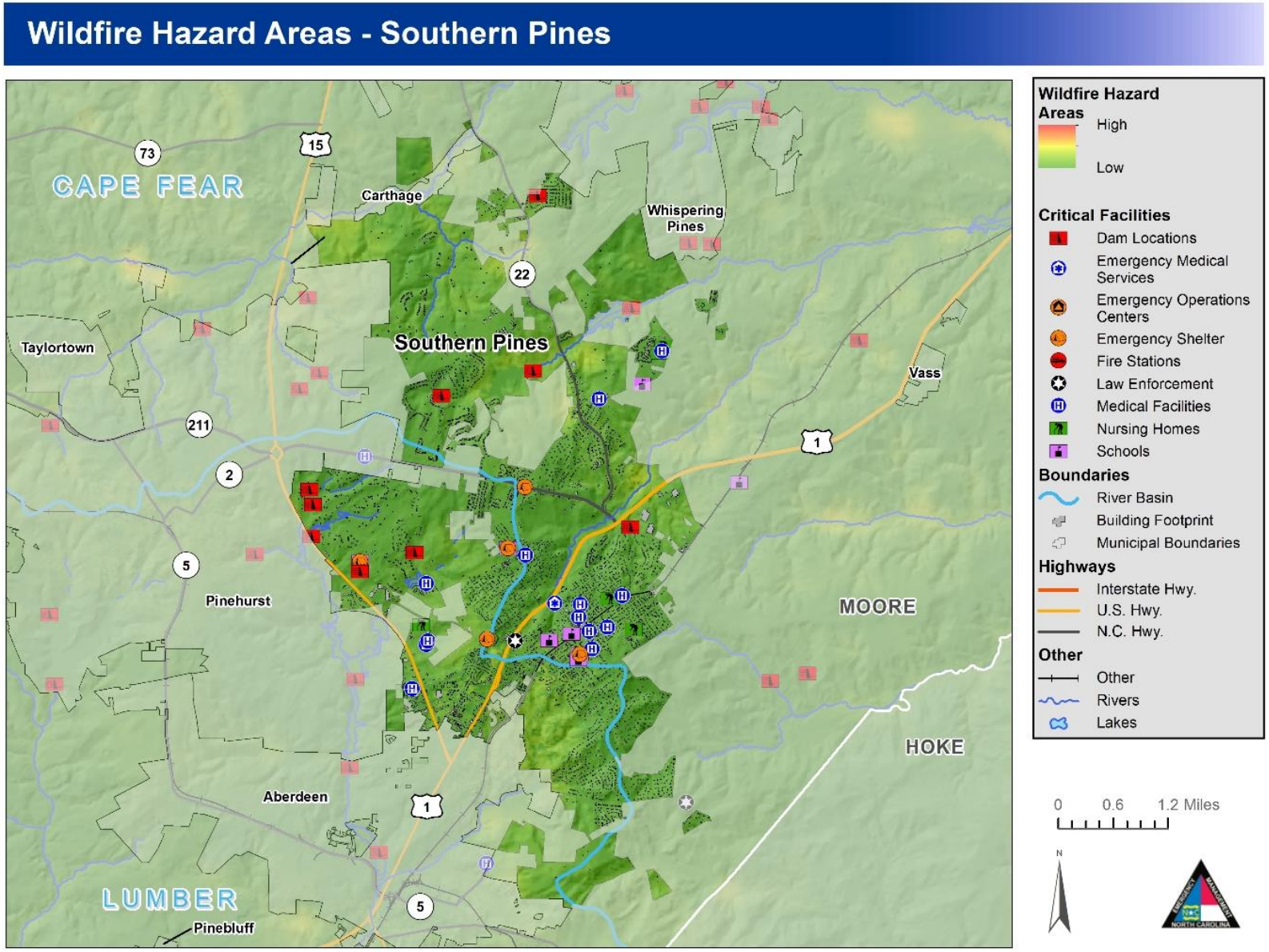


Figure 5-159: Wildfire Hazard Areas – Southern Pines

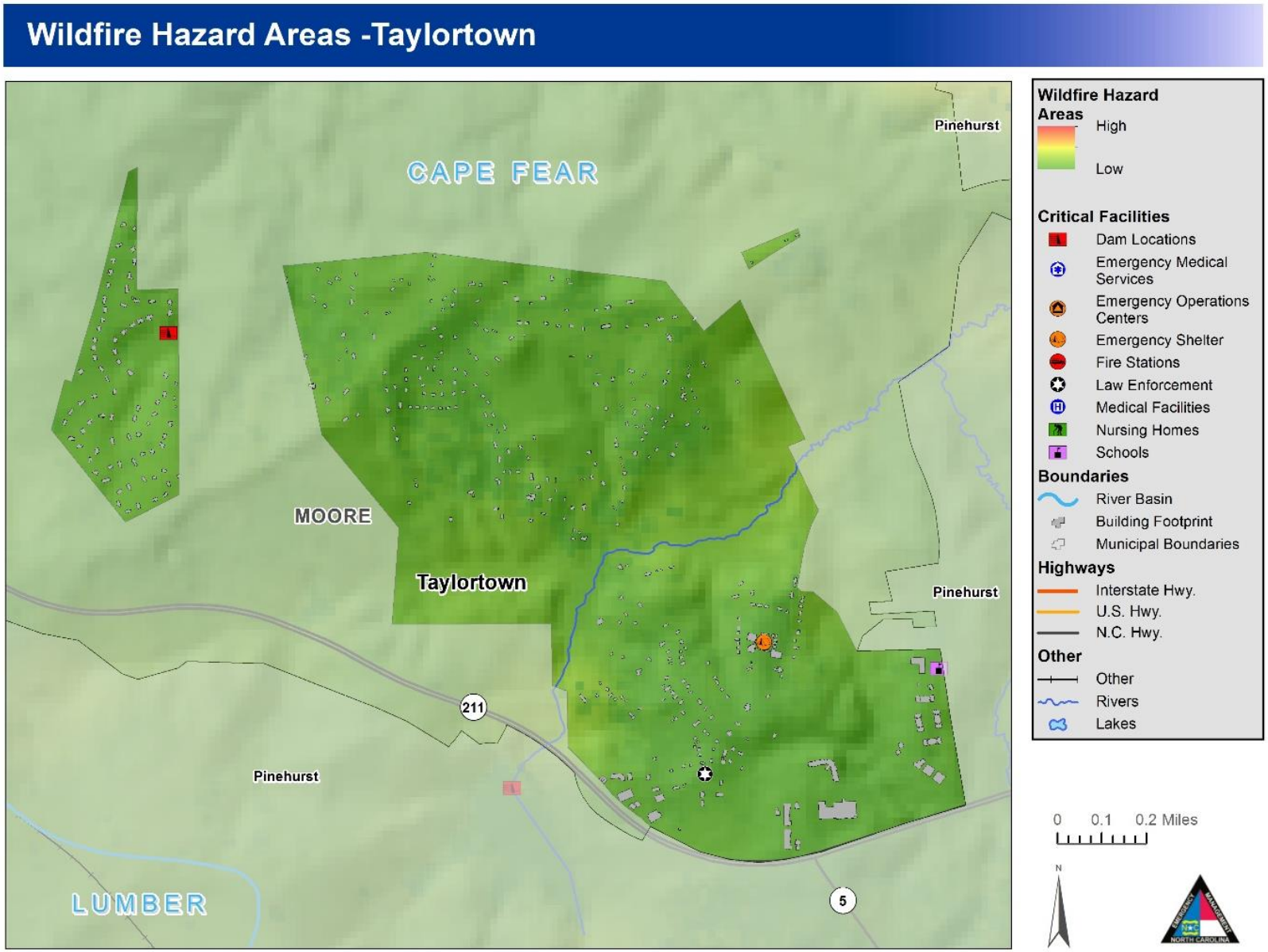


Figure 5-160: Wildfire Hazard Areas - Taylortown

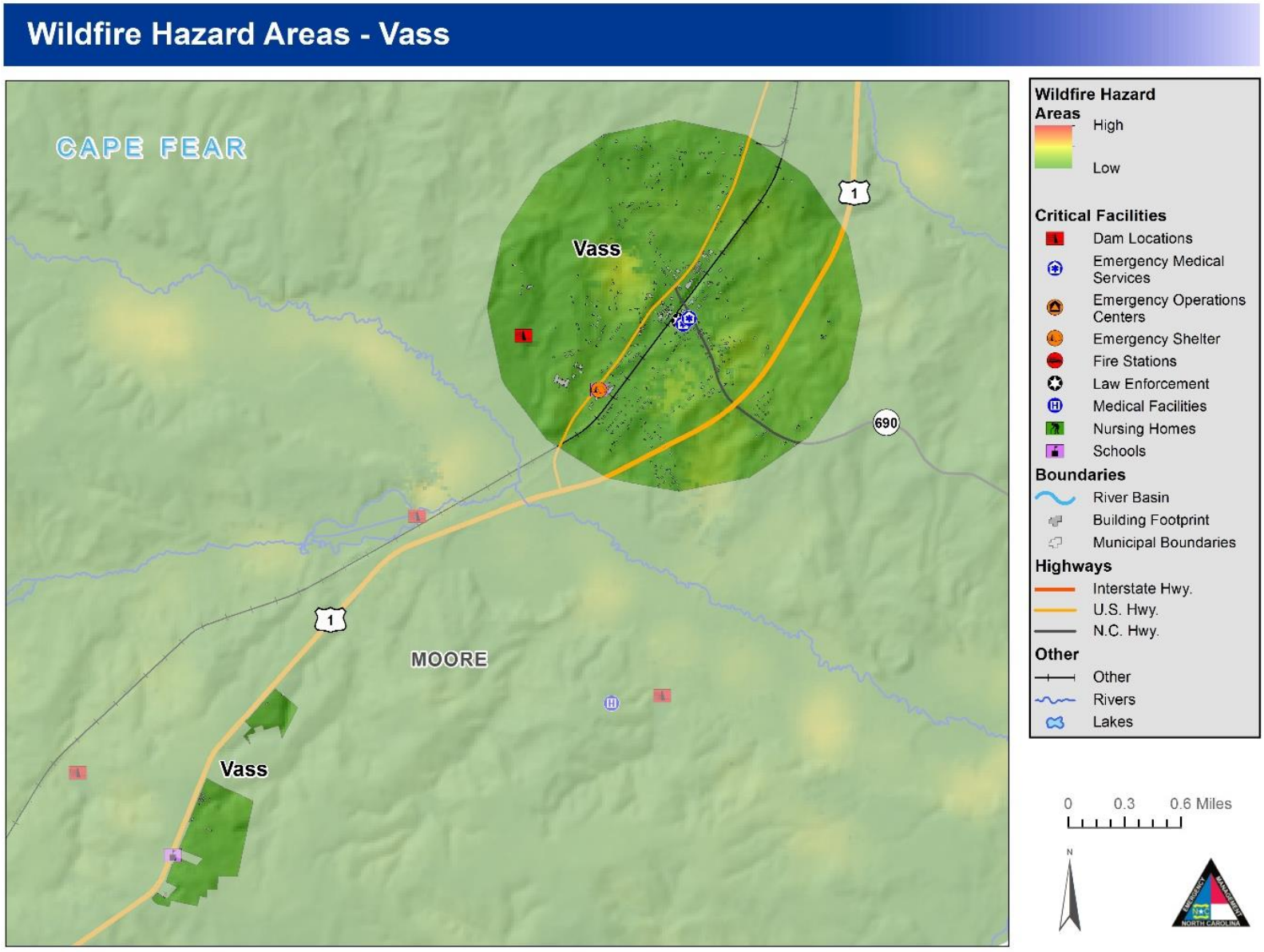


Figure 5-161: Wildfire Hazard Areas - Vass

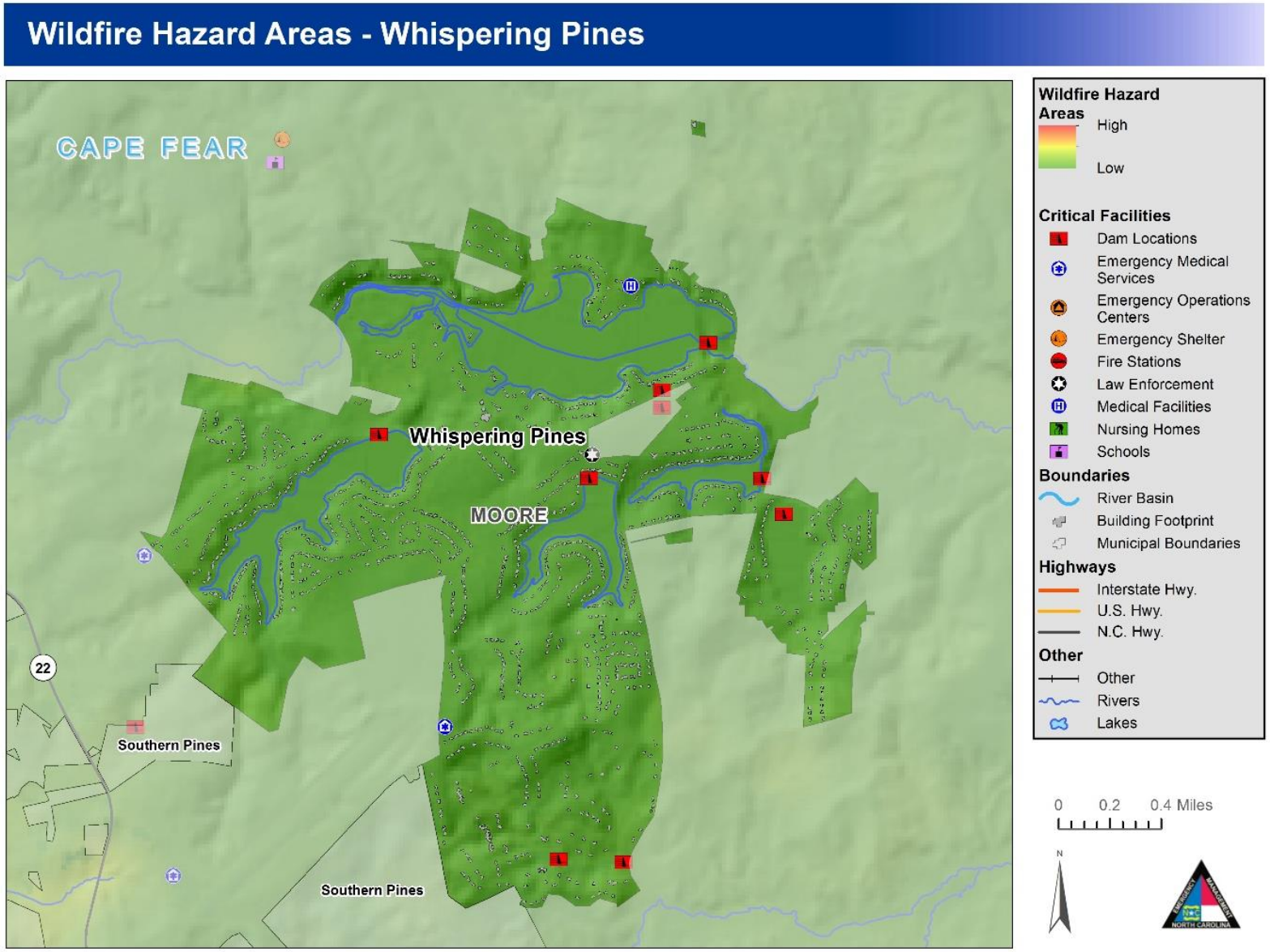


Figure 5-162: Wildfire Hazard Areas – Whispering Pines

5.13.3 Extent

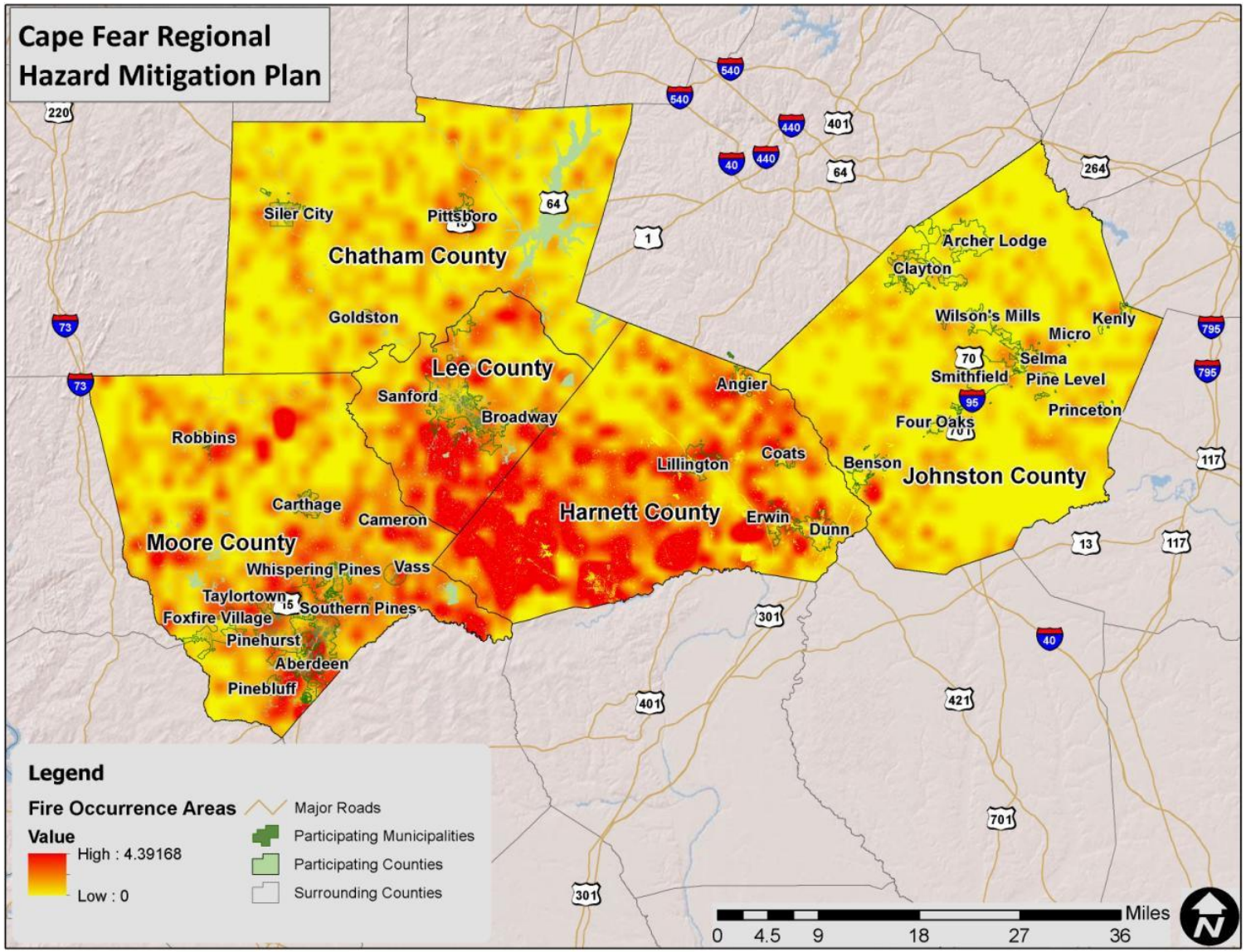
The average size of wildfires in the Region is typically small. Wildfire data was provided by the North Carolina Division of Forest Resources through Community Wildfire Protection Plans (Included in Appendix H) and is reported annually by county. The table below shows the number of acres burned for each community in the last five years. It should be noted that there may have been multiple acres burned that are not depicted by this table due to the small size of the fire and/or the unavailability of data at the local level.

Jurisdiction	Total Acres Burned
Chatham County	
Goldston	10
Pittsboro	10
Siler City	10
Unincorporated Area	50
Harnett County	
Angier	No Data Available
Coats	No Data Available
Dunn	No Data Available
Erwin	No Data Available
Lillington	No Data Available
Unincorporated Area	1,136
Johnston County	
Archer Lodge	No Data Available
Benson	No Data Available
Clayton	No Data Available
Four Oaks	No Data Available
Kenly	No Data Available
Micro	No Data Available
Pine Level	No Data Available
Princeton	No Data Available
Selma	No Data Available
Smithfield	No Data Available
Wilson's Mills	No Data Available

Jurisdiction	Total Acres Burned
Unincorporated Area	237.96
Lee County	
Broadway	No Data Available
Sanford	No Data Available
Unincorporated Area	No Data Available
Moore County	
Aberdeen	No Data Available
Cameron	No Data Available
Cartage	No Data Available
Foxfire Village	No Data Available
Pinebluff	No Data Available
Pinehurst	No Data Available
Robbins	No Data Available
Southern Pines	No Data Available
Taylortown	No Data Available
Vass	No Data Available
Whispering Pines	No Data Available
Unincorporated Area	1,467

5.13.4 Historical Occurrences

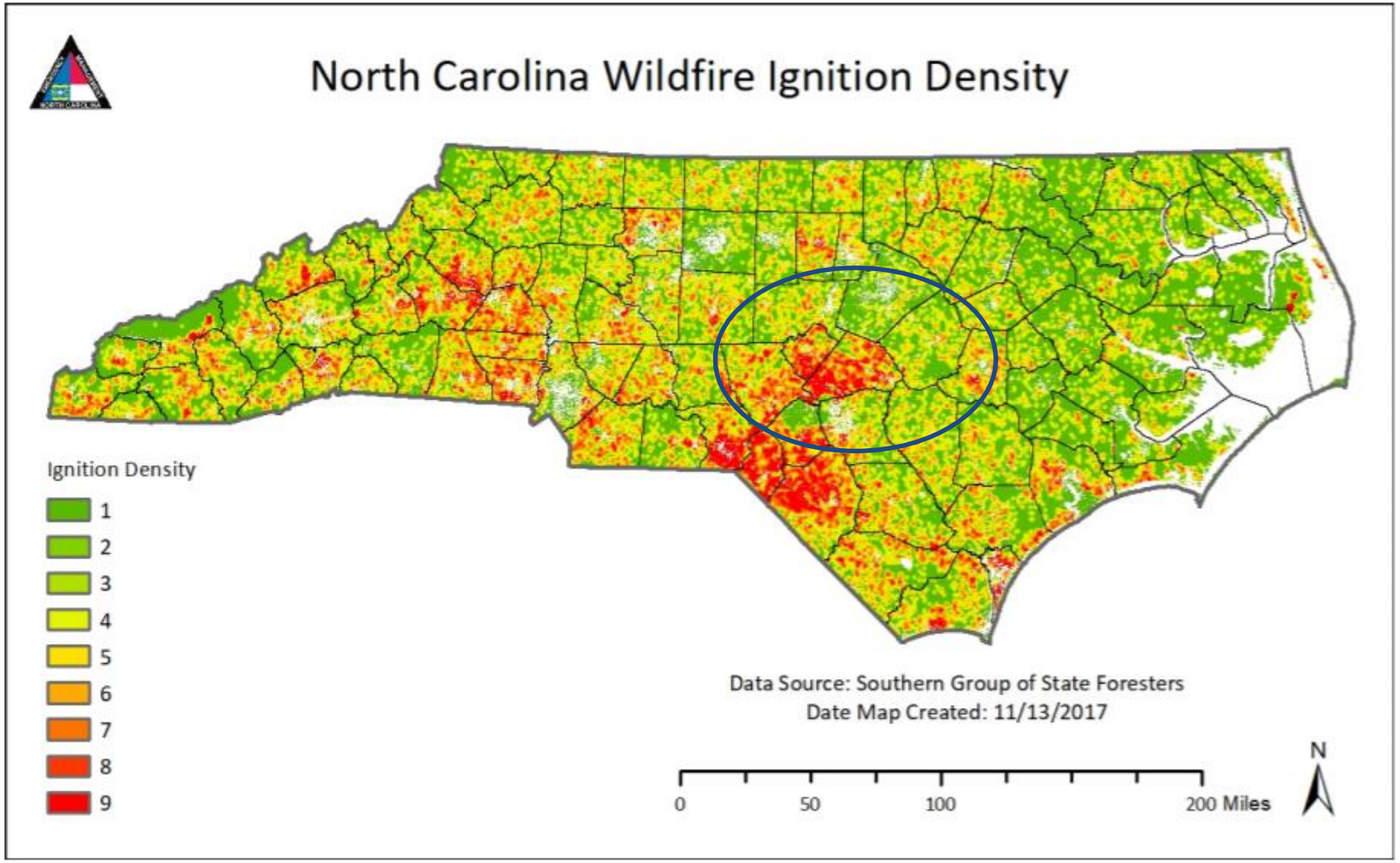
Figure 5.163 shows the Fire Occurrence Areas (FOA) in the Cape Fear Region based on data from the Southern Wildfire Risk Assessment. This data is based on historical fire ignitions and is reported as the number of fires that occur per 1,000 acres each year.



Source: Southern Wildfire Risk Assessment

Figure 5-163: Historic Wildfire Events in the Cape Fear Region

Figure 5-164 shows the Wildfire Ignition Density in the Region based on data from the Southern Group of State Foresters. This data is based on historical fire ignitions and the likelihood of a wildfire igniting in an area. Occurrence is derived by modeling historic wildfire ignition locations to create an average ignition rate map. This is measured in the number of fires per year per 1,000 acres.



Source: Southern Wildfire Risk Assessment

Figure 5-164: North Carolina Wildfire Ignition Density

Based on data from the North Carolina Division of Forest Resources from 2003 to 2020, the Cape Fear Region experienced an average of 431 wildfires annually which burn a combined 1,216 acres, on average per year. The data indicates that most of these fires are small, averaging three acres per fire. **Table 5-34** provides a summary table for wildfire occurrences in the Cape Fear Region.

Table 5-34: Summary Table of Annual Wildfire Occurrences (2003-2020) *

	Chatham County	Harnett County	Johnston County	Lee County	Moore County	Cape Fear Region
Average Number of Fires per year	58	141	37	67	129	431
Average Number of Acres Burned per year	108	551	191	74	317	1,216
Average Number of Acres Burned per fire	2	4	5	1	2	3

Source: North Carolina Division of Forest Resources

5.13.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Wildfire is shown in the table below, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Less Than 1% Annual Probability
- Between 1% And 10% Annual Probability
- More Than 10% Annual Probability

Jurisdiction	Calculated Probability (IRISK)
Chatham County (Unincorporated Area)	Low
City of Dunn	Medium
City of Sanford	Low
Harnett County (Unincorporated Area)	Medium
Johnston County (Unincorporated Area)	Medium
Lee County (Unincorporated Area)	Medium
Moore County (Unincorporated Area)	Medium
Town of Aberdeen	Medium
Town of Angier	Low
Town of Archer Lodge	Low
Town of Benson	Low
Town of Broadway	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Cameron	Medium
Town of Carthage	Medium
Town of Clayton	Low
Town of Coats	Medium
Town of Erwin	Low
Town of Four Oaks	Low
Town of Goldston	Low
Town of Kenly	Medium
Town of Lillington	Medium
Town of Micro	Low
Town of Pine Level	Low
Town of Pinebluff	Medium
Town of Pittsboro	Low
Town of Princeton	Low
Town of Robbins	Low
Town of Selma	Low
Town of Siler City	Low
Town of Smithfield	Low
Town of Southern Pines	Medium
Town of Taylortown	Medium
Town of Vass	Medium
Town of Wilson's Mills	Low
Village of Foxfire	Medium
Village of Pinehurst	Medium
Village of Whispering Pines	Medium

Wildfire events will be an ongoing occurrence in the Cape Fear Region. The likelihood of wildfires increases during drought cycles and abnormally dry conditions. Fires are likely to stay small in size but could increase due local climate and ground conditions. Dry, windy conditions with an accumulation of forest floor fuel (potentially due to ice storms or lack of fire) could create conditions for a large fire that spreads quickly. It should also be noted that some areas do vary somewhat in risk. For example, highly developed areas are less susceptible unless they are located near the urban-wildland boundary. The risk will also vary due to assets. Areas in the urban-wildland interface will have much more property at risk, resulting in increased vulnerability and need to mitigate compared to rural, mainly forested areas. The

probability assigned to the Cape Fear Region for future wildfire events is likely (10 to 100 percent annual probability).

5.13.6 Impact

People

The potential health risk from wildfire events and the resulting diminished air quality is a concern. Exposure to wildfire smoke can cause serious health problems within a community, including asthma attacks and pneumonia, and can worsen chronic heart and lung diseases. Vulnerable populations include people with respiratory problems or with heart disease. Even healthy citizens may experience minor symptoms, such as sore throats and itchy eyes.

First Responders

Public and firefighter safety is the first priority in all wildland fire management activities. Wildfires are a real threat to the health and safety of the emergency services. Most fire-fighters in rural areas are 'retained'. This means that they are part-time and can be called away from their normal work to attend to fires.

Continuity of Operations

Wildfire events can result in a loss of power which may impact operations. Downed trees, power lines and damaged road conditions may prevent access to critical facilities and/or emergency equipment.

Built Environment

Wildfires frequently damage community infrastructure, including roadways, communication networks and facilities, power lines, and water distribution systems. Restoring basic services is critical and a top priority. Efforts to restore roadways include the costs of maintenance and damage assessment teams, field data collection, and replacement or repair costs. Direct impacts to municipal water supply may occur through contamination of ash and debris during the fire, destruction of aboveground distribution lines, and soil erosion or debris deposits into waterways after the fire. Utilities and communications repairs are also necessary for equipment damaged by a fire. This includes power lines, transformers, cell phone towers, and phone lines.

Economy

Wildfires can have significant short-term and long-term effects on the local economy. Wildfires, and extreme fire danger, may reduce recreation and tourism in and near the fires. If aesthetics are impaired, local property values can decline. Extensive fire damage to trees can significantly alter the timber supply, both through a short-term surplus from timber salvage and a longer-term decline while the trees regrow. Water supplies can be degraded by post-fire erosion and stream sedimentation. The jurisdictions of Pine bluff, Pinehurst and Vass in Moore County appear to be more vulnerable to this impact.

Wildfires can also have positive effects on local economies. Positive effects come from economic activity generated in the community during fire suppression and post-fire rebuilding. These may include forestry support work, such as building fire lines and performing other defenses, or providing firefighting teams with food, ice, and amenities such as temporary shelters and washing machines.

Natural Environment

Wildfires cause damage to the natural environment, killing vegetation and occasionally animals. The risk of floods and debris flows increases due to the exposure of bare ground and the loss of vegetation. In

addition, the secondary effects of wildfires, including erosion, landslides, introduction of invasive species, and changes in water quality, are often more disastrous than the fire itself.

5.14 Nuclear Accident

5.14.1 Background

A nuclear and radiation accident is defined by the International Atomic Energy Agency as "an event that has led to significant consequences to people, the environment or the facility. Often, this type of incident results from damage to the reactor core of a nuclear power plant which can release radioactivity into the environment. The degree of exposure from nuclear accidents has varied from serious to catastrophic.

By some estimates, over 50 percent of nuclear accidents that have ever occurred were in the United States.[11] However, it is also important to note that generally, nuclear accidents are a rare occurrence. Many incidents are extremely well known due to their large-scale impact and serious effects on people and the environment.

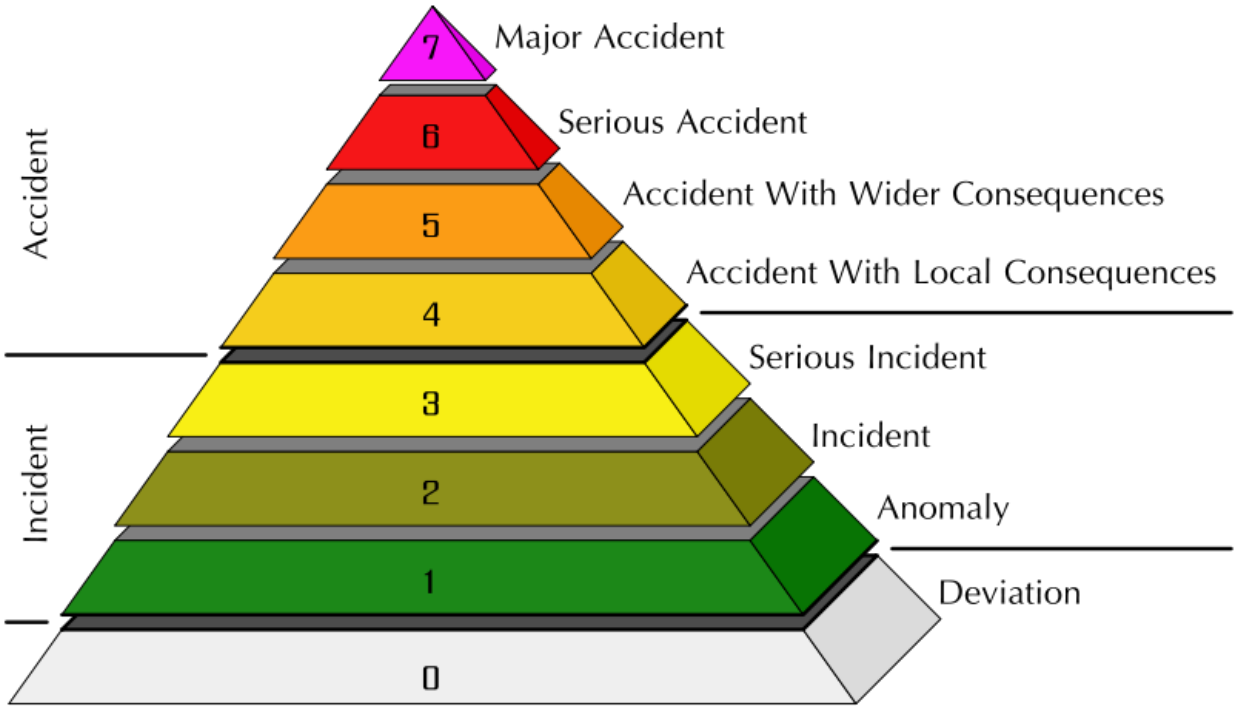
One of the most notorious accidents in the United States was the Three Mile Island accident which occurred in 1979 and released small amounts of radioactive gases and iodine into the environment. Although no deaths have been directly attributed to the accident, it invoked a strong public reaction and demonstrated the potential dangers associated with nuclear power generation.

Shearon Harris Nuclear Station, which is located in southwest Wake County, is a 2,948-megawatt power plant that began commercial operation in 1987. Its reactor is a pressurized water reactor and the plant operates with a very high level of security.

Location and Spatial Extent

Almost the entire region is at risk to a nuclear incident. However, areas in the northeastern part of the region are more susceptible due to their proximity to the Shearon Harris Nuclear Station. The International Atomic Energy Association has developed a scale called the International Nuclear and Radiological Event Scale (INES) which provides a quantitative means of assessing the extent of a nuclear event. This scale, like the MMI used for earthquakes, is logarithmic which means that each increasing level on the scale represents an event 10 times more severe than the previous level (**Figure 5-165**).

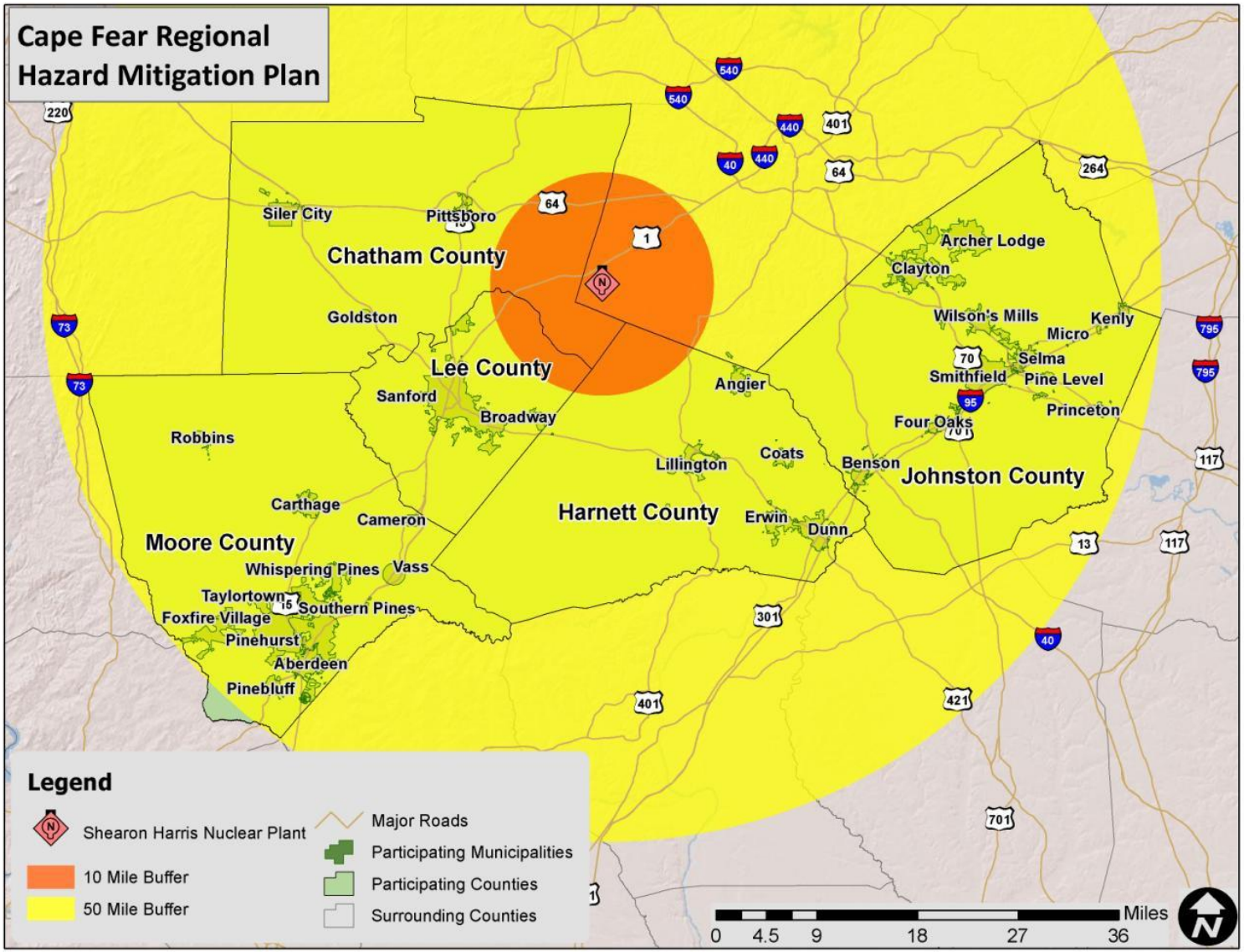
[11] Benjamin K. Sovacool. A Critical Evaluation of Nuclear Power and Renewable Electricity in Asia Journal of Contemporary Asia, Vol. 40, No. 3, August 2010, pp. 393–400.



Source: International Atomic Energy Agency

Figure 5-165: International Nuclear Event Scale

The Nuclear Regulatory Commission defines two emergency planning zones around nuclear plants. Areas located within 10 miles of the station are considered to be within the zone of highest risk to a nuclear incident and this radius is the designated evacuation radius recommended by the Nuclear Regulatory Commission (**Figure 5-166**). Within the 10-mile zone, the primary concern is exposure to and inhalation of radioactive contamination. The most concerning effects in the secondary 50-mile zone are related to ingestion of food and liquids that may have been contaminated. Nearly all areas of the region that are not located within the 10-mile radius are located within this 50-mile radius that is still considered to be at risk to some impacts from a nuclear incident.



Source: International Atomic Energy Agency

Figure 5-166: Shearon Harris Nuclear Power Station Incident Hazard Zones

5.14.2 Historical Occurrences

Although there have been no major nuclear events at the Shearon Harris Nuclear Station, there is some possibility that one could occur as there have been incidents in the past in the United States at other facilities and at facilities around the world. In May of 2013, there was an unplanned shutdown of the plant which resulted from the discovery of a ¼ inch crack in the Reactor Pressure Vessel Head.

Shearon Harris has declared 2 "Alerts" and 28 "Notice of Unusual Events" since 1986, which are shown in **Table 5-35**. There have also been 338 additional incidents reported to the NRC since 1986, but they did not necessitate an emergency declaration and therefore were not included in this analysis.

Table 5-35: Shearon Harris Emergency Declaration History

Emergency Declaration	Date	Description
Alert	08/12/1988	Loss of greater than 50% of main control board (MCB) alarms due to electrical problems; normal power supply to annunciator panel failed and did not transfer to its backup inverter.
Alert	10/09/1988	Fire on "B" Main Electrical Transformer; release of flammable gas in the Protected Area.
Unusual Event	11/28/1986	Loss of ERFIS computer system to display Safety Parameter Display System (SPDS) (55 lapsed minutes).
Unusual Event	11/29/1986	Loss of ERFIS computer system to display SPDS (58 lapsed minutes).
Unusual Event	11/30/1986	Loss of ERFIS computer system to display SPDS (48 lapsed minutes).
Unusual Event	12/03/1986	Loss of ERFIS computer system to display SPDS (27 lapsed minutes).
Unusual Event	12/11/1986	Safety Injection (an Emergency Core Cooling System) actuated while testing electronic circuitry.
Unusual Event	01/27/1987	Loss of ERFIS computer system to display SPDS (23 lapsed minutes).
Unusual Event	07/11/1987	Loss of ERFIS computer system to display SPDS (22 lapsed minutes).
Unusual Event	07/24/1987	Loss of ERFIS computer system to display SPDS (32 lapsed minutes).
Unusual Event	07/25/1987	Loss of ERFIS computer system to display SPDS (28 lapsed minute).
Unusual Event	02/04/1988	Fire within the Protected Area greater than 10 minutes; smoke observed coming from the motor for the reactor auxiliary building supply fan.
Unusual Event	10/06/1988	RCS leakage in excess of Tech Specs (unidentified leakage > 1.0 gpm).
Unusual Event	10/20/1988	RCS leakage in excess of Tech Specs; pressure operated relief valve opened and admitted RCS inventory to the pressurized relief tank (PRT).
Unusual Event	11/17/1988	Loss of ERFIS computer system to display SPDS for > 60 minutes.
Unusual Event	12/01/1988	Reactor coolant system (RCS) leakage in excess of Tech Specs (unidentified leakage > 1.0 gpm).
Unusual Event	12/16/1988	High level alarm on radiological effluent release monitor the (Treated Laundry and Hot Shower high level alarm was set just above background).
Unusual Event	03/13/1989	Loss of ERFIS computer system to display SPDS for > 60 minutes.

Emergency Declaration	Date	Description
Unusual Event	01/24/1991	Plant shutdown required by Technical Specifications. Excessive leakage of a containment penetration; leakage discovered during surveillance testing.
Unusual Event	02/15/1991	Loss of ERFIS computer system to display SPDS for > 4 hours.
Unusual Event	03/05/1991	Plant shutdown required by Technical Specifications (testing of "A" Reactor Coolant Pump (RCP) electrical protection function).
Unusual Event	04/14/1992	Loss of ERFIS computer system to display SPDS for > 4 hours.
Unusual Event	02/06/1993	Loss of ERFIS computer system to display SPDS for > 4 hours.
Unusual Event	02/17/1994	Loss of ERFIS computer system to display SPDS for > 4 hours.
Unusual Event	07/22/1994	Loss of both emergency diesel generators - "B" diesel generator was being worked on; in accordance with test procedures, "A" diesel generator is required to be tested within 24 hours following having redundant diesel out-of-service; did not pass test.
Unusual Event	11/05/1995	Unplanned emergency core cooling system (ECCS) discharge to the reactor vessel; reactor trip and safety injection (SI) occurred during the performance of testing.
Unusual Event	12/14/1995	Train derailment on site - while removing empty cask car from the Protected Area, the rail cars were moved onto the Engine Spur to allow passage of the CSX engine on adjacent Plant Spur; cask car shifted; 4 wheels of the car left the rails.
Unusual Event	01/22/1997	Security Event - while working Work Request and Authorization (WR&A), I&C Tech investigation found cut wire in a Turbine Building radiation monitor. Later determined to not be vandalism (i.e., not a security threat).
Unusual Event	04/02/2000	Loss of Emergency Response Facility Information System (ERFIS) computer system to display Safety Parameter Display System (SPDS) for more than 4 hours.
Unusual Event	08/23/2011	Seismic activity at the site due to a magnitude 5.8 earthquake near Mineral, VA.

Source: Nuclear Regulatory Commission

5.14.3 Probability of Future Occurrences

A major nuclear event is a very rare occurrence in the United States due to the intense regulation of the industry. There have been incidents in the past, but it is considered unlikely (less than 1 percent annual probability).

5.15 Terror Threat

5.15.1 Background

Terrorism is defined in the United States by the Code of Federal Regulations as: "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian

population, or any segment thereof, in furtherance of political or social objectives."[12] Academic literature identifies some overarching political goals that terrorism seeks to achieve, including spreading anxiety and alarm among immediate victims, families, and the general public; eliminating opponents and destroying symbolic targets; and generating direct damage on society, such as affecting business confidence. In the following sections, some general background information about terrorism is presented prior to the county's hazard identification and risk assessment findings.

There are two general types of terrorist groups: network and hierarchical. The type of organization a group adopts largely depends on how long the group has existed. More recently developed groups tend to organize or adapt to the possibilities of the network model. Older, more established groups lean toward the hierarchical structure and are often more associated with violence of a political nature.[13] Terrorist acts can be committed by large, formally organized groups with terrorist cells in different parts of the world, or they can originate from smaller groups or individuals from a small city or domestic "homegrown" location. In the United States, terrorists that are "homegrown" do not belong to a defined group, may operate very effectively "under the radar," and may pose the biggest threat initially at the local level.[14]

5.15.2 Location and Spatial Extent

A terror threat could potentially occur at any location in the region. However, the very definition of a terrorist event indicates that it is most likely to be targeted at a critical or symbolic resource/location. Ensuring and protecting the continuity of critical infrastructure and key resources (CIKR) of the United States is essential to the Nation's security, public health and safety, economic vitality, and way of life. CIKR includes physical and/or virtual systems or assets that, if damaged, would have a detrimental impact on national security, including large-scale human casualties, property destruction, economic disruption, and significant damage to morale and public confidence. **Table 5-36** lists the U.S. Department of Homeland Security's (DHS) identified main critical infrastructure sectors.

Table 5-36: U.S. Department of Homeland Security Critical Infrastructure Sectors

- Agriculture and Food
- Banking and Finance
- Chemical
- Commercial Facilities
- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Government Facilities
- Healthcare and Public Health
- Information Technology
- National Monuments and Icons
- Nuclear Reactors, Materials, and Waste
- Postal and Shipping
- Transportation Systems
- Water

Although all critical facilities (see Section 6: *Vulnerability Assessment*) are at a heightened level of risk in the Cape Fear Region, there are several that have been identified as the likely primary targets. These are listed in **Table 5-37**.

[12] U.S. Code of Federal Regulations. 23 C.F.R. Section 0.85
[13] Terrorism Research. *Terrorist groups.* Retrieved December 27, 2011, from http://www.terrorism-research.com/groups/
[14] Ibid.

Table 5-37: Critical Facilities at Elevated Risk of Terror Threat in the Cape Fear Region

Critical Facility
Chatham County
Chatham County Emergency Operations Center
Chatham Hospital
Harnett County
Harnett County Emergency Operations Center
Central Harnett Hospital
Betsy Johnson Hospital
Johnston County
Johnston County Emergency Operations Center
Johnston Medical Center
Lee County
Lee County Emergency Operations Center
Central Carolina Hospital
Moore County
Rick Rhyne Public Safety: Moore County Emergency Operations Center
Moore Regional Hospital

Source: Local Governments

5.15.3 Historical Occurrences

Although there have been no major terror events in the Cape Fear Region, there is some possibility that one could occur in the future as there have been incidents in the United States in the past and there are several facilities that could be potential targets.

5.15.4 Probability of Future Occurrences

The Cape Fear Region has had no recorded terrorist events. Due to no recorded incidents against the region, the probability of future occurrences of a terrorist attack is unlikely (less than 1 percent annual probability).

5.16 Conclusions on Hazard Risk

The hazard profiles presented in this section were developed using best available data and result in what may be considered principally a qualitative assessment as recommended by FEMA in its "How-to" guidance document titled *Understanding Your Risks: Identifying Hazards and Estimating Losses* (FEMA Publication 386-2). It relies heavily on historical and anecdotal data, stakeholder input, and professional and experienced judgment regarding observed and/or anticipated hazard impacts. It also carefully considers the findings in other relevant plans, studies, and technical reports.

5.16.1 Priority Risk Index

In order to draw some meaningful planning conclusions on hazard risk for the Cape Fear Region, the results of the hazard profiling process were used to generate countywide hazard classifications according to a "Priority Risk Index" (PRI). The purpose of the PRI is to categorize and prioritize all potential hazards for the Cape Fear Region as high, moderate, or low risk. Combined with the asset inventory and quantitative vulnerability assessment provided in the next section, the summary hazard classifications generated through the use of the PRI allows for the prioritization of those high hazard risks for mitigation planning purposes, and more specifically, the identification of hazard mitigation opportunities for the jurisdictions in the Cape Fear Region to consider as part of their proposed mitigation strategy.

The prioritization and categorization of identified hazards for the Cape Fear Region is based principally on the PRI, a tool used to measure the degree of risk for identified hazards in a particular planning area. The PRI is used to assist the Cape Fear Regional Hazard Mitigation Planning Team in gaining consensus on the determination of those hazards that pose the most significant threat to the Cape Fear counties based on a variety of factors. The PRI is not scientifically based but is rather meant to be utilized as an objective planning tool for classifying and prioritizing hazard risks in the Cape Fear Region based on standardized criteria.

The application of the PRI results in numerical values that allow identified hazards to be ranked against one another (the higher the PRI value, the greater the hazard risk). PRI values are obtained by assigning varying degrees of risk to five categories for each hazard (probability, impact, spatial extent, warning time, and duration). Each degree of risk has been assigned a value (1 to 4) and an agreed upon weighting factor[15], as summarized in **Table 5-38**. To calculate the PRI value for a given hazard, the assigned risk value for each category is multiplied by the weighting factor. The sum of all five categories equals the final PRI value, as demonstrated in the example equation below:

PRI VALUE = [(PROBABILITY x .30) + (IMPACT x .30) + (SPATIAL EXTENT x .20) + (WARNING TIME x .10) + (DURATION x .10)]

According to the weighting scheme and point system applied, the highest possible value for any hazard is 4.0. When the scheme is applied for the Cape Fear Region, the highest PRI value is 3.3 (thunderstorm/high wind). Prior to being finalized, PRI values for each identified hazard were reviewed and accepted by the members of the Planning Team.

Table 5-38: Priority Risk Index for the Cape Fear Region

PRI Category	Degree of Risk			Assigned Weighting Factor
	Level	Criteria	Index Value	
Probability	Unlikely	Less than 1% annual probability	1	30%
	Possible	Between 1 and 10% annual probability	2	
	Likely	Between 10 and 100% annual probability	3	
	Highly Likely	100% annual probability	4	
Impact	Minor	Very few injuries, if any. Only minor property damage and minimal disruption	1	30%

[15] The Planning Team, based upon any unique concerns or factors for the planning area, may adjust the PRI weighting scheme during future plan updates.

PRI Category	Degree of Risk			Assigned Weighting Factor
	Level	Criteria	Index Value	
		on quality of life. Temporary shutdown of critical facilities.		
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.	3	
	Catastrophic	High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for 30 days or more.	4	
Spatial Extent	Negligible	Less than 1% of area affected	1	20%
	Small	Between 1 and 10% of area affected	2	
	Moderate	Between 10 and 50% of area affected	3	
	Large	Between 50 and 100% of area affected	4	
Warning Time	More than 24 hours	Self-explanatory	1	10%
	12 to 24 hours	Self-explanatory	2	
	6 to 12 hours	Self-explanatory	3	
	Less than 6 hours	Self-explanatory	4	
Duration	Less than 6 hours	Self-explanatory	1	10%
	Less than 24 hours	Self-explanatory	2	
	Less than one week	Self-explanatory	3	
	More than one week	Self-explanatory	4	

5.16.2 Priority Risk Index Results

Table 5-39 summarizes the degree of risk assigned to each category for all initially identified hazards based on the application of the PRI. Assigned risk levels were based on the detailed hazard profiles developed for this section, as well as input from the Planning Team. The results were then used in calculating PRI values and making final determinations for the risk assessment.

Table 5-39: Summary of PRI Results for the Cape Fear Region

Hazard	Category/Degree of Risk					
	Probability	Impact	Spatial Extent	Warning Time	Duration	PRI Score
Atmospheric Hazards						
Drought	Likely	Minor	Large	More than 24 hours	More than 1 week	2.5
Extreme Heat	Likely	Minor	Large	More than 24 hours	Less than 1 week	2.4
Hurricane and Tropical Storm	Likely	Critical	Large	More than 24 hours	Less than 24 hours	2.9
Severe Weather	Highly Likely	Critical	Large	6 to 12 hours	Less than 6 hours	3.3
Tornado	Likely	Critical	Small	Less than 6 hours	Less than 6 hours	2.7
Winter Storm	Likely	Limited	Moderate	More than 24 hours	Less than 1 week	2.5
Geologic Hazards						
Earthquake	Unlikely	Minor	Moderate	Less than 6 hours	Less than 6 hours	1.7
Hydrologic Hazards						
Dam Failure	Unlikely	Critical	Small	Less than 6 hours	Less than 6 hours	2.1
Flood	Likely	Critical	Moderate	6 to 12 hours	Less than 1 week	3.0
Other Hazards						
Hazardous Materials Incident	Likely	Limited	Small	Less than 6 hours	Less than 24 hours	2.5
Wildfire	Likely	Minor	Small	Less than 6 hours	Less than 1 week	2.3
Nuclear Accident	Unlikely	Critical	Small	6 to 12 hours	Less than 1 week	2.2
Terror Threat	Unlikely	Critical	Small	Less than 6 hours	Less than 24 hours	2.2

5.17 Final Determinations

The conclusions drawn from the hazard profiling process for the Cape Fear Region, including the PRI results and input from the Regional Hazard Mitigation Planning Team, resulted in the classification of risk for each identified hazard according to three categories: High Risk, Moderate Risk, and Low Risk (**Table 5-40**). For purposes of these classifications, risk is expressed in relative terms according to the estimated impact that a hazard will have on human life and property throughout all of the Cape Fear Region. A more quantitative analysis to estimate potential dollar losses for each hazard has been performed separately and is described in Section 6: *Vulnerability Assessment*. It should be noted that although some hazards are classified below as posing low risk, their occurrence of varying or unprecedented magnitudes is still possible in some cases and their assigned classification will continue to be evaluated during future plan updates.

Table 5-40: Conclusions on Hazard Risk for the Cape Fear Region

HIGH RISK	Severe Weather, Flood, Hurricane and Tropical Storm, Tornado, Drought, Winter Storm
MODERATE RISK	Hazardous Material Incident, Extreme Heat, Wildfire
LOW RISK	Nuclear Accident, Terror Threat Dam Failure, Earthquake

SECTION 6: VULNERABILITY ASSESSMENT

This section identifies and quantifies the vulnerability of the jurisdictions within the Cape Fear Region to the significant hazards identified in the previous sections (*Hazard Identification and Profiles*). It consists of the following subsections:

- 6.1 Overview
- 6.2 Methodology
- 6.3 Explanation of Data Sources
- 6.4 Asset Inventory
- 6.5 Vulnerability Assessment Results
- 6.6 Conclusions on Hazard Vulnerability

44 CFR Requirement
44 CFR Part 201.6(c)(2)(ii): The risk assessment shall include a description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. The description shall include an overall summary of each hazard and its impact on the community. The plan should describe vulnerability in terms of: (A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; (B) An estimate of the potential losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate; (C) Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

6.1 Overview

This section builds upon the information provided in Section 4: *Hazard Identification and* Section 5*: Hazard Profiles* by identifying and characterizing an inventory of assets in the Cape Fear Region. In addition, the potential impact and expected amount of damages caused to these assets by each identified hazard event is assessed. The primary objective of the vulnerability assessment is to quantify exposure and the potential loss estimates for each hazard. In doing so, the Cape Fear counties and their participating jurisdictions may better understand their unique risks to identified hazards and be better prepared to evaluate and prioritize specific hazard mitigation actions.

This section begins with an explanation of the methodology applied to complete the vulnerability assessment, followed by a summary description of the asset inventory as compiled for jurisdictions in the Cape Fear Region. The remainder of this section focuses on the results of the assessment conducted.

6.2 Methodology

This vulnerability assessment was conducted using three distinct methodologies: (1) A stochastic risk assessment; (2) a geographic information system (GIS)-based analysis; and (3) a risk modeling software analysis. Each approach provides estimates for the potential impact of hazards by using a common, systematic framework for evaluation, including historical occurrence information provided in the *Hazard Identification* and *Hazard Profiles* sections. A brief description of the three different approaches is provided on the following pages.

6.2.1 Stochastic Risk Assessment

The stochastic risk assessment methodology was applied to analyze hazards of concern that were outside the scope of hazard risk models and the GIS-based risk assessment. This involves the consideration of annualized loss estimates and impacts of current and future buildings and populations. Annualized loss is the estimated long-term weighted average value of losses to property in any single year in a specified geographic area (i.e., municipal jurisdiction or county). This methodology is applied primarily to hazards that do not have geographically definable boundaries and are therefore excluded from spatial analysis through GIS. A stochastic risk methodology was used for the following hazards:

- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Flood
- HAZMAT
- Hurricane
- Nuclear Accident
- Terror Threat
- Severe Weather
- Tornado
- Winter Storm
- Wildfire

With the exception of Dam Failure, HAZMAT, Nuclear Accident and Terror Threat, the hazards listed above are considered atmospheric and have the potential to affect all current and future buildings and all populations. **Table 6-1** provides information about all improved property in the Cape Fear Region that is vulnerable to these hazards. For all hazards annualized loss estimates were determined using the best available data on historical losses from sources including NOAA's National Climatic Data Center records, Hazard Mitigation Plan, and local knowledge. Annualized loss estimates were generated by totaling the amount of property damage over the period of time for which records were available and calculating the average annual loss. Given the standard weighting analysis, losses can be readily compared across hazards providing an objective approach for evaluating mitigation alternatives.

For the dam failure[1], drought, extreme heat, HAZMAT, nuclear accident, terror threat, and winter storm no data with historical property damages was available. Therefore, a detailed vulnerability assessment could not be completed for these hazards at this time.

The results for these hazards are found at the end of this section in **Table 6.466**.

6.2.2 S-Based Analysis

The objective of the GIS-based analysis was to determine the estimated vulnerability of critical facilities and populations for the identified hazards in the Cape Fear Region using best available geospatial data. Digital data was collected from local, regional, state, and national sources for hazards and buildings. This included local tax assessor records for individual parcels and buildings and geo-referenced point locations for identified assets (critical facilities and infrastructure, special populations, etc.) when available. ESRI® ArcGIS™ 10.2 was used to assess hazard vulnerability utilizing digital hazard data, as well

[1] As noted in Section 5: *Hazard Profiles*, dam failure could be catastrophic to structures and populations in the inundation area. However, due to lack of data, no additional analysis was performed. Further, local USACE and NCDENR also complete separate dam failure plans to identify risk and response measures.

as local building data. Using these data layers, hazard vulnerability can be quantified by estimating the assessed building value for parcels and/or buildings determined to be located in identified hazard areas. To estimate vulnerable populations in hazard areas, digital Census 2010 data by census tract was obtained. This was intersected with hazard areas to determine exposed population counts. The results of the analysis provided an estimate of the number of people and critical facilities, as well as the assessed value of parcels and improvements, determined to be potentially at risk to those hazards with delineable geographic hazard boundaries.

Loss estimates provided in this vulnerability assessment are based on best available data and methodologies. The results approximate risk. These estimates should be used to understand relative risk from hazards and potential losses. Uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from approximations and simplifications that are necessary for a comprehensive analysis (e.g., incomplete inventories, non- specific locations, demographics, or economic parameters). All conclusions are presented in "Conclusions on Hazard Vulnerability" at the end of this section.

6.3 Explanation of Data Sources

6.3.1 Earthquake

6.3.2 Flood

FEMA Digital Flood Insurance Rate Maps (DFIRMs) were used to determine flood vulnerability. DFIRM data can be used in ArcGIS for mapping purposes and, they identify several features including floodplain boundaries and base flood elevations. Identified areas on the DFIRM represent some features of a Flood Insurance Rate Maps including the 100-year flood areas (1.0-percent annual chance flood), and the 500-year flood areas (0.2-percent annual chance flood). For the vulnerability assessment, local parcel data and critical facilities were overlaid on the 100-year floodplain areas and 500-year floodplain areas. It should be noted that such an analysis does not account for building elevation.

HURRICANE AND TROPICAL STORM WIND

Hazardous Materials Incident

For the fixed hazardous materials incident analysis, Toxic Release Inventory (TRI) data was used. The Toxics Release Inventory is a publicly available database from the federal Environmental Protection Agency (EPA) that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. Each year, facilities that meet certain activity thresholds must report their releases and other waste management activities for listed toxic chemicals to EPA and to their state or tribal entity. A facility must report if it meets the following three criteria:

- The facility falls within one of the following industrial categories: manufacturing; metal mining; coal mining; electric generating facilities that combust coal and/or oil; chemical wholesale distributors; petroleum terminals and bulk storage facilities; RCRA Subtitle C treatment, storage, and disposal (TSD) facilities; and solvent recovery services;
- Has 10 or more full-time employee equivalents; and

- Manufactures or processes more than 25,000 pounds or otherwise uses more than 10,000 pounds of any listed chemical during the calendar year. Persistent, bio accumulative, and toxic (PBT) chemicals are subject to different thresholds of 10 pounds, 100 pounds, or 0.1 grams depending on the chemical.

For the mobile hazardous materials incident analysis, transportation data including major highways and railroads were obtained from the North Carolina Department of Transportation. This data is ArcGIS compatible, lending itself to buffer analysis to determine risk.

Wildfire

The data used to determine vulnerability to wildfire in the Cape Fear Region is based on GIS data called the Southern Wildfire Risk Assessment (SWRA). It was provided for use in this plan by the North Carolina Division of Forest Resources. A specific layer, known as "Level of Concern" (LOC) was used to determine vulnerability of people and property. The LOC is presented on a scale of 1 to 100. It combines a Wildfire Susceptibility Index (WFSI) with a Fire Effects Index (FEI). The primary purpose of the LOC data is to highlight areas of concern that may be conducive to mitigation actions. Due to the assumptions made, it is not a true probability. However, it does provide a comparison of risk throughout the region.

Nuclear Accident

The data used to determine vulnerability to a nuclear accident in the Cape Fear Region is based on the location of the Shearon Harris Nuclear Power Station and buffer radii recommended by the Nuclear Regulatory Commission for emergency management planning in the event of a nuclear accident.

6.3.3 Inventory of Community Assets

Each participating jurisdiction assisted in the identification of assets to be used for analysis to determine what assets may be potentially at risk to the hazards covered in the Plan. These assets are defined broadly as anything that is important to the function and character of the community. For the purposes of this Risk Assessment, the individual types of assets include:

- Population
- Parcels and Buildings
- Critical Facilities
- Infrastructure
- High Potential Loss Properties
- Historic Properties

Although all assets may be affected by certain hazards (such as hail or tornadoes), some assets are more vulnerable because of their location (e.g., the floodplain), certain physical characteristics (e.g., slab-on-grade construction), or socioeconomic uses (e.g., major employers). The following subsections document the numbers and values used for the analysis.

6.3.4 Population

The population counts shown in **Table 6-1** are derived from 2010 census data and include a breakdown of two subpopulations assumed to be at greater risk to natural hazards than the "general" population: elderly (ages 65 and older) and children (under the age of 5). **Figure 6-1,** shows population density per square mile, along with the distribution of potentially at-risk populations, across the planning area.

Figure 6-1: Cape Fear Population Density Map

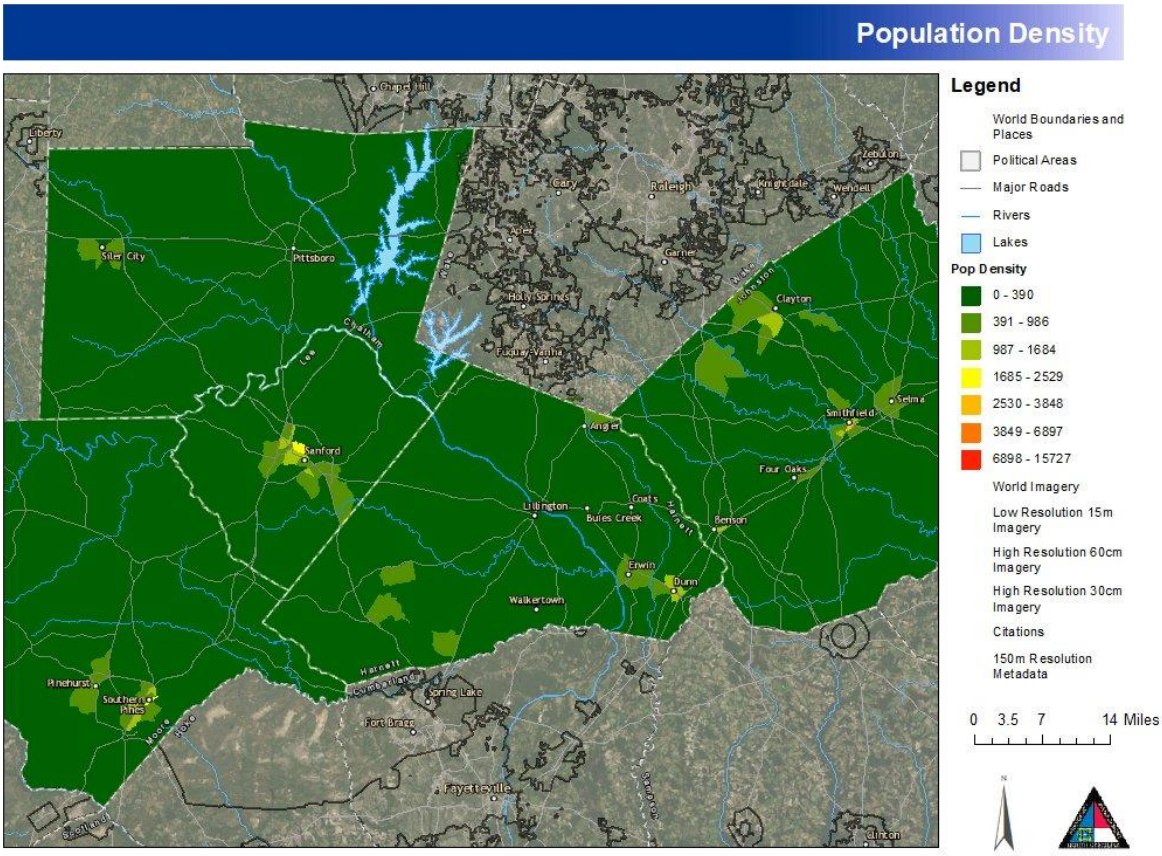


Table 6-1: Population Counts with Vulnerable Population Breakdown

Jurisdiction	2010 Census Population	Elderly (Age 65 and Over)	Children (Age 5 and Under)
Chatham			
Chatham County (Unincorporated Area)	42,266	7,745	2,608
Town of Goldston	263	48	16
Town of Pittsboro	6,417	1,176	396
Town of Siler City	13,243	2,427	817
Subtotal Chatham	*62,189*	*11,396*	*3,837*
Harnett			
City of Dunn	10,132	1,056	822
Harnett County (Unincorporated Area)	85,585	8,921	6,948
Town of Angier	5,712	594	462

Jurisdiction	2010 Census Population	Elderly (Age 65 and Over)	Children (Age 5 and Under)
Town of Benson	4,986	509	379
Town of Broadway	1,813	246	133
Town of Coats	2,860	298	232
Town of Erwin	6,272	654	509
Town of Lillington	4,071	424	330
Subtotal Harnett	*121,431*	*12,702*	*9,815*
Johnston			
Johnston County (Unincorporated Area)	94,330	9,632	7,169
Town of Archer Lodge	4,150	424	315
Town of Clayton	27,459	2,804	2,087
Town of Four Oaks	4,719	482	359
Town of Kenly	2,087	222	156
Town of Micro	950	97	72
Town of Pine Level	2,767	283	210
Town of Princeton	1,729	177	131
Town of Selma	8,565	875	651
Town of Smithfield	14,194	1,449	1,079
Town of Wilson's Mills	3,324	339	253
Subtotal Johnston	*164,274*	*16,784*	*12,482*
Lee			
City of Sanford	30,778	4,222	2,245
Lee County (Unincorporated Area)	25,355	3,478	1,850
Subtotal Lee	*56,133*	*7,700*	*4,095*
Moore			
Moore County (Unincorporated Area)	34,917	7,910	1,996
Town of Aberdeen	7,402	1,677	423
Town of Cameron	655	148	37
Town of Carthage	2,724	617	156
Town of Pinebluff	2,609	591	149
Town of Robbins	1,907	432	109
Town of Southern Pines	15,394	3,487	880

Jurisdiction	2010 Census Population	Elderly (Age 65 and Over)	Children (Age 5 and Under)
Town of Taylortown	754	171	43
Town of Vass	1,294	293	74
Village of Foxfire	1,195	271	68
Village of Pinehurst	15,514	3,514	887
Village of Whispering Pines	3,864	875	221
Subtotal Moore	*88,229*	*19,986*	*5,043*
TOTAL PLAN AREA	**492,256**	**68,568**	**35,272**

Source: U.S. Census Bureau.

6.3.5 Parcels and Buildings

The parcel counts, building counts, and building values shown in **Table 6-2** represent the built environment inventories used for the analyses included in the Risk Assessment. In order to provide a more accurate reflection of buildings that contain livable space and/or commercial, industrial, or other uses, all building footprints less than 500 square feet have been eliminated from the counts and analysis.

Table 6-2: Parcel and Building Counts and Values by Jurisdiction

Jurisdiction	Number of Developed Parcels	Number of Undeveloped Parcels	Building Count	Building Value	Number of Pre-FIRM Buildings
Chatham					
Chatham County (Unincorporated Area)	0	0	27,859	$3,870,138,279	0
Town of Goldston	0	0	244	$15,009,246	0
Town of Pittsboro	0	0	3,678	$440,854,800	0
Town of Siler City	0	0	6,630	$642,079,341	0
Subtotal Chatham	*0*	*0*	*38,411*	*$4,968,081,666*	*0*
Harnett					
City of Dunn	0	0	4,925	$1,102,081,424	0
Harnett County (Unincorporated Area)	0	0	40,441	$5,434,767,070	0
Town of Angier	0	0	2,541	$415,386,686	0
Town of Benson	0	0	2,761	$356,448,597	0
Town of Broadway	0	0	1,048	$92,378,971	0

Jurisdiction	Number of Developed Parcels	Number of Undeveloped Parcels	Building Count	Building Value	Number of Pre-FIRM Buildings
Town of Coats	0	0	1,457	$218,879,793	0
Town of Erwin	0	0	3,117	$504,204,839	0
Town of Lillington	0	0	1,589	$449,704,020	0
Subtotal Harnett	*0*	*0*	*57,879*	*$8,573,851,400*	*0*
Johnston					
Johnston County (Unincorporated Area)	0	0	47,795	$4,517,854,154	0
Town of Archer Lodge	0	0	1,599	$139,690,363	0
Town of Clayton	0	0	9,845	$1,596,751,757	0
Town of Four Oaks	0	0	2,838	$207,592,360	0
Town of Kenly	0	0	1,314	$185,427,285	0
Town of Micro	0	0	577	$65,196,313	0
Town of Pine Level	0	0	1,426	$99,297,958	0
Town of Princeton	0	0	1,000	$153,237,702	0
Town of Selma	0	0	3,784	$410,778,250	0
Town of Smithfield	0	0	6,924	$1,220,555,438	0
Town of Wilson's Mills	0	0	1,397	$186,421,683	0
Subtotal Johnston	*0*	*0*	*78,499*	*$8,782,803,263*	*0*
Lee					
City of Sanford	0	0	12,108	$1,643,600,616	0
Lee County (Unincorporated Area)	0	0	14,761	$1,315,953,088	0
Subtotal Lee	*0*	*0*	*26,869*	*$2,959,553,704*	*0*
Moore					
Moore County (Unincorporated Area)	0	0	28,697	$2,142,831,570	0
Town of Aberdeen	0	0	3,401	$436,915,109	0
Town of Cameron	0	0	594	$31,783,454	0
Town of Carthage	0	0	2,011	$203,983,152	0
Town of Pinebluff	0	0	1,500	$154,166,240	0
Town of Robbins	0	0	1,427	$79,768,552	0
Town of Southern Pines	0	0	7,755	$1,646,436,097	0
Town of Taylortown	0	0	458	$53,943,710	0

Jurisdiction	Number of Developed Parcels	Number of Undeveloped Parcels	Building Count	Building Value	Number of Pre-FIRM Buildings
Town of Vass	0	0	960	$76,814,488	0
Village of Foxfire	0	0	589	$95,940,005	0
Village of Pinehurst	0	0	8,291	$2,409,869,495	0
Village of Whispering Pines	0	0	1,795	$313,241,921	0
Subtotal Moore	*0*	*0*	*57,478*	*$7,645,693,793*	*0*
TOTAL PLAN	**0**	**0**	**259,136**	**$32,929,983,825**	**0**

Source: Participating jurisdictions.

6.3.6 Critical Facilities

Table 6-3 shows counts of critical facilities under a variety of categories attributed to each participating jurisdiction.

Table 6-3: Critical Facilities Counts by Jurisdiction Part A

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Chatham									
Chatham County (Unincorporated Area)	3,697	4	0	641	0	375	73	0	174
Town of Goldston	0	1	0	28	0	15	0	0	4
Town of Pittsboro	159	18	0	180	0	37	25	0	51
Town of Siler City	483	13	0	391	0	123	23	0	64
Subtotal Chatham	*4,339*	*36*	*0*	*1,240*	*0*	*550*	*121*	*0*	*293*
Harnett									
City of Dunn	42	27	1	360	2	80	46	0	51
Harnett County (Unincorporated Area)	2,093	1	1	505	1	188	18	0	370
Town of Angier	57	6	0	85	0	21	7	0	7
Town of Benson	390	6	0	160	0	31	19	0	17
Town of Broadway	32	2	0	54	0	5	0	0	8

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Town of Coats	16	3	0	52	0	7	2	0	8
Town of Erwin	21	3	0	91	0	15	11	0	25
Town of Lillington	3	9	0	125	0	29	12	0	82
Subtotal Harnett	*2,654*	*57*	*2*	*1,432*	*3*	*376*	*115*	*0*	*568*
Johnston									
Johnston County (Unincorporated Area)	8,411	4	0	851	0	267	18	0	162
Town of Archer Lodge	120	0	0	7	0	6	0	0	3
Town of Clayton	311	13	1	298	0	114	34	0	44
Town of Four Oaks	383	14	0	114	0	25	4	0	10
Town of Kenly	73	3	0	105	0	17	4	0	5
Town of Micro	76	1	0	36	0	6	0	0	20
Town of Pine Level	138	1	0	45	0	9	1	0	12
Town of Princeton	56	3	0	64	0	11	4	0	20
Town of Selma	206	7	0	255	0	42	16	0	28
Town of Smithfield	349	17	0	445	1	105	57	0	112

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Town of Wilson's Mills	94	0	0	45	0	11	1	0	9
Subtotal Johnston	*10,217*	*63*	*1*	*2,265*	*1*	*613*	*139*	*0*	*425*
Lee									
City of Sanford	105	36	0	845	1	250	102	0	177
Lee County (Unincorporated Area)	1,170	0	0	440	0	256	27	0	34
Subtotal Lee	*1,275*	*36*	*0*	*1,285*	*1*	*506*	*129*	*0*	*211*
Moore									
Moore County (Unincorporated Area)	3,782	7	1	967	0	303	40	0	89
Town of Aberdeen	27	6	0	290	1	98	15	0	39
Town of Cameron	31	0	0	48	0	10	0	0	9
Town of Carthage	32	5	0	147	0	34	6	0	126
Town of Pinebluff	26	2	0	37	0	7	4	0	5
Town of Robbins	41	6	0	99	0	19	4	0	20
Town of Southern Pines	87	27	1	524	3	97	53	0	111

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Town of Taylortown	0	1	0	21	0	5	4	0	10
Town of Vass	94	6	0	83	0	12	3	0	12
Village of Foxfire	48	0	0	19	0	3	0	0	0
Village of Pinehurst	59	10	0	164	0	16	96	0	18
Village of Whispering Pines	38	0	0	32	0	7	1	0	11
Subtotal Moore	*4,265*	*70*	*2*	*2,431*	*4*	*611*	*226*	*0*	*450*
TOTAL PLAN	**22,750**	**262**	**5**	**8,653**	**9**	**2,656**	**730**	**0**	**1,947**

Table 6-4: Critical Facilities Counts by Jurisdiction Part B

Jurisdiction	Defense Industrial Base	National Monuments and Icons	Nuclear Reactors, Materials and Waste	Postal and Shipping	Transportation Systems	Energy	Emergency Services	Water	Other
Chatham									
Chatham County (Unincorporated Area)	0	0	0	0	124	5	10	27	0
Town of Goldston	0	0	0	0	1	0	2	0	0

Jurisdiction	Defense Industrial Base	National Monuments and Icons	Nuclear Reactors, Materials and Waste	Postal and Shipping	Transportation Systems	Energy	Emergency Services	Water	Other
Town of Pittsboro	0	0	0	0	28	1	2	2	0
Town of Siler City	0	0	0	0	31	4	4	8	0
Subtotal Chatham	*0*	*0*	*0*	*0*	*184*	*10*	*18*	*37*	*0*
Harnett									
City of Dunn	0	0	1	0	57	3	3	1	0
Harnett County (Unincorporated Area)	0	0	1	0	69	2	13	1	0
Town of Angier	0	0	0	0	10	2	2	0	0
Town of Benson	0	0	0	0	21	3	2	0	0
Town of Broadway	0	0	0	0	15	0	1	0	0
Town of Coats	0	0	0	0	3	0	1	0	0
Town of Erwin	0	0	0	0	21	0	1	2	0
Town of Lillington	1	0	0	0	7	1	4	8	0
Subtotal Harnett	*1*	*0*	*2*	*0*	*203*	*11*	*27*	*12*	*0*
Johnston									
Johnston County	0	0	1	0	149	10	22	1	0

Jurisdiction	Defense Industrial Base	National Monuments and Icons	Nuclear Reactors, Materials and Waste	Postal and Shipping	Transportation Systems	Energy	Emergency Services	Water	Other
(Unincorporated Area)									
Town of Archer Lodge	0	0	0	0	0	0	1	0	0
Town of Clayton	0	0	0	0	35	4	2	0	0
Town of Four Oaks	0	0	0	0	15	0	1	0	0
Town of Kenly	0	0	0	0	23	4	2	1	0
Town of Micro	0	0	0	0	2	0	0	0	0
Town of Pine Level	0	0	0	0	5	0	2	0	0
Town of Princeton	0	0	0	0	16	1	1	0	0
Town of Selma	0	0	0	0	49	3	2	0	0
Town of Smithfield	2	0	0	0	55	10	4	0	0
Town of Wilson's Mills	0	0	0	0	9	7	1	0	0
Subtotal Johnston	*2*	*0*	*1*	*0*	*358*	*39*	*38*	*2*	*0*
Lee									
City of Sanford	2	0	0	0	225	19	6	0	0
Lee County (Unincorporated Area)	1	0	0	0	123	8	9	0	0

Jurisdiction	Defense Industrial Base	National Monuments and Icons	Nuclear Reactors, Materials and Waste	Postal and Shipping	Transportation Systems	Energy	Emergency Services	Water	Other
Subtotal Lee	*3*	*0*	*0*	*0*	*348*	*27*	*15*	*0*	*0*
Moore									
Moore County (Unincorporated Area)	0	0	1	0	194	4	8	9	0
Town of Aberdeen	1	0	0	0	62	3	6	0	0
Town of Cameron	0	0	0	0	5	0	0	0	0
Town of Carthage	0	0	0	0	25	0	4	4	0
Town of Pinebluff	0	0	0	0	5	0	1	4	0
Town of Robbins	0	0	0	0	13	1	2	3	0
Town of Southern Pines	1	0	0	0	132	3	2	1	0
Town of Taylortown	0	0	0	0	4	0	0	0	0
Town of Vass	0	0	0	0	10	0	2	0	0
Village of Foxfire	0	0	0	0	2	0	2	0	0
Village of Pinehurst	0	0	0	0	25	0	3	0	0

Jurisdiction	Defense Industrial Base	National Monuments and Icons	Nuclear Reactors, Materials and Waste	Postal and Shipping	Transportation Systems	Energy	Emergency Services	Water	Other
Village of Whispering Pines	0	0	0	0	10	0	3	0	0
Subtotal Moore	*2*	*0*	*1*	*0*	*487*	*11*	*33*	*21*	*0*
TOTAL PLAN	**8**	**0**	**4**	**0**	**1,580**	**98**	**131**	**72**	**0**

Source: Numbers in black supplied by participating jurisdictions. Numbers in orange derived from alternate sources via NC One Map.
*** A facility exists but a GPS point location for GIS analysis is not currently available.

6.3.7 Infrastructure

Certain infrastructure elements as shown in **Table 6-5** were identified for analysis. These include major roads, railroads, power plants, water/wastewater facilities, and water/wastewater lines.

Table 6-5: Infrastructure Counts and Measurements (in Miles) by Jurisdiction

Jurisdiction	Major Roads[2]	Railroad[3]	Energy (Power Plants)	Water (Treatment Facilities)	Water / Wastewater Lines
Chatham					
Chatham County (Unincorporated Area)	0.0	0.0	5	27	0.0
Town of Goldston	0.0	0.0	0	0	0.0
Town of Pittsboro	0.0	0.0	1	2	0.0
Town of Siler City	0.0	0.0	4	8	0.0
Subtotal Chatham	*0.0*	*0.0*	*10*	*37*	*0.0*
Harnett					
City of Dunn	0.0	0.0	3	1	0.0
Harnett County (Unincorporated Area)	0.0	0.0	2	1	0.0
Town of Angier	0.0	0.0	2	0	0.0
Town of Benson	0.0	0.0	3	0	0.0
Town of Broadway	0.0	0.0	0	0	0.0
Town of Coats	0.0	0.0	0	0	0.0
Town of Erwin	0.0	0.0	0	2	0.0
Town of Lillington	0.0	0.0	1	8	0.0
Subtotal Harnett	*0.0*	*0.0*	*11*	*12*	*0.0*
Johnston					
Johnston County (Unincorporated Area)	0.0	0.0	10	1	0.0
Town of Archer Lodge	0.0	0.0	0	0	0.0
Town of Clayton	0.0	0.0	4	0	0.0
Town of Four Oaks	0.0	0.0	0	0	0.0
Town of Kenly	0.0	0.0	4	1	0.0
Town of Micro	0.0	0.0	0	0	0.0
Town of Pine Level	0.0	0.0	0	0	0.0
Town of Princeton	0.0	0.0	1	0	0.0

[2] The major roads and railroads accounted for in this table are the same as those depicted on the "Community Profile" map found in Section 2.

[3] Does not include inactive/abandoned railroads.

Jurisdiction	Major Roads[2]	Railroad[3]	Energy (Power Plants)	Water (Treatment Facilities)	Water / Wastewater Lines
Town of Selma	0.0	0.0	3	0	0.0
Town of Smithfield	0.0	0.0	10	0	0.0
Town of Wilson's Mills	0.0	0.0	7	0	0.0
Subtotal Johnston	*0.0*	*0.0*	*39*	*2*	*0.0*
Lee					
City of Sanford	0.0	0.0	19	0	0.0
Lee County (Unincorporated Area)	0.0	0.0	8	0	0.0
Subtotal Lee	*0.0*	*0.0*	*27*	*0*	*0.0*
Moore					
Moore County (Unincorporated Area)	0.0	0.0	4	9	0.0
Town of Aberdeen	0.0	0.0	3	0	0.0
Town of Cameron	0.0	0.0	0	0	0.0
Town of Carthage	0.0	0.0	0	4	0.0
Town of Pinebluff	0.0	0.0	0	4	0.0
Town of Robbins	0.0	0.0	1	3	0.0
Town of Southern Pines	0.0	0.0	3	1	0.0
Town of Taylortown	0.0	0.0	0	0	0.0
Town of Vass	0.0	0.0	0	0	0.0
Village of Foxfire	0.0	0.0	0	0	0.0
Village of Pinehurst	0.0	0.0	0	0	0.0
Village of Whispering Pines	0.0	0.0	0	0	0.0
Subtotal Moore	*0.0*	*0.0*	*11*	*21*	*0.0*
TOTAL PLAN	**0.0**	**0.0**	**98**	**72**	**0.0**

Source: NC IRISK and participating jurisdictions.

6.3.8 High Potential Loss Properties

Table 6-6 shows counts of high potential loss properties attributed to each participating jurisdiction.

Table 6-6: High Potential Loss Properties by Jurisdiction

Jurisdiction	Residential[4]	Commercial	Industrial	Government	Agricultural	Religious	Utilities	Other
Chatham								
Chatham County (Unincorporated Area)	116	19	11	9	0	4	13	0
Town of Goldston	0	0	1	0	0	0	0	0
Town of Pittsboro	1	10	1	5	0	2	2	0
Town of Siler City	2	11	7	6	0	2	6	0
Subtotal Chatham	*119*	*40*	*20*	*20*	*0*	*8*	*21*	*0*
Harnett								
City of Dunn	8	80	16	20	0	17	0	0
Harnett County (Unincorporated Area)	28	86	13	88	1	98	0	0
Town of Angier	4	10	4	3	0	8	0	0
Town of Benson	0	7	4	7	0	4	3	0
Town of Broadway	0	0	0	2	0	2	0	0
Town of Coats	1	3	0	2	0	4	0	0
Town of Erwin	1	15	5	8	0	15	0	0
Town of Lillington	4	15	7	25	0	7	0	0
Subtotal Harnett	*46*	*216*	*49*	*155*	*1*	*155*	*3*	*0*
Johnston								
Johnston County (Unincorporated Area)	11	54	4	25	2	24	2	0

[4]This category consists of a variety of facilities specified by participating jurisdictions.

Jurisdiction	Residential[4]	Commercial	Industrial	Government	Agricultural	Religious	Utilities	Other
Town of Archer Lodge	0	0	0	2	0	1	0	0
Town of Clayton	8	40	22	11	0	11	4	0
Town of Four Oaks	0	3	1	3	0	0	0	0
Town of Kenly	0	7	1	1	0	1	1	0
Town of Micro	0	3	1	2	0	0	0	0
Town of Pine Level	1	2	0	1	0	1	0	0
Town of Princeton	1	1	0	3	0	2	1	0
Town of Selma	0	16	5	3	0	3	3	0
Town of Smithfield	4	48	9	25	0	12	8	0
Town of Wilson's Mills	0	0	1	1	1	2	6	0
Subtotal Johnston	*25*	*174*	*44*	*77*	*3*	*57*	*25*	*0*
Lee								
City of Sanford	7	63	22	37	0	9	8	0
Lee County (Unincorporated Area)	1	32	16	11	0	5	1	0
Subtotal Lee	*8*	*95*	*38*	*48*	*0*	*14*	*9*	*0*
Moore								
Moore County (Unincorporated Area)	6	13	2	9	0	7	9	0
Town of Aberdeen	2	12	5	4	0	2	0	0
Town of Cameron	0	0	0	1	0	0	0	0
Town of Carthage	2	7	0	11	0	0	0	0
Town of Pinebluff	0	1	0	0	0	0	4	0
Town of Robbins	1	1	1	1	0	1	0	0

Jurisdiction	Residential[4]	Commercial	Industrial	Government	Agricultural	Religious	Utilities	Other
Town of Southern Pines	46	66	1	27	0	6	0	0
Town of Taylortown	0	3	0	2	0	0	0	0
Town of Vass	3	1	0	3	0	0	0	0
Village of Foxfire	0	1	0	0	0	0	0	0
Village of Pinehurst	66	54	0	4	0	4	1	0
Village of Whispering Pines	0	6	0	1	0	0	0	0
Subtotal Moore	*126*	*165*	*9*	*63*	*0*	*20*	*14*	*0*
TOTAL PLAN	**324**	**690**	**160**	**363**	**4**	**254**	**72**	**0**

Source: Local sources

6.3.9 Historic Properties

Historic property counts including districts, buildings, and other cultural resources as shown in **Table 6-7** were derived from a combination of sources consisting of the National Register of Historic Places (National Park Service) and participating jurisdictions.

Table 6-7: Historic Property Counts by Jurisdiction

Jurisdiction	Districts	Buildings and Landmarks	Other
TOTAL PLAN	**0**	**0**	**0**

Source: Jurisdictions and National Register of Historic Places.

The two categories of physical assets consist of:

1. Improved Property: Includes all improved properties in the Cape Fear Region according to local parcel and building footprint data provided by counties. The information has been expressed in terms of the number of parcels and total assessed value of improvements (buildings) that may be exposed to the identified hazards.
2. Critical Facilities: Critical facilities vary by jurisdiction. When provided, the critical facilities provided by the jurisdiction are used in this section. If no critical facilities were identified, facilities were used from RMT which includes fire stations, police station, medical care facilities, schools, and emergency operation centers. It should be noted that this listing is not all-inclusive for assets located in the region, but it is anticipated that it will be expanded during future plan updates as more geo-referenced data becomes available for use in GIS analysis.

The following tables provide a detailed listing of the geo-referenced assets that have been identified for inclusion in the vulnerability assessment for the Cape Fear Region.

Table 6-8 lists the number of parcels, total value of parcels, total number of parcels with improvements, and the total assessed value of improvements for participating areas of the Cape Fear Region (study area of vulnerability assessment).[5]

Table 6-8: Improved Property in the Cape Fear Region

Location	Number of Parcels	Total Assessed Value of Parcels	Estimated Number of Buildings	Total Assessed Value of Improvements[6]
Chatham County	**42,136**	**$9,679,182,721**	**39,487**	**$5,417,460,799**
Goldston	208	$18,917,702	245	$14,109,087
Pittsboro	1,923	$399,912,184	1,591	$283,695,816
Siler City	2,808	$341,987,155	2,889	$254,476,937
Unincorporated Area	37,197	$8,918,365,680	34,762	$4,865,178,959
Harnett County	**64,570**	**$6,716,003,387**	**57,035**	**$4,566,025,607**
Angier	1,862	$204,154,164	1,722	$152,433,474
Coats	1,002	$83,433,680	992	$61,881,400
Dunn	4,829	$608,930,378	4,114	$451,638,268
Erwin	2,470	$220,463,380	2,160	$159,419,650
Lillington	1,639	$244,373,348	1,055	$145,446,258
Unincorporated Area	52,768	$5,354,648,437	46,992	$3,595,206,557
Johnston County	**91,719**	**$13,568,650,678**	**80,508**	**$8,608,016,248**
Archer Lodge	1,750	$247,693,690	1,595	$170,585,060
Benson	1,712	$257,648,473	1,458	$178,956,673
Clayton	7,504	$1,494,324,813	4,762	$1,031,714,203
Four Oaks	1,131	$129,732,334	915	$92,646,954
Kenly	741	$68,712,041	750	$48,529,791
Micro	244	$15,870,507	256	$11,897,567
Pine Level	795	$98,304,350	820	$70,814,330
Princeton	707	$104,664,930	628	$83,358,730
Selma	2,311	$308,607,010	2,506	$205,382,510
Smithfield	5,236	$1,182,116,491	4,798	$815,559,431

[5] Total assessed values for improvements is based on tax assessor records as joined to digital parcel data. This data does not include dollar figures for tax-exempt improvements such as publicly owned buildings and facilities. It should also be noted that, due to record keeping, some duplication is possible thus potentially resulting in an inflated value exposure for an area.

[6] Building value for each county is based on the number of parcels with an improved building value greater than zero.

Location	Number of Parcels	Total Assessed Value of Parcels	Estimated Number of Buildings	Total Assessed Value of Improvements[6]
Wilson's Mills	1,093	$124,486,200	895	$82,053,740
Unincorporated Area	68,495	$9,536,489,839	61,125	$5,816,517,259
Lee County	**31,547**	**$4,470,799,360**	**43,630**	**$3,117,299,580**
Broadway	700	$82,776,760	844	$68,903,880
Sanford	11,665	$1,904,810,000	13,980	$1,439,592,100
Unincorporated Area	19,182	$2,483,212,600	28,806	$1,608,803,600
Moore County	**69,582**	**$13,184,827,276**	**74,517**	**$8,177,661,828**
Aberdeen	3,268	$506,861,340	3,339	$362,337,820
Cameron	222	$16,494,610	362	$12,184,480
Carthage	1,220	$171,090,030	1,428	$134,851,010
Foxfire Village	887	$123,111,560	472	$90,386,300
Pinebluff	862	$81,763,510	975	$62,333,510
Pinehurst	9,496	$2,931,076,680	7,111	$2,164,614,510
Robbins	631	$47,844,530	809	$36,792,390
Southern Pines	7,735	$1,962,592,842	6,285	$1,253,968,868
Taylortown	644	$70,729,730	575	$51,615,140
Vass	662	$63,353,460	770	$45,738,310
Whispering Pines	1,788	$356,890,320	1,378	$274,595,350
Unincorporated Area	42,167	$6,853,018,664	51,013	$3,688,244,140
CAPE FEAR REGION TOTAL	**299,554**	**$47,619,463,422**	**295,177**	**$29,886,464,062**

Table 6-9 lists the fire stations, police stations, EMS/rescue stations, emergency operations centers (EOCs), medical care facilities, schools, and other critical facilities located in the Cape Fear Region. Local governments at the county level provided a majority of the data for this analysis; however, gaps in the data were filled using RMT to obtain the location of some critical facilities for which spatial data was not available. In addition, **Figure 6-1** shows the locations of essential facilities in the Cape Fear Region. **Table 6.466**, near the end of this section, shows a complete list of the critical facilities by name, as well as the hazards that affect each facility. As noted previously, this list is not all-inclusive and only includes information provided by the counties and RMT.

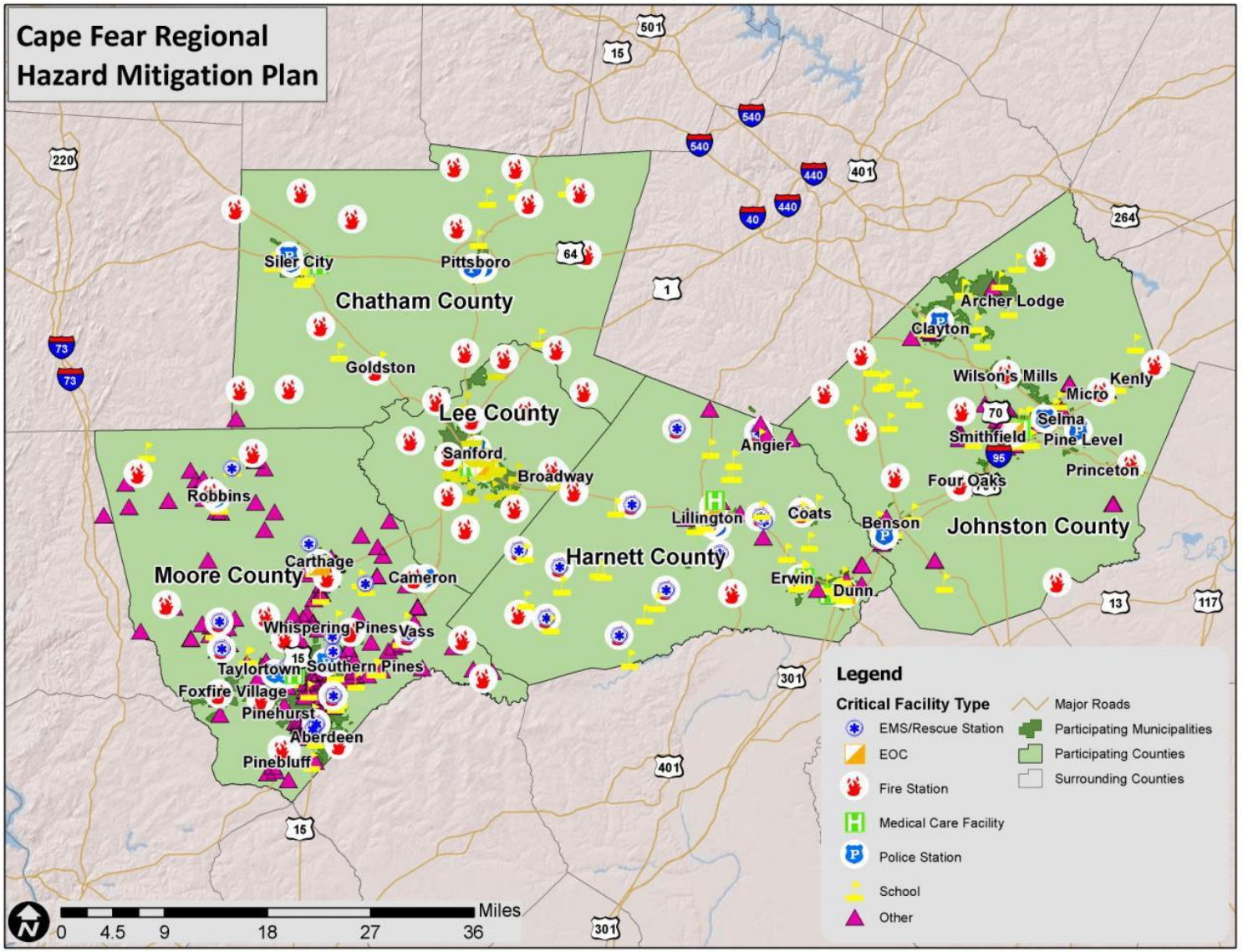
Table 6-9: Critical Facility Inventory in the Cape Fear Region

Location	Fire Stations	Police Stations	EMS/Rescue Stations*	Medical Care Facilities	EOC	Schools	Other
Chatham County	**19**	**4**	**0**	**1**	**1**	**18**	**0**

Location	Fire Stations	Police Stations	EMS/Rescue Stations*	Medical Care Facilities	EOC	Schools	Other
Goldston	1	0	0	0	0	0	0
Pittsboro	1	2	0	0	1	3	0
Siler City	1	2	0	1	0	2	0
Unincorporated Area	16	0	0	0	0	13	0
Harnett County	**19**	**9**	**15**	**3**	**2**	**33**	**16**
Angier	1	1	1	0	0	1	2
Coats	1	1	1	0	0	1	0
Dunn	2	1	1	1	1	6	3
Erwin	1	1	1	1	0	4	1
Lillington	2	4	1	0	1	2	2
Unincorporated Area	12	1	10	1	0	19	8
Johnston County	**16**	**8**	**2**	**7**	**1**	**48**	**107**
Archer Lodge	1	0	0	0	0	1	1
Benson	1	1	1	3	0	3	8
Clayton	0	1	0	0	0	7	9
Four Oaks	2	1	1	3	0	2	4
Kenly	1	1	0	0	0	0	6
Micro	1	0	0	0	0	1	5
Pine Level	0	1	0	0	0	1	3
Princeton	1	0	0	0	0	2	6
Selma	0	1	0	0	0	2	12
Smithfield	0	1	0	1	1	9	37
Wilson's Mills	2	1	0	0	0	2	2
Unincorporated Area	7	0	0	0	0	18	14
Lee County	**10**	**3**	**0**	**1**	**1**	**25**	**0**
Broadway	1	1	0	0	0	1	0
Sanford	1	2	0	1	1	17	0
Unincorporated Area	8	0	0	0	0	7	0
Moore County	**25**	**16**	**13**	**1**	**1**	**38**	**187**
Aberdeen	2	1	1	0	1	3	16
Cameron	1	1	0	0	0	1	1
Carthage	1	2	0	0	1	3	24

Location	Fire Stations	Police Stations	EMS/Rescue Stations*	Medical Care Facilities	EOC	Schools	Other
Foxfire Village	1	1	0	0	0	0	2
Pinebluff	1	1	0	0	0	0	3
Pinehurst	2	1	1	1	1	1	4
Robbins	1	1	0	0	0	2	3
Southern Pines	2	1	2	0	1	4	13
Taylortown	0	0	0	0	0		3
Vass	1	1	1	0	0	1	3
Whispering Pines	1	1	1	0	0	0	3
Unincorporated Area	12	2	6	0	0	16	112
CAPE FEAR REGION TOTAL	**91**	**44**	**28**	**8**	**7**	**194**	**389**

*Some jurisdictions included their EMS/Rescue Stations as separate facilities, while others elected to list only Fire Stations which in many cases are co-located with EMS/Rescue Stations.
Source: Local Governments; RMT



Source: Local Governments

Figure 6-1: Critical Facility Locations in the Cape Fear Region

6.3.10 Social Vulnerability

In addition to identifying those assets potentially at risk to identified hazards, it is important to identify and assess those particular segments of the resident population in the Cape Fear Region that are potentially at risk to these hazards.

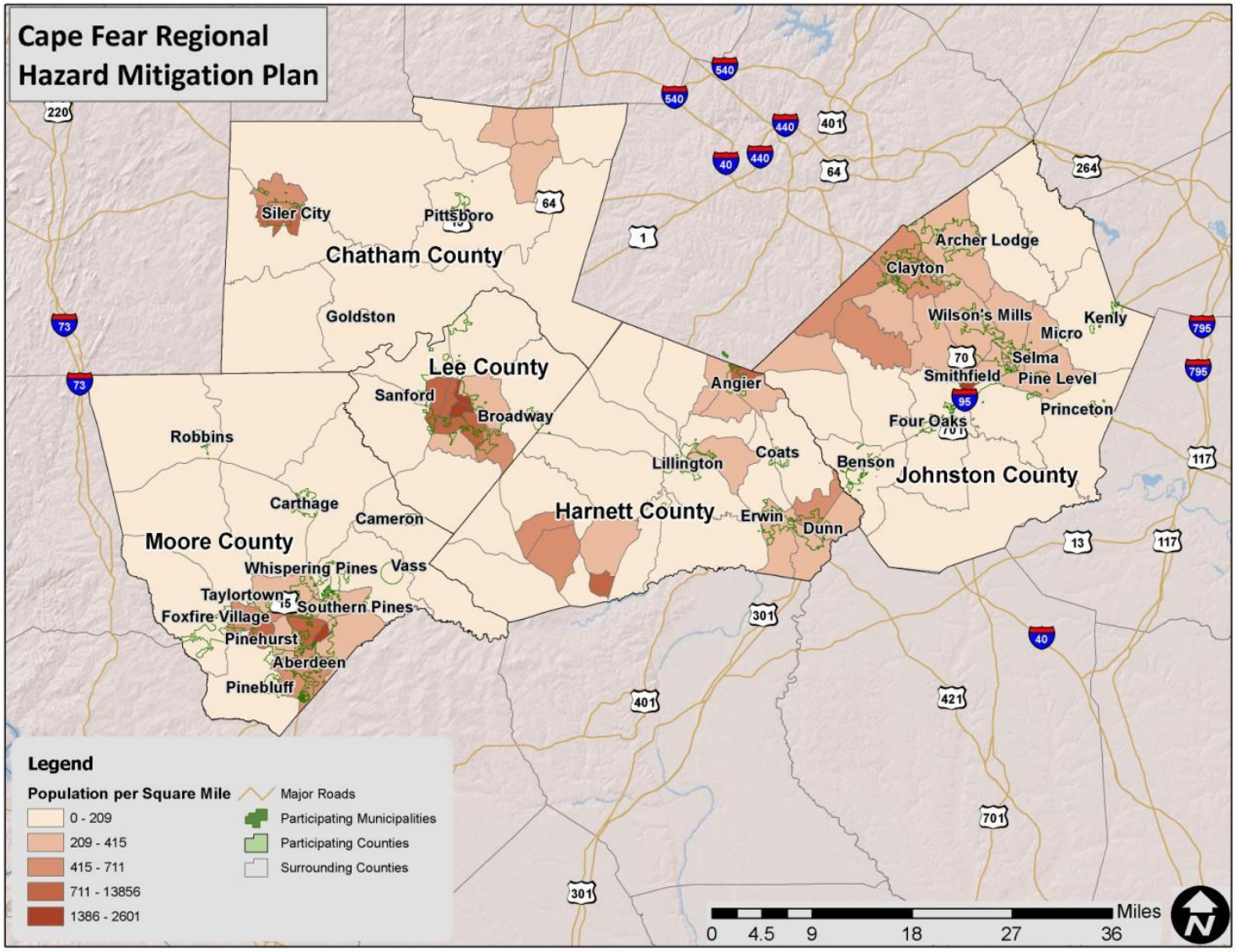
Table 6-10 lists the population by county according to U.S. Census 2010 population estimates. The total population in the Cape Fear Region according to Census data is 324,296 persons. Additional population estimates are presented in Section 3: *Community Profile*.

Table 6-10: Total Population in the Cape Fear Region

Location	Total 2010 Population
Chatham County	63,505
Harnett County	114,678
Johnston County	168,878
Lee County	57,866
Moore County	88,247
CAPE FEAR REGION TOTAL	**493,174**

Source: United States Census 2010

In addition, **Figure 6-2** illustrates the population density by census tract as it was reported by the U.S. Census Bureau in 2010.



Source: United States Census Bureau, 2010

Figure 6-2: Population Density in the Cape Fear Region

6.4 Asset Inventory

An inventory of geo-referenced assets within the Cape Fear counties and jurisdictions was compiled in order to identify and characterize those properties potentially at risk to the identified hazards[2]. By understanding the type and number of assets that exist and where they are located in relation to known hazard areas, the relative risk and vulnerability for such assets can be assessed. Under this assessment, two categories of physical assets were created and then further assessed through GIS analysis. Additionally, social assets are addressed to determine population at risk to the identified hazards. These are presented below in Section 6.4.2.

6.4.1 Development Trends and Changes in Vulnerability

Since the previous Plan was approved, the Cape Fear Region has experienced some growth and development. These changes did not affect the Region's overall vulnerability. **Table 6-11** shows the number of building units constructed since 2010 according to the U.S. Census American Community Survey.

Table 6-11: Building Counts for the Cape Fear Region

Jurisdiction	Total Housing Units (2012)	Units Built 2010 or later	% Building Stock Built Post-2010
Chatham County	**28,681**	**199**	**0.7%**
Goldston	160	0	0.0%
Pittsboro	1,511	0	0.0%
Siler City	2,973	54	1.8%
Unincorporated Area	24,037	145	0.6%
Harnett County	**49,926**	**518**	**1.0%**
Angier	2,146	16	0.7%
Coats	1,088	0	0.0%
Dunn	4,457	0	0.0%
Erwin	2,039	0	0.0%
Lillington	986	0	0.0%
Unincorporated Area	39,210	502	1.3%
Johnston County	**67,535**	**353**	**0.5%**
Archer Lodge	1,540	0	0.0%
Benson	1,599	0	0.0%
Clayton	6,657	0	0.0%
Four Oaks	907	0	0.0%
Kenly	736	0	0.0%
Micro	222	5	2.3%
Pine Level	793	0	0.0%

Jurisdiction	Total Housing Units (2012)	Units Built 2010 or later	% Building Stock Built Post-2010
Princeton	572	0	0.0%
Selma	2,719	0	0.0%
Smithfield	4,970	0	0.0%
Wilson's Mills	873	0	0.0%
Unincorporated Area	45,947	348	0.8%
Lee County	**24,070**	**51**	**0.2%**
Broadway	542	0	0.0%
Sanford	11,398	34	0.3%
Unincorporated Area	12,130	17	0.1%
Moore County	**43,890**	**162**	**0.4%**
Aberdeen	3,401	54	1.6%
Cameron	154	0	0.0%
Carthage	833	5	0.6%
Foxfire Village	594	0	0.0%
Pinebluff	591	4	0.7%
Pinehurst	8,078	10	0.1%
Robbins	550	2	0.4%
Southern Pines	6,443	0	0.0%
Taylortown	495	0	0.0%
Vass	318	0	0.0%
Whispering Pines	1,356	14	1.0%
Unincorporated Area	21,077	73	0.3%
CAPE FEAR REGION TOTAL	**214,102**	**1,283**	**0.6%**

Source: United States Census Bureau

Table 6-12 shows population growth estimates for the region from 2010 to 2019 based on the U.S. Census Annual Estimates of Resident Population.

Table 6-12: Population Growth for the Cape Fear Region

Jurisdiction	2010	2019	% change from 2010-2019
Chatham County	**63,485**	**74,470**	**17.3%**
Goldston	268	299	11.6%
Pittsboro	3,780	4,287	13.2%
Siler City	7,821	8,225	5.2%
Harnett County	**114,691**	**135,967**	**18.6%**
Angier	4,428	5,415	22.3%
Coats	2,134	2,506	17.4%
Dunn	9,274	9,718	4.8%
Erwin	4,535	5,156	13.7%
Lillington	3,209	3,674	14.5%
Johnston County	**168,878**	**209,339**	**24.0%**
Archer Lodge	4,262	5,159	21.0%
Benson	3,322	3,311	-0.3%
Clayton	16,219	24,887	53.4%
Four Oaks	1,929	2,254	16.8%
Kenly	1,345	1,339	-0.4%
Micro	442	537	21.5%
Pine Level	1,708	2,019	18.2%
Princeton	1,198	1,398	16.7%
Selma	6,122	7,101	16.0%
Smithfield	11,043	12,985	17.6%
Wilson's Mills	2,287	2,756	20.5%
Lee County	**57,849**	**61,779**	**6.8%**
Broadway	1,230	1,227	-0.2%
Sanford	28,217	30,085	6.6%
Moore County	**88,250**	**100,880**	**14.3%**
Aberdeen	6,369	7,988	25.4%
Cameron	290	285	-1.7%
Carthage	2,282	2,553	11.9%
Foxfire Village	914	1,042	14.0%
Pinebluff	1,309	1,619	23.7%
Pinehurst	14,738	16,620	12.8%
Robbins	1,128	1,086	-3.7%

Jurisdiction	2010	2019	% change from 2010-2019
Southern Pines	12,411	14,657	18.1%
Taylortown	774	858	10.9%
Vass	713	720	0.9%
Whispering Pines	2,962	3,221	8.7%
CAPE FEAR REGION TOTAL	**651,816**	**767,422**	**18.4%**

Based on the data above, there has been a low to moderate rate of residential development and population growth in the region since 2010. However, Clayton, Aberdeen, Johnston County, Pinebluff and Angier have experienced slightly higher rates of development compared to the rest of the region, resulting in an increased number of structures that are vulnerable to the potential impacts of the identified hazards. Since the population has increased in these municipalities, there are now greater numbers of people exposed to the identified hazards. Though increased in some development and population growth, they have not impacted the region's overall vulnerability since the previous Plan was approved, especially with mitigative and resilient actions taken on by the Region.

It is also important to note that as development increases in the future, greater populations and more structures and infrastructure will be exposed to potential hazards if development occurs in the floodplains, moderate landside susceptibility areas, high wildfire risk areas, primary and secondary TRI site buffers, or Shearon Harris Nuclear Station's 10-mile buffer.

6.5 Vulnerability Assessment Results

As noted earlier, only hazards with a specific geographic boundary, modeling tool, or sufficient historical data allow for further analysis. Those results are presented here. All other hazards are assumed to impact the entire planning region (drought, extreme heat, severe weather, tornado, and winter storm) or, due to lack of data, analysis would not lead to credible results (dam failure, HAZMAT, nuclear accident, terror threat and winter storm). The annualized loss estimate for all hazards is presented at the end of this section in **Table 6.466.** Please see Section 5 for additional vulnerability by jurisdiction through Consequence and Impact Analysis.

6.5.1 Dam Failure

There is a fundamental limitation in the data available for vulnerability assessment for the dam failure hazard in the planning area. The dam structures that are of concern are smaller, privately owned, and unregulated dams for which no GIS data or inventories are currently available. These are the facilities that could and likely would cause the most damage and disruption should a more likely failure occur.

It has been determined that any rudimentary calculations based on the point locations for the dams mapped by NCDENR would also be potentially misleading if any type of buffer or proximity analysis was performed to estimate surrounding impacts should a failure occur.

Any mitigation actions developed for this hazard therefore should be based on addressing data limitations, education and awareness programs, and/or any jurisdiction-specific concerns that may be addressable through an appropriate mitigation project.

6.5.2 Drought

Agricultural crops are most directly affected and vulnerable to drought, and their loss can result in a significant economic burden on the local economy. The local economy is semi-dependent upon agriculture. Within the community, it is common knowledge that the past two decades of drought conditions have contributed to a reduction in the number of local farmers. It is estimated that annualized losses to the drought hazard will decrease over time due to the continued trend of decreasing agricultural production within the Region (for all jurisdictions in the planning area), much of which has to do with decreases in the number of farms and land available for farming. While future agricultural losses may decrease other sectors of the Region that are dependent on water supply will likely continue to experience future economic impacts during periods of severe to extreme drought conditions.

6.5.3 Extreme Heat

It is estimated that annualized losses to the extreme heat hazard will decrease over time due to the continued trend of decreasing agricultural production within the Region and all its jurisdictions, much of which has to do with decreases in the number of farms and land available for farming. In addition to the physical danger, periods of extreme heat put pressure on the Region's infrastructure. Heat waves cause people to increase their usage of air conditioning, which can strain the power grid and trigger power outages; power outages in turn, can lead to adverse health impacts.

6.5.4 Hurricane and Tropical Storm

The following tables provide counts and values by jurisdiction relevant to Hurricane Winds hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-13: Population Impacted by the 25 Year Hurricane Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	40,877	96.7%	7,745	7,491	96.7%	2,608	2,522	96.7%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,415	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,149	99.3%	2,427	2,410	99.3%	817	811	99.3%
Subtotal Chatham	*62,189*	*60,704*	*97.6%*	*11396*	*11125*	*97.6%*	*3837*	*3745*	*97.6%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,187	99.5%	8,921	8,879	99.5%	6,948	6,916	99.5%
Town of Angier	5,712	5,710	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,807	99.7%	246	245	99.6%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,025*	*99.7%*	*12702*	*12659*	*99.7%*	*9815*	*9783*	*99.7%*
Johnston									
Johnston County (Unincorporated Area)	94,330	93,830	99.5%	9,632	9,581	99.5%	7,169	7,131	99.5%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Archer Lodge	4,150	4,122	99.3%	424	421	99.3%	315	313	99.4%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,291	99.4%	2,804	2,787	99.4%	2,087	2,074	99.4%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*163,578*	*99.6%*	*16784*	*16713*	*99.6%*	*12482*	*12429*	*99.6%*
Lee									
City of Sanford	30,778	30,301	98.5%	4,222	4,157	98.5%	2,245	2,210	98.4%
Lee County (Unincorporated Area)	25,355	25,217	99.5%	3,478	3,459	99.5%	1,850	1,840	99.5%
Subtotal Lee	*56,133*	*55,518*	*98.9%*	*7700*	*7616*	*98.9%*	*4095*	*4050*	*98.9%*
Moore									
Moore County (Unincorporated Area)	34,917	34,818	99.7%	7,910	7,888	99.7%	1,996	1,990	99.7%
Town of Aberdeen	7,402	7,335	99.1%	1,677	1,662	99.1%	423	419	99.1%
Town of Cameron	655	652	99.5%	148	147	99.3%	37	37	100%
Town of Carthage	2,724	2,722	99.9%	617	617	100%	156	156	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Pinebluff	2,609	2,607	99.9%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,905	99.9%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	14,924	96.9%	3,487	3,381	97%	880	853	96.9%
Town of Taylortown	754	749	99.3%	171	170	99.4%	43	43	100%
Town of Vass	1,294	1,290	99.7%	293	292	99.7%	74	74	100%
Village of Foxfire	1,195	1,172	98.1%	271	266	98.2%	68	67	98.5%
Village of Pinehurst	15,514	15,262	98.4%	3,514	3,457	98.4%	887	873	98.4%
Village of Whispering Pines	3,864	3,807	98.5%	875	862	98.5%	221	218	98.6%
Subtotal Moore	*88,229*	*87,243*	*98.9%*	*19986*	*19765*	*98.9%*	*5043*	*4988*	*98.9%*
TOTAL PLAN	**492,256**	**488,068**	**99.1%**	**68568**	**67878**	**99%**	**35272**	**34995**	**99.2%**

Source: GIS Analysis

Table 6-14: Population Impacted by the 50 Year Hurricane Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,205	99.9%	7,745	7,734	99.9%	2,608	2,604	99.8%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,128*	*99.9%*	*11396*	*11385*	*99.9%*	*3837*	*3833*	*99.9%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,195**	**100%**	**68568**	**68557**	**100%**	**35272**	**35268**	**100%**

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent

Source: GIS Analysis

Table 6-15: Population Impacted by the 100 Year Hurricane Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-16: Population Impacted by the 300 Year Hurricane Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-17: Population Impacted by the 700 Year Hurricane Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-18: Buildings Impacted by the 25 Year Hurricane Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham County (Unincorporated Area)	27,859	25,466	91.4%	21,977	78.9%	$2,753,746	4,716	16.9%	$451,008	384	1.4%	$89,314	27,077	97.2%	$3,294,068
Town of Goldston	244	244	100%	193	79.1%	$38,105	41	16.8%	$2,668	10	4.1%	$919	244	100%	$41,693
Town of Pittsboro	3,678	3,677	100%	3,172	86.2%	$269,440	409	11.1%	$63,524	94	2.6%	$21,891	3,675	99.9%	$354,854
Town of Siler City	6,630	6,591	99.4%	5,447	82.2%	$429,934	982	14.8%	$139,454	153	2.3%	$69,986	6,582	99.3%	$639,374
Subtotal Chatham	*38,411*	*35,978*	*93.7%*	*30,789*	*80.2%*	*$3,491,225*	*6,148*	*16%*	*$656,654*	*641*	*1.7%*	*$182,110*	*37,578*	*97.8%*	*$4,329,989*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$1,241,578	545	11.1%	$257,196	126	2.6%	$117,823	4,924	100%	$1,616,597
Harnett County (Unincorporated Area)	40,441	30,742	76%	36,980	91.4%	$4,518,347	2,644	6.5%	$231,992	643	1.6%	$412,095	40,267	99.6%	$5,162,435
Town of Angier	2,541	2,489	98%	2,343	92.2%	$216,063	158	6.2%	$25,770	39	1.5%	$13,544	2,540	100%	$255,376
Town of Broadway	1,048	1,019	97.2%	928	88.5%	$66,490	98	9.4%	$9,017	19	1.8%	$3,890	1,045	99.7%	$79,398
Town of Coats	1,457	1,457	100%	1,364	93.6%	$377,090	69	4.7%	$14,646	24	1.6%	$72,257	1,457	100%	$463,993
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$997,360	120	3.8%	$62,846	72	2.3%	$32,679	3,115	99.9%	$1,092,885
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$101,146	159	10%	$20,053	114	7.2%	$20,457	1,580	99.4%	$141,656
Subtotal Harnett	*57,879*	*47,727*	*82.5%*	*52,210*	*90.2%*	*$8,099,655*	*4,389*	*7.6%*	*$691,598*	*1,087*	*1.9%*	*$689,339*	*57,686*	*99.7%*	*$9,480,593*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,475	42.8%	37,703	78.9%	$6,143,663	9,432	19.7%	$287,805	448	0.9%	$88,454	47,583	99.6%	$6,519,922
Town of Archer Lodge	1,599	0	0%	1,452	90.8%	$65,824	133	8.3%	$764	4	0.3%	$975	1,589	99.4%	$67,563
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$581,581	596	21.6%	$70,078	50	1.8%	$16,594	2,758	99.9%	$668,253
Town of Clayton	9,845	2,553	25.9%	8,933	90.7%	$639,669	751	7.6%	$41,944	102	1%	$15,827	9,786	99.4%	$697,440
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$603,462	539	19%	$22,085	27	1%	$10,678	2,838	100%	$636,225

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$277,526	216	16.4%	$28,338	20	1.5%	$3,260	1,313	99.9%	$309,123
Town of Micro	577	534	92.5%	436	75.6%	$109,642	106	18.4%	$5,784	35	6.1%	$8,012	577	100%	$123,438
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$302,508	185	13%	$12,601	22	1.5%	$5,526	1,426	100%	$320,635
Town of Princeton	1,000	724	72.4%	824	82.4%	$221,236	140	14%	$10,024	35	3.5%	$9,820	999	99.9%	$241,080
Town of Selma	3,784	3,520	93%	3,176	83.9%	$754,826	530	14%	$88,187	75	2%	$20,309	3,781	99.9%	$863,322
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$1,530,732	956	13.8%	$233,847	197	2.8%	$63,173	6,916	99.9%	$1,827,752
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$291,222	139	9.9%	$11,706	31	2.2%	$9,990	1,390	99.5%	$312,918
Subtotal Johnston	*78,499*	*39,015*	*49.7%*	*64,075*	*81.6%*	*$10,940,310*	*13,127*	*16.7%*	*$743,085*	*996*	*1.3%*	*$236,024*	*78,198*	*99.6%*	*$11,919,418*
Lee															
City of Sanford	12,108	9,936	82.1%	10,159	83.9%	$711,311	1,469	12.1%	$427,724	309	2.6%	$161,766	11,937	98.6%	$1,300,802
Lee County (Unincorporated Area)	14,761	9,363	63.4%	12,624	85.5%	$694,946	1,930	13.1%	$203,094	128	0.9%	$52,800	14,682	99.5%	$950,840
Subtotal Lee	*26,869*	*19,299*	*71.8%*	*22,783*	*84.8%*	*$1,406,257*	*3,399*	*12.7%*	*$630,818*	*437*	*1.6%*	*$214,566*	*26,619*	*99.1%*	*$2,251,642*
Moore															
Moore County (Unincorporated Area)	28,697	21,006	73.2%	23,204	80.9%	$1,705,170	5,035	17.5%	$139,629	382	1.3%	$69,414	28,621	99.7%	$1,914,214
Town of Aberdeen	3,401	2,396	70.4%	2,825	83.1%	$219,092	467	13.7%	$64,846	83	2.4%	$8,476	3,375	99.2%	$292,414
Town of Cameron	594	495	83.3%	489	82.3%	$29,907	83	14%	$4,354	20	3.4%	$2,354	592	99.7%	$36,615
Town of Carthage	2,011	1,955	97.2%	1,623	80.7%	$98,877	211	10.5%	$21,473	172	8.6%	$24,839	2,006	99.8%	$145,189
Town of Pinebluff	1,500	995	66.3%	1,407	93.8%	$103,061	76	5.1%	$29,014	12	0.8%	$687	1,495	99.7%	$132,762
Town of Robbins	1,427	1,324	92.8%	1,215	85.1%	$78,258	160	11.2%	$23,089	48	3.4%	$9,750	1,423	99.7%	$111,097
Town of Southern Pines	7,755	5,250	67.7%	6,504	83.9%	$463,935	845	10.9%	$129,574	199	2.6%	$31,959	7,548	97.3%	$625,467
Town of Taylortown	458	454	99.1%	410	89.5%	$31,089	31	6.8%	$6,601	14	3.1%	$2,983	455	99.3%	$40,672

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Vass	960	946	98.5%	736	76.7%	$56,678	189	19.7%	$6,439	33	3.4%	$4,388	958	99.8%	$67,505
Village of Foxfire	589	329	55.9%	505	85.7%	$59,967	68	11.5%	$2,546	6	1%	$373	579	98.3%	$62,887
Village of Pinehurst	8,291	3,636	43.9%	7,769	93.7%	$947,838	345	4.2%	$108,344	47	0.6%	$7,530	8,161	98.4%	$1,063,712
Village of Whispering Pines	1,795	1,075	59.9%	1,668	92.9%	$251,158	85	4.7%	$4,461	17	0.9%	$3,958	1,770	98.6%	$259,577
Subtotal Moore	*57,478*	*39,861*	*69.4%*	*48,355*	*84.1%*	*$4,045,030*	*7,595*	*13.2%*	*$540,370*	*1,033*	*1.8%*	*$166,711*	*56,983*	*99.1%*	*$4,752,111*
TOTAL PLAN	**259,136**	**181,880**	**70.2%**	**218,212**	**84.2%**	**$27,982,477**	**34,658**	**13.4%**	**$3,262,525**	**4,194**	**1.6%**	**$1,488,750**	**257,064**	**99.2%**	**$32,733,753**

Source: GIS Analysis

Table 6-19: Buildings Impacted by the 50 Year Hurricane Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,180	94%	22,693	81.5%	$8,982,787	4,716	16.9%	$2,224,001	384	1.4%	$427,278	27,793	99.8%	$11,634,066
Town of Goldston	244	244	100%	193	79.1%	$106,521	41	16.8%	$9,339	10	4.1%	$4,071	244	100%	$119,930
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$1,010,538	409	11.1%	$319,766	94	2.6%	$103,785	3,676	99.9%	$1,434,089
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$1,579,583	982	14.8%	$655,670	153	2.3%	$359,071	6,621	99.9%	$2,594,324
Subtotal Chatham	*38,411*	*36,732*	*95.6%*	*31,545*	*82.1%*	*$11,679,429*	*6,148*	*16%*	*$3,208,776*	*641*	*1.7%*	*$894,205*	*38,334*	*99.8%*	*$15,782,409*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$3,029,649	545	11.1%	$901,294	126	2.6%	$443,950	4,924	100%	$4,374,892

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$14,363,991	2,644	6.5%	$1,009,868	643	1.6%	$3,748,452	40,440	100%	$19,122,312
Town of Angier	2,541	2,490	98%	2,344	92.2%	$733,324	158	6.2%	$103,745	39	1.5%	$45,903	2,541	100%	$882,972
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$242,108	98	9.4%	$40,214	19	1.8%	$9,666	1,048	100%	$291,988
Town of Coats	1,457	1,457	100%	1,364	93.6%	$926,236	69	4.7%	$44,326	24	1.6%	$172,923	1,457	100%	$1,143,485
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$2,182,678	120	3.8%	$216,190	72	2.3%	$117,506	3,115	99.9%	$2,516,374
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$400,744	159	10%	$94,946	114	7.2%	$112,696	1,580	99.4%	$608,386
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$23,318,867*	*4,389*	*7.6%*	*$2,731,515*	*1,087*	*1.9%*	*$4,710,561*	*57,863*	*100%*	*$30,760,942*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$18,105,392	9,432	19.7%	$1,419,191	448	0.9%	$476,763	47,784	100%	$20,001,346
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$288,092	133	8.3%	$3,959	4	0.3%	$5,059	1,599	100%	$297,111
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$1,440,137	596	21.6%	$320,932	50	1.8%	$59,465	2,758	99.9%	$1,820,533
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$2,638,368	751	7.6%	$187,000	102	1%	$42,998	9,841	100%	$2,868,366
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$1,449,986	539	19%	$93,707	27	1%	$40,816	2,838	100%	$1,584,508
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$663,566	216	16.4%	$106,871	20	1.5%	$13,305	1,313	99.9%	$783,742
Town of Micro	577	534	92.5%	436	75.6%	$266,740	106	18.4%	$25,471	35	6.1%	$31,012	577	100%	$323,223
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$742,022	185	13%	$59,490	22	1.5%	$22,235	1,426	100%	$823,748
Town of Princeton	1,000	724	72.4%	824	82.4%	$524,469	140	14%	$43,575	35	3.5%	$41,937	999	99.9%	$609,980
Town of Selma	3,784	3,520	93%	3,176	83.9%	$1,803,808	530	14%	$365,011	75	2%	$90,686	3,781	99.9%	$2,259,506
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$3,802,845	956	13.8%	$896,661	197	2.8%	$246,519	6,916	99.9%	$4,946,024
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$759,933	139	9.9%	$52,467	31	2.2%	$38,930	1,390	99.5%	$851,330
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$31,045,221*	*13,127*	*16.7%*	*$3,253,403*	*996*	*1.3%*	*$1,050,260*	*78,464*	*100%*	*$35,348,884*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$2,644,070	1,469	12.1%	$1,641,238	309	2.6%	$675,725	12,098	99.9%	$4,961,033
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$2,673,129	1,932	13.1%	$647,476	128	0.9%	$184,897	14,753	99.9%	$3,505,503
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$5,317,199*	*3,401*	*12.7%*	*$2,288,714*	*437*	*1.6%*	*$860,622*	*26,851*	*99.9%*	*$8,466,536*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$5,940,151	5,035	17.5%	$535,460	382	1.3%	$254,578	28,687	100%	$6,730,189
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$793,197	467	13.7%	$256,862	83	2.4%	$30,791	3,401	100%	$1,080,850
Town of Cameron	594	497	83.7%	491	82.7%	$99,216	83	14%	$16,382	20	3.4%	$7,870	594	100%	$123,469
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$353,520	211	10.5%	$85,358	172	8.6%	$110,162	2,007	99.8%	$549,040
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$355,849	76	5.1%	$153,041	12	0.8%	$1,667	1,496	99.7%	$510,558
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$260,103	160	11.2%	$73,174	48	3.4%	$41,211	1,424	99.8%	$374,488
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,931,572	845	10.9%	$513,085	199	2.6%	$119,391	7,754	100%	$2,564,048
Town of Taylortown	458	457	99.8%	413	90.2%	$100,499	31	6.8%	$33,984	14	3.1%	$13,532	458	100%	$148,015
Town of Vass	960	948	98.8%	738	76.9%	$195,276	189	19.7%	$23,952	33	3.4%	$17,402	960	100%	$236,630
Village of Foxfire	589	330	56%	515	87.4%	$217,978	68	11.5%	$7,718	6	1%	$1,462	589	100%	$227,158
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$3,775,400	345	4.2%	$439,743	47	0.6%	$28,305	8,290	100%	$4,243,447
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$838,904	85	4.7%	$14,103	17	0.9%	$17,183	1,795	100%	$870,190
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$14,861,665*	*7,595*	*13.2%*	*$2,152,862*	*1,033*	*1.8%*	*$643,554*	*57,455*	*100%*	*$17,658,082*
TOTAL PLAN	**259,136**	**183,266**	**70.7%**	**220,113**	**84.9%**	**$86,222,381**	**34,660**	**13.4%**	**$13,635,270**	**4,194**	**1.6%**	**$8,159,202**	**258,967**	**99.9%**	**$108,016,853**

Source: GIS Analysis

Table 6-20: Buildings Impacted by the 100 Year Hurricane Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$20,979,725	4,716	16.9%	$7,623,898	384	1.4%	$1,650,859	27,826	99.9%	$30,254,482
Town of Goldston	244	244	100%	193	79.1%	$239,298	41	16.8%	$34,648	10	4.1%	$17,484	244	100%	$291,431
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$2,383,020	409	11.1%	$1,260,563	94	2.6%	$406,450	3,676	99.9%	$4,050,033
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$3,786,205	982	14.8%	$2,551,413	153	2.3%	$1,407,195	6,621	99.9%	$7,744,812
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$27,388,248*	*6,148*	*16%*	*$11,470,522*	*641*	*1.7%*	*$3,481,988*	*38,367*	*99.9%*	*$42,340,758*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$7,088,953	545	11.1%	$2,864,078	126	2.6%	$1,448,623	4,924	100%	$11,401,654
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$36,933,456	2,644	6.5%	$3,196,603	643	1.6%	$9,939,734	40,440	100%	$50,069,793
Town of Angier	2,541	2,490	98%	2,344	92.2%	$1,927,584	158	6.2%	$321,673	39	1.5%	$163,645	2,541	100%	$2,412,903
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$592,789	98	9.4%	$146,269	19	1.8%	$25,232	1,048	100%	$764,290
Town of Coats	1,457	1,457	100%	1,364	93.6%	$2,220,560	69	4.7%	$126,412	24	1.6%	$334,216	1,457	100%	$2,681,189
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$4,746,401	120	3.8%	$727,020	72	2.3%	$413,171	3,115	99.9%	$5,886,592
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$1,362,779	159	10%	$563,682	114	7.2%	$756,462	1,580	99.4%	$2,682,923
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$58,570,748*	*4,389*	*7.6%*	*$9,290,160*	*1,087*	*1.9%*	*$13,327,590*	*57,863*	*100%*	*$81,188,500*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$43,144,021	9,432	19.7%	$4,986,411	448	0.9%	$2,136,756	47,784	100%	$50,267,188
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$789,792	133	8.3%	$17,989	4	0.3%	$19,240	1,599	100%	$827,022
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$3,698,226	596	21.6%	$1,344,423	50	1.8%	$246,507	2,758	99.9%	$5,289,156

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$6,928,196	751	7.6%	$536,408	102	1%	$135,399	9,841	100%	$7,600,004
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$3,552,090	539	19%	$361,536	27	1%	$156,481	2,838	100%	$4,070,106
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$1,663,046	216	16.4%	$411,537	20	1.5%	$66,526	1,313	99.9%	$2,141,110
Town of Micro	577	534	92.5%	436	75.6%	$630,104	106	18.4%	$101,974	35	6.1%	$147,266	577	100%	$879,344
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$1,847,530	185	13%	$233,401	22	1.5%	$97,363	1,426	100%	$2,178,293
Town of Princeton	1,000	724	72.4%	824	82.4%	$1,264,389	140	14%	$184,764	35	3.5%	$204,579	999	99.9%	$1,653,731
Town of Selma	3,784	3,520	93%	3,176	83.9%	$4,138,324	530	14%	$1,372,490	75	2%	$435,140	3,781	99.9%	$5,945,954
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$8,974,768	956	13.8%	$3,415,081	197	2.8%	$1,080,345	6,916	99.9%	$13,470,194
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$1,931,059	139	9.9%	$199,311	31	2.2%	$152,438	1,390	99.5%	$2,282,808
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$74,863,319*	*13,127*	*16.7%*	*$11,820,902*	*996*	*1.3%*	*$4,631,533*	*78,464*	*100%*	*$91,315,754*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$6,584,353	1,469	12.1%	$5,624,349	309	2.6%	$2,233,773	12,098	99.9%	$14,442,476
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$6,704,762	1,932	13.1%	$1,948,482	128	0.9%	$566,528	14,753	99.9%	$9,219,772
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$13,289,115*	*3,401*	*12.7%*	*$7,572,831*	*437*	*1.6%*	*$2,800,301*	*26,851*	*99.9%*	*$23,662,248*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$14,736,036	5,035	17.5%	$1,878,432	382	1.3%	$834,066	28,687	100%	$17,448,533
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$1,984,605	467	13.7%	$994,295	83	2.4%	$119,041	3,401	100%	$3,097,941
Town of Cameron	594	497	83.7%	491	82.7%	$233,697	83	14%	$54,331	20	3.4%	$24,495	594	100%	$312,522
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$840,526	211	10.5%	$303,109	172	8.6%	$410,369	2,007	99.8%	$1,554,004
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$881,171	76	5.1%	$560,979	12	0.8%	$6,354	1,496	99.7%	$1,448,504
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$590,899	160	11.2%	$205,941	48	3.4%	$147,520	1,424	99.8%	$944,360

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$5,251,172	845	10.9%	$1,809,557	199	2.6%	$428,898	7,754	100%	$7,489,628
Town of Taylortown	458	457	99.8%	413	90.2%	$234,469	31	6.8%	$132,481	14	3.1%	$52,693	458	100%	$419,643
Town of Vass	960	948	98.8%	738	76.9%	$489,638	189	19.7%	$85,460	33	3.4%	$65,788	960	100%	$640,886
Village of Foxfire	589	330	56%	515	87.4%	$547,959	68	11.5%	$21,698	6	1%	$5,551	589	100%	$575,208
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$9,647,545	345	4.2%	$1,565,050	47	0.6%	$99,463	8,290	100%	$11,312,058
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$2,062,235	85	4.7%	$44,893	17	0.9%	$59,342	1,795	100%	$2,166,469
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$37,499,952*	*7,595*	*13.2%*	*$7,656,226*	*1,033*	*1.8%*	*$2,253,580*	*57,455*	*100%*	*$47,409,756*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$211,611,382**	**34,660**	**13.4%**	**$47,810,641**	**4,194**	**1.6%**	**$26,494,992**	**259,000**	**99.9%**	**$285,917,016**

Source: GIS Analysis

Table 6-21: Buildings Impacted by the 300 Year Hurricane Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$52,822,212	4,716	16.9%	$19,268,390	384	1.4%	$4,586,158	27,826	99.9%	$76,676,760
Town of Goldston	244	244	100%	193	79.1%	$730,082	41	16.8%	$111,155	10	4.1%	$62,775	244	100%	$904,012
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$5,154,089	409	11.1%	$3,399,157	94	2.6%	$1,158,114	3,676	99.9%	$9,711,360
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$8,853,031	982	14.8%	$7,327,893	153	2.3%	$3,766,026	6,621	99.9%	$19,946,950
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$67,559,414*	*6,148*	*16%*	*$30,106,595*	*641*	*1.7%*	*$9,573,073*	*38,367*	*99.9%*	*$107,239,082*
Harnett															

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
City of Dunn	4,925	4,925	100%	4,253	86.4%	$23,696,649	545	11.1%	$9,917,240	126	2.6%	$4,916,744	4,924	100%	$38,530,633
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$161,199,073	2,644	6.5%	$14,163,417	643	1.6%	$26,697,429	40,440	100%	$202,059,919
Town of Angier	2,541	2,490	98%	2,344	92.2%	$16,919,295	158	6.2%	$2,298,298	39	1.5%	$2,034,134	2,541	100%	$21,251,727
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$3,798,071	98	9.4%	$904,359	19	1.8%	$170,746	1,048	100%	$4,873,176
Town of Coats	1,457	1,457	100%	1,364	93.6%	$6,242,257	69	4.7%	$374,807	24	1.6%	$672,612	1,457	100%	$7,289,677
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$12,889,032	120	3.8%	$2,460,511	72	2.3%	$1,373,518	3,115	99.9%	$16,723,061
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$4,497,522	159	10%	$2,503,399	114	7.2%	$2,956,054	1,580	99.4%	$9,956,975
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$240,207,164*	*4,389*	*7.6%*	*$37,533,607*	*1,087*	*1.9%*	*$39,791,556*	*57,863*	*100%*	*$317,532,329*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$193,009,569	9,432	19.7%	$23,170,241	448	0.9%	$13,435,002	47,784	100%	$229,614,812
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$4,952,398	133	8.3%	$193,634	4	0.3%	$182,125	1,599	100%	$5,328,158
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$10,965,265	596	21.6%	$4,911,576	50	1.8%	$970,319	2,758	99.9%	$16,847,161
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$46,309,623	751	7.6%	$7,706,528	102	1%	$2,440,873	9,841	100%	$56,457,024
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$10,239,026	539	19%	$1,223,711	27	1%	$547,088	2,838	100%	$12,009,825
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$4,797,705	216	16.4%	$1,507,385	20	1.5%	$297,691	1,313	99.9%	$6,602,781
Town of Micro	577	534	92.5%	436	75.6%	$1,713,170	106	18.4%	$353,412	35	6.1%	$655,393	577	100%	$2,721,975
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$5,442,409	185	13%	$778,992	22	1.5%	$364,820	1,426	100%	$6,586,221
Town of Princeton	1,000	724	72.4%	824	82.4%	$3,732,669	140	14%	$701,901	35	3.5%	$860,285	999	99.9%	$5,294,855
Town of Selma	3,784	3,520	93%	3,176	83.9%	$11,379,160	530	14%	$4,721,854	75	2%	$1,814,204	3,781	99.9%	$17,915,218
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$24,990,092	956	13.8%	$12,693,677	197	2.8%	$4,340,835	6,916	99.9%	$42,024,604
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$5,502,967	139	9.9%	$628,167	31	2.2%	$556,347	1,390	99.5%	$6,687,481

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$312,068,788*	*13,127*	*16.7%*	*$53,679,502*	*996*	*1.3%*	*$25,494,663*	*78,464*	*100%*	*$391,242,954*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$42,422,087	1,469	12.1%	$41,089,535	309	2.6%	$13,482,333	12,098	99.9%	$96,993,956
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$37,835,528	1,932	13.1%	$9,363,650	128	0.9%	$3,042,114	14,753	99.9%	$50,241,292
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$80,257,615*	*3,401*	*12.7%*	*$50,453,185*	*437*	*1.6%*	*$16,524,447*	*26,851*	*99.9%*	*$147,235,248*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$92,630,381	5,035	17.5%	$11,371,078	382	1.3%	$4,836,243	28,687	100%	$108,837,702
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$15,353,610	467	13.7%	$9,266,352	83	2.4%	$1,383,761	3,401	100%	$26,003,723
Town of Cameron	594	497	83.7%	491	82.7%	$1,859,041	83	14%	$332,435	20	3.4%	$208,888	594	100%	$2,400,363
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$5,698,151	211	10.5%	$2,354,417	172	8.6%	$3,254,256	2,007	99.8%	$11,306,823
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$7,806,520	76	5.1%	$2,450,360	12	0.8%	$142,360	1,496	99.7%	$10,399,240
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$1,308,971	160	11.2%	$562,452	48	3.4%	$409,910	1,424	99.8%	$2,281,333
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$35,967,004	845	10.9%	$13,488,706	199	2.6%	$3,790,488	7,754	100%	$53,246,197
Town of Taylortown	458	457	99.8%	413	90.2%	$1,547,529	31	6.8%	$1,052,667	14	3.1%	$520,827	458	100%	$3,121,023
Town of Vass	960	948	98.8%	738	76.9%	$4,249,194	189	19.7%	$772,221	33	3.4%	$702,234	960	100%	$5,723,650
Village of Foxfire	589	330	56%	515	87.4%	$4,156,135	68	11.5%	$131,405	6	1%	$55,875	589	100%	$4,343,415
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$67,813,301	345	4.2%	$10,870,081	47	0.6%	$852,939	8,290	100%	$79,536,320
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$15,681,161	85	4.7%	$350,283	17	0.9%	$418,592	1,795	100%	$16,450,036
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$254,070,998*	*7,595*	*13.2%*	*$53,002,457*	*1,033*	*1.8%*	*$16,576,373*	*57,455*	*100%*	*$323,649,825*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$954,163,979**	**34,660**	**13.4%**	**$224,775,346**	**4,194**	**1.6%**	**$107,960,112**	**259,000**	**99.9%**	**$1,286,899,438**

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages

Source: GIS Analysis

Table 6-22: Buildings Impacted by the 700 Year Hurricane Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$159,021,652	4,716	16.9%	$40,435,385	384	1.4%	$10,531,728	27,826	99.9%	$209,988,765
Town of Goldston	244	244	100%	193	79.1%	$2,659,382	41	16.8%	$320,034	10	4.1%	$192,260	244	100%	$3,171,675
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$13,579,288	409	11.1%	$7,738,850	94	2.6%	$2,902,831	3,676	99.9%	$24,220,970
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$25,630,877	982	14.8%	$18,804,203	153	2.3%	$8,584,916	6,621	99.9%	$53,019,997
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$200,891,199*	*6,148*	*16%*	*$67,298,472*	*641*	*1.7%*	*$22,211,735*	*38,367*	*99.9%*	*$290,401,407*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$55,377,664	545	11.1%	$24,641,369	126	2.6%	$11,800,088	4,924	100%	$91,819,121
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$428,951,508	2,644	6.5%	$30,375,382	643	1.6%	$57,297,588	40,440	100%	$516,624,478
Town of Angier	2,541	2,490	98%	2,344	92.2%	$42,007,972	158	6.2%	$5,456,412	39	1.5%	$5,482,712	2,541	100%	$52,947,096
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$10,193,083	98	9.4%	$1,977,675	19	1.8%	$400,688	1,048	100%	$12,571,446
Town of Coats	1,457	1,457	100%	1,364	93.6%	$16,516,600	69	4.7%	$985,663	24	1.6%	$1,541,014	1,457	100%	$19,043,277
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$34,864,856	120	3.8%	$7,131,988	72	2.3%	$3,780,732	3,115	99.9%	$45,777,576
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$12,204,539	159	10%	$7,005,306	114	7.2%	$8,233,627	1,580	99.4%	$27,443,471
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$629,435,330*	*4,389*	*7.6%*	*$91,196,153*	*1,087*	*1.9%*	*$91,485,272*	*57,863*	*100%*	*$812,116,754*
Johnston															

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$482,308,405	9,432	19.7%	$55,444,188	448	0.9%	$36,371,776	47,784	100%	$574,124,369
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$13,443,305	133	8.3%	$478,430	4	0.3%	$469,227	1,599	100%	$14,390,962
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$29,319,108	596	21.6%	$13,622,358	50	1.8%	$2,948,823	2,758	99.9%	$45,890,289
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$125,302,041	751	7.6%	$22,713,382	102	1%	$8,067,655	9,841	100%	$156,083,078
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$27,307,472	539	19%	$3,315,217	27	1%	$1,596,177	2,838	100%	$32,218,867
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$12,525,690	216	16.4%	$4,385,550	20	1.5%	$920,173	1,313	99.9%	$17,831,413
Town of Micro	577	534	92.5%	436	75.6%	$4,394,597	106	18.4%	$943,189	35	6.1%	$2,136,290	577	100%	$7,474,076
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$14,614,948	185	13%	$2,037,017	22	1.5%	$988,276	1,426	100%	$17,640,241
Town of Princeton	1,000	724	72.4%	824	82.4%	$10,378,043	140	14%	$2,002,325	35	3.5%	$2,512,716	999	99.9%	$14,893,084
Town of Selma	3,784	3,520	93%	3,176	83.9%	$30,608,550	530	14%	$13,231,993	75	2%	$5,438,227	3,781	99.9%	$49,278,770
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$67,994,359	956	13.8%	$38,587,198	197	2.8%	$13,074,064	6,916	99.9%	$119,655,621
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$14,324,876	139	9.9%	$1,573,105	31	2.2%	$1,564,186	1,390	99.5%	$17,462,166
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$803,202,286*	*13,127*	*16.7%*	*$144,711,594*	*996*	*1.3%*	*$73,138,767*	*78,464*	*100%*	*$1,021,052,647*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$115,025,214	1,469	12.1%	$100,812,027	309	2.6%	$31,222,905	12,098	99.9%	$247,060,146
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$100,694,118	1,932	13.1%	$24,587,421	128	0.9%	$7,349,469	14,753	99.9%	$132,631,007
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$215,719,332*	*3,401*	*12.7%*	*$125,399,448*	*437*	*1.6%*	*$38,572,374*	*26,851*	*99.9%*	*$379,691,153*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$253,865,804	5,035	17.5%	$29,712,110	382	1.3%	$13,435,780	28,687	100%	$297,013,694
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$43,464,440	467	13.7%	$23,725,624	83	2.4%	$3,962,299	3,401	100%	$71,152,363
Town of Cameron	594	497	83.7%	491	82.7%	$5,286,658	83	14%	$789,075	20	3.4%	$592,362	594	100%	$6,668,095
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$15,933,641	211	10.5%	$5,853,283	172	8.6%	$8,119,464	2,007	99.8%	$29,906,388
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$21,206,305	76	5.1%	$4,229,846	12	0.8%	$490,381	1,496	99.7%	$25,926,532

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$3,551,550	160	11.2%	$1,577,997	48	3.4%	$978,576	1,424	99.8%	$6,108,124
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$101,300,653	845	10.9%	$33,470,198	199	2.6%	$9,864,253	7,754	100%	$144,635,104
Town of Taylortown	458	457	99.8%	413	90.2%	$4,239,676	31	6.8%	$2,585,495	14	3.1%	$1,422,583	458	100%	$8,247,754
Town of Vass	960	948	98.8%	738	76.9%	$11,330,906	189	19.7%	$2,024,628	33	3.4%	$2,051,201	960	100%	$15,406,735
Village of Foxfire	589	330	56%	515	87.4%	$11,349,343	68	11.5%	$330,425	6	1%	$151,577	589	100%	$11,831,346
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$194,896,601	345	4.2%	$27,016,985	47	0.6%	$2,209,222	8,290	100%	$224,122,808
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$42,565,175	85	4.7%	$924,204	17	0.9%	$1,124,593	1,795	100%	$44,613,972
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$708,990,752*	*7,595*	*13.2%*	*$132,239,870*	*1,033*	*1.8%*	*$44,402,291*	*57,455*	*100%*	*$885,632,915*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$2,558,238,899**	**34,660**	**13.4%**	**$560,845,537**	**4,194**	**1.6%**	**$269,810,439**	**259,000**	**99.9%**	**$3,388,894,876**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-23: Critical Facilities Exposed to the Hurricane Winds - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	4	$9,398
	50 Year	4	$48,533
	100 Year	4	$156,865
	300 Year	4	$319,580
	700 Year	4	$515,307
Commercial Facilities	25 Year	641	$327,799
	50 Year	641	$1,635,083
	100 Year	641	$5,659,783
	300 Year	641	$13,256,417
	700 Year	641	$25,920,657
Critical Manufacturing	25 Year	375	$123,432
	50 Year	375	$548,448
	100 Year	375	$1,747,814
	300 Year	375	$5,029,053
	700 Year	375	$11,194,424
Emergency Services	25 Year	10	$3,722
	50 Year	10	$16,946
	100 Year	10	$72,423
	300 Year	10	$217,462
	700 Year	10	$486,651
Energy	25 Year	5	$7,787
	50 Year	5	$15,997
	100 Year	5	$47,617
	300 Year	5	$855,391
	700 Year	5	$3,007,784
Food and Agriculture	25 Year	3,697	$6,348
	50 Year	3,697	$54,867
	100 Year	3,697	$335,539

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	3,697	$1,401,171
	700 Year	3,697	$4,051,281
Government Facilities	25 Year	173	$25,090
	50 Year	173	$113,100
	100 Year	173	$430,502
	300 Year	173	$1,266,045
	700 Year	173	$3,330,995
Healthcare and Public Health	25 Year	73	$10,294
	50 Year	73	$66,934
	100 Year	73	$292,952
	300 Year	73	$966,409
	700 Year	73	$2,738,772
Transportation Systems	25 Year	124	$33,607
	50 Year	124	$165,477
	100 Year	124	$573,930
	300 Year	124	$1,387,491
	700 Year	124	$2,704,728
Water	25 Year	27	$53,944
	50 Year	27	$103,723
	100 Year	27	$290,814
	300 Year	27	$2,133,109
	700 Year	27	$7,771,606
All Categories	**25 Year**	**5,129**	**$601,421**
	50 Year	**5,129**	**$2,769,108**
	100 Year	**5,129**	**$9,608,239**
	300 Year	**5,129**	**$26,832,128**
	700 Year	**5,129**	**$61,722,205**

Source: GIS Analysis

Table 6-24: Critical Facilities Exposed to the Hurricane Winds - Town of Goldston

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$96
	50 Year	1	$293
	100 Year	1	$1,143
	300 Year	1	$4,462
	700 Year	1	$14,451
Commercial Facilities	25 Year	28	$1,398
	50 Year	28	$7,169
	100 Year	28	$30,702
	300 Year	28	$105,069
	700 Year	28	$309,296
Critical Manufacturing	25 Year	15	$1,736
	50 Year	15	$4,792
	100 Year	15	$15,943
	300 Year	15	$49,286
	700 Year	15	$140,954
Emergency Services	25 Year	2	$168
	50 Year	2	$382
	100 Year	2	$1,116
	300 Year	2	$3,737
	700 Year	2	$13,046
Government Facilities	25 Year	4	$156
	50 Year	4	$667
	100 Year	4	$2,798
	300 Year	4	$9,739
	700 Year	4	$29,461
Transportation Systems	25 Year	1	$36
	50 Year	1	$107
	100 Year	1	$430
	300 Year	1	$1,637
	700 Year	1	$5,085
All Categories	**25 Year**	**51**	**$3,590**
	50 Year	**51**	**$13,410**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	**51**	**$52,132**
	300 Year	**51**	**$173,930**
	700 Year	**51**	**$512,293**

Source: GIS Analysis

Table 6-25: Critical Facilities Exposed to the Hurricane Winds - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	18	$864
Banking and Finance	50 Year	18	$3,453
Banking and Finance	100 Year	18	$14,055
Banking and Finance	300 Year	18	$48,556
Banking and Finance	700 Year	18	$160,643
Commercial Facilities	25 Year	180	$31,180
Commercial Facilities	50 Year	180	$156,633
Commercial Facilities	100 Year	180	$627,365
Commercial Facilities	300 Year	180	$1,826,915
Commercial Facilities	700 Year	180	$4,692,458
Critical Manufacturing	25 Year	37	$6,955
Critical Manufacturing	50 Year	37	$33,857
Critical Manufacturing	100 Year	37	$127,338
Critical Manufacturing	300 Year	37	$325,790
Critical Manufacturing	700 Year	37	$719,408
Emergency Services	25 Year	2	$655
Emergency Services	50 Year	2	$3,509
Emergency Services	100 Year	2	$13,189
Emergency Services	300 Year	2	$37,098
Emergency Services	700 Year	2	$97,196
Energy	25 Year	1	$37
Energy	50 Year	1	$82
Energy	100 Year	1	$252
Energy	300 Year	1	$1,079

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	700 Year	1	$4,976
Food and Agriculture	25 Year	159	$115
Food and Agriculture	50 Year	159	$1,302
Food and Agriculture	100 Year	159	$8,463
Food and Agriculture	300 Year	159	$33,254
Food and Agriculture	700 Year	159	$97,720
Government Facilities	25 Year	51	$9,427
Government Facilities	50 Year	51	$42,529
Government Facilities	100 Year	51	$168,705
Government Facilities	300 Year	51	$520,766
Government Facilities	700 Year	51	$1,473,796
Healthcare and Public Health	25 Year	25	$32,505
Healthcare and Public Health	50 Year	25	$166,265
Healthcare and Public Health	100 Year	25	$646,860
Healthcare and Public Health	300 Year	25	$1,581,402
Healthcare and Public Health	700 Year	25	$2,906,905
Transportation Systems	25 Year	28	$3,307
Transportation Systems	50 Year	28	$14,703
Transportation Systems	100 Year	28	$57,430
Transportation Systems	300 Year	28	$175,284
Transportation Systems	700 Year	28	$475,303
Water	25 Year	2	$6,081
Water	50 Year	2	$11,166
Water	100 Year	2	$30,854
Water	300 Year	2	$96,900
Water	700 Year	2	$403,475
All Categories	**25 Year**	**503**	**$91,126**
All Categories	**50 Year**	**503**	**$433,499**
All Categories	**100 Year**	**503**	**$1,694,511**
All Categories	**300 Year**	**503**	**$4,647,044**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**700 Year**	**503**	**$11,031,880**

Source: GIS Analysis

Table 6-26: Critical Facilities Exposed to the Hurricane Winds - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	13	$995
Banking and Finance	50 Year	13	$3,368
Banking and Finance	100 Year	13	$13,897
Banking and Finance	300 Year	13	$57,034
Banking and Finance	700 Year	13	$224,176
Commercial Facilities	25 Year	391	$70,266
Commercial Facilities	50 Year	391	$335,340
Commercial Facilities	100 Year	391	$1,321,690
Commercial Facilities	300 Year	391	$3,843,011
Commercial Facilities	700 Year	391	$9,981,381
Critical Manufacturing	25 Year	123	$78,737
Critical Manufacturing	50 Year	123	$382,608
Critical Manufacturing	100 Year	123	$1,450,408
Critical Manufacturing	300 Year	123	$3,888,099
Critical Manufacturing	700 Year	123	$9,156,508
Emergency Services	25 Year	4	$15,608
Emergency Services	50 Year	4	$81,363
Emergency Services	100 Year	4	$316,985
Emergency Services	300 Year	4	$750,141
Emergency Services	700 Year	4	$1,310,094
Energy	25 Year	4	$1,180
Energy	50 Year	4	$2,403
Energy	100 Year	4	$7,203
Energy	300 Year	4	$26,052
Energy	700 Year	4	$107,692
Food and Agriculture	25 Year	483	$640
Food and Agriculture	50 Year	483	$5,408

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	100 Year	483	$34,147
Food and Agriculture	300 Year	483	$138,808
Food and Agriculture	700 Year	483	$416,299
Government Facilities	25 Year	64	$33,764
Government Facilities	50 Year	64	$172,758
Government Facilities	100 Year	64	$683,899
Government Facilities	300 Year	64	$1,907,839
Government Facilities	700 Year	64	$4,649,923
Healthcare and Public Health	25 Year	23	$6,797
Healthcare and Public Health	50 Year	23	$21,032
Healthcare and Public Health	100 Year	23	$81,329
Healthcare and Public Health	300 Year	23	$310,977
Healthcare and Public Health	700 Year	23	$1,053,715
Transportation Systems	25 Year	31	$2,449
Transportation Systems	50 Year	31	$12,404
Transportation Systems	100 Year	31	$54,646
Transportation Systems	300 Year	31	$192,216
Transportation Systems	700 Year	31	$578,005
Water	25 Year	8	$11,925
Water	50 Year	8	$21,862
Water	100 Year	8	$59,748
Water	300 Year	8	$186,029
Water	700 Year	8	$770,061
All Categories	**25 Year**	**1,144**	**$222,361**
All Categories	**50 Year**	**1,144**	**$1,038,546**
All Categories	**100 Year**	**1,144**	**$4,023,952**
All Categories	**300 Year**	**1,144**	**$11,300,206**
All Categories	**700 Year**	**1,144**	**$28,247,854**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-27: Critical Facilities Exposed to the Hurricane Winds - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	27	$4,761
Banking and Finance	50 Year	27	$17,560
Banking and Finance	100 Year	27	$68,611
Banking and Finance	300 Year	27	$250,151
Banking and Finance	700 Year	27	$752,579
Chemical	25 Year	1	$3,215
Chemical	50 Year	1	$15,371
Chemical	100 Year	1	$50,854
Chemical	300 Year	1	$133,465
Chemical	700 Year	1	$336,146
Commercial Facilities	25 Year	360	$186,059
Commercial Facilities	50 Year	360	$619,116
Commercial Facilities	100 Year	360	$1,952,501
Commercial Facilities	300 Year	360	$6,642,633
Commercial Facilities	700 Year	360	$17,145,791
Communications	25 Year	2	$320
Communications	50 Year	2	$1,153
Communications	100 Year	2	$4,291
Communications	300 Year	2	$13,835
Communications	700 Year	2	$35,458
Critical Manufacturing	25 Year	80	$41,734
Critical Manufacturing	50 Year	80	$155,049
Critical Manufacturing	100 Year	80	$519,170
Critical Manufacturing	300 Year	80	$1,863,087

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	700 Year	80	$4,751,278
Emergency Services	25 Year	3	$639
Emergency Services	50 Year	3	$1,872
Emergency Services	100 Year	3	$6,508
Emergency Services	300 Year	3	$23,891
Emergency Services	700 Year	3	$77,753
Energy	25 Year	3	$233
Energy	50 Year	3	$1,060
Energy	100 Year	3	$4,265
Energy	300 Year	3	$31,999
Energy	700 Year	3	$42,032
Food and Agriculture	25 Year	42	$1,064
Food and Agriculture	50 Year	42	$6,311
Food and Agriculture	100 Year	42	$23,384
Food and Agriculture	300 Year	42	$65,390
Food and Agriculture	700 Year	42	$141,302
Government Facilities	25 Year	51	$79,528
Government Facilities	50 Year	51	$317,487
Government Facilities	100 Year	51	$1,075,911
Government Facilities	300 Year	51	$3,763,077
Government Facilities	700 Year	51	$8,972,904
Healthcare and Public Health	25 Year	46	$45,763
Healthcare and Public Health	50 Year	46	$163,023
Healthcare and Public Health	100 Year	46	$425,372
Healthcare and Public Health	300 Year	46	$1,000,559
Healthcare and Public Health	700 Year	46	$2,257,417
Nuclear Reactors, Materials and Waste	25 Year	1	$136
Nuclear Reactors, Materials and Waste	50 Year	1	$402

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	100 Year	1	$1,368
Nuclear Reactors, Materials and Waste	300 Year	1	$4,803
Nuclear Reactors, Materials and Waste	700 Year	1	$15,523
Transportation Systems	25 Year	57	$11,821
Transportation Systems	50 Year	57	$48,126
Transportation Systems	100 Year	57	$185,217
Transportation Systems	300 Year	57	$1,055,114
Transportation Systems	700 Year	57	$1,948,045
Water	25 Year	1	$21
Water	50 Year	1	$61
Water	100 Year	1	$245
Water	300 Year	1	$1,107
Water	700 Year	1	$3,889
All Categories	**25 Year**	**674**	**$375,294**
All Categories	**50 Year**	**674**	**$1,346,591**
All Categories	**100 Year**	**674**	**$4,317,697**
All Categories	**300 Year**	**674**	**$14,849,111**
All Categories	**700 Year**	**674**	**$36,480,117**

Source: GIS Analysis

Table 6-28: Critical Facilities Exposed to the Hurricane Winds - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$4
Banking and Finance	50 Year	1	$268
Banking and Finance	100 Year	1	$1,048
Banking and Finance	300 Year	1	$2,991
Banking and Finance	700 Year	1	$7,136
Chemical	25 Year	1	$140
Chemical	50 Year	1	$572

Sector	Event	Number of Buildings At Risk	Estimated Damages
Chemical	100 Year	1	$2,051
Chemical	300 Year	1	$16,809
Chemical	700 Year	1	$37,735
Commercial Facilities	25 Year	505	$286,963
Commercial Facilities	50 Year	505	$1,154,598
Commercial Facilities	100 Year	505	$3,325,425
Commercial Facilities	300 Year	505	$12,902,349
Commercial Facilities	700 Year	505	$27,817,311
Communications	25 Year	1	$678
Communications	50 Year	1	$5,106
Communications	100 Year	1	$13,308
Communications	300 Year	1	$28,023
Communications	700 Year	1	$46,075
Critical Manufacturing	25 Year	188	$65,900
Critical Manufacturing	50 Year	188	$248,784
Critical Manufacturing	100 Year	188	$753,765
Critical Manufacturing	300 Year	188	$3,099,234
Critical Manufacturing	700 Year	188	$7,033,855
Emergency Services	25 Year	13	$8,374
Emergency Services	50 Year	13	$59,266
Emergency Services	100 Year	13	$147,700
Emergency Services	300 Year	13	$668,926
Emergency Services	700 Year	13	$1,809,103
Energy	25 Year	2	$99
Energy	50 Year	2	$371
Energy	100 Year	2	$1,752
Energy	300 Year	2	$8,153
Energy	700 Year	2	$24,213
Food and Agriculture	25 Year	2,093	$17,106
Food and Agriculture	50 Year	2,093	$123,103
Food and Agriculture	100 Year	2,093	$590,423
Food and Agriculture	300 Year	2,093	$3,240,643

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	700 Year	2,093	$7,542,323
Government Facilities	25 Year	370	$217,142
Government Facilities	50 Year	370	$2,908,696
Government Facilities	100 Year	370	$7,593,565
Government Facilities	300 Year	370	$18,554,766
Government Facilities	700 Year	370	$37,757,462
Healthcare and Public Health	25 Year	18	$11,597
Healthcare and Public Health	50 Year	18	$106,728
Healthcare and Public Health	100 Year	18	$256,173
Healthcare and Public Health	300 Year	18	$588,280
Healthcare and Public Health	700 Year	18	$1,134,194
Nuclear Reactors, Materials and Waste	25 Year	1	$1,706
Nuclear Reactors, Materials and Waste	50 Year	1	$5,569
Nuclear Reactors, Materials and Waste	100 Year	1	$16,149
Nuclear Reactors, Materials and Waste	300 Year	1	$136,509
Nuclear Reactors, Materials and Waste	700 Year	1	$324,804
Transportation Systems	25 Year	69	$23,953
Transportation Systems	50 Year	69	$84,677
Transportation Systems	100 Year	69	$246,234
Transportation Systems	300 Year	69	$1,085,003
Transportation Systems	700 Year	69	$2,776,740
Water	25 Year	1	$51
Water	50 Year	1	$150
Water	100 Year	1	$580
Water	300 Year	1	$2,535
Water	700 Year	1	$9,002

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**3,263**	**$633,713**
All Categories	**50 Year**	**3,263**	**$4,697,888**
All Categories	**100 Year**	**3,263**	**$12,948,173**
All Categories	**300 Year**	**3,263**	**$40,334,221**
All Categories	**700 Year**	**3,263**	**$86,319,953**

Source: GIS Analysis

Table 6-29: Critical Facilities Exposed to the Hurricane Winds - Town of Angier

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$232
Banking and Finance	50 Year	6	$623
Banking and Finance	100 Year	6	$2,010
Banking and Finance	300 Year	6	$20,426
Banking and Finance	700 Year	6	$56,042
Commercial Facilities	25 Year	85	$16,605
Commercial Facilities	50 Year	85	$56,110
Commercial Facilities	100 Year	85	$183,139
Commercial Facilities	300 Year	85	$1,845,316
Commercial Facilities	700 Year	85	$4,701,846
Critical Manufacturing	25 Year	21	$13,278
Critical Manufacturing	50 Year	21	$60,186
Critical Manufacturing	100 Year	21	$177,432
Critical Manufacturing	300 Year	21	$943,145
Critical Manufacturing	700 Year	21	$2,038,313
Emergency Services	25 Year	2	$365
Emergency Services	50 Year	2	$1,196
Emergency Services	100 Year	2	$8,522
Emergency Services	300 Year	2	$255,344
Emergency Services	700 Year	2	$722,172
Energy	25 Year	2	$19
Energy	50 Year	2	$41

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	100 Year	2	$132
Energy	300 Year	2	$3,024
Energy	700 Year	2	$10,189
Food and Agriculture	25 Year	57	$133
Food and Agriculture	50 Year	57	$1,313
Food and Agriculture	100 Year	57	$7,607
Food and Agriculture	300 Year	57	$73,468
Food and Agriculture	700 Year	57	$161,921
Government Facilities	25 Year	7	$4,978
Government Facilities	50 Year	7	$14,974
Government Facilities	100 Year	7	$55,602
Government Facilities	300 Year	7	$682,300
Government Facilities	700 Year	7	$1,914,122
Healthcare and Public Health	25 Year	7	$877
Healthcare and Public Health	50 Year	7	$2,550
Healthcare and Public Health	100 Year	7	$14,045
Healthcare and Public Health	300 Year	7	$279,636
Healthcare and Public Health	700 Year	7	$747,028
Transportation Systems	25 Year	10	$2,825
Transportation Systems	50 Year	10	$12,656
Transportation Systems	100 Year	10	$36,828
Transportation Systems	300 Year	10	$229,773
Transportation Systems	700 Year	10	$587,491
All Categories	**25 Year**	**197**	**$39,312**
All Categories	**50 Year**	**197**	**$149,649**
All Categories	**100 Year**	**197**	**$485,317**
All Categories	**300 Year**	**197**	**$4,332,432**
All Categories	**700 Year**	**197**	**$10,939,124**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-30: Critical Facilities Exposed to the Hurricane Winds - Town of Benson

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$635
Banking and Finance	50 Year	6	$1,841
Banking and Finance	100 Year	6	$6,487
Banking and Finance	300 Year	6	$23,940
Banking and Finance	700 Year	6	$77,175
Commercial Facilities	25 Year	160	$46,817
Commercial Facilities	50 Year	160	$197,687
Commercial Facilities	100 Year	160	$755,742
Commercial Facilities	300 Year	160	$2,658,294
Commercial Facilities	700 Year	160	$7,551,147
Critical Manufacturing	25 Year	31	$13,180
Critical Manufacturing	50 Year	31	$70,117
Critical Manufacturing	100 Year	31	$376,189
Critical Manufacturing	300 Year	31	$1,565,020
Critical Manufacturing	700 Year	31	$4,294,110
Emergency Services	25 Year	2	$2,937
Emergency Services	50 Year	2	$11,391
Emergency Services	100 Year	2	$44,532
Emergency Services	300 Year	2	$147,620
Emergency Services	700 Year	2	$378,769
Energy	25 Year	3	$14,132
Energy	50 Year	3	$44,941
Energy	100 Year	3	$209,060
Energy	300 Year	3	$978,045
Energy	700 Year	3	$3,326,887
Food and Agriculture	25 Year	390	$5,415
Food and Agriculture	50 Year	390	$31,854

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	100 Year	390	$118,975
Food and Agriculture	300 Year	390	$328,507
Food and Agriculture	700 Year	390	$741,875
Government Facilities	25 Year	17	$8,667
Government Facilities	50 Year	17	$30,501
Government Facilities	100 Year	17	$131,737
Government Facilities	300 Year	17	$555,385
Government Facilities	700 Year	17	$1,777,354
Healthcare and Public Health	25 Year	19	$4,864
Healthcare and Public Health	50 Year	19	$22,664
Healthcare and Public Health	100 Year	19	$109,098
Healthcare and Public Health	300 Year	19	$445,696
Healthcare and Public Health	700 Year	19	$1,302,299
Transportation Systems	25 Year	21	$4,156
Transportation Systems	50 Year	21	$14,343
Transportation Systems	100 Year	21	$48,170
Transportation Systems	300 Year	21	$157,434
Transportation Systems	700 Year	21	$448,452
All Categories	**25 Year**	**649**	**$100,803**
All Categories	**50 Year**	**649**	**$425,339**
All Categories	**100 Year**	**649**	**$1,799,990**
All Categories	**300 Year**	**649**	**$6,859,941**
All Categories	**700 Year**	**649**	**$19,898,068**

Source: GIS Analysis

Table 6-31: Critical Facilities Exposed to the Hurricane Winds - Town of Broadway

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$108

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	50 Year	2	$264
Banking and Finance	100 Year	2	$823
Banking and Finance	300 Year	2	$10,137
Banking and Finance	700 Year	2	$32,272
Commercial Facilities	25 Year	54	$5,250
Commercial Facilities	50 Year	54	$17,098
Commercial Facilities	100 Year	54	$55,277
Commercial Facilities	300 Year	54	$459,732
Commercial Facilities	700 Year	54	$1,137,204
Critical Manufacturing	25 Year	5	$399
Critical Manufacturing	50 Year	5	$1,201
Critical Manufacturing	100 Year	5	$4,387
Critical Manufacturing	300 Year	5	$50,450
Critical Manufacturing	700 Year	5	$117,978
Emergency Services	25 Year	1	$117
Emergency Services	50 Year	1	$284
Emergency Services	100 Year	1	$882
Emergency Services	300 Year	1	$10,399
Emergency Services	700 Year	1	$32,262
Food and Agriculture	25 Year	32	$29
Food and Agriculture	50 Year	32	$233
Food and Agriculture	100 Year	32	$1,430
Food and Agriculture	300 Year	32	$17,158
Food and Agriculture	700 Year	32	$40,565
Government Facilities	25 Year	8	$1,272
Government Facilities	50 Year	8	$2,702
Government Facilities	100 Year	8	$6,601
Government Facilities	300 Year	8	$49,154
Government Facilities	700 Year	8	$119,347
Transportation Systems	25 Year	15	$5,732
Transportation Systems	50 Year	15	$28,097
Transportation Systems	100 Year	15	$102,102

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	300 Year	15	$478,075
Transportation Systems	700 Year	15	$898,735
All Categories	**25 Year**	**117**	**$12,907**
All Categories	**50 Year**	**117**	**$49,879**
All Categories	**100 Year**	**117**	**$171,502**
All Categories	**300 Year**	**117**	**$1,075,105**
All Categories	**700 Year**	**117**	**$2,378,363**

Source: GIS Analysis

Table 6-32: Critical Facilities Exposed to the Hurricane Winds - Town of Coats

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$1,614
Banking and Finance	50 Year	3	$6,219
Banking and Finance	100 Year	3	$19,017
Banking and Finance	300 Year	3	$51,837
Banking and Finance	700 Year	3	$126,715
Commercial Facilities	25 Year	52	$13,575
Commercial Facilities	50 Year	52	$43,943
Commercial Facilities	100 Year	52	$146,664
Commercial Facilities	300 Year	52	$519,629
Commercial Facilities	700 Year	52	$1,588,737
Critical Manufacturing	25 Year	7	$670
Critical Manufacturing	50 Year	7	$2,559
Critical Manufacturing	100 Year	7	$9,305
Critical Manufacturing	300 Year	7	$31,306
Critical Manufacturing	700 Year	7	$87,733
Emergency Services	25 Year	1	$120
Emergency Services	50 Year	1	$802
Emergency Services	100 Year	1	$3,275
Emergency Services	300 Year	1	$9,630
Emergency Services	700 Year	1	$23,057
Food and Agriculture	25 Year	16	$269

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	50 Year	16	$1,625
Food and Agriculture	100 Year	16	$6,154
Food and Agriculture	300 Year	16	$17,084
Food and Agriculture	700 Year	16	$38,590
Government Facilities	25 Year	8	$61,016
Government Facilities	50 Year	8	$138,884
Government Facilities	100 Year	8	$230,815
Government Facilities	300 Year	8	$321,102
Government Facilities	700 Year	8	$433,396
Healthcare and Public Health	25 Year	2	$194
Healthcare and Public Health	50 Year	2	$663
Healthcare and Public Health	100 Year	2	$3,286
Healthcare and Public Health	300 Year	2	$16,843
Healthcare and Public Health	700 Year	2	$56,408
Transportation Systems	25 Year	3	$9,398
Transportation Systems	50 Year	3	$22,422
Transportation Systems	100 Year	3	$41,679
Transportation Systems	300 Year	3	$78,613
Transportation Systems	700 Year	3	$168,192
All Categories	**25 Year**	**92**	**$86,856**
All Categories	**50 Year**	**92**	**$217,117**
All Categories	**100 Year**	**92**	**$460,195**
All Categories	**300 Year**	**92**	**$1,046,044**
All Categories	**700 Year**	**92**	**$2,522,828**

Source: GIS Analysis

Table 6-33: Critical Facilities Exposed to the Hurricane Winds - Town of Erwin

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$286
Banking and Finance	50 Year	3	$870
Banking and Finance	100 Year	3	$3,466
Banking and Finance	300 Year	3	$13,745
Banking and Finance	700 Year	3	$42,609
Commercial Facilities	25 Year	91	$46,505
Commercial Facilities	50 Year	91	$156,225
Commercial Facilities	100 Year	91	$530,537
Commercial Facilities	300 Year	91	$1,841,618
Commercial Facilities	700 Year	91	$5,395,924
Critical Manufacturing	25 Year	15	$15,795
Critical Manufacturing	50 Year	15	$57,008
Critical Manufacturing	100 Year	15	$191,585
Critical Manufacturing	300 Year	15	$639,978
Critical Manufacturing	700 Year	15	$1,872,807
Emergency Services	25 Year	1	$1,499
Emergency Services	50 Year	1	$7,170
Emergency Services	100 Year	1	$25,174
Emergency Services	300 Year	1	$72,629
Emergency Services	700 Year	1	$177,685
Food and Agriculture	25 Year	21	$495
Food and Agriculture	50 Year	21	$2,804
Food and Agriculture	100 Year	21	$10,101
Food and Agriculture	300 Year	21	$27,153
Food and Agriculture	700 Year	21	$60,044
Government Facilities	25 Year	25	$8,806
Government Facilities	50 Year	25	$34,600
Government Facilities	100 Year	25	$148,980
Government Facilities	300 Year	25	$577,559
Government Facilities	700 Year	25	$1,678,612
Healthcare and Public Health	25 Year	11	$19,245

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	50 Year	11	$64,425
Healthcare and Public Health	100 Year	11	$186,297
Healthcare and Public Health	300 Year	11	$486,321
Healthcare and Public Health	700 Year	11	$1,168,649
Transportation Systems	25 Year	21	$2,044
Transportation Systems	50 Year	21	$7,465
Transportation Systems	100 Year	21	$32,961
Transportation Systems	300 Year	21	$141,865
Transportation Systems	700 Year	21	$437,334
Water	25 Year	2	$96
Water	50 Year	2	$296
Water	100 Year	2	$1,280
Water	300 Year	2	$5,894
Water	700 Year	2	$20,372
All Categories	**25 Year**	**190**	**$94,771**
All Categories	**50 Year**	**190**	**$330,863**
All Categories	**100 Year**	**190**	**$1,130,381**
All Categories	**300 Year**	**190**	**$3,806,762**
All Categories	**700 Year**	**190**	**$10,854,036**

Source: GIS Analysis

Table 6-34: Critical Facilities Exposed to the Hurricane Winds - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	9	$384
Banking and Finance	50 Year	9	$1,305
Banking and Finance	100 Year	9	$14,796
Banking and Finance	300 Year	9	$70,623
Banking and Finance	700 Year	9	$205,375
Commercial Facilities	25 Year	125	$9,673
Commercial Facilities	50 Year	125	$53,918

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	125	$271,151
Commercial Facilities	300 Year	125	$926,967
Commercial Facilities	700 Year	125	$2,512,717
Critical Manufacturing	25 Year	29	$9,542
Critical Manufacturing	50 Year	29	$33,216
Critical Manufacturing	100 Year	29	$197,511
Critical Manufacturing	300 Year	29	$874,810
Critical Manufacturing	700 Year	29	$2,292,906
Defense Industrial Base	25 Year	1	$2,255
Defense Industrial Base	50 Year	1	$4,673
Defense Industrial Base	100 Year	1	$47,349
Defense Industrial Base	300 Year	1	$191,308
Defense Industrial Base	700 Year	1	$666,994
Emergency Services	25 Year	4	$408
Emergency Services	50 Year	4	$907
Emergency Services	100 Year	4	$12,501
Emergency Services	300 Year	4	$56,823
Emergency Services	700 Year	4	$193,514
Energy	25 Year	1	$11
Energy	50 Year	1	$24
Energy	100 Year	1	$342
Energy	300 Year	1	$1,591
Energy	700 Year	1	$5,449
Food and Agriculture	25 Year	3	$137
Food and Agriculture	50 Year	3	$1,598
Food and Agriculture	100 Year	3	$5,723
Food and Agriculture	300 Year	3	$17,069
Food and Agriculture	700 Year	3	$35,724
Government Facilities	25 Year	82	$13,042
Government Facilities	50 Year	82	$59,637
Government Facilities	100 Year	82	$522,785
Government Facilities	300 Year	82	$2,092,457

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	700 Year	82	$5,877,983
Healthcare and Public Health	25 Year	12	$4,492
Healthcare and Public Health	50 Year	12	$51,048
Healthcare and Public Health	100 Year	12	$236,800
Healthcare and Public Health	300 Year	12	$1,143,231
Healthcare and Public Health	700 Year	12	$3,151,204
Transportation Systems	25 Year	7	$538
Transportation Systems	50 Year	7	$1,256
Transportation Systems	100 Year	7	$11,029
Transportation Systems	300 Year	7	$83,178
Transportation Systems	700 Year	7	$293,487
Water	25 Year	8	$19
Water	50 Year	8	$45
Water	100 Year	8	$141
Water	300 Year	8	$3,089
Water	700 Year	8	$10,522
All Categories	**25 Year**	**281**	**$40,501**
All Categories	**50 Year**	**281**	**$207,627**
All Categories	**100 Year**	**281**	**$1,320,128**
All Categories	**300 Year**	**281**	**$5,461,146**
All Categories	**700 Year**	**281**	**$15,245,875**

Source: GIS Analysis

Table 6-35: Critical Facilities Exposed to the Hurricane Winds - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	4	$1,509
Banking and Finance	50 Year	4	$6,013
Banking and Finance	100 Year	4	$19,725

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	300 Year	4	$82,928
Banking and Finance	700 Year	4	$250,710
Commercial Facilities	25 Year	851	$146,554
Commercial Facilities	50 Year	851	$669,936
Commercial Facilities	100 Year	851	$2,353,751
Commercial Facilities	300 Year	851	$13,305,620
Commercial Facilities	700 Year	851	$34,567,989
Critical Manufacturing	25 Year	267	$45,090
Critical Manufacturing	50 Year	267	$168,768
Critical Manufacturing	100 Year	267	$582,940
Critical Manufacturing	300 Year	267	$2,932,511
Critical Manufacturing	700 Year	267	$8,052,855
Emergency Services	25 Year	22	$2,343
Emergency Services	50 Year	22	$15,900
Emergency Services	100 Year	22	$62,048
Emergency Services	300 Year	22	$390,194
Emergency Services	700 Year	22	$1,017,342
Energy	25 Year	10	$49,889
Energy	50 Year	10	$95,364
Energy	100 Year	10	$271,128
Energy	300 Year	10	$4,037,923
Energy	700 Year	10	$14,686,998
Food and Agriculture	25 Year	8,411	$77,277
Food and Agriculture	50 Year	8,411	$484,112
Food and Agriculture	100 Year	8,411	$1,840,125
Food and Agriculture	300 Year	8,411	$7,898,744
Food and Agriculture	700 Year	8,411	$16,190,420

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	25 Year	162	$40,761
Government Facilities	50 Year	162	$234,210
Government Facilities	100 Year	162	$1,161,474
Government Facilities	300 Year	162	$7,473,632
Government Facilities	700 Year	162	$21,373,679
Healthcare and Public Health	25 Year	18	$9,817
Healthcare and Public Health	50 Year	18	$45,223
Healthcare and Public Health	100 Year	18	$165,575
Healthcare and Public Health	300 Year	18	$743,168
Healthcare and Public Health	700 Year	18	$1,398,824
Nuclear Reactors, Materials and Waste	25 Year	1	$12
Nuclear Reactors, Materials and Waste	50 Year	1	$84
Nuclear Reactors, Materials and Waste	100 Year	1	$355
Nuclear Reactors, Materials and Waste	300 Year	1	$1,081
Nuclear Reactors, Materials and Waste	700 Year	1	$2,577
Transportation Systems	25 Year	149	$50,694
Transportation Systems	50 Year	149	$263,345
Transportation Systems	100 Year	149	$901,858
Transportation Systems	300 Year	149	$3,498,836
Transportation Systems	700 Year	149	$8,720,090
Water	25 Year	1	$19,726
Water	50 Year	1	$94,706
Water	100 Year	1	$485,775
Water	300 Year	1	$2,024,324
Water	700 Year	1	$5,687,960
All Categories	**25 Year**	**9,896**	**$443,672**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**9,896**	**$2,077,661**
All Categories	**100 Year**	**9,896**	**$7,844,754**
All Categories	**300 Year**	**9,896**	**$42,388,961**
All Categories	**700 Year**	**9,896**	**$111,949,444**

Source: GIS Analysis

Table 6-36: Critical Facilities Exposed to the Hurricane Winds - Town of Archer Lodge

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	7	$568
Commercial Facilities	50 Year	7	$2,329
Commercial Facilities	100 Year	7	$9,171
Commercial Facilities	300 Year	7	$107,401
Commercial Facilities	700 Year	7	$285,018
Critical Manufacturing	25 Year	6	$204
Critical Manufacturing	50 Year	6	$988
Critical Manufacturing	100 Year	6	$3,918
Critical Manufacturing	300 Year	6	$36,094
Critical Manufacturing	700 Year	6	$92,892
Emergency Services	25 Year	1	$95
Emergency Services	50 Year	1	$323
Emergency Services	100 Year	1	$2,312
Emergency Services	300 Year	1	$52,450
Emergency Services	700 Year	1	$136,458
Food and Agriculture	25 Year	120	$116
Food and Agriculture	50 Year	120	$936
Food and Agriculture	100 Year	120	$5,554
Food and Agriculture	300 Year	120	$61,085
Food and Agriculture	700 Year	120	$142,193
Government Facilities	25 Year	3	$755
Government Facilities	50 Year	3	$4,441
Government Facilities	100 Year	3	$16,274
Government Facilities	300 Year	3	$118,729

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	700 Year	3	$291,097
All Categories	**25 Year**	**137**	**$1,738**
All Categories	**50 Year**	**137**	**$9,017**
All Categories	**100 Year**	**137**	**$37,229**
All Categories	**300 Year**	**137**	**$375,759**
All Categories	**700 Year**	**137**	**$947,658**

Source: GIS Analysis

Table 6-37: Critical Facilities Exposed to the Hurricane Winds - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	13	$961
Banking and Finance	50 Year	13	$2,226
Banking and Finance	100 Year	13	$7,588
Banking and Finance	300 Year	13	$134,065
Banking and Finance	700 Year	13	$420,632
Chemical	25 Year	1	$665
Chemical	50 Year	1	$1,679
Chemical	100 Year	1	$7,893
Chemical	300 Year	1	$192,819
Chemical	700 Year	1	$598,191
Commercial Facilities	25 Year	298	$24,017
Commercial Facilities	50 Year	298	$127,390
Commercial Facilities	100 Year	298	$299,541
Commercial Facilities	300 Year	298	$3,896,644
Commercial Facilities	700 Year	298	$11,566,973
Critical Manufacturing	25 Year	114	$12,948
Critical Manufacturing	50 Year	114	$42,050
Critical Manufacturing	100 Year	114	$169,451
Critical Manufacturing	300 Year	114	$2,862,018
Critical Manufacturing	700 Year	114	$8,369,866
Emergency Services	25 Year	2	$151
Emergency Services	50 Year	2	$352

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	100 Year	2	$1,213
Emergency Services	300 Year	2	$28,651
Emergency Services	700 Year	2	$98,312
Energy	25 Year	4	$18,303
Energy	50 Year	4	$40,652
Energy	100 Year	4	$126,480
Energy	300 Year	4	$2,618,669
Energy	700 Year	4	$8,994,534
Food and Agriculture	25 Year	311	$460
Food and Agriculture	50 Year	311	$3,308
Food and Agriculture	100 Year	311	$16,417
Food and Agriculture	300 Year	311	$207,853
Food and Agriculture	700 Year	311	$513,401
Government Facilities	25 Year	44	$10,396
Government Facilities	50 Year	44	$26,940
Government Facilities	100 Year	44	$75,978
Government Facilities	300 Year	44	$1,505,662
Government Facilities	700 Year	44	$5,112,627
Healthcare and Public Health	25 Year	34	$5,602
Healthcare and Public Health	50 Year	34	$16,074
Healthcare and Public Health	100 Year	34	$56,500
Healthcare and Public Health	300 Year	34	$878,164
Healthcare and Public Health	700 Year	34	$2,807,362
Transportation Systems	25 Year	35	$2,516
Transportation Systems	50 Year	35	$9,637
Transportation Systems	100 Year	35	$35,875
Transportation Systems	300 Year	35	$429,607
Transportation Systems	700 Year	35	$1,256,495

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**856**	**$76,019**
All Categories	**50 Year**	**856**	**$270,308**
All Categories	**100 Year**	**856**	**$796,936**
All Categories	**300 Year**	**856**	**$12,754,152**
All Categories	**700 Year**	**856**	**$39,738,393**

Source: GIS Analysis

Table 6-38: Critical Facilities Exposed to the Hurricane Winds - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	14	$2,291
Banking and Finance	50 Year	14	$7,860
Banking and Finance	100 Year	14	$32,451
Banking and Finance	300 Year	14	$130,886
Banking and Finance	700 Year	14	$397,667
Commercial Facilities	25 Year	114	$8,980
Commercial Facilities	50 Year	114	$36,830
Commercial Facilities	100 Year	114	$149,361
Commercial Facilities	300 Year	114	$549,007
Commercial Facilities	700 Year	114	$1,567,309
Critical Manufacturing	25 Year	25	$4,949
Critical Manufacturing	50 Year	25	$17,313
Critical Manufacturing	100 Year	25	$65,050
Critical Manufacturing	300 Year	25	$230,680
Critical Manufacturing	700 Year	25	$653,759
Emergency Services	25 Year	1	$115
Emergency Services	50 Year	1	$375
Emergency Services	100 Year	1	$1,351
Emergency Services	300 Year	1	$4,901
Emergency Services	700 Year	1	$15,673
Food and Agriculture	25 Year	383	$3,611
Food and Agriculture	50 Year	383	$21,287
Food and Agriculture	100 Year	383	$79,605

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	300 Year	383	$219,941
Food and Agriculture	700 Year	383	$496,598
Government Facilities	25 Year	10	$8,739
Government Facilities	50 Year	10	$33,324
Government Facilities	100 Year	10	$121,653
Government Facilities	300 Year	10	$397,511
Government Facilities	700 Year	10	$1,131,876
Healthcare and Public Health	25 Year	4	$1,000
Healthcare and Public Health	50 Year	4	$4,850
Healthcare and Public Health	100 Year	4	$21,695
Healthcare and Public Health	300 Year	4	$80,805
Healthcare and Public Health	700 Year	4	$229,314
Transportation Systems	25 Year	15	$3,077
Transportation Systems	50 Year	15	$12,683
Transportation Systems	100 Year	15	$46,851
Transportation Systems	300 Year	15	$157,067
Transportation Systems	700 Year	15	$419,199
All Categories	**25 Year**	**566**	**$32,762**
All Categories	**50 Year**	**566**	**$134,522**
All Categories	**100 Year**	**566**	**$518,017**
All Categories	**300 Year**	**566**	**$1,770,798**
All Categories	**700 Year**	**566**	**$4,911,395**

Source: GIS Analysis

Table 6-39: Critical Facilities Exposed to the Hurricane Winds - Town of Kenly

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$482
Banking and Finance	50 Year	3	$1,521

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	100 Year	3	$6,285
Banking and Finance	300 Year	3	$26,878
Banking and Finance	700 Year	3	$87,299
Commercial Facilities	25 Year	105	$18,104
Commercial Facilities	50 Year	105	$71,274
Commercial Facilities	100 Year	105	$270,325
Commercial Facilities	300 Year	105	$945,979
Commercial Facilities	700 Year	105	$2,664,729
Critical Manufacturing	25 Year	17	$3,173
Critical Manufacturing	50 Year	17	$11,732
Critical Manufacturing	100 Year	17	$50,701
Critical Manufacturing	300 Year	17	$204,763
Critical Manufacturing	700 Year	17	$615,580
Emergency Services	25 Year	2	$508
Emergency Services	50 Year	2	$1,936
Emergency Services	100 Year	2	$9,182
Emergency Services	300 Year	2	$40,711
Emergency Services	700 Year	2	$126,883
Energy	25 Year	4	$582
Energy	50 Year	4	$1,868
Energy	100 Year	4	$7,132
Energy	300 Year	4	$27,101
Energy	700 Year	4	$82,568
Food and Agriculture	25 Year	73	$2,867
Food and Agriculture	50 Year	73	$9,169
Food and Agriculture	100 Year	73	$27,321
Food and Agriculture	300 Year	73	$77,691
Food and Agriculture	700 Year	73	$199,733
Government Facilities	25 Year	5	$1,105
Government Facilities	50 Year	5	$4,954
Government Facilities	100 Year	5	$26,962
Government Facilities	300 Year	5	$125,534

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	700 Year	5	$386,011
Healthcare and Public Health	25 Year	4	$252
Healthcare and Public Health	50 Year	4	$933
Healthcare and Public Health	100 Year	4	$4,888
Healthcare and Public Health	300 Year	4	$23,425
Healthcare and Public Health	700 Year	4	$76,192
Transportation Systems	25 Year	23	$4,524
Transportation Systems	50 Year	23	$16,789
Transportation Systems	100 Year	23	$75,268
Transportation Systems	300 Year	23	$332,995
Transportation Systems	700 Year	23	$1,066,728
Water	25 Year	1	$15,125
Water	50 Year	1	$52,996
Water	100 Year	1	$255,630
Water	300 Year	1	$1,162,559
Water	700 Year	1	$3,772,963
All Categories	**25 Year**	**237**	**$46,722**
All Categories	**50 Year**	**237**	**$173,172**
All Categories	**100 Year**	**237**	**$733,694**
All Categories	**300 Year**	**237**	**$2,967,636**
All Categories	**700 Year**	**237**	**$9,078,686**

Source: GIS Analysis

Table 6-40: Critical Facilities Exposed to the Hurricane Winds - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$47
Banking and Finance	50 Year	1	$139
Banking and Finance	100 Year	1	$512

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	300 Year	1	$1,847
Banking and Finance	700 Year	1	$4,847
Commercial Facilities	25 Year	36	$4,684
Commercial Facilities	50 Year	36	$19,733
Commercial Facilities	100 Year	36	$82,195
Commercial Facilities	300 Year	36	$312,160
Commercial Facilities	700 Year	36	$896,428
Critical Manufacturing	25 Year	6	$1,538
Critical Manufacturing	50 Year	6	$6,161
Critical Manufacturing	100 Year	6	$25,558
Critical Manufacturing	300 Year	6	$91,490
Critical Manufacturing	700 Year	6	$243,576
Food and Agriculture	25 Year	76	$516
Food and Agriculture	50 Year	76	$3,174
Food and Agriculture	100 Year	76	$12,298
Food and Agriculture	300 Year	76	$34,934
Food and Agriculture	700 Year	76	$80,071
Government Facilities	25 Year	20	$6,850
Government Facilities	50 Year	20	$26,622
Government Facilities	100 Year	20	$125,886
Government Facilities	300 Year	20	$557,487
Government Facilities	700 Year	20	$1,820,800
Transportation Systems	25 Year	2	$161
Transportation Systems	50 Year	2	$654
Transportation Systems	100 Year	2	$2,792
Transportation Systems	300 Year	2	$10,888
Transportation Systems	700 Year	2	$33,757
All Categories	**25 Year**	**141**	**$13,796**
All Categories	**50 Year**	**141**	**$56,483**
All Categories	**100 Year**	**141**	**$249,241**
All Categories	**300 Year**	**141**	**$1,008,806**
All Categories	**700 Year**	**141**	**$3,079,479**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-41: Critical Facilities Exposed to the Hurricane Winds - Town of Pine Level

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$150
Banking and Finance	50 Year	1	$517
Banking and Finance	100 Year	1	$1,914
Banking and Finance	300 Year	1	$7,047
Banking and Finance	700 Year	1	$22,417
Commercial Facilities	25 Year	45	$7,870
Commercial Facilities	50 Year	45	$37,565
Commercial Facilities	100 Year	45	$164,302
Commercial Facilities	300 Year	45	$608,406
Commercial Facilities	700 Year	45	$1,646,745
Critical Manufacturing	25 Year	9	$1,872
Critical Manufacturing	50 Year	9	$8,178
Critical Manufacturing	100 Year	9	$35,742
Critical Manufacturing	300 Year	9	$139,226
Critical Manufacturing	700 Year	9	$413,821
Emergency Services	25 Year	2	$396
Emergency Services	50 Year	2	$1,441
Emergency Services	100 Year	2	$5,624
Emergency Services	300 Year	2	$18,889
Emergency Services	700 Year	2	$49,348
Food and Agriculture	25 Year	138	$1,691
Food and Agriculture	50 Year	138	$10,056
Food and Agriculture	100 Year	138	$37,446
Food and Agriculture	300 Year	138	$102,222
Food and Agriculture	700 Year	138	$228,700
Government Facilities	25 Year	12	$16,502
Government Facilities	50 Year	12	$40,702
Government Facilities	100 Year	12	$114,963

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	300 Year	12	$355,454
Government Facilities	700 Year	12	$910,200
Healthcare and Public Health	25 Year	1	$1,421
Healthcare and Public Health	50 Year	1	$6,123
Healthcare and Public Health	100 Year	1	$21,052
Healthcare and Public Health	300 Year	1	$62,164
Healthcare and Public Health	700 Year	1	$147,541
Transportation Systems	25 Year	5	$2,049
Transportation Systems	50 Year	5	$8,626
Transportation Systems	100 Year	5	$29,452
Transportation Systems	300 Year	5	$88,682
Transportation Systems	700 Year	5	$220,469
All Categories	**25 Year**	**213**	**$31,951**
All Categories	**50 Year**	**213**	**$113,208**
All Categories	**100 Year**	**213**	**$410,495**
All Categories	**300 Year**	**213**	**$1,382,090**
All Categories	**700 Year**	**213**	**$3,639,241**

Source: GIS Analysis

Table 6-42: Critical Facilities Exposed to the Hurricane Winds - Town of Princeton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$170
Banking and Finance	50 Year	3	$754
Banking and Finance	100 Year	3	$3,339
Banking and Finance	300 Year	3	$12,966
Banking and Finance	700 Year	3	$36,829
Commercial Facilities	25 Year	64	$8,261
Commercial Facilities	50 Year	64	$34,867
Commercial Facilities	100 Year	64	$153,926

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	300 Year	64	$618,330
Commercial Facilities	700 Year	64	$1,803,689
Critical Manufacturing	25 Year	11	$1,615
Critical Manufacturing	50 Year	11	$8,000
Critical Manufacturing	100 Year	11	$37,683
Critical Manufacturing	300 Year	11	$145,460
Critical Manufacturing	700 Year	11	$395,145
Emergency Services	25 Year	1	$185
Emergency Services	50 Year	1	$786
Emergency Services	100 Year	1	$3,944
Emergency Services	300 Year	1	$16,947
Emergency Services	700 Year	1	$50,292
Energy	25 Year	1	$16,970
Energy	50 Year	1	$69,720
Energy	100 Year	1	$347,910
Energy	300 Year	1	$1,508,098
Energy	700 Year	1	$4,540,813
Food and Agriculture	25 Year	56	$549
Food and Agriculture	50 Year	56	$3,224
Food and Agriculture	100 Year	56	$11,913
Food and Agriculture	300 Year	56	$32,426
Food and Agriculture	700 Year	56	$72,373
Government Facilities	25 Year	20	$6,487
Government Facilities	50 Year	20	$28,181
Government Facilities	100 Year	20	$141,224
Government Facilities	300 Year	20	$597,988
Government Facilities	700 Year	20	$1,742,508
Healthcare and Public Health	25 Year	4	$369
Healthcare and Public Health	50 Year	4	$1,085
Healthcare and Public Health	100 Year	4	$3,677

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	300 Year	4	$12,686
Healthcare and Public Health	700 Year	4	$38,623
Transportation Systems	25 Year	16	$2,207
Transportation Systems	50 Year	16	$8,617
Transportation Systems	100 Year	16	$33,638
Transportation Systems	300 Year	16	$125,383
Transportation Systems	700 Year	16	$375,583
All Categories	**25 Year**	**176**	**$36,813**
All Categories	**50 Year**	**176**	**$155,234**
All Categories	**100 Year**	**176**	**$737,254**
All Categories	**300 Year**	**176**	**$3,070,284**
All Categories	**700 Year**	**176**	**$9,055,855**

Source: GIS Analysis

Table 6-43: Critical Facilities Exposed to the Hurricane Winds - Town of Selma

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$843
Banking and Finance	50 Year	7	$3,193
Banking and Finance	100 Year	7	$13,673
Banking and Finance	300 Year	7	$55,068
Banking and Finance	700 Year	7	$162,320
Commercial Facilities	25 Year	255	$66,328
Commercial Facilities	50 Year	255	$285,506
Commercial Facilities	100 Year	255	$1,065,041
Commercial Facilities	300 Year	255	$3,599,134
Commercial Facilities	700 Year	255	$10,062,418
Critical Manufacturing	25 Year	42	$12,078
Critical Manufacturing	50 Year	42	$42,171
Critical Manufacturing	100 Year	42	$177,794
Critical Manufacturing	300 Year	42	$719,792

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	700 Year	42	$2,143,218
Emergency Services	25 Year	2	$296
Emergency Services	50 Year	2	$836
Emergency Services	100 Year	2	$3,337
Emergency Services	300 Year	2	$14,804
Emergency Services	700 Year	2	$47,417
Energy	25 Year	3	$11,847
Energy	50 Year	3	$36,929
Energy	100 Year	3	$167,155
Energy	300 Year	3	$777,156
Energy	700 Year	3	$2,654,098
Food and Agriculture	25 Year	206	$2,418
Food and Agriculture	50 Year	206	$11,958
Food and Agriculture	100 Year	206	$43,540
Food and Agriculture	300 Year	206	$120,396
Food and Agriculture	700 Year	206	$275,320
Government Facilities	25 Year	28	$10,405
Government Facilities	50 Year	28	$49,392
Government Facilities	100 Year	28	$272,521
Government Facilities	300 Year	28	$1,223,635
Government Facilities	700 Year	28	$3,738,492
Healthcare and Public Health	25 Year	16	$3,362
Healthcare and Public Health	50 Year	16	$14,109
Healthcare and Public Health	100 Year	16	$55,283
Healthcare and Public Health	300 Year	16	$199,068
Healthcare and Public Health	700 Year	16	$567,204
Transportation Systems	25 Year	49	$13,179
Transportation Systems	50 Year	49	$50,036
Transportation Systems	100 Year	49	$184,103

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	300 Year	49	$639,132
Transportation Systems	700 Year	49	$1,783,523
All Categories	**25 Year**	**608**	**$120,756**
All Categories	**50 Year**	**608**	**$494,130**
All Categories	**100 Year**	**608**	**$1,982,447**
All Categories	**300 Year**	**608**	**$7,348,185**
All Categories	**700 Year**	**608**	**$21,434,010**

Source: GIS Analysis

Table 6-44: Critical Facilities Exposed to the Hurricane Winds - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	17	$8,653
Banking and Finance	50 Year	17	$31,728
Banking and Finance	100 Year	17	$113,614
Banking and Finance	300 Year	17	$393,821
Banking and Finance	700 Year	17	$1,201,727
Commercial Facilities	25 Year	445	$131,598
Commercial Facilities	50 Year	445	$529,794
Commercial Facilities	100 Year	445	$1,963,621
Commercial Facilities	300 Year	445	$6,782,055
Commercial Facilities	700 Year	445	$19,438,218
Communications	25 Year	1	$178
Communications	50 Year	1	$524
Communications	100 Year	1	$1,773
Communications	300 Year	1	$6,215
Communications	700 Year	1	$20,065
Critical Manufacturing	25 Year	105	$46,986
Critical Manufacturing	50 Year	105	$163,179
Critical Manufacturing	100 Year	105	$616,823
Critical Manufacturing	300 Year	105	$2,335,260
Critical Manufacturing	700 Year	105	$7,277,482
Defense Industrial Base	25 Year	2	$13,783

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	50 Year	2	$41,032
Defense Industrial Base	100 Year	2	$159,292
Defense Industrial Base	300 Year	2	$694,959
Defense Industrial Base	700 Year	2	$2,400,198
Emergency Services	25 Year	4	$1,842
Emergency Services	50 Year	4	$5,666
Emergency Services	100 Year	4	$24,044
Emergency Services	300 Year	4	$107,084
Emergency Services	700 Year	4	$364,835
Energy	25 Year	10	$54,222
Energy	50 Year	10	$161,665
Energy	100 Year	10	$652,209
Energy	300 Year	10	$2,946,021
Energy	700 Year	10	$10,318,729
Food and Agriculture	25 Year	349	$4,451
Food and Agriculture	50 Year	349	$26,837
Food and Agriculture	100 Year	349	$102,797
Food and Agriculture	300 Year	349	$291,056
Food and Agriculture	700 Year	349	$666,725
Government Facilities	25 Year	112	$47,215
Government Facilities	50 Year	112	$187,143
Government Facilities	100 Year	112	$838,912
Government Facilities	300 Year	112	$3,415,223
Government Facilities	700 Year	112	$10,266,397
Healthcare and Public Health	25 Year	57	$26,851
Healthcare and Public Health	50 Year	57	$94,480
Healthcare and Public Health	100 Year	57	$439,901
Healthcare and Public Health	300 Year	57	$2,175,211
Healthcare and Public Health	700 Year	57	$7,563,455

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	25 Year	55	$15,211
Transportation Systems	50 Year	55	$60,622
Transportation Systems	100 Year	55	$220,889
Transportation Systems	300 Year	55	$770,262
Transportation Systems	700 Year	55	$2,257,063
All Categories	**25 Year**	**1,157**	**$350,990**
All Categories	**50 Year**	**1,157**	**$1,302,670**
All Categories	**100 Year**	**1,157**	**$5,133,875**
All Categories	**300 Year**	**1,157**	**$19,917,167**
All Categories	**700 Year**	**1,157**	**$61,774,894**

Source: GIS Analysis

Table 6-45: Critical Facilities Exposed to the Hurricane Winds - Town of Wilson's Mills

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	45	$13,308
Commercial Facilities	50 Year	45	$54,156
Commercial Facilities	100 Year	45	$199,616
Commercial Facilities	300 Year	45	$650,519
Commercial Facilities	700 Year	45	$1,685,567
Critical Manufacturing	25 Year	11	$2,962
Critical Manufacturing	50 Year	11	$9,826
Critical Manufacturing	100 Year	11	$33,219
Critical Manufacturing	300 Year	11	$101,795
Critical Manufacturing	700 Year	11	$268,512
Emergency Services	25 Year	1	$117
Emergency Services	50 Year	1	$707
Emergency Services	100 Year	1	$2,585
Emergency Services	300 Year	1	$7,190
Emergency Services	700 Year	1	$17,021
Energy	25 Year	7	$13,845
Energy	50 Year	7	$44,627
Energy	100 Year	7	$202,170

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	300 Year	7	$927,671
Energy	700 Year	7	$3,127,510
Food and Agriculture	25 Year	94	$1,554
Food and Agriculture	50 Year	94	$9,528
Food and Agriculture	100 Year	94	$36,635
Food and Agriculture	300 Year	94	$103,240
Food and Agriculture	700 Year	94	$235,162
Government Facilities	25 Year	9	$2,545
Government Facilities	50 Year	9	$11,378
Government Facilities	100 Year	9	$55,842
Government Facilities	300 Year	9	$234,494
Government Facilities	700 Year	9	$676,937
Healthcare and Public Health	25 Year	1	$51
Healthcare and Public Health	50 Year	1	$220
Healthcare and Public Health	100 Year	1	$1,108
Healthcare and Public Health	300 Year	1	$4,784
Healthcare and Public Health	700 Year	1	$14,182
Transportation Systems	25 Year	9	$1,159
Transportation Systems	50 Year	9	$5,583
Transportation Systems	100 Year	9	$22,744
Transportation Systems	300 Year	9	$82,493
Transportation Systems	700 Year	9	$239,909
All Categories	**25 Year**	**177**	**$35,541**
All Categories	**50 Year**	**177**	**$136,025**
All Categories	**100 Year**	**177**	**$553,919**
All Categories	**300 Year**	**177**	**$2,112,186**
All Categories	**700 Year**	**177**	**$6,264,800**

Source: GIS Analysis

Table 6-46: Critical Facilities Exposed to the Hurricane Winds - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	36	$4,153
Banking and Finance	50 Year	36	$17,261
Banking and Finance	100 Year	36	$72,253
Banking and Finance	300 Year	36	$815,638
Banking and Finance	700 Year	36	$2,113,160
Commercial Facilities	25 Year	845	$187,481
Commercial Facilities	50 Year	845	$692,608
Commercial Facilities	100 Year	845	$2,270,453
Commercial Facilities	300 Year	845	$17,710,770
Commercial Facilities	700 Year	845	$45,389,872
Communications	25 Year	1	$49
Communications	50 Year	1	$113
Communications	100 Year	1	$330
Communications	300 Year	1	$3,867
Communications	700 Year	1	$12,454
Critical Manufacturing	25 Year	250	$234,511
Critical Manufacturing	50 Year	250	$947,004
Critical Manufacturing	100 Year	250	$3,236,932
Critical Manufacturing	300 Year	250	$19,186,401
Critical Manufacturing	700 Year	250	$42,240,369
Defense Industrial Base	25 Year	2	$836
Defense Industrial Base	50 Year	2	$2,273
Defense Industrial Base	100 Year	2	$8,376
Defense Industrial Base	300 Year	2	$98,414
Defense Industrial Base	700 Year	2	$253,572
Emergency Services	25 Year	6	$4,544
Emergency Services	50 Year	6	$23,362
Emergency Services	100 Year	6	$85,355
Emergency Services	300 Year	6	$560,291
Emergency Services	700 Year	6	$1,313,432
Energy	25 Year	19	$4,401
Energy	50 Year	19	$9,836

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	100 Year	19	$26,933
Energy	300 Year	19	$182,726
Energy	700 Year	19	$589,018
Food and Agriculture	25 Year	105	$1,525
Food and Agriculture	50 Year	105	$3,516
Food and Agriculture	100 Year	105	$11,533
Food and Agriculture	300 Year	105	$130,509
Food and Agriculture	700 Year	105	$385,408
Government Facilities	25 Year	177	$95,800
Government Facilities	50 Year	177	$404,277
Government Facilities	100 Year	177	$1,367,968
Government Facilities	300 Year	177	$8,021,825
Government Facilities	700 Year	177	$18,146,835
Healthcare and Public Health	25 Year	102	$27,645
Healthcare and Public Health	50 Year	102	$119,937
Healthcare and Public Health	100 Year	102	$428,666
Healthcare and Public Health	300 Year	102	$4,080,612
Healthcare and Public Health	700 Year	102	$11,099,713
Transportation Systems	25 Year	225	$30,655
Transportation Systems	50 Year	225	$98,886
Transportation Systems	100 Year	225	$347,202
Transportation Systems	300 Year	225	$3,636,225
Transportation Systems	700 Year	225	$10,178,361
All Categories	**25 Year**	**1,768**	**$591,600**
All Categories	**50 Year**	**1,768**	**$2,319,073**
All Categories	**100 Year**	**1,768**	**$7,856,001**
All Categories	**300 Year**	**1,768**	**$54,427,278**
All Categories	**700 Year**	**1,768**	**$131,722,194**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-47: Critical Facilities Exposed to the Hurricane Winds - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	440	$100,881
Commercial Facilities	50 Year	440	$345,368
Commercial Facilities	100 Year	440	$1,056,463
Commercial Facilities	300 Year	440	$5,327,275
Commercial Facilities	700 Year	440	$12,409,765
Critical Manufacturing	25 Year	256	$98,685
Critical Manufacturing	50 Year	256	$285,777
Critical Manufacturing	100 Year	256	$793,347
Critical Manufacturing	300 Year	256	$3,403,396
Critical Manufacturing	700 Year	256	$8,107,680
Defense Industrial Base	25 Year	1	$240
Defense Industrial Base	50 Year	1	$496
Defense Industrial Base	100 Year	1	$1,481
Defense Industrial Base	300 Year	1	$5,960
Defense Industrial Base	700 Year	1	$26,926
Emergency Services	25 Year	9	$6,837
Emergency Services	50 Year	9	$34,666
Emergency Services	100 Year	9	$126,567
Emergency Services	300 Year	9	$507,753
Emergency Services	700 Year	9	$834,392
Energy	25 Year	8	$830
Energy	50 Year	8	$2,458
Energy	100 Year	8	$5,938
Energy	300 Year	8	$50,391
Energy	700 Year	8	$162,565
Food and Agriculture	25 Year	1,168	$6,252
Food and Agriculture	50 Year	1,170	$23,977
Food and Agriculture	100 Year	1,170	$110,638

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	300 Year	1,170	$1,012,737
Food and Agriculture	700 Year	1,170	$4,287,335
Government Facilities	25 Year	34	$19,348
Government Facilities	50 Year	34	$57,698
Government Facilities	100 Year	34	$161,234
Government Facilities	300 Year	34	$843,244
Government Facilities	700 Year	34	$2,585,114
Healthcare and Public Health	25 Year	27	$4,548
Healthcare and Public Health	50 Year	27	$14,168
Healthcare and Public Health	100 Year	27	$41,538
Healthcare and Public Health	300 Year	27	$207,810
Healthcare and Public Health	700 Year	27	$956,115
Transportation Systems	25 Year	123	$19,103
Transportation Systems	50 Year	123	$70,222
Transportation Systems	100 Year	123	$223,742
Transportation Systems	300 Year	123	$1,097,588
Transportation Systems	700 Year	123	$2,729,563
All Categories	**25 Year**	**2,066**	**$256,724**
All Categories	**50 Year**	**2,068**	**$834,830**
All Categories	**100 Year**	**2,068**	**$2,520,948**
All Categories	**300 Year**	**2,068**	**$12,456,154**
All Categories	**700 Year**	**2,068**	**$32,099,455**

Source: GIS Analysis

Table 6-48: Critical Facilities Exposed to the Hurricane Winds - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$356
Banking and Finance	50 Year	7	$826

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	100 Year	7	$2,642
Banking and Finance	300 Year	7	$34,935
Banking and Finance	700 Year	7	$105,986
Chemical	25 Year	1	$61
Chemical	50 Year	1	$181
Chemical	100 Year	1	$936
Chemical	300 Year	1	$19,902
Chemical	700 Year	1	$54,233
Commercial Facilities	25 Year	967	$113,872
Commercial Facilities	50 Year	967	$436,783
Commercial Facilities	100 Year	967	$1,472,670
Commercial Facilities	300 Year	967	$9,081,050
Commercial Facilities	700 Year	967	$23,571,335
Critical Manufacturing	25 Year	303	$31,214
Critical Manufacturing	50 Year	303	$107,914
Critical Manufacturing	100 Year	303	$334,771
Critical Manufacturing	300 Year	303	$1,616,694
Critical Manufacturing	700 Year	303	$4,220,372
Emergency Services	25 Year	8	$5,338
Emergency Services	50 Year	8	$16,148
Emergency Services	100 Year	8	$43,199
Emergency Services	300 Year	8	$207,865
Emergency Services	700 Year	8	$589,470
Energy	25 Year	4	$182
Energy	50 Year	4	$609
Energy	100 Year	4	$2,302
Energy	300 Year	4	$19,878
Energy	700 Year	4	$72,874
Food and Agriculture	25 Year	3,782	$4,831
Food and Agriculture	50 Year	3,782	$40,592
Food and Agriculture	100 Year	3,782	$252,488
Food and Agriculture	300 Year	3,782	$1,820,114

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	700 Year	3,782	$4,960,411
Government Facilities	25 Year	89	$15,326
Government Facilities	50 Year	89	$57,752
Government Facilities	100 Year	89	$201,450
Government Facilities	300 Year	89	$1,246,187
Government Facilities	700 Year	89	$3,657,136
Healthcare and Public Health	25 Year	40	$3,001
Healthcare and Public Health	50 Year	40	$10,874
Healthcare and Public Health	100 Year	40	$38,713
Healthcare and Public Health	300 Year	40	$328,054
Healthcare and Public Health	700 Year	40	$887,897
Nuclear Reactors, Materials and Waste	25 Year	1	$43
Nuclear Reactors, Materials and Waste	50 Year	1	$86
Nuclear Reactors, Materials and Waste	100 Year	1	$240
Nuclear Reactors, Materials and Waste	300 Year	1	$2,567
Nuclear Reactors, Materials and Waste	700 Year	1	$8,118
Transportation Systems	25 Year	194	$32,817
Transportation Systems	50 Year	194	$113,878
Transportation Systems	100 Year	194	$351,490
Transportation Systems	300 Year	194	$1,794,298
Transportation Systems	700 Year	194	$4,629,802
Water	25 Year	9	$5,724
Water	50 Year	9	$11,919
Water	100 Year	9	$35,766
Water	300 Year	9	$660,703
Water	700 Year	9	$2,311,996

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**5,405**	**$212,765**
All Categories	**50 Year**	**5,405**	**$797,562**
All Categories	**100 Year**	**5,405**	**$2,736,667**
All Categories	**300 Year**	**5,405**	**$16,832,247**
All Categories	**700 Year**	**5,405**	**$45,069,630**

Source: GIS Analysis

Table 6-49: Critical Facilities Exposed to the Hurricane Winds - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$538
Banking and Finance	50 Year	6	$1,362
Banking and Finance	100 Year	6	$4,346
Banking and Finance	300 Year	6	$39,221
Banking and Finance	700 Year	6	$106,718
Commercial Facilities	25 Year	290	$33,041
Commercial Facilities	50 Year	290	$139,060
Commercial Facilities	100 Year	290	$545,823
Commercial Facilities	300 Year	290	$5,083,859
Commercial Facilities	700 Year	290	$13,135,926
Communications	25 Year	1	$380
Communications	50 Year	1	$1,066
Communications	100 Year	1	$4,155
Communications	300 Year	1	$43,697
Communications	700 Year	1	$94,617
Critical Manufacturing	25 Year	98	$23,287
Critical Manufacturing	50 Year	98	$90,393
Critical Manufacturing	100 Year	98	$348,078
Critical Manufacturing	300 Year	98	$3,160,297
Critical Manufacturing	700 Year	98	$7,835,329
Defense Industrial Base	25 Year	1	$190
Defense Industrial Base	50 Year	1	$406
Defense Industrial Base	100 Year	1	$1,511

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	300 Year	1	$37,727
Defense Industrial Base	700 Year	1	$131,692
Emergency Services	25 Year	6	$972
Emergency Services	50 Year	6	$2,661
Emergency Services	100 Year	6	$9,953
Emergency Services	300 Year	6	$108,595
Emergency Services	700 Year	6	$298,229
Energy	25 Year	3	$60
Energy	50 Year	3	$135
Energy	100 Year	3	$465
Energy	300 Year	3	$10,560
Energy	700 Year	3	$36,253
Food and Agriculture	25 Year	27	$14
Food and Agriculture	50 Year	27	$140
Food and Agriculture	100 Year	27	$926
Food and Agriculture	300 Year	27	$11,735
Food and Agriculture	700 Year	27	$27,838
Government Facilities	25 Year	39	$4,978
Government Facilities	50 Year	39	$18,423
Government Facilities	100 Year	39	$72,069
Government Facilities	300 Year	39	$909,307
Government Facilities	700 Year	39	$2,675,669
Healthcare and Public Health	25 Year	15	$2,404
Healthcare and Public Health	50 Year	15	$7,654
Healthcare and Public Health	100 Year	15	$28,880
Healthcare and Public Health	300 Year	15	$370,752
Healthcare and Public Health	700 Year	15	$1,127,901
Transportation Systems	25 Year	62	$7,302
Transportation Systems	50 Year	62	$26,032

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	100 Year	62	$96,357
Transportation Systems	300 Year	62	$866,795
Transportation Systems	700 Year	62	$2,196,252
All Categories	**25 Year**	**548**	**$73,166**
All Categories	**50 Year**	**548**	**$287,332**
All Categories	**100 Year**	**548**	**$1,112,563**
All Categories	**300 Year**	**548**	**$10,642,545**
All Categories	**700 Year**	**548**	**$27,666,424**

Source: GIS Analysis

Table 6-50: Critical Facilities Exposed to the Hurricane Winds - Town of Cameron

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	48	$4,520
Commercial Facilities	50 Year	48	$17,478
Commercial Facilities	100 Year	48	$56,894
Commercial Facilities	300 Year	48	$336,531
Commercial Facilities	700 Year	48	$787,178
Critical Manufacturing	25 Year	10	$552
Critical Manufacturing	50 Year	10	$1,741
Critical Manufacturing	100 Year	10	$5,274
Critical Manufacturing	300 Year	10	$36,752
Critical Manufacturing	700 Year	10	$103,732
Food and Agriculture	25 Year	31	$20
Food and Agriculture	50 Year	31	$200
Food and Agriculture	100 Year	31	$1,278
Food and Agriculture	300 Year	31	$15,117
Food and Agriculture	700 Year	31	$35,247
Government Facilities	25 Year	9	$919
Government Facilities	50 Year	9	$2,781
Government Facilities	100 Year	9	$10,045
Government Facilities	300 Year	9	$124,267
Government Facilities	700 Year	9	$377,790

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	25 Year	5	$697
Transportation Systems	50 Year	5	$2,052
Transportation Systems	100 Year	5	$5,335
Transportation Systems	300 Year	5	$28,655
Transportation Systems	700 Year	5	$77,490
All Categories	**25 Year**	**103**	**$6,708**
All Categories	**50 Year**	**103**	**$24,252**
All Categories	**100 Year**	**103**	**$78,826**
All Categories	**300 Year**	**103**	**$541,322**
All Categories	**700 Year**	**103**	**$1,381,437**

Source: GIS Analysis

Table 6-51: Critical Facilities Exposed to the Hurricane Winds - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	5	$250
Banking and Finance	50 Year	5	$1,056
Banking and Finance	100 Year	5	$4,001
Banking and Finance	300 Year	5	$33,902
Banking and Finance	700 Year	5	$88,492
Commercial Facilities	25 Year	147	$18,570
Commercial Facilities	50 Year	147	$75,682
Commercial Facilities	100 Year	147	$272,565
Commercial Facilities	300 Year	147	$2,080,965
Commercial Facilities	700 Year	147	$5,057,179
Critical Manufacturing	25 Year	34	$2,761
Critical Manufacturing	50 Year	34	$7,884
Critical Manufacturing	100 Year	34	$24,525
Critical Manufacturing	300 Year	34	$262,888
Critical Manufacturing	700 Year	34	$786,997
Emergency Services	25 Year	4	$284
Emergency Services	50 Year	4	$641
Emergency Services	100 Year	4	$2,176

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	300 Year	4	$53,191
Emergency Services	700 Year	4	$189,285
Food and Agriculture	25 Year	32	$905
Food and Agriculture	50 Year	32	$7,039
Food and Agriculture	100 Year	32	$32,260
Food and Agriculture	300 Year	32	$237,667
Food and Agriculture	700 Year	32	$511,128
Government Facilities	25 Year	126	$18,766
Government Facilities	50 Year	126	$89,730
Government Facilities	100 Year	126	$341,222
Government Facilities	300 Year	126	$2,661,621
Government Facilities	700 Year	126	$6,545,841
Healthcare and Public Health	25 Year	6	$985
Healthcare and Public Health	50 Year	6	$2,113
Healthcare and Public Health	100 Year	6	$5,838
Healthcare and Public Health	300 Year	6	$76,003
Healthcare and Public Health	700 Year	6	$256,227
Transportation Systems	25 Year	25	$2,965
Transportation Systems	50 Year	25	$8,990
Transportation Systems	100 Year	25	$24,627
Transportation Systems	300 Year	25	$172,894
Transportation Systems	700 Year	25	$471,102
Water	25 Year	4	$171
Water	50 Year	4	$582
Water	100 Year	4	$1,932
Water	300 Year	4	$18,266
Water	700 Year	4	$47,855
All Categories	**25 Year**	**383**	**$45,657**
All Categories	**50 Year**	**383**	**$193,717**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**383**	**$709,146**
All Categories	**300 Year**	**383**	**$5,597,397**
All Categories	**700 Year**	**383**	**$13,954,106**

Source: GIS Analysis

Table 6-52: Critical Facilities Exposed to the Hurricane Winds - Town of Pinebluff

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$135
Banking and Finance	50 Year	2	$363
Banking and Finance	100 Year	2	$1,079
Banking and Finance	300 Year	2	$9,579
Banking and Finance	700 Year	2	$29,468
Commercial Facilities	25 Year	37	$26,387
Commercial Facilities	50 Year	37	$136,647
Commercial Facilities	100 Year	37	$497,915
Commercial Facilities	300 Year	37	$2,093,139
Commercial Facilities	700 Year	37	$3,517,290
Critical Manufacturing	25 Year	7	$2,462
Critical Manufacturing	50 Year	7	$15,541
Critical Manufacturing	100 Year	7	$60,020
Critical Manufacturing	300 Year	7	$387,394
Critical Manufacturing	700 Year	7	$876,464
Emergency Services	25 Year	1	$134
Emergency Services	50 Year	1	$269
Emergency Services	100 Year	1	$680
Emergency Services	300 Year	1	$6,379
Emergency Services	700 Year	1	$19,210
Food and Agriculture	25 Year	26	$17
Food and Agriculture	50 Year	26	$163
Food and Agriculture	100 Year	26	$1,039
Food and Agriculture	300 Year	26	$12,175
Food and Agriculture	700 Year	26	$28,312

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	25 Year	5	$143
Government Facilities	50 Year	5	$279
Government Facilities	100 Year	5	$790
Government Facilities	300 Year	5	$12,722
Government Facilities	700 Year	5	$44,279
Healthcare and Public Health	25 Year	4	$170
Healthcare and Public Health	50 Year	4	$356
Healthcare and Public Health	100 Year	4	$1,096
Healthcare and Public Health	300 Year	4	$20,685
Healthcare and Public Health	700 Year	4	$75,894
Transportation Systems	25 Year	5	$245
Transportation Systems	50 Year	5	$1,072
Transportation Systems	100 Year	5	$4,668
Transportation Systems	300 Year	5	$50,104
Transportation Systems	700 Year	5	$127,484
Water	25 Year	4	$6,000
Water	50 Year	4	$13,374
Water	100 Year	4	$41,689
Water	300 Year	4	$867,881
Water	700 Year	4	$2,978,435
All Categories	**25 Year**	**91**	**$35,693**
All Categories	**50 Year**	**91**	**$168,064**
All Categories	**100 Year**	**91**	**$608,976**
All Categories	**300 Year**	**91**	**$3,460,058**
All Categories	**700 Year**	**91**	**$7,696,836**

Source: GIS Analysis

Table 6-53: Critical Facilities Exposed to the Hurricane Winds - Town of Robbins

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$184
Banking and Finance	50 Year	6	$434
Banking and Finance	100 Year	6	$1,430
Banking and Finance	300 Year	6	$5,183
Banking and Finance	700 Year	6	$17,426
Commercial Facilities	25 Year	99	$10,072
Commercial Facilities	50 Year	99	$43,855
Commercial Facilities	100 Year	99	$151,601
Commercial Facilities	300 Year	99	$392,952
Commercial Facilities	700 Year	99	$914,002
Critical Manufacturing	25 Year	19	$16,935
Critical Manufacturing	50 Year	19	$48,322
Critical Manufacturing	100 Year	19	$112,366
Critical Manufacturing	300 Year	19	$278,114
Critical Manufacturing	700 Year	19	$803,444
Emergency Services	25 Year	2	$165
Emergency Services	50 Year	2	$1,333
Emergency Services	100 Year	2	$6,193
Emergency Services	300 Year	2	$18,846
Emergency Services	700 Year	2	$46,100
Energy	25 Year	1	$53
Energy	50 Year	1	$108
Energy	100 Year	1	$321
Energy	300 Year	1	$1,257
Energy	700 Year	1	$5,636
Food and Agriculture	25 Year	41	$7
Food and Agriculture	50 Year	41	$76
Food and Agriculture	100 Year	41	$526
Food and Agriculture	300 Year	41	$2,328
Food and Agriculture	700 Year	41	$7,293
Government Facilities	25 Year	20	$3,068
Government Facilities	50 Year	20	$11,365

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	100 Year	20	$50,611
Government Facilities	300 Year	20	$187,993
Government Facilities	700 Year	20	$542,662
Healthcare and Public Health	25 Year	4	$115
Healthcare and Public Health	50 Year	4	$243
Healthcare and Public Health	100 Year	4	$665
Healthcare and Public Health	300 Year	4	$2,345
Healthcare and Public Health	700 Year	4	$9,620
Transportation Systems	25 Year	13	$1,088
Transportation Systems	50 Year	13	$4,947
Transportation Systems	100 Year	13	$20,707
Transportation Systems	300 Year	13	$66,420
Transportation Systems	700 Year	13	$181,639
Water	25 Year	3	$154
Water	50 Year	3	$588
Water	100 Year	3	$1,409
Water	300 Year	3	$2,805
Water	700 Year	3	$6,846
All Categories	**25 Year**	**208**	**$31,841**
All Categories	**50 Year**	**208**	**$111,271**
All Categories	**100 Year**	**208**	**$345,829**
All Categories	**300 Year**	**208**	**$958,243**
All Categories	**700 Year**	**208**	**$2,534,668**

Source: GIS Analysis

Table 6-54: Critical Facilities Exposed to the Hurricane Winds - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	27	$2,704

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	50 Year	27	$8,857
Banking and Finance	100 Year	27	$33,265
Banking and Finance	300 Year	27	$370,232
Banking and Finance	700 Year	27	$1,036,376
Chemical	25 Year	1	$224
Chemical	50 Year	1	$581
Chemical	100 Year	1	$1,728
Chemical	300 Year	1	$14,410
Chemical	700 Year	1	$39,962
Commercial Facilities	25 Year	524	$81,758
Commercial Facilities	50 Year	524	$327,435
Commercial Facilities	100 Year	524	$1,126,680
Commercial Facilities	300 Year	524	$8,485,917
Commercial Facilities	700 Year	524	$21,677,154
Communications	25 Year	3	$2,076
Communications	50 Year	3	$10,480
Communications	100 Year	3	$39,698
Communications	300 Year	3	$174,754
Communications	700 Year	3	$293,671
Critical Manufacturing	25 Year	97	$6,523
Critical Manufacturing	50 Year	97	$26,558
Critical Manufacturing	100 Year	97	$101,490
Critical Manufacturing	300 Year	97	$930,991
Critical Manufacturing	700 Year	97	$2,462,746
Defense Industrial Base	25 Year	1	$855
Defense Industrial Base	50 Year	1	$6,915
Defense Industrial Base	100 Year	1	$33,725
Defense Industrial Base	300 Year	1	$346,263
Defense Industrial Base	700 Year	1	$848,689
Emergency Services	25 Year	2	$538
Emergency Services	50 Year	2	$1,435
Emergency Services	100 Year	2	$4,232

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	300 Year	2	$49,375
Emergency Services	700 Year	2	$158,155
Energy	25 Year	3	$176
Energy	50 Year	3	$546
Energy	100 Year	3	$2,124
Energy	300 Year	3	$25,960
Energy	700 Year	3	$67,527
Food and Agriculture	25 Year	87	$55
Food and Agriculture	50 Year	87	$537
Food and Agriculture	100 Year	87	$3,571
Food and Agriculture	300 Year	87	$45,552
Food and Agriculture	700 Year	87	$108,233
Government Facilities	25 Year	111	$21,329
Government Facilities	50 Year	111	$79,208
Government Facilities	100 Year	111	$282,532
Government Facilities	300 Year	111	$2,488,043
Government Facilities	700 Year	111	$6,469,929
Healthcare and Public Health	25 Year	53	$33,331
Healthcare and Public Health	50 Year	53	$136,241
Healthcare and Public Health	100 Year	53	$509,328
Healthcare and Public Health	300 Year	53	$3,330,443
Healthcare and Public Health	700 Year	53	$6,990,642
Transportation Systems	25 Year	132	$11,837
Transportation Systems	50 Year	132	$33,395
Transportation Systems	100 Year	132	$99,231
Transportation Systems	300 Year	132	$1,008,668
Transportation Systems	700 Year	132	$3,155,997
Water	25 Year	1	$9
Water	50 Year	1	$22

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	100 Year	1	$67
Water	300 Year	1	$1,385
Water	700 Year	1	$4,801
All Categories	**25 Year**	**1,042**	**$161,415**
All Categories	**50 Year**	**1,042**	**$632,210**
All Categories	**100 Year**	**1,042**	**$2,237,671**
All Categories	**300 Year**	**1,042**	**$17,271,993**
All Categories	**700 Year**	**1,042**	**$43,313,882**

Source: GIS Analysis

Table 6-55: Critical Facilities Exposed to the Hurricane Winds - Town of Taylortown

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$104
Banking and Finance	50 Year	1	$205
Banking and Finance	100 Year	1	$504
Banking and Finance	300 Year	1	$4,556
Banking and Finance	700 Year	1	$13,618
Commercial Facilities	25 Year	21	$5,781
Commercial Facilities	50 Year	21	$30,860
Commercial Facilities	100 Year	21	$118,698
Commercial Facilities	300 Year	21	$897,286
Commercial Facilities	700 Year	21	$2,171,100
Critical Manufacturing	25 Year	5	$410
Critical Manufacturing	50 Year	5	$1,299
Critical Manufacturing	100 Year	5	$5,128
Critical Manufacturing	300 Year	5	$52,356
Critical Manufacturing	700 Year	5	$133,052
Government Facilities	25 Year	10	$1,786
Government Facilities	50 Year	10	$10,008
Government Facilities	100 Year	10	$43,487
Government Facilities	300 Year	10	$477,777
Government Facilities	700 Year	10	$1,318,403

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	25 Year	4	$1,033
Healthcare and Public Health	50 Year	4	$3,924
Healthcare and Public Health	100 Year	4	$13,626
Healthcare and Public Health	300 Year	4	$109,143
Healthcare and Public Health	700 Year	4	$282,755
Transportation Systems	25 Year	4	$470
Transportation Systems	50 Year	4	$1,219
Transportation Systems	100 Year	4	$3,731
Transportation Systems	300 Year	4	$32,376
Transportation Systems	700 Year	4	$89,151
All Categories	**25 Year**	**45**	**$9,584**
All Categories	**50 Year**	**45**	**$47,515**
All Categories	**100 Year**	**45**	**$185,174**
All Categories	**300 Year**	**45**	**$1,573,494**
All Categories	**700 Year**	**45**	**$4,008,079**

Source: GIS Analysis

Table 6-56: Critical Facilities Exposed to the Hurricane Winds - Town of Vass

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$191
Banking and Finance	50 Year	6	$525
Banking and Finance	100 Year	6	$1,918
Banking and Finance	300 Year	6	$25,657
Banking and Finance	700 Year	6	$79,331
Commercial Facilities	25 Year	83	$6,059
Commercial Facilities	50 Year	83	$23,210
Commercial Facilities	100 Year	83	$84,470
Commercial Facilities	300 Year	83	$813,229

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	700 Year	83	$2,179,973
Critical Manufacturing	25 Year	12	$169
Critical Manufacturing	50 Year	12	$394
Critical Manufacturing	100 Year	12	$1,327
Critical Manufacturing	300 Year	12	$23,943
Critical Manufacturing	700 Year	12	$82,454
Emergency Services	25 Year	2	$210
Emergency Services	50 Year	2	$429
Emergency Services	100 Year	2	$1,146
Emergency Services	300 Year	2	$11,579
Emergency Services	700 Year	2	$35,711
Food and Agriculture	25 Year	94	$109
Food and Agriculture	50 Year	94	$1,057
Food and Agriculture	100 Year	94	$6,786
Food and Agriculture	300 Year	94	$80,903
Food and Agriculture	700 Year	94	$188,944
Government Facilities	25 Year	12	$2,524
Government Facilities	50 Year	12	$11,219
Government Facilities	100 Year	12	$42,925
Government Facilities	300 Year	12	$427,708
Government Facilities	700 Year	12	$1,258,317
Healthcare and Public Health	25 Year	3	$88
Healthcare and Public Health	50 Year	3	$188
Healthcare and Public Health	100 Year	3	$558
Healthcare and Public Health	300 Year	3	$10,011
Healthcare and Public Health	700 Year	3	$35,219
Transportation Systems	25 Year	10	$1,478
Transportation Systems	50 Year	10	$4,331
Transportation Systems	100 Year	10	$12,118

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	300 Year	10	$81,426
Transportation Systems	700 Year	10	$215,879
All Categories	**25 Year**	**222**	**$10,828**
All Categories	**50 Year**	**222**	**$41,353**
All Categories	**100 Year**	**222**	**$151,248**
All Categories	**300 Year**	**222**	**$1,474,456**
All Categories	**700 Year**	**222**	**$4,075,828**

Source: GIS Analysis

Table 6-57: Critical Facilities Exposed to the Hurricane Winds - Village of Foxfire

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	19	$2,567
Commercial Facilities	50 Year	19	$8,124
Commercial Facilities	100 Year	19	$23,705
Commercial Facilities	300 Year	19	$152,621
Commercial Facilities	700 Year	19	$385,834
Critical Manufacturing	25 Year	3	$62
Critical Manufacturing	50 Year	3	$132
Critical Manufacturing	100 Year	3	$371
Critical Manufacturing	300 Year	3	$5,490
Critical Manufacturing	700 Year	3	$18,999
Emergency Services	25 Year	2	$118
Emergency Services	50 Year	2	$317
Emergency Services	100 Year	2	$966
Emergency Services	300 Year	2	$9,388
Emergency Services	700 Year	2	$26,697
Food and Agriculture	25 Year	48	$16
Food and Agriculture	50 Year	48	$157
Food and Agriculture	100 Year	48	$1,035
Food and Agriculture	300 Year	48	$12,950
Food and Agriculture	700 Year	48	$30,617
Transportation Systems	25 Year	2	$156

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	50 Year	2	$450
Transportation Systems	100 Year	2	$1,172
Transportation Systems	300 Year	2	$6,831
Transportation Systems	700 Year	2	$19,855
All Categories	**25 Year**	**74**	**$2,919**
All Categories	**50 Year**	**74**	**$9,180**
All Categories	**100 Year**	**74**	**$27,249**
All Categories	**300 Year**	**74**	**$187,280**
All Categories	**700 Year**	**74**	**$482,002**

Source: GIS Analysis

Table 6-58: Critical Facilities Exposed to the Hurricane Winds - Village of Pinehurst

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	10	$795
Banking and Finance	50 Year	10	$2,347
Banking and Finance	100 Year	10	$8,583
Banking and Finance	300 Year	10	$107,395
Banking and Finance	700 Year	10	$323,670
Commercial Facilities	25 Year	164	$41,938
Commercial Facilities	50 Year	164	$162,225
Commercial Facilities	100 Year	164	$583,985
Commercial Facilities	300 Year	164	$4,964,676
Commercial Facilities	700 Year	164	$13,231,069
Critical Manufacturing	25 Year	16	$2,472
Critical Manufacturing	50 Year	16	$10,287
Critical Manufacturing	100 Year	16	$35,009
Critical Manufacturing	300 Year	16	$200,601
Critical Manufacturing	700 Year	16	$454,941
Emergency Services	25 Year	3	$169
Emergency Services	50 Year	3	$384
Emergency Services	100 Year	3	$1,264
Emergency Services	300 Year	3	$29,411

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	700 Year	3	$103,511
Food and Agriculture	25 Year	59	$42
Food and Agriculture	50 Year	59	$404
Food and Agriculture	100 Year	59	$2,599
Food and Agriculture	300 Year	59	$31,162
Food and Agriculture	700 Year	59	$72,878
Government Facilities	25 Year	18	$1,875
Government Facilities	50 Year	18	$8,212
Government Facilities	100 Year	18	$33,109
Government Facilities	300 Year	18	$326,739
Government Facilities	700 Year	18	$842,758
Healthcare and Public Health	25 Year	96	$65,091
Healthcare and Public Health	50 Year	96	$270,758
Healthcare and Public Health	100 Year	96	$956,726
Healthcare and Public Health	300 Year	96	$5,763,202
Healthcare and Public Health	700 Year	96	$13,415,725
Transportation Systems	25 Year	25	$4,424
Transportation Systems	50 Year	25	$15,385
Transportation Systems	100 Year	25	$49,170
Transportation Systems	300 Year	25	$413,332
Transportation Systems	700 Year	25	$1,180,383
All Categories	**25 Year**	**391**	**$116,806**
All Categories	**50 Year**	**391**	**$470,002**
All Categories	**100 Year**	**391**	**$1,670,445**
All Categories	**300 Year**	**391**	**$11,836,518**
All Categories	**700 Year**	**391**	**$29,624,935**

Source: GIS Analysis

Table 6-59: Critical Facilities Exposed to the Hurricane Winds - Village of Whispering Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	32	$4,494
Commercial Facilities	50 Year	32	$14,426
Commercial Facilities	100 Year	32	$45,280
Commercial Facilities	300 Year	32	$324,960
Commercial Facilities	700 Year	32	$804,228
Critical Manufacturing	25 Year	7	$848
Critical Manufacturing	50 Year	7	$2,536
Critical Manufacturing	100 Year	7	$6,860
Critical Manufacturing	300 Year	7	$36,450
Critical Manufacturing	700 Year	7	$92,898
Emergency Services	25 Year	3	$207
Emergency Services	50 Year	3	$676
Emergency Services	100 Year	3	$2,390
Emergency Services	300 Year	3	$19,148
Emergency Services	700 Year	3	$47,027
Food and Agriculture	25 Year	38	$14
Food and Agriculture	50 Year	38	$133
Food and Agriculture	100 Year	38	$886
Food and Agriculture	300 Year	38	$11,319
Food and Agriculture	700 Year	38	$26,900
Government Facilities	25 Year	11	$1,771
Government Facilities	50 Year	11	$10,549
Government Facilities	100 Year	11	$41,008
Government Facilities	300 Year	11	$328,298
Government Facilities	700 Year	11	$945,067
Healthcare and Public Health	25 Year	1	$35
Healthcare and Public Health	50 Year	1	$77
Healthcare and Public Health	100 Year	1	$247
Healthcare and Public Health	300 Year	1	$5,036

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	700 Year	1	$18,724
Transportation Systems	25 Year	10	$1,049
Transportation Systems	50 Year	10	$2,888
Transportation Systems	100 Year	10	$7,563
Transportation Systems	300 Year	10	$43,666
Transportation Systems	700 Year	10	$113,954
All Categories	**25 Year**	**102**	**$8,418**
All Categories	**50 Year**	**102**	**$31,285**
All Categories	**100 Year**	**102**	**$104,234**
All Categories	**300 Year**	**102**	**$768,877**
All Categories	**700 Year**	**102**	**$2,048,798**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-60: Critical Facilities Exposed to the Hurricane Winds (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	262	$43,893
Banking and Finance	50 Year	262	$171,784
Banking and Finance	100 Year	262	$631,340
Banking and Finance	300 Year	262	$3,165,286
Banking and Finance	700 Year	262	$8,713,173
Chemical	25 Year	5	$4,305
Chemical	50 Year	5	$18,384
Chemical	100 Year	5	$63,462
Chemical	300 Year	5	$377,405
Chemical	700 Year	5	$1,066,267
Commercial Facilities	25 Year	8,653	$2,109,783
Commercial Facilities	50 Year	8,653	$8,756,061
Commercial Facilities	100 Year	8,653	$29,878,028
Commercial Facilities	300 Year	8,653	$135,948,435

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	700 Year	8,653	$340,171,457
Communications	25 Year	9	$3,681
Communications	50 Year	9	$18,442
Communications	100 Year	9	$63,555
Communications	300 Year	9	$270,391
Communications	700 Year	9	$502,340
Critical Manufacturing	25 Year	2,656	$925,664
Critical Manufacturing	50 Year	2,656	$3,621,973
Critical Manufacturing	100 Year	2,656	$12,435,224
Critical Manufacturing	300 Year	2,656	$57,740,114
Critical Manufacturing	700 Year	2,656	$140,446,457
Defense Industrial Base	25 Year	8	$18,159
Defense Industrial Base	50 Year	8	$55,795
Defense Industrial Base	100 Year	8	$251,734
Defense Industrial Base	300 Year	8	$1,374,631
Defense Industrial Base	700 Year	8	$4,328,071
Emergency Services	25 Year	131	$60,176
Emergency Services	50 Year	131	$295,731
Emergency Services	100 Year	131	$1,052,568
Emergency Services	300 Year	131	$4,517,342
Emergency Services	700 Year	131	$10,906,102
Energy	25 Year	98	$194,858
Energy	50 Year	98	$529,436
Energy	100 Year	98	$2,082,890
Energy	300 Year	98	$15,038,745
Energy	700 Year	98	$51,868,345
Food and Agriculture	25 Year	22,748	$141,068
Food and Agriculture	50 Year	22,750	$891,998
Food and Agriculture	100 Year	22,750	$3,781,162
Food and Agriculture	300 Year	22,750	$17,933,561
Food and Agriculture	700 Year	22,750	$43,098,884
Government Facilities	25 Year	1,946	$802,281

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	50 Year	1,946	$5,245,323
Government Facilities	100 Year	1,946	$16,652,039
Government Facilities	300 Year	1,946	$64,361,269
Government Facilities	700 Year	1,946	$160,875,779
Healthcare and Public Health	25 Year	730	$323,799
Healthcare and Public Health	50 Year	730	$1,414,962
Healthcare and Public Health	100 Year	730	$5,047,772
Healthcare and Public Health	300 Year	730	$25,302,925
Healthcare and Public Health	700 Year	730	$64,515,720
Nuclear Reactors, Materials and Waste	25 Year	4	$1,897
Nuclear Reactors, Materials and Waste	50 Year	4	$6,141
Nuclear Reactors, Materials and Waste	100 Year	4	$18,112
Nuclear Reactors, Materials and Waste	300 Year	4	$144,960
Nuclear Reactors, Materials and Waste	700 Year	4	$351,022
Transportation Systems	25 Year	1,580	$308,929
Transportation Systems	50 Year	1,580	$1,232,072
Transportation Systems	100 Year	1,580	$4,191,239
Transportation Systems	300 Year	1,580	$20,500,306
Transportation Systems	700 Year	1,580	$53,061,325
Water	25 Year	72	$119,046
Water	50 Year	72	$311,490
Water	100 Year	72	$1,205,930
Water	300 Year	72	$7,166,586
Water	700 Year	72	$23,799,783
All Categories	**25 Year**	**38,902**	**$5,057,539**
All Categories	**50 Year**	**38,904**	**$22,569,592**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**38,904**	**$77,355,055**
All Categories	**300 Year**	**38,904**	**$353,841,956**
All Categories	**700 Year**	**38,904**	**$903,704,725**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-61: High Potential Loss Properties Exposed to the Hurricane Winds - Chatham County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	19	$104,869
Commercial	50 Year	19	$539,782
Commercial	100 Year	19	$1,823,798
Commercial	300 Year	19	$4,101,853
Commercial	700 Year	19	$7,819,729
Government	25 Year	8	$12,799
Government	50 Year	8	$52,132
Government	100 Year	8	$192,225
Government	300 Year	8	$584,135
Government	700 Year	8	$1,636,860
Industrial	25 Year	11	$76,117
Industrial	50 Year	11	$341,435
Industrial	100 Year	11	$983,526
Industrial	300 Year	11	$2,707,836
Industrial	700 Year	11	$5,724,679
Religious	25 Year	4	$5,147
Religious	50 Year	4	$15,570
Religious	100 Year	4	$66,099
Religious	300 Year	4	$236,658
Religious	700 Year	4	$515,304
Residential	25 Year	116	$139,427
Residential	50 Year	116	$432,948

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	100 Year	116	$996,006
Residential	300 Year	116	$2,716,765
Residential	700 Year	116	$9,055,773
Utilities	25 Year	13	$47,532
Utilities	50 Year	13	$88,946
Utilities	100 Year	13	$242,246
Utilities	300 Year	13	$1,546,406
Utilities	700 Year	13	$5,636,501
All Categories	**25 Year**	**171**	**$385,891**
All Categories	**50 Year**	**171**	**$1,470,813**
All Categories	**100 Year**	**171**	**$4,303,900**
All Categories	**300 Year**	**171**	**$11,893,653**
All Categories	**700 Year**	**171**	**$30,388,846**

Source: GIS Analysis

Table 6-62: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Goldston

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	25 Year	1	$867
Industrial	50 Year	1	$1,700
Industrial	100 Year	1	$4,640
Industrial	300 Year	1	$14,245
Industrial	700 Year	1	$47,999
All Categories	**25 Year**	**1**	**$867**
All Categories	**50 Year**	**1**	**$1,700**
All Categories	**100 Year**	**1**	**$4,640**
All Categories	**300 Year**	**1**	**$14,245**
All Categories	**700 Year**	**1**	**$47,999**

Source: GIS Analysis

Table 6-63: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Pittsboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	10	$11,201
Commercial	50 Year	10	$61,631
Commercial	100 Year	10	$263,838
Commercial	300 Year	10	$878,583
Commercial	700 Year	10	$2,594,176
Government	25 Year	5	$3,327
Government	50 Year	5	$13,845
Government	100 Year	5	$53,885
Government	300 Year	5	$175,920
Government	700 Year	5	$546,051
Industrial	25 Year	1	$2,634
Industrial	50 Year	1	$14,105
Industrial	100 Year	1	$52,196
Industrial	300 Year	1	$118,041
Industrial	700 Year	1	$200,935
Religious	25 Year	2	$2,418
Religious	50 Year	2	$13,350
Religious	100 Year	2	$50,730
Religious	300 Year	2	$121,480
Religious	700 Year	2	$223,899
Residential	25 Year	1	$141
Residential	50 Year	1	$305
Residential	100 Year	1	$843
Residential	300 Year	1	$2,892
Residential	700 Year	1	$9,847
Utilities	25 Year	2	$6,081
Utilities	50 Year	2	$11,166
Utilities	100 Year	2	$30,854
Utilities	300 Year	2	$96,900
Utilities	700 Year	2	$403,475
All Categories	**25 Year**	**21**	**$25,802**
All Categories	**50 Year**	**21**	**$114,402**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**21**	**$452,346**
All Categories	**300 Year**	**21**	**$1,393,816**
All Categories	**700 Year**	**21**	**$3,978,383**

Source: GIS Analysis

Table 6-64: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Siler City

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	11	$10,461
Commercial	50 Year	11	$41,651
Commercial	100 Year	11	$168,323
Commercial	300 Year	11	$602,737
Commercial	700 Year	11	$1,958,063
Government	25 Year	6	$39,555
Government	50 Year	6	$198,453
Government	100 Year	6	$769,468
Government	300 Year	6	$1,923,031
Government	700 Year	6	$3,889,217
Industrial	25 Year	7	$54,437
Industrial	50 Year	7	$281,470
Industrial	100 Year	7	$1,081,179
Industrial	300 Year	7	$2,771,200
Industrial	700 Year	7	$6,040,006
Religious	25 Year	2	$577
Religious	50 Year	2	$1,174
Religious	100 Year	2	$3,103
Religious	300 Year	2	$9,566
Religious	700 Year	2	$31,939
Residential	25 Year	2	$213
Residential	50 Year	2	$469
Residential	100 Year	2	$1,319
Residential	300 Year	2	$4,566
Residential	700 Year	2	$15,546

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	25 Year	6	$12,842
Utilities	50 Year	6	$23,654
Utilities	100 Year	6	$64,912
Utilities	300 Year	6	$204,783
Utilities	700 Year	6	$852,229
All Categories	**25 Year**	**34**	**$118,085**
All Categories	**50 Year**	**34**	**$546,871**
All Categories	**100 Year**	**34**	**$2,088,304**
All Categories	**300 Year**	**34**	**$5,515,883**
All Categories	**700 Year**	**34**	**$12,787,000**

Source: GIS Analysis

Table 6-65: High Potential Loss Properties Exposed to the Hurricane Winds - City of Dunn

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	80	$164,079
Commercial	50 Year	80	$543,506
Commercial	100 Year	80	$1,646,704
Commercial	300 Year	80	$5,770,473
Commercial	700 Year	80	$13,735,558
Government	25 Year	20	$75,552
Government	50 Year	20	$299,660
Government	100 Year	20	$995,499
Government	300 Year	20	$3,417,764
Government	700 Year	20	$8,005,588
Industrial	25 Year	16	$32,143
Industrial	50 Year	16	$124,183
Industrial	100 Year	16	$407,445
Industrial	300 Year	16	$1,367,675
Industrial	700 Year	16	$3,508,261
Religious	25 Year	17	$32,605
Religious	50 Year	17	$107,081
Religious	100 Year	17	$314,823

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	300 Year	17	$1,006,976
Religious	700 Year	17	$2,445,391
Residential	25 Year	8	$14,780
Residential	50 Year	8	$40,639
Residential	100 Year	8	$118,006
Residential	300 Year	8	$368,302
Residential	700 Year	8	$1,016,956
All Categories	**25 Year**	**141**	**$319,159**
All Categories	**50 Year**	**141**	**$1,115,069**
All Categories	**100 Year**	**141**	**$3,482,477**
All Categories	**300 Year**	**141**	**$11,931,190**
All Categories	**700 Year**	**141**	**$28,711,754**

Source: GIS Analysis

Table 6-66: High Potential Loss Properties Exposed to the Hurricane Winds - Harnett County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$117
Agricultural	50 Year	1	$275
Agricultural	100 Year	1	$965
Agricultural	300 Year	1	$14,054
Agricultural	700 Year	1	$46,363
Commercial	25 Year	86	$118,761
Commercial	50 Year	86	$522,590
Commercial	100 Year	86	$1,502,869
Commercial	300 Year	86	$5,829,231
Commercial	700 Year	86	$10,521,493
Government	25 Year	88	$203,405
Government	50 Year	88	$2,853,134
Government	100 Year	88	$7,147,283
Government	300 Year	88	$17,144,774
Government	700 Year	88	$34,434,201

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	25 Year	13	$46,026
Industrial	50 Year	13	$169,759
Industrial	100 Year	13	$466,250
Industrial	300 Year	13	$1,536,757
Industrial	700 Year	13	$3,569,564
Religious	25 Year	98	$159,225
Religious	50 Year	98	$640,446
Religious	100 Year	98	$1,686,150
Religious	300 Year	98	$5,517,980
Religious	700 Year	98	$12,584,023
Residential	25 Year	28	$20,208
Residential	50 Year	28	$98,578
Residential	100 Year	28	$343,428
Residential	300 Year	28	$1,058,972
Residential	700 Year	28	$2,688,089
All Categories	**25 Year**	**314**	**$547,742**
All Categories	**50 Year**	**314**	**$4,284,782**
All Categories	**100 Year**	**314**	**$11,146,945**
All Categories	**300 Year**	**314**	**$31,101,768**
All Categories	**700 Year**	**314**	**$63,843,733**

Source: GIS Analysis

Table 6-67: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Angier

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	10	$6,667
Commercial	50 Year	10	$24,329
Commercial	100 Year	10	$67,034
Commercial	300 Year	10	$361,615
Commercial	700 Year	10	$863,951
Government	25 Year	3	$5,023
Government	50 Year	3	$15,451
Government	100 Year	3	$61,568

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	300 Year	3	$882,437
Government	700 Year	3	$2,476,922
Industrial	25 Year	4	$10,809
Industrial	50 Year	4	$51,726
Industrial	100 Year	4	$147,575
Industrial	300 Year	4	$620,583
Industrial	700 Year	4	$1,298,235
Religious	25 Year	8	$6,506
Religious	50 Year	8	$22,694
Religious	100 Year	8	$62,871
Religious	300 Year	8	$507,608
Religious	700 Year	8	$1,375,491
Residential	25 Year	4	$367
Residential	50 Year	4	$2,620
Residential	100 Year	4	$11,920
Residential	300 Year	4	$80,766
Residential	700 Year	4	$173,077
All Categories	**25 Year**	**29**	**$29,372**
All Categories	**50 Year**	**29**	**$116,820**
All Categories	**100 Year**	**29**	**$350,968**
All Categories	**300 Year**	**29**	**$2,453,009**
All Categories	**700 Year**	**29**	**$6,187,676**

Source: GIS Analysis

Table 6-68: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Benson

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$30,194
Commercial	50 Year	7	$141,201
Commercial	100 Year	7	$534,888
Commercial	300 Year	7	$1,802,058
Commercial	700 Year	7	$4,946,563
Government	25 Year	7	$10,579

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	50 Year	7	$38,317
Government	100 Year	7	$160,320
Government	300 Year	7	$636,683
Government	700 Year	7	$1,956,181
Industrial	25 Year	4	$12,292
Industrial	50 Year	4	$67,955
Industrial	100 Year	4	$378,061
Industrial	300 Year	4	$1,602,539
Industrial	700 Year	4	$4,427,730
Religious	25 Year	4	$1,774
Religious	50 Year	4	$4,997
Religious	100 Year	4	$17,933
Religious	300 Year	4	$68,559
Religious	700 Year	4	$219,923
Utilities	25 Year	3	$14,132
Utilities	50 Year	3	$44,941
Utilities	100 Year	3	$209,060
Utilities	300 Year	3	$978,045
Utilities	700 Year	3	$3,326,887
All Categories	**25 Year**	**25**	**$68,971**
All Categories	**50 Year**	**25**	**$297,411**
All Categories	**100 Year**	**25**	**$1,300,262**
All Categories	**300 Year**	**25**	**$5,087,884**
All Categories	**700 Year**	**25**	**$14,877,284**

Source: GIS Analysis

Table 6-69: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Broadway

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	2	$1,327
Government	50 Year	2	$2,810
Government	100 Year	2	$6,787
Government	300 Year	2	$49,063

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	700 Year	2	$120,260
Religious	25 Year	2	$291
Religious	50 Year	2	$647
Religious	100 Year	2	$1,816
Religious	300 Year	2	$18,720
Religious	700 Year	2	$53,392
All Categories	**25 Year**	**4**	**$1,618**
All Categories	**50 Year**	**4**	**$3,457**
All Categories	**100 Year**	**4**	**$8,603**
All Categories	**300 Year**	**4**	**$67,783**
All Categories	**700 Year**	**4**	**$173,652**

Source: GIS Analysis

Table 6-70: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Coats

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$9,365
Commercial	50 Year	3	$22,674
Commercial	100 Year	3	$41,989
Commercial	300 Year	3	$71,188
Commercial	700 Year	3	$129,936
Government	25 Year	2	$60,747
Government	50 Year	2	$137,801
Government	100 Year	2	$224,613
Government	300 Year	2	$288,141
Government	700 Year	2	$326,036
Religious	25 Year	4	$8,764
Religious	50 Year	4	$22,960
Religious	100 Year	4	$57,380
Religious	300 Year	4	$180,552
Religious	700 Year	4	$623,752
Residential	25 Year	1	$249
Residential	50 Year	1	$799

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	100 Year	1	$2,733
Residential	300 Year	1	$8,528
Residential	700 Year	1	$23,950
All Categories	**25 Year**	**10**	**$79,125**
All Categories	**50 Year**	**10**	**$184,234**
All Categories	**100 Year**	**10**	**$326,715**
All Categories	**300 Year**	**10**	**$548,409**
All Categories	**700 Year**	**10**	**$1,103,674**

Source: GIS Analysis

Table 6-71: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Erwin

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	15	$38,508
Commercial	50 Year	15	$125,201
Commercial	100 Year	15	$404,663
Commercial	300 Year	15	$1,347,316
Commercial	700 Year	15	$3,891,115
Government	25 Year	8	$9,003
Government	50 Year	8	$36,369
Government	100 Year	8	$151,608
Government	300 Year	8	$565,256
Government	700 Year	8	$1,608,512
Industrial	25 Year	5	$14,601
Industrial	50 Year	5	$53,299
Industrial	100 Year	5	$178,510
Industrial	300 Year	5	$590,098
Industrial	700 Year	5	$1,717,507
Religious	25 Year	15	$16,904
Religious	50 Year	15	$54,897
Religious	100 Year	15	$163,371
Religious	300 Year	15	$476,563
Religious	700 Year	15	$1,253,249

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	25 Year	1	$497
Residential	50 Year	1	$1,971
Residential	100 Year	1	$7,426
Residential	300 Year	1	$22,497
Residential	700 Year	1	$50,732
All Categories	**25 Year**	**44**	**$79,513**
All Categories	**50 Year**	**44**	**$271,737**
All Categories	**100 Year**	**44**	**$905,578**
All Categories	**300 Year**	**44**	**$3,001,730**
All Categories	**700 Year**	**44**	**$8,521,115**

Source: GIS Analysis

Table 6-72: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Lillington

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	15	$7,726
Commercial	50 Year	15	$20,721
Commercial	100 Year	15	$128,009
Commercial	300 Year	15	$628,482
Commercial	700 Year	15	$1,828,364
Government	25 Year	25	$12,559
Government	50 Year	25	$54,025
Government	100 Year	25	$455,139
Government	300 Year	25	$2,071,104
Government	700 Year	25	$5,953,612
Industrial	25 Year	7	$6,709
Industrial	50 Year	7	$22,850
Industrial	100 Year	7	$139,543
Industrial	300 Year	7	$649,503
Industrial	700 Year	7	$1,822,753
Religious	25 Year	7	$4,458
Religious	50 Year	7	$38,517
Religious	100 Year	7	$139,157

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	300 Year	7	$301,198
Religious	700 Year	7	$616,319
Residential	25 Year	4	$1,899
Residential	50 Year	4	$6,425
Residential	100 Year	4	$29,173
Residential	300 Year	4	$94,938
Residential	700 Year	4	$264,443
All Categories	**25 Year**	**58**	**$33,351**
All Categories	**50 Year**	**58**	**$142,538**
All Categories	**100 Year**	**58**	**$891,021**
All Categories	**300 Year**	**58**	**$3,745,225**
All Categories	**700 Year**	**58**	**$10,485,491**

Source: GIS Analysis

Table 6-73: High Potential Loss Properties Exposed to the Hurricane Winds - Johnston County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	2	$930
Agricultural	50 Year	2	$4,208
Agricultural	100 Year	2	$18,075
Agricultural	300 Year	2	$67,332
Agricultural	700 Year	2	$194,096
Commercial	25 Year	54	$44,558
Commercial	50 Year	54	$238,199
Commercial	100 Year	54	$795,347
Commercial	300 Year	54	$4,119,444
Commercial	700 Year	54	$10,896,323
Government	25 Year	25	$32,503
Government	50 Year	25	$202,258
Government	100 Year	25	$1,038,819
Government	300 Year	25	$6,663,438
Government	700 Year	25	$19,187,036

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	25 Year	4	$4,244
Industrial	50 Year	4	$14,290
Industrial	100 Year	4	$62,750
Industrial	300 Year	4	$282,396
Industrial	700 Year	4	$917,515
Religious	25 Year	24	$14,383
Religious	50 Year	24	$80,325
Religious	100 Year	24	$298,698
Religious	300 Year	24	$1,719,208
Religious	700 Year	24	$4,675,276
Residential	25 Year	11	$18,307
Residential	50 Year	11	$88,526
Residential	100 Year	11	$293,945
Residential	300 Year	11	$1,185,240
Residential	700 Year	11	$2,578,625
Utilities	25 Year	2	$69,420
Utilities	50 Year	2	$189,510
Utilities	100 Year	2	$754,880
Utilities	300 Year	2	$6,030,401
Utilities	700 Year	2	$20,284,266
All Categories	**25 Year**	**122**	**$184,345**
All Categories	**50 Year**	**122**	**$817,316**
All Categories	**100 Year**	**122**	**$3,262,514**
All Categories	**300 Year**	**122**	**$20,067,459**
All Categories	**700 Year**	**122**	**$58,733,137**

Source: GIS Analysis

Table 6-74: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Archer Lodge

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	2	$723
Government	50 Year	2	$4,336
Government	100 Year	2	$15,793

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	300 Year	2	$110,884
Government	700 Year	2	$268,431
Religious	25 Year	1	$219
Religious	50 Year	1	$618
Religious	100 Year	1	$2,966
Religious	300 Year	1	$63,396
Religious	700 Year	1	$178,130
All Categories	**25 Year**	**3**	**$942**
All Categories	**50 Year**	**3**	**$4,954**
All Categories	**100 Year**	**3**	**$18,759**
All Categories	**300 Year**	**3**	**$174,280**
All Categories	**700 Year**	**3**	**$446,561**

Source: GIS Analysis

Table 6-75: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Clayton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	40	$15,373
Commercial	50 Year	40	$101,268
Commercial	100 Year	40	$207,886
Commercial	300 Year	40	$2,287,833
Commercial	700 Year	40	$6,520,207
Government	25 Year	11	$9,127
Government	50 Year	11	$22,518
Government	100 Year	11	$64,387
Government	300 Year	11	$1,276,523
Government	700 Year	11	$4,370,810
Industrial	25 Year	22	$9,196
Industrial	50 Year	22	$29,356
Industrial	100 Year	22	$139,673
Industrial	300 Year	22	$2,569,034
Industrial	700 Year	22	$7,551,680
Religious	25 Year	11	$3,557

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	50 Year	11	$10,164
Religious	100 Year	11	$35,954
Religious	300 Year	11	$566,461
Religious	700 Year	11	$1,807,204
Residential	25 Year	8	$64,561
Residential	50 Year	8	$253,502
Residential	100 Year	8	$653,568
Residential	300 Year	8	$2,726,787
Residential	700 Year	8	$7,605,668
Utilities	25 Year	4	$18,303
Utilities	50 Year	4	$40,652
Utilities	100 Year	4	$126,480
Utilities	300 Year	4	$2,618,669
Utilities	700 Year	4	$8,994,534
All Categories	**25 Year**	**96**	**$120,117**
All Categories	**50 Year**	**96**	**$457,460**
All Categories	**100 Year**	**96**	**$1,227,948**
All Categories	**300 Year**	**96**	**$12,045,307**
All Categories	**700 Year**	**96**	**$36,850,103**

Source: GIS Analysis

Table 6-76: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Four Oaks

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$3,248
Commercial	50 Year	3	$13,891
Commercial	100 Year	3	$51,961
Commercial	300 Year	3	$173,203
Commercial	700 Year	3	$468,512
Government	25 Year	3	$8,225
Government	50 Year	3	$31,676
Government	100 Year	3	$115,156
Government	300 Year	3	$372,057

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	700 Year	3	$1,053,050
Industrial	25 Year	1	$1,511
Industrial	50 Year	1	$3,761
Industrial	100 Year	1	$9,925
Industrial	300 Year	1	$24,295
Industrial	700 Year	1	$50,119
All Categories	**25 Year**	**7**	**$12,984**
All Categories	**50 Year**	**7**	**$49,328**
All Categories	**100 Year**	**7**	**$177,042**
All Categories	**300 Year**	**7**	**$569,555**
All Categories	**700 Year**	**7**	**$1,571,681**

Source: GIS Analysis

Table 6-77: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Kenly

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$7,641
Commercial	50 Year	7	$30,095
Commercial	100 Year	7	$123,144
Commercial	300 Year	7	$451,833
Commercial	700 Year	7	$1,288,812
Government	25 Year	1	$454
Government	50 Year	1	$2,166
Government	100 Year	1	$12,410
Government	300 Year	1	$59,091
Government	700 Year	1	$181,050
Industrial	25 Year	1	$457
Industrial	50 Year	1	$1,553
Industrial	100 Year	1	$4,942
Industrial	300 Year	1	$14,438
Industrial	700 Year	1	$40,232
Religious	25 Year	1	$299
Religious	50 Year	1	$858

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	100 Year	1	$3,169
Religious	300 Year	1	$13,489
Religious	700 Year	1	$48,357
Utilities	25 Year	1	$15,125
Utilities	50 Year	1	$52,996
Utilities	100 Year	1	$255,630
Utilities	300 Year	1	$1,162,559
Utilities	700 Year	1	$3,772,963
All Categories	**25 Year**	**11**	**$23,976**
All Categories	**50 Year**	**11**	**$87,668**
All Categories	**100 Year**	**11**	**$399,295**
All Categories	**300 Year**	**11**	**$1,701,410**
All Categories	**700 Year**	**11**	**$5,331,414**

Source: GIS Analysis

Table 6-78: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Micro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$2,803
Commercial	50 Year	3	$12,400
Commercial	100 Year	3	$48,035
Commercial	300 Year	3	$162,935
Commercial	700 Year	3	$424,551
Government	25 Year	2	$5,856
Government	50 Year	2	$21,790
Government	100 Year	2	$100,363
Government	300 Year	2	$449,688
Government	700 Year	2	$1,503,723
Industrial	25 Year	1	$595
Industrial	50 Year	1	$2,928
Industrial	100 Year	1	$15,076
Industrial	300 Year	1	$62,465
Industrial	700 Year	1	$173,645

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**6**	**$9,254**
All Categories	**50 Year**	**6**	**$37,118**
All Categories	**100 Year**	**6**	**$163,474**
All Categories	**300 Year**	**6**	**$675,088**
All Categories	**700 Year**	**6**	**$2,101,919**

Source: GIS Analysis

Table 6-79: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Pine Level

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	2	$2,599
Commercial	50 Year	2	$13,287
Commercial	100 Year	2	$58,797
Commercial	300 Year	2	$211,290
Commercial	700 Year	2	$527,304
Government	25 Year	1	$2,289
Government	50 Year	1	$7,880
Government	100 Year	1	$30,544
Government	300 Year	1	$101,601
Government	700 Year	1	$251,912
Religious	25 Year	1	$399
Religious	50 Year	1	$2,394
Religious	100 Year	1	$14,191
Religious	300 Year	1	$63,443
Religious	700 Year	1	$179,225
Residential	25 Year	1	$10,422
Residential	50 Year	1	$22,293
Residential	100 Year	1	$54,261
Residential	300 Year	1	$156,040
Residential	700 Year	1	$392,320
All Categories	**25 Year**	**5**	**$15,709**
All Categories	**50 Year**	**5**	**$45,854**
All Categories	**100 Year**	**5**	**$157,793**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**300 Year**	**5**	**$532,374**
All Categories	**700 Year**	**5**	**$1,350,761**

Source: GIS Analysis

Table 6-80: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Princeton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$534
Commercial	50 Year	1	$2,629
Commercial	100 Year	1	$15,199
Commercial	300 Year	1	$74,775
Commercial	700 Year	1	$234,918
Government	25 Year	3	$5,026
Government	50 Year	3	$21,850
Government	100 Year	3	$110,192
Government	300 Year	3	$470,500
Government	700 Year	3	$1,380,856
Religious	25 Year	2	$1,221
Religious	50 Year	2	$5,966
Religious	100 Year	2	$33,214
Religious	300 Year	2	$150,741
Religious	700 Year	2	$447,649
Residential	25 Year	1	$231
Residential	50 Year	1	$1,442
Residential	100 Year	1	$5,860
Residential	300 Year	1	$17,831
Residential	700 Year	1	$45,061
Utilities	25 Year	1	$16,970
Utilities	50 Year	1	$69,720
Utilities	100 Year	1	$347,910
Utilities	300 Year	1	$1,508,098
Utilities	700 Year	1	$4,540,813
All Categories	**25 Year**	**8**	**$23,982**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**8**	**$101,607**
All Categories	**100 Year**	**8**	**$512,375**
All Categories	**300 Year**	**8**	**$2,221,945**
All Categories	**700 Year**	**8**	**$6,649,297**

Source: GIS Analysis

Table 6-81: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Selma

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$30,680
Commercial	50 Year	16	$138,226
Commercial	100 Year	16	$481,985
Commercial	300 Year	16	$1,486,000
Commercial	700 Year	16	$4,041,048
Government	25 Year	3	$7,797
Government	50 Year	3	$37,809
Government	100 Year	3	$212,354
Government	300 Year	3	$965,842
Government	700 Year	3	$2,985,376
Industrial	25 Year	5	$7,893
Industrial	50 Year	5	$27,855
Industrial	100 Year	5	$125,921
Industrial	300 Year	5	$533,948
Industrial	700 Year	5	$1,597,306
Religious	25 Year	3	$3,124
Religious	50 Year	3	$13,686
Religious	100 Year	3	$54,207
Religious	300 Year	3	$203,588
Religious	700 Year	3	$605,036
Utilities	25 Year	3	$12,065
Utilities	50 Year	3	$38,186
Utilities	100 Year	3	$174,952
Utilities	300 Year	3	$814,671

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	700 Year	3	$2,775,782
All Categories	**25 Year**	**30**	**$61,559**
All Categories	**50 Year**	**30**	**$255,762**
All Categories	**100 Year**	**30**	**$1,049,419**
All Categories	**300 Year**	**30**	**$4,004,049**
All Categories	**700 Year**	**30**	**$12,004,548**

Source: GIS Analysis

Table 6-82: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	48	$109,648
Commercial	50 Year	48	$440,476
Commercial	100 Year	48	$1,637,558
Commercial	300 Year	48	$5,968,156
Commercial	700 Year	48	$17,902,823
Government	25 Year	25	$36,881
Government	50 Year	25	$140,925
Government	100 Year	25	$613,375
Government	300 Year	25	$2,482,940
Government	700 Year	25	$7,544,414
Industrial	25 Year	9	$31,926
Industrial	50 Year	9	$103,956
Industrial	100 Year	9	$402,683
Industrial	300 Year	9	$1,658,004
Industrial	700 Year	9	$5,432,421
Religious	25 Year	12	$6,857
Religious	50 Year	12	$24,146
Religious	100 Year	12	$87,048
Religious	300 Year	12	$306,004
Religious	700 Year	12	$904,820
Residential	25 Year	4	$14,767
Residential	50 Year	4	$38,637

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	100 Year	4	$106,437
Residential	300 Year	4	$287,362
Residential	700 Year	4	$667,195
Utilities	25 Year	8	$54,093
Utilities	50 Year	8	$161,282
Utilities	100 Year	8	$650,794
Utilities	300 Year	8	$2,940,453
Utilities	700 Year	8	$10,300,218
All Categories	**25 Year**	**106**	**$254,172**
All Categories	**50 Year**	**106**	**$909,422**
All Categories	**100 Year**	**106**	**$3,497,895**
All Categories	**300 Year**	**106**	**$13,642,919**
All Categories	**700 Year**	**106**	**$42,751,891**

Source: GIS Analysis

Table 6-83: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Wilson's Mills

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$597
Agricultural	50 Year	1	$3,607
Agricultural	100 Year	1	$13,656
Agricultural	300 Year	1	$37,902
Agricultural	700 Year	1	$85,590
Government	25 Year	1	$2,322
Government	50 Year	1	$10,413
Government	100 Year	1	$51,090
Government	300 Year	1	$214,663
Government	700 Year	1	$618,036
Industrial	25 Year	1	$1,859
Industrial	50 Year	1	$5,778
Industrial	100 Year	1	$17,459
Industrial	300 Year	1	$47,461
Industrial	700 Year	1	$122,333

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	25 Year	2	$2,567
Religious	50 Year	2	$7,204
Religious	100 Year	2	$20,229
Religious	300 Year	2	$67,418
Religious	700 Year	2	$199,815
Utilities	25 Year	6	$13,672
Utilities	50 Year	6	$44,107
Utilities	100 Year	6	$200,033
Utilities	300 Year	6	$917,965
Utilities	700 Year	6	$3,093,603
All Categories	**25 Year**	**11**	**$21,017**
All Categories	**50 Year**	**11**	**$71,109**
All Categories	**100 Year**	**11**	**$302,467**
All Categories	**300 Year**	**11**	**$1,285,409**
All Categories	**700 Year**	**11**	**$4,119,377**

Source: GIS Analysis

Table 6-84: High Potential Loss Properties Exposed to the Hurricane Winds - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	63	$89,100
Commercial	50 Year	63	$300,222
Commercial	100 Year	63	$985,274
Commercial	300 Year	63	$8,844,964
Commercial	700 Year	63	$23,692,256
Government	25 Year	37	$70,121
Government	50 Year	37	$291,583
Government	100 Year	37	$1,005,539
Government	300 Year	37	$5,614,462
Government	700 Year	37	$12,241,338
Industrial	25 Year	22	$167,447
Industrial	50 Year	22	$719,242
Industrial	100 Year	22	$2,494,038

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	300 Year	22	$13,715,604
Industrial	700 Year	22	$28,634,180
Religious	25 Year	9	$16,569
Religious	50 Year	9	$46,937
Religious	100 Year	9	$119,150
Religious	300 Year	9	$1,215,780
Religious	700 Year	9	$3,298,608
Residential	25 Year	7	$1,251
Residential	50 Year	7	$7,278
Residential	100 Year	7	$31,046
Residential	300 Year	7	$276,841
Residential	700 Year	7	$736,514
Utilities	25 Year	8	$2,802
Utilities	50 Year	8	$4,919
Utilities	100 Year	8	$12,595
Utilities	300 Year	8	$33,449
Utilities	700 Year	8	$127,681
All Categories	**25 Year**	**146**	**$347,290**
All Categories	**50 Year**	**146**	**$1,370,181**
All Categories	**100 Year**	**146**	**$4,647,642**
All Categories	**300 Year**	**146**	**$29,701,100**
All Categories	**700 Year**	**146**	**$68,730,577**

Source: GIS Analysis

Table 6-85: High Potential Loss Properties Exposed to the Hurricane Winds - Lee County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	32	$35,782
Commercial	50 Year	32	$111,875
Commercial	100 Year	32	$325,520
Commercial	300 Year	32	$1,257,810
Commercial	700 Year	32	$2,974,089

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	11	$16,554
Government	50 Year	11	$49,385
Government	100 Year	11	$138,390
Government	300 Year	11	$720,572
Government	700 Year	11	$2,263,902
Industrial	25 Year	16	$71,232
Industrial	50 Year	16	$192,936
Industrial	100 Year	16	$511,968
Industrial	300 Year	16	$1,741,934
Industrial	700 Year	16	$5,441,730
Religious	25 Year	5	$2,258
Religious	50 Year	5	$6,727
Religious	100 Year	5	$17,889
Religious	300 Year	5	$50,554
Religious	700 Year	5	$99,408
Residential	25 Year	1	$87
Residential	50 Year	1	$1,413
Residential	100 Year	1	$5,981
Residential	300 Year	1	$25,141
Residential	700 Year	1	$81,285
Utilities	25 Year	1	$211
Utilities	50 Year	1	$419
Utilities	100 Year	1	$1,218
Utilities	300 Year	1	$20,115
Utilities	700 Year	1	$71,821
All Categories	**25 Year**	**66**	**$126,124**
All Categories	**50 Year**	**66**	**$362,755**
All Categories	**100 Year**	**66**	**$1,000,966**
All Categories	**300 Year**	**66**	**$3,816,126**
All Categories	**700 Year**	**66**	**$10,932,235**

Source: GIS Analysis

Table 6-86: High Potential Loss Properties Exposed to the Hurricane Winds - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	13	$9,460
Commercial	50 Year	13	$36,741
Commercial	100 Year	13	$109,738
Commercial	300 Year	13	$428,025
Commercial	700 Year	13	$847,343
Government	25 Year	9	$6,397
Government	50 Year	9	$25,338
Government	100 Year	9	$95,072
Government	300 Year	9	$670,200
Government	700 Year	9	$2,025,967
Industrial	25 Year	2	$1,288
Industrial	50 Year	2	$6,670
Industrial	100 Year	2	$20,345
Industrial	300 Year	2	$55,520
Industrial	700 Year	2	$218,361
Religious	25 Year	7	$4,739
Religious	50 Year	7	$20,037
Religious	100 Year	7	$69,623
Religious	300 Year	7	$241,686
Religious	700 Year	7	$602,337
Residential	25 Year	6	$10,281
Residential	50 Year	6	$34,580
Residential	100 Year	6	$73,410
Residential	300 Year	6	$356,934
Residential	700 Year	6	$876,675
Utilities	25 Year	9	$5,724
Utilities	50 Year	9	$11,919
Utilities	100 Year	9	$35,766
Utilities	300 Year	9	$660,703
Utilities	700 Year	9	$2,311,996
All Categories	**25 Year**	**46**	**$37,889**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**46**	**$135,285**
All Categories	**100 Year**	**46**	**$403,954**
All Categories	**300 Year**	**46**	**$2,413,068**
All Categories	**700 Year**	**46**	**$6,882,679**

Source: GIS Analysis

Table 6-87: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Aberdeen

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	12	$9,011
Commercial	50 Year	12	$41,995
Commercial	100 Year	12	$172,359
Commercial	300 Year	12	$1,682,118
Commercial	700 Year	12	$4,408,518
Government	25 Year	4	$3,707
Government	50 Year	4	$15,128
Government	100 Year	4	$60,650
Government	300 Year	4	$741,150
Government	700 Year	4	$2,164,080
Industrial	25 Year	5	$7,481
Industrial	50 Year	5	$28,745
Industrial	100 Year	5	$114,685
Industrial	300 Year	5	$1,048,567
Industrial	700 Year	5	$2,477,717
Religious	25 Year	2	$273
Religious	50 Year	2	$1,485
Religious	100 Year	2	$6,446
Religious	300 Year	2	$54,317
Religious	700 Year	2	$131,406
Residential	25 Year	2	$866
Residential	50 Year	2	$3,967
Residential	100 Year	2	$9,126
Residential	300 Year	2	$92,909

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	700 Year	2	$312,477
All Categories	**25 Year**	**25**	**$21,338**
All Categories	**50 Year**	**25**	**$91,320**
All Categories	**100 Year**	**25**	**$363,266**
All Categories	**300 Year**	**25**	**$3,619,061**
All Categories	**700 Year**	**25**	**$9,494,198**

Source: GIS Analysis

Table 6-88: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Cameron

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$504
Government	50 Year	1	$1,089
Government	100 Year	1	$3,337
Government	300 Year	1	$66,025
Government	700 Year	1	$228,421
All Categories	**25 Year**	**1**	**$504**
All Categories	**50 Year**	**1**	**$1,089**
All Categories	**100 Year**	**1**	**$3,337**
All Categories	**300 Year**	**1**	**$66,025**
All Categories	700 Year	1	**$228,421**

Source: GIS Analysis

Table 6-89: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Carthage

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$2,682
Commercial	50 Year	7	$7,658
Commercial	100 Year	7	$24,993
Commercial	300 Year	7	$238,926
Commercial	700 Year	7	$638,170
Government	25 Year	11	$8,080
Government	50 Year	11	$47,099

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	100 Year	11	$187,094
Government	300 Year	11	$1,532,555
Government	700 Year	11	$3,874,170
Residential	25 Year	2	$2,971
Residential	50 Year	2	$10,661
Residential	100 Year	2	$21,615
Residential	300 Year	2	$72,764
Residential	700 Year	2	$198,078
All Categories	**25 Year**	**20**	**$13,733**
All Categories	**50 Year**	**20**	**$65,418**
All Categories	**100 Year**	**20**	**$233,702**
All Categories	**300 Year**	**20**	**$1,844,245**
All Categories	**700 Year**	**20**	**$4,710,418**

Source: GIS Analysis

Table 6-90: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Pinebluff

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$21,114
Commercial	50 Year	1	$112,170
Commercial	100 Year	1	$422,636
Commercial	300 Year	1	$1,664,901
Commercial	700 Year	1	$2,439,739
Utilities	25 Year	4	$6,000
Utilities	50 Year	4	$13,374
Utilities	100 Year	4	$41,689
Utilities	300 Year	4	$867,881
Utilities	700 Year	4	$2,978,435
All Categories	**25 Year**	**5**	**$27,114**
All Categories	**50 Year**	**5**	**$125,544**
All Categories	**100 Year**	**5**	**$464,325**
All Categories	**300 Year**	**5**	**$2,532,782**
All Categories	**700 Year**	**5**	**$5,418,174**

Category	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-91: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Robbins

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$333
Commercial	50 Year	1	$688
Commercial	100 Year	1	$1,593
Commercial	300 Year	1	$3,977
Commercial	700 Year	1	$10,782
Government	25 Year	1	$1,717
Government	50 Year	1	$7,467
Government	100 Year	1	$37,638
Government	300 Year	1	$145,913
Government	700 Year	1	$418,056
Industrial	25 Year	1	$15,150
Industrial	50 Year	1	$39,526
Industrial	100 Year	1	$76,967
Industrial	300 Year	1	$177,991
Industrial	700 Year	1	$570,482
Religious	25 Year	1	$265
Religious	50 Year	1	$516
Religious	100 Year	1	$1,248
Religious	300 Year	1	$3,673
Religious	700 Year	1	$11,015
Residential	25 Year	1	$138
Residential	50 Year	1	$338
Residential	100 Year	1	$908
Residential	300 Year	1	$2,545
Residential	700 Year	1	$6,370
All Categories	**25 Year**	**5**	**$17,603**
All Categories	**50 Year**	**5**	**$48,535**
All Categories	**100 Year**	**5**	**$118,354**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**300 Year**	**5**	**$334,099**
All Categories	**700 Year**	**5**	**$1,016,705**

Source: GIS Analysis

Table 6-92: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Southern Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	66	$77,033
Commercial	50 Year	66	$325,213
Commercial	100 Year	66	$1,122,969
Commercial	300 Year	66	$6,874,522
Commercial	700 Year	66	$15,505,017
Government	25 Year	27	$15,430
Government	50 Year	27	$61,144
Government	100 Year	27	$222,857
Government	300 Year	27	$1,865,990
Government	700 Year	27	$4,662,792
Industrial	25 Year	1	$855
Industrial	50 Year	1	$6,915
Industrial	100 Year	1	$33,725
Industrial	300 Year	1	$346,263
Industrial	700 Year	1	$848,689
Religious	25 Year	6	$2,799
Religious	50 Year	6	$8,479
Religious	100 Year	6	$31,896
Religious	300 Year	6	$358,585
Religious	700 Year	6	$954,821
Residential	25 Year	46	$11,483
Residential	50 Year	46	$56,965
Residential	100 Year	46	$175,443
Residential	300 Year	46	$1,254,596
Residential	700 Year	46	$3,382,199
All Categories	**25 Year**	**146**	**$107,600**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**146**	**$458,716**
All Categories	**100 Year**	**146**	**$1,586,890**
All Categories	**300 Year**	**146**	**$10,699,956**
All Categories	**700 Year**	**146**	**$25,353,518**

Source: GIS Analysis

Table 6-93: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Taylortown

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$3,065
Commercial	50 Year	3	$19,426
Commercial	100 Year	3	$75,082
Commercial	300 Year	3	$481,880
Commercial	700 Year	3	$1,081,717
Government	25 Year	2	$1,389
Government	50 Year	2	$8,462
Government	100 Year	2	$37,244
Government	300 Year	2	$399,768
Government	700 Year	2	$1,091,603
All Categories	**25 Year**	**5**	**$4,454**
All Categories	**50 Year**	**5**	**$27,888**
All Categories	**100 Year**	**5**	**$112,326**
All Categories	**300 Year**	**5**	**$881,648**
All Categories	**700 Year**	**5**	**$2,173,320**

Source: GIS Analysis

Table 6-94: High Potential Loss Properties Exposed to the Hurricane Winds - Town of Vass

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$543
Commercial	50 Year	1	$1,706
Commercial	100 Year	1	$4,360
Commercial	300 Year	1	$20,132
Commercial	700 Year	1	$51,833

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	3	$2,153
Government	50 Year	3	$10,310
Government	100 Year	3	$39,819
Government	300 Year	3	$382,588
Government	700 Year	3	$1,118,275
Residential	25 Year	3	$8,899
Residential	50 Year	3	$24,045
Residential	100 Year	3	$63,258
Residential	300 Year	3	$742,244
Residential	700 Year	3	$1,719,423
All Categories	**25 Year**	**7**	**$11,595**
All Categories	**50 Year**	**7**	**$36,061**
All Categories	**100 Year**	**7**	**$107,437**
All Categories	**300 Year**	**7**	**$1,144,964**
All Categories	**700 Year**	**7**	**$2,889,531**

Source: GIS Analysis

Table 6-95: High Potential Loss Properties Exposed to the Hurricane Winds - Village of Foxfire

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$1,747
Commercial	50 Year	1	$5,548
Commercial	100 Year	1	$14,230
Commercial	300 Year	1	$43,482
Commercial	700 Year	1	$76,256
All Categories	**25 Year**	**1**	**$1,747**
All Categories	**50 Year**	**1**	**$5,548**
All Categories	**100 Year**	**1**	**$14,230**
All Categories	**300 Year**	**1**	**$43,482**
All Categories	**700 Year**	**1**	**$76,256**

Source: GIS Analysis

Table 6-96: High Potential Loss Properties Exposed to the Hurricane Winds - Village of Pinehurst

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	54	$70,875
Commercial	50 Year	54	$282,776
Commercial	100 Year	54	$1,029,272
Commercial	300 Year	54	$7,420,747
Commercial	700 Year	54	$18,739,626
Government	25 Year	4	$1,093
Government	50 Year	4	$6,104
Government	100 Year	4	$25,828
Government	300 Year	4	$225,976
Government	700 Year	4	$524,819
Religious	25 Year	4	$1,917
Religious	50 Year	4	$9,136
Religious	100 Year	4	$33,539
Religious	300 Year	4	$234,672
Religious	700 Year	4	$539,767
Residential	25 Year	62	$39,290
Residential	50 Year	66	$142,464
Residential	100 Year	66	$358,514
Residential	300 Year	66	$2,380,635
Residential	700 Year	66	$6,875,114
Utilities	25 Year	1	$1,007
Utilities	50 Year	1	$2,106
Utilities	100 Year	1	$6,333
Utilities	300 Year	1	$117,930
Utilities	700 Year	1	$412,115
All Categories	**25 Year**	**125**	**$114,182**
All Categories	**50 Year**	**129**	**$442,586**
All Categories	**100 Year**	**129**	**$1,453,486**
All Categories	**300 Year**	**129**	**$10,379,960**
All Categories	**700 Year**	**129**	**$27,091,441**

Source: GIS Analysis

Table 6-97: High Potential Loss Properties Exposed to the Hurricane Winds - Village of Whispering Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	6	$1,492
Commercial	50 Year	6	$4,791
Commercial	100 Year	6	$15,699
Commercial	300 Year	6	$131,833
Commercial	700 Year	6	$347,279
Government	25 Year	1	$1,086
Government	50 Year	1	$6,759
Government	100 Year	1	$26,725
Government	300 Year	1	$232,175
Government	700 Year	1	$716,230
All Categories	**25 Year**	**7**	**$2,578**
All Categories	**50 Year**	**7**	**$11,550**
All Categories	**100 Year**	**7**	**$42,424**
All Categories	**300 Year**	**7**	**$364,008**
All Categories	**700 Year**	**7**	**$1,063,509**

Source: GIS Analysis

Historical evidence indicates that the Cape Fear Region has a significant risk to the hurricane and tropical storm hazard.

Hurricanes and tropical storms can cause damage through numerous additional hazards such as flooding, erosion, tornadoes, and high winds and precipitation, thus it is difficult to estimate total potential losses from these cumulative effects. It can be assumed that all existing and future buildings and populations are at risk to the hurricane and tropical storm hazard.

6.5.5 Social Vulnerability

Given equal susceptibility across the entire Cape Fear Region, it is assumed that the total population is at risk to the hurricane and tropical storm hazard.

6.5.6 Critical Facilities

Given equal vulnerability across the Cape Fear Region, all critical facilities are considered to be at risk.

Some buildings may perform better than others in the face of such an event due to construction and age, among other factors. Determining individual building response is beyond the scope of this plan. However, this plan will consider mitigation actions for vulnerable structures, including critical facilities, to reduce the impacts of the hurricane wind hazard. A list of specific critical facilities and their associated risk can be found in **Table 6.17** at the end of this section.

In conclusion, a hurricane event has the potential to impact many existing and future buildings, critical facilities, and populations in the Cape Fear Region. Hurricane events can cause substantial damage in their wake including fatalities, extensive debris clean-up, and extended power outages.

6.5.7 Earthquake

The following tables provide counts and values by jurisdiction relevant to Earthquake hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-98: Population Impacted by the 250 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	16,852	39.9%	7,745	3,088	39.9%	2,608	1,040	39.9%
Town of Goldston	263	50	19%	48	9	18.8%	16	3	18.8%
Town of Pittsboro	6,417	1,406	21.9%	1,176	258	21.9%	396	87	22%
Town of Siler City	13,243	12,515	94.5%	2,427	2,294	94.5%	817	772	94.5%
Subtotal Chatham	*62,189*	*30,823*	*49.6%*	*11396*	*5649*	*49.6%*	*3837*	*1902*	*49.6%*
Harnett									
City of Dunn	10,132	1,159	11.4%	1,056	121	11.5%	822	94	11.4%
Harnett County (Unincorporated Area)	85,585	24,333	28.4%	8,921	2,536	28.4%	6,948	1,975	28.4%
Town of Angier	5,712	986	17.3%	594	103	17.3%	462	80	17.3%
Town of Broadway	1,813	462	25.5%	246	63	25.6%	133	34	25.6%
Town of Coats	2,860	616	21.5%	298	64	21.5%	232	50	21.6%
Town of Erwin	6,272	1,039	16.6%	654	108	16.5%	509	84	16.5%
Town of Lillington	4,071	850	20.9%	424	88	20.8%	330	69	20.9%
Subtotal Harnett	*121,431*	*31,910*	*26.3%*	*12702*	*3335*	*26.3%*	*9815*	*2573*	*26.2%*
Johnston									
Johnston County (Unincorporated Area)	94,330	22,745	24.1%	9,632	2,323	24.1%	7,169	1,729	24.1%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Archer Lodge	4,150	761	18.3%	424	78	18.4%	315	58	18.4%
Town of Benson	4,986	2,465	49.4%	509	252	49.5%	379	187	49.3%
Town of Clayton	27,459	7,709	28.1%	2,804	787	28.1%	2,087	586	28.1%
Town of Four Oaks	4,719	2,498	52.9%	482	255	52.9%	359	190	52.9%
Town of Kenly	2,087	364	17.4%	222	39	17.6%	156	27	17.3%
Town of Micro	950	133	14%	97	14	14.4%	72	10	13.9%
Town of Pine Level	2,767	116	4.2%	283	12	4.2%	210	9	4.3%
Town of Princeton	1,729	115	6.7%	177	12	6.8%	131	9	6.9%
Town of Selma	8,565	1,600	18.7%	875	163	18.6%	651	122	18.7%
Town of Smithfield	14,194	2,541	17.9%	1,449	259	17.9%	1,079	193	17.9%
Town of Wilson's Mills	3,324	961	28.9%	339	98	28.9%	253	73	28.9%
Subtotal Johnston	*164,274*	*39,543*	*24.1%*	*16784*	*4040*	*24.1%*	*12482*	*3006*	*24.1%*
Lee									
City of Sanford	30,778	4,636	15.1%	4,222	636	15.1%	2,245	338	15.1%
Lee County (Unincorporated Area)	25,355	10,310	40.7%	3,478	1,414	40.7%	1,850	752	40.6%
Subtotal Lee	*56,133*	*14,946*	*26.6%*	*7700*	*2050*	*26.6%*	*4095*	*1090*	*26.6%*
Moore									
Moore County (Unincorporated Area)	34,917	34,559	99%	7,910	7,829	99%	1,996	1,976	99%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*87,871*	*99.6%*	*19986*	*19905*	*99.6%*	*5043*	*5023*	*99.6%*
TOTAL PLAN	**492,256**	**205,093**	**41.7%**	**68568**	**34979**	**51%**	**35272**	**13594**	**38.5%**

Source: GIS Analysis

Table 6-99: Population Impacted by the 500 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent

Source: GIS Analysis

Table 6-100: Population Impacted by the 750 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-101: Population Impacted by the 1000 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-102: Population Impacted by the 1500 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-103: Population Impacted by the 2000 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-104: Population Impacted by the 2500 Year Earthquake

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-105: Buildings Impacted by the 250 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	13,511	48.5%	9,080	32.6%	$43,809	4,622	16.6%	$186,782	324	1.2%	$30,685	14,026	50.3%	$261,275

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Goldston	244	86	35.2%	37	15.2%	$328	41	16.8%	$3,943	8	3.3%	$1,584	86	35.2%	$5,855
Town of Pittsboro	3,678	1,172	31.9%	692	18.8%	$5,258	399	10.8%	$28,825	79	2.1%	$12,381	1,170	31.8%	$46,465
Town of Siler City	6,630	6,322	95.4%	5,184	78.2%	$20,108	979	14.8%	$125,305	150	2.3%	$31,213	6,313	95.2%	$176,627
Subtotal Chatham	*38,411*	*21,091*	*54.9%*	*14,993*	*39%*	*$69,503*	*6,041*	*15.7%*	*$344,855*	*561*	*1.5%*	*$75,863*	*21,595*	*56.2%*	*$490,222*
Harnett															
City of Dunn	4,925	1,126	22.9%	480	9.7%	$4,538	534	10.8%	$42,810	111	2.3%	$11,600	1,125	22.8%	$58,948
Harnett County (Unincorporated Area)	40,441	11,369	28.1%	10,551	26.1%	$30,636	2,619	6.5%	$71,092	570	1.4%	$84,445	13,740	34%	$186,174
Town of Angier	2,541	593	23.3%	403	15.9%	$3,206	158	6.2%	$5,749	35	1.4%	$3,090	596	23.5%	$12,045
Town of Broadway	1,048	342	32.6%	237	22.6%	$1,176	98	9.4%	$3,592	15	1.4%	$2,590	350	33.4%	$7,358
Town of Coats	1,457	383	26.3%	293	20.1%	$1,468	69	4.7%	$2,044	21	1.4%	$6,156	383	26.3%	$9,668
Town of Erwin	3,117	665	21.3%	480	15.4%	$2,244	119	3.8%	$20,832	64	2.1%	$6,808	663	21.3%	$29,884
Town of Lillington	1,589	456	28.7%	271	17.1%	$2,021	156	9.8%	$19,249	112	7%	$16,382	539	33.9%	$37,652
Subtotal Harnett	*57,879*	*16,511*	*28.5%*	*13,755*	*23.8%*	*$48,751*	*4,348*	*7.5%*	*$182,531*	*970*	*1.7%*	*$134,406*	*19,073*	*33%*	*$365,689*
Johnston															
Johnston County (Unincorporated Area)	47,795	8,938	18.7%	9,137	19.1%	$13,872	8,072	16.9%	$33,338	299	0.6%	$15,625	17,508	36.6%	$62,835
Town of Archer Lodge	1,599	0	0%	268	16.8%	$124	131	8.2%	$335	4	0.3%	$240	403	25.2%	$699
Town of Benson	2,761	1,577	57.1%	1,040	37.7%	$3,462	595	21.6%	$17,163	42	1.5%	$3,335	1,677	60.7%	$23,960
Town of Clayton	9,845	1,489	15.1%	2,518	25.6%	$3,414	737	7.5%	$38,522	82	0.8%	$7,992	3,337	33.9%	$49,928
Town of Four Oaks	2,838	1,642	57.9%	1,192	42%	$1,372	538	19%	$5,388	25	0.9%	$1,080	1,755	61.8%	$7,840
Town of Kenly	1,314	295	22.5%	187	14.2%	$662	96	7.3%	$2,627	15	1.1%	$591	298	22.7%	$3,879
Town of Micro	577	85	14.7%	61	10.6%	$196	19	3.3%	$715	10	1.7%	$528	90	15.6%	$1,439
Town of Pine Level	1,426	218	15.3%	51	3.6%	$259	161	11.3%	$1,373	13	0.9%	$574	225	15.8%	$2,206

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Princeton	1,000	103	10.3%	55	5.5%	$347	51	5.1%	$1,147	13	1.3%	$760	119	11.9%	$2,255
Town of Selma	3,784	1,064	28.1%	586	15.5%	$2,121	466	12.3%	$12,180	48	1.3%	$3,887	1,100	29.1%	$18,188
Town of Smithfield	6,924	1,269	18.3%	1,021	14.7%	$4,172	823	11.9%	$47,240	136	2%	$9,226	1,980	28.6%	$60,638
Town of Wilson's Mills	1,397	403	28.8%	353	25.3%	$182	136	9.7%	$2,159	14	1%	$401	503	36%	$2,742
Subtotal Johnston	*78,499*	*15,506*	*19.8%*	*15,429*	*19.7%*	*$26,721*	*11,230*	*14.3%*	*$145,024*	*659*	*0.8%*	*$40,904*	*27,318*	*34.8%*	*$212,649*
Lee															
City of Sanford	12,108	2,842	23.5%	1,535	12.7%	$25,196	1,439	11.9%	$335,533	260	2.1%	$72,405	3,234	26.7%	$433,134
Lee County (Unincorporated Area)	14,761	4,143	28.1%	5,160	35%	$21,719	1,921	13%	$103,919	106	0.7%	$29,405	7,187	48.7%	$155,043
Subtotal Lee	*26,869*	*6,985*	*26%*	*6,695*	*24.9%*	*$46,915*	*3,360*	*12.5%*	*$439,452*	*366*	*1.4%*	*$101,810*	*10,421*	*38.8%*	*$588,177*
Moore															
Moore County (Unincorporated Area)	28,697	20,885	72.8%	23,031	80.3%	$144,841	5,034	17.5%	$238,020	381	1.3%	$79,273	28,446	99.1%	$462,134
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$29,087	467	13.7%	$131,410	83	2.4%	$19,056	3,401	100%	$179,553
Town of Cameron	594	497	83.7%	491	82.7%	$1,241	83	14%	$3,838	20	3.4%	$2,787	594	100%	$7,865
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$9,019	211	10.5%	$33,864	172	8.6%	$32,132	2,007	99.8%	$75,015
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$10,906	76	5.1%	$15,669	12	0.8%	$2,429	1,496	99.7%	$29,004
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$8,749	160	11.2%	$17,951	48	3.4%	$9,510	1,424	99.8%	$36,210
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$88,426	844	10.9%	$183,452	199	2.6%	$46,910	7,753	100%	$318,787
Town of Taylortown	458	457	99.8%	413	90.2%	$2,841	31	6.8%	$10,264	14	3.1%	$4,200	458	100%	$17,306
Town of Vass	960	948	98.8%	738	76.9%	$4,799	189	19.7%	$9,274	33	3.4%	$6,739	960	100%	$20,811
Village of Foxfire	589	330	56%	515	87.4%	$10,548	68	11.5%	$4,224	6	1%	$922	589	100%	$15,695
Village of Pinehurst	8,291	3,684	44.4%	7,898	95.3%	$106,682	342	4.1%	$143,187	47	0.6%	$14,123	8,287	100%	$263,992

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$12,788	85	4.7%	$8,946	17	0.9%	$3,963	1,795	100%	$25,697
Subtotal Moore	*57,478*	*39,988*	*69.6%*	*48,588*	*84.5%*	*$429,927*	*7,590*	*13.2%*	*$800,099*	*1,032*	*1.8%*	*$222,044*	*57,210*	*99.5%*	*$1,452,069*
TOTAL PLAN	**259,136**	**100,081**	**38.6%**	**99,460**	**38.4%**	**$621,817**	**32,569**	**12.6%**	**$1,911,961**	**3,588**	**1.4%**	**$575,027**	**135,617**	**52.3%**	**$3,108,806**

Source: GIS Analysis

Table 6-106: Buildings Impacted by the 500 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$1,711,153	4,716	16.9%	$1,780,803	384	1.4%	$376,254	27,826	99.9%	$3,868,209
Town of Goldston	244	244	100%	193	79.1%	$16,090	41	16.8%	$40,952	10	4.1%	$15,058	244	100%	$72,099
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$222,477	409	11.1%	$298,805	94	2.6%	$132,003	3,676	99.9%	$653,286
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$430,837	982	14.8%	$1,053,240	153	2.3%	$304,896	6,621	99.9%	$1,788,973
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$2,380,557*	*6,148*	*16%*	*$3,173,800*	*641*	*1.7%*	*$828,211*	*38,367*	*99.9%*	*$6,382,567*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$213,059	545	11.1%	$507,568	126	2.6%	$174,159	4,924	100%	$894,787
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$1,861,174	2,644	6.5%	$830,024	643	1.6%	$1,007,629	40,440	100%	$3,698,827
Town of Angier	2,541	2,490	98%	2,344	92.2%	$110,721	158	6.2%	$72,528	39	1.5%	$51,025	2,541	100%	$234,274
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$52,432	98	9.4%	$43,035	19	1.8%	$30,382	1,048	100%	$125,849
Town of Coats	1,457	1,457	100%	1,364	93.6%	$52,699	69	4.7%	$24,407	24	1.6%	$50,608	1,457	100%	$127,714

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$116,785	120	3.8%	$226,786	72	2.3%	$91,819	3,115	99.9%	$435,390
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$81,119	159	10%	$228,057	114	7.2%	$174,835	1,580	99.4%	$484,011
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$2,608,172*	*4,389*	*7.6%*	*$2,131,950*	*1,087*	*1.9%*	*$1,632,737*	*57,863*	*100%*	*$6,372,860*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$1,246,204	9,432	19.7%	$605,345	448	0.9%	$258,901	47,784	100%	$2,110,450
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$36,158	133	8.3%	$5,274	4	0.3%	$2,975	1,599	100%	$44,406
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$120,183	596	21.6%	$199,545	50	1.8%	$52,280	2,758	99.9%	$372,008
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$338,936	751	7.6%	$416,210	102	1%	$99,745	9,841	100%	$854,891
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$96,407	539	19%	$62,538	27	1%	$24,636	2,838	100%	$183,580
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$34,120	216	16.4%	$43,216	20	1.5%	$7,495	1,313	99.9%	$84,830
Town of Micro	577	534	92.5%	436	75.6%	$12,542	106	18.4%	$9,845	35	6.1%	$14,810	577	100%	$37,196
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$37,058	185	13%	$17,933	22	1.5%	$9,977	1,426	100%	$64,968
Town of Princeton	1,000	724	72.4%	824	82.4%	$26,109	140	14%	$18,332	35	3.5%	$16,626	999	99.9%	$61,068
Town of Selma	3,784	3,520	93%	3,176	83.9%	$103,927	530	14%	$163,300	75	2%	$37,455	3,781	99.9%	$304,682
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$285,013	956	13.8%	$623,171	197	2.8%	$153,962	6,916	99.9%	$1,062,147
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$33,566	139	9.9%	$24,659	31	2.2%	$10,156	1,390	99.5%	$68,381
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$2,250,040*	*13,127*	*16.7%*	*$1,989,823*	*996*	*1.3%*	*$636,738*	*78,464*	*100%*	*$4,876,599*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$817,207	1,469	12.1%	$3,264,369	309	2.6%	$752,496	12,098	99.9%	$4,834,072
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$800,321	1,932	13.1%	$1,079,525	128	0.9%	$305,801	14,753	99.9%	$2,185,647
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$1,617,528*	*3,401*	*12.7%*	*$4,343,894*	*437*	*1.6%*	*$1,058,297*	*26,851*	*99.9%*	*$7,019,719*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$2,070,521	5,035	17.5%	$2,000,018	382	1.3%	$689,505	28,687	100%	$4,760,043
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$416,464	467	13.7%	$1,142,936	83	2.4%	$156,548	3,401	100%	$1,715,948
Town of Cameron	594	497	83.7%	491	82.7%	$30,925	83	14%	$37,694	20	3.4%	$26,140	594	100%	$94,759
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$141,638	211	10.5%	$299,862	172	8.6%	$302,491	2,007	99.8%	$743,991
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$143,402	76	5.1%	$131,487	12	0.8%	$20,418	1,496	99.7%	$295,307
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$102,950	160	11.2%	$152,319	48	3.4%	$79,051	1,424	99.8%	$334,320
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,295,720	845	10.9%	$1,609,273	199	2.6%	$417,361	7,754	100%	$3,322,354
Town of Taylortown	458	457	99.8%	413	90.2%	$40,152	31	6.8%	$93,646	14	3.1%	$36,487	458	100%	$170,285
Town of Vass	960	948	98.8%	738	76.9%	$79,409	189	19.7%	$87,335	33	3.4%	$58,782	960	100%	$225,526
Village of Foxfire	589	330	56%	515	87.4%	$118,244	68	11.5%	$35,893	6	1%	$6,324	589	100%	$160,461
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$1,638,879	345	4.2%	$1,222,047	47	0.6%	$124,234	8,290	100%	$2,985,160
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$258,905	85	4.7%	$74,942	17	0.9%	$37,358	1,795	100%	$371,205
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$6,337,209*	*7,595*	*13.2%*	*$6,887,452*	*1,033*	*1.8%*	*$1,954,699*	*57,455*	*100%*	*$15,179,359*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$15,193,506**	**34,660**	**13.4%**	**$18,526,919**	**4,194**	**1.6%**	**$6,110,682**	**259,000**	**99.9%**	**$39,831,104**

Source: GIS Analysis

Table 6-107: Buildings Impacted by the 750 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$4,724,659	4,716	16.9%	$3,898,969	384	1.4%	$923,287	27,826	99.9%	$9,546,914
Town of Goldston	244	244	100%	193	79.1%	$44,731	41	16.8%	$96,380	10	4.1%	$35,146	244	100%	$176,257
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$610,018	409	11.1%	$672,791	94	2.6%	$291,354	3,676	99.9%	$1,574,162
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$1,113,037	982	14.8%	$2,291,293	153	2.3%	$693,660	6,621	99.9%	$4,097,990
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$6,492,445*	*6,148*	*16%*	*$6,959,433*	*641*	*1.7%*	*$1,943,447*	*38,367*	*99.9%*	*$15,395,323*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$676,842	545	11.1%	$1,322,303	126	2.6%	$443,248	4,924	100%	$2,442,393
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$5,576,536	2,644	6.5%	$1,960,354	643	1.6%	$2,514,582	40,440	100%	$10,051,472
Town of Angier	2,541	2,490	98%	2,344	92.2%	$328,114	158	6.2%	$171,965	39	1.5%	$129,030	2,541	100%	$629,110
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$148,718	98	9.4%	$107,046	19	1.8%	$65,310	1,048	100%	$321,074
Town of Coats	1,457	1,457	100%	1,364	93.6%	$165,377	69	4.7%	$59,019	24	1.6%	$127,758	1,457	100%	$352,155
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$377,345	120	3.8%	$598,070	72	2.3%	$242,444	3,115	99.9%	$1,217,859
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$236,014	159	10%	$518,799	114	7.2%	$412,604	1,580	99.4%	$1,167,417
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$7,869,876*	*4,389*	*7.6%*	*$5,226,474*	*1,087*	*1.9%*	*$4,078,198*	*57,863*	*100%*	*$17,174,550*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$4,035,771	9,432	19.7%	$1,618,441	448	0.9%	$706,567	47,784	100%	$6,360,779
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$124,107	133	8.3%	$14,746	4	0.3%	$8,546	1,599	100%	$147,399

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$360,930	596	21.6%	$488,918	50	1.8%	$143,222	2,758	99.9%	$993,070
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$1,099,219	751	7.6%	$1,104,476	102	1%	$278,319	9,841	100%	$2,482,014
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$286,560	539	19%	$162,275	27	1%	$65,891	2,838	100%	$514,725
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$113,831	216	16.4%	$132,676	20	1.5%	$23,031	1,313	99.9%	$269,539
Town of Micro	577	534	92.5%	436	75.6%	$42,668	106	18.4%	$29,186	35	6.1%	$48,060	577	100%	$119,914
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$120,420	185	13%	$48,028	22	1.5%	$29,597	1,426	100%	$198,045
Town of Princeton	1,000	724	72.4%	824	82.4%	$88,397	140	14%	$57,721	35	3.5%	$53,579	999	99.9%	$199,697
Town of Selma	3,784	3,520	93%	3,176	83.9%	$331,731	530	14%	$460,664	75	2%	$111,516	3,781	99.9%	$903,912
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$870,246	956	13.8%	$1,775,995	197	2.8%	$439,655	6,916	99.9%	$3,085,896
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$109,700	139	9.9%	$63,035	31	2.2%	$29,721	1,390	99.5%	$202,456
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$7,222,650*	*13,127*	*16.7%*	*$5,467,243*	*996*	*1.3%*	*$1,794,482*	*78,464*	*100%*	*$14,484,376*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$2,262,895	1,469	12.1%	$7,736,104	309	2.6%	$1,851,662	12,098	99.9%	$11,850,660
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$2,207,236	1,932	13.1%	$2,511,677	128	0.9%	$722,631	14,753	99.9%	$5,441,544
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$4,470,131*	*3,401*	*12.7%*	*$10,247,781*	*437*	*1.6%*	*$2,574,293*	*26,851*	*99.9%*	*$17,292,204*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$5,971,501	5,035	17.5%	$4,687,628	382	1.3%	$1,711,907	28,687	100%	$12,371,036
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$1,263,462	467	13.7%	$2,837,531	83	2.4%	$398,154	3,401	100%	$4,499,146

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Cameron	594	497	83.7%	491	82.7%	$89,393	83	14%	$91,309	20	3.4%	$55,186	594	100%	$235,889
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$414,589	211	10.5%	$720,088	172	8.6%	$744,301	2,007	99.8%	$1,878,979
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$421,911	76	5.1%	$290,518	12	0.8%	$51,019	1,496	99.7%	$763,447
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$291,282	160	11.2%	$361,272	48	3.4%	$183,518	1,424	99.8%	$836,072
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$3,899,093	845	10.9%	$4,038,060	199	2.6%	$1,065,746	7,754	100%	$9,002,900
Town of Taylortown	458	457	99.8%	413	90.2%	$119,534	31	6.8%	$223,067	14	3.1%	$88,896	458	100%	$431,498
Town of Vass	960	948	98.8%	738	76.9%	$231,090	189	19.7%	$206,521	33	3.4%	$147,849	960	100%	$585,460
Village of Foxfire	589	330	56%	515	87.4%	$345,555	68	11.5%	$86,365	6	1%	$15,291	589	100%	$447,211
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$5,044,051	345	4.2%	$3,109,096	47	0.6%	$332,094	8,290	100%	$8,485,241
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$791,420	85	4.7%	$174,529	17	0.9%	$91,297	1,795	100%	$1,057,246
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$18,882,881*	*7,595*	*13.2%*	*$16,825,984*	*1,033*	*1.8%*	*$4,885,258*	*57,455*	*100%*	*$40,594,125*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$44,937,983**	**34,660**	**13.4%**	**$44,726,915**	**4,194**	**1.6%**	**$15,275,678**	**259,000**	**99.9%**	**$104,940,578**

Source: GIS Analysis

Table 6-108: Buildings Impacted by the 1000 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$9,047,714	4,716	16.9%	$6,228,992	384	1.4%	$1,591,005	27,826	99.9%	$16,867,710
Town of Goldston	244	244	100%	193	79.1%	$79,986	41	16.8%	$156,819	10	4.1%	$59,582	244	100%	$296,387
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$1,141,736	409	11.1%	$1,114,772	94	2.6%	$491,834	3,676	99.9%	$2,748,343
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$1,944,841	982	14.8%	$3,603,720	153	2.3%	$1,143,612	6,621	99.9%	$6,692,173
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$12,214,277*	*6,148*	*16%*	*$11,104,303*	*641*	*1.7%*	*$3,286,033*	*38,367*	*99.9%*	*$26,604,613*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$1,312,812	545	11.1%	$2,340,979	126	2.6%	$784,268	4,924	100%	$4,438,058
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$9,924,187	2,644	6.5%	$3,258,368	643	1.6%	$4,403,912	40,440	100%	$17,586,466
Town of Angier	2,541	2,490	98%	2,344	92.2%	$641,914	158	6.2%	$297,414	39	1.5%	$228,586	2,541	100%	$1,167,914
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$262,910	98	9.4%	$177,393	19	1.8%	$101,707	1,048	100%	$542,009
Town of Coats	1,457	1,457	100%	1,364	93.6%	$326,278	69	4.7%	$103,241	24	1.6%	$236,514	1,457	100%	$666,033
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$734,065	120	3.8%	$1,044,200	72	2.3%	$436,480	3,115	99.9%	$2,214,744
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$433,037	159	10%	$828,820	114	7.2%	$694,717	1,580	99.4%	$1,956,574
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$14,360,721*	*4,389*	*7.6%*	*$8,914,921*	*1,087*	*1.9%*	*$7,165,264*	*57,863*	*100%*	*$30,440,901*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$8,143,183	9,432	19.7%	$2,879,648	448	0.9%	$1,370,351	47,784	100%	$12,393,182
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$245,390	133	8.3%	$25,508	4	0.3%	$15,530	1,599	100%	$286,429
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$725,518	596	21.6%	$864,506	50	1.8%	$279,080	2,758	99.9%	$1,869,103

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$2,217,431	751	7.6%	$1,949,518	102	1%	$531,846	9,841	100%	$4,698,794
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$602,462	539	19%	$310,861	27	1%	$135,087	2,838	100%	$1,048,410
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$217,648	216	16.4%	$235,346	20	1.5%	$41,115	1,313	99.9%	$494,109
Town of Micro	577	534	92.5%	436	75.6%	$84,971	106	18.4%	$50,788	35	6.1%	$88,793	577	100%	$224,552
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$242,703	185	13%	$85,664	22	1.5%	$57,140	1,426	100%	$385,507
Town of Princeton	1,000	724	72.4%	824	82.4%	$177,820	140	14%	$109,961	35	3.5%	$104,650	999	99.9%	$392,431
Town of Selma	3,784	3,520	93%	3,176	83.9%	$669,500	530	14%	$837,302	75	2%	$217,429	3,781	99.9%	$1,724,231
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$1,779,229	956	13.8%	$3,330,957	197	2.8%	$844,390	6,916	99.9%	$5,954,576
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$216,875	139	9.9%	$104,409	31	2.2%	$56,959	1,390	99.5%	$378,243
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$14,597,212*	*13,127*	*16.7%*	*$9,919,962*	*996*	*1.3%*	*$3,463,290*	*78,464*	*100%*	*$27,980,464*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$3,990,559	1,469	12.1%	$12,496,665	309	2.6%	$3,141,701	12,098	99.9%	$19,628,924
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$3,725,987	1,932	13.1%	$3,977,787	128	0.9%	$1,189,950	14,753	99.9%	$8,893,724
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$7,716,546*	*3,401*	*12.7%*	*$16,474,452*	*437*	*1.6%*	*$4,331,651*	*26,851*	*99.9%*	*$28,522,648*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$10,134,440	5,035	17.5%	$7,235,051	382	1.3%	$2,890,881	28,687	100%	$20,260,373
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$2,383,303	467	13.7%	$4,833,439	83	2.4%	$756,626	3,401	100%	$7,973,369
Town of Cameron	594	497	83.7%	491	82.7%	$146,314	83	14%	$144,872	20	3.4%	$83,768	594	100%	$374,953
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$676,636	211	10.5%	$1,103,927	172	8.6%	$1,165,964	2,007	99.8%	$2,946,527
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$804,861	76	5.1%	$478,252	12	0.8%	$79,809	1,496	99.7%	$1,362,923
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$472,950	160	11.2%	$545,211	48	3.4%	$292,818	1,424	99.8%	$1,310,979

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$7,140,008	845	10.9%	$6,891,385	199	2.6%	$1,878,518	7,754	100%	$15,909,911
Town of Taylortown	458	457	99.8%	413	90.2%	$217,172	31	6.8%	$354,864	14	3.1%	$136,236	458	100%	$708,272
Town of Vass	960	948	98.8%	738	76.9%	$394,268	189	19.7%	$319,396	33	3.4%	$234,772	960	100%	$948,436
Village of Foxfire	589	330	56%	515	87.4%	$643,613	68	11.5%	$131,301	6	1%	$26,458	589	100%	$801,371
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$9,318,438	345	4.2%	$5,162,900	47	0.6%	$596,992	8,290	100%	$15,078,330
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$1,374,870	85	4.7%	$264,280	17	0.9%	$136,410	1,795	100%	$1,775,559
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$33,706,873*	*7,595*	*13.2%*	*$27,464,878*	*1,033*	*1.8%*	*$8,279,252*	*57,455*	*100%*	*$69,451,003*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$82,595,629**	**34,660**	**13.4%**	**$73,878,516**	**4,194**	**1.6%**	**$26,525,490**	**259,000**	**99.9%**	**$182,999,629**

Source: GIS Analysis

Table 6-109: Buildings Impacted by the 1500 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$17,522,364	4,716	16.9%	$11,336,539	384	1.4%	$2,947,332	27,826	99.9%	$31,806,235
Town of Goldston	244	244	100%	193	79.1%	$171,319	41	16.8%	$308,761	10	4.1%	$121,159	244	100%	$601,239
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$2,226,165	409	11.1%	$1,927,872	94	2.6%	$872,888	3,676	99.9%	$5,026,926
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$3,863,224	982	14.8%	$6,417,183	153	2.3%	$2,132,121	6,621	99.9%	$12,412,528
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$23,783,072*	*6,148*	*16%*	*$19,990,355*	*641*	*1.7%*	*$6,073,500*	*38,367*	*99.9%*	*$49,846,928*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$2,867,031	545	11.1%	$4,724,548	126	2.6%	$1,569,927	4,924	100%	$9,161,505
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$21,516,116	2,644	6.5%	$6,357,641	643	1.6%	$8,318,528	40,440	100%	$36,192,284
Town of Angier	2,541	2,490	98%	2,344	92.2%	$1,312,028	158	6.2%	$513,247	39	1.5%	$450,416	2,541	100%	$2,275,690
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$565,021	98	9.4%	$342,644	19	1.8%	$203,298	1,048	100%	$1,110,963
Town of Coats	1,457	1,457	100%	1,364	93.6%	$708,534	69	4.7%	$192,622	24	1.6%	$447,043	1,457	100%	$1,348,199
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$1,659,841	120	3.8%	$1,969,453	72	2.3%	$879,136	3,115	99.9%	$4,508,431
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$914,818	159	10%	$1,447,826	114	7.2%	$1,395,069	1,580	99.4%	$3,757,713
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$31,002,314*	*4,389*	*7.6%*	*$17,087,951*	*1,087*	*1.9%*	*$13,803,101*	*57,863*	*100%*	*$61,893,364*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$15,451,399	9,432	19.7%	$4,911,434	448	0.9%	$2,494,064	47,784	100%	$22,856,897
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$469,114	133	8.3%	$42,428	4	0.3%	$26,833	1,599	100%	$538,376
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$1,458,925	596	21.6%	$1,539,970	50	1.8%	$539,684	2,758	99.9%	$3,538,579
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$4,104,606	751	7.6%	$3,153,977	102	1%	$939,022	9,841	100%	$8,197,605
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$1,155,627	539	19%	$538,830	27	1%	$251,575	2,838	100%	$1,946,031
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$439,601	216	16.4%	$427,983	20	1.5%	$76,235	1,313	99.9%	$943,819
Town of Micro	577	534	92.5%	436	75.6%	$165,078	106	18.4%	$87,519	35	6.1%	$157,597	577	100%	$410,195
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$453,272	185	13%	$143,220	22	1.5%	$100,744	1,426	100%	$697,236
Town of Princeton	1,000	724	72.4%	824	82.4%	$337,224	140	14%	$197,347	35	3.5%	$192,933	999	99.9%	$727,504
Town of Selma	3,784	3,520	93%	3,176	83.9%	$1,275,143	530	14%	$1,419,730	75	2%	$396,110	3,781	99.9%	$3,090,983
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$3,264,942	956	13.8%	$5,629,969	197	2.8%	$1,466,121	6,916	99.9%	$10,361,032

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$390,972	139	9.9%	$166,513	31	2.2%	$104,269	1,390	99.5%	$661,754
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$27,506,978*	*13,127*	*16.7%*	*$16,718,950*	*996*	*1.3%*	*$6,205,503*	*78,464*	*100%*	*$50,431,432*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$8,742,142	1,469	12.1%	$24,058,855	309	2.6%	$6,315,903	12,098	99.9%	$39,116,900
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$7,959,988	1,932	13.1%	$7,137,628	128	0.9%	$2,161,533	14,753	99.9%	$17,259,149
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$16,702,130*	*3,401*	*12.7%*	*$31,196,483*	*437*	*1.6%*	*$8,477,436*	*26,851*	*99.9%*	*$56,376,049*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$22,252,056	5,035	17.5%	$13,496,930	382	1.3%	$5,715,695	28,687	100%	$41,464,682
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$4,698,583	467	13.7%	$9,061,189	83	2.4%	$1,730,333	3,401	100%	$15,490,105
Town of Cameron	594	497	83.7%	491	82.7%	$356,504	83	14%	$277,502	20	3.4%	$174,827	594	100%	$808,834
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$1,631,948	211	10.5%	$2,260,791	172	8.6%	$2,416,911	2,007	99.8%	$6,309,650
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$1,531,337	76	5.1%	$864,982	12	0.8%	$134,031	1,496	99.7%	$2,530,351
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$1,151,924	160	11.2%	$1,104,795	48	3.4%	$656,601	1,424	99.8%	$2,913,320
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$14,525,379	845	10.9%	$13,219,918	199	2.6%	$3,762,221	7,754	100%	$31,507,518
Town of Taylortown	458	457	99.8%	413	90.2%	$434,366	31	6.8%	$634,255	14	3.1%	$244,257	458	100%	$1,312,878
Town of Vass	960	948	98.8%	738	76.9%	$892,467	189	19.7%	$602,512	33	3.4%	$520,047	960	100%	$2,015,026
Village of Foxfire	589	330	56%	515	87.4%	$1,247,573	68	11.5%	$215,293	6	1%	$53,602	589	100%	$1,516,469
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$18,621,113	345	4.2%	$9,541,287	47	0.6%	$1,184,180	8,290	100%	$29,346,579
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$2,970,128	85	4.7%	$487,219	17	0.9%	$254,789	1,795	100%	$3,712,136

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$70,313,378*	*7,595*	*13.2%*	*$51,766,673*	*1,033*	*1.8%*	*$16,847,494*	*57,455*	*100%*	*$138,927,548*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$169,307,872**	**34,660**	**13.4%**	**$136,760,412**	**4,194**	**1.6%**	**$51,407,034**	**259,000**	**99.9%**	**$357,475,321**

Source: GIS Analysis

Table 6-110: Buildings Impacted by the 2000 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$28,211,532	4,716	16.9%	$16,889,545	384	1.4%	$4,378,678	27,826	99.9%	$49,479,754
Town of Goldston	244	244	100%	193	79.1%	$260,865	41	16.8%	$448,805	10	4.1%	$189,695	244	100%	$899,365
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$3,463,068	409	11.1%	$2,818,430	94	2.6%	$1,288,212	3,676	99.9%	$7,569,710
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$5,840,212	982	14.8%	$9,508,160	153	2.3%	$3,213,551	6,621	99.9%	$18,561,923
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$37,775,677*	*6,148*	*16%*	*$29,664,940*	*641*	*1.7%*	*$9,070,136*	*38,367*	*99.9%*	*$76,510,752*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$4,439,343	545	11.1%	$7,159,435	126	2.6%	$2,432,751	4,924	100%	$14,031,528
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$31,836,218	2,644	6.5%	$9,483,405	643	1.6%	$13,138,459	40,440	100%	$54,458,083
Town of Angier	2,541	2,490	98%	2,344	92.2%	$2,080,882	158	6.2%	$747,902	39	1.5%	$696,543	2,541	100%	$3,525,327

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$844,315	98	9.4%	$494,961	19	1.8%	$311,551	1,048	100%	$1,650,826
Town of Coats	1,457	1,457	100%	1,364	93.6%	$1,147,445	69	4.7%	$291,329	24	1.6%	$694,622	1,457	100%	$2,133,396
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$2,635,303	120	3.8%	$2,962,776	72	2.3%	$1,335,481	3,115	99.9%	$6,933,561
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$1,388,637	159	10%	$2,070,436	114	7.2%	$2,187,293	1,580	99.4%	$5,646,365
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$46,644,806*	*4,389*	*7.6%*	*$25,461,825*	*1,087*	*1.9%*	*$21,615,785*	*57,863*	*100%*	*$93,722,415*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$25,478,870	9,432	19.7%	$7,484,348	448	0.9%	$3,901,704	47,784	100%	$36,864,922
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$786,618	133	8.3%	$64,093	4	0.3%	$41,323	1,599	100%	$892,035
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$2,272,663	596	21.6%	$2,251,581	50	1.8%	$819,085	2,758	99.9%	$5,343,329
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$7,133,860	751	7.6%	$4,801,562	102	1%	$1,515,534	9,841	100%	$13,450,955
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$1,929,649	539	19%	$826,044	27	1%	$401,479	2,838	100%	$3,157,171
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$715,415	216	16.4%	$638,281	20	1.5%	$114,786	1,313	99.9%	$1,468,481
Town of Micro	577	534	92.5%	436	75.6%	$281,093	106	18.4%	$137,422	35	6.1%	$246,919	577	100%	$665,433
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$784,000	185	13%	$222,837	22	1.5%	$162,040	1,426	100%	$1,168,877
Town of Princeton	1,000	724	72.4%	824	82.4%	$579,280	140	14%	$316,611	35	3.5%	$316,888	999	99.9%	$1,212,779
Town of Selma	3,784	3,520	93%	3,176	83.9%	$2,241,247	530	14%	$2,249,161	75	2%	$646,355	3,781	99.9%	$5,136,763
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$5,667,913	956	13.8%	$9,041,634	197	2.8%	$2,398,986	6,916	99.9%	$17,108,533

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$665,645	139	9.9%	$246,101	31	2.2%	$167,328	1,390	99.5%	$1,079,074
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$46,263,590*	*13,127*	*16.7%*	*$26,028,094*	*996*	*1.3%*	*$9,913,342*	*78,464*	*100%*	*$82,205,023*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$12,897,808	1,469	12.1%	$34,632,403	309	2.6%	$9,748,985	12,098	99.9%	$57,279,196
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$11,607,107	1,932	13.1%	$10,135,291	128	0.9%	$3,255,579	14,753	99.9%	$24,997,978
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$24,504,915*	*3,401*	*12.7%*	*$44,767,694*	*437*	*1.6%*	*$13,004,564*	*26,851*	*99.9%*	*$82,277,174*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$32,922,586	5,035	17.5%	$19,767,266	382	1.3%	$8,677,729	28,687	100%	$61,367,581
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$7,357,844	467	13.7%	$14,349,136	83	2.4%	$2,899,076	3,401	100%	$24,606,057
Town of Cameron	594	497	83.7%	491	82.7%	$513,448	83	14%	$396,681	20	3.4%	$260,944	594	100%	$1,171,073
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$2,358,766	211	10.5%	$3,290,354	172	8.6%	$3,598,140	2,007	99.8%	$9,247,260
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$2,435,571	76	5.1%	$1,318,797	12	0.8%	$221,710	1,496	99.7%	$3,976,077
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$1,648,017	160	11.2%	$1,559,946	48	3.4%	$1,018,767	1,424	99.8%	$4,226,731
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$22,424,466	845	10.9%	$20,707,607	199	2.6%	$6,043,203	7,754	100%	$49,175,277
Town of Taylortown	458	457	99.8%	413	90.2%	$668,863	31	6.8%	$968,443	14	3.1%	$396,486	458	100%	$2,033,791
Town of Vass	960	948	98.8%	738	76.9%	$1,330,717	189	19.7%	$909,025	33	3.4%	$810,989	960	100%	$3,050,731

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Village of Foxfire	589	330	56%	515	87.4%	$1,944,532	68	11.5%	$328,207	6	1%	$81,115	589	100%	$2,353,854
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$28,676,248	345	4.2%	$14,236,227	47	0.6%	$1,837,743	8,290	100%	$44,750,219
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$4,425,856	85	4.7%	$727,527	17	0.9%	$384,831	1,795	100%	$5,538,214
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$106,706,914*	*7,595*	*13.2%*	*$78,559,216*	*1,033*	*1.8%*	*$26,230,733*	*57,455*	*100%*	*$211,496,865*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$261,895,902**	**34,660**	**13.4%**	**$204,481,769**	**4,194**	**1.6%**	**$79,834,560**	**259,000**	**99.9%**	**$546,212,229**

Source: GIS Analysis

Table 6-111: Buildings Impacted by the 2500 Year Earthquake

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$36,209,234	4,716	16.9%	$22,417,576	384	1.4%	$5,652,422	27,826	99.9%	$64,279,232
Town of Goldston	244	244	100%	193	79.1%	$322,244	41	16.8%	$553,779	10	4.1%	$246,444	244	100%	$1,122,467
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$4,358,567	409	11.1%	$3,600,560	94	2.6%	$1,647,098	3,676	99.9%	$9,606,225
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$7,212,574	982	14.8%	$12,064,517	153	2.3%	$4,145,566	6,621	99.9%	$23,422,657
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$48,102,619*	*6,148*	*16%*	*$38,636,432*	*641*	*1.7%*	*$11,691,530*	*38,367*	*99.9%*	*$98,430,581*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$5,647,349	545	11.1%	$9,357,574	126	2.6%	$3,213,891	4,924	100%	$18,218,813

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$42,802,582	2,644	6.5%	$12,512,683	643	1.6%	$17,806,657	40,440	100%	$73,121,922
Town of Angier	2,541	2,490	98%	2,344	92.2%	$2,649,869	158	6.2%	$944,739	39	1.5%	$960,651	2,541	100%	$4,555,259
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$1,096,893	98	9.4%	$652,821	19	1.8%	$446,386	1,048	100%	$2,196,099
Town of Coats	1,457	1,457	100%	1,364	93.6%	$1,456,383	69	4.7%	$374,723	24	1.6%	$948,085	1,457	100%	$2,779,190
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$3,394,899	120	3.8%	$3,888,019	72	2.3%	$1,737,437	3,115	99.9%	$9,020,355
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$1,763,586	159	10%	$2,624,470	114	7.2%	$2,959,660	1,580	99.4%	$7,347,716
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$61,660,298*	*4,389*	*7.6%*	*$33,115,713*	*1,087*	*1.9%*	*$29,083,324*	*57,863*	*100%*	*$123,859,332*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$33,526,738	9,432	19.7%	$9,675,620	448	0.9%	$4,937,167	47,784	100%	$48,139,525
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$1,072,101	133	8.3%	$84,373	4	0.3%	$53,973	1,599	100%	$1,210,447
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$2,848,737	596	21.6%	$2,760,684	50	1.8%	$1,010,557	2,758	99.9%	$6,619,978
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$9,520,259	751	7.6%	$6,060,020	102	1%	$1,946,321	9,841	100%	$17,526,600
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$2,507,311	539	19%	$1,026,096	27	1%	$497,206	2,838	100%	$4,030,614
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$1,019,054	216	16.4%	$850,324	20	1.5%	$155,069	1,313	99.9%	$2,024,447
Town of Micro	577	534	92.5%	436	75.6%	$392,882	106	18.4%	$185,577	35	6.1%	$322,944	577	100%	$901,402
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$1,052,063	185	13%	$288,460	22	1.5%	$209,205	1,426	100%	$1,549,728
Town of Princeton	1,000	724	72.4%	824	82.4%	$781,074	140	14%	$408,679	35	3.5%	$409,381	999	99.9%	$1,599,134
Town of Selma	3,784	3,520	93%	3,176	83.9%	$3,118,093	530	14%	$2,896,111	75	2%	$835,597	3,781	99.9%	$6,849,801
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$7,471,010	956	13.8%	$11,437,772	197	2.8%	$3,069,670	6,916	99.9%	$21,978,452
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$888,769	139	9.9%	$317,629	31	2.2%	$221,092	1,390	99.5%	$1,427,490
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$61,349,354*	*13,127*	*16.7%*	*$33,230,661*	*996*	*1.3%*	*$12,657,625*	*78,464*	*100%*	*$107,237,640*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$17,002,200	1,469	12.1%	$45,814,284	309	2.6%	$13,408,087	12,098	99.9%	$76,224,571
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$15,616,813	1,932	13.1%	$13,021,926	128	0.9%	$4,357,235	14,753	99.9%	$32,995,975
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$32,619,013*	*3,401*	*12.7%*	*$58,836,210*	*437*	*1.6%*	*$17,765,322*	*26,851*	*99.9%*	*$109,220,546*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$44,030,625	5,035	17.5%	$27,280,388	382	1.3%	$11,741,435	28,687	100%	$83,052,448
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$9,293,777	467	13.7%	$17,958,697	83	2.4%	$3,635,852	3,401	100%	$30,888,325
Town of Cameron	594	497	83.7%	491	82.7%	$710,883	83	14%	$556,065	20	3.4%	$384,626	594	100%	$1,651,574
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$3,231,032	211	10.5%	$4,651,307	172	8.6%	$5,213,837	2,007	99.8%	$13,096,177
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$3,047,376	76	5.1%	$1,626,159	12	0.8%	$292,445	1,496	99.7%	$4,965,980
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$2,279,551	160	11.2%	$2,350,414	48	3.4%	$1,590,216	1,424	99.8%	$6,220,181
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$28,923,894	845	10.9%	$26,778,908	199	2.6%	$8,031,080	7,754	100%	$63,733,883
Town of Taylortown	458	457	99.8%	413	90.2%	$861,574	31	6.8%	$1,276,466	14	3.1%	$561,054	458	100%	$2,699,094
Town of Vass	960	948	98.8%	738	76.9%	$1,777,232	189	19.7%	$1,239,587	33	3.4%	$1,090,036	960	100%	$4,106,856
Village of Foxfire	589	330	56%	515	87.4%	$2,464,948	68	11.5%	$421,338	6	1%	$103,373	589	100%	$2,989,659
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$36,796,120	345	4.2%	$17,977,840	47	0.6%	$2,345,815	8,290	100%	$57,119,776
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$5,902,675	85	4.7%	$990,317	17	0.9%	$560,431	1,795	100%	$7,453,423
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$139,319,687*	*7,595*	*13.2%*	*$103,107,486*	*1,033*	*1.8%*	*$35,550,200*	*57,455*	*100%*	*$277,977,376*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$343,050,971**	**34,660**	**13.4%**	**$266,926,502**	**4,194**	**1.6%**	**$106,748,001**	**259,000**	**99.9%**	**$716,725,475**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-112: Critical Facilities Exposed to the Earthquake - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$183
Banking and Finance	500 Year	4	$3,817
Banking and Finance	750 Year	4	$11,346
Banking and Finance	1000 Year	4	$19,515
Banking and Finance	1500 Year	4	$42,462
Banking and Finance	2000 Year	4	$59,422
Banking and Finance	2500 Year	4	$86,024
Commercial Facilities	250 Year	572	$57,502
Commercial Facilities	500 Year	641	$689,717
Commercial Facilities	750 Year	641	$1,642,644
Commercial Facilities	1000 Year	641	$2,769,620
Commercial Facilities	1500 Year	641	$5,338,713
Commercial Facilities	2000 Year	641	$7,920,277
Commercial Facilities	2500 Year	641	$10,656,064
Critical Manufacturing	250 Year	368	$95,462
Critical Manufacturing	500 Year	375	$753,002
Critical Manufacturing	750 Year	375	$1,540,221
Critical Manufacturing	1000 Year	375	$2,415,843
Critical Manufacturing	1500 Year	375	$4,274,925
Critical Manufacturing	2000 Year	375	$6,380,898
Critical Manufacturing	2500 Year	375	$8,290,472
Emergency Services	250 Year	10	$2,336
Emergency Services	500 Year	10	$21,872
Emergency Services	750 Year	10	$46,639
Emergency Services	1000 Year	10	$75,772
Emergency Services	1500 Year	10	$158,559
Emergency Services	2000 Year	10	$249,710
Emergency Services	2500 Year	10	$344,712
Energy	250 Year	5	$31,318

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	500 Year	5	$176,746
Energy	750 Year	5	$371,477
Energy	1000 Year	5	$609,154
Energy	1500 Year	5	$984,042
Energy	2000 Year	5	$1,361,023
Energy	2500 Year	5	$1,778,315
Food and Agriculture	250 Year	3,687	$34,693
Food and Agriculture	500 Year	3,697	$388,391
Food and Agriculture	750 Year	3,697	$861,094
Food and Agriculture	1000 Year	3,697	$1,297,874
Food and Agriculture	1500 Year	3,697	$2,277,140
Food and Agriculture	2000 Year	3,697	$3,305,805
Food and Agriculture	2500 Year	3,697	$4,306,544
Government Facilities	250 Year	167	$16,673
Government Facilities	500 Year	173	$154,759
Government Facilities	750 Year	173	$366,706
Government Facilities	1000 Year	173	$618,869
Government Facilities	1500 Year	173	$1,085,351
Government Facilities	2000 Year	173	$1,655,775
Government Facilities	2500 Year	173	$2,192,108
Healthcare and Public Health	250 Year	15	$1,205
Healthcare and Public Health	500 Year	73	$38,758
Healthcare and Public Health	750 Year	73	$100,291
Healthcare and Public Health	1000 Year	73	$195,208
Healthcare and Public Health	1500 Year	73	$363,567
Healthcare and Public Health	2000 Year	73	$587,915
Healthcare and Public Health	2500 Year	73	$763,393
Transportation Systems	250 Year	121	$8,963

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	500 Year	124	$102,636
Transportation Systems	750 Year	124	$243,930
Transportation Systems	1000 Year	124	$411,326
Transportation Systems	1500 Year	124	$715,402
Transportation Systems	2000 Year	124	$1,067,692
Transportation Systems	2500 Year	124	$1,380,238
Water	250 Year	27	$223,589
Water	500 Year	27	$1,098,951
Water	750 Year	27	$2,108,305
Water	1000 Year	27	$3,393,604
Water	1500 Year	27	$5,570,091
Water	2000 Year	27	$7,457,253
Water	2500 Year	27	$9,741,206
All Categories	**250 Year**	**4,975**	**$471,924**
All Categories	**500 Year**	**5,129**	**$3,428,649**
All Categories	**750 Year**	**5,129**	**$7,292,653**
All Categories	**1000 Year**	**5,129**	**$11,806,785**
All Categories	**1500 Year**	**5,129**	**$20,810,252**
All Categories	**2000 Year**	**5,129**	**$30,045,770**
All Categories	**2500 Year**	**5,129**	**$39,539,076**

Source: GIS Analysis

Table 6-113: Critical Facilities Exposed to the Earthquake - Town of Goldston

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$230
Banking and Finance	500 Year	1	$2,012
Banking and Finance	750 Year	1	$4,434
Banking and Finance	1000 Year	1	$7,595
Banking and Finance	1500 Year	1	$18,176
Banking and Finance	2000 Year	1	$31,288
Banking and Finance	2500 Year	1	$42,465
Commercial Facilities	250 Year	26	$1,889

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	500 Year	28	$18,688
Commercial Facilities	750 Year	28	$44,078
Commercial Facilities	1000 Year	28	$73,865
Commercial Facilities	1500 Year	28	$147,462
Commercial Facilities	2000 Year	28	$227,055
Commercial Facilities	2500 Year	28	$292,441
Critical Manufacturing	250 Year	15	$2,479
Critical Manufacturing	500 Year	15	$27,022
Critical Manufacturing	750 Year	15	$65,477
Critical Manufacturing	1000 Year	15	$106,402
Critical Manufacturing	1500 Year	15	$200,604
Critical Manufacturing	2000 Year	15	$275,356
Critical Manufacturing	2500 Year	15	$326,330
Emergency Services	250 Year	2	$484
Emergency Services	500 Year	2	$4,300
Emergency Services	750 Year	2	$9,670
Emergency Services	1000 Year	2	$16,328
Emergency Services	1500 Year	2	$38,492
Emergency Services	2000 Year	2	$66,148
Emergency Services	2500 Year	2	$89,874
Government Facilities	250 Year	4	$399
Government Facilities	500 Year	4	$3,556
Government Facilities	750 Year	4	$6,795
Government Facilities	1000 Year	4	$10,389
Government Facilities	1500 Year	4	$21,674
Government Facilities	2000 Year	4	$33,803
Government Facilities	2500 Year	4	$43,419
Transportation Systems	250 Year	1	$45
Transportation Systems	500 Year	1	$431
Transportation Systems	750 Year	1	$1,071
Transportation Systems	1000 Year	1	$1,822
Transportation Systems	1500 Year	1	$3,511

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	2000 Year	1	$4,850
Transportation Systems	2500 Year	1	$5,694
All Categories	**250 Year**	**49**	**$5,526**
All Categories	**500 Year**	**51**	**$56,009**
All Categories	**750 Year**	**51**	**$131,525**
All Categories	**1000 Year**	**51**	**$216,401**
All Categories	**1500 Year**	**51**	**$429,919**
All Categories	**2000 Year**	**51**	**$638,500**
All Categories	**2500 Year**	**51**	**$800,223**

Source: GIS Analysis

Table 6-114: Critical Facilities Exposed to the Earthquake - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	18	$1,465
Banking and Finance	500 Year	18	$13,610
Banking and Finance	750 Year	18	$27,470
Banking and Finance	1000 Year	18	$43,517
Banking and Finance	1500 Year	18	$74,824
Banking and Finance	2000 Year	18	$110,903
Banking and Finance	2500 Year	18	$141,599
Commercial Facilities	250 Year	165	$15,959
Commercial Facilities	500 Year	180	$193,107
Commercial Facilities	750 Year	180	$427,910
Commercial Facilities	1000 Year	180	$703,392
Commercial Facilities	1500 Year	180	$1,211,317
Commercial Facilities	2000 Year	180	$1,789,503
Commercial Facilities	2500 Year	180	$2,249,384
Critical Manufacturing	250 Year	34	$5,507
Critical Manufacturing	500 Year	37	$37,061
Critical Manufacturing	750 Year	37	$78,475
Critical Manufacturing	1000 Year	37	$125,312
Critical Manufacturing	1500 Year	37	$204,471

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	2000 Year	37	$280,729
Critical Manufacturing	2500 Year	37	$352,275
Emergency Services	250 Year	2	$441
Emergency Services	500 Year	2	$5,179
Emergency Services	750 Year	2	$12,112
Emergency Services	1000 Year	2	$19,869
Emergency Services	1500 Year	2	$33,993
Emergency Services	2000 Year	2	$48,684
Emergency Services	2500 Year	2	$58,104
Energy	250 Year	1	$72
Energy	500 Year	1	$461
Energy	750 Year	1	$903
Energy	1000 Year	1	$1,570
Energy	1500 Year	1	$3,365
Energy	2000 Year	1	$5,882
Energy	2500 Year	1	$8,290
Food and Agriculture	250 Year	156	$738
Food and Agriculture	500 Year	159	$10,756
Food and Agriculture	750 Year	159	$23,562
Food and Agriculture	1000 Year	159	$36,211
Food and Agriculture	1500 Year	159	$56,786
Food and Agriculture	2000 Year	159	$81,236
Food and Agriculture	2500 Year	159	$99,096
Government Facilities	250 Year	49	$7,286
Government Facilities	500 Year	51	$66,703
Government Facilities	750 Year	51	$146,179
Government Facilities	1000 Year	51	$250,230
Government Facilities	1500 Year	51	$448,173
Government Facilities	2000 Year	51	$662,277
Government Facilities	2500 Year	51	$868,104
Healthcare and Public Health	250 Year	24	$7,064

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	500 Year	25	$73,155
Healthcare and Public Health	750 Year	25	$181,360
Healthcare and Public Health	1000 Year	25	$319,743
Healthcare and Public Health	1500 Year	25	$586,398
Healthcare and Public Health	2000 Year	25	$858,036
Healthcare and Public Health	2500 Year	25	$1,132,589
Transportation Systems	250 Year	28	$2,492
Transportation Systems	500 Year	28	$29,744
Transportation Systems	750 Year	28	$63,812
Transportation Systems	1000 Year	28	$102,549
Transportation Systems	1500 Year	28	$173,266
Transportation Systems	2000 Year	28	$256,884
Transportation Systems	2500 Year	28	$320,434
Water	250 Year	2	$25,518
Water	500 Year	2	$119,378
Water	750 Year	2	$217,892
Water	1000 Year	2	$347,640
Water	1500 Year	2	$571,794
Water	2000 Year	2	$755,568
Water	2500 Year	2	$978,196
All Categories	**250 Year**	**479**	**$66,542**
All Categories	**500 Year**	**503**	**$549,154**
All Categories	**750 Year**	**503**	**$1,179,675**
All Categories	**1000 Year**	**503**	**$1,950,033**
All Categories	**1500 Year**	**503**	**$3,364,387**
All Categories	**2000 Year**	**503**	**$4,849,702**
All Categories	**2500 Year**	**503**	**$6,208,071**

Source: GIS Analysis

Table 6-115: Critical Facilities Exposed to the Earthquake - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	13	$1,931
Banking and Finance	500 Year	13	$15,491
Banking and Finance	750 Year	13	$32,803
Banking and Finance	1000 Year	13	$53,043
Banking and Finance	1500 Year	13	$107,034
Banking and Finance	2000 Year	13	$173,511
Banking and Finance	2500 Year	13	$228,005
Commercial Facilities	250 Year	389	$47,502
Commercial Facilities	500 Year	391	$450,414
Commercial Facilities	750 Year	391	$1,033,607
Commercial Facilities	1000 Year	391	$1,713,565
Commercial Facilities	1500 Year	391	$3,167,618
Commercial Facilities	2000 Year	391	$4,738,264
Commercial Facilities	2500 Year	391	$6,051,631
Critical Manufacturing	250 Year	120	$65,539
Critical Manufacturing	500 Year	123	$522,331
Critical Manufacturing	750 Year	123	$1,114,328
Critical Manufacturing	1000 Year	123	$1,699,683
Critical Manufacturing	1500 Year	123	$2,912,849
Critical Manufacturing	2000 Year	123	$4,218,927
Critical Manufacturing	2500 Year	123	$5,264,140
Emergency Services	250 Year	4	$3,218
Emergency Services	500 Year	4	$31,346
Emergency Services	750 Year	4	$88,733
Emergency Services	1000 Year	4	$164,809
Emergency Services	1500 Year	4	$324,053
Emergency Services	2000 Year	4	$508,603
Emergency Services	2500 Year	4	$719,409
Energy	250 Year	4	$5,286
Energy	500 Year	4	$23,542
Energy	750 Year	4	$45,498
Energy	1000 Year	4	$71,088

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	1500 Year	4	$115,747
Energy	2000 Year	4	$158,346
Energy	2500 Year	4	$199,001
Food and Agriculture	250 Year	483	$4,068
Food and Agriculture	500 Year	483	$42,502
Food and Agriculture	750 Year	483	$89,764
Food and Agriculture	1000 Year	483	$130,110
Food and Agriculture	1500 Year	483	$214,397
Food and Agriculture	2000 Year	483	$302,217
Food and Agriculture	2500 Year	483	$366,994
Government Facilities	250 Year	63	$19,724
Government Facilities	500 Year	64	$167,767
Government Facilities	750 Year	64	$347,237
Government Facilities	1000 Year	64	$543,621
Government Facilities	1500 Year	64	$1,004,241
Government Facilities	2000 Year	64	$1,532,308
Government Facilities	2500 Year	64	$1,961,203
Healthcare and Public Health	250 Year	23	$11,413
Healthcare and Public Health	500 Year	23	$97,538
Healthcare and Public Health	750 Year	23	$209,224
Healthcare and Public Health	1000 Year	23	$330,907
Healthcare and Public Health	1500 Year	23	$613,163
Healthcare and Public Health	2000 Year	23	$942,997
Healthcare and Public Health	2500 Year	23	$1,244,082
Transportation Systems	250 Year	31	$2,917
Transportation Systems	500 Year	31	$28,264
Transportation Systems	750 Year	31	$63,199
Transportation Systems	1000 Year	31	$101,246

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	1500 Year	31	$186,361
Transportation Systems	2000 Year	31	$277,488
Transportation Systems	2500 Year	31	$342,379
Water	250 Year	8	$63,178
Water	500 Year	8	$253,680
Water	750 Year	8	$468,946
Water	1000 Year	8	$722,142
Water	1500 Year	8	$1,151,103
Water	2000 Year	8	$1,548,898
Water	2500 Year	8	$1,980,274
All Categories	**250 Year**	**1,138**	**$224,776**
All Categories	**500 Year**	**1,144**	**$1,632,875**
All Categories	**750 Year**	**1,144**	**$3,493,339**
All Categories	**1000 Year**	**1,144**	**$5,530,214**
All Categories	**1500 Year**	**1,144**	**$9,796,566**
All Categories	**2000 Year**	**1,144**	**$14,401,559**
All Categories	**2500 Year**	**1,144**	**$18,357,118**

Source: GIS Analysis

Table 6-116: Critical Facilities Exposed to the Earthquake - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	25	$2,028
Banking and Finance	500 Year	27	$23,692
Banking and Finance	750 Year	27	$59,599
Banking and Finance	1000 Year	27	$107,259
Banking and Finance	1500 Year	27	$227,580
Banking and Finance	2000 Year	27	$341,213
Banking and Finance	2500 Year	27	$433,281
Chemical	250 Year	1	$677
Chemical	500 Year	1	$6,659
Chemical	750 Year	1	$17,824
Chemical	1000 Year	1	$28,669

Sector	Event	Number of Buildings At Risk	Estimated Damages
Chemical	1500 Year	1	$49,983
Chemical	2000 Year	1	$71,177
Chemical	2500 Year	1	$88,381
Commercial Facilities	250 Year	335	$23,464
Commercial Facilities	500 Year	360	$311,680
Commercial Facilities	750 Year	360	$818,945
Commercial Facilities	1000 Year	360	$1,473,937
Commercial Facilities	1500 Year	360	$3,048,487
Commercial Facilities	2000 Year	360	$4,700,049
Commercial Facilities	2500 Year	360	$6,221,388
Communications	250 Year	2	$79
Communications	500 Year	2	$902
Communications	750 Year	2	$2,502
Communications	1000 Year	2	$4,611
Communications	1500 Year	2	$9,218
Communications	2000 Year	2	$13,381
Communications	2500 Year	2	$16,645
Critical Manufacturing	250 Year	80	$13,508
Critical Manufacturing	500 Year	80	$134,750
Critical Manufacturing	750 Year	80	$338,465
Critical Manufacturing	1000 Year	80	$573,661
Critical Manufacturing	1500 Year	80	$1,051,383
Critical Manufacturing	2000 Year	80	$1,525,728
Critical Manufacturing	2500 Year	80	$1,936,961
Emergency Services	250 Year	3	$377
Emergency Services	500 Year	3	$3,840
Emergency Services	750 Year	3	$10,774
Emergency Services	1000 Year	3	$19,837
Emergency Services	1500 Year	3	$41,151
Emergency Services	2000 Year	3	$60,872
Emergency Services	2500 Year	3	$75,018
Energy	250 Year	3	$85

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	500 Year	3	$1,174
Energy	750 Year	3	$3,237
Energy	1000 Year	3	$5,765
Energy	1500 Year	3	$11,411
Energy	2000 Year	3	$16,558
Energy	2500 Year	3	$21,253
Food and Agriculture	250 Year	42	$135
Food and Agriculture	500 Year	42	$3,013
Food and Agriculture	750 Year	42	$7,601
Food and Agriculture	1000 Year	42	$11,939
Food and Agriculture	1500 Year	42	$20,927
Food and Agriculture	2000 Year	42	$30,117
Food and Agriculture	2500 Year	42	$38,247
Government Facilities	250 Year	50	$6,061
Government Facilities	500 Year	51	$93,462
Government Facilities	750 Year	51	$241,809
Government Facilities	1000 Year	51	$426,577
Government Facilities	1500 Year	51	$846,085
Government Facilities	2000 Year	51	$1,326,623
Government Facilities	2500 Year	51	$1,767,735
Healthcare and Public Health	250 Year	46	$4,540
Healthcare and Public Health	500 Year	46	$59,047
Healthcare and Public Health	750 Year	46	$151,234
Healthcare and Public Health	1000 Year	46	$260,293
Healthcare and Public Health	1500 Year	46	$508,821
Healthcare and Public Health	2000 Year	46	$758,908
Healthcare and Public Health	2500 Year	46	$996,329

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	250 Year	1	$71
Nuclear Reactors, Materials and Waste	500 Year	1	$715
Nuclear Reactors, Materials and Waste	750 Year	1	$2,011
Nuclear Reactors, Materials and Waste	1000 Year	1	$3,763
Nuclear Reactors, Materials and Waste	1500 Year	1	$7,547
Nuclear Reactors, Materials and Waste	2000 Year	1	$10,736
Nuclear Reactors, Materials and Waste	2500 Year	1	$13,118
Transportation Systems	250 Year	57	$3,387
Transportation Systems	500 Year	57	$43,044
Transportation Systems	750 Year	57	$112,400
Transportation Systems	1000 Year	57	$210,655
Transportation Systems	1500 Year	57	$475,643
Transportation Systems	2000 Year	57	$742,481
Transportation Systems	2500 Year	57	$970,242
Water	250 Year	1	$34
Water	500 Year	1	$218
Water	750 Year	1	$494
Water	1000 Year	1	$796
Water	1500 Year	1	$1,307
Water	2000 Year	1	$1,890
Water	2500 Year	1	$2,437
All Categories	**250 Year**	**646**	**$54,446**
All Categories	**500 Year**	**674**	**$682,196**
All Categories	**750 Year**	**674**	**$1,766,895**
All Categories	**1000 Year**	**674**	**$3,127,762**
All Categories	**1500 Year**	**674**	**$6,299,543**
All Categories	**2000 Year**	**674**	**$9,599,733**
All Categories	**2500 Year**	**674**	**$12,581,035**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-117: Critical Facilities Exposed to the Earthquake - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$11
Banking and Finance	500 Year	1	$241
Banking and Finance	750 Year	1	$594
Banking and Finance	1000 Year	1	$921
Banking and Finance	1500 Year	1	$1,554
Banking and Finance	2000 Year	1	$2,197
Banking and Finance	2500 Year	1	$2,681
Chemical	250 Year	1	$26
Chemical	500 Year	1	$268
Chemical	750 Year	1	$718
Chemical	1000 Year	1	$1,517
Chemical	1500 Year	1	$4,623
Chemical	2000 Year	1	$7,374
Chemical	2500 Year	1	$9,877
Commercial Facilities	250 Year	456	$54,051
Commercial Facilities	500 Year	505	$669,437
Commercial Facilities	750 Year	505	$1,682,029
Commercial Facilities	1000 Year	505	$2,962,246
Commercial Facilities	1500 Year	505	$5,933,268
Commercial Facilities	2000 Year	505	$9,011,656
Commercial Facilities	2500 Year	505	$11,900,712
Communications	250 Year	1	$556
Communications	500 Year	1	$5,960
Communications	750 Year	1	$12,985
Communications	1000 Year	1	$19,901
Communications	1500 Year	1	$36,072
Communications	2000 Year	1	$54,957
Communications	2500 Year	1	$70,764

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	250 Year	181	$20,882
Critical Manufacturing	500 Year	188	$190,464
Critical Manufacturing	750 Year	188	$410,535
Critical Manufacturing	1000 Year	188	$651,715
Critical Manufacturing	1500 Year	188	$1,129,386
Critical Manufacturing	2000 Year	188	$1,622,862
Critical Manufacturing	2500 Year	188	$2,082,287
Emergency Services	250 Year	13	$2,574
Emergency Services	500 Year	13	$22,603
Emergency Services	750 Year	13	$56,263
Emergency Services	1000 Year	13	$98,577
Emergency Services	1500 Year	13	$183,986
Emergency Services	2000 Year	13	$294,933
Emergency Services	2500 Year	13	$403,835
Energy	250 Year	2	$75
Energy	500 Year	2	$598
Energy	750 Year	2	$1,301
Energy	1000 Year	2	$2,314
Energy	1500 Year	2	$5,675
Energy	2000 Year	2	$9,744
Energy	2500 Year	2	$14,039
Food and Agriculture	250 Year	2,093	$14,220
Food and Agriculture	500 Year	2,093	$240,409
Food and Agriculture	750 Year	2,093	$559,452
Food and Agriculture	1000 Year	2,093	$833,994
Food and Agriculture	1500 Year	2,093	$1,458,954
Food and Agriculture	2000 Year	2,093	$2,063,135
Food and Agriculture	2500 Year	2,093	$2,776,698
Government Facilities	250 Year	342	$51,477
Government Facilities	500 Year	370	$568,408
Government Facilities	750 Year	370	$1,411,702
Government Facilities	1000 Year	370	$2,514,839

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	1500 Year	370	$4,871,220
Government Facilities	2000 Year	370	$8,013,680
Government Facilities	2500 Year	370	$11,063,816
Healthcare and Public Health	250 Year	15	$2,523
Healthcare and Public Health	500 Year	18	$27,786
Healthcare and Public Health	750 Year	18	$69,876
Healthcare and Public Health	1000 Year	18	$117,062
Healthcare and Public Health	1500 Year	18	$215,028
Healthcare and Public Health	2000 Year	18	$324,590
Healthcare and Public Health	2500 Year	18	$440,882
Nuclear Reactors, Materials and Waste	250 Year	1	$756
Nuclear Reactors, Materials and Waste	500 Year	1	$4,856
Nuclear Reactors, Materials and Waste	750 Year	1	$9,890
Nuclear Reactors, Materials and Waste	1000 Year	1	$17,043
Nuclear Reactors, Materials and Waste	1500 Year	1	$28,398
Nuclear Reactors, Materials and Waste	2000 Year	1	$43,626
Nuclear Reactors, Materials and Waste	2500 Year	1	$53,614
Transportation Systems	250 Year	65	$5,423
Transportation Systems	500 Year	69	$67,392
Transportation Systems	750 Year	69	$162,341
Transportation Systems	1000 Year	69	$271,523
Transportation Systems	1500 Year	69	$491,980
Transportation Systems	2000 Year	69	$706,971

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	2500 Year	69	$908,558
Water	250 Year	1	$86
Water	500 Year	1	$550
Water	750 Year	1	$1,183
Water	1000 Year	1	$1,798
Water	1500 Year	1	$3,866
Water	2000 Year	1	$5,915
Water	2500 Year	1	$7,130
All Categories	**250 Year**	**3,172**	**$152,660**
All Categories	**500 Year**	**3,263**	**$1,798,972**
All Categories	**750 Year**	**3,263**	**$4,378,869**
All Categories	**1000 Year**	**3,263**	**$7,493,450**
All Categories	**1500 Year**	**3,263**	**$14,364,010**
All Categories	**2000 Year**	**3,263**	**$22,161,640**
All Categories	**2500 Year**	**3,263**	**$29,734,893**

Source: GIS Analysis

Table 6-118: Critical Facilities Exposed to the Earthquake - Town of Angier

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	6	$267
Banking and Finance	500 Year	6	$2,931
Banking and Finance	750 Year	6	$6,926
Banking and Finance	1000 Year	6	$11,847
Banking and Finance	1500 Year	6	$20,345
Banking and Finance	2000 Year	6	$29,548
Banking and Finance	2500 Year	6	$35,837
Commercial Facilities	250 Year	81	$4,386
Commercial Facilities	500 Year	85	$55,334
Commercial Facilities	750 Year	85	$135,698
Commercial Facilities	1000 Year	85	$241,841
Commercial Facilities	1500 Year	85	$428,178
Commercial Facilities	2000 Year	85	$630,980

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	2500 Year	85	$810,325
Critical Manufacturing	250 Year	21	$2,164
Critical Manufacturing	500 Year	21	$21,682
Critical Manufacturing	750 Year	21	$47,131
Critical Manufacturing	1000 Year	21	$77,886
Critical Manufacturing	1500 Year	21	$132,777
Critical Manufacturing	2000 Year	21	$194,301
Critical Manufacturing	2500 Year	21	$251,567
Emergency Services	250 Year	2	$286
Emergency Services	500 Year	2	$5,066
Emergency Services	750 Year	2	$10,470
Emergency Services	1000 Year	2	$15,767
Emergency Services	1500 Year	2	$25,732
Emergency Services	2000 Year	2	$38,414
Emergency Services	2500 Year	2	$49,160
Energy	250 Year	2	$23
Energy	500 Year	2	$183
Energy	750 Year	2	$367
Energy	1000 Year	2	$672
Energy	1500 Year	2	$1,478
Energy	2000 Year	2	$2,641
Energy	2500 Year	2	$3,737
Food and Agriculture	250 Year	57	$166
Food and Agriculture	500 Year	57	$3,031
Food and Agriculture	750 Year	57	$7,245
Food and Agriculture	1000 Year	57	$11,450
Food and Agriculture	1500 Year	57	$18,317
Food and Agriculture	2000 Year	57	$26,214
Food and Agriculture	2500 Year	57	$31,828
Government Facilities	250 Year	7	$823
Government Facilities	500 Year	7	$23,196
Government Facilities	750 Year	7	$62,663

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	1000 Year	7	$111,831
Government Facilities	1500 Year	7	$235,741
Government Facilities	2000 Year	7	$372,313
Government Facilities	2500 Year	7	$536,530
Healthcare and Public Health	250 Year	7	$384
Healthcare and Public Health	500 Year	7	$6,609
Healthcare and Public Health	750 Year	7	$17,091
Healthcare and Public Health	1000 Year	7	$30,769
Healthcare and Public Health	1500 Year	7	$57,809
Healthcare and Public Health	2000 Year	7	$87,870
Healthcare and Public Health	2500 Year	7	$109,616
Transportation Systems	250 Year	10	$340
Transportation Systems	500 Year	10	$5,521
Transportation Systems	750 Year	10	$13,404
Transportation Systems	1000 Year	10	$23,936
Transportation Systems	1500 Year	10	$43,284
Transportation Systems	2000 Year	10	$62,164
Transportation Systems	2500 Year	10	$76,791
All Categories	**250 Year**	**193**	**$8,839**
All Categories	**500 Year**	**197**	**$123,553**
All Categories	**750 Year**	**197**	**$300,995**
All Categories	**1000 Year**	**197**	**$525,999**
All Categories	**1500 Year**	**197**	**$963,661**
All Categories	**2000 Year**	**197**	**$1,444,445**
All Categories	**2500 Year**	**197**	**$1,905,391**

Source: GIS Analysis

Table 6-119: Critical Facilities Exposed to the Earthquake - Town of Benson

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	6	$286
Banking and Finance	500 Year	6	$3,043
Banking and Finance	750 Year	6	$8,250
Banking and Finance	1000 Year	6	$15,371
Banking and Finance	1500 Year	6	$27,845
Banking and Finance	2000 Year	6	$40,324
Banking and Finance	2500 Year	6	$47,799
Commercial Facilities	250 Year	152	$6,814
Commercial Facilities	500 Year	160	$91,810
Commercial Facilities	750 Year	160	$250,657
Commercial Facilities	1000 Year	160	$477,208
Commercial Facilities	1500 Year	160	$899,999
Commercial Facilities	2000 Year	160	$1,335,629
Commercial Facilities	2500 Year	160	$1,637,032
Critical Manufacturing	250 Year	31	$8,972
Critical Manufacturing	500 Year	31	$81,176
Critical Manufacturing	750 Year	31	$169,786
Critical Manufacturing	1000 Year	31	$269,457
Critical Manufacturing	1500 Year	31	$439,446
Critical Manufacturing	2000 Year	31	$621,024
Critical Manufacturing	2500 Year	31	$758,329
Emergency Services	250 Year	2	$872
Emergency Services	500 Year	2	$7,656
Emergency Services	750 Year	2	$21,096
Emergency Services	1000 Year	2	$39,994
Emergency Services	1500 Year	2	$75,375
Emergency Services	2000 Year	2	$119,556
Emergency Services	2500 Year	2	$153,082
Energy	250 Year	3	$18,240
Energy	500 Year	3	$99,420
Energy	750 Year	3	$189,420
Energy	1000 Year	3	$319,740

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	1500 Year	3	$543,600
Energy	2000 Year	3	$716,820
Energy	2500 Year	3	$941,220
Food and Agriculture	250 Year	390	$650
Food and Agriculture	500 Year	390	$14,419
Food and Agriculture	750 Year	390	$37,264
Food and Agriculture	1000 Year	390	$63,933
Food and Agriculture	1500 Year	390	$112,811
Food and Agriculture	2000 Year	390	$170,857
Food and Agriculture	2500 Year	390	$218,068
Government Facilities	250 Year	17	$1,369
Government Facilities	500 Year	17	$27,387
Government Facilities	750 Year	17	$73,649
Government Facilities	1000 Year	17	$142,736
Government Facilities	1500 Year	17	$275,328
Government Facilities	2000 Year	17	$414,906
Government Facilities	2500 Year	17	$509,083
Healthcare and Public Health	250 Year	18	$839
Healthcare and Public Health	500 Year	19	$14,902
Healthcare and Public Health	750 Year	19	$41,849
Healthcare and Public Health	1000 Year	19	$79,367
Healthcare and Public Health	1500 Year	19	$146,421
Healthcare and Public Health	2000 Year	19	$215,094
Healthcare and Public Health	2500 Year	19	$258,514
Transportation Systems	250 Year	21	$696
Transportation Systems	500 Year	21	$11,431
Transportation Systems	750 Year	21	$29,589
Transportation Systems	1000 Year	21	$55,519

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	1500 Year	21	$102,428
Transportation Systems	2000 Year	21	$153,276
Transportation Systems	2500 Year	21	$189,334
All Categories	**250 Year**	**640**	**$38,738**
All Categories	**500 Year**	**649**	**$351,244**
All Categories	**750 Year**	**649**	**$821,560**
All Categories	**1000 Year**	**649**	**$1,463,325**
All Categories	**1500 Year**	**649**	**$2,623,253**
All Categories	**2000 Year**	**649**	**$3,787,486**
All Categories	**2500 Year**	**649**	**$4,712,461**

Source: GIS Analysis

Table 6-120: Critical Facilities Exposed to the Earthquake - Town of Broadway

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$168
Banking and Finance	500 Year	2	$1,684
Banking and Finance	750 Year	2	$4,173
Banking and Finance	1000 Year	2	$7,145
Banking and Finance	1500 Year	2	$14,635
Banking and Finance	2000 Year	2	$20,828
Banking and Finance	2500 Year	2	$27,204
Commercial Facilities	250 Year	50	$2,608
Commercial Facilities	500 Year	54	$30,630
Commercial Facilities	750 Year	54	$76,550
Commercial Facilities	1000 Year	54	$127,937
Commercial Facilities	1500 Year	54	$245,063
Commercial Facilities	2000 Year	54	$356,196
Commercial Facilities	2500 Year	54	$472,251
Critical Manufacturing	250 Year	5	$259
Critical Manufacturing	500 Year	5	$1,485
Critical Manufacturing	750 Year	5	$3,046
Critical Manufacturing	1000 Year	5	$4,698

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	1500 Year	5	$7,971
Critical Manufacturing	2000 Year	5	$11,463
Critical Manufacturing	2500 Year	5	$15,029
Emergency Services	250 Year	1	$208
Emergency Services	500 Year	1	$2,034
Emergency Services	750 Year	1	$4,893
Emergency Services	1000 Year	1	$9,068
Emergency Services	1500 Year	1	$24,536
Emergency Services	2000 Year	1	$37,088
Emergency Services	2500 Year	1	$48,031
Food and Agriculture	250 Year	32	$86
Food and Agriculture	500 Year	32	$1,362
Food and Agriculture	750 Year	32	$3,209
Food and Agriculture	1000 Year	32	$4,963
Food and Agriculture	1500 Year	32	$9,875
Food and Agriculture	2000 Year	32	$15,092
Food and Agriculture	2500 Year	32	$20,246
Government Facilities	250 Year	8	$1,653
Government Facilities	500 Year	8	$18,086
Government Facilities	750 Year	8	$34,758
Government Facilities	1000 Year	8	$50,882
Government Facilities	1500 Year	8	$102,532
Government Facilities	2000 Year	8	$167,094
Government Facilities	2500 Year	8	$256,431
Transportation Systems	250 Year	15	$1,201
Transportation Systems	500 Year	15	$18,135
Transportation Systems	750 Year	15	$45,726
Transportation Systems	1000 Year	15	$74,408
Transportation Systems	1500 Year	15	$141,329
Transportation Systems	2000 Year	15	$198,751
Transportation Systems	2500 Year	15	$260,015
All Categories	**250 Year**	**113**	**$6,183**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**500 Year**	**117**	**$73,416**
All Categories	**750 Year**	**117**	**$172,355**
All Categories	**1000 Year**	**117**	**$279,101**
All Categories	**1500 Year**	**117**	**$545,941**
All Categories	**2000 Year**	**117**	**$806,512**
All Categories	**2500 Year**	**117**	**$1,099,207**

Source: GIS Analysis

Table 6-121: Critical Facilities Exposed to the Earthquake - Town of Coats

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$63
Banking and Finance	500 Year	3	$1,481
Banking and Finance	750 Year	3	$3,949
Banking and Finance	1000 Year	3	$6,719
Banking and Finance	1500 Year	3	$12,278
Banking and Finance	2000 Year	3	$18,626
Banking and Finance	2500 Year	3	$23,801
Commercial Facilities	250 Year	49	$2,254
Commercial Facilities	500 Year	52	$32,873
Commercial Facilities	750 Year	52	$85,330
Commercial Facilities	1000 Year	52	$156,231
Commercial Facilities	1500 Year	52	$282,422
Commercial Facilities	2000 Year	52	$416,637
Commercial Facilities	2500 Year	52	$527,978
Critical Manufacturing	250 Year	7	$244
Critical Manufacturing	500 Year	7	$2,393
Critical Manufacturing	750 Year	7	$5,946
Critical Manufacturing	1000 Year	7	$10,347
Critical Manufacturing	1500 Year	7	$19,197
Critical Manufacturing	2000 Year	7	$28,596
Critical Manufacturing	2500 Year	7	$35,579
Emergency Services	250 Year	1	$36

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	500 Year	1	$849
Emergency Services	750 Year	1	$2,165
Emergency Services	1000 Year	1	$3,452
Emergency Services	1500 Year	1	$5,721
Emergency Services	2000 Year	1	$8,152
Emergency Services	2500 Year	1	$9,912
Food and Agriculture	250 Year	16	$46
Food and Agriculture	500 Year	16	$913
Food and Agriculture	750 Year	16	$2,288
Food and Agriculture	1000 Year	16	$3,742
Food and Agriculture	1500 Year	16	$6,672
Food and Agriculture	2000 Year	16	$9,946
Food and Agriculture	2500 Year	16	$12,559
Government Facilities	250 Year	8	$4,539
Government Facilities	500 Year	8	$25,214
Government Facilities	750 Year	8	$61,596
Government Facilities	1000 Year	8	$114,975
Government Facilities	1500 Year	8	$232,645
Government Facilities	2000 Year	8	$386,020
Government Facilities	2500 Year	8	$562,117
Healthcare and Public Health	250 Year	2	$91
Healthcare and Public Health	500 Year	2	$1,284
Healthcare and Public Health	750 Year	2	$2,788
Healthcare and Public Health	1000 Year	2	$4,862
Healthcare and Public Health	1500 Year	2	$9,874
Healthcare and Public Health	2000 Year	2	$15,588
Healthcare and Public Health	2500 Year	2	$20,161
Transportation Systems	250 Year	3	$905

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	500 Year	3	$9,616
Transportation Systems	750 Year	3	$21,700
Transportation Systems	1000 Year	3	$37,560
Transportation Systems	1500 Year	3	$67,478
Transportation Systems	2000 Year	3	$97,349
Transportation Systems	2500 Year	3	$124,378
All Categories	**250 Year**	**89**	**$8,178**
All Categories	**500 Year**	**92**	**$74,623**
All Categories	**750 Year**	**92**	**$185,762**
All Categories	**1000 Year**	**92**	**$337,888**
All Categories	**1500 Year**	**92**	**$636,287**
All Categories	**2000 Year**	**92**	**$980,914**
All Categories	**2500 Year**	**92**	**$1,316,485**

Source: GIS Analysis

Table 6-122: Critical Facilities Exposed to the Earthquake - Town of Erwin

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$210
Banking and Finance	500 Year	3	$1,890
Banking and Finance	750 Year	3	$5,060
Banking and Finance	1000 Year	3	$9,100
Banking and Finance	1500 Year	3	$17,958
Banking and Finance	2000 Year	3	$26,587
Banking and Finance	2500 Year	3	$33,935
Commercial Facilities	250 Year	82	$14,483
Commercial Facilities	500 Year	91	$147,914
Commercial Facilities	750 Year	91	$398,510
Commercial Facilities	1000 Year	91	$714,977
Commercial Facilities	1500 Year	91	$1,380,188
Commercial Facilities	2000 Year	91	$2,127,924
Commercial Facilities	2500 Year	91	$2,845,427
Critical Manufacturing	250 Year	15	$7,288

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	500 Year	15	$89,692
Critical Manufacturing	750 Year	15	$229,970
Critical Manufacturing	1000 Year	15	$383,951
Critical Manufacturing	1500 Year	15	$684,911
Critical Manufacturing	2000 Year	15	$970,199
Critical Manufacturing	2500 Year	15	$1,227,739
Emergency Services	250 Year	1	$101
Emergency Services	500 Year	1	$2,326
Emergency Services	750 Year	1	$6,139
Emergency Services	1000 Year	1	$9,871
Emergency Services	1500 Year	1	$18,781
Emergency Services	2000 Year	1	$28,501
Emergency Services	2500 Year	1	$37,479
Food and Agriculture	250 Year	21	$67
Food and Agriculture	500 Year	21	$1,387
Food and Agriculture	750 Year	21	$3,422
Food and Agriculture	1000 Year	21	$5,227
Food and Agriculture	1500 Year	21	$9,151
Food and Agriculture	2000 Year	21	$12,922
Food and Agriculture	2500 Year	21	$16,786
Government Facilities	250 Year	25	$2,744
Government Facilities	500 Year	25	$39,752
Government Facilities	750 Year	25	$103,295
Government Facilities	1000 Year	25	$188,898
Government Facilities	1500 Year	25	$389,224
Government Facilities	2000 Year	25	$607,584
Government Facilities	2500 Year	25	$792,704
Healthcare and Public Health	250 Year	11	$1,528
Healthcare and Public Health	500 Year	11	$22,588
Healthcare and Public Health	750 Year	11	$59,176

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	1000 Year	11	$103,451
Healthcare and Public Health	1500 Year	11	$209,496
Healthcare and Public Health	2000 Year	11	$315,455
Healthcare and Public Health	2500 Year	11	$404,281
Transportation Systems	250 Year	21	$946
Transportation Systems	500 Year	21	$10,450
Transportation Systems	750 Year	21	$27,857
Transportation Systems	1000 Year	21	$51,224
Transportation Systems	1500 Year	21	$104,243
Transportation Systems	2000 Year	21	$155,734
Transportation Systems	2500 Year	21	$197,698
Water	250 Year	2	$156
Water	500 Year	2	$987
Water	750 Year	2	$2,253
Water	1000 Year	2	$3,597
Water	1500 Year	2	$5,838
Water	2000 Year	2	$8,523
Water	2500 Year	2	$10,936
All Categories	**250 Year**	**181**	**$27,523**
All Categories	**500 Year**	**190**	**$316,986**
All Categories	**750 Year**	**190**	**$835,682**
All Categories	**1000 Year**	**190**	**$1,470,296**
All Categories	**1500 Year**	**190**	**$2,819,790**
All Categories	**2000 Year**	**190**	**$4,253,429**
All Categories	**2500 Year**	**190**	**$5,566,985**

Source: GIS Analysis

Table 6-123: Critical Facilities Exposed to the Earthquake - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	9	$426
Banking and Finance	500 Year	9	$7,158
Banking and Finance	750 Year	9	$17,223
Banking and Finance	1000 Year	9	$27,352
Banking and Finance	1500 Year	9	$47,852
Banking and Finance	2000 Year	9	$69,075
Banking and Finance	2500 Year	9	$88,660
Commercial Facilities	250 Year	123	$6,212
Commercial Facilities	500 Year	125	$83,856
Commercial Facilities	750 Year	125	$206,705
Commercial Facilities	1000 Year	125	$351,325
Commercial Facilities	1500 Year	125	$654,284
Commercial Facilities	2000 Year	125	$956,304
Commercial Facilities	2500 Year	125	$1,226,880
Critical Manufacturing	250 Year	29	$10,765
Critical Manufacturing	500 Year	29	$105,767
Critical Manufacturing	750 Year	29	$220,147
Critical Manufacturing	1000 Year	29	$337,106
Critical Manufacturing	1500 Year	29	$575,710
Critical Manufacturing	2000 Year	29	$820,165
Critical Manufacturing	2500 Year	29	$1,040,419
Defense Industrial Base	250 Year	1	$1,950
Defense Industrial Base	500 Year	1	$31,695
Defense Industrial Base	750 Year	1	$77,675
Defense Industrial Base	1000 Year	1	$119,239
Defense Industrial Base	1500 Year	1	$184,897
Defense Industrial Base	2000 Year	1	$245,978
Defense Industrial Base	2500 Year	1	$297,972
Emergency Services	250 Year	4	$931
Emergency Services	500 Year	4	$7,467
Emergency Services	750 Year	4	$18,069
Emergency Services	1000 Year	4	$31,554

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	1500 Year	4	$55,275
Emergency Services	2000 Year	4	$80,859
Emergency Services	2500 Year	4	$105,201
Energy	250 Year	1	$22
Energy	500 Year	1	$168
Energy	750 Year	1	$476
Energy	1000 Year	1	$879
Energy	1500 Year	1	$1,647
Energy	2000 Year	1	$2,586
Energy	2500 Year	1	$3,526
Food and Agriculture	250 Year	3	$228
Food and Agriculture	500 Year	3	$2,466
Food and Agriculture	750 Year	3	$4,830
Food and Agriculture	1000 Year	3	$7,277
Food and Agriculture	1500 Year	3	$13,269
Food and Agriculture	2000 Year	3	$19,974
Food and Agriculture	2500 Year	3	$26,367
Government Facilities	250 Year	82	$13,153
Government Facilities	500 Year	82	$129,710
Government Facilities	750 Year	82	$300,147
Government Facilities	1000 Year	82	$505,677
Government Facilities	1500 Year	82	$1,042,375
Government Facilities	2000 Year	82	$1,670,568
Government Facilities	2500 Year	82	$2,295,667
Healthcare and Public Health	250 Year	9	$1,363
Healthcare and Public Health	500 Year	12	$25,105
Healthcare and Public Health	750 Year	12	$62,154
Healthcare and Public Health	1000 Year	12	$103,059
Healthcare and Public Health	1500 Year	12	$198,771

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	2000 Year	12	$297,342
Healthcare and Public Health	2500 Year	12	$382,322
Transportation Systems	250 Year	7	$537
Transportation Systems	500 Year	7	$9,147
Transportation Systems	750 Year	7	$23,221
Transportation Systems	1000 Year	7	$38,670
Transportation Systems	1500 Year	7	$65,330
Transportation Systems	2000 Year	7	$88,634
Transportation Systems	2500 Year	7	$108,079
Water	250 Year	8	$70
Water	500 Year	8	$363
Water	750 Year	8	$715
Water	1000 Year	8	$1,151
Water	1500 Year	8	$1,828
Water	2000 Year	8	$2,556
Water	2500 Year	8	$3,254
All Categories	**250 Year**	**276**	**$35,657**
All Categories	**500 Year**	**281**	**$402,902**
All Categories	**750 Year**	**281**	**$931,362**
All Categories	**1000 Year**	**281**	**$1,523,289**
All Categories	**1500 Year**	**281**	**$2,841,238**
All Categories	**2000 Year**	**281**	**$4,254,041**
All Categories	**2500 Year**	**281**	**$5,578,347**

Source: GIS Analysis

Table 6-124: Critical Facilities Exposed to the Earthquake - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$97
Banking and Finance	500 Year	4	$1,528
Banking and Finance	750 Year	4	$4,368

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	1000 Year	4	$7,907
Banking and Finance	1500 Year	4	$12,996
Banking and Finance	2000 Year	4	$20,244
Banking and Finance	2500 Year	4	$25,421
Commercial Facilities	250 Year	680	$17,684
Commercial Facilities	500 Year	851	$294,852
Commercial Facilities	750 Year	851	$796,262
Commercial Facilities	1000 Year	851	$1,505,595
Commercial Facilities	1500 Year	851	$2,683,414
Commercial Facilities	2000 Year	851	$4,148,553
Commercial Facilities	2500 Year	851	$5,285,782
Critical Manufacturing	250 Year	260	$11,987
Critical Manufacturing	500 Year	267	$106,226
Critical Manufacturing	750 Year	267	$274,752
Critical Manufacturing	1000 Year	267	$471,804
Critical Manufacturing	1500 Year	267	$799,174
Critical Manufacturing	2000 Year	267	$1,182,649
Critical Manufacturing	2500 Year	267	$1,527,216
Emergency Services	250 Year	20	$787
Emergency Services	500 Year	22	$9,596
Emergency Services	750 Year	22	$26,114
Emergency Services	1000 Year	22	$47,587
Emergency Services	1500 Year	22	$82,427
Emergency Services	2000 Year	22	$122,460
Emergency Services	2500 Year	22	$153,105
Energy	250 Year	10	$118,234
Energy	500 Year	10	$636,963
Energy	750 Year	10	$1,232,885
Energy	1000 Year	10	$1,897,874
Energy	1500 Year	10	$3,274,068
Energy	2000 Year	10	$4,740,734
Energy	2500 Year	10	$5,691,583

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	250 Year	7,153	$7,620
Food and Agriculture	500 Year	8,411	$246,633
Food and Agriculture	750 Year	8,411	$668,323
Food and Agriculture	1000 Year	8,411	$1,174,655
Food and Agriculture	1500 Year	8,411	$1,995,746
Food and Agriculture	2000 Year	8,411	$3,068,219
Food and Agriculture	2500 Year	8,411	$3,993,537
Government Facilities	250 Year	117	$7,833
Government Facilities	500 Year	162	$140,146
Government Facilities	750 Year	162	$371,572
Government Facilities	1000 Year	162	$710,308
Government Facilities	1500 Year	162	$1,268,188
Government Facilities	2000 Year	162	$1,981,316
Government Facilities	2500 Year	162	$2,505,215
Healthcare and Public Health	250 Year	15	$527
Healthcare and Public Health	500 Year	18	$8,802
Healthcare and Public Health	750 Year	18	$25,195
Healthcare and Public Health	1000 Year	18	$46,182
Healthcare and Public Health	1500 Year	18	$80,848
Healthcare and Public Health	2000 Year	18	$124,021
Healthcare and Public Health	2500 Year	18	$159,818
Nuclear Reactors, Materials and Waste	250 Year	1	$3
Nuclear Reactors, Materials and Waste	500 Year	1	$83
Nuclear Reactors, Materials and Waste	750 Year	1	$229
Nuclear Reactors, Materials and Waste	1000 Year	1	$405

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	1500 Year	1	$630
Nuclear Reactors, Materials and Waste	2000 Year	1	$943
Nuclear Reactors, Materials and Waste	2500 Year	1	$1,197
Transportation Systems	250 Year	123	$2,343
Transportation Systems	500 Year	149	$55,068
Transportation Systems	750 Year	149	$154,025
Transportation Systems	1000 Year	149	$277,869
Transportation Systems	1500 Year	149	$469,869
Transportation Systems	2000 Year	149	$718,446
Transportation Systems	2500 Year	149	$937,191
Water	250 Year	1	$16,920
Water	500 Year	1	$102,360
Water	750 Year	1	$215,100
Water	1000 Year	1	$385,980
Water	1500 Year	1	$679,320
Water	2000 Year	1	$872,640
Water	2500 Year	1	$1,209,600
All Categories	**250 Year**	**8,383**	**$184,035**
All Categories	**500 Year**	**9,896**	**$1,602,257**
All Categories	**750 Year**	**9,896**	**$3,768,825**
All Categories	**1000 Year**	**9,896**	**$6,526,166**
All Categories	**1500 Year**	**9,896**	**$11,346,680**
All Categories	**2000 Year**	**9,896**	**$16,980,225**
All Categories	**2500 Year**	**9,896**	**$21,489,665**

Source: GIS Analysis

Table 6-125: Critical Facilities Exposed to the Earthquake - Town of Archer Lodge

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	6	$246
Commercial Facilities	500 Year	7	$2,629

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	750 Year	7	$7,320
Commercial Facilities	1000 Year	7	$13,301
Commercial Facilities	1500 Year	7	$23,573
Commercial Facilities	2000 Year	7	$36,866
Commercial Facilities	2500 Year	7	$48,389
Critical Manufacturing	250 Year	6	$143
Critical Manufacturing	500 Year	6	$1,145
Critical Manufacturing	750 Year	6	$3,120
Critical Manufacturing	1000 Year	6	$5,263
Critical Manufacturing	1500 Year	6	$8,708
Critical Manufacturing	2000 Year	6	$12,743
Critical Manufacturing	2500 Year	6	$16,332
Emergency Services	250 Year	1	$72
Emergency Services	500 Year	1	$465
Emergency Services	750 Year	1	$1,401
Emergency Services	1000 Year	1	$2,725
Emergency Services	1500 Year	1	$5,070
Emergency Services	2000 Year	1	$8,108
Emergency Services	2500 Year	1	$10,589
Food and Agriculture	250 Year	119	$61
Food and Agriculture	500 Year	120	$2,427
Food and Agriculture	750 Year	120	$6,872
Food and Agriculture	1000 Year	120	$11,913
Food and Agriculture	1500 Year	120	$19,454
Food and Agriculture	2000 Year	120	$29,366
Food and Agriculture	2500 Year	120	$39,052
Government Facilities	250 Year	3	$54
Government Facilities	500 Year	3	$1,582
Government Facilities	750 Year	3	$4,579
Government Facilities	1000 Year	3	$7,837
Government Facilities	1500 Year	3	$12,457
Government Facilities	2000 Year	3	$18,334

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	2500 Year	3	$23,984
All Categories	**250 Year**	**135**	**$576**
All Categories	**500 Year**	**137**	**$8,248**
All Categories	**750 Year**	**137**	**$23,292**
All Categories	**1000 Year**	**137**	**$41,039**
All Categories	**1500 Year**	**137**	**$69,262**
All Categories	**2000 Year**	**137**	**$105,417**
All Categories	**2500 Year**	**137**	**$138,346**

Source: GIS Analysis

Table 6-126: Critical Facilities Exposed to the Earthquake - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	13	$819
Banking and Finance	500 Year	13	$6,888
Banking and Finance	750 Year	13	$19,032
Banking and Finance	1000 Year	13	$36,749
Banking and Finance	1500 Year	13	$64,259
Banking and Finance	2000 Year	13	$104,094
Banking and Finance	2500 Year	13	$132,163
Chemical	250 Year	1	$588
Chemical	500 Year	1	$5,542
Chemical	750 Year	1	$15,674
Chemical	1000 Year	1	$31,265
Chemical	1500 Year	1	$56,634
Chemical	2000 Year	1	$93,188
Chemical	2500 Year	1	$117,158
Commercial Facilities	250 Year	274	$10,057
Commercial Facilities	500 Year	298	$166,650
Commercial Facilities	750 Year	298	$445,827
Commercial Facilities	1000 Year	298	$828,782
Commercial Facilities	1500 Year	298	$1,406,878
Commercial Facilities	2000 Year	298	$2,228,405

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	2500 Year	298	$2,850,664
Critical Manufacturing	250 Year	111	$23,827
Critical Manufacturing	500 Year	114	$208,950
Critical Manufacturing	750 Year	114	$546,961
Critical Manufacturing	1000 Year	114	$914,191
Critical Manufacturing	1500 Year	114	$1,403,538
Critical Manufacturing	2000 Year	114	$2,032,308
Critical Manufacturing	2500 Year	114	$2,524,334
Emergency Services	250 Year	2	$153
Emergency Services	500 Year	2	$1,150
Emergency Services	750 Year	2	$3,241
Emergency Services	1000 Year	2	$6,259
Emergency Services	1500 Year	2	$11,372
Emergency Services	2000 Year	2	$18,621
Emergency Services	2500 Year	2	$23,694
Energy	250 Year	4	$49,860
Energy	500 Year	4	$260,820
Energy	750 Year	4	$494,820
Energy	1000 Year	4	$805,320
Energy	1500 Year	4	$1,317,240
Energy	2000 Year	4	$1,825,020
Energy	2500 Year	4	$2,395,620
Food and Agriculture	250 Year	311	$465
Food and Agriculture	500 Year	311	$8,964
Food and Agriculture	750 Year	311	$24,163
Food and Agriculture	1000 Year	311	$43,133
Food and Agriculture	1500 Year	311	$69,474
Food and Agriculture	2000 Year	311	$109,577
Food and Agriculture	2500 Year	311	$142,262
Government Facilities	250 Year	41	$5,572
Government Facilities	500 Year	44	$64,829
Government Facilities	750 Year	44	$181,178

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	1000 Year	44	$342,563
Government Facilities	1500 Year	44	$603,319
Government Facilities	2000 Year	44	$968,612
Government Facilities	2500 Year	44	$1,245,894
Healthcare and Public Health	250 Year	34	$3,968
Healthcare and Public Health	500 Year	34	$38,173
Healthcare and Public Health	750 Year	34	$105,262
Healthcare and Public Health	1000 Year	34	$200,873
Healthcare and Public Health	1500 Year	34	$344,075
Healthcare and Public Health	2000 Year	34	$551,285
Healthcare and Public Health	2500 Year	34	$696,622
Transportation Systems	250 Year	32	$1,063
Transportation Systems	500 Year	35	$14,734
Transportation Systems	750 Year	35	$41,194
Transportation Systems	1000 Year	35	$76,990
Transportation Systems	1500 Year	35	$132,383
Transportation Systems	2000 Year	35	$209,114
Transportation Systems	2500 Year	35	$271,013
All Categories	**250 Year**	**823**	**$96,372**
All Categories	**500 Year**	**856**	**$776,700**
All Categories	**750 Year**	**856**	**$1,877,352**
All Categories	**1000 Year**	**856**	**$3,286,125**
All Categories	**1500 Year**	**856**	**$5,409,172**
All Categories	**2000 Year**	**856**	**$8,140,224**
All Categories	**2500 Year**	**856**	**$10,399,424**

Source: GIS Analysis

Table 6-127: Critical Facilities Exposed to the Earthquake - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	14	$879
Banking and Finance	500 Year	14	$7,222
Banking and Finance	750 Year	14	$19,594
Banking and Finance	1000 Year	14	$40,249
Banking and Finance	1500 Year	14	$75,192
Banking and Finance	2000 Year	14	$119,704
Banking and Finance	2500 Year	14	$146,138
Commercial Facilities	250 Year	112	$1,776
Commercial Facilities	500 Year	114	$22,049
Commercial Facilities	750 Year	114	$58,818
Commercial Facilities	1000 Year	114	$118,305
Commercial Facilities	1500 Year	114	$216,991
Commercial Facilities	2000 Year	114	$347,442
Commercial Facilities	2500 Year	114	$435,448
Critical Manufacturing	250 Year	25	$2,624
Critical Manufacturing	500 Year	25	$24,328
Critical Manufacturing	750 Year	25	$60,325
Critical Manufacturing	1000 Year	25	$111,484
Critical Manufacturing	1500 Year	25	$181,290
Critical Manufacturing	2000 Year	25	$256,871
Critical Manufacturing	2500 Year	25	$310,748
Emergency Services	250 Year	1	$47
Emergency Services	500 Year	1	$360
Emergency Services	750 Year	1	$982
Emergency Services	1000 Year	1	$2,068
Emergency Services	1500 Year	1	$3,893
Emergency Services	2000 Year	1	$6,167
Emergency Services	2500 Year	1	$7,444
Food and Agriculture	250 Year	383	$293
Food and Agriculture	500 Year	383	$8,418
Food and Agriculture	750 Year	383	$22,190
Food and Agriculture	1000 Year	383	$40,374

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	1500 Year	383	$68,297
Food and Agriculture	2000 Year	383	$108,365
Food and Agriculture	2500 Year	383	$141,710
Government Facilities	250 Year	10	$546
Government Facilities	500 Year	10	$18,385
Government Facilities	750 Year	10	$49,040
Government Facilities	1000 Year	10	$99,861
Government Facilities	1500 Year	10	$185,700
Government Facilities	2000 Year	10	$296,847
Government Facilities	2500 Year	10	$367,572
Healthcare and Public Health	250 Year	3	$15
Healthcare and Public Health	500 Year	4	$1,719
Healthcare and Public Health	750 Year	4	$5,199
Healthcare and Public Health	1000 Year	4	$10,759
Healthcare and Public Health	1500 Year	4	$19,908
Healthcare and Public Health	2000 Year	4	$32,347
Healthcare and Public Health	2500 Year	4	$39,942
Transportation Systems	250 Year	15	$287
Transportation Systems	500 Year	15	$4,693
Transportation Systems	750 Year	15	$12,019
Transportation Systems	1000 Year	15	$22,847
Transportation Systems	1500 Year	15	$39,133
Transportation Systems	2000 Year	15	$59,780
Transportation Systems	2500 Year	15	$74,301
All Categories	**250 Year**	**563**	**$6,467**
All Categories	**500 Year**	**566**	**$87,174**
All Categories	**750 Year**	**566**	**$228,167**
All Categories	**1000 Year**	**566**	**$445,947**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**566**	**$790,404**
All Categories	**2000 Year**	**566**	**$1,227,523**
All Categories	**2500 Year**	**566**	**$1,523,303**

Source: GIS Analysis

Table 6-128: Critical Facilities Exposed to the Earthquake - Town of Kenly

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$97
Banking and Finance	500 Year	3	$1,262
Banking and Finance	750 Year	3	$4,034
Banking and Finance	1000 Year	3	$7,191
Banking and Finance	1500 Year	3	$12,464
Banking and Finance	2000 Year	3	$17,337
Banking and Finance	2500 Year	3	$22,328
Commercial Facilities	250 Year	62	$1,279
Commercial Facilities	500 Year	105	$26,057
Commercial Facilities	750 Year	105	$80,479
Commercial Facilities	1000 Year	105	$143,371
Commercial Facilities	1500 Year	105	$262,503
Commercial Facilities	2000 Year	105	$395,445
Commercial Facilities	2500 Year	105	$530,958
Critical Manufacturing	250 Year	16	$913
Critical Manufacturing	500 Year	17	$7,945
Critical Manufacturing	750 Year	17	$22,710
Critical Manufacturing	1000 Year	17	$39,727
Critical Manufacturing	1500 Year	17	$73,218
Critical Manufacturing	2000 Year	17	$109,178
Critical Manufacturing	2500 Year	17	$144,212
Emergency Services	250 Year	2	$129
Emergency Services	500 Year	2	$973
Emergency Services	750 Year	2	$3,235
Emergency Services	1000 Year	2	$6,084

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	1500 Year	2	$11,975
Emergency Services	2000 Year	2	$18,636
Emergency Services	2500 Year	2	$24,975
Energy	250 Year	2	$27
Energy	500 Year	4	$1,081
Energy	750 Year	4	$3,477
Energy	1000 Year	4	$6,212
Energy	1500 Year	4	$10,775
Energy	2000 Year	4	$15,400
Energy	2500 Year	4	$19,819
Food and Agriculture	250 Year	2	$28
Food and Agriculture	500 Year	73	$1,596
Food and Agriculture	750 Year	73	$5,061
Food and Agriculture	1000 Year	73	$9,004
Food and Agriculture	1500 Year	73	$17,690
Food and Agriculture	2000 Year	73	$27,018
Food and Agriculture	2500 Year	73	$37,048
Government Facilities	250 Year	4	$169
Government Facilities	500 Year	5	$2,212
Government Facilities	750 Year	5	$6,687
Government Facilities	1000 Year	5	$11,859
Government Facilities	1500 Year	5	$21,195
Government Facilities	2000 Year	5	$31,891
Government Facilities	2500 Year	5	$43,676
Healthcare and Public Health	250 Year	4	$81
Healthcare and Public Health	500 Year	4	$738
Healthcare and Public Health	750 Year	4	$1,895
Healthcare and Public Health	1000 Year	4	$3,278
Healthcare and Public Health	1500 Year	4	$6,440

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	2000 Year	4	$9,761
Healthcare and Public Health	2500 Year	4	$12,558
Transportation Systems	250 Year	16	$494
Transportation Systems	500 Year	23	$8,847
Transportation Systems	750 Year	23	$28,129
Transportation Systems	1000 Year	23	$49,733
Transportation Systems	1500 Year	23	$87,959
Transportation Systems	2000 Year	23	$128,400
Transportation Systems	2500 Year	23	$169,819
Water	250 Year	1	$12,120
Water	500 Year	1	$81,420
Water	750 Year	1	$185,220
Water	1000 Year	1	$312,300
Water	1500 Year	1	$592,080
Water	2000 Year	1	$779,700
Water	2500 Year	1	$977,580
All Categories	**250 Year**	**112**	**$15,337**
All Categories	**500 Year**	**237**	**$132,131**
All Categories	**750 Year**	**237**	**$340,927**
All Categories	**1000 Year**	**237**	**$588,759**
All Categories	**1500 Year**	**237**	**$1,096,299**
All Categories	**2000 Year**	**237**	**$1,532,766**
All Categories	**2500 Year**	**237**	**$1,982,973**

Source: GIS Analysis

Table 6-129: Critical Facilities Exposed to the Earthquake - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$14
Banking and Finance	500 Year	1	$123
Banking and Finance	750 Year	1	$392

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	1000 Year	1	$741
Banking and Finance	1500 Year	1	$1,389
Banking and Finance	2000 Year	1	$2,236
Banking and Finance	2500 Year	1	$2,912
Commercial Facilities	250 Year	17	$412
Commercial Facilities	500 Year	36	$7,180
Commercial Facilities	750 Year	36	$21,075
Commercial Facilities	1000 Year	36	$37,510
Commercial Facilities	1500 Year	36	$67,074
Commercial Facilities	2000 Year	36	$107,954
Commercial Facilities	2500 Year	36	$148,421
Critical Manufacturing	250 Year	6	$429
Critical Manufacturing	500 Year	6	$3,577
Critical Manufacturing	750 Year	6	$10,959
Critical Manufacturing	1000 Year	6	$19,426
Critical Manufacturing	1500 Year	6	$32,668
Critical Manufacturing	2000 Year	6	$49,222
Critical Manufacturing	2500 Year	6	$62,777
Food and Agriculture	250 Year	1	$1
Food and Agriculture	500 Year	76	$1,228
Food and Agriculture	750 Year	76	$3,682
Food and Agriculture	1000 Year	76	$6,511
Food and Agriculture	1500 Year	76	$11,063
Food and Agriculture	2000 Year	76	$17,149
Food and Agriculture	2500 Year	76	$23,422
Government Facilities	250 Year	2	$364
Government Facilities	500 Year	20	$12,204
Government Facilities	750 Year	20	$40,193
Government Facilities	1000 Year	20	$73,733
Government Facilities	1500 Year	20	$129,767
Government Facilities	2000 Year	20	$202,020
Government Facilities	2500 Year	20	$262,212

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	250 Year	2	$22
Transportation Systems	500 Year	2	$343
Transportation Systems	750 Year	2	$946
Transportation Systems	1000 Year	2	$1,659
Transportation Systems	1500 Year	2	$3,155
Transportation Systems	2000 Year	2	$5,758
Transportation Systems	2500 Year	2	$8,776
All Categories	**250 Year**	**29**	**$1,242**
All Categories	**500 Year**	**141**	**$24,655**
All Categories	**750 Year**	**141**	**$77,247**
All Categories	**1000 Year**	**141**	**$139,580**
All Categories	**1500 Year**	**141**	**$245,116**
All Categories	**2000 Year**	**141**	**$384,339**
All Categories	**2500 Year**	**141**	**$508,520**

Source: GIS Analysis

Table 6-130: Critical Facilities Exposed to the Earthquake - Town of Pine Level

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$47
Banking and Finance	500 Year	1	$418
Banking and Finance	750 Year	1	$1,265
Banking and Finance	1000 Year	1	$2,444
Banking and Finance	1500 Year	1	$4,469
Banking and Finance	2000 Year	1	$7,390
Banking and Finance	2500 Year	1	$9,415
Commercial Facilities	250 Year	35	$748
Commercial Facilities	500 Year	45	$10,643
Commercial Facilities	750 Year	45	$31,689
Commercial Facilities	1000 Year	45	$61,881
Commercial Facilities	1500 Year	45	$111,992
Commercial Facilities	2000 Year	45	$184,226
Commercial Facilities	2500 Year	45	$236,955

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	250 Year	9	$1,032
Critical Manufacturing	500 Year	9	$7,349
Critical Manufacturing	750 Year	9	$16,492
Critical Manufacturing	1000 Year	9	$26,677
Critical Manufacturing	1500 Year	9	$41,678
Critical Manufacturing	2000 Year	9	$59,143
Critical Manufacturing	2500 Year	9	$75,943
Emergency Services	250 Year	1	$45
Emergency Services	500 Year	2	$822
Emergency Services	750 Year	2	$2,487
Emergency Services	1000 Year	2	$4,207
Emergency Services	1500 Year	2	$6,465
Emergency Services	2000 Year	2	$9,365
Emergency Services	2500 Year	2	$11,737
Food and Agriculture	250 Year	121	$28
Food and Agriculture	500 Year	138	$3,128
Food and Agriculture	750 Year	138	$8,990
Food and Agriculture	1000 Year	138	$16,131
Food and Agriculture	1500 Year	138	$26,357
Food and Agriculture	2000 Year	138	$41,853
Food and Agriculture	2500 Year	138	$55,820
Government Facilities	250 Year	7	$60
Government Facilities	500 Year	12	$4,754
Government Facilities	750 Year	12	$14,634
Government Facilities	1000 Year	12	$28,526
Government Facilities	1500 Year	12	$50,585
Government Facilities	2000 Year	12	$83,771
Government Facilities	2500 Year	12	$113,794
Healthcare and Public Health	250 Year	1	$4
Healthcare and Public Health	500 Year	1	$454
Healthcare and Public Health	750 Year	1	$1,410

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	1000 Year	1	$2,392
Healthcare and Public Health	1500 Year	1	$3,675
Healthcare and Public Health	2000 Year	1	$5,488
Healthcare and Public Health	2500 Year	1	$7,018
Transportation Systems	250 Year	2	$7
Transportation Systems	500 Year	5	$1,128
Transportation Systems	750 Year	5	$3,473
Transportation Systems	1000 Year	5	$6,452
Transportation Systems	1500 Year	5	$10,586
Transportation Systems	2000 Year	5	$16,569
Transportation Systems	2500 Year	5	$21,229
All Categories	**250 Year**	**177**	**$1,971**
All Categories	**500 Year**	**213**	**$28,696**
All Categories	**750 Year**	**213**	**$80,440**
All Categories	**1000 Year**	**213**	**$148,710**
All Categories	**1500 Year**	**213**	**$255,807**
All Categories	**2000 Year**	**213**	**$407,805**
All Categories	**2500 Year**	**213**	**$531,911**

Source: GIS Analysis

Table 6-131: Critical Facilities Exposed to the Earthquake - Town of Princeton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$33
Banking and Finance	500 Year	3	$356
Banking and Finance	750 Year	3	$1,148
Banking and Finance	1000 Year	3	$2,156
Banking and Finance	1500 Year	3	$3,734
Banking and Finance	2000 Year	3	$5,752
Banking and Finance	2500 Year	3	$7,336

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	31	$828
Commercial Facilities	500 Year	64	$13,885
Commercial Facilities	750 Year	64	$43,033
Commercial Facilities	1000 Year	64	$83,898
Commercial Facilities	1500 Year	64	$154,094
Commercial Facilities	2000 Year	64	$251,887
Commercial Facilities	2500 Year	64	$327,448
Critical Manufacturing	250 Year	11	$469
Critical Manufacturing	500 Year	11	$4,597
Critical Manufacturing	750 Year	11	$14,745
Critical Manufacturing	1000 Year	11	$27,424
Critical Manufacturing	1500 Year	11	$46,880
Critical Manufacturing	2000 Year	11	$70,664
Critical Manufacturing	2500 Year	11	$87,866
Emergency Services	250 Year	1	$23
Emergency Services	500 Year	1	$549
Emergency Services	750 Year	1	$1,840
Emergency Services	1000 Year	1	$3,257
Emergency Services	1500 Year	1	$5,151
Emergency Services	2000 Year	1	$7,582
Emergency Services	2500 Year	1	$9,819
Energy	250 Year	1	$12,060
Energy	500 Year	1	$84,720
Energy	750 Year	1	$195,900
Energy	1000 Year	1	$350,760
Energy	1500 Year	1	$624,240
Energy	2000 Year	1	$815,880
Energy	2500 Year	1	$1,078,200
Food and Agriculture	250 Year	4	$0
Food and Agriculture	500 Year	56	$925
Food and Agriculture	750 Year	56	$2,783
Food and Agriculture	1000 Year	56	$5,006

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	1500 Year	56	$8,323
Food and Agriculture	2000 Year	56	$13,175
Food and Agriculture	2500 Year	56	$17,703
Government Facilities	250 Year	4	$254
Government Facilities	500 Year	20	$10,306
Government Facilities	750 Year	20	$33,887
Government Facilities	1000 Year	20	$66,036
Government Facilities	1500 Year	20	$123,642
Government Facilities	2000 Year	20	$206,298
Government Facilities	2500 Year	20	$267,449
Healthcare and Public Health	250 Year	3	$102
Healthcare and Public Health	500 Year	4	$978
Healthcare and Public Health	750 Year	4	$3,181
Healthcare and Public Health	1000 Year	4	$6,150
Healthcare and Public Health	1500 Year	4	$10,873
Healthcare and Public Health	2000 Year	4	$16,851
Healthcare and Public Health	2500 Year	4	$21,386
Transportation Systems	250 Year	8	$198
Transportation Systems	500 Year	16	$3,363
Transportation Systems	750 Year	16	$10,682
Transportation Systems	1000 Year	16	$20,684
Transportation Systems	1500 Year	16	$37,584
Transportation Systems	2000 Year	16	$61,290
Transportation Systems	2500 Year	16	$79,055
All Categories	**250 Year**	**65**	**$13,967**
All Categories	**500 Year**	**176**	**$119,679**
All Categories	**750 Year**	**176**	**$307,199**
All Categories	**1000 Year**	**176**	**$565,371**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**176**	**$1,014,521**
All Categories	**2000 Year**	**176**	**$1,449,379**
All Categories	**2500 Year**	**176**	**$1,896,262**

Source: GIS Analysis

Table 6-132: Critical Facilities Exposed to the Earthquake - Town of Selma

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	7	$249
Banking and Finance	500 Year	7	$2,177
Banking and Finance	750 Year	7	$6,550
Banking and Finance	1000 Year	7	$12,690
Banking and Finance	1500 Year	7	$23,062
Banking and Finance	2000 Year	7	$37,919
Banking and Finance	2500 Year	7	$48,578
Commercial Facilities	250 Year	181	$5,937
Commercial Facilities	500 Year	255	$99,532
Commercial Facilities	750 Year	255	$288,185
Commercial Facilities	1000 Year	255	$544,917
Commercial Facilities	1500 Year	255	$950,557
Commercial Facilities	2000 Year	255	$1,535,806
Commercial Facilities	2500 Year	255	$1,982,652
Critical Manufacturing	250 Year	41	$4,894
Critical Manufacturing	500 Year	42	$43,361
Critical Manufacturing	750 Year	42	$115,447
Critical Manufacturing	1000 Year	42	$193,482
Critical Manufacturing	1500 Year	42	$308,632
Critical Manufacturing	2000 Year	42	$461,740
Critical Manufacturing	2500 Year	42	$582,347
Emergency Services	250 Year	1	$29
Emergency Services	500 Year	2	$769
Emergency Services	750 Year	2	$2,298
Emergency Services	1000 Year	2	$4,498

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	1500 Year	2	$7,682
Emergency Services	2000 Year	2	$11,389
Emergency Services	2500 Year	2	$14,099
Energy	250 Year	3	$12,106
Energy	500 Year	3	$70,644
Energy	750 Year	3	$137,864
Energy	1000 Year	3	$227,397
Energy	1500 Year	3	$376,352
Energy	2000 Year	3	$512,642
Energy	2500 Year	3	$682,187
Food and Agriculture	250 Year	206	$299
Food and Agriculture	500 Year	206	$5,602
Food and Agriculture	750 Year	206	$16,217
Food and Agriculture	1000 Year	206	$28,314
Food and Agriculture	1500 Year	206	$45,204
Food and Agriculture	2000 Year	206	$69,166
Food and Agriculture	2500 Year	206	$90,768
Government Facilities	250 Year	23	$2,931
Government Facilities	500 Year	28	$23,277
Government Facilities	750 Year	28	$69,655
Government Facilities	1000 Year	28	$134,894
Government Facilities	1500 Year	28	$245,890
Government Facilities	2000 Year	28	$400,216
Government Facilities	2500 Year	28	$514,026
Healthcare and Public Health	250 Year	12	$339
Healthcare and Public Health	500 Year	16	$4,795
Healthcare and Public Health	750 Year	16	$15,008
Healthcare and Public Health	1000 Year	16	$28,879
Healthcare and Public Health	1500 Year	16	$51,437

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	2000 Year	16	$83,718
Healthcare and Public Health	2500 Year	16	$108,365
Transportation Systems	250 Year	43	$1,833
Transportation Systems	500 Year	49	$23,641
Transportation Systems	750 Year	49	$63,328
Transportation Systems	1000 Year	49	$114,052
Transportation Systems	1500 Year	49	$193,919
Transportation Systems	2000 Year	49	$306,975
Transportation Systems	2500 Year	49	$403,619
All Categories	**250 Year**	**517**	**$28,617**
All Categories	**500 Year**	**608**	**$273,798**
All Categories	**750 Year**	**608**	**$714,552**
All Categories	**1000 Year**	**608**	**$1,289,123**
All Categories	**1500 Year**	**608**	**$2,202,735**
All Categories	**2000 Year**	**608**	**$3,419,571**
All Categories	**2500 Year**	**608**	**$4,426,641**

Source: GIS Analysis

Table 6-133: Critical Facilities Exposed to the Earthquake - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	15	$1,803
Banking and Finance	500 Year	17	$22,040
Banking and Finance	750 Year	17	$62,851
Banking and Finance	1000 Year	17	$118,298
Banking and Finance	1500 Year	17	$201,449
Banking and Finance	2000 Year	17	$326,118
Banking and Finance	2500 Year	17	$410,302
Commercial Facilities	250 Year	318	$12,206
Commercial Facilities	500 Year	445	$228,002
Commercial Facilities	750 Year	445	$644,068

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	1000 Year	445	$1,235,938
Commercial Facilities	1500 Year	445	$2,134,831
Commercial Facilities	2000 Year	445	$3,470,664
Commercial Facilities	2500 Year	445	$4,435,605
Communications	250 Year	1	$74
Communications	500 Year	1	$814
Communications	750 Year	1	$2,377
Communications	1000 Year	1	$4,681
Communications	1500 Year	1	$8,348
Communications	2000 Year	1	$13,810
Communications	2500 Year	1	$17,159
Critical Manufacturing	250 Year	105	$20,902
Critical Manufacturing	500 Year	105	$200,277
Critical Manufacturing	750 Year	105	$564,974
Critical Manufacturing	1000 Year	105	$1,039,129
Critical Manufacturing	1500 Year	105	$1,729,047
Critical Manufacturing	2000 Year	105	$2,745,527
Critical Manufacturing	2500 Year	105	$3,424,443
Defense Industrial Base	250 Year	2	$5,817
Defense Industrial Base	500 Year	2	$62,916
Defense Industrial Base	750 Year	2	$188,889
Defense Industrial Base	1000 Year	2	$367,328
Defense Industrial Base	1500 Year	2	$654,353
Defense Industrial Base	2000 Year	2	$1,077,215
Defense Industrial Base	2500 Year	2	$1,349,097
Emergency Services	250 Year	3	$151
Emergency Services	500 Year	4	$5,561
Emergency Services	750 Year	4	$15,982
Emergency Services	1000 Year	4	$26,811
Emergency Services	1500 Year	4	$41,006
Emergency Services	2000 Year	4	$63,219
Emergency Services	2500 Year	4	$79,922

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	250 Year	9	$66,078
Energy	500 Year	10	$405,263
Energy	750 Year	10	$872,951
Energy	1000 Year	10	$1,545,670
Energy	1500 Year	10	$2,711,975
Energy	2000 Year	10	$3,510,846
Energy	2500 Year	10	$4,781,101
Food and Agriculture	250 Year	349	$831
Food and Agriculture	500 Year	349	$13,812
Food and Agriculture	750 Year	349	$38,492
Food and Agriculture	1000 Year	349	$68,801
Food and Agriculture	1500 Year	349	$109,916
Food and Agriculture	2000 Year	349	$175,530
Food and Agriculture	2500 Year	349	$229,728
Government Facilities	250 Year	78	$5,685
Government Facilities	500 Year	112	$110,386
Government Facilities	750 Year	112	$316,812
Government Facilities	1000 Year	112	$606,467
Government Facilities	1500 Year	112	$1,048,038
Government Facilities	2000 Year	112	$1,705,103
Government Facilities	2500 Year	112	$2,181,596
Healthcare and Public Health	250 Year	48	$7,211
Healthcare and Public Health	500 Year	57	$97,440
Healthcare and Public Health	750 Year	57	$280,053
Healthcare and Public Health	1000 Year	57	$518,234
Healthcare and Public Health	1500 Year	57	$850,370
Healthcare and Public Health	2000 Year	57	$1,341,312
Healthcare and Public Health	2500 Year	57	$1,701,980

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	250 Year	37	$1,635
Transportation Systems	500 Year	55	$33,774
Transportation Systems	750 Year	55	$95,184
Transportation Systems	1000 Year	55	$178,176
Transportation Systems	1500 Year	55	$298,003
Transportation Systems	2000 Year	55	$485,285
Transportation Systems	2500 Year	55	$627,639
All Categories	**250 Year**	**965**	**$122,393**
All Categories	**500 Year**	**1,157**	**$1,180,285**
All Categories	**750 Year**	**1,157**	**$3,082,633**
All Categories	**1000 Year**	**1,157**	**$5,709,533**
All Categories	**1500 Year**	**1,157**	**$9,787,336**
All Categories	**2000 Year**	**1,157**	**$14,914,629**
All Categories	**2500 Year**	**1,157**	**$19,238,572**

Source: GIS Analysis

Table 6-134: Critical Facilities Exposed to the Earthquake - Town of Wilson's Mills

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	30	$805
Commercial Facilities	500 Year	45	$12,295
Commercial Facilities	750 Year	45	$34,672
Commercial Facilities	1000 Year	45	$63,244
Commercial Facilities	1500 Year	45	$114,203
Commercial Facilities	2000 Year	45	$179,681
Commercial Facilities	2500 Year	45	$238,151
Critical Manufacturing	250 Year	10	$1,457
Critical Manufacturing	500 Year	11	$11,677
Critical Manufacturing	750 Year	11	$27,754
Critical Manufacturing	1000 Year	11	$43,304
Critical Manufacturing	1500 Year	11	$66,572
Critical Manufacturing	2000 Year	11	$93,714

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	2500 Year	11	$117,326
Emergency Services	250 Year	1	$5
Emergency Services	500 Year	1	$248
Emergency Services	750 Year	1	$746
Emergency Services	1000 Year	1	$1,312
Emergency Services	1500 Year	1	$2,185
Emergency Services	2000 Year	1	$3,435
Emergency Services	2500 Year	1	$4,668
Energy	250 Year	7	$15,000
Energy	500 Year	7	$83,580
Energy	750 Year	7	$162,000
Energy	1000 Year	7	$263,340
Energy	1500 Year	7	$433,980
Energy	2000 Year	7	$603,300
Energy	2500 Year	7	$786,540
Food and Agriculture	250 Year	94	$101
Food and Agriculture	500 Year	94	$4,018
Food and Agriculture	750 Year	94	$11,017
Food and Agriculture	1000 Year	94	$18,852
Food and Agriculture	1500 Year	94	$28,819
Food and Agriculture	2000 Year	94	$43,731
Food and Agriculture	2500 Year	94	$56,371
Government Facilities	250 Year	6	$49
Government Facilities	500 Year	9	$3,690
Government Facilities	750 Year	9	$10,598
Government Facilities	1000 Year	9	$20,496
Government Facilities	1500 Year	9	$36,035
Government Facilities	2000 Year	9	$56,923
Government Facilities	2500 Year	9	$75,275
Healthcare and Public Health	250 Year	1	$16
Healthcare and Public Health	500 Year	1	$173

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	750 Year	1	$349
Healthcare and Public Health	1000 Year	1	$615
Healthcare and Public Health	1500 Year	1	$1,105
Healthcare and Public Health	2000 Year	1	$2,030
Healthcare and Public Health	2500 Year	1	$2,911
Transportation Systems	250 Year	8	$128
Transportation Systems	500 Year	9	$2,714
Transportation Systems	750 Year	9	$7,620
Transportation Systems	1000 Year	9	$13,544
Transportation Systems	1500 Year	9	$21,862
Transportation Systems	2000 Year	9	$33,916
Transportation Systems	2500 Year	9	$44,018
All Categories	**250 Year**	**157**	**$17,561**
All Categories	**500 Year**	**177**	**$118,395**
All Categories	**750 Year**	**177**	**$254,756**
All Categories	**1000 Year**	**177**	**$424,707**
All Categories	**1500 Year**	**177**	**$704,761**
All Categories	**2000 Year**	**177**	**$1,016,730**
All Categories	**2500 Year**	**177**	**$1,325,260**

Source: GIS Analysis

Table 6-135: Critical Facilities Exposed to the Earthquake - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	36	$5,298
Banking and Finance	500 Year	36	$58,150
Banking and Finance	750 Year	36	$142,464
Banking and Finance	1000 Year	36	$229,732
Banking and Finance	1500 Year	36	$447,854

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	2000 Year	36	$635,996
Banking and Finance	2500 Year	36	$841,618
Commercial Facilities	250 Year	806	$113,444
Commercial Facilities	500 Year	845	$1,208,954
Commercial Facilities	750 Year	845	$2,991,100
Commercial Facilities	1000 Year	845	$4,969,078
Commercial Facilities	1500 Year	845	$10,070,519
Commercial Facilities	2000 Year	845	$14,735,529
Commercial Facilities	2500 Year	845	$19,692,365
Communications	250 Year	1	$81
Communications	500 Year	1	$815
Communications	750 Year	1	$2,085
Communications	1000 Year	1	$3,558
Communications	1500 Year	1	$7,006
Communications	2000 Year	1	$9,592
Communications	2500 Year	1	$11,971
Critical Manufacturing	250 Year	249	$170,076
Critical Manufacturing	500 Year	250	$1,568,736
Critical Manufacturing	750 Year	250	$3,521,371
Critical Manufacturing	1000 Year	250	$5,526,472
Critical Manufacturing	1500 Year	250	$10,019,707
Critical Manufacturing	2000 Year	250	$14,222,902
Critical Manufacturing	2500 Year	250	$18,664,374
Defense Industrial Base	250 Year	2	$1,116
Defense Industrial Base	500 Year	2	$13,929
Defense Industrial Base	750 Year	2	$37,247
Defense Industrial Base	1000 Year	2	$62,922
Defense Industrial Base	1500 Year	2	$123,871
Defense Industrial Base	2000 Year	2	$161,683
Defense Industrial Base	2500 Year	2	$197,649
Emergency Services	250 Year	6	$3,016
Emergency Services	500 Year	6	$36,547

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	750 Year	6	$89,284
Emergency Services	1000 Year	6	$141,322
Emergency Services	1500 Year	6	$273,975
Emergency Services	2000 Year	6	$409,207
Emergency Services	2500 Year	6	$552,484
Energy	250 Year	19	$14,864
Energy	500 Year	19	$76,224
Energy	750 Year	19	$156,284
Energy	1000 Year	19	$247,646
Energy	1500 Year	19	$418,808
Energy	2000 Year	19	$594,477
Energy	2500 Year	19	$760,955
Food and Agriculture	250 Year	105	$1,255
Food and Agriculture	500 Year	105	$22,920
Food and Agriculture	750 Year	105	$59,928
Food and Agriculture	1000 Year	105	$102,297
Food and Agriculture	1500 Year	105	$203,762
Food and Agriculture	2000 Year	105	$277,343
Food and Agriculture	2500 Year	105	$346,065
Government Facilities	250 Year	167	$45,758
Government Facilities	500 Year	177	$455,045
Government Facilities	750 Year	177	$1,103,326
Government Facilities	1000 Year	177	$1,881,286
Government Facilities	1500 Year	177	$3,791,985
Government Facilities	2000 Year	177	$6,006,925
Government Facilities	2500 Year	177	$8,423,018
Healthcare and Public Health	250 Year	84	$29,139
Healthcare and Public Health	500 Year	102	$253,573
Healthcare and Public Health	750 Year	102	$643,590
Healthcare and Public Health	1000 Year	102	$1,069,834

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	1500 Year	102	$2,017,969
Healthcare and Public Health	2000 Year	102	$2,991,182
Healthcare and Public Health	2500 Year	102	$3,907,151
Transportation Systems	250 Year	225	$35,695
Transportation Systems	500 Year	225	$369,321
Transportation Systems	750 Year	225	$924,026
Transportation Systems	1000 Year	225	$1,522,093
Transportation Systems	1500 Year	225	$3,116,410
Transportation Systems	2000 Year	225	$4,474,527
Transportation Systems	2500 Year	225	$5,973,720
All Categories	**250 Year**	**1,700**	**$419,742**
All Categories	**500 Year**	**1,768**	**$4,064,214**
All Categories	**750 Year**	**1,768**	**$9,670,705**
All Categories	**1000 Year**	**1,768**	**$15,756,240**
All Categories	**1500 Year**	**1,768**	**$30,491,866**
All Categories	**2000 Year**	**1,768**	**$44,519,363**
All Categories	**2500 Year**	**1,768**	**$59,371,370**

Source: GIS Analysis

Table 6-136: Critical Facilities Exposed to the Earthquake - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	412	$36,059
Commercial Facilities	500 Year	440	$390,994
Commercial Facilities	750 Year	440	$926,709
Commercial Facilities	1000 Year	440	$1,501,210
Commercial Facilities	1500 Year	440	$2,719,319
Commercial Facilities	2000 Year	440	$3,995,397
Commercial Facilities	2500 Year	440	$5,298,018
Critical Manufacturing	250 Year	254	$52,567
Critical Manufacturing	500 Year	256	$498,188

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	750 Year	256	$1,110,727
Critical Manufacturing	1000 Year	256	$1,720,875
Critical Manufacturing	1500 Year	256	$2,973,327
Critical Manufacturing	2000 Year	256	$4,143,829
Critical Manufacturing	2500 Year	256	$5,158,081
Defense Industrial Base	250 Year	1	$382
Defense Industrial Base	500 Year	1	$3,782
Defense Industrial Base	750 Year	1	$9,570
Defense Industrial Base	1000 Year	1	$16,506
Defense Industrial Base	1500 Year	1	$32,157
Defense Industrial Base	2000 Year	1	$44,597
Defense Industrial Base	2500 Year	1	$53,770
Emergency Services	250 Year	9	$1,957
Emergency Services	500 Year	9	$21,182
Emergency Services	750 Year	9	$52,517
Emergency Services	1000 Year	9	$86,201
Emergency Services	1500 Year	9	$153,310
Emergency Services	2000 Year	9	$223,354
Emergency Services	2500 Year	9	$298,691
Energy	250 Year	8	$1,537
Energy	500 Year	8	$8,189
Energy	750 Year	8	$16,220
Energy	1000 Year	8	$25,102
Energy	1500 Year	8	$39,644
Energy	2000 Year	8	$53,926
Energy	2500 Year	8	$68,637
Food and Agriculture	250 Year	1,168	$13,375
Food and Agriculture	500 Year	1,170	$176,136
Food and Agriculture	750 Year	1,170	$429,070
Food and Agriculture	1000 Year	1,170	$687,285
Food and Agriculture	1500 Year	1,170	$1,316,953
Food and Agriculture	2000 Year	1,170	$1,844,927

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	2500 Year	1,170	$2,378,441
Government Facilities	250 Year	34	$15,181
Government Facilities	500 Year	34	$145,285
Government Facilities	750 Year	34	$337,691
Government Facilities	1000 Year	34	$563,344
Government Facilities	1500 Year	34	$1,029,476
Government Facilities	2000 Year	34	$1,598,136
Government Facilities	2500 Year	34	$2,164,653
Healthcare and Public Health	250 Year	27	$3,357
Healthcare and Public Health	500 Year	27	$34,321
Healthcare and Public Health	750 Year	27	$81,487
Healthcare and Public Health	1000 Year	27	$132,448
Healthcare and Public Health	1500 Year	27	$240,011
Healthcare and Public Health	2000 Year	27	$341,111
Healthcare and Public Health	2500 Year	27	$435,922
Transportation Systems	250 Year	122	$10,447
Transportation Systems	500 Year	123	$115,437
Transportation Systems	750 Year	123	$286,537
Transportation Systems	1000 Year	123	$459,869
Transportation Systems	1500 Year	123	$834,609
Transportation Systems	2000 Year	123	$1,199,520
Transportation Systems	2500 Year	123	$1,591,585
All Categories	**250 Year**	**2,035**	**$134,862**
All Categories	**500 Year**	**2,068**	**$1,393,514**
All Categories	**750 Year**	**2,068**	**$3,250,528**
All Categories	**1000 Year**	**2,068**	**$5,192,840**
All Categories	**1500 Year**	**2,068**	**$9,338,806**
All Categories	**2000 Year**	**2,068**	**$13,444,797**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**2500 Year**	**2,068**	**$17,447,798**

Source: GIS Analysis

Table 6-137: Critical Facilities Exposed to the Earthquake - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	7	$1,226
Banking and Finance	500 Year	7	$8,243
Banking and Finance	750 Year	7	$18,200
Banking and Finance	1000 Year	7	$28,363
Banking and Finance	1500 Year	7	$54,835
Banking and Finance	2000 Year	7	$77,938
Banking and Finance	2500 Year	7	$100,288
Chemical	250 Year	1	$194
Chemical	500 Year	1	$1,725
Chemical	750 Year	1	$4,824
Chemical	1000 Year	1	$9,295
Chemical	1500 Year	1	$25,890
Chemical	2000 Year	1	$37,851
Chemical	2500 Year	1	$45,974
Commercial Facilities	250 Year	965	$134,017
Commercial Facilities	500 Year	967	$1,190,994
Commercial Facilities	750 Year	967	$2,897,304
Commercial Facilities	1000 Year	967	$4,640,678
Commercial Facilities	1500 Year	967	$8,798,195
Commercial Facilities	2000 Year	967	$13,140,325
Commercial Facilities	2500 Year	967	$17,865,385
Critical Manufacturing	250 Year	303	$56,554
Critical Manufacturing	500 Year	303	$421,903
Critical Manufacturing	750 Year	303	$963,996
Critical Manufacturing	1000 Year	303	$1,461,221
Critical Manufacturing	1500 Year	303	$2,536,764
Critical Manufacturing	2000 Year	303	$3,488,499

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	2500 Year	303	$4,445,696
Emergency Services	250 Year	8	$6,026
Emergency Services	500 Year	8	$44,354
Emergency Services	750 Year	8	$94,107
Emergency Services	1000 Year	8	$145,215
Emergency Services	1500 Year	8	$275,839
Emergency Services	2000 Year	8	$413,937
Emergency Services	2500 Year	8	$555,169
Energy	250 Year	4	$405
Energy	500 Year	4	$2,643
Energy	750 Year	4	$6,979
Energy	1000 Year	4	$14,153
Energy	1500 Year	4	$29,227
Energy	2000 Year	4	$44,746
Energy	2500 Year	4	$56,539
Food and Agriculture	250 Year	3,782	$46,813
Food and Agriculture	500 Year	3,782	$436,476
Food and Agriculture	750 Year	3,782	$993,954
Food and Agriculture	1000 Year	3,782	$1,449,999
Food and Agriculture	1500 Year	3,782	$2,826,354
Food and Agriculture	2000 Year	3,782	$4,170,070
Food and Agriculture	2500 Year	3,782	$6,346,195
Government Facilities	250 Year	89	$22,896
Government Facilities	500 Year	89	$180,811
Government Facilities	750 Year	89	$463,496
Government Facilities	1000 Year	89	$841,987
Government Facilities	1500 Year	89	$1,749,899
Government Facilities	2000 Year	89	$2,704,154
Government Facilities	2500 Year	89	$3,733,289
Healthcare and Public Health	250 Year	40	$7,177
Healthcare and Public Health	500 Year	40	$60,421

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	750 Year	40	$141,505
Healthcare and Public Health	1000 Year	40	$224,683
Healthcare and Public Health	1500 Year	40	$428,098
Healthcare and Public Health	2000 Year	40	$648,566
Healthcare and Public Health	2500 Year	40	$867,312
Nuclear Reactors, Materials and Waste	250 Year	1	$76
Nuclear Reactors, Materials and Waste	500 Year	1	$762
Nuclear Reactors, Materials and Waste	750 Year	1	$2,255
Nuclear Reactors, Materials and Waste	1000 Year	1	$3,871
Nuclear Reactors, Materials and Waste	1500 Year	1	$6,914
Nuclear Reactors, Materials and Waste	2000 Year	1	$9,664
Nuclear Reactors, Materials and Waste	2500 Year	1	$12,205
Transportation Systems	250 Year	194	$36,078
Transportation Systems	500 Year	194	$302,056
Transportation Systems	750 Year	194	$722,933
Transportation Systems	1000 Year	194	$1,156,150
Transportation Systems	1500 Year	194	$2,178,585
Transportation Systems	2000 Year	194	$3,208,822
Transportation Systems	2500 Year	194	$4,301,510
Water	250 Year	9	$41,284
Water	500 Year	9	$166,444
Water	750 Year	9	$348,696
Water	1000 Year	9	$509,794
Water	1500 Year	9	$850,529
Water	2000 Year	9	$1,136,730

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	2500 Year	9	$1,380,055
All Categories	**250 Year**	**5,403**	**$352,746**
All Categories	**500 Year**	**5,405**	**$2,816,832**
All Categories	**750 Year**	**5,405**	**$6,658,249**
All Categories	**1000 Year**	**5,405**	**$10,485,409**
All Categories	**1500 Year**	**5,405**	**$19,761,129**
All Categories	**2000 Year**	**5,405**	**$29,081,302**
All Categories	**2500 Year**	**5,405**	**$39,709,617**

Source: GIS Analysis

Table 6-138: Critical Facilities Exposed to the Earthquake - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	6	$1,435
Banking and Finance	500 Year	6	$12,702
Banking and Finance	750 Year	6	$33,248
Banking and Finance	1000 Year	6	$55,532
Banking and Finance	1500 Year	6	$101,270
Banking and Finance	2000 Year	6	$163,538
Banking and Finance	2500 Year	6	$223,562
Commercial Facilities	250 Year	290	$53,425
Commercial Facilities	500 Year	290	$482,549
Commercial Facilities	750 Year	290	$1,267,769
Commercial Facilities	1000 Year	290	$2,213,939
Commercial Facilities	1500 Year	290	$4,201,621
Commercial Facilities	2000 Year	290	$6,853,171
Commercial Facilities	2500 Year	290	$8,733,669
Communications	250 Year	1	$436
Communications	500 Year	1	$5,073
Communications	750 Year	1	$15,536
Communications	1000 Year	1	$27,733
Communications	1500 Year	1	$47,792
Communications	2000 Year	1	$69,259

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	2500 Year	1	$85,918
Critical Manufacturing	250 Year	98	$59,400
Critical Manufacturing	500 Year	98	$503,842
Critical Manufacturing	750 Year	98	$1,166,565
Critical Manufacturing	1000 Year	98	$1,928,615
Critical Manufacturing	1500 Year	98	$3,568,080
Critical Manufacturing	2000 Year	98	$5,416,625
Critical Manufacturing	2500 Year	98	$6,451,158
Defense Industrial Base	250 Year	1	$425
Defense Industrial Base	500 Year	1	$3,921
Defense Industrial Base	750 Year	1	$11,253
Defense Industrial Base	1000 Year	1	$19,735
Defense Industrial Base	1500 Year	1	$34,637
Defense Industrial Base	2000 Year	1	$52,959
Defense Industrial Base	2500 Year	1	$68,992
Emergency Services	250 Year	6	$2,164
Emergency Services	500 Year	6	$16,120
Emergency Services	750 Year	6	$40,814
Emergency Services	1000 Year	6	$71,444
Emergency Services	1500 Year	6	$139,467
Emergency Services	2000 Year	6	$214,498
Emergency Services	2500 Year	6	$264,603
Energy	250 Year	3	$169
Energy	500 Year	3	$1,259
Energy	750 Year	3	$3,341
Energy	1000 Year	3	$5,748
Energy	1500 Year	3	$10,956
Energy	2000 Year	3	$16,876
Energy	2500 Year	3	$21,476
Food and Agriculture	250 Year	27	$214
Food and Agriculture	500 Year	27	$2,038
Food and Agriculture	750 Year	27	$4,795

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	1000 Year	27	$8,018
Food and Agriculture	1500 Year	27	$15,075
Food and Agriculture	2000 Year	27	$26,860
Food and Agriculture	2500 Year	27	$32,608
Government Facilities	250 Year	39	$10,936
Government Facilities	500 Year	39	$89,000
Government Facilities	750 Year	39	$224,374
Government Facilities	1000 Year	39	$455,336
Government Facilities	1500 Year	39	$1,140,636
Government Facilities	2000 Year	39	$1,931,208
Government Facilities	2500 Year	39	$2,372,805
Healthcare and Public Health	250 Year	15	$6,879
Healthcare and Public Health	500 Year	15	$62,892
Healthcare and Public Health	750 Year	15	$153,397
Healthcare and Public Health	1000 Year	15	$251,421
Healthcare and Public Health	1500 Year	15	$469,821
Healthcare and Public Health	2000 Year	15	$847,459
Healthcare and Public Health	2500 Year	15	$1,189,596
Transportation Systems	250 Year	62	$14,397
Transportation Systems	500 Year	62	$116,801
Transportation Systems	750 Year	62	$304,870
Transportation Systems	1000 Year	62	$531,176
Transportation Systems	1500 Year	62	$1,014,345
Transportation Systems	2000 Year	62	$1,585,198
Transportation Systems	2500 Year	62	$2,063,890
All Categories	**250 Year**	**548**	**$149,880**
All Categories	**500 Year**	**548**	**$1,296,197**
All Categories	**750 Year**	**548**	**$3,225,962**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1000 Year**	**548**	**$5,568,697**
All Categories	**1500 Year**	**548**	**$10,743,700**
All Categories	**2000 Year**	**548**	**$17,177,651**
All Categories	**2500 Year**	**548**	**$21,508,277**

Source: GIS Analysis

Table 6-139: Critical Facilities Exposed to the Earthquake - Town of Cameron

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	48	$3,360
Commercial Facilities	500 Year	48	$34,639
Commercial Facilities	750 Year	48	$85,556
Commercial Facilities	1000 Year	48	$135,273
Commercial Facilities	1500 Year	48	$262,310
Commercial Facilities	2000 Year	48	$370,908
Commercial Facilities	2500 Year	48	$522,540
Critical Manufacturing	250 Year	10	$787
Critical Manufacturing	500 Year	10	$7,086
Critical Manufacturing	750 Year	10	$15,803
Critical Manufacturing	1000 Year	10	$24,630
Critical Manufacturing	1500 Year	10	$44,415
Critical Manufacturing	2000 Year	10	$60,679
Critical Manufacturing	2500 Year	10	$80,142
Food and Agriculture	250 Year	31	$138
Food and Agriculture	500 Year	31	$1,758
Food and Agriculture	750 Year	31	$4,069
Food and Agriculture	1000 Year	31	$5,837
Food and Agriculture	1500 Year	31	$11,497
Food and Agriculture	2000 Year	31	$16,756
Food and Agriculture	2500 Year	31	$26,374
Government Facilities	250 Year	9	$1,903
Government Facilities	500 Year	9	$16,648
Government Facilities	750 Year	9	$32,197

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	1000 Year	9	$46,879
Government Facilities	1500 Year	9	$102,529
Government Facilities	2000 Year	9	$159,280
Government Facilities	2500 Year	9	$244,059
Transportation Systems	250 Year	5	$436
Transportation Systems	500 Year	5	$3,701
Transportation Systems	750 Year	5	$8,871
Transportation Systems	1000 Year	5	$16,021
Transportation Systems	1500 Year	5	$31,578
Transportation Systems	2000 Year	5	$50,001
Transportation Systems	2500 Year	5	$67,575
All Categories	**250 Year**	**103**	**$6,624**
All Categories	**500 Year**	**103**	**$63,832**
All Categories	**750 Year**	**103**	**$146,496**
All Categories	**1000 Year**	**103**	**$228,640**
All Categories	**1500 Year**	**103**	**$452,329**
All Categories	**2000 Year**	**103**	**$657,624**
All Categories	**2500 Year**	**103**	**$940,690**

Source: GIS Analysis

Table 6-140: Critical Facilities Exposed to the Earthquake - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	5	$600
Banking and Finance	500 Year	5	$5,512
Banking and Finance	750 Year	5	$13,911
Banking and Finance	1000 Year	5	$21,546
Banking and Finance	1500 Year	5	$46,102
Banking and Finance	2000 Year	5	$67,471
Banking and Finance	2500 Year	5	$94,680
Commercial Facilities	250 Year	147	$25,403
Commercial Facilities	500 Year	147	$237,830
Commercial Facilities	750 Year	147	$573,045

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	1000 Year	147	$873,458
Commercial Facilities	1500 Year	147	$1,755,546
Commercial Facilities	2000 Year	147	$2,555,708
Commercial Facilities	2500 Year	147	$3,676,932
Critical Manufacturing	250 Year	34	$6,425
Critical Manufacturing	500 Year	34	$54,260
Critical Manufacturing	750 Year	34	$127,759
Critical Manufacturing	1000 Year	34	$195,099
Critical Manufacturing	1500 Year	34	$372,635
Critical Manufacturing	2000 Year	34	$502,009
Critical Manufacturing	2500 Year	34	$649,557
Emergency Services	250 Year	4	$774
Emergency Services	500 Year	4	$5,807
Emergency Services	750 Year	4	$15,090
Emergency Services	1000 Year	4	$26,161
Emergency Services	1500 Year	4	$63,993
Emergency Services	2000 Year	4	$97,327
Emergency Services	2500 Year	4	$124,243
Food and Agriculture	250 Year	32	$1,477
Food and Agriculture	500 Year	32	$15,253
Food and Agriculture	750 Year	32	$36,841
Food and Agriculture	1000 Year	32	$54,671
Food and Agriculture	1500 Year	32	$116,504
Food and Agriculture	2000 Year	32	$178,160
Food and Agriculture	2500 Year	32	$288,862
Government Facilities	250 Year	126	$24,003
Government Facilities	500 Year	126	$222,756
Government Facilities	750 Year	126	$542,505
Government Facilities	1000 Year	126	$845,532
Government Facilities	1500 Year	126	$1,770,843
Government Facilities	2000 Year	126	$2,658,613
Government Facilities	2500 Year	126	$3,892,770

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	250 Year	6	$3,073
Healthcare and Public Health	500 Year	6	$22,989
Healthcare and Public Health	750 Year	6	$60,784
Healthcare and Public Health	1000 Year	6	$100,631
Healthcare and Public Health	1500 Year	6	$237,395
Healthcare and Public Health	2000 Year	6	$359,106
Healthcare and Public Health	2500 Year	6	$490,650
Transportation Systems	250 Year	25	$3,494
Transportation Systems	500 Year	25	$30,366
Transportation Systems	750 Year	25	$75,037
Transportation Systems	1000 Year	25	$120,485
Transportation Systems	1500 Year	25	$249,942
Transportation Systems	2000 Year	25	$370,634
Transportation Systems	2500 Year	25	$494,086
Water	250 Year	4	$205
Water	500 Year	4	$2,464
Water	750 Year	4	$6,120
Water	1000 Year	4	$9,153
Water	1500 Year	4	$18,321
Water	2000 Year	4	$25,064
Water	2500 Year	4	$36,872
All Categories	**250 Year**	**383**	**$65,454**
All Categories	**500 Year**	**383**	**$597,237**
All Categories	**750 Year**	**383**	**$1,451,092**
All Categories	**1000 Year**	**383**	**$2,246,736**
All Categories	**1500 Year**	**383**	**$4,631,281**
All Categories	**2000 Year**	**383**	**$6,814,092**
All Categories	**2500 Year**	**383**	**$9,748,652**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-141: Critical Facilities Exposed to the Earthquake - Town of Pinebluff

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$399
Banking and Finance	500 Year	2	$2,295
Banking and Finance	750 Year	2	$5,917
Banking and Finance	1000 Year	2	$11,706
Banking and Finance	1500 Year	2	$26,604
Banking and Finance	2000 Year	2	$37,148
Banking and Finance	2500 Year	2	$44,420
Commercial Facilities	250 Year	37	$9,705
Commercial Facilities	500 Year	37	$86,619
Commercial Facilities	750 Year	37	$199,053
Commercial Facilities	1000 Year	37	$334,148
Commercial Facilities	1500 Year	37	$623,988
Commercial Facilities	2000 Year	37	$961,430
Commercial Facilities	2500 Year	37	$1,208,165
Critical Manufacturing	250 Year	7	$5,473
Critical Manufacturing	500 Year	7	$43,502
Critical Manufacturing	750 Year	7	$90,607
Critical Manufacturing	1000 Year	7	$137,180
Critical Manufacturing	1500 Year	7	$214,967
Critical Manufacturing	2000 Year	7	$331,635
Critical Manufacturing	2500 Year	7	$403,361
Emergency Services	250 Year	1	$566
Emergency Services	500 Year	1	$5,160
Emergency Services	750 Year	1	$12,650
Emergency Services	1000 Year	1	$18,674
Emergency Services	1500 Year	1	$29,190
Emergency Services	2000 Year	1	$46,205
Emergency Services	2500 Year	1	$60,443

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	250 Year	26	$186
Food and Agriculture	500 Year	26	$1,703
Food and Agriculture	750 Year	26	$4,073
Food and Agriculture	1000 Year	26	$6,945
Food and Agriculture	1500 Year	26	$13,224
Food and Agriculture	2000 Year	26	$23,523
Food and Agriculture	2500 Year	26	$28,064
Government Facilities	250 Year	5	$491
Government Facilities	500 Year	5	$2,952
Government Facilities	750 Year	5	$6,638
Government Facilities	1000 Year	5	$10,901
Government Facilities	1500 Year	5	$20,997
Government Facilities	2000 Year	5	$35,879
Government Facilities	2500 Year	5	$44,024
Healthcare and Public Health	250 Year	4	$680
Healthcare and Public Health	500 Year	4	$4,701
Healthcare and Public Health	750 Year	4	$10,941
Healthcare and Public Health	1000 Year	4	$19,560
Healthcare and Public Health	1500 Year	4	$37,945
Healthcare and Public Health	2000 Year	4	$56,244
Healthcare and Public Health	2500 Year	4	$70,368
Transportation Systems	250 Year	5	$564
Transportation Systems	500 Year	5	$4,754
Transportation Systems	750 Year	5	$10,927
Transportation Systems	1000 Year	5	$17,190
Transportation Systems	1500 Year	5	$28,656
Transportation Systems	2000 Year	5	$43,470
Transportation Systems	2500 Year	5	$53,708

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	250 Year	4	$43,478
Water	500 Year	4	$179,189
Water	750 Year	4	$375,475
Water	1000 Year	4	$556,154
Water	1500 Year	4	$927,336
Water	2000 Year	4	$1,260,971
Water	2500 Year	4	$1,492,173
All Categories	**250 Year**	**91**	**$61,542**
All Categories	**500 Year**	**91**	**$330,875**
All Categories	**750 Year**	**91**	**$716,281**
All Categories	**1000 Year**	**91**	**$1,112,458**
All Categories	**1500 Year**	**91**	**$1,922,907**
All Categories	**2000 Year**	**91**	**$2,796,505**
All Categories	**2500 Year**	**91**	**$3,404,726**

Source: GIS Analysis

Table 6-142: Critical Facilities Exposed to the Earthquake - Town of Robbins

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	6	$755
Banking and Finance	500 Year	6	$6,094
Banking and Finance	750 Year	6	$13,029
Banking and Finance	1000 Year	6	$18,867
Banking and Finance	1500 Year	6	$38,814
Banking and Finance	2000 Year	6	$55,006
Banking and Finance	2500 Year	6	$84,734
Commercial Facilities	250 Year	99	$12,316
Commercial Facilities	500 Year	99	$104,293
Commercial Facilities	750 Year	99	$245,257
Commercial Facilities	1000 Year	99	$380,262
Commercial Facilities	1500 Year	99	$775,869
Commercial Facilities	2000 Year	99	$1,125,324
Commercial Facilities	2500 Year	99	$1,700,458

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	250 Year	19	$4,902
Critical Manufacturing	500 Year	19	$43,202
Critical Manufacturing	750 Year	19	$108,147
Critical Manufacturing	1000 Year	19	$166,040
Critical Manufacturing	1500 Year	19	$336,692
Critical Manufacturing	2000 Year	19	$465,959
Critical Manufacturing	2500 Year	19	$658,360
Emergency Services	250 Year	2	$377
Emergency Services	500 Year	2	$3,926
Emergency Services	750 Year	2	$9,077
Emergency Services	1000 Year	2	$12,982
Emergency Services	1500 Year	2	$26,290
Emergency Services	2000 Year	2	$36,919
Emergency Services	2500 Year	2	$59,464
Energy	250 Year	1	$130
Energy	500 Year	1	$1,201
Energy	750 Year	1	$2,776
Energy	1000 Year	1	$3,929
Energy	1500 Year	1	$7,774
Energy	2000 Year	1	$11,103
Energy	2500 Year	1	$18,819
Food and Agriculture	250 Year	41	$164
Food and Agriculture	500 Year	41	$1,427
Food and Agriculture	750 Year	41	$3,250
Food and Agriculture	1000 Year	41	$4,669
Food and Agriculture	1500 Year	41	$9,281
Food and Agriculture	2000 Year	41	$13,193
Food and Agriculture	2500 Year	41	$21,434
Government Facilities	250 Year	20	$4,699
Government Facilities	500 Year	20	$36,575
Government Facilities	750 Year	20	$82,254
Government Facilities	1000 Year	20	$125,565

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	1500 Year	20	$307,273
Government Facilities	2000 Year	20	$492,029
Government Facilities	2500 Year	20	$841,217
Healthcare and Public Health	250 Year	4	$368
Healthcare and Public Health	500 Year	4	$2,840
Healthcare and Public Health	750 Year	4	$6,083
Healthcare and Public Health	1000 Year	4	$9,152
Healthcare and Public Health	1500 Year	4	$19,526
Healthcare and Public Health	2000 Year	4	$28,040
Healthcare and Public Health	2500 Year	4	$42,097
Transportation Systems	250 Year	13	$2,941
Transportation Systems	500 Year	13	$24,826
Transportation Systems	750 Year	13	$57,143
Transportation Systems	1000 Year	13	$86,282
Transportation Systems	1500 Year	13	$176,242
Transportation Systems	2000 Year	13	$254,080
Transportation Systems	2500 Year	13	$379,527
Water	250 Year	3	$281
Water	500 Year	3	$2,316
Water	750 Year	3	$4,813
Water	1000 Year	3	$6,841
Water	1500 Year	3	$12,737
Water	2000 Year	3	$16,755
Water	2500 Year	3	$24,156
All Categories	**250 Year**	**208**	**$26,933**
All Categories	**500 Year**	**208**	**$226,700**
All Categories	**750 Year**	**208**	**$531,829**
All Categories	**1000 Year**	**208**	**$814,589**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**208**	**$1,710,498**
All Categories	**2000 Year**	**208**	**$2,498,408**
All Categories	**2500 Year**	**208**	**$3,830,266**

Source: GIS Analysis

Table 6-143: Critical Facilities Exposed to the Earthquake - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	27	$6,714
Banking and Finance	500 Year	27	$61,818
Banking and Finance	750 Year	27	$158,693
Banking and Finance	1000 Year	27	$271,801
Banking and Finance	1500 Year	27	$510,797
Banking and Finance	2000 Year	27	$803,627
Banking and Finance	2500 Year	27	$1,015,367
Chemical	250 Year	1	$596
Chemical	500 Year	1	$3,816
Chemical	750 Year	1	$12,286
Chemical	1000 Year	1	$26,941
Chemical	1500 Year	1	$60,905
Chemical	2000 Year	1	$91,714
Chemical	2500 Year	1	$113,277
Commercial Facilities	250 Year	523	$106,964
Commercial Facilities	500 Year	524	$956,285
Commercial Facilities	750 Year	524	$2,384,697
Commercial Facilities	1000 Year	524	$4,084,261
Commercial Facilities	1500 Year	524	$7,846,738
Commercial Facilities	2000 Year	524	$12,405,398
Commercial Facilities	2500 Year	524	$16,271,120
Communications	250 Year	3	$1,283
Communications	500 Year	3	$12,177
Communications	750 Year	3	$28,574
Communications	1000 Year	3	$51,967

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	1500 Year	3	$98,555
Communications	2000 Year	3	$144,582
Communications	2500 Year	3	$176,127
Critical Manufacturing	250 Year	97	$16,845
Critical Manufacturing	500 Year	97	$136,977
Critical Manufacturing	750 Year	97	$333,302
Critical Manufacturing	1000 Year	97	$560,781
Critical Manufacturing	1500 Year	97	$1,079,369
Critical Manufacturing	2000 Year	97	$1,653,128
Critical Manufacturing	2500 Year	97	$2,038,281
Defense Industrial Base	250 Year	1	$3,448
Defense Industrial Base	500 Year	1	$32,282
Defense Industrial Base	750 Year	1	$75,296
Defense Industrial Base	1000 Year	1	$113,564
Defense Industrial Base	1500 Year	1	$203,772
Defense Industrial Base	2000 Year	1	$312,972
Defense Industrial Base	2500 Year	1	$373,894
Emergency Services	250 Year	2	$1,749
Emergency Services	500 Year	2	$16,459
Emergency Services	750 Year	2	$42,800
Emergency Services	1000 Year	2	$66,625
Emergency Services	1500 Year	2	$119,711
Emergency Services	2000 Year	2	$192,526
Emergency Services	2500 Year	2	$276,133
Energy	250 Year	3	$234
Energy	500 Year	3	$2,698
Energy	750 Year	3	$7,884
Energy	1000 Year	3	$13,601
Energy	1500 Year	3	$24,499
Energy	2000 Year	3	$35,146
Energy	2500 Year	3	$44,953
Food and Agriculture	250 Year	87	$712

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	500 Year	87	$7,436
Food and Agriculture	750 Year	87	$16,998
Food and Agriculture	1000 Year	87	$26,027
Food and Agriculture	1500 Year	87	$49,246
Food and Agriculture	2000 Year	87	$82,054
Food and Agriculture	2500 Year	87	$111,347
Government Facilities	250 Year	111	$29,199
Government Facilities	500 Year	111	$255,310
Government Facilities	750 Year	111	$624,956
Government Facilities	1000 Year	111	$1,086,446
Government Facilities	1500 Year	111	$2,229,952
Government Facilities	2000 Year	111	$3,724,571
Government Facilities	2500 Year	111	$5,025,827
Healthcare and Public Health	250 Year	53	$34,646
Healthcare and Public Health	500 Year	53	$308,661
Healthcare and Public Health	750 Year	53	$824,102
Healthcare and Public Health	1000 Year	53	$1,441,777
Healthcare and Public Health	1500 Year	53	$2,788,553
Healthcare and Public Health	2000 Year	53	$4,188,696
Healthcare and Public Health	2500 Year	53	$5,266,011
Transportation Systems	250 Year	132	$27,561
Transportation Systems	500 Year	132	$229,739
Transportation Systems	750 Year	132	$585,724
Transportation Systems	1000 Year	132	$1,010,142
Transportation Systems	1500 Year	132	$1,937,127
Transportation Systems	2000 Year	132	$3,065,787
Transportation Systems	2500 Year	132	$4,032,340
Water	250 Year	1	$53

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	500 Year	1	$243
Water	750 Year	1	$527
Water	1000 Year	1	$867
Water	1500 Year	1	$1,750
Water	2000 Year	1	$2,434
Water	2500 Year	1	$2,851
All Categories	**250 Year**	**1,041**	**$230,004**
All Categories	**500 Year**	**1,042**	**$2,023,901**
All Categories	**750 Year**	**1,042**	**$5,095,839**
All Categories	**1000 Year**	**1,042**	**$8,754,800**
All Categories	**1500 Year**	**1,042**	**$16,950,974**
All Categories	**2000 Year**	**1,042**	**$26,702,635**
All Categories	**2500 Year**	**1,042**	**$34,747,528**

Source: GIS Analysis

Table 6-144: Critical Facilities Exposed to the Earthquake - Town of Taylortown

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$409
Banking and Finance	500 Year	1	$2,848
Banking and Finance	750 Year	1	$5,713
Banking and Finance	1000 Year	1	$8,557
Banking and Finance	1500 Year	1	$14,948
Banking and Finance	2000 Year	1	$24,396
Banking and Finance	2500 Year	1	$34,946
Commercial Facilities	250 Year	21	$6,890
Commercial Facilities	500 Year	21	$63,575
Commercial Facilities	750 Year	21	$158,828
Commercial Facilities	1000 Year	21	$259,971
Commercial Facilities	1500 Year	21	$477,876
Commercial Facilities	2000 Year	21	$732,150
Commercial Facilities	2500 Year	21	$964,675
Critical Manufacturing	250 Year	5	$1,105

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	500 Year	5	$9,352
Critical Manufacturing	750 Year	5	$17,934
Critical Manufacturing	1000 Year	5	$27,049
Critical Manufacturing	1500 Year	5	$45,441
Critical Manufacturing	2000 Year	5	$66,166
Critical Manufacturing	2500 Year	5	$81,308
Government Facilities	250 Year	10	$2,350
Government Facilities	500 Year	10	$21,176
Government Facilities	750 Year	10	$50,417
Government Facilities	1000 Year	10	$79,250
Government Facilities	1500 Year	10	$148,475
Government Facilities	2000 Year	10	$251,414
Government Facilities	2500 Year	10	$364,821
Healthcare and Public Health	250 Year	4	$2,209
Healthcare and Public Health	500 Year	4	$20,262
Healthcare and Public Health	750 Year	4	$46,959
Healthcare and Public Health	1000 Year	4	$69,156
Healthcare and Public Health	1500 Year	4	$113,953
Healthcare and Public Health	2000 Year	4	$171,907
Healthcare and Public Health	2500 Year	4	$229,518
Transportation Systems	250 Year	4	$1,501
Transportation Systems	500 Year	4	$12,920
Transportation Systems	750 Year	4	$32,113
Transportation Systems	1000 Year	4	$47,117
Transportation Systems	1500 Year	4	$77,819
Transportation Systems	2000 Year	4	$118,896
Transportation Systems	2500 Year	4	$162,252

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**250 Year**	**45**	**$14,464**
All Categories	**500 Year**	**45**	**$130,133**
All Categories	**750 Year**	**45**	**$311,964**
All Categories	**1000 Year**	**45**	**$491,100**
All Categories	**1500 Year**	**45**	**$878,512**
All Categories	**2000 Year**	**45**	**$1,364,929**
All Categories	**2500 Year**	**45**	**$1,837,520**

Source: GIS Analysis

Table 6-145: Critical Facilities Exposed to the Earthquake - Town of Vass

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	6	$529
Banking and Finance	500 Year	6	$3,860
Banking and Finance	750 Year	6	$9,390
Banking and Finance	1000 Year	6	$15,112
Banking and Finance	1500 Year	6	$28,840
Banking and Finance	2000 Year	6	$44,390
Banking and Finance	2500 Year	6	$58,514
Commercial Facilities	250 Year	83	$8,118
Commercial Facilities	500 Year	83	$78,316
Commercial Facilities	750 Year	83	$190,334
Commercial Facilities	1000 Year	83	$294,170
Commercial Facilities	1500 Year	83	$566,077
Commercial Facilities	2000 Year	83	$850,307
Commercial Facilities	2500 Year	83	$1,156,338
Critical Manufacturing	250 Year	12	$698
Critical Manufacturing	500 Year	12	$5,275
Critical Manufacturing	750 Year	12	$12,236
Critical Manufacturing	1000 Year	12	$17,957
Critical Manufacturing	1500 Year	12	$32,706
Critical Manufacturing	2000 Year	12	$45,271
Critical Manufacturing	2500 Year	12	$56,994

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	250 Year	2	$617
Emergency Services	500 Year	2	$5,661
Emergency Services	750 Year	2	$14,688
Emergency Services	1000 Year	2	$21,742
Emergency Services	1500 Year	2	$37,702
Emergency Services	2000 Year	2	$51,518
Emergency Services	2500 Year	2	$69,265
Food and Agriculture	250 Year	94	$796
Food and Agriculture	500 Year	94	$9,752
Food and Agriculture	750 Year	94	$21,942
Food and Agriculture	1000 Year	94	$31,498
Food and Agriculture	1500 Year	94	$59,269
Food and Agriculture	2000 Year	94	$89,144
Food and Agriculture	2500 Year	94	$131,536
Government Facilities	250 Year	12	$3,271
Government Facilities	500 Year	12	$26,426
Government Facilities	750 Year	12	$65,456
Government Facilities	1000 Year	12	$109,485
Government Facilities	1500 Year	12	$277,959
Government Facilities	2000 Year	12	$457,468
Government Facilities	2500 Year	12	$618,133
Healthcare and Public Health	250 Year	3	$282
Healthcare and Public Health	500 Year	3	$2,400
Healthcare and Public Health	750 Year	3	$5,629
Healthcare and Public Health	1000 Year	3	$8,899
Healthcare and Public Health	1500 Year	3	$19,611
Healthcare and Public Health	2000 Year	3	$32,064
Healthcare and Public Health	2500 Year	3	$41,769

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	250 Year	10	$1,701
Transportation Systems	500 Year	10	$14,428
Transportation Systems	750 Year	10	$34,696
Transportation Systems	1000 Year	10	$55,305
Transportation Systems	1500 Year	10	$100,395
Transportation Systems	2000 Year	10	$149,852
Transportation Systems	2500 Year	10	$197,073
All Categories	**250 Year**	**222**	**$16,012**
All Categories	**500 Year**	**222**	**$146,118**
All Categories	**750 Year**	**222**	**$354,371**
All Categories	**1000 Year**	**222**	**$554,168**
All Categories	**1500 Year**	**222**	**$1,122,559**
All Categories	**2000 Year**	**222**	**$1,720,014**
All Categories	**2500 Year**	**222**	**$2,329,622**

Source: GIS Analysis

Table 6-146: Critical Facilities Exposed to the Earthquake - Village of Foxfire

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	19	$3,889
Commercial Facilities	500 Year	19	$33,537
Commercial Facilities	750 Year	19	$82,424
Commercial Facilities	1000 Year	19	$126,169
Commercial Facilities	1500 Year	19	$207,164
Commercial Facilities	2000 Year	19	$312,770
Commercial Facilities	2500 Year	19	$407,130
Critical Manufacturing	250 Year	3	$358
Critical Manufacturing	500 Year	3	$2,865
Critical Manufacturing	750 Year	3	$5,661
Critical Manufacturing	1000 Year	3	$8,012
Critical Manufacturing	1500 Year	3	$12,788
Critical Manufacturing	2000 Year	3	$20,997
Critical Manufacturing	2500 Year	3	$24,983

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	250 Year	2	$360
Emergency Services	500 Year	2	$1,992
Emergency Services	750 Year	2	$4,887
Emergency Services	1000 Year	2	$9,187
Emergency Services	1500 Year	2	$20,970
Emergency Services	2000 Year	2	$30,678
Emergency Services	2500 Year	2	$37,004
Food and Agriculture	250 Year	48	$255
Food and Agriculture	500 Year	48	$2,156
Food and Agriculture	750 Year	48	$4,865
Food and Agriculture	1000 Year	48	$7,801
Food and Agriculture	1500 Year	48	$14,400
Food and Agriculture	2000 Year	48	$25,366
Food and Agriculture	2500 Year	48	$32,194
Transportation Systems	250 Year	2	$284
Transportation Systems	500 Year	2	$1,666
Transportation Systems	750 Year	2	$3,820
Transportation Systems	1000 Year	2	$6,590
Transportation Systems	1500 Year	2	$13,574
Transportation Systems	2000 Year	2	$19,510
Transportation Systems	2500 Year	2	$23,400
All Categories	**250 Year**	**74**	**$5,146**
All Categories	**500 Year**	**74**	**$42,216**
All Categories	**750 Year**	**74**	**$101,657**
All Categories	**1000 Year**	**74**	**$157,759**
All Categories	**1500 Year**	**74**	**$268,896**
All Categories	**2000 Year**	**74**	**$409,321**
All Categories	**2500 Year**	**74**	**$524,711**

Source: GIS Analysis

Table 6-147: Critical Facilities Exposed to the Earthquake - Village of Pinehurst

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	10	$2,437
Banking and Finance	500 Year	10	$20,802
Banking and Finance	750 Year	10	$52,557
Banking and Finance	1000 Year	10	$91,658
Banking and Finance	1500 Year	10	$181,251
Banking and Finance	2000 Year	10	$285,165
Banking and Finance	2500 Year	10	$350,289
Commercial Facilities	250 Year	161	$69,437
Commercial Facilities	500 Year	164	$528,781
Commercial Facilities	750 Year	164	$1,306,150
Commercial Facilities	1000 Year	164	$2,227,259
Commercial Facilities	1500 Year	164	$4,313,087
Commercial Facilities	2000 Year	164	$6,595,941
Commercial Facilities	2500 Year	164	$8,419,784
Critical Manufacturing	250 Year	16	$2,305
Critical Manufacturing	500 Year	16	$18,496
Critical Manufacturing	750 Year	16	$41,296
Critical Manufacturing	1000 Year	16	$66,323
Critical Manufacturing	1500 Year	16	$118,870
Critical Manufacturing	2000 Year	16	$177,692
Critical Manufacturing	2500 Year	16	$218,570
Emergency Services	250 Year	3	$555
Emergency Services	500 Year	3	$4,480
Emergency Services	750 Year	3	$11,084
Emergency Services	1000 Year	3	$20,228
Emergency Services	1500 Year	3	$44,130
Emergency Services	2000 Year	3	$69,300
Emergency Services	2500 Year	3	$84,203
Food and Agriculture	250 Year	59	$469
Food and Agriculture	500 Year	59	$4,343
Food and Agriculture	750 Year	59	$9,766
Food and Agriculture	1000 Year	59	$15,342

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	1500 Year	59	$28,148
Food and Agriculture	2000 Year	59	$48,196
Food and Agriculture	2500 Year	59	$62,776
Government Facilities	250 Year	18	$4,700
Government Facilities	500 Year	18	$41,227
Government Facilities	750 Year	18	$108,973
Government Facilities	1000 Year	18	$208,094
Government Facilities	1500 Year	18	$438,983
Government Facilities	2000 Year	18	$696,031
Government Facilities	2500 Year	18	$858,665
Healthcare and Public Health	250 Year	96	$78,946
Healthcare and Public Health	500 Year	96	$711,829
Healthcare and Public Health	750 Year	96	$1,859,345
Healthcare and Public Health	1000 Year	96	$3,018,948
Healthcare and Public Health	1500 Year	96	$5,336,925
Healthcare and Public Health	2000 Year	96	$7,755,731
Healthcare and Public Health	2500 Year	96	$9,745,205
Transportation Systems	250 Year	25	$5,192
Transportation Systems	500 Year	25	$42,036
Transportation Systems	750 Year	25	$105,044
Transportation Systems	1000 Year	25	$190,102
Transportation Systems	1500 Year	25	$384,672
Transportation Systems	2000 Year	25	$605,478
Transportation Systems	2500 Year	25	$768,470
All Categories	**250 Year**	**388**	**$164,041**
All Categories	**500 Year**	**391**	**$1,371,994**
All Categories	**750 Year**	**391**	**$3,494,215**
All Categories	**1000 Year**	**391**	**$5,837,954**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**391**	**$10,846,066**
All Categories	**2000 Year**	**391**	**$16,233,534**
All Categories	**2500 Year**	**391**	**$20,507,962**

Source: GIS Analysis

Table 6-148: Critical Facilities Exposed to the Earthquake - Village of Whispering Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	32	$7,357
Commercial Facilities	500 Year	32	$65,285
Commercial Facilities	750 Year	32	$155,342
Commercial Facilities	1000 Year	32	$231,086
Commercial Facilities	1500 Year	32	$417,471
Commercial Facilities	2000 Year	32	$617,671
Commercial Facilities	2500 Year	32	$857,930
Critical Manufacturing	250 Year	7	$1,428
Critical Manufacturing	500 Year	7	$11,405
Critical Manufacturing	750 Year	7	$26,470
Critical Manufacturing	1000 Year	7	$39,548
Critical Manufacturing	1500 Year	7	$68,169
Critical Manufacturing	2000 Year	7	$98,602
Critical Manufacturing	2500 Year	7	$132,121
Emergency Services	250 Year	3	$494
Emergency Services	500 Year	3	$4,291
Emergency Services	750 Year	3	$8,665
Emergency Services	1000 Year	3	$12,624
Emergency Services	1500 Year	3	$23,671
Emergency Services	2000 Year	3	$35,833
Emergency Services	2500 Year	3	$50,567
Food and Agriculture	250 Year	38	$170
Food and Agriculture	500 Year	38	$1,791
Food and Agriculture	750 Year	38	$4,190
Food and Agriculture	1000 Year	38	$6,364

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	1500 Year	38	$12,571
Food and Agriculture	2000 Year	38	$20,274
Food and Agriculture	2500 Year	38	$28,672
Government Facilities	250 Year	11	$1,545
Government Facilities	500 Year	11	$13,929
Government Facilities	750 Year	11	$33,095
Government Facilities	1000 Year	11	$50,197
Government Facilities	1500 Year	11	$101,050
Government Facilities	2000 Year	11	$162,291
Government Facilities	2500 Year	11	$246,088
Healthcare and Public Health	250 Year	1	$110
Healthcare and Public Health	500 Year	1	$702
Healthcare and Public Health	750 Year	1	$1,658
Healthcare and Public Health	1000 Year	1	$2,820
Healthcare and Public Health	1500 Year	1	$6,969
Healthcare and Public Health	2000 Year	1	$10,884
Healthcare and Public Health	2500 Year	1	$13,247
Transportation Systems	250 Year	10	$1,805
Transportation Systems	500 Year	10	$14,898
Transportation Systems	750 Year	10	$36,406
Transportation Systems	1000 Year	10	$58,050
Transportation Systems	1500 Year	10	$112,108
Transportation Systems	2000 Year	10	$166,804
Transportation Systems	2500 Year	10	$222,123
All Categories	**250 Year**	**102**	**$12,909**
All Categories	**500 Year**	**102**	**$112,301**
All Categories	**750 Year**	**102**	**$265,826**
All Categories	**1000 Year**	**102**	**$400,689**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**102**	**$742,009**
All Categories	**2000 Year**	**102**	**$1,112,359**
All Categories	**2500 Year**	**102**	**$1,550,748**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-149: Critical Facilities Exposed to the Earthquake (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	255	$31,108
Banking and Finance	500 Year	262	$301,388
Banking and Finance	750 Year	262	$754,183
Banking and Finance	1000 Year	262	$1,290,683
Banking and Finance	1500 Year	262	$2,462,872
Banking and Finance	2000 Year	262	$3,758,991
Banking and Finance	2500 Year	262	$4,844,302
Chemical	250 Year	5	$2,081
Chemical	500 Year	5	$18,010
Chemical	750 Year	5	$51,326
Chemical	1000 Year	5	$97,687
Chemical	1500 Year	5	$198,035
Chemical	2000 Year	5	$301,304
Chemical	2500 Year	5	$374,667
Commercial Facilities	250 Year	7,869	$879,486
Commercial Facilities	500 Year	8,653	$9,121,885
Commercial Facilities	750 Year	8,653	$22,717,659
Commercial Facilities	1000 Year	8,653	$38,673,848
Commercial Facilities	1500 Year	8,653	$73,898,889
Commercial Facilities	2000 Year	8,653	$112,349,432
Commercial Facilities	2500 Year	8,653	$148,186,495

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	250 Year	9	$2,509
Communications	500 Year	9	$25,741
Communications	750 Year	9	$64,059
Communications	1000 Year	9	$112,451
Communications	1500 Year	9	$206,991
Communications	2000 Year	9	$305,581
Communications	2500 Year	9	$378,584
Critical Manufacturing	250 Year	2,620	$680,669
Critical Manufacturing	500 Year	2,656	$5,911,346
Critical Manufacturing	750 Year	2,656	$13,423,640
Critical Manufacturing	1000 Year	2,656	$21,427,774
Critical Manufacturing	1500 Year	2,656	$37,748,965
Critical Manufacturing	2000 Year	2,656	$54,718,000
Critical Manufacturing	2500 Year	2,656	$69,517,657
Defense Industrial Base	250 Year	8	$13,138
Defense Industrial Base	500 Year	8	$148,525
Defense Industrial Base	750 Year	8	$399,930
Defense Industrial Base	1000 Year	8	$699,294
Defense Industrial Base	1500 Year	8	$1,233,687
Defense Industrial Base	2000 Year	8	$1,895,404
Defense Industrial Base	2500 Year	8	$2,341,374
Emergency Services	250 Year	126	$31,960
Emergency Services	500 Year	131	$301,010
Emergency Services	750 Year	131	$741,012
Emergency Services	1000 Year	131	$1,242,111
Emergency Services	1500 Year	131	$2,371,128
Emergency Services	2000 Year	131	$3,631,804
Emergency Services	2500 Year	131	$4,866,138
Energy	250 Year	95	$345,825
Energy	500 Year	98	$1,937,577
Energy	750 Year	98	$3,906,060
Energy	1000 Year	98	$6,417,934

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	1500 Year	98	$10,946,503
Energy	2000 Year	98	$15,053,696
Energy	2500 Year	98	$19,375,810
Food and Agriculture	250 Year	21,261	$130,848
Food and Agriculture	500 Year	22,750	$1,688,589
Food and Agriculture	750 Year	22,750	$4,001,262
Food and Agriculture	1000 Year	22,750	$6,236,167
Food and Agriculture	1500 Year	22,750	$11,274,926
Food and Agriculture	2000 Year	22,750	$16,556,530
Food and Agriculture	2500 Year	22,750	$22,575,422
Government Facilities	250 Year	1,768	$316,350
Government Facilities	500 Year	1,946	$3,216,911
Government Facilities	750 Year	1,946	$7,930,749
Government Facilities	1000 Year	1,946	$13,886,406
Government Facilities	1500 Year	1,946	$27,389,462
Government Facilities	2000 Year	1,946	$43,672,281
Government Facilities	2500 Year	1,946	$59,278,979
Healthcare and Public Health	250 Year	628	$210,079
Healthcare and Public Health	500 Year	730	$2,005,635
Healthcare and Public Health	750 Year	730	$5,168,075
Healthcare and Public Health	1000 Year	730	$8,711,412
Healthcare and Public Health	1500 Year	730	$15,994,855
Healthcare and Public Health	2000 Year	730	$24,001,598
Healthcare and Public Health	2500 Year	730	$30,801,615
Nuclear Reactors, Materials and Waste	250 Year	4	$906
Nuclear Reactors, Materials and Waste	500 Year	4	$6,416

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	750 Year	4	$14,385
Nuclear Reactors, Materials and Waste	1000 Year	4	$25,082
Nuclear Reactors, Materials and Waste	1500 Year	4	$43,489
Nuclear Reactors, Materials and Waste	2000 Year	4	$64,969
Nuclear Reactors, Materials and Waste	2500 Year	4	$80,134
Transportation Systems	250 Year	1,500	$177,958
Transportation Systems	500 Year	1,580	$1,767,065
Transportation Systems	750 Year	1,580	$4,412,997
Transportation Systems	1000 Year	1,580	$7,419,016
Transportation Systems	1500 Year	1,580	$14,120,770
Transportation Systems	2000 Year	1,580	$21,150,386
Transportation Systems	2500 Year	1,580	$27,851,759
Water	250 Year	72	$426,972
Water	500 Year	72	$2,008,563
Water	750 Year	72	$3,935,739
Water	1000 Year	72	$6,251,817
Water	1500 Year	72	$10,387,900
Water	2000 Year	72	$13,874,897
Water	2500 Year	72	$17,846,720
All Categories	**250 Year**	**36,220**	**$3,249,889**
All Categories	**500 Year**	**38,904**	**$28,458,661**
All Categories	**750 Year**	**38,904**	**$67,521,076**
All Categories	**1000 Year**	**38,904**	**$112,491,682**
All Categories	**1500 Year**	**38,904**	**$208,278,472**
All Categories	**2000 Year**	**38,904**	**$311,334,873**
All Categories	**2500 Year**	**38,904**	**$408,319,656**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-150: High Potential Loss Properties Exposed to the Earthquake - Chatham County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	13	$8,206
Commercial	500 Year	19	$114,192
Commercial	750 Year	19	$274,049
Commercial	1000 Year	19	$467,801
Commercial	1500 Year	19	$890,609
Commercial	2000 Year	19	$1,299,122
Commercial	2500 Year	19	$1,818,658
Government	250 Year	8	$9,075
Government	500 Year	8	$79,843
Government	750 Year	8	$196,118
Government	1000 Year	8	$338,512
Government	1500 Year	8	$587,563
Government	2000 Year	8	$900,642
Government	2500 Year	8	$1,188,294
Industrial	250 Year	11	$51,564
Industrial	500 Year	11	$391,426
Industrial	750 Year	11	$779,715
Industrial	1000 Year	11	$1,240,131
Industrial	1500 Year	11	$2,232,203
Industrial	2000 Year	11	$3,401,757
Industrial	2500 Year	11	$4,477,790
Religious	250 Year	2	$283
Religious	500 Year	4	$12,823
Religious	750 Year	4	$32,720
Religious	1000 Year	4	$59,917
Religious	1500 Year	4	$114,143
Religious	2000 Year	4	$172,241
Religious	2500 Year	4	$213,077

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	250 Year	4	$1,183
Residential	500 Year	116	$65,784
Residential	750 Year	116	$185,114
Residential	1000 Year	116	$380,271
Residential	1500 Year	116	$679,944
Residential	2000 Year	116	$1,186,997
Residential	2500 Year	116	$1,576,531
Utilities	250 Year	13	$198,325
Utilities	500 Year	13	$957,486
Utilities	750 Year	13	$1,812,040
Utilities	1000 Year	13	$2,908,408
Utilities	1500 Year	13	$4,786,497
Utilities	2000 Year	13	$6,374,008
Utilities	2500 Year	13	$8,326,670
All Categories	**250 Year**	**51**	**$268,636**
All Categories	**500 Year**	**171**	**$1,621,554**
All Categories	**750 Year**	**171**	**$3,279,756**
All Categories	**1000 Year**	**171**	**$5,395,040**
All Categories	**1500 Year**	**171**	**$9,290,959**
All Categories	**2000 Year**	**171**	**$13,334,767**
All Categories	**2500 Year**	**171**	**$17,601,020**

Source: GIS Analysis

Table 6-151: High Potential Loss Properties Exposed to the Earthquake - Town of Goldston

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	250 Year	1	$1,570
Industrial	500 Year	1	$19,078
Industrial	750 Year	1	$47,943
Industrial	1000 Year	1	$80,135
Industrial	1500 Year	1	$152,610
Industrial	2000 Year	1	$205,738
Industrial	2500 Year	1	$239,927

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**250 Year**	**1**	**$1,570**
All Categories	**500 Year**	**1**	**$19,078**
All Categories	**750 Year**	**1**	**$47,943**
All Categories	**1000 Year**	**1**	**$80,135**
All Categories	**1500 Year**	**1**	**$152,610**
All Categories	**2000 Year**	**1**	**$205,738**
All Categories	**2500 Year**	**1**	**$239,927**

Source: GIS Analysis

Table 6-152: High Potential Loss Properties Exposed to the Earthquake - Town of Pittsboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	9	$7,122
Commercial	500 Year	10	$84,998
Commercial	750 Year	10	$188,467
Commercial	1000 Year	10	$314,398
Commercial	1500 Year	10	$535,503
Commercial	2000 Year	10	$777,620
Commercial	2500 Year	10	$991,858
Government	250 Year	5	$4,032
Government	500 Year	5	$29,055
Government	750 Year	5	$61,994
Government	1000 Year	5	$110,403
Government	1500 Year	5	$197,528
Government	2000 Year	5	$285,487
Government	2500 Year	5	$382,653
Industrial	250 Year	1	$187
Industrial	500 Year	1	$1,675
Industrial	750 Year	1	$4,845
Industrial	1000 Year	1	$8,928
Industrial	1500 Year	1	$17,622
Industrial	2000 Year	1	$26,907
Industrial	2500 Year	1	$37,652

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	250 Year	1	$206
Religious	500 Year	2	$5,332
Religious	750 Year	2	$13,081
Religious	1000 Year	2	$23,023
Religious	1500 Year	2	$41,473
Religious	2000 Year	2	$62,045
Religious	2500 Year	2	$77,635
Residential	250 Year	1	$358
Residential	500 Year	1	$2,579
Residential	750 Year	1	$4,268
Residential	1000 Year	1	$6,084
Residential	1500 Year	1	$10,481
Residential	2000 Year	1	$16,765
Residential	2500 Year	1	$22,801
Utilities	250 Year	2	$25,518
Utilities	500 Year	2	$119,378
Utilities	750 Year	2	$217,892
Utilities	1000 Year	2	$347,640
Utilities	1500 Year	2	$571,794
Utilities	2000 Year	2	$755,568
Utilities	2500 Year	2	$978,196
All Categories	**250 Year**	**19**	**$37,423**
All Categories	**500 Year**	**21**	**$243,017**
All Categories	**750 Year**	**21**	**$490,547**
All Categories	**1000 Year**	**21**	**$810,476**
All Categories	**1500 Year**	**21**	**$1,374,401**
All Categories	**2000 Year**	**21**	**$1,924,392**
All Categories	**2500 Year**	**21**	**$2,490,795**

Source: GIS Analysis

Table 6-153: High Potential Loss Properties Exposed to the Earthquake - Town of Siler City

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	11	$11,752
Commercial	500 Year	11	$116,455
Commercial	750 Year	11	$249,675
Commercial	1000 Year	11	$384,140
Commercial	1500 Year	11	$672,278
Commercial	2000 Year	11	$1,003,366
Commercial	2500 Year	11	$1,295,040
Government	250 Year	6	$14,867
Government	500 Year	6	$131,758
Government	750 Year	6	$290,410
Government	1000 Year	6	$478,628
Government	1500 Year	6	$913,605
Government	2000 Year	6	$1,409,230
Government	2500 Year	6	$1,867,375
Industrial	250 Year	7	$25,344
Industrial	500 Year	7	$223,322
Industrial	750 Year	7	$503,265
Industrial	1000 Year	7	$784,130
Industrial	1500 Year	7	$1,350,202
Industrial	2000 Year	7	$1,945,295
Industrial	2500 Year	7	$2,429,994
Religious	250 Year	2	$1,403
Religious	500 Year	2	$10,807
Religious	750 Year	2	$22,981
Religious	1000 Year	2	$33,902
Religious	1500 Year	2	$56,884

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	2000 Year	2	$82,620
Religious	2500 Year	2	$105,739
Residential	250 Year	2	$718
Residential	500 Year	2	$4,137
Residential	750 Year	2	$6,762
Residential	1000 Year	2	$9,394
Residential	1500 Year	2	$16,620
Residential	2000 Year	2	$26,272
Residential	2500 Year	2	$35,099
Utilities	250 Year	6	$67,840
Utilities	500 Year	6	$273,060
Utilities	750 Year	6	$505,280
Utilities	1000 Year	6	$778,100
Utilities	1500 Year	6	$1,239,640
Utilities	2000 Year	6	$1,669,590
Utilities	2500 Year	6	$2,133,920
All Categories	**250 Year**	**34**	**$121,924**
All Categories	**500 Year**	**34**	**$759,539**
All Categories	**750 Year**	**34**	**$1,578,373**
All Categories	**1000 Year**	**34**	**$2,468,294**
All Categories	**1500 Year**	**34**	**$4,249,229**
All Categories	**2000 Year**	**34**	**$6,136,373**
All Categories	**2500 Year**	**34**	**$7,867,167**

Source: GIS Analysis

Table 6-154: High Potential Loss Properties Exposed to the Earthquake - City of Dunn

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	72	$18,819
Commercial	500 Year	80	$236,571
Commercial	750 Year	80	$631,607
Commercial	1000 Year	80	$1,134,649
Commercial	1500 Year	80	$2,349,825
Commercial	2000 Year	80	$3,646,909
Commercial	2500 Year	80	$4,863,525
Government	250 Year	19	$5,283
Government	500 Year	20	$82,384
Government	750 Year	20	$214,530
Government	1000 Year	20	$379,763
Government	1500 Year	20	$756,080
Government	2000 Year	20	$1,184,397
Government	2500 Year	20	$1,572,610
Industrial	250 Year	16	$8,056
Industrial	500 Year	16	$80,905
Industrial	750 Year	16	$201,304
Industrial	1000 Year	16	$333,264
Industrial	1500 Year	16	$600,333
Industrial	2000 Year	16	$864,700
Industrial	2500 Year	16	$1,085,335
Religious	250 Year	13	$3,563
Religious	500 Year	17	$51,080
Religious	750 Year	17	$129,357
Religious	1000 Year	17	$231,898
Religious	1500 Year	17	$471,409
Religious	2000 Year	17	$724,534
Religious	2500 Year	17	$952,465
Residential	250 Year	3	$416
Residential	500 Year	8	$7,674
Residential	750 Year	8	$20,237
Residential	1000 Year	8	$37,908

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	1500 Year	8	$85,579
Residential	2000 Year	8	$144,184
Residential	2500 Year	8	$188,964
All Categories	**250 Year**	**123**	**$36,137**
All Categories	**500 Year**	**141**	**$458,614**
All Categories	**750 Year**	**141**	**$1,197,035**
All Categories	**1000 Year**	**141**	**$2,117,482**
All Categories	**1500 Year**	**141**	**$4,263,226**
All Categories	**2000 Year**	**141**	**$6,564,724**
All Categories	**2500 Year**	**141**	**$8,662,899**

Source: GIS Analysis

Table 6-155: High Potential Loss Properties Exposed to the Earthquake - Harnett County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	250 Year	1	$130
Agricultural	500 Year	1	$1,867
Agricultural	750 Year	1	$3,663
Agricultural	1000 Year	1	$5,318
Agricultural	1500 Year	1	$9,140
Agricultural	2000 Year	1	$12,790
Agricultural	2500 Year	1	$16,877
Commercial	250 Year	79	$24,067
Commercial	500 Year	86	$265,229
Commercial	750 Year	86	$668,770
Commercial	1000 Year	86	$1,240,443
Commercial	1500 Year	86	$2,822,500
Commercial	2000 Year	86	$4,434,459
Commercial	2500 Year	86	$5,898,232
Government	250 Year	82	$41,050
Government	500 Year	88	$466,757
Government	750 Year	88	$1,167,706

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	1000 Year	88	$2,115,655
Government	1500 Year	88	$4,093,460
Government	2000 Year	88	$6,789,801
Government	2500 Year	88	$9,311,250
Industrial	250 Year	12	$11,537
Industrial	500 Year	13	$101,352
Industrial	750 Year	13	$217,761
Industrial	1000 Year	13	$337,052
Industrial	1500 Year	13	$566,827
Industrial	2000 Year	13	$801,027
Industrial	2500 Year	13	$999,835
Religious	250 Year	78	$20,206
Religious	500 Year	98	$286,886
Religious	750 Year	98	$734,393
Religious	1000 Year	98	$1,260,864
Religious	1500 Year	98	$2,268,428
Religious	2000 Year	98	$3,360,366
Religious	2500 Year	98	$4,407,421
Residential	250 Year	18	$4,077
Residential	500 Year	28	$53,294
Residential	750 Year	28	$128,998
Residential	1000 Year	28	$224,090
Residential	1500 Year	28	$429,816
Residential	2000 Year	28	$645,541
Residential	2500 Year	28	$837,180
All Categories	**250 Year**	**270**	**$101,067**
All Categories	**500 Year**	**314**	**$1,175,385**
All Categories	**750 Year**	**314**	**$2,921,291**
All Categories	**1000 Year**	**314**	**$5,183,422**
All Categories	**1500 Year**	**314**	**$10,190,171**
All Categories	**2000 Year**	**314**	**$16,043,984**
All Categories	**2500 Year**	**314**	**$21,470,795**

Category	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-156: High Potential Loss Properties Exposed to the Earthquake - Town of Angier

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	10	$1,832
Commercial	500 Year	10	$28,100
Commercial	750 Year	10	$70,431
Commercial	1000 Year	10	$125,701
Commercial	1500 Year	10	$213,644
Commercial	2000 Year	10	$305,899
Commercial	2500 Year	10	$380,226
Government	250 Year	3	$804
Government	500 Year	3	$24,460
Government	750 Year	3	$64,904
Government	1000 Year	3	$113,997
Government	1500 Year	3	$238,180
Government	2000 Year	3	$376,880
Government	2500 Year	3	$542,606
Industrial	250 Year	4	$1,347
Industrial	500 Year	4	$11,876
Industrial	750 Year	4	$24,591
Industrial	1000 Year	4	$39,375
Industrial	1500 Year	4	$69,125
Industrial	2000 Year	4	$102,212
Industrial	2500 Year	4	$135,523
Religious	250 Year	7	$1,278
Religious	500 Year	8	$13,019
Religious	750 Year	8	$32,612
Religious	1000 Year	8	$58,227
Religious	1500 Year	8	$108,190
Religious	2000 Year	8	$160,846
Religious	2500 Year	8	$213,910

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	250 Year	2	$122
Residential	500 Year	4	$2,970
Residential	750 Year	4	$7,719
Residential	1000 Year	4	$14,444
Residential	1500 Year	4	$28,140
Residential	2000 Year	4	$42,686
Residential	2500 Year	4	$52,946
All Categories	**250 Year**	**26**	**$5,383**
All Categories	**500 Year**	**29**	**$80,425**
All Categories	**750 Year**	**29**	**$200,257**
All Categories	**1000 Year**	**29**	**$351,744**
All Categories	**1500 Year**	**29**	**$657,279**
All Categories	**2000 Year**	**29**	**$988,523**
All Categories	**2500 Year**	**29**	**$1,325,211**

Source: GIS Analysis

Table 6-157: High Potential Loss Properties Exposed to the Earthquake - Town of Benson

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	7	$1,395
Commercial	500 Year	7	$26,850
Commercial	750 Year	7	$73,664
Commercial	1000 Year	7	$136,247
Commercial	1500 Year	7	$249,936
Commercial	2000 Year	7	$375,234
Commercial	2500 Year	7	$463,687
Government	250 Year	7	$2,039
Government	500 Year	7	$31,175
Government	750 Year	7	$84,438
Government	1000 Year	7	$163,702
Government	1500 Year	7	$316,906
Government	2000 Year	7	$484,510
Government	2500 Year	7	$599,260

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	250 Year	4	$8,334
Industrial	500 Year	4	$78,438
Industrial	750 Year	4	$168,273
Industrial	1000 Year	4	$271,783
Industrial	1500 Year	4	$454,181
Industrial	2000 Year	4	$638,631
Industrial	2500 Year	4	$771,142
Religious	250 Year	4	$341
Religious	500 Year	4	$6,723
Religious	750 Year	4	$19,067
Religious	1000 Year	4	$37,710
Religious	1500 Year	4	$72,282
Religious	2000 Year	4	$106,634
Religious	2500 Year	4	$129,315
Utilities	250 Year	3	$18,240
Utilities	500 Year	3	$99,420
Utilities	750 Year	3	$189,420
Utilities	1000 Year	3	$319,740
Utilities	1500 Year	3	$543,600
Utilities	2000 Year	3	$716,820
Utilities	2500 Year	3	$941,220
All Categories	**250 Year**	**25**	**$30,349**
All Categories	**500 Year**	**25**	**$242,606**
All Categories	**750 Year**	**25**	**$534,862**
All Categories	**1000 Year**	**25**	**$929,182**
All Categories	**1500 Year**	**25**	**$1,636,905**
All Categories	**2000 Year**	**25**	**$2,321,829**
All Categories	**2500 Year**	**25**	**$2,904,624**

Source: GIS Analysis

Table 6-158: High Potential Loss Properties Exposed to the Earthquake - Town of Broadway

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	2	$1,743
Government	500 Year	2	$18,938
Government	750 Year	2	$37,320
Government	1000 Year	2	$56,392
Government	1500 Year	2	$119,846
Government	2000 Year	2	$192,721
Government	2500 Year	2	$287,398
Religious	250 Year	2	$395
Religious	500 Year	2	$5,594
Religious	750 Year	2	$13,316
Religious	1000 Year	2	$21,037
Religious	1500 Year	2	$36,736
Religious	2000 Year	2	$50,939
Religious	2500 Year	2	$67,081
All Categories	**250 Year**	**4**	**$2,138**
All Categories	**500 Year**	**4**	**$24,532**
All Categories	**750 Year**	**4**	**$50,636**
All Categories	**1000 Year**	**4**	**$77,429**
All Categories	**1500 Year**	**4**	**$156,582**
All Categories	**2000 Year**	**4**	**$243,660**
All Categories	**2500 Year**	**4**	**$354,479**

Source: GIS Analysis

Table 6-159: High Potential Loss Properties Exposed to the Earthquake - Town of Coats

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	3	$876
Commercial	500 Year	3	$9,716
Commercial	750 Year	3	$21,978
Commercial	1000 Year	3	$37,144
Commercial	1500 Year	3	$63,714
Commercial	2000 Year	3	$89,222

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2500 Year	3	$112,516
Government	250 Year	2	$4,418
Government	500 Year	2	$23,701
Government	750 Year	2	$58,296
Government	1000 Year	2	$109,213
Government	1500 Year	2	$220,258
Government	2000 Year	2	$364,104
Government	2500 Year	2	$531,511
Religious	250 Year	4	$1,075
Religious	500 Year	4	$18,512
Religious	750 Year	4	$47,858
Religious	1000 Year	4	$87,349
Religious	1500 Year	4	$147,082
Religious	2000 Year	4	$206,312
Religious	2500 Year	4	$257,974
Residential	250 Year	1	$126
Residential	500 Year	1	$1,188
Residential	750 Year	1	$3,031
Residential	1000 Year	1	$6,411
Residential	1500 Year	1	$16,779
Residential	2000 Year	1	$29,313
Residential	2500 Year	1	$39,534
All Categories	**250 Year**	**10**	**$6,495**
All Categories	**500 Year**	**10**	**$53,117**
All Categories	**750 Year**	**10**	**$131,163**
All Categories	**1000 Year**	**10**	**$240,117**
All Categories	**1500 Year**	**10**	**$447,833**
All Categories	**2000 Year**	**10**	**$688,951**
All Categories	**2500 Year**	**10**	**$941,535**

Source: GIS Analysis

Table 6-160: High Potential Loss Properties Exposed to the Earthquake - Town of Erwin

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	14	$10,800
Commercial	500 Year	15	$103,463
Commercial	750 Year	15	$283,272
Commercial	1000 Year	15	$511,375
Commercial	1500 Year	15	$983,776
Commercial	2000 Year	15	$1,531,745
Commercial	2500 Year	15	$2,054,894
Government	250 Year	8	$2,403
Government	500 Year	8	$36,883
Government	750 Year	8	$95,658
Government	1000 Year	8	$172,883
Government	1500 Year	8	$351,543
Government	2000 Year	8	$546,478
Government	2500 Year	8	$712,320
Industrial	250 Year	5	$6,622
Industrial	500 Year	5	$82,062
Industrial	750 Year	5	$210,861
Industrial	1000 Year	5	$351,466
Industrial	1500 Year	5	$626,748
Industrial	2000 Year	5	$891,252
Industrial	2500 Year	5	$1,131,229
Religious	250 Year	13	$2,276
Religious	500 Year	15	$30,969
Religious	750 Year	15	$83,689
Religious	1000 Year	15	$147,020
Religious	1500 Year	15	$279,198
Religious	2000 Year	15	$408,108
Religious	2500 Year	15	$528,524
Residential	250 Year	1	$135
Residential	500 Year	1	$1,278
Residential	750 Year	1	$3,586
Residential	1000 Year	1	$6,583

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	1500 Year	1	$13,196
Residential	2000 Year	1	$18,537
Residential	2500 Year	1	$22,958
All Categories	**250 Year**	**41**	**$22,236**
All Categories	**500 Year**	**44**	**$254,655**
All Categories	**750 Year**	**44**	**$677,066**
All Categories	**1000 Year**	**44**	**$1,189,327**
All Categories	**1500 Year**	**44**	**$2,254,461**
All Categories	**2000 Year**	**44**	**$3,396,120**
All Categories	**2500 Year**	**44**	**$4,449,925**

Source: GIS Analysis

Table 6-161: High Potential Loss Properties Exposed to the Earthquake - Town of Lillington

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	14	$4,774
Commercial	500 Year	15	$76,938
Commercial	750 Year	15	$192,080
Commercial	1000 Year	15	$315,475
Commercial	1500 Year	15	$551,127
Commercial	2000 Year	15	$778,482
Commercial	2500 Year	15	$974,600
Government	250 Year	25	$12,028
Government	500 Year	25	$118,025
Government	750 Year	25	$274,581
Government	1000 Year	25	$463,726
Government	1500 Year	25	$957,530
Government	2000 Year	25	$1,535,735
Government	2500 Year	25	$2,113,210
Industrial	250 Year	7	$9,826
Industrial	500 Year	7	$92,317
Industrial	750 Year	7	$184,969
Industrial	1000 Year	7	$279,130

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	1500 Year	7	$470,986
Industrial	2000 Year	7	$676,716
Industrial	2500 Year	7	$868,389
Religious	250 Year	6	$1,079
Religious	500 Year	7	$15,376
Religious	750 Year	7	$38,724
Religious	1000 Year	7	$67,174
Religious	1500 Year	7	$130,592
Religious	2000 Year	7	$196,206
Religious	2500 Year	7	$255,972
Residential	250 Year	2	$173
Residential	500 Year	4	$4,468
Residential	750 Year	4	$11,213
Residential	1000 Year	4	$18,753
Residential	1500 Year	4	$34,727
Residential	2000 Year	4	$49,971
Residential	2500 Year	4	$62,377
All Categories	**250 Year**	**54**	**$27,880**
All Categories	**500 Year**	**58**	**$307,124**
All Categories	**750 Year**	**58**	**$701,567**
All Categories	**1000 Year**	**58**	**$1,144,258**
All Categories	**1500 Year**	**58**	**$2,144,962**
All Categories	**2000 Year**	**58**	**$3,237,110**
All Categories	**2500 Year**	**58**	**$4,274,548**

Source: GIS Analysis

Table 6-162: High Potential Loss Properties Exposed to the Earthquake - Johnston County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	250 Year	2	$244
Agricultural	500 Year	2	$2,798
Agricultural	750 Year	2	$8,085

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	1000 Year	2	$15,704
Agricultural	1500 Year	2	$28,884
Agricultural	2000 Year	2	$47,289
Agricultural	2500 Year	2	$60,646
Commercial	250 Year	43	$3,281
Commercial	500 Year	54	$77,936
Commercial	750 Year	54	$206,946
Commercial	1000 Year	54	$386,392
Commercial	1500 Year	54	$668,578
Commercial	2000 Year	54	$1,040,231
Commercial	2500 Year	54	$1,338,128
Government	250 Year	22	$6,758
Government	500 Year	25	$122,709
Government	750 Year	25	$324,833
Government	1000 Year	25	$621,828
Government	1500 Year	25	$1,107,074
Government	2000 Year	25	$1,728,542
Government	2500 Year	25	$2,175,185
Industrial	250 Year	4	$1,073
Industrial	500 Year	4	$9,745
Industrial	750 Year	4	$28,385
Industrial	1000 Year	4	$49,777
Industrial	1500 Year	4	$93,652
Industrial	2000 Year	4	$142,142
Industrial	2500 Year	4	$191,007
Religious	250 Year	14	$962
Religious	500 Year	24	$30,643
Religious	750 Year	24	$85,288
Religious	1000 Year	24	$168,535
Religious	1500 Year	24	$312,185
Religious	2000 Year	24	$495,382
Religious	2500 Year	24	$619,577

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	250 Year	3	$226
Residential	500 Year	11	$11,422
Residential	750 Year	11	$39,383
Residential	1000 Year	11	$82,618
Residential	1500 Year	11	$167,285
Residential	2000 Year	11	$284,433
Residential	2500 Year	11	$369,582
Utilities	250 Year	2	$134,920
Utilities	500 Year	2	$737,860
Utilities	750 Year	2	$1,445,100
Utilities	1000 Year	2	$2,278,980
Utilities	1500 Year	2	$3,944,820
Utilities	2000 Year	2	$5,602,640
Utilities	2500 Year	2	$6,886,600
All Categories	**250 Year**	**90**	**$147,464**
All Categories	**500 Year**	**122**	**$993,113**
All Categories	**750 Year**	**122**	**$2,138,020**
All Categories	**1000 Year**	**122**	**$3,603,834**
All Categories	**1500 Year**	**122**	**$6,322,478**
All Categories	**2000 Year**	**122**	**$9,340,659**
All Categories	**2500 Year**	**122**	**$11,640,725**

Source: GIS Analysis

Table 6-163: High Potential Loss Properties Exposed to the Earthquake - Town of Archer Lodge

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	2	$40
Government	500 Year	2	$1,395
Government	750 Year	2	$4,013
Government	1000 Year	2	$6,822
Government	1500 Year	2	$10,748

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	2000 Year	2	$15,883
Government	2500 Year	2	$20,857
Religious	250 Year	1	$186
Religious	500 Year	1	$1,392
Religious	750 Year	1	$3,967
Religious	1000 Year	1	$7,693
Religious	1500 Year	1	$14,376
Religious	2000 Year	1	$22,990
Religious	2500 Year	1	$29,989
All Categories	**250 Year**	**3**	**$226**
All Categories	**500 Year**	**3**	**$2,787**
All Categories	**750 Year**	**3**	**$7,980**
All Categories	**1000 Year**	**3**	**$14,515**
All Categories	**1500 Year**	**3**	**$25,124**
All Categories	**2000 Year**	**3**	**$38,873**
All Categories	**2500 Year**	**3**	**$50,846**

Source: GIS Analysis

Table 6-164: High Potential Loss Properties Exposed to the Earthquake - Town of Clayton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	39	$5,826
Commercial	500 Year	40	$96,336
Commercial	750 Year	40	$256,433
Commercial	1000 Year	40	$474,682
Commercial	1500 Year	40	$798,598
Commercial	2000 Year	40	$1,263,703
Commercial	2500 Year	40	$1,608,467
Government	250 Year	8	$4,570

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	500 Year	11	$54,800
Government	750 Year	11	$154,817
Government	1000 Year	11	$294,853
Government	1500 Year	11	$522,748
Government	2000 Year	11	$841,029
Government	2500 Year	11	$1,081,671
Industrial	250 Year	22	$17,779
Industrial	500 Year	22	$154,291
Industrial	750 Year	22	$399,850
Industrial	1000 Year	22	$653,296
Industrial	1500 Year	22	$988,944
Industrial	2000 Year	22	$1,451,198
Industrial	2500 Year	22	$1,819,120
Religious	250 Year	10	$1,735
Religious	500 Year	11	$20,985
Religious	750 Year	11	$57,948
Religious	1000 Year	11	$113,471
Religious	1500 Year	11	$203,239
Religious	2000 Year	11	$332,352
Religious	2500 Year	11	$423,966
Residential	250 Year	4	$238
Residential	500 Year	8	$18,491
Residential	750 Year	8	$61,501
Residential	1000 Year	8	$124,191
Residential	1500 Year	8	$226,881
Residential	2000 Year	8	$401,513
Residential	2500 Year	8	$535,130
Utilities	250 Year	4	$49,860
Utilities	500 Year	4	$260,820
Utilities	750 Year	4	$494,820
Utilities	1000 Year	4	$805,320
Utilities	1500 Year	4	$1,317,240

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	2000 Year	4	$1,825,020
Utilities	2500 Year	4	$2,395,620
All Categories	**250 Year**	**87**	**$80,008**
All Categories	**500 Year**	**96**	**$605,723**
All Categories	**750 Year**	**96**	**$1,425,369**
All Categories	**1000 Year**	**96**	**$2,465,813**
All Categories	**1500 Year**	**96**	**$4,057,650**
All Categories	**2000 Year**	**96**	**$6,114,815**
All Categories	**2500 Year**	**96**	**$7,863,974**

Source: GIS Analysis

Table 6-165: High Potential Loss Properties Exposed to the Earthquake - Town of Four Oaks

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	3	$229
Commercial	500 Year	3	$3,825
Commercial	750 Year	3	$11,093
Commercial	1000 Year	3	$22,323
Commercial	1500 Year	3	$40,421
Commercial	2000 Year	3	$65,089
Commercial	2500 Year	3	$80,135
Government	250 Year	3	$356
Government	500 Year	3	$16,241
Government	750 Year	3	$43,465
Government	1000 Year	3	$89,080
Government	1500 Year	3	$166,682
Government	2000 Year	3	$268,121
Government	2500 Year	3	$330,794
Industrial	250 Year	1	$1,077
Industrial	500 Year	1	$11,473
Industrial	750 Year	1	$29,370
Industrial	1000 Year	1	$54,937
Industrial	1500 Year	1	$83,872

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	2000 Year	1	$111,029
Industrial	2500 Year	1	$129,406
All Categories	**250 Year**	**7**	**$1,662**
All Categories	**500 Year**	**7**	**$31,539**
All Categories	**750 Year**	**7**	**$83,928**
All Categories	**1000 Year**	**7**	**$166,340**
All Categories	**1500 Year**	**7**	**$290,975**
All Categories	**2000 Year**	**7**	**$444,239**
All Categories	**2500 Year**	**7**	**$540,335**

Source: GIS Analysis

Table 6-166: High Potential Loss Properties Exposed to the Earthquake - Town of Kenly

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	3	$282
Commercial	500 Year	7	$9,041
Commercial	750 Year	7	$28,823
Commercial	1000 Year	7	$50,746
Commercial	1500 Year	7	$87,412
Commercial	2000 Year	7	$126,700
Commercial	2500 Year	7	$164,944
Government	250 Year	1	$48
Government	500 Year	1	$833
Government	750 Year	1	$2,507
Government	1000 Year	1	$4,355
Government	1500 Year	1	$7,431
Government	2000 Year	1	$11,040
Government	2500 Year	1	$15,378
Industrial	250 Year	1	$199
Industrial	500 Year	1	$1,582
Industrial	750 Year	1	$4,172
Industrial	1000 Year	1	$6,773
Industrial	1500 Year	1	$11,596

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	2000 Year	1	$15,686
Industrial	2500 Year	1	$18,918
Religious	250 Year	1	$58
Religious	500 Year	1	$1,297
Religious	750 Year	1	$3,763
Religious	1000 Year	1	$5,779
Religious	1500 Year	1	$9,191
Religious	2000 Year	1	$12,778
Religious	2500 Year	1	$16,747
Utilities	250 Year	1	$12,120
Utilities	500 Year	1	$81,420
Utilities	750 Year	1	$185,220
Utilities	1000 Year	1	$312,300
Utilities	1500 Year	1	$592,080
Utilities	2000 Year	1	$779,700
Utilities	2500 Year	1	$977,580
All Categories	**250 Year**	**7**	**$12,707**
All Categories	**500 Year**	**11**	**$94,173**
All Categories	**750 Year**	**11**	**$224,485**
All Categories	**1000 Year**	**11**	**$379,953**
All Categories	**1500 Year**	**11**	**$707,710**
All Categories	**2000 Year**	**11**	**$945,904**
All Categories	**2500 Year**	**11**	**$1,193,567**

Source: GIS Analysis

Table 6-167: High Potential Loss Properties Exposed to the Earthquake - Town of Micro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	2	$169
Commercial	500 Year	3	$2,909
Commercial	750 Year	3	$8,137
Commercial	1000 Year	3	$13,317
Commercial	1500 Year	3	$23,083

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2000 Year	3	$37,389
Commercial	2500 Year	3	$52,917
Government	250 Year	1	$347
Government	500 Year	2	$10,825
Government	750 Year	2	$35,715
Government	1000 Year	2	$65,312
Government	1500 Year	2	$114,395
Government	2000 Year	2	$177,578
Government	2500 Year	2	$230,309
Industrial	250 Year	1	$142
Industrial	500 Year	1	$1,409
Industrial	750 Year	1	$4,375
Industrial	1000 Year	1	$8,554
Industrial	1500 Year	1	$16,153
Industrial	2000 Year	1	$25,958
Industrial	2500 Year	1	$33,708
All Categories	**250 Year**	**4**	**$658**
All Categories	**500 Year**	**6**	**$15,143**
All Categories	**750 Year**	**6**	**$48,227**
All Categories	**1000 Year**	**6**	**$87,183**
All Categories	**1500 Year**	**6**	**$153,631**
All Categories	**2000 Year**	**6**	**$240,925**
All Categories	**2500 Year**	**6**	**$316,934**

Source: GIS Analysis

Table 6-168: High Potential Loss Properties Exposed to the Earthquake - Town of Pine Level

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$6
Commercial	500 Year	2	$1,651
Commercial	750 Year	2	$4,877
Commercial	1000 Year	2	$9,452
Commercial	1500 Year	2	$16,611

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2000 Year	2	$26,961
Commercial	2500 Year	2	$34,544
Government	500 Year	1	$3,104
Government	750 Year	1	$9,184
Government	1000 Year	1	$17,997
Government	1500 Year	1	$31,685
Government	2000 Year	1	$50,746
Government	2500 Year	1	$67,005
Religious	250 Year	1	$99
Religious	500 Year	1	$837
Religious	750 Year	1	$2,460
Religious	1000 Year	1	$4,927
Religious	1500 Year	1	$9,114
Religious	2000 Year	1	$15,104
Religious	2500 Year	1	$19,314
Residential	500 Year	1	$387
Residential	750 Year	1	$1,504
Residential	1000 Year	1	$3,129
Residential	1500 Year	1	$6,108
Residential	2000 Year	1	$11,151
Residential	2500 Year	1	$15,214
All Categories	**250 Year**	**2**	**$105**
All Categories	**500 Year**	**5**	**$5,979**
All Categories	**750 Year**	**5**	**$18,025**
All Categories	**1000 Year**	**5**	**$35,505**
All Categories	**1500 Year**	**5**	**$63,518**
All Categories	**2000 Year**	**5**	**$103,962**
All Categories	**2500 Year**	**5**	**$136,077**

Source: GIS Analysis

Table 6-169: High Potential Loss Properties Exposed to the Earthquake - Town of Princeton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	500 Year	1	$1,010
Commercial	750 Year	1	$3,073
Commercial	1000 Year	1	$6,268
Commercial	1500 Year	1	$12,082
Commercial	2000 Year	1	$20,175
Commercial	2500 Year	1	$25,962
Government	250 Year	1	$207
Government	500 Year	3	$7,982
Government	750 Year	3	$26,320
Government	1000 Year	3	$51,415
Government	1500 Year	3	$96,329
Government	2000 Year	3	$160,387
Government	2500 Year	3	$207,116
Religious	250 Year	1	$148
Religious	500 Year	2	$2,579
Religious	750 Year	2	$7,777
Religious	1000 Year	2	$15,411
Religious	1500 Year	2	$27,142
Religious	2000 Year	2	$42,293
Religious	2500 Year	2	$53,477
Residential	500 Year	1	$218
Residential	750 Year	1	$869
Residential	1000 Year	1	$1,894
Residential	1500 Year	1	$3,857
Residential	2000 Year	1	$6,871
Residential	2500 Year	1	$9,292
Utilities	250 Year	1	$12,060
Utilities	500 Year	1	$84,720
Utilities	750 Year	1	$195,900
Utilities	1000 Year	1	$350,760
Utilities	1500 Year	1	$624,240
Utilities	2000 Year	1	$815,880

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	2500 Year	1	$1,078,200
All Categories	**500 Year**	**8**	**$96,509**
All Categories	**750 Year**	**8**	**$233,939**
All Categories	**1000 Year**	**8**	**$425,748**
All Categories	**1500 Year**	**8**	**$763,650**
All Categories	**2000 Year**	**8**	**$1,045,606**
All Categories	**2500 Year**	**8**	**$1,374,047**
All Categories	**250 Year**	**3**	**$12,415**

Source: GIS Analysis

Table 6-170: High Potential Loss Properties Exposed to the Earthquake - Town of Selma

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	8	$920
Commercial	500 Year	16	$34,314
Commercial	750 Year	16	$97,490
Commercial	1000 Year	16	$180,890
Commercial	1500 Year	16	$309,700
Commercial	2000 Year	16	$500,516
Commercial	2500 Year	16	$645,014
Government	250 Year	3	$2,433
Government	500 Year	3	$17,252
Government	750 Year	3	$51,305
Government	1000 Year	3	$99,920
Government	1500 Year	3	$183,519
Government	2000 Year	3	$299,355
Government	2500 Year	3	$383,614
Industrial	250 Year	5	$3,585
Industrial	500 Year	5	$31,547
Industrial	750 Year	5	$81,729
Industrial	1000 Year	5	$132,037
Industrial	1500 Year	5	$203,876
Industrial	2000 Year	5	$298,844

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	2500 Year	5	$374,846
Religious	250 Year	2	$319
Religious	500 Year	3	$3,000
Religious	750 Year	3	$8,965
Religious	1000 Year	3	$17,946
Religious	1500 Year	3	$33,698
Religious	2000 Year	3	$55,752
Religious	2500 Year	3	$72,370
Utilities	250 Year	3	$12,580
Utilities	500 Year	3	$73,366
Utilities	750 Year	3	$143,154
Utilities	1000 Year	3	$235,974
Utilities	1500 Year	3	$390,400
Utilities	2000 Year	3	$531,532
Utilities	2500 Year	3	$706,152
All Categories	**250 Year**	**21**	**$19,837**
All Categories	**500 Year**	**30**	**$159,479**
All Categories	**750 Year**	**30**	**$382,643**
All Categories	**1000 Year**	**30**	**$666,767**
All Categories	**1500 Year**	**30**	**$1,121,193**
All Categories	**2000 Year**	**30**	**$1,685,999**
All Categories	**2500 Year**	**30**	**$2,181,996**

Source: GIS Analysis

Table 6-171: High Potential Loss Properties Exposed to the Earthquake - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	30	$8,735
Commercial	500 Year	48	$183,911
Commercial	750 Year	48	$525,422
Commercial	1000 Year	48	$971,294
Commercial	1500 Year	48	$1,598,472
Commercial	2000 Year	48	$2,529,079

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2500 Year	48	$3,226,735
Government	250 Year	13	$3,227
Government	500 Year	25	$84,180
Government	750 Year	25	$242,701
Government	1000 Year	25	$461,807
Government	1500 Year	25	$794,126
Government	2000 Year	25	$1,289,277
Government	2500 Year	25	$1,651,445
Industrial	250 Year	9	$13,915
Industrial	500 Year	9	$137,799
Industrial	750 Year	9	$388,372
Industrial	1000 Year	9	$713,812
Industrial	1500 Year	9	$1,191,955
Industrial	2000 Year	9	$1,893,722
Industrial	2500 Year	9	$2,361,280
Religious	250 Year	7	$1,318
Religious	500 Year	12	$16,574
Religious	750 Year	12	$47,022
Religious	1000 Year	12	$92,206
Religious	1500 Year	12	$164,320
Religious	2000 Year	12	$273,816
Religious	2500 Year	12	$350,205
Residential	250 Year	1	$18
Residential	500 Year	4	$3,096
Residential	750 Year	4	$10,427
Residential	1000 Year	4	$21,010
Residential	1500 Year	4	$36,989
Residential	2000 Year	4	$64,117
Residential	2500 Year	4	$84,941
Utilities	250 Year	8	$66,040
Utilities	500 Year	8	$404,883
Utilities	750 Year	8	$871,848

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	1000 Year	8	$1,543,435
Utilities	1500 Year	8	$2,708,034
Utilities	2000 Year	8	$3,504,467
Utilities	2500 Year	8	$4,773,176
All Categories	**250 Year**	**68**	**$93,253**
All Categories	**500 Year**	**106**	**$830,443**
All Categories	**750 Year**	**106**	**$2,085,792**
All Categories	**1000 Year**	**106**	**$3,803,564**
All Categories	**1500 Year**	**106**	**$6,493,896**
All Categories	**2000 Year**	**106**	**$9,554,478**
All Categories	**2500 Year**	**106**	**$12,447,782**

Source: GIS Analysis

Table 6-172: High Potential Loss Properties Exposed to the Earthquake - Town of Wilson's Mills

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	250 Year	1	$36
Agricultural	500 Year	1	$1,359
Agricultural	750 Year	1	$3,697
Agricultural	1000 Year	1	$6,216
Agricultural	1500 Year	1	$9,243
Agricultural	2000 Year	1	$13,765
Agricultural	2500 Year	1	$17,426
Government	500 Year	1	$3,193
Government	750 Year	1	$9,163
Government	1000 Year	1	$17,782
Government	1500 Year	1	$31,234
Government	2000 Year	1	$49,210
Government	2500 Year	1	$65,204
Industrial	250 Year	1	$1,054
Industrial	500 Year	1	$8,282
Industrial	750 Year	1	$19,460
Industrial	1000 Year	1	$30,324

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	1500 Year	1	$46,370
Industrial	2000 Year	1	$63,662
Industrial	2500 Year	1	$78,161
Religious	500 Year	2	$1,142
Religious	750 Year	2	$4,030
Religious	1000 Year	2	$7,399
Religious	1500 Year	2	$14,992
Religious	2000 Year	2	$23,331
Religious	2500 Year	2	$31,275
Utilities	250 Year	6	$14,795
Utilities	500 Year	6	$82,437
Utilities	750 Year	6	$159,785
Utilities	1000 Year	6	$259,739
Utilities	1500 Year	6	$428,046
Utilities	2000 Year	6	$595,051
Utilities	2500 Year	6	$775,785
All Categories	**250 Year**	**8**	**$15,885**
All Categories	**500 Year**	**11**	**$96,413**
All Categories	**750 Year**	**11**	**$196,135**
All Categories	**1000 Year**	**11**	**$321,460**
All Categories	**1500 Year**	**11**	**$529,885**
All Categories	**2000 Year**	**11**	**$745,019**
All Categories	**2500 Year**	**11**	**$967,851**

Source: GIS Analysis

Table 6-173: High Potential Loss Properties Exposed to the Earthquake - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	55	$66,620
Commercial	500 Year	63	$660,509
Commercial	750 Year	63	$1,670,030
Commercial	1000 Year	63	$2,760,537
Commercial	1500 Year	63	$5,454,852

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2000 Year	63	$7,949,237
Commercial	2500 Year	63	$10,600,813
Government	250 Year	37	$34,121
Government	500 Year	37	$340,070
Government	750 Year	37	$823,940
Government	1000 Year	37	$1,404,376
Government	1500 Year	37	$2,778,371
Government	2000 Year	37	$4,437,817
Government	2500 Year	37	$6,250,388
Industrial	250 Year	22	$88,764
Industrial	500 Year	22	$811,585
Industrial	750 Year	22	$1,803,741
Industrial	1000 Year	22	$2,858,342
Industrial	1500 Year	22	$4,944,294
Industrial	2000 Year	22	$7,049,026
Industrial	2500 Year	22	$9,164,736
Religious	250 Year	8	$5,176
Religious	500 Year	9	$57,944
Religious	750 Year	9	$155,697
Religious	1000 Year	9	$279,690
Religious	1500 Year	9	$613,852
Religious	2000 Year	9	$947,292
Religious	2500 Year	9	$1,272,484
Residential	250 Year	4	$1,447
Residential	500 Year	7	$18,037
Residential	750 Year	7	$46,321
Residential	1000 Year	7	$77,430
Residential	1500 Year	7	$165,769
Residential	2000 Year	7	$242,698
Residential	2500 Year	7	$322,269
Utilities	250 Year	8	$12,984
Utilities	500 Year	8	$60,134

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	750 Year	8	$116,971
Utilities	1000 Year	8	$181,146
Utilities	1500 Year	8	$282,095
Utilities	2000 Year	8	$395,598
Utilities	2500 Year	8	$499,643
All Categories	**250 Year**	**134**	**$209,112**
All Categories	**500 Year**	**146**	**$1,948,279**
All Categories	**750 Year**	**146**	**$4,616,700**
All Categories	**1000 Year**	**146**	**$7,561,521**
All Categories	**1500 Year**	**146**	**$14,239,233**
All Categories	**2000 Year**	**146**	**$21,021,668**
All Categories	**2500 Year**	**146**	**$28,110,333**

Source: GIS Analysis

Table 6-174: High Potential Loss Properties Exposed to the Earthquake - Lee County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	30	$5,954
Commercial	500 Year	32	$70,906
Commercial	750 Year	32	$171,990
Commercial	1000 Year	32	$282,143
Commercial	1500 Year	32	$508,123
Commercial	2000 Year	32	$747,877
Commercial	2500 Year	32	$967,187
Government	250 Year	11	$13,821
Government	500 Year	11	$131,676
Government	750 Year	11	$306,573
Government	1000 Year	11	$510,441
Government	1500 Year	11	$932,539
Government	2000 Year	11	$1,443,434
Government	2500 Year	11	$1,954,959
Industrial	250 Year	16	$25,917

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	500 Year	16	$273,377
Industrial	750 Year	16	$673,675
Industrial	1000 Year	16	$1,098,075
Industrial	1500 Year	16	$2,025,058
Industrial	2000 Year	16	$2,761,526
Industrial	2500 Year	16	$3,292,808
Religious	250 Year	5	$1,065
Religious	500 Year	5	$14,222
Religious	750 Year	5	$32,916
Religious	1000 Year	5	$54,481
Religious	1500 Year	5	$99,020
Religious	2000 Year	5	$151,455
Religious	2500 Year	5	$199,285
Residential	500 Year	1	$603
Residential	750 Year	1	$1,774
Residential	1000 Year	1	$3,121
Residential	1500 Year	1	$6,961
Residential	2000 Year	1	$10,124
Residential	2500 Year	1	$13,705
Utilities	250 Year	1	$861
Utilities	500 Year	1	$4,216
Utilities	750 Year	1	$8,073
Utilities	1000 Year	1	$12,786
Utilities	1500 Year	1	$20,375
Utilities	2000 Year	1	$28,080
Utilities	2500 Year	1	$35,805
All Categories	**250 Year**	**63**	**$47,618**
All Categories	**500 Year**	**66**	**$495,000**
All Categories	**750 Year**	**66**	**$1,195,001**
All Categories	**1000 Year**	**66**	**$1,961,047**
All Categories	**1500 Year**	**66**	**$3,592,076**
All Categories	**2000 Year**	**66**	**$5,142,496**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**2500 Year**	**66**	**$6,463,749**

Source: GIS Analysis

Table 6-175: High Potential Loss Properties Exposed to the Earthquake - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	13	$5,828
Commercial	500 Year	13	$56,350
Commercial	750 Year	13	$137,128
Commercial	1000 Year	13	$215,563
Commercial	1500 Year	13	$384,430
Commercial	2000 Year	13	$564,005
Commercial	2500 Year	13	$776,161
Government	250 Year	9	$12,760
Government	500 Year	9	$97,976
Government	750 Year	9	$273,238
Government	1000 Year	9	$539,172
Government	1500 Year	9	$1,145,620
Government	2000 Year	9	$1,744,677
Government	2500 Year	9	$2,323,155
Industrial	250 Year	2	$3,294
Industrial	500 Year	2	$19,501
Industrial	750 Year	2	$50,053
Industrial	1000 Year	2	$82,026
Industrial	1500 Year	2	$167,697
Industrial	2000 Year	2	$239,097
Industrial	2500 Year	2	$292,819
Religious	250 Year	7	$2,815
Religious	500 Year	7	$32,758
Religious	750 Year	7	$88,449
Religious	1000 Year	7	$152,365
Religious	1500 Year	7	$313,631

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	2000 Year	7	$450,993
Religious	2500 Year	7	$600,188
Residential	250 Year	6	$735
Residential	500 Year	6	$12,261
Residential	750 Year	6	$30,757
Residential	1000 Year	6	$45,371
Residential	1500 Year	6	$83,478
Residential	2000 Year	6	$122,746
Residential	2500 Year	6	$173,640
Utilities	250 Year	9	$41,284
Utilities	500 Year	9	$166,444
Utilities	750 Year	9	$348,696
Utilities	1000 Year	9	$509,794
Utilities	1500 Year	9	$850,529
Utilities	2000 Year	9	$1,136,730
Utilities	2500 Year	9	$1,380,055
All Categories	**250 Year**	**46**	**$66,716**
All Categories	**500 Year**	**46**	**$385,290**
All Categories	**750 Year**	**46**	**$928,321**
All Categories	**1000 Year**	**46**	**$1,544,291**
All Categories	**1500 Year**	**46**	**$2,945,385**
All Categories	**2000 Year**	**46**	**$4,258,248**
All Categories	**2500 Year**	**46**	**$5,546,018**

Source: GIS Analysis

Table 6-176: High Potential Loss Properties Exposed to the Earthquake - Town of Aberdeen

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	12	$17,876
Commercial	500 Year	12	$165,030
Commercial	750 Year	12	$425,531
Commercial	1000 Year	12	$720,479
Commercial	1500 Year	12	$1,411,699

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2000 Year	12	$2,441,627
Commercial	2500 Year	12	$3,112,738
Government	250 Year	4	$7,629
Government	500 Year	4	$60,246
Government	750 Year	4	$146,203
Government	1000 Year	4	$292,957
Government	1500 Year	4	$811,012
Government	2000 Year	4	$1,411,407
Government	2500 Year	4	$1,725,889
Industrial	250 Year	5	$28,341
Industrial	500 Year	5	$252,604
Industrial	750 Year	5	$555,550
Industrial	1000 Year	5	$895,506
Industrial	1500 Year	5	$1,718,607
Industrial	2000 Year	5	$2,606,628
Industrial	2500 Year	5	$3,072,153
Religious	250 Year	2	$514
Religious	500 Year	2	$4,682
Religious	750 Year	2	$13,341
Religious	1000 Year	2	$25,481
Religious	1500 Year	2	$54,737
Religious	2000 Year	2	$81,400
Religious	2500 Year	2	$99,679
Residential	250 Year	2	$580
Residential	500 Year	2	$4,006
Residential	750 Year	2	$11,145
Residential	1000 Year	2	$22,320
Residential	1500 Year	2	$50,626
Residential	2000 Year	2	$76,229
Residential	2500 Year	2	$93,302
All Categories	**250 Year**	**25**	**$54,940**
All Categories	**500 Year**	**25**	**$486,568**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**750 Year**	**25**	**$1,151,770**
All Categories	**1000 Year**	**25**	**$1,956,743**
All Categories	**1500 Year**	**25**	**$4,046,681**
All Categories	**2000 Year**	**25**	**$6,617,291**
All Categories	**2500 Year**	**25**	**$8,103,761**

Source: GIS Analysis

Table 6-177: High Potential Loss Properties Exposed to the Earthquake - Town of Cameron

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	1	$1,130
Government	500 Year	1	$9,028
Government	750 Year	1	$16,161
Government	1000 Year	1	$23,445
Government	1500 Year	1	$55,447
Government	2000 Year	1	$91,970
Government	2500 Year	1	$134,664
All Categories	**250 Year**	**1**	**$1,130**
All Categories	**500 Year**	**1**	**$9,028**
All Categories	**750 Year**	**1**	**$16,161**
All Categories	**1000 Year**	**1**	**$23,445**
All Categories	**1500 Year**	**1**	**$55,447**
All Categories	**2000 Year**	**1**	**$91,970**
All Categories	**2500 Year**	**1**	**$134,664**

Source: GIS Analysis

Table 6-178: High Potential Loss Properties Exposed to the Earthquake - Town of Carthage

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	7	$5,232
Commercial	500 Year	7	$45,697
Commercial	750 Year	7	$117,491
Commercial	1000 Year	7	$187,263

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	1500 Year	7	$407,235
Commercial	2000 Year	7	$600,705
Commercial	2500 Year	7	$847,449
Government	250 Year	11	$8,760
Government	500 Year	11	$84,889
Government	750 Year	11	$205,494
Government	1000 Year	11	$310,483
Government	1500 Year	11	$658,206
Government	2000 Year	11	$982,914
Government	2500 Year	11	$1,495,711
Residential	250 Year	2	$58
Residential	500 Year	2	$1,731
Residential	750 Year	2	$5,299
Residential	1000 Year	2	$8,444
Residential	1500 Year	2	$20,105
Residential	2000 Year	2	$28,226
Residential	2500 Year	2	$39,745
All Categories	**250 Year**	**20**	**$14,050**
All Categories	**500 Year**	**20**	**$132,317**
All Categories	**750 Year**	**20**	**$328,284**
All Categories	**1000 Year**	**20**	**$506,190**
All Categories	**1500 Year**	**20**	**$1,085,546**
All Categories	**2000 Year**	**20**	**$1,611,845**
All Categories	**2500 Year**	**20**	**$2,382,905**

Source: GIS Analysis

Table 6-179: High Potential Loss Properties Exposed to the Earthquake - Town of Pinebluff

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$5,543
Commercial	500 Year	1	$50,482
Commercial	750 Year	1	$109,180
Commercial	1000 Year	1	$185,023

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	1500 Year	1	$358,907
Commercial	2000 Year	1	$534,777
Commercial	2500 Year	1	$649,086
Utilities	250 Year	4	$43,478
Utilities	500 Year	4	$179,189
Utilities	750 Year	4	$375,475
Utilities	1000 Year	4	$556,154
Utilities	1500 Year	4	$927,336
Utilities	2000 Year	4	$1,260,971
Utilities	2500 Year	4	$1,492,173
All Categories	**250 Year**	**5**	**$49,021**
All Categories	**500 Year**	**5**	**$229,671**
All Categories	**750 Year**	**5**	**$484,655**
All Categories	**1000 Year**	**5**	**$741,177**
All Categories	**1500 Year**	**5**	**$1,286,243**
All Categories	**2000 Year**	**5**	**$1,795,748**
All Categories	**2500 Year**	**5**	**$2,141,259**

Source: GIS Analysis

Table 6-180: High Potential Loss Properties Exposed to the Earthquake - Town of Robbins

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$349
Commercial	500 Year	1	$3,038
Commercial	750 Year	1	$7,276
Commercial	1000 Year	1	$10,758
Commercial	1500 Year	1	$22,928
Commercial	2000 Year	1	$33,218
Commercial	2500 Year	1	$55,241
Government	250 Year	1	$1,407
Government	500 Year	1	$13,604
Government	750 Year	1	$31,885
Government	1000 Year	1	$47,304

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	1500 Year	1	$121,729
Government	2000 Year	1	$206,272
Government	2500 Year	1	$428,718
Industrial	250 Year	1	$1,699
Industrial	500 Year	1	$15,557
Industrial	750 Year	1	$46,458
Industrial	1000 Year	1	$73,733
Industrial	1500 Year	1	$159,157
Industrial	2000 Year	1	$215,193
Industrial	2500 Year	1	$289,532
Religious	250 Year	1	$978
Religious	500 Year	1	$7,006
Religious	750 Year	1	$14,505
Religious	1000 Year	1	$20,910
Religious	1500 Year	1	$43,639
Religious	2000 Year	1	$62,359
Religious	2500 Year	1	$102,524
Residential	250 Year	1	$443
Residential	500 Year	1	$3,548
Residential	750 Year	1	$8,901
Residential	1000 Year	1	$13,046
Residential	1500 Year	1	$25,357
Residential	2000 Year	1	$34,907
Residential	2500 Year	1	$54,676
All Categories	**250 Year**	**5**	**$4,876**
All Categories	**500 Year**	**5**	**$42,753**
All Categories	**750 Year**	**5**	**$109,025**
All Categories	**1000 Year**	**5**	**$165,751**
All Categories	**1500 Year**	**5**	**$372,810**
All Categories	**2000 Year**	**5**	**$551,949**
All Categories	**2500 Year**	**5**	**$930,691**

Source: GIS Analysis

Table 6-181: High Potential Loss Properties Exposed to the Earthquake - Town of Southern Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	66	$71,828
Commercial	500 Year	66	$650,902
Commercial	750 Year	66	$1,618,733
Commercial	1000 Year	66	$2,730,200
Commercial	1500 Year	66	$5,259,835
Commercial	2000 Year	66	$8,288,618
Commercial	2500 Year	66	$10,780,452
Government	250 Year	27	$18,740
Government	500 Year	27	$167,405
Government	750 Year	27	$407,848
Government	1000 Year	27	$701,315
Government	1500 Year	27	$1,422,363
Government	2000 Year	27	$2,390,525
Government	2500 Year	27	$3,268,167
Industrial	250 Year	1	$3,448
Industrial	500 Year	1	$32,282
Industrial	750 Year	1	$75,296
Industrial	1000 Year	1	$113,564
Industrial	1500 Year	1	$203,772
Industrial	2000 Year	1	$312,972
Industrial	2500 Year	1	$373,894
Religious	250 Year	6	$5,766
Religious	500 Year	6	$51,366
Religious	750 Year	6	$146,741
Religious	1000 Year	6	$286,893
Religious	1500 Year	6	$563,988
Religious	2000 Year	6	$821,444
Religious	2500 Year	6	$1,013,121
Residential	250 Year	46	$3,494
Residential	500 Year	46	$48,654
Residential	750 Year	46	$150,186
Residential	1000 Year	46	$276,726

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	1500 Year	46	$572,153
Residential	2000 Year	46	$861,127
Residential	2500 Year	46	$1,094,809
All Categories	**250 Year**	**146**	**$103,276**
All Categories	**500 Year**	**146**	**$950,609**
All Categories	**750 Year**	**146**	**$2,398,804**
All Categories	**1000 Year**	**146**	**$4,108,698**
All Categories	**1500 Year**	**146**	**$8,022,111**
All Categories	**2000 Year**	**146**	**$12,674,686**
All Categories	**2500 Year**	**146**	**$16,530,443**

Source: GIS Analysis

Table 6-182: High Potential Loss Properties Exposed to the Earthquake - Town of Taylortown

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	3	$2,582
Commercial	500 Year	3	$27,409
Commercial	750 Year	3	$65,788
Commercial	1000 Year	3	$107,365
Commercial	1500 Year	3	$195,946
Commercial	2000 Year	3	$309,756
Commercial	2500 Year	3	$419,305
Government	250 Year	2	$1,837
Government	500 Year	2	$15,797
Government	750 Year	2	$36,039
Government	1000 Year	2	$54,819
Government	1500 Year	2	$103,145
Government	2000 Year	2	$181,994
Government	2500 Year	2	$273,027
All Categories	**250 Year**	**5**	**$4,419**
All Categories	**500 Year**	**5**	**$43,206**
All Categories	**750 Year**	**5**	**$101,827**
All Categories	**1000 Year**	**5**	**$162,184**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**5**	**$299,091**
All Categories	**2000 Year**	**5**	**$491,750**
All Categories	**2500 Year**	**5**	**$692,332**

Source: GIS Analysis

Table 6-183: High Potential Loss Properties Exposed to the Earthquake - Town of Vass

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$410
Commercial	500 Year	1	$4,095
Commercial	750 Year	1	$10,459
Commercial	1000 Year	1	$15,025
Commercial	1500 Year	1	$25,280
Commercial	2000 Year	1	$35,821
Commercial	2500 Year	1	$50,341
Government	250 Year	3	$2,374
Government	500 Year	3	$19,081
Government	750 Year	3	$47,996
Government	1000 Year	3	$81,269
Government	1500 Year	3	$212,758
Government	2000 Year	3	$352,766
Government	2500 Year	3	$472,273
Residential	250 Year	3	$69
Residential	500 Year	3	$2,709
Residential	750 Year	3	$8,585
Residential	1000 Year	3	$14,792
Residential	1500 Year	3	$33,036
Residential	2000 Year	3	$48,749
Residential	2500 Year	3	$65,766
All Categories	**250 Year**	**7**	**$2,853**
All Categories	**500 Year**	**7**	**$25,885**
All Categories	**750 Year**	**7**	**$67,040**
All Categories	**1000 Year**	**7**	**$111,086**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1500 Year**	**7**	**$271,074**
All Categories	**2000 Year**	**7**	**$437,336**
All Categories	**2500 Year**	**7**	**$588,380**

Source: GIS Analysis

Table 6-184: High Potential Loss Properties Exposed to the Earthquake - Village of Foxfire

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$2,016
Commercial	500 Year	1	$18,530
Commercial	750 Year	1	$45,163
Commercial	1000 Year	1	$65,781
Commercial	1500 Year	1	$99,984
Commercial	2000 Year	1	$150,537
Commercial	2500 Year	1	$195,513
All Categories	**250 Year**	**1**	**$2,016**
All Categories	**500 Year**	**1**	**$18,530**
All Categories	**750 Year**	**1**	**$45,163**
All Categories	**1000 Year**	**1**	**$65,781**
All Categories	**1500 Year**	**1**	**$99,984**
All Categories	**2000 Year**	**1**	**$150,537**
All Categories	**2500 Year**	**1**	**$195,513**

Source: GIS Analysis

Table 6-185: High Potential Loss Properties Exposed to the Earthquake - Village of Pinehurst

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	53	$100,815
Commercial	500 Year	54	$848,697
Commercial	750 Year	54	$2,199,443
Commercial	1000 Year	54	$3,664,872
Commercial	1500 Year	54	$6,768,992
Commercial	2000 Year	54	$9,941,848

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	2500 Year	54	$12,433,764
Government	250 Year	4	$2,113
Government	500 Year	4	$21,524
Government	750 Year	4	$57,393
Government	1000 Year	4	$109,235
Government	1500 Year	4	$228,234
Government	2000 Year	4	$366,958
Government	2500 Year	4	$455,718
Religious	250 Year	4	$2,552
Religious	500 Year	4	$23,566
Religious	750 Year	4	$70,342
Religious	1000 Year	4	$137,264
Religious	1500 Year	4	$278,882
Religious	2000 Year	4	$412,123
Religious	2500 Year	4	$511,822
Residential	250 Year	66	$4,524
Residential	500 Year	66	$61,216
Residential	750 Year	66	$188,313
Residential	1000 Year	66	$353,230
Residential	1500 Year	66	$717,204
Residential	2000 Year	66	$1,104,201
Residential	2500 Year	66	$1,402,808
Utilities	250 Year	1	$6,960
Utilities	500 Year	1	$27,350
Utilities	750 Year	1	$56,430
Utilities	1000 Year	1	$83,790
Utilities	1500 Year	1	$133,540
Utilities	2000 Year	1	$184,190
Utilities	2500 Year	1	$217,160
All Categories	**250 Year**	**128**	**$116,964**
All Categories	**500 Year**	**129**	**$982,353**
All Categories	**750 Year**	**129**	**$2,571,921**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**1000 Year**	**129**	**$4,348,391**
All Categories	**1500 Year**	**129**	**$8,126,852**
All Categories	**2000 Year**	**129**	**$12,009,320**
All Categories	**2500 Year**	**129**	**$15,021,272**

Source: GIS Analysis

Table 6-186: High Potential Loss Properties Exposed to the Earthquake - Village of Whispering Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	6	$3,368
Commercial	500 Year	6	$27,206
Commercial	750 Year	6	$63,092
Commercial	1000 Year	6	$92,162
Commercial	1500 Year	6	$164,548
Commercial	2000 Year	6	$241,206
Commercial	2500 Year	6	$323,502
Government	250 Year	1	$770
Government	500 Year	1	$7,279
Government	750 Year	1	$16,976
Government	1000 Year	1	$25,452
Government	1500 Year	1	$50,624
Government	2000 Year	1	$82,852
Government	2500 Year	1	$131,236
All Categories	**250 Year**	**7**	**$4,138**
All Categories	**500 Year**	**7**	**$34,485**
All Categories	**750 Year**	**7**	**$80,068**
All Categories	**1000 Year**	**7**	**$117,614**
All Categories	**1500 Year**	**7**	**$215,172**
All Categories	**2000 Year**	**7**	**$324,058**
All Categories	**2500 Year**	**7**	**$454,738**

Source: GIS Analysis

For the earthquake hazard vulnerability assessment, a probabilistic scenario was created to estimate the annualized loss for the region. The results of the analysis reported at the U.S. Census tract level do not make it feasible to estimate losses at the jurisdiction level. Since the scenario is annualized, no building counts are provided. Losses reported included losses due to building damage and do not include losses to contents, inventory, or business interruption.

6.5.8 Social Vulnerability

It can be assumed that all existing future populations are at risk to the earthquake hazard.

6.5.9 Critical Facilities

The analysis indicated that no critical facilities would sustain measurable damage in an earthquake event. However, all critical facilities should be considered at-risk to minor damage, should an event occur. A list of individual critical facilities and their risk can be found in **Table 6.17**.

In conclusion, an earthquake has the potential to impact all existing and future buildings, facilities, and populations in the Cape Fear Region. Minor earthquakes may rattle dishes and cause minimal damage while stronger earthquakes will result in structural damage. Impacts of earthquakes include debris clean-up, service disruption and, in severe cases, fatalities due to building collapse. Specific vulnerabilities for assets will be greatly dependent on their individual design and the mitigation measures in place, where appropriate. Such site-specific vulnerability determinations are outside the scope of this assessment but will be considered during future plan updates if data becomes available. Furthermore, mitigation actions to address earthquake vulnerability will be considered.

6.5.10 Flood

The following tables provide counts and values by jurisdiction relevant to River Flooding hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-187: Population Impacted by the 10 Year River Flooding

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	19	0%	7,745	3	0%	2,608	1	0%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	16	0.2%	1,176	3	0.3%	396	1	0.3%
Town of Siler City	13,243	34	0.3%	2,427	6	0.2%	817	2	0.2%
Subtotal Chatham	*62,189*	*69*	*0.1%*	*11396*	*12*	*0.1%*	*3837*	*4*	*0.1%*
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%
Subtotal Harnett	*121,431*	*5*	*0%*	*12702*	*0*	*0%*	*9815*	*0*	*0%*
Johnston									
Johnston County (Unincorporated Area)	94,330	291	0.3%	9,632	30	0.3%	7,169	22	0.3%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Archer Lodge	4,150	3	0.1%	424	0	0%	315	0	0%
Town of Benson	4,986	5	0.1%	509	0	0%	379	0	0%
Town of Clayton	27,459	9	0%	2,804	1	0%	2,087	1	0%
Town of Four Oaks	4,719	14	0.3%	482	1	0.2%	359	1	0.3%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	15	1.6%	97	2	2.1%	72	1	1.4%
Town of Pine Level	2,767	2	0.1%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	64	0.7%	875	7	0.8%	651	5	0.8%
Town of Smithfield	14,194	105	0.7%	1,449	11	0.8%	1,079	8	0.7%
Town of Wilson's Mills	3,324	0	0%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*503*	*0.3%*	*16784*	*52*	*0.3%*	*12482*	*38*	*0.3%*
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	*56,133*	*0*	*0%*	*7700*	*0*	*0%*	*4095*	*0*	*0%*
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**577**	**0.1%**	**68568**	**64**	**0.1%**	**35272**	**42**	**0.1%**

Source: GIS Analysis

Table 6-188: Population Impacted by the 25 Year River Flooding

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	22	0.1%	7,745	4	0.1%	2,608	1	0%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	20	0.3%	1,176	4	0.3%	396	1	0.3%
Town of Siler City	13,243	55	0.4%	2,427	10	0.4%	817	3	0.4%
Subtotal Chatham	*62,189*	*97*	*0.2%*	*11396*	*18*	*0.2%*	*3837*	*5*	*0.1%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%
Subtotal Harnett	*121,431*	*9*	*0%*	*12702*	*1*	*0%*	*9815*	*1*	*0%*
Johnston									
Johnston County (Unincorporated Area)	94,330	393	0.4%	9,632	40	0.4%	7,169	30	0.4%
Town of Archer Lodge	4,150	3	0.1%	424	0	0%	315	0	0%
Town of Benson	4,986	9	0.2%	509	1	0.2%	379	1	0.3%
Town of Clayton	27,459	12	0%	2,804	1	0%	2,087	1	0%
Town of Four Oaks	4,719	18	0.4%	482	2	0.4%	359	1	0.3%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	31	3.3%	97	3	3.1%	72	2	2.8%
Town of Pine Level	2,767	2	0.1%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	72	0.8%	875	7	0.8%	651	5	0.8%
Town of Smithfield	14,194	149	1%	1,449	15	1%	1,079	11	1%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Wilson's Mills	3,324	3	0.1%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*683*	*0.4%*	*16784*	*68*	*0.4%*	*12482*	*50*	*0.4%*
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	56,133	0	0%	7700	0	0%	4095	0	0%
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**789**	**0.2%**	**68568**	**87**	**0.1%**	**35272**	**56**	**0.2%**

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent

Source: GIS Analysis

Table 6-189: Population Impacted by the 50 Year River Flooding

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	28	0.1%	7,745	5	0.1%	2,608	2	0.1%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	24	0.4%	1,176	4	0.3%	396	1	0.3%
Town of Siler City	13,243	65	0.5%	2,427	12	0.5%	817	4	0.5%
Subtotal Chatham	*62,189*	*117*	*0.2%*	*11396*	*21*	*0.2%*	*3837*	*7*	*0.2%*
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%
Subtotal Harnett	*121,431*	*9*	*0%*	*12702*	*1*	*0%*	*9815*	*1*	*0%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Johnston									
Johnston County (Unincorporated Area)	94,330	520	0.6%	9,632	53	0.6%	7,169	40	0.6%
Town of Archer Lodge	4,150	3	0.1%	424	0	0%	315	0	0%
Town of Benson	4,986	9	0.2%	509	1	0.2%	379	1	0.3%
Town of Clayton	27,459	15	0.1%	2,804	2	0.1%	2,087	1	0%
Town of Four Oaks	4,719	25	0.5%	482	3	0.6%	359	2	0.6%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	33	3.5%	97	3	3.1%	72	2	2.8%
Town of Pine Level	2,767	5	0.2%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	78	0.9%	875	8	0.9%	651	6	0.9%
Town of Smithfield	14,194	235	1.7%	1,449	24	1.7%	1,079	18	1.7%
Town of Wilson's Mills	3,324	3	0.1%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*917*	*0.6%*	*16784*	*93*	*0.6%*	*12482*	*69*	*0.6%*
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	*56,133*	*0*	*0%*	*7700*	*0*	*0%*	*4095*	*0*	*0%*
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**1,043**	**0.2%**	**68568**	**115**	**0.2%**	**35272**	**77**	**0.2%**

Source: GIS Analysis

Table 6-190: Population Impacted by the 100 Year River Flooding

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	50	0.1%	7,745	9	0.1%	2,608	3	0.1%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	34	0.5%	1,176	6	0.5%	396	2	0.5%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Siler City	13,243	75	0.6%	2,427	14	0.6%	817	5	0.6%
Subtotal Chatham	62,189	159	0.3%	11396	29	0.3%	3837	10	0.3%
Harnett									
City of Dunn	10,132	169	1.7%	1,056	18	1.7%	822	14	1.7%
Harnett County (Unincorporated Area)	85,585	308	0.4%	8,921	32	0.4%	6,948	25	0.4%
Town of Angier	5,712	2	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	88	1.4%	654	9	1.4%	509	7	1.4%
Town of Lillington	4,071	16	0.4%	424	2	0.5%	330	1	0.3%
Subtotal Harnett	121,431	595	0.5%	12702	62	0.5%	9815	48	0.5%
Johnston									
Johnston County (Unincorporated Area)	94,330	605	0.6%	9,632	62	0.6%	7,169	46	0.6%
Town of Archer Lodge	4,150	3	0.1%	424	0	0%	315	0	0%
Town of Benson	4,986	12	0.2%	509	1	0.2%	379	1	0.3%
Town of Clayton	27,459	21	0.1%	2,804	2	0.1%	2,087	2	0.1%
Town of Four Oaks	4,719	31	0.7%	482	3	0.6%	359	2	0.6%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	37	3.9%	97	4	4.1%	72	3	4.2%
Town of Pine Level	2,767	5	0.2%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Selma	8,565	78	0.9%	875	8	0.9%	651	6	0.9%
Town of Smithfield	14,194	284	2%	1,449	29	2%	1,079	22	2%
Town of Wilson's Mills	3,324	5	0.2%	339	1	0.3%	253	0	0%
Subtotal Johnston	164,274	1,069	0.7%	16784	109	0.6%	12482	81	0.6%
Lee									
City of Sanford	30,778	187	0.6%	4,222	26	0.6%	2,245	14	0.6%
Lee County (Unincorporated Area)	25,355	230	0.9%	3,478	31	0.9%	1,850	17	0.9%
Subtotal Lee	56,133	417	0.7%	7700	57	0.7%	4095	31	0.8%
Moore									
Moore County (Unincorporated Area)	34,917	419	1.2%	7,910	95	1.2%	1,996	24	1.2%
Town of Aberdeen	7,402	16	0.2%	1,677	4	0.2%	423	1	0.2%
Town of Cameron	655	1	0.2%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	2	0.1%	591	0	0%	149	0	0%
Town of Robbins	1,907	3	0.2%	432	1	0.2%	109	0	0%
Town of Southern Pines	15,394	7	0%	3,487	2	0.1%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	29	0.2%	3,514	7	0.2%	887	2	0.2%
Village of Whispering Pines	3,864	32	0.8%	875	7	0.8%	221	2	0.9%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Moore	88,229	509	0.6%	19986	116	0.6%	5043	29	0.6%
TOTAL PLAN	**492,256**	**2,749**	**0.6%**	**68568**	**373**	**0.5%**	**35272**	**199**	**0.6%**

Source: GIS Analysis

Table 6-191: Population Impacted by the Floodway

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	0	0%	7,745	0	0%	2,608	0	0%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	0	0%	1,176	0	0%	396	0	0%
Town of Siler City	13,243	0	0%	2,427	0	0%	817	0	0%
Subtotal Chatham	*62,189*	*0*	*0%*	*11396*	*0*	*0%*	*3837*	*0*	*0%*
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Harnett	*121,431*	*0*	*0%*	*12702*	*0*	*0%*	*9815*	*0*	*0%*
Johnston									
Johnston County (Unincorporated Area)	94,330	0	0%	9,632	0	0%	7,169	0	0%
Town of Archer Lodge	4,150	0	0%	424	0	0%	315	0	0%
Town of Benson	4,986	0	0%	509	0	0%	379	0	0%
Town of Clayton	27,459	0	0%	2,804	0	0%	2,087	0	0%
Town of Four Oaks	4,719	0	0%	482	0	0%	359	0	0%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	0	0%	97	0	0%	72	0	0%
Town of Pine Level	2,767	0	0%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	0	0%	875	0	0%	651	0	0%
Town of Smithfield	14,194	0	0%	1,449	0	0%	1,079	0	0%
Town of Wilson's Mills	3,324	0	0%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*0*	*0%*	*16784*	*0*	*0%*	*12482*	*0*	*0%*
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	*56,133*	*0*	*0%*	*7700*	*0*	*0%*	*4095*	*0*	*0%*
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**0**	**0%**	**68568**	**0**	**0%**	**35272**	**0**	**0%**

Source: GIS Analysis

Table 6-192: Population Impacted by the 500 Year River Flooding

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	91	0.2%	7,745	17	0.2%	2,608	6	0.2%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Pittsboro	6,417	42	0.7%	1,176	8	0.7%	396	3	0.8%
Town of Siler City	13,243	89	0.7%	2,427	16	0.7%	817	6	0.7%
Subtotal Chatham	*62,189*	*222*	*0.4%*	*11396*	*41*	*0.4%*	*3837*	*15*	*0.4%*
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%
Subtotal Harnett	*121,431*	*12*	*0%*	*12702*	*1*	*0%*	*9815*	*1*	*0%*
Johnston									
Johnston County (Unincorporated Area)	94,330	848	0.9%	9,632	87	0.9%	7,169	64	0.9%
Town of Archer Lodge	4,150	6	0.1%	424	1	0.2%	315	0	0%
Town of Benson	4,986	12	0.2%	509	1	0.2%	379	1	0.3%
Town of Clayton	27,459	67	0.2%	2,804	7	0.2%	2,087	5	0.2%
Town of Four Oaks	4,719	39	0.8%	482	4	0.8%	359	3	0.8%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	37	3.9%	97	4	4.1%	72	3	4.2%
Town of Pine Level	2,767	7	0.3%	283	1	0.4%	210	1	0.5%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	83	1%	875	8	0.9%	651	6	0.9%
Town of Smithfield	14,194	845	6%	1,449	86	5.9%	1,079	64	5.9%
Town of Wilson's Mills	3,324	8	0.2%	339	1	0.3%	253	1	0.4%
Subtotal Johnston	*164,274*	*1,940*	*1.2%*	*16784*	*199*	*1.2%*	*12482*	*147*	*1.2%*
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	*56,133*	*0*	*0%*	*7700*	*0*	*0%*	*4095*	*0*	*0%*
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**2,174**	**0.4%**	**68568**	**241**	**0.4%**	**35272**	**163**	**0.5%**

Source: GIS Analysis

Table 6-193: Buildings Impacted by the 10 Year River Flooding

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	14	0.1%	10	0%	$8,994	0	0%	$0	3	0%	$100,649	13	0%	$109,643
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	9	0.2%	8	0.2%	$50,717	1	0%	$213,049	0	0%	$0	9	0.2%	$263,766
Town of Siler City	6,630	21	0.3%	14	0.2%	$9,369	7	0.1%	$214,050	0	0%	$0	21	0.3%	$223,420
Subtotal Chatham	*38,411*	*44*	*0.1%*	*32*	*0.1%*	*$69,080*	*8*	*0%*	*$427,099*	*3*	*0%*	*$100,649*	*43*	*0.1%*	*$596,829*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*2*	*0%*	*2*	*0%*	*$795*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*2*	*0%*	*$795*
Johnston															
Johnston County (Unincorporated Area)	47,795	80	0.2%	117	0.2%	$159,826	5	0%	$3,459	0	0%	$0	122	0.3%	$163,285
Town of Archer Lodge	1,599	0	0%	1	0.1%	$6,494	0	0%	$0	0	0%	$0	1	0.1%	$6,494
Town of Benson	2,761	2	0.1%	2	0.1%	$795	0	0%	$0	0	0%	$0	2	0.1%	$795
Town of Clayton	9,845	1	0%	3	0%	$2,137	1	0%	$13,176	0	0%	$0	4	0%	$15,313

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Four Oaks	2,838	7	0.2%	7	0.2%	$11,886	0	0%	$0	0	0%	$0	7	0.2%	$11,886
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	8	1.4%	7	1.2%	$46,411	1	0.2%	$15,524	0	0%	$0	8	1.4%	$61,935
Town of Pine Level	1,426	1	0.1%	1	0.1%	$743	0	0%	$0	0	0%	$0	1	0.1%	$743
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	19	0.5%	24	0.6%	$158,941	0	0%	$0	0	0%	$0	24	0.6%	$158,941
Town of Smithfield	6,924	43	0.6%	43	0.6%	$52,369	4	0.1%	$16,047	1	0%	$16,824	48	0.7%	$85,240
Town of Wilson's Mills	1,397	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Johnston	*78,499*	*159*	*0.2%*	*203*	*0.3%*	*$438,807*	*11*	*0%*	*$48,206*	*1*	*0%*	*$16,824*	*215*	*0.3%*	*$503,837*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**205**	**0.1%**	**237**	**0.1%**	**$508,682**	**19**	**0%**	**$475,305**	**4**	**0%**	**$117,473**	**260**	**0.1%**	**$1,101,461**

Source: GIS Analysis

Table 6-194: Buildings Impacted by the 25 Year River Flooding

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	23	0.1%	12	0%	$17,046	0	0%	$0	10	0%	$258,649	22	0.1%	$275,695
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	11	0.3%	10	0.3%	$68,886	1	0%	$223,010	0	0%	$0	11	0.3%	$291,897

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Siler City	6,630	32	0.5%	23	0.3%	$17,561	9	0.1%	$371,256	0	0%	$0	32	0.5%	$388,817
Subtotal Chatham	*38,411*	*66*	*0.2%*	*45*	*0.1%*	*$103,493*	*10*	*0%*	*$594,266*	*10*	*0%*	*$258,649*	*65*	*0.2%*	*$956,409*
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*4*	*0%*	*4*	*0%*	*$3,522*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*4*	*0%*	*$3,522*
Johnston															
Johnston County (Unincorporated Area)	47,795	107	0.2%	158	0.3%	$326,389	16	0%	$232,104	0	0%	$0	174	0.4%	$558,493

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Archer Lodge	1,599	0	0%	1	0.1%	$12,640	0	0%	$0	0	0%	$0	1	0.1%	$12,640
Town of Benson	2,761	4	0.1%	4	0.1%	$3,522	0	0%	$0	0	0%	$0	4	0.1%	$3,522
Town of Clayton	9,845	1	0%	4	0%	$2,402	1	0%	$23,460	0	0%	$0	5	0.1%	$25,862
Town of Four Oaks	2,838	9	0.3%	9	0.3%	$17,759	0	0%	$0	0	0%	$0	9	0.3%	$17,759
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	15	2.6%	14	2.4%	$87,209	1	0.2%	$19,996	0	0%	$0	15	2.6%	$107,205
Town of Pine Level	1,426	1	0.1%	1	0.1%	$743	0	0%	$0	0	0%	$0	1	0.1%	$743
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	22	0.6%	27	0.7%	$167,669	0	0%	$0	0	0%	$0	27	0.7%	$167,669
Town of Smithfield	6,924	65	0.9%	61	0.9%	$82,677	11	0.2%	$104,579	1	0%	$19,453	73	1.1%	$206,709
Town of Wilson's Mills	1,397	1	0.1%	1	0.1%	$770	0	0%	$0	0	0%	$0	1	0.1%	$770
Subtotal Johnston	*78,499*	*221*	*0.3%*	*276*	*0.4%*	*$698,258*	*29*	*0%*	*$380,139*	*1*	*0%*	*$19,453*	*306*	*0.4%*	*$1,097,850*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**291**	**0.1%**	**325**	**0.1%**	**$805,273**	**39**	**0%**	**$974,405**	**11**	**0%**	**$278,102**	**375**	**0.1%**	**$2,057,781**

Source: GIS Analysis

Table 6-195: Buildings Impacted by the 50 Year River Flooding

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	33	0.1%	15	0.1%	$29,060	0	0%	$0	17	0.1%	$478,694	32	0.1%	$507,754

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	13	0.4%	12	0.3%	$75,399	1	0%	$230,526	0	0%	$0	13	0.4%	$305,926
Town of Siler City	6,630	40	0.6%	27	0.4%	$30,357	13	0.2%	$493,537	0	0%	$0	40	0.6%	$523,894
Subtotal Chatham	*38,411*	*86*	*0.2%*	*54*	*0.1%*	*$134,816*	*14*	*0%*	*$724,063*	*17*	*0%*	*$478,694*	*85*	*0.2%*	*$1,337,574*
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*4*	*0%*	*4*	*0%*	*$4,191*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*4*	*0%*	*$4,191*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Johnston															
Johnston County (Unincorporated Area)	47,795	149	0.3%	209	0.4%	$908,994	33	0.1%	$433,285	1	0%	$95,941	243	0.5%	$1,438,220
Town of Archer Lodge	1,599	0	0%	1	0.1%	$17,412	0	0%	$0	0	0%	$0	1	0.1%	$17,412
Town of Benson	2,761	4	0.1%	4	0.1%	$4,191	0	0%	$0	0	0%	$0	4	0.1%	$4,191
Town of Clayton	9,845	1	0%	5	0.1%	$4,122	1	0%	$33,165	0	0%	$0	6	0.1%	$37,287
Town of Four Oaks	2,838	13	0.5%	12	0.4%	$27,521	1	0%	$210	0	0%	$0	13	0.5%	$27,731
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	16	2.8%	15	2.6%	$158,251	1	0.2%	$27,013	0	0%	$0	16	2.8%	$185,264
Town of Pine Level	1,426	2	0.1%	2	0.1%	$1,501	0	0%	$0	0	0%	$0	2	0.1%	$1,501
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	24	0.6%	29	0.8%	$178,455	0	0%	$0	0	0%	$0	29	0.8%	$178,455
Town of Smithfield	6,924	106	1.5%	95	1.4%	$169,476	21	0.3%	$295,712	1	0%	$22,082	117	1.7%	$487,270
Town of Wilson's Mills	1,397	1	0.1%	1	0.1%	$6,318	0	0%	$0	0	0%	$0	1	0.1%	$6,318

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Subtotal Johnston	*78,499*	*312*	*0.4%*	*369*	*0.5%*	*$1,472,050*	*57*	*0.1%*	*$789,385*	*2*	*0%*	*$118,023*	*428*	*0.5%*	*$2,379,458*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**402**	**0.2%**	**427**	**0.2%**	**$1,611,057**	**71**	**0%**	**$1,513,448**	**19**	**0%**	**$596,717**	**517**	**0.2%**	**$3,721,223**

Source: GIS Analysis

Table 6-196: Buildings Impacted by the 100 Year River Flooding

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	53	0.2%	27	0.1%	$76,412	2	0%	$866	20	0.1%	$679,670	49	0.2%	$756,948
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	19	0.5%	17	0.5%	$97,055	2	0.1%	$245,688	0	0%	$0	19	0.5%	$342,743
Town of Siler City	6,630	46	0.7%	31	0.5%	$47,943	15	0.2%	$619,088	0	0%	$0	46	0.7%	$667,030
Subtotal Chatham	*38,411*	*118*	*0.3%*	*75*	*0.2%*	*$221,410*	*19*	*0%*	*$865,642*	*20*	*0.1%*	*$679,670*	*114*	*0.3%*	*$1,766,721*
Harnett															
City of Dunn	4,925	73	1.5%	71	1.4%	$290,332	2	0%	$60,394	0	0%	$0	73	1.5%	$350,726
Harnett County (Unincorporated Area)	40,441	127	0.3%	134	0.3%	$1,047,488	16	0%	$432,431	1	0%	$1,126	151	0.4%	$1,481,046
Town of Angier	2,541	1	0%	1	0%	$1,034	0	0%	$0	0	0%	$0	1	0%	$1,034
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Erwin	3,117	41	1.3%	41	1.3%	$502,033	0	0%	$0	0	0%	$0	41	1.3%	$502,033
Town of Lillington	1,589	7	0.4%	5	0.3%	$316,220	0	0%	$0	1	0.1%	$21,548	6	0.4%	$337,768
Subtotal Harnett	*57,879*	*254*	*0.4%*	*257*	*0.4%*	*$2,168,606*	*18*	*0%*	*$492,825*	*2*	*0%*	*$22,674*	*277*	*0.5%*	*$2,684,106*
Johnston															
Johnston County (Unincorporated Area)	47,795	174	0.4%	243	0.5%	$1,287,207	48	0.1%	$609,672	1	0%	$99,779	292	0.6%	$1,996,658
Town of Archer Lodge	1,599	0	0%	1	0.1%	$24,277	0	0%	$0	0	0%	$0	1	0.1%	$24,277
Town of Benson	2,761	5	0.2%	5	0.2%	$11,499	0	0%	$0	0	0%	$0	5	0.2%	$11,499
Town of Clayton	9,845	3	0%	7	0.1%	$16,734	1	0%	$41,328	0	0%	$0	8	0.1%	$58,062
Town of Four Oaks	2,838	17	0.6%	15	0.5%	$40,934	2	0.1%	$5,258	0	0%	$0	17	0.6%	$46,192
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	20	3.5%	17	2.9%	$329,765	3	0.5%	$42,295	0	0%	$0	20	3.5%	$372,061
Town of Pine Level	1,426	2	0.1%	2	0.1%	$1,501	0	0%	$0	0	0%	$0	2	0.1%	$1,501
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	24	0.6%	29	0.8%	$191,096	0	0%	$0	0	0%	$0	29	0.8%	$191,096

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Smithfield	6,924	127	1.8%	113	1.6%	$393,496	29	0.4%	$856,318	1	0%	$24,710	143	2.1%	$1,274,525
Town of Wilson's Mills	1,397	2	0.1%	2	0.1%	$24,781	0	0%	$0	0	0%	$0	2	0.1%	$24,781
Subtotal Johnston	*78,499*	*369*	*0.5%*	*429*	*0.5%*	*$2,309,791*	*83*	*0.1%*	*$1,554,871*	*2*	*0%*	*$124,489*	*514*	*0.7%*	*$3,989,153*
Lee															
City of Sanford	12,108	68	0.6%	63	0.5%	$479,020	23	0.2%	$225,553	0	0%	$0	86	0.7%	$704,573
Lee County (Unincorporated Area)	14,761	83	0.6%	115	0.8%	$623,247	8	0.1%	$73,992	0	0%	$0	123	0.8%	$697,238
Subtotal Lee	*26,869*	*151*	*0.6%*	*178*	*0.7%*	*$1,102,267*	*31*	*0.1%*	*$299,545*	*0*	*0%*	*$0*	*209*	*0.8%*	*$1,401,811*
Moore															
Moore County (Unincorporated Area)	28,697	144	0.5%	280	1%	$1,618,402	1	0%	$2,025	0	0%	$0	281	1%	$1,620,427
Town of Aberdeen	3,401	12	0.4%	6	0.2%	$28,391	4	0.1%	$19,550	2	0.1%	$15,064	12	0.4%	$63,005
Town of Cameron	594	1	0.2%	1	0.2%	$498	0	0%	$0	0	0%	$0	1	0.2%	$498
Town of Carthage	2,011	1	0%	0	0%	$0	1	0%	$239	0	0%	$0	1	0%	$239
Town of Pinebluff	1,500	1	0.1%	1	0.1%	$165	0	0%	$0	0	0%	$0	1	0.1%	$165

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Robbins	1,427	1	0.1%	2	0.1%	$32,102	0	0%	$0	0	0%	$0	2	0.1%	$32,102
Town of Southern Pines	7,755	3	0%	3	0%	$48,809	0	0%	$0	0	0%	$0	3	0%	$48,809
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	12	0.1%	15	0.2%	$125,373	0	0%	$0	0	0%	$0	15	0.2%	$125,373
Village of Whispering Pines	1,795	12	0.7%	14	0.8%	$89,416	0	0%	$0	0	0%	$0	14	0.8%	$89,416
Subtotal Moore	*57,478*	*187*	*0.3%*	*322*	*0.6%*	*$1,943,156*	*6*	*0%*	*$21,814*	*2*	*0%*	*$15,064*	*330*	*0.6%*	*$1,980,034*
TOTAL PLAN	**259,136**	**1,079**	**0.4%**	**1,261**	**0.5%**	**$7,745,230**	**157**	**0.1%**	**$3,234,697**	**26**	**0%**	**$841,897**	**1,444**	**0.6%**	**$11,821,825**

Source: GIS Analysis

Table 6-197: Buildings Impacted by the Floodway

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Siler City	6,630	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Chatham	*38,411*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Johnston															
Johnston County (Unincorporated Area)	47,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Archer Lodge	1,599	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Benson	2,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Clayton	9,845	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Four Oaks	2,838	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pine Level	1,426	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Smithfield	6,924	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Wilson's Mills	1,397	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Johnston	*78,499*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**0**	**0%**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**

Source: GIS Analysis

Table 6-198: Buildings Impacted by the 500 Year River Flooding

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	84	0.3%	49	0.2%	$371,754	9	0%	$68,454	25	0.1%	$1,483,776	83	0.3%	$1,923,984
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	23	0.6%	21	0.6%	$138,351	2	0.1%	$264,720	0	0%	$0	23	0.6%	$403,071
Town of Siler City	6,630	60	0.9%	37	0.6%	$98,795	23	0.3%	$900,693	0	0%	$0	60	0.9%	$999,488
Subtotal Chatham	*38,411*	*167*	*0.4%*	*107*	*0.3%*	*$608,900*	*34*	*0.1%*	*$1,233,867*	*25*	*0.1%*	*$1,483,776*	*166*	*0.4%*	*$3,326,543*
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*5*	*0%*	*5*	*0%*	*$50,227*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*5*	*0%*	*$50,227*
Johnston															
Johnston County (Unincorporated Area)	47,795	233	0.5%	341	0.7%	$3,328,222	81	0.2%	$1,254,146	2	0%	$175,008	424	0.9%	$4,757,377
Town of Archer Lodge	1,599	0	0%	2	0.1%	$38,089	0	0%	$0	0	0%	$0	2	0.1%	$38,089
Town of Benson	2,761	5	0.2%	5	0.2%	$50,227	0	0%	$0	0	0%	$0	5	0.2%	$50,227
Town of Clayton	9,845	7	0.1%	22	0.2%	$275,381	2	0%	$64,007	0	0%	$0	24	0.2%	$339,387
Town of Four Oaks	2,838	21	0.7%	19	0.7%	$98,815	2	0.1%	$12,284	0	0%	$0	21	0.7%	$111,099
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	20	3.5%	17	2.9%	$456,218	3	0.5%	$59,429	0	0%	$0	20	3.5%	$515,647
Town of Pine Level	1,426	3	0.2%	3	0.2%	$2,414	0	0%	$0	0	0%	$0	3	0.2%	$2,414
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	26	0.7%	31	0.8%	$218,798	0	0%	$0	0	0%	$0	31	0.8%	$218,798
Town of Smithfield	6,924	296	4.3%	340	4.9%	$8,242,045	50	0.7%	$5,325,193	5	0.1%	$179,840	395	5.7%	$13,747,078

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	3	0.2%	3	0.2%	$33,517	0	0%	$0	0	0%	$0	3	0.2%	$33,517
Subtotal Johnston	*78,499*	*609*	*0.8%*	*778*	*1%*	*$12,693,499*	*138*	*0.2%*	*$6,715,059*	*7*	*0%*	*$354,848*	*923*	*1.2%*	*$19,763,406*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**781**	**0.3%**	**890**	**0.3%**	**$13,352,626**	**172**	**0.1%**	**$7,948,926**	**32**	**0%**	**$1,838,624**	**1,094**	**0.4%**	**$23,140,176**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-199: Critical Facilities Exposed to the River Flooding - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	1	$3,776
Commercial Facilities	50 Year	1	$26,966
Commercial Facilities	100 Year	2	$29,061
Commercial Facilities	500 Year	4	$92,546
Critical Manufacturing	100 Year	1	$616
Critical Manufacturing	500 Year	5	$7,332
Energy	10 Year	1	$4,806
Energy	25 Year	1	$4,806
Energy	50 Year	1	$4,806
Energy	100 Year	3	$758,576
Energy	500 Year	1	$12,753
Food and Agriculture	500 Year	1	$6
Government Facilities	10 Year	3	$100,649
Government Facilities	25 Year	9	$254,873
Government Facilities	50 Year	16	$451,728
Government Facilities	100 Year	19	$650,859
Government Facilities	500 Year	24	$1,452,346
Water	100 Year	1	$177,710
Water	500 Year	1	$365,713
All Categories	**25 Year**	**11**	**$263,455**
All Categories	**50 Year**	**18**	**$483,500**
All Categories	**100 Year**	**26**	**$1,616,822**
All Categories	**500 Year**	**36**	**$1,930,696**
All Categories	**10 Year**	**4**	**$105,455**

Source: GIS Analysis

Table 6-200: Critical Facilities Exposed to the River Flooding - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	10 Year	1	$213,049
Commercial Facilities	25 Year	1	$223,010
Commercial Facilities	50 Year	1	$230,526
Commercial Facilities	100 Year	2	$245,688
Commercial Facilities	500 Year	2	$264,720
All Categories	**10 Year**	**1**	**$213,049**
All Categories	**25 Year**	**1**	**$223,010**
All Categories	**50 Year**	**1**	**$230,526**
All Categories	**100 Year**	**2**	**$245,688**
All Categories	**500 Year**	**2**	**$264,720**

Source: GIS Analysis

Table 6-201: Critical Facilities Exposed to the River Flooding - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	10 Year	7	$214,050
Commercial Facilities	25 Year	9	$371,256
Commercial Facilities	50 Year	11	$493,180
Commercial Facilities	100 Year	12	$616,979
Commercial Facilities	500 Year	17	$865,241
Critical Manufacturing	50 Year	2	$357
Critical Manufacturing	100 Year	3	$2,108
Critical Manufacturing	500 Year	4	$33,731
Food and Agriculture	500 Year	2	$1,721
All Categories	**10 Year**	**7**	**$214,050**
All Categories	**25 Year**	**9**	**$371,256**
All Categories	**50 Year**	**13**	**$493,537**
All Categories	**100 Year**	**15**	**$619,087**
All Categories	**500 Year**	**23**	**$900,693**

Source: GIS Analysis

Table 6-202: Critical Facilities Exposed to the River Flooding - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	2	$60,394
All Categories	**100 Year**	**2**	**$60,394**

Source: GIS Analysis

Table 6-203: Critical Facilities Exposed to the River Flooding - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	3	$32,392
Food and Agriculture	100 Year	13	$400,039
Government Facilities	100 Year	1	$1,126
All Categories	**100 Year**	**17**	**$433,557**

Source: GIS Analysis

Table 6-204: Critical Facilities Exposed to the River Flooding - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	100 Year	1	$21,548
Water	100 Year	2	$13,580
All Categories	**100 Year**	**3**	**$35,128**

Source: GIS Analysis

Table 6-205: Critical Facilities Exposed to the River Flooding - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	10 Year	1	$889
Commercial Facilities	25 Year	5	$153,132
Commercial Facilities	50 Year	7	$303,578
Commercial Facilities	100 Year	9	$372,021
Commercial Facilities	500 Year	16	$715,036
Critical Manufacturing	10 Year	1	$699
Critical Manufacturing	25 Year	2	$68,926
Critical Manufacturing	50 Year	2	$158,440

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	100 Year	3	$218,122
Critical Manufacturing	500 Year	4	$419,927
Food and Agriculture	10 Year	3	$1,872
Food and Agriculture	25 Year	9	$10,046
Food and Agriculture	50 Year	25	$67,208
Food and Agriculture	100 Year	37	$119,308
Food and Agriculture	500 Year	63	$294,191
All Categories	**10 Year**	**5**	**$3,460**
All Categories	**25 Year**	**16**	**$232,104**
All Categories	**50 Year**	**34**	**$529,226**
All Categories	**100 Year**	**49**	**$709,451**
All Categories	**500 Year**	**83**	**$1,429,154**

Source: GIS Analysis

Table 6-206: Critical Facilities Exposed to the River Flooding - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	10 Year	1	$13,176
Critical Manufacturing	25 Year	1	$23,460
Critical Manufacturing	50 Year	1	$33,165
Critical Manufacturing	100 Year	1	$41,328
Critical Manufacturing	500 Year	1	$63,631
Food and Agriculture	500 Year	1	$376
All Categories	**10 Year**	**1**	**$13,176**
All Categories	**25 Year**	**1**	**$23,460**
All Categories	**50 Year**	**1**	**$33,165**
All Categories	**100 Year**	**1**	**$41,328**
All Categories	**500 Year**	**2**	**$64,007**

Source: GIS Analysis

Table 6-207: Critical Facilities Exposed to the River Flooding - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	1	$210
Commercial Facilities	100 Year	2	$5,258
Commercial Facilities	500 Year	2	$12,284
All Categories	**50 Year**	**1**	**$210**
All Categories	**100 Year**	**2**	**$5,258**
All Categories	**500 Year**	**2**	**$12,284**

Source: GIS Analysis

Table 6-208: Critical Facilities Exposed to the River Flooding - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	10 Year	1	$15,524
Commercial Facilities	25 Year	1	$19,996
Commercial Facilities	50 Year	1	$27,013
Commercial Facilities	100 Year	2	$40,956
Commercial Facilities	500 Year	2	$55,992
Food and Agriculture	100 Year	1	$1,339
Food and Agriculture	500 Year	1	$3,437
All Categories	**10 Year**	**1**	**$15,524**
All Categories	**25 Year**	**1**	**$19,996**
All Categories	**50 Year**	**1**	**$27,013**
All Categories	**100 Year**	**3**	**$42,295**
All Categories	**500 Year**	**3**	**$59,429**

Source: GIS Analysis

Table 6-209: Critical Facilities Exposed to the River Flooding - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	100 Year	1	$1,397
Banking and Finance	500 Year	1	$2,794
Commercial Facilities	10 Year	5	$32,871
Commercial Facilities	25 Year	10	$85,248

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	17	$160,130
Commercial Facilities	100 Year	20	$301,756
Commercial Facilities	500 Year	31	$1,193,376
Critical Manufacturing	25 Year	1	$36,455
Critical Manufacturing	50 Year	2	$95,146
Critical Manufacturing	100 Year	3	$151,153
Critical Manufacturing	500 Year	7	$1,963,607
Energy	10 Year	1	$287,994
Energy	25 Year	1	$2,578,392
Energy	50 Year	3	$4,306,582
Energy	100 Year	4	$9,088,157
Energy	500 Year	7	$29,998,551
Food and Agriculture	25 Year	1	$2,328
Food and Agriculture	50 Year	2	$5,599
Food and Agriculture	100 Year	3	$14,610
Food and Agriculture	500 Year	7	$79,219
Government Facilities	500 Year	2	$10,681
Healthcare and Public Health	50 Year	1	$56,919
Healthcare and Public Health	100 Year	3	$412,113
Healthcare and Public Health	500 Year	4	$2,056,758
Transportation Systems	500 Year	1	$55,831
All Categories	**100 Year**	**34**	**$9,969,186**
All Categories	**500 Year**	**60**	**$35,360,817**
All Categories	**10 Year**	**6**	**$320,865**
All Categories	**25 Year**	**13**	**$2,702,423**
All Categories	**50 Year**	**25**	**$4,624,376**

Source: GIS Analysis

Table 6-210: Critical Facilities Exposed to the River Flooding - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	100 Year	1	$8,983
Commercial Facilities	100 Year	19	$184,879
Critical Manufacturing	100 Year	1	$27,320
Energy	100 Year	1	$4,459
Food and Agriculture	100 Year	1	$3,575
Healthcare and Public Health	100 Year	1	$796
All Categories	**100 Year**	**24**	**$230,012**

Source: GIS Analysis

Table 6-211: Critical Facilities Exposed to the River Flooding - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	4	$71,826
Energy	100 Year	1	$6,493
Food and Agriculture	100 Year	4	$2,165
All Categories	**100 Year**	**9**	**$80,484**

Source: GIS Analysis

Table 6-212: Critical Facilities Exposed to the River Flooding - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	100 Year	1	$2,025
All Categories	**100 Year**	**1**	**$2,025**

Source: GIS Analysis

Table 6-213: Critical Facilities Exposed to the River Flooding - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	4	$19,550
Emergency Services	100 Year	1	$13,082
Government Facilities	100 Year	1	$1,982

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**6**	**$34,614**

Source: GIS Analysis

Table 6-214: Critical Facilities Exposed to the River Flooding - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	1	$239
All Categories	**100 Year**	**1**	**$239**

Source: GIS Analysis

Table 6-215: Critical Facilities Exposed to the River Flooding - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	100 Year	1	$44,203
All Categories	**100 Year**	**1**	**$44,203**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-216: Critical Facilities Exposed to the River Flooding (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	100 Year	2	$10,380
Banking and Finance	500 Year	1	$2,794
Commercial Facilities	10 Year	15	$476,383
Commercial Facilities	25 Year	27	$856,418
Commercial Facilities	50 Year	39	$1,241,603
Commercial Facilities	100 Year	82	$1,980,999
Commercial Facilities	500 Year	74	$3,199,195
Critical Manufacturing	10 Year	2	$13,875
Critical Manufacturing	25 Year	4	$128,841

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	50 Year	7	$287,108
Critical Manufacturing	100 Year	13	$442,672
Critical Manufacturing	500 Year	21	$2,488,228
Emergency Services	100 Year	1	$13,082
Energy	10 Year	2	$292,800
Energy	25 Year	2	$2,583,198
Energy	50 Year	4	$4,311,388
Energy	100 Year	9	$9,857,685
Energy	500 Year	8	$30,011,304
Food and Agriculture	10 Year	3	$1,872
Food and Agriculture	25 Year	10	$12,374
Food and Agriculture	50 Year	27	$72,807
Food and Agriculture	100 Year	59	$541,036
Food and Agriculture	500 Year	75	$378,950
Government Facilities	10 Year	3	$100,649
Government Facilities	25 Year	9	$254,873
Government Facilities	50 Year	16	$451,728
Government Facilities	100 Year	22	$675,515
Government Facilities	500 Year	26	$1,463,027
Healthcare and Public Health	50 Year	1	$56,919
Healthcare and Public Health	100 Year	4	$412,909
Healthcare and Public Health	500 Year	4	$2,056,758
Transportation Systems	500 Year	1	$55,831
Water	100 Year	4	$235,493
Water	500 Year	1	$365,713

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**196**	**$14,169,771**
All Categories	**500 Year**	**211**	**$40,021,800**
All Categories	**10 Year**	**25**	**$885,579**
All Categories	**25 Year**	**52**	**$3,835,704**
All Categories	**50 Year**	**94**	**$6,421,553**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-217: High Potential Loss Properties Exposed to the River Flooding - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	500 Year	1	$55,831
Industrial	500 Year	1	$1,176,514
Residential	500 Year	1	$276,809
Utilities	10 Year	1	$287,994
Utilities	25 Year	1	$2,578,392
Utilities	50 Year	3	$4,306,582
Utilities	100 Year	4	$9,088,157
Utilities	500 Year	7	$29,998,551
All Categories	**500 Year**	**10**	**$31,507,705**
All Categories	**10 Year**	**1**	**$287,994**
All Categories	**25 Year**	**1**	**$2,578,392**
All Categories	**50 Year**	**3**	**$4,306,582**
All Categories	**100 Year**	**4**	**$9,088,157**

Source: GIS Analysis

Table 6-218: High Potential Loss Properties Exposed to the River Flooding - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	100 Year	1	$33,023
All Categories	**100 Year**	**1**	**$33,023**

Source: GIS Analysis

Table 6-219: High Potential Loss Properties Exposed to the River Flooding - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	100 Year	2	$36,510
All Categories	**100 Year**	**2**	**$36,510**

Source: GIS Analysis

The following tables provide counts and estimated damages for Historic Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

No Historic Properties were identified in the planning area.

Table 6-220 provides a summary count by jurisdiction of Repetitive Loss (RL) properties identified by FEMA through the NFIP.

Table 6-220: Numbers of Repetitive Loss (RL) Properties by Jurisdiction

Jurisdiction	Total Number of Properties	Total Number of Losses
Chatham County (Unincorporated Area)	1	3
Town of Goldston	0	0
Town of Pittsboro	0	0
Town of Siler City	1	2
Subtotal Chatham	*2*	*5*
City of Dunn	1	2
Harnett County (Unincorporated Area)	7	14
Town of Angier	0	0
Town of Broadway	0	0
Town of Coats	0	0

Jurisdiction	Total Number of Properties	Total Number of Losses
Town of Erwin	0	0
Town of Lillington	0	0
Subtotal Harnett	*8*	*16*
Johnston County (Unincorporated Area)	18	71
Town of Archer Lodge	0	0
Town of Benson	0	0
Town of Clayton	0	0
Town of Four Oaks	0	0
Town of Kenly	1	2
Town of Micro	0	0
Town of Pine Level	0	0
Town of Princeton	0	0
Town of Selma	0	0
Town of Smithfield	18	65
Town of Wilson's Mills	0	0
Subtotal Johnston	*37*	*205*
City of Sanford	3	6
Lee County (Unincorporated Area)	3	7
Subtotal Lee	*6*	*13*
Moore County (Unincorporated Area)	5	11
Town of Aberdeen	0	0
Town of Cameron	0	0
Town of Carthage	0	0
Town of Pinebluff	0	0
Town of Robbins	0	0
Town of Southern Pines	0	0
Town of Taylortown	0	0
Town of Vass	0	0
Village of Foxfire	0	0
Village of Pinehurst	2	6

Jurisdiction	Total Number of Properties	Total Number of Losses
Village of Whispering Pines	0	0
Subtotal Moore	*7*	*17*
PLAN TOTAL	**60**	**256**

Historical evidence indicates that the Cape Fear Region is susceptible to flood events.

In order to assess flood risk, a GIS-based analysis was used to estimate exposure to flood events using Digital Flood Insurance Rate Map (DFIRM) data in combination with local tax assessor records for each of the Cape Fear counties. The determination of assessed value at-risk (exposure) was calculated using GIS analysis by summing the total assessed building values for only those improved properties that were confirmed to be located within an identified floodplain. **Table 6-221** presents the potential at-risk property. Both the number of parcels and the approximate value are presented.

Table 6-221: Estimated Exposure of Parcels to the Flood Hazard

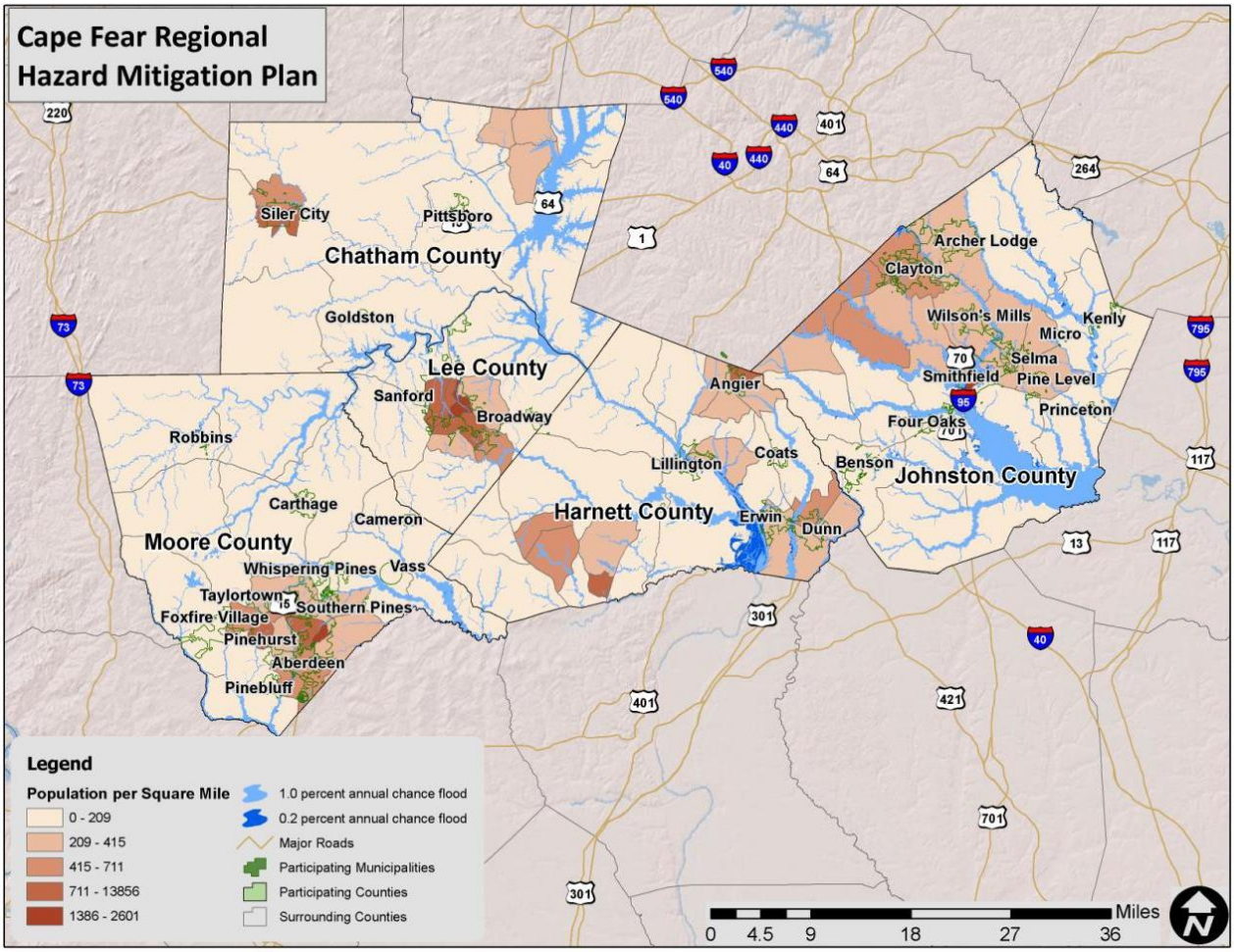
Location	1.0-percent ACF			0.2-percent ACF		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Chatham County	**3,310**	**237**	**$305,691,442**	**26**	**19**	**$7,032,547**
Goldston	0	0	$0	0	0	$0
Pittsboro	82	17	$25,250,289	3	1	$235,864
Siler City	210	77	$19,683,496	9	12	$5,483,543
Unincorporated Area	3,018	143	$260,757,657	14	6	$1,313,140
Harnett County	**3,691**	**450**	**$212,393,380**	**762**	**507**	**$40,329,040**
Angier	13	1	$438,820	2	1	$754,550
Coats	0	0	$0	0	0	$0
Dunn	218	99	$22,443,480	31	19	$1,792,580
Erwin	58	15	$12,418,680	64	55	$3,430,800
Lillington	20	7	$709,240	25	20	$8,325,230
Unincorporated Area	3,382	328	$176,383,160	640	412	$26,025,880
Johnston County	**7,386**	**920**	**$620,984,390**	**785**	**453**	**$88,424,540**
Archer Lodge	42	2	$3,039,260	0	0	$0
Benson	4	1	$51,270	0	0	$0
Clayton	213	20	$58,841,010	68	34	$10,496,010
Four Oaks	29	3	$1,501,390	23	4	$2,645,850
Kenly	0	0	$0	0	0	$0
Micro	1	0	$0	0	0	$0
Pine Level	1	0	$31,870	0	0	$0
Princeton	1	0	$120,110	0	0	$0

Location	1.0-percent ACF			0.2-percent ACF		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Selma	23	2	$1,070,130	0	0	$0
Smithfield	609	287	$105,484,330	272	178	$34,648,500
Wilson's Mills	14	1	$536,410	0	0	$0
Unincorporated Area	6,449	604	$450,308,610	422	237	$40,634,180
Lee County	**2,819**	**532**	**$435,806,000**	**82**	**80**	**$13,160,900**
Broadway	0	0	$0	0	0	$0
Sanford	627	197	$137,463,600	67	59	$9,426,300
Unincorporated Area	2,192	335	$298,342,400	15	21	$3,734,600
Moore County	**5,949**	**838**	**$973,218,800**	**148**	**172**	**$12,359,110**
Aberdeen	92	68	$8,716,810	43	25	$3,941,560
Cameron	20	1	$145,810	0	0	$0
Carthage	0	0	$0	0	0	$0
Foxfire Village	0	0	$0	0	0	$0
Pinebluff	21	0	$981,520	8	7	$67,720
Pinehurst	651	154	$372,422,300	7	5	$1,186,550
Robbins	12	4	$500,040	2	6	$2,234,830
Southern Pines	142	9	$41,464,100	4	3	$536,800
Taylortown	11	1	$107,130	0	0	$0
Vass	4	0	$0	0	0	$0
Whispering Pines	179	35	$24,426,800	15	41	$1,527,290
Unincorporated Area	4,817	566	$524,454,290	69	85	$2,864,360
CAPE FEAR REGION TOTAL	**23,155**	**2,977**	**$2,548,094,012**	**1,803**	**1,231**	**$161,306,137**

Source: Federal Emergency Management Agency DFIRM

6.5.11 Social Vulnerability

Since 2010 tract level population data and flood zones do not overlay precisely, at-risk population figures are difficult to determine. **Figure 6-3** is presented to gain a better understanding of at-risk population.



Source: Federal Emergency Management Agency DFIRM; United States Census 2010

Figure 6-3: Population Density Near Floodplains in the Cape Fear Region

6.5.12 Critical Facilities

The critical facility analysis revealed that there are no critical facilities in Chatham, Harnett, or Lee Counties located in the Cape Fear 1.0-percent annual chance floodplain and 0.2-percent annual chance floodplain based on FEMA DFIRM boundaries and GIS analysis (as previously noted, this analysis does not consider building elevation, which may negate risk). In Moore County there are 7 critical facilities located in the 1.0 percent annual chance floodplain, including 1 EMS/rescue station, a town hall, and several communications towers/units. There is 1 additional Moore County critical facility, a wastewater treatment plant, located in the 0.2 percent annual chance floodplain. In Johnston County there are five facilities located in the 1.0 percent annual chance floodplain including two adult care facilities, two town-owned buildings, and a school. There are also two facilities located in the 0.2 percent annual chance floodplain: Smithfield Operation Center and Meadowview Assisted Living Center. A list of specific critical facilities and their associated risk can be found in **Table 6-222** at the end of this section.

In conclusion, a flood has the potential to impact many existing and future buildings, facilities, and populations in the Cape Fear Region, though some areas are at a higher risk than others. All types of structures in a floodplain are at-risk, though elevated structures will have a reduced risk. As noted, the floodplains used in this analysis include the 100-year and 500-year FEMA regulated floodplain boundaries. It is certainly possible that more severe events could occur beyond these boundaries or

urban (flash) flooding could impact additional structures. Such site-specific vulnerability determinations are outside the scope of this assessment but will be considered during future plan updates. Furthermore, areas subject to repetitive flooding should be analyzed for potential mitigation actions.

6.5.13 Severe Weather

Vulnerability is difficult to evaluate since thunderstorms can occur at different strength levels, in random locations, and can create relatively narrow paths of destruction. Due to the randomness of this event, all existing and future structures and facilities in the planning region could potentially be impacted and remain vulnerable to possible injury and/or property loss. Continued enforcement of building codes, flood damage prevention ordinances and other local regulatory tools and policies designed to mitigate the effects of high hazard winds is expected to minimize future losses as construction and planning continue to seek higher standards. Based on historical events the most significant local impacts for the Region regarding future events will likely be damage to trees (and the requisite management of vegetative debris) and widespread power outages to the area.

The following tables provide counts and values by jurisdiction relevant to Thunderstorm Winds hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-222: Population Impacted by the 25 Year Thunderstorm Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-223: Population Impacted by the 50 Year Thunderstorm Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-224: Population Impacted by the 100 Year Thunderstorm Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-225: Population Impacted by the 300 Year Thunderstorm Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-226: Population Impacted by the 700 Year Thunderstorm Winds

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-227: Buildings Impacted by the 25 Year Thunderstorm Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$9,111,961	4,716	16.9%	$2,234,448	384	1.4%	$442,038	27,826	99.9%	$11,788,447
Town of Goldston	244	244	100%	193	79.1%	$106,521	41	16.8%	$9,339	10	4.1%	$4,071	244	100%	$119,930
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$1,010,538	409	11.1%	$319,766	94	2.6%	$103,785	3,676	99.9%	$1,434,089
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$1,581,090	982	14.8%	$655,699	153	2.3%	$359,158	6,621	99.9%	$2,595,947
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$11,810,110*	*6,148*	*16%*	*$3,219,252*	*641*	*1.7%*	*$909,052*	*38,367*	*99.9%*	*$15,938,413*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$1,241,578	545	11.1%	$257,196	126	2.6%	$117,823	4,924	100%	$1,616,597

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$9,511,718	2,644	6.5%	$450,738	643	1.6%	$1,312,671	40,440	100%	$11,275,126
Town of Angier	2,541	2,490	98%	2,344	92.2%	$733,324	158	6.2%	$103,745	39	1.5%	$45,903	2,541	100%	$882,972
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$581,581	596	21.6%	$70,078	50	1.8%	$16,594	2,758	99.9%	$668,253
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$242,108	98	9.4%	$40,214	19	1.8%	$9,666	1,048	100%	$291,988
Town of Coats	1,457	1,457	100%	1,364	93.6%	$377,090	69	4.7%	$14,646	24	1.6%	$72,257	1,457	100%	$463,993
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$997,360	120	3.8%	$62,846	72	2.3%	$32,679	3,115	99.9%	$1,092,885
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$375,144	159	10%	$64,030	114	7.2%	$77,982	1,580	99.4%	$517,156
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$14,059,903*	*4,389*	*7.6%*	*$1,063,493*	*1,087*	*1.9%*	*$1,685,575*	*57,863*	*100%*	*$16,808,970*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$9,495,644	9,432	19.7%	$400,328	448	0.9%	$136,874	47,784	100%	$10,032,846
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$288,092	133	8.3%	$3,959	4	0.3%	$5,059	1,599	100%	$297,111
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$2,617,033	751	7.6%	$134,548	102	1%	$39,516	9,841	100%	$2,791,098
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$603,462	539	19%	$22,085	27	1%	$10,678	2,838	100%	$636,225
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$277,526	216	16.4%	$28,338	20	1.5%	$3,260	1,313	99.9%	$309,123
Town of Micro	577	534	92.5%	436	75.6%	$109,642	106	18.4%	$5,784	35	6.1%	$8,012	577	100%	$123,438
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$302,508	185	13%	$12,601	22	1.5%	$5,526	1,426	100%	$320,635
Town of Princeton	1,000	724	72.4%	824	82.4%	$221,236	140	14%	$10,024	35	3.5%	$9,820	999	99.9%	$241,080
Town of Selma	3,784	3,520	93%	3,176	83.9%	$754,826	530	14%	$88,187	75	2%	$20,309	3,781	99.9%	$863,322
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$1,530,732	956	13.8%	$233,847	197	2.8%	$63,173	6,916	99.9%	$1,827,752
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$291,222	139	9.9%	$11,706	31	2.2%	$9,990	1,390	99.5%	$312,918
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$16,491,923*	*13,127*	*16.7%*	*$951,407*	*996*	*1.3%*	*$312,217*	*78,464*	*100%*	*$17,755,548*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$2,644,070	1,469	12.1%	$1,641,238	309	2.6%	$675,725	12,098	99.9%	$4,961,033
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$2,673,129	1,932	13.1%	$647,476	128	0.9%	$184,897	14,753	99.9%	$3,505,503
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$5,317,199*	*3,401*	*12.7%*	*$2,288,714*	*437*	*1.6%*	*$860,622*	*26,851*	*99.9%*	*$8,466,536*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$5,940,151	5,035	17.5%	$535,460	382	1.3%	$254,578	28,687	100%	$6,730,189
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$793,197	467	13.7%	$256,862	83	2.4%	$30,791	3,401	100%	$1,080,850
Town of Cameron	594	497	83.7%	491	82.7%	$99,216	83	14%	$16,382	20	3.4%	$7,870	594	100%	$123,469
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$353,520	211	10.5%	$85,358	172	8.6%	$110,162	2,007	99.8%	$549,040
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$355,849	76	5.1%	$153,041	12	0.8%	$1,667	1,496	99.7%	$510,558
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$260,103	160	11.2%	$73,174	48	3.4%	$41,211	1,424	99.8%	$374,488
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,931,572	845	10.9%	$513,085	199	2.6%	$119,391	7,754	100%	$2,564,048
Town of Taylortown	458	457	99.8%	413	90.2%	$100,499	31	6.8%	$33,984	14	3.1%	$13,532	458	100%	$148,015
Town of Vass	960	948	98.8%	738	76.9%	$195,276	189	19.7%	$23,952	33	3.4%	$17,402	960	100%	$236,630
Village of Foxfire	589	330	56%	515	87.4%	$217,978	68	11.5%	$7,718	6	1%	$1,462	589	100%	$227,158
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$3,775,400	345	4.2%	$439,743	47	0.6%	$28,305	8,290	100%	$4,243,447
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$838,904	85	4.7%	$14,103	17	0.9%	$17,183	1,795	100%	$870,190
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$14,861,665*	*7,595*	*13.2%*	*$2,152,862*	*1,033*	*1.8%*	*$643,554*	*57,455*	*100%*	*$17,658,082*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$62,540,800**	**34,660**	**13.4%**	**$9,675,728**	**4,194**	**1.6%**	**$4,411,020**	**259,000**	**99.9%**	**$76,627,549**

Source: GIS Analysis

Table 6-228: Buildings Impacted by the 50 Year Thunderstorm Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$14,180,253	4,716	16.9%	$4,350,818	384	1.4%	$907,222	27,826	99.9%	$19,438,294
Town of Goldston	244	244	100%	193	79.1%	$158,894	41	16.8%	$18,187	10	4.1%	$8,594	244	100%	$185,675
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$1,608,439	409	11.1%	$670,207	94	2.6%	$214,755	3,676	99.9%	$2,493,401
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$2,519,378	982	14.8%	$1,353,236	153	2.3%	$753,145	6,621	99.9%	$4,625,760
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$18,466,964*	*6,148*	*16%*	*$6,392,448*	*641*	*1.7%*	*$1,883,716*	*38,367*	*99.9%*	*$26,743,130*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$1,991,687	545	11.1%	$488,414	126	2.6%	$234,370	4,924	100%	$2,714,471
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$15,312,997	2,644	6.5%	$871,675	643	1.6%	$2,561,238	40,440	100%	$18,745,909
Town of Angier	2,541	2,490	98%	2,344	92.2%	$1,196,628	158	6.2%	$190,256	39	1.5%	$86,913	2,541	100%	$1,473,797
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$930,056	596	21.6%	$151,020	50	1.8%	$30,206	2,758	99.9%	$1,111,281
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$390,161	98	9.4%	$80,296	19	1.8%	$15,513	1,048	100%	$485,970
Town of Coats	1,457	1,457	100%	1,364	93.6%	$608,523	69	4.7%	$25,907	24	1.6%	$115,864	1,457	100%	$750,294
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$1,511,956	120	3.8%	$116,500	72	2.3%	$62,109	3,115	99.9%	$1,690,565
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$591,459	159	10%	$120,208	114	7.2%	$152,306	1,580	99.4%	$863,974
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$22,533,467*	*4,389*	*7.6%*	*$2,044,276*	*1,087*	*1.9%*	*$3,258,519*	*57,863*	*100%*	*$27,836,261*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$15,473,393	9,432	19.7%	$866,563	448	0.9%	$289,441	47,784	100%	$16,629,398
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$498,462	133	8.3%	$8,718	4	0.3%	$10,232	1,599	100%	$517,412

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$4,415,082	751	7.6%	$266,255	102	1%	$69,834	9,841	100%	$4,751,170
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$954,141	539	19%	$45,685	27	1%	$20,387	2,838	100%	$1,020,213
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$435,783	216	16.4%	$54,550	20	1.5%	$6,359	1,313	99.9%	$496,692
Town of Micro	577	534	92.5%	436	75.6%	$175,180	106	18.4%	$12,258	35	6.1%	$14,985	577	100%	$202,423
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$484,547	185	13%	$28,032	22	1.5%	$10,860	1,426	100%	$523,439
Town of Princeton	1,000	724	72.4%	824	82.4%	$348,135	140	14%	$20,917	35	3.5%	$19,624	999	99.9%	$388,676
Town of Selma	3,784	3,520	93%	3,176	83.9%	$1,198,815	530	14%	$181,644	75	2%	$42,206	3,781	99.9%	$1,422,664
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$2,482,592	956	13.8%	$456,310	197	2.8%	$121,153	6,916	99.9%	$3,060,055
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$481,804	139	9.9%	$25,130	31	2.2%	$19,637	1,390	99.5%	$526,570
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$26,947,934*	*13,127*	*16.7%*	*$1,966,062*	*996*	*1.3%*	*$624,718*	*78,464*	*100%*	*$29,538,712*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$4,296,723	1,469	12.1%	$3,133,287	309	2.6%	$1,276,696	12,098	99.9%	$8,706,705
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$4,381,164	1,932	13.1%	$1,142,314	128	0.9%	$332,039	14,753	99.9%	$5,855,518
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$8,677,887*	*3,401*	*12.7%*	*$4,275,601*	*437*	*1.6%*	*$1,608,735*	*26,851*	*99.9%*	*$14,562,223*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$9,489,713	5,035	17.5%	$1,024,519	382	1.3%	$471,611	28,687	100%	$10,985,843
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$1,281,973	467	13.7%	$515,569	83	2.4%	$61,364	3,401	100%	$1,858,905
Town of Cameron	594	497	83.7%	491	82.7%	$154,710	83	14%	$30,725	20	3.4%	$14,029	594	100%	$199,464
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$560,351	211	10.5%	$164,769	172	8.6%	$219,878	2,007	99.8%	$944,998
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$567,341	76	5.1%	$310,107	12	0.8%	$3,154	1,496	99.7%	$880,602
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$402,263	160	11.2%	$123,556	48	3.4%	$80,096	1,424	99.8%	$605,916

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$3,298,666	845	10.9%	$991,987	199	2.6%	$231,443	7,754	100%	$4,522,097
Town of Taylortown	458	457	99.8%	413	90.2%	$156,565	31	6.8%	$70,164	14	3.1%	$27,423	458	100%	$254,151
Town of Vass	960	948	98.8%	738	76.9%	$312,237	189	19.7%	$45,953	33	3.4%	$34,504	960	100%	$392,694
Village of Foxfire	589	330	56%	515	87.4%	$353,606	68	11.5%	$13,198	6	1%	$2,875	589	100%	$369,680
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$6,244,649	345	4.2%	$858,200	47	0.6%	$54,466	8,290	100%	$7,157,315
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$1,339,787	85	4.7%	$25,370	17	0.9%	$33,098	1,795	100%	$1,398,255
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$24,161,861*	*7,595*	*13.2%*	*$4,174,117*	*1,033*	*1.8%*	*$1,233,941*	*57,455*	*100%*	*$29,569,920*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$100,788,113**	**34,660**	**13.4%**	**$18,852,504**	**4,194**	**1.6%**	**$8,609,629**	**259,000**	**99.9%**	**$128,250,246**

Source: GIS Analysis

Table 6-229: Buildings Impacted by the 100 Year Thunderstorm Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$21,196,827	4,716	16.9%	$7,656,630	384	1.4%	$1,689,299	27,826	99.9%	$30,542,756
Town of Goldston	244	244	100%	193	79.1%	$239,298	41	16.8%	$34,648	10	4.1%	$17,484	244	100%	$291,431
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$2,383,020	409	11.1%	$1,260,563	94	2.6%	$406,450	3,676	99.9%	$4,050,033
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$3,786,205	982	14.8%	$2,551,413	153	2.3%	$1,407,195	6,621	99.9%	$7,744,812
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$27,605,350*	*6,148*	*16%*	*$11,503,254*	*641*	*1.7%*	*$3,520,428*	*38,367*	*99.9%*	*$42,629,032*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$3,029,649	545	11.1%	$901,294	126	2.6%	$443,950	4,924	100%	$4,374,892
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$23,312,259	2,644	6.5%	$1,598,885	643	1.6%	$4,568,811	40,440	100%	$29,479,955
Town of Angier	2,541	2,490	98%	2,344	92.2%	$1,927,584	158	6.2%	$321,673	39	1.5%	$163,645	2,541	100%	$2,412,903
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$1,440,137	596	21.6%	$320,932	50	1.8%	$59,465	2,758	99.9%	$1,820,533
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$592,789	98	9.4%	$146,269	19	1.8%	$25,232	1,048	100%	$764,290
Town of Coats	1,457	1,457	100%	1,364	93.6%	$926,236	69	4.7%	$44,326	24	1.6%	$172,923	1,457	100%	$1,143,485
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$2,182,678	120	3.8%	$216,190	72	2.3%	$117,506	3,115	99.9%	$2,516,374
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$868,152	159	10%	$225,684	114	7.2%	$289,466	1,580	99.4%	$1,383,302
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$34,279,484*	*4,389*	*7.6%*	*$3,775,253*	*1,087*	*1.9%*	*$5,840,998*	*57,863*	*100%*	*$43,895,734*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$23,899,598	9,432	19.7%	$1,771,586	448	0.9%	$622,630	47,784	100%	$26,293,813
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$789,792	133	8.3%	$17,989	4	0.3%	$19,240	1,599	100%	$827,022
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$6,917,861	751	7.6%	$536,408	102	1%	$135,399	9,841	100%	$7,589,668
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$1,449,986	539	19%	$93,707	27	1%	$40,816	2,838	100%	$1,584,508
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$663,566	216	16.4%	$106,871	20	1.5%	$13,305	1,313	99.9%	$783,742
Town of Micro	577	534	92.5%	436	75.6%	$266,740	106	18.4%	$25,471	35	6.1%	$31,012	577	100%	$323,223
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$742,022	185	13%	$59,490	22	1.5%	$22,235	1,426	100%	$823,748
Town of Princeton	1,000	724	72.4%	824	82.4%	$524,469	140	14%	$43,575	35	3.5%	$41,937	999	99.9%	$609,980
Town of Selma	3,784	3,520	93%	3,176	83.9%	$1,803,808	530	14%	$365,011	75	2%	$90,686	3,781	99.9%	$2,259,506
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$3,802,845	956	13.8%	$896,661	197	2.8%	$246,519	6,916	99.9%	$4,946,024

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$759,933	139	9.9%	$52,467	31	2.2%	$38,930	1,390	99.5%	$851,330
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$41,620,620*	*13,127*	*16.7%*	*$3,969,236*	*996*	*1.3%*	*$1,302,709*	*78,464*	*100%*	*$46,892,564*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$6,584,353	1,469	12.1%	$5,624,349	309	2.6%	$2,233,773	12,098	99.9%	$14,442,476
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$6,704,762	1,932	13.1%	$1,948,482	128	0.9%	$566,528	14,753	99.9%	$9,219,772
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$13,289,115*	*3,401*	*12.7%*	*$7,572,831*	*437*	*1.6%*	*$2,800,301*	*26,851*	*99.9%*	*$23,662,248*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$14,557,308	5,035	17.5%	$1,871,888	382	1.3%	$834,066	28,687	100%	$17,263,262
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$1,984,605	467	13.7%	$994,295	83	2.4%	$119,041	3,401	100%	$3,097,941
Town of Cameron	594	497	83.7%	491	82.7%	$233,697	83	14%	$54,331	20	3.4%	$24,495	594	100%	$312,522
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$840,526	211	10.5%	$303,109	172	8.6%	$410,369	2,007	99.8%	$1,554,004
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$881,171	76	5.1%	$560,979	12	0.8%	$6,354	1,496	99.7%	$1,448,504
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$590,899	160	11.2%	$205,941	48	3.4%	$147,520	1,424	99.8%	$944,360
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$5,251,172	845	10.9%	$1,809,557	199	2.6%	$428,898	7,754	100%	$7,489,628
Town of Taylortown	458	457	99.8%	413	90.2%	$234,469	31	6.8%	$132,481	14	3.1%	$52,693	458	100%	$419,643
Town of Vass	960	948	98.8%	738	76.9%	$489,638	189	19.7%	$85,460	33	3.4%	$65,788	960	100%	$640,886
Village of Foxfire	589	330	56%	515	87.4%	$547,959	68	11.5%	$21,698	6	1%	$5,551	589	100%	$575,208
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$9,647,545	345	4.2%	$1,565,050	47	0.6%	$99,463	8,290	100%	$11,312,058
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$2,062,235	85	4.7%	$44,893	17	0.9%	$59,342	1,795	100%	$2,166,469

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$37,321,224*	*7,595*	*13.2%*	*$7,649,682*	*1,033*	*1.8%*	*$2,253,580*	*57,455*	*100%*	*$47,224,485*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$154,115,793**	**34,660**	**13.4%**	**$34,470,256**	**4,194**	**1.6%**	**$15,718,016**	**259,000**	**99.9%**	**$204,304,063**

Source: GIS Analysis

Table 6-230: Buildings Impacted by the 300 Year Thunderstorm Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$51,571,614	4,716	16.9%	$18,339,658	384	1.4%	$4,573,876	27,826	99.9%	$74,485,148
Town of Goldston	244	244	100%	193	79.1%	$730,082	41	16.8%	$111,155	10	4.1%	$62,775	244	100%	$904,012
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$5,154,089	409	11.1%	$3,399,157	94	2.6%	$1,158,114	3,676	99.9%	$9,711,360
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$8,853,031	982	14.8%	$7,327,893	153	2.3%	$3,766,026	6,621	99.9%	$19,946,950
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$66,308,816*	*6,148*	*16%*	*$29,177,863*	*641*	*1.7%*	*$9,560,791*	*38,367*	*99.9%*	*$105,047,470*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$7,088,953	545	11.1%	$2,864,078	126	2.6%	$1,448,623	4,924	100%	$11,401,654
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$55,470,329	2,644	6.5%	$4,673,667	643	1.6%	$11,537,202	40,440	100%	$71,681,198
Town of Angier	2,541	2,490	98%	2,344	92.2%	$5,588,442	158	6.2%	$856,240	39	1.5%	$593,127	2,541	100%	$7,037,810
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$3,698,226	596	21.6%	$1,344,423	50	1.8%	$246,507	2,758	99.9%	$5,289,156
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$1,376,864	98	9.4%	$383,455	19	1.8%	$66,395	1,048	100%	$1,826,714
Town of Coats	1,457	1,457	100%	1,364	93.6%	$2,220,560	69	4.7%	$126,412	24	1.6%	$334,216	1,457	100%	$2,681,189

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$4,746,401	120	3.8%	$727,020	72	2.3%	$413,171	3,115	99.9%	$5,886,592
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$1,790,147	159	10%	$760,315	114	7.2%	$948,279	1,580	99.4%	$3,498,740
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$81,979,922*	*4,389*	*7.6%*	*$11,735,610*	*1,087*	*1.9%*	*$15,587,520*	*57,863*	*100%*	*$109,303,053*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$58,448,631	9,432	19.7%	$6,295,621	448	0.9%	$2,925,594	47,784	100%	$67,669,846
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$1,826,671	133	8.3%	$64,543	4	0.3%	$60,125	1,599	100%	$1,951,339
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$16,513,206	751	7.6%	$2,106,902	102	1%	$568,288	9,841	100%	$19,188,396
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$3,552,090	539	19%	$361,536	27	1%	$156,481	2,838	100%	$4,070,106
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$1,663,046	216	16.4%	$411,537	20	1.5%	$66,526	1,313	99.9%	$2,141,110
Town of Micro	577	534	92.5%	436	75.6%	$630,104	106	18.4%	$101,974	35	6.1%	$147,266	577	100%	$879,344
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$1,847,530	185	13%	$233,401	22	1.5%	$97,363	1,426	100%	$2,178,293
Town of Princeton	1,000	724	72.4%	824	82.4%	$1,264,389	140	14%	$184,764	35	3.5%	$204,579	999	99.9%	$1,653,731
Town of Selma	3,784	3,520	93%	3,176	83.9%	$4,138,324	530	14%	$1,372,490	75	2%	$435,140	3,781	99.9%	$5,945,954
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$8,974,768	956	13.8%	$3,415,081	197	2.8%	$1,080,345	6,916	99.9%	$13,470,194
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$1,931,059	139	9.9%	$199,311	31	2.2%	$152,438	1,390	99.5%	$2,282,808
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$100,789,818*	*13,127*	*16.7%*	*$14,747,160*	*996*	*1.3%*	*$5,894,145*	*78,464*	*100%*	*$121,431,121*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$15,374,252	1,469	12.1%	$15,656,127	309	2.6%	$5,656,038	12,098	99.9%	$36,686,418
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$15,130,579	1,932	13.1%	$5,012,549	128	0.9%	$1,456,508	14,753	99.9%	$21,599,636
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$30,504,831*	*3,401*	*12.7%*	*$20,668,676*	*437*	*1.6%*	*$7,112,546*	*26,851*	*99.9%*	*$58,286,054*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$36,870,441	5,035	17.5%	$5,401,427	382	1.3%	$2,324,851	28,687	100%	$44,596,719
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$5,037,501	467	13.7%	$3,203,318	83	2.4%	$415,705	3,401	100%	$8,656,524
Town of Cameron	594	497	83.7%	491	82.7%	$585,659	83	14%	$139,497	20	3.4%	$69,683	594	100%	$794,840
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$1,959,846	211	10.5%	$878,021	172	8.6%	$1,212,380	2,007	99.8%	$4,050,247
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$2,414,506	76	5.1%	$1,319,361	12	0.8%	$29,971	1,496	99.7%	$3,763,838
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$1,308,971	160	11.2%	$562,452	48	3.4%	$409,910	1,424	99.8%	$2,281,333
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$12,741,053	845	10.9%	$5,095,668	199	2.6%	$1,312,493	7,754	100%	$19,149,213
Town of Taylortown	458	457	99.8%	413	90.2%	$548,072	31	6.8%	$394,168	14	3.1%	$169,956	458	100%	$1,112,197
Town of Vass	960	948	98.8%	738	76.9%	$1,352,172	189	19.7%	$265,666	33	3.4%	$218,446	960	100%	$1,836,284
Village of Foxfire	589	330	56%	515	87.4%	$1,382,037	68	11.5%	$53,013	6	1%	$18,443	589	100%	$1,453,493
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$23,035,125	345	4.2%	$4,252,175	47	0.6%	$298,713	8,290	100%	$27,586,013
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$5,193,831	85	4.7%	$126,377	17	0.9%	$162,312	1,795	100%	$5,482,521
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$92,429,214*	*7,595*	*13.2%*	*$21,691,143*	*1,033*	*1.8%*	*$6,642,863*	*57,455*	*100%*	*$120,763,222*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$372,012,601**	**34,660**	**13.4%**	**$98,020,452**	**4,194**	**1.6%**	**$44,797,865**	**259,000**	**99.9%**	**$514,830,920**

Source: GIS Analysis

Table 6-231: Buildings Impacted by the 700 Year Thunderstorm Winds

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$90,267,585	4,716	16.9%	$27,049,426	384	1.4%	$7,133,690	27,826	99.9%	$124,450,701
Town of Goldston	244	244	100%	193	79.1%	$1,456,126	41	16.8%	$194,764	10	4.1%	$114,625	244	100%	$1,765,515
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$8,364,470	409	11.1%	$5,266,356	94	2.6%	$1,887,419	3,676	99.9%	$15,518,246
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$15,109,684	982	14.8%	$12,098,612	153	2.3%	$5,846,810	6,621	99.9%	$33,055,106
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$115,197,865*	*6,148*	*16%*	*$44,609,158*	*641*	*1.7%*	*$14,982,544*	*38,367*	*99.9%*	*$174,789,568*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$11,949,627	545	11.1%	$5,265,376	126	2.6%	$2,619,821	4,924	100%	$19,834,824
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$94,186,260	2,644	6.5%	$7,969,225	643	1.6%	$17,761,141	40,440	100%	$119,916,625
Town of Angier	2,541	2,490	98%	2,344	92.2%	$10,023,138	158	6.2%	$1,442,586	39	1.5%	$1,140,173	2,541	100%	$12,605,897
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$6,481,486	596	21.6%	$2,738,535	50	1.8%	$524,386	2,758	99.9%	$9,744,407
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$2,297,480	98	9.4%	$608,114	19	1.8%	$110,269	1,048	100%	$3,015,862
Town of Coats	1,457	1,457	100%	1,364	93.6%	$3,747,009	69	4.7%	$224,664	24	1.6%	$469,871	1,457	100%	$4,441,545
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$7,801,301	120	3.8%	$1,403,715	72	2.3%	$799,484	3,115	99.9%	$10,004,500
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$2,810,159	159	10%	$1,434,481	114	7.2%	$1,738,275	1,580	99.4%	$5,982,915
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$139,296,460*	*4,389*	*7.6%*	*$21,086,696*	*1,087*	*1.9%*	*$25,163,420*	*57,863*	*100%*	*$185,546,575*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$100,146,247	9,432	19.7%	$11,577,879	448	0.9%	$6,359,988	47,784	100%	$118,084,113
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$3,013,640	133	8.3%	$118,044	4	0.3%	$109,207	1,599	100%	$3,240,892
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$27,864,242	751	7.6%	$4,281,696	102	1%	$1,266,571	9,841	100%	$33,412,508
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$6,112,186	539	19%	$704,448	27	1%	$310,759	2,838	100%	$7,127,393
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$2,874,646	216	16.4%	$835,824	20	1.5%	$154,367	1,313	99.9%	$3,864,837
Town of Micro	577	534	92.5%	436	75.6%	$1,049,630	106	18.4%	$203,115	35	6.1%	$341,808	577	100%	$1,594,553
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$3,220,151	185	13%	$451,071	22	1.5%	$202,303	1,426	100%	$3,873,525
Town of Princeton	1,000	724	72.4%	824	82.4%	$2,186,362	140	14%	$385,691	35	3.5%	$461,171	999	99.9%	$3,033,225
Town of Selma	3,784	3,520	93%	3,176	83.9%	$6,887,689	530	14%	$2,685,300	75	2%	$966,404	3,781	99.9%	$10,539,394
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$15,055,908	956	13.8%	$6,953,223	197	2.8%	$2,334,426	6,916	99.9%	$24,343,557
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$3,319,173	139	9.9%	$375,027	31	2.2%	$312,307	1,390	99.5%	$4,006,507
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$171,729,874*	*13,127*	*16.7%*	*$28,571,318*	*996*	*1.3%*	*$12,819,311*	*78,464*	*100%*	*$213,120,504*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$25,633,136	1,469	12.1%	$26,073,972	309	2.6%	$8,921,057	12,098	99.9%	$60,628,165
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$24,642,443	1,932	13.1%	$8,049,443	128	0.9%	$2,400,438	14,753	99.9%	$35,092,324
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$50,275,579*	*3,401*	*12.7%*	*$34,123,415*	*437*	*1.6%*	*$11,321,495*	*26,851*	*99.9%*	*$95,720,489*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$64,917,995	5,035	17.5%	$9,112,895	382	1.3%	$3,938,043	28,687	100%	$77,968,934
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$8,888,985	467	13.7%	$5,651,374	83	2.4%	$788,926	3,401	100%	$15,329,285
Town of Cameron	594	497	83.7%	491	82.7%	$1,045,684	83	14%	$220,328	20	3.4%	$123,917	594	100%	$1,389,929
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$3,343,046	211	10.5%	$1,477,298	172	8.6%	$2,043,854	2,007	99.8%	$6,864,198
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$4,443,069	76	5.1%	$1,858,164	12	0.8%	$71,346	1,496	99.7%	$6,372,579
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$2,144,039	160	11.2%	$960,068	48	3.4%	$650,712	1,424	99.8%	$3,754,819
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$21,460,108	845	10.9%	$8,537,651	199	2.6%	$2,304,325	7,754	100%	$32,302,084
Town of Taylortown	458	457	99.8%	413	90.2%	$923,144	31	6.8%	$663,150	14	3.1%	$306,279	458	100%	$1,892,573
Town of Vass	960	948	98.8%	738	76.9%	$2,459,457	189	19.7%	$467,888	33	3.4%	$403,610	960	100%	$3,330,955
Village of Foxfire	589	330	56%	515	87.4%	$2,436,071	68	11.5%	$85,106	6	1%	$33,237	589	100%	$2,554,414
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$39,600,616	345	4.2%	$6,959,437	47	0.6%	$520,754	8,290	100%	$47,080,808
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$9,163,918	85	4.7%	$216,470	17	0.9%	$263,114	1,795	100%	$9,643,502
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$160,826,132*	*7,595*	*13.2%*	*$36,209,829*	*1,033*	*1.8%*	*$11,448,117*	*57,455*	*100%*	*$208,484,080*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$637,325,910**	**34,660**	**13.4%**	**$164,600,416**	**4,194**	**1.6%**	**$75,734,887**	**259,000**	**99.9%**	**$877,661,216**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-232: Critical Facilities Exposed to the Thunderstorm Winds - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	4	$48,533
Banking and Finance	50 Year	4	$92,268
Banking and Finance	100 Year	4	$156,865
Banking and Finance	300 Year	4	$319,580
Banking and Finance	700 Year	4	$418,442
Commercial Facilities	25 Year	641	$1,654,032
Commercial Facilities	50 Year	641	$3,241,331
Commercial Facilities	100 Year	641	$5,705,424
Commercial Facilities	300 Year	641	$13,245,511
Commercial Facilities	700 Year	641	$18,952,420
Critical Manufacturing	25 Year	375	$549,924
Critical Manufacturing	50 Year	375	$1,032,786
Critical Manufacturing	100 Year	375	$1,753,624
Critical Manufacturing	300 Year	375	$4,135,819
Critical Manufacturing	700 Year	375	$6,220,333
Emergency Services	25 Year	10	$16,946
Emergency Services	50 Year	10	$36,298
Emergency Services	100 Year	10	$72,423
Emergency Services	300 Year	10	$216,088
Emergency Services	700 Year	10	$335,547
Energy	25 Year	5	$15,997
Energy	50 Year	5	$26,331
Energy	100 Year	5	$47,617
Energy	300 Year	5	$189,857
Energy	700 Year	5	$434,274
Food and Agriculture	25 Year	3,697	$56,945
Food and Agriculture	50 Year	3,697	$147,537
Food and Agriculture	100 Year	3,697	$345,804

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	300 Year	3,697	$1,366,475
Food and Agriculture	700 Year	3,697	$2,455,126
Government Facilities	25 Year	173	$113,100
Government Facilities	50 Year	173	$228,707
Government Facilities	100 Year	173	$430,502
Government Facilities	300 Year	173	$1,266,045
Government Facilities	700 Year	173	$2,122,937
Healthcare and Public Health	25 Year	73	$66,934
Healthcare and Public Health	50 Year	73	$146,547
Healthcare and Public Health	100 Year	73	$292,952
Healthcare and Public Health	300 Year	73	$966,409
Healthcare and Public Health	700 Year	73	$1,676,251
Transportation Systems	25 Year	124	$168,180
Transportation Systems	50 Year	124	$329,442
Transportation Systems	100 Year	124	$583,387
Transportation Systems	300 Year	124	$1,386,689
Transportation Systems	700 Year	124	$1,985,502
Water	25 Year	27	$103,723
Water	50 Year	27	$168,540
Water	100 Year	27	$290,814
Water	300 Year	27	$1,016,470
Water	700 Year	27	$2,247,107
All Categories	**25 Year**	**5,129**	**$2,794,314**
All Categories	**50 Year**	**5,129**	**$5,449,787**
All Categories	**100 Year**	**5,129**	**$9,679,412**
All Categories	**300 Year**	**5,129**	**$24,108,943**
All Categories	**700 Year**	**5,129**	**$36,847,939**

Source: GIS Analysis

Table 6-233: Critical Facilities Exposed to the Thunderstorm Winds - Town of Goldston

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$293
Banking and Finance	50 Year	1	$559
Banking and Finance	100 Year	1	$1,143
Banking and Finance	300 Year	1	$4,462
Banking and Finance	700 Year	1	$8,420
Commercial Facilities	25 Year	28	$7,169
Commercial Facilities	50 Year	28	$15,306
Commercial Facilities	100 Year	28	$30,702
Commercial Facilities	300 Year	28	$105,069
Commercial Facilities	700 Year	28	$187,321
Critical Manufacturing	25 Year	15	$4,792
Critical Manufacturing	50 Year	15	$8,692
Critical Manufacturing	100 Year	15	$15,943
Critical Manufacturing	300 Year	15	$49,286
Critical Manufacturing	700 Year	15	$85,910
Emergency Services	25 Year	2	$382
Emergency Services	50 Year	2	$622
Emergency Services	100 Year	2	$1,116
Emergency Services	300 Year	2	$3,737
Emergency Services	700 Year	2	$7,139
Government Facilities	25 Year	4	$667
Government Facilities	50 Year	4	$1,392
Government Facilities	100 Year	4	$2,798
Government Facilities	300 Year	4	$9,739
Government Facilities	700 Year	4	$17,572
Transportation Systems	25 Year	1	$107
Transportation Systems	50 Year	1	$211
Transportation Systems	100 Year	1	$430
Transportation Systems	300 Year	1	$1,637
Transportation Systems	700 Year	1	$3,028

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**51**	**$13,410**
All Categories	**50 Year**	**51**	**$26,782**
All Categories	**100 Year**	**51**	**$52,132**
All Categories	**300 Year**	**51**	**$173,930**
All Categories	**700 Year**	**51**	**$309,390**

Source: GIS Analysis

Table 6-234: Critical Facilities Exposed to the Thunderstorm Winds - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	18	$3,453
Banking and Finance	50 Year	18	$7,162
Banking and Finance	100 Year	18	$14,055
Banking and Finance	300 Year	18	$48,556
Banking and Finance	700 Year	18	$92,087
Commercial Facilities	25 Year	180	$156,633
Commercial Facilities	50 Year	180	$327,802
Commercial Facilities	100 Year	180	$627,365
Commercial Facilities	300 Year	180	$1,826,915
Commercial Facilities	700 Year	180	$3,007,441
Critical Manufacturing	25 Year	37	$33,857
Critical Manufacturing	50 Year	37	$69,076
Critical Manufacturing	100 Year	37	$127,338
Critical Manufacturing	300 Year	37	$325,790
Critical Manufacturing	700 Year	37	$496,236
Emergency Services	25 Year	2	$3,509
Emergency Services	50 Year	2	$7,155
Emergency Services	100 Year	2	$13,189
Emergency Services	300 Year	2	$37,098
Emergency Services	700 Year	2	$61,745
Energy	25 Year	1	$82
Energy	50 Year	1	$135
Energy	100 Year	1	$252

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	300 Year	1	$1,079
Energy	700 Year	1	$2,513
Food and Agriculture	25 Year	159	$1,302
Food and Agriculture	50 Year	159	$3,567
Food and Agriculture	100 Year	159	$8,463
Food and Agriculture	300 Year	159	$33,254
Food and Agriculture	700 Year	159	$59,942
Government Facilities	25 Year	51	$42,529
Government Facilities	50 Year	51	$87,751
Government Facilities	100 Year	51	$168,705
Government Facilities	300 Year	51	$520,766
Government Facilities	700 Year	51	$906,190
Healthcare and Public Health	25 Year	25	$166,265
Healthcare and Public Health	50 Year	25	$350,104
Healthcare and Public Health	100 Year	25	$646,860
Healthcare and Public Health	300 Year	25	$1,581,402
Healthcare and Public Health	700 Year	25	$2,220,092
Transportation Systems	25 Year	28	$14,703
Transportation Systems	50 Year	28	$30,121
Transportation Systems	100 Year	28	$57,430
Transportation Systems	300 Year	28	$175,284
Transportation Systems	700 Year	28	$297,592
Water	25 Year	2	$11,166
Water	50 Year	2	$18,320
Water	100 Year	2	$30,854
Water	300 Year	2	$96,900
Water	700 Year	2	$208,996
All Categories	**25 Year**	**503**	**$433,499**
All Categories	**50 Year**	**503**	**$901,193**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**503**	**$1,694,511**
All Categories	**300 Year**	**503**	**$4,647,044**
All Categories	**700 Year**	**503**	**$7,352,834**

Source: GIS Analysis

Table 6-235: Critical Facilities Exposed to the Thunderstorm Winds - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	13	$3,368
Banking and Finance	50 Year	13	$6,819
Banking and Finance	100 Year	13	$13,897
Banking and Finance	300 Year	13	$57,034
Banking and Finance	700 Year	13	$120,093
Commercial Facilities	25 Year	391	$335,428
Commercial Facilities	50 Year	391	$696,097
Commercial Facilities	100 Year	391	$1,321,690
Commercial Facilities	300 Year	391	$3,843,011
Commercial Facilities	700 Year	391	$6,382,511
Critical Manufacturing	25 Year	123	$382,608
Critical Manufacturing	50 Year	123	$784,881
Critical Manufacturing	100 Year	123	$1,450,408
Critical Manufacturing	300 Year	123	$3,888,099
Critical Manufacturing	700 Year	123	$6,122,872
Emergency Services	25 Year	4	$81,363
Emergency Services	50 Year	4	$172,280
Emergency Services	100 Year	4	$316,985
Emergency Services	300 Year	4	$750,141
Emergency Services	700 Year	4	$1,027,228
Energy	25 Year	4	$2,403
Energy	50 Year	4	$4,014
Energy	100 Year	4	$7,203
Energy	300 Year	4	$26,052
Energy	700 Year	4	$56,193
Food and Agriculture	25 Year	483	$5,437

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	50 Year	483	$14,309
Food and Agriculture	100 Year	483	$34,147
Food and Agriculture	300 Year	483	$138,808
Food and Agriculture	700 Year	483	$253,424
Government Facilities	25 Year	64	$172,758
Government Facilities	50 Year	64	$363,474
Government Facilities	100 Year	64	$683,899
Government Facilities	300 Year	64	$1,907,839
Government Facilities	700 Year	64	$3,070,883
Healthcare and Public Health	25 Year	23	$21,032
Healthcare and Public Health	50 Year	23	$40,973
Healthcare and Public Health	100 Year	23	$81,329
Healthcare and Public Health	300 Year	23	$310,977
Healthcare and Public Health	700 Year	23	$610,693
Transportation Systems	25 Year	31	$12,404
Transportation Systems	50 Year	31	$26,729
Transportation Systems	100 Year	31	$54,646
Transportation Systems	300 Year	31	$192,216
Transportation Systems	700 Year	31	$346,870
Water	25 Year	8	$21,862
Water	50 Year	8	$35,655
Water	100 Year	8	$59,748
Water	300 Year	8	$186,029
Water	700 Year	8	$399,853
All Categories	**25 Year**	**1,144**	**$1,038,663**
All Categories	**50 Year**	**1,144**	**$2,145,231**
All Categories	**100 Year**	**1,144**	**$4,023,952**
All Categories	**300 Year**	**1,144**	**$11,300,206**
All Categories	**700 Year**	**1,144**	**$18,390,620**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-236: Critical Facilities Exposed to the Thunderstorm Winds - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	27	$4,761
Banking and Finance	50 Year	27	$8,873
Banking and Finance	100 Year	27	$17,560
Banking and Finance	300 Year	27	$68,611
Banking and Finance	700 Year	27	$138,534
Chemical	25 Year	1	$3,215
Chemical	50 Year	1	$7,428
Chemical	100 Year	1	$15,371
Chemical	300 Year	1	$50,854
Chemical	700 Year	1	$84,951
Commercial Facilities	25 Year	360	$186,059
Commercial Facilities	50 Year	360	$341,959
Commercial Facilities	100 Year	360	$619,116
Commercial Facilities	300 Year	360	$1,952,501
Commercial Facilities	700 Year	360	$3,609,113
Communications	25 Year	2	$320
Communications	50 Year	2	$592
Communications	100 Year	2	$1,153
Communications	300 Year	2	$4,291
Communications	700 Year	2	$8,094
Critical Manufacturing	25 Year	80	$41,734
Critical Manufacturing	50 Year	80	$81,619
Critical Manufacturing	100 Year	80	$155,049
Critical Manufacturing	300 Year	80	$519,170
Critical Manufacturing	700 Year	80	$972,295
Emergency Services	25 Year	3	$639
Emergency Services	50 Year	3	$1,037
Emergency Services	100 Year	3	$1,872

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	300 Year	3	$6,508
Emergency Services	700 Year	3	$12,856
Energy	25 Year	3	$233
Energy	50 Year	3	$496
Energy	100 Year	3	$1,060
Energy	300 Year	3	$4,265
Energy	700 Year	3	$8,395
Food and Agriculture	25 Year	42	$1,064
Food and Agriculture	50 Year	42	$2,754
Food and Agriculture	100 Year	42	$6,311
Food and Agriculture	300 Year	42	$23,384
Food and Agriculture	700 Year	42	$40,428
Government Facilities	25 Year	51	$79,528
Government Facilities	50 Year	51	$164,283
Government Facilities	100 Year	51	$317,487
Government Facilities	300 Year	51	$1,075,911
Government Facilities	700 Year	51	$1,972,906
Healthcare and Public Health	25 Year	46	$45,763
Healthcare and Public Health	50 Year	46	$90,241
Healthcare and Public Health	100 Year	46	$163,023
Healthcare and Public Health	300 Year	46	$425,372
Healthcare and Public Health	700 Year	46	$673,081
Nuclear Reactors, Materials and Waste	25 Year	1	$136
Nuclear Reactors, Materials and Waste	50 Year	1	$223
Nuclear Reactors, Materials and Waste	100 Year	1	$402
Nuclear Reactors, Materials and Waste	300 Year	1	$1,368

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	700 Year	1	$2,630
Transportation Systems	25 Year	57	$11,821
Transportation Systems	50 Year	57	$23,882
Transportation Systems	100 Year	57	$48,126
Transportation Systems	300 Year	57	$185,217
Transportation Systems	700 Year	57	$370,458
Water	25 Year	1	$21
Water	50 Year	1	$34
Water	100 Year	1	$61
Water	300 Year	1	$245
Water	700 Year	1	$562
All Categories	**25 Year**	**674**	**$375,294**
All Categories	**50 Year**	**674**	**$723,421**
All Categories	**100 Year**	**674**	**$1,346,591**
All Categories	**300 Year**	**674**	**$4,317,697**
All Categories	**700 Year**	**674**	**$7,894,303**

Source: GIS Analysis

Table 6-237: Critical Facilities Exposed to the Thunderstorm Winds - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$41
Banking and Finance	50 Year	1	$111
Banking and Finance	100 Year	1	$268
Banking and Finance	300 Year	1	$1,048
Banking and Finance	700 Year	1	$1,841
Chemical	25 Year	1	$140
Chemical	50 Year	1	$285
Chemical	100 Year	1	$572
Chemical	300 Year	1	$2,051
Chemical	700 Year	1	$3,897

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	505	$559,227
Commercial Facilities	50 Year	505	$1,020,633
Commercial Facilities	100 Year	505	$1,749,474
Commercial Facilities	300 Year	505	$4,479,241
Commercial Facilities	700 Year	505	$7,285,519
Communications	25 Year	1	$1,768
Communications	50 Year	1	$2,959
Communications	100 Year	1	$5,106
Communications	300 Year	1	$13,308
Communications	700 Year	1	$20,089
Critical Manufacturing	25 Year	188	$105,984
Critical Manufacturing	50 Year	188	$205,484
Critical Manufacturing	100 Year	188	$373,921
Critical Manufacturing	300 Year	188	$1,079,798
Critical Manufacturing	700 Year	188	$1,857,604
Emergency Services	25 Year	13	$29,513
Emergency Services	50 Year	13	$53,569
Emergency Services	100 Year	13	$91,358
Emergency Services	300 Year	13	$238,008
Emergency Services	700 Year	13	$408,221
Energy	25 Year	2	$123
Energy	50 Year	2	$223
Energy	100 Year	2	$443
Energy	300 Year	2	$1,992
Energy	700 Year	2	$4,419
Food and Agriculture	25 Year	2,093	$45,760
Food and Agriculture	50 Year	2,093	$117,624
Food and Agriculture	100 Year	2,093	$274,198
Food and Agriculture	300 Year	2,093	$1,077,343
Food and Agriculture	700 Year	2,093	$1,942,983
Government Facilities	25 Year	370	$906,734
Government Facilities	50 Year	370	$1,823,181

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	100 Year	370	$3,311,817
Government Facilities	300 Year	370	$8,385,225
Government Facilities	700 Year	370	$12,692,618
Healthcare and Public Health	25 Year	18	$40,290
Healthcare and Public Health	50 Year	18	$74,994
Healthcare and Public Health	100 Year	18	$128,639
Healthcare and Public Health	300 Year	18	$296,519
Healthcare and Public Health	700 Year	18	$430,224
Nuclear Reactors, Materials and Waste	25 Year	1	$5,569
Nuclear Reactors, Materials and Waste	50 Year	1	$9,686
Nuclear Reactors, Materials and Waste	100 Year	1	$16,149
Nuclear Reactors, Materials and Waste	300 Year	1	$46,332
Nuclear Reactors, Materials and Waste	700 Year	1	$83,184
Transportation Systems	25 Year	69	$51,498
Transportation Systems	50 Year	69	$91,382
Transportation Systems	100 Year	69	$153,669
Transportation Systems	300 Year	69	$398,642
Transportation Systems	700 Year	69	$672,518
Water	25 Year	1	$51
Water	50 Year	1	$84
Water	100 Year	1	$150
Water	300 Year	1	$580
Water	700 Year	1	$1,295
All Categories	**25 Year**	**3,263**	**$1,746,698**
All Categories	**50 Year**	**3,263**	**$3,400,215**
All Categories	**100 Year**	**3,263**	**$6,105,764**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**300 Year**	**3,263**	**$16,020,087**
All Categories	**700 Year**	**3,263**	**$25,404,412**

Source: GIS Analysis

Table 6-238: Critical Facilities Exposed to the Thunderstorm Winds - Town of Angier

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$623
Banking and Finance	50 Year	6	$1,107
Banking and Finance	100 Year	6	$2,010
Banking and Finance	300 Year	6	$6,629
Banking and Finance	700 Year	6	$12,154
Commercial Facilities	25 Year	85	$56,110
Commercial Facilities	50 Year	85	$103,051
Commercial Facilities	100 Year	85	$183,139
Commercial Facilities	300 Year	85	$582,280
Commercial Facilities	700 Year	85	$1,082,203
Critical Manufacturing	25 Year	21	$60,186
Critical Manufacturing	50 Year	21	$109,593
Critical Manufacturing	100 Year	21	$177,432
Critical Manufacturing	300 Year	21	$409,027
Critical Manufacturing	700 Year	21	$631,689
Emergency Services	25 Year	2	$1,196
Emergency Services	50 Year	2	$3,268
Emergency Services	100 Year	2	$8,522
Emergency Services	300 Year	2	$55,276
Emergency Services	700 Year	2	$131,719
Energy	25 Year	2	$41
Energy	50 Year	2	$72
Energy	100 Year	2	$132
Energy	300 Year	2	$606
Energy	700 Year	2	$1,496
Food and Agriculture	25 Year	57	$1,313

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	50 Year	57	$3,361
Food and Agriculture	100 Year	57	$7,607
Food and Agriculture	300 Year	57	$27,594
Food and Agriculture	700 Year	57	$47,231
Government Facilities	25 Year	7	$14,974
Government Facilities	50 Year	7	$28,185
Government Facilities	100 Year	7	$55,602
Government Facilities	300 Year	7	$209,565
Government Facilities	700 Year	7	$378,971
Healthcare and Public Health	25 Year	7	$2,550
Healthcare and Public Health	50 Year	7	$5,931
Healthcare and Public Health	100 Year	7	$14,045
Healthcare and Public Health	300 Year	7	$72,177
Healthcare and Public Health	700 Year	7	$154,376
Transportation Systems	25 Year	10	$12,656
Transportation Systems	50 Year	10	$22,602
Transportation Systems	100 Year	10	$36,828
Transportation Systems	300 Year	10	$86,213
Transportation Systems	700 Year	10	$142,920
All Categories	**25 Year**	**197**	**$149,649**
All Categories	**50 Year**	**197**	**$277,170**
All Categories	**100 Year**	**197**	**$485,317**
All Categories	**300 Year**	**197**	**$1,449,367**
All Categories	**700 Year**	**197**	**$2,582,759**

Source: GIS Analysis

Table 6-239: Critical Facilities Exposed to the Thunderstorm Winds - Town of Benson

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$635
Banking and Finance	50 Year	6	$1,031
Banking and Finance	100 Year	6	$1,841
Banking and Finance	300 Year	6	$6,487
Banking and Finance	700 Year	6	$12,957
Commercial Facilities	25 Year	160	$46,817
Commercial Facilities	50 Year	160	$97,062
Commercial Facilities	100 Year	160	$197,687
Commercial Facilities	300 Year	160	$755,742
Commercial Facilities	700 Year	160	$1,493,730
Critical Manufacturing	25 Year	31	$13,180
Critical Manufacturing	50 Year	31	$30,086
Critical Manufacturing	100 Year	31	$70,117
Critical Manufacturing	300 Year	31	$376,189
Critical Manufacturing	700 Year	31	$840,417
Emergency Services	25 Year	2	$2,937
Emergency Services	50 Year	2	$5,555
Emergency Services	100 Year	2	$11,391
Emergency Services	300 Year	2	$44,532
Emergency Services	700 Year	2	$85,644
Energy	25 Year	3	$14,132
Energy	50 Year	3	$23,382
Energy	100 Year	3	$44,941
Energy	300 Year	3	$209,060
Energy	700 Year	3	$492,308
Food and Agriculture	25 Year	390	$5,415
Food and Agriculture	50 Year	390	$13,914
Food and Agriculture	100 Year	390	$31,854
Food and Agriculture	300 Year	390	$118,975
Food and Agriculture	700 Year	390	$207,729
Government Facilities	25 Year	17	$8,667
Government Facilities	50 Year	17	$15,569

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	100 Year	17	$30,501
Government Facilities	300 Year	17	$131,737
Government Facilities	700 Year	17	$293,043
Healthcare and Public Health	25 Year	19	$4,864
Healthcare and Public Health	50 Year	19	$10,291
Healthcare and Public Health	100 Year	19	$22,664
Healthcare and Public Health	300 Year	19	$109,098
Healthcare and Public Health	700 Year	19	$238,647
Transportation Systems	25 Year	21	$4,156
Transportation Systems	50 Year	21	$7,718
Transportation Systems	100 Year	21	$14,343
Transportation Systems	300 Year	21	$48,170
Transportation Systems	700 Year	21	$90,754
All Categories	**25 Year**	**649**	**$100,803**
All Categories	**50 Year**	**649**	**$204,608**
All Categories	**100 Year**	**649**	**$425,339**
All Categories	**300 Year**	**649**	**$1,799,990**
All Categories	**700 Year**	**649**	**$3,755,229**

Source: GIS Analysis

Table 6-240: Critical Facilities Exposed to the Thunderstorm Winds - Town of Broadway

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$264
Banking and Finance	50 Year	2	$449
Banking and Finance	100 Year	2	$823
Banking and Finance	300 Year	2	$2,871
Banking and Finance	700 Year	2	$5,624
Commercial Facilities	25 Year	54	$17,098

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	54	$31,163
Commercial Facilities	100 Year	54	$55,277
Commercial Facilities	300 Year	54	$161,776
Commercial Facilities	700 Year	54	$283,684
Critical Manufacturing	25 Year	5	$1,201
Critical Manufacturing	50 Year	5	$2,273
Critical Manufacturing	100 Year	5	$4,387
Critical Manufacturing	300 Year	5	$16,073
Critical Manufacturing	700 Year	5	$30,143
Emergency Services	25 Year	1	$284
Emergency Services	50 Year	1	$483
Emergency Services	100 Year	1	$882
Emergency Services	300 Year	1	$3,029
Emergency Services	700 Year	1	$5,900
Food and Agriculture	25 Year	32	$233
Food and Agriculture	50 Year	32	$607
Food and Agriculture	100 Year	32	$1,430
Food and Agriculture	300 Year	32	$5,735
Food and Agriculture	700 Year	32	$10,482
Government Facilities	25 Year	8	$2,702
Government Facilities	50 Year	8	$4,160
Government Facilities	100 Year	8	$6,601
Government Facilities	300 Year	8	$17,952
Government Facilities	700 Year	8	$30,862
Transportation Systems	25 Year	15	$28,097
Transportation Systems	50 Year	15	$56,674
Transportation Systems	100 Year	15	$102,102
Transportation Systems	300 Year	15	$242,413
Transportation Systems	700 Year	15	$351,688
All Categories	**25 Year**	**117**	**$49,879**
All Categories	**50 Year**	**117**	**$95,809**
All Categories	**100 Year**	**117**	**$171,502**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**300 Year**	**117**	**$449,849**
All Categories	**700 Year**	**117**	**$718,383**

Source: GIS Analysis

Table 6-241: Critical Facilities Exposed to the Thunderstorm Winds - Town of Coats

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$1,614
Banking and Finance	50 Year	3	$3,284
Banking and Finance	100 Year	3	$6,219
Banking and Finance	300 Year	3	$19,017
Banking and Finance	700 Year	3	$32,138
Commercial Facilities	25 Year	52	$13,575
Commercial Facilities	50 Year	52	$24,417
Commercial Facilities	100 Year	52	$43,943
Commercial Facilities	300 Year	52	$146,664
Commercial Facilities	700 Year	52	$287,074
Critical Manufacturing	25 Year	7	$670
Critical Manufacturing	50 Year	7	$1,322
Critical Manufacturing	100 Year	7	$2,559
Critical Manufacturing	300 Year	7	$9,305
Critical Manufacturing	700 Year	7	$17,886
Emergency Services	25 Year	1	$120
Emergency Services	50 Year	1	$327
Emergency Services	100 Year	1	$802
Emergency Services	300 Year	1	$3,275
Emergency Services	700 Year	1	$5,850
Food and Agriculture	25 Year	16	$269
Food and Agriculture	50 Year	16	$701
Food and Agriculture	100 Year	16	$1,625
Food and Agriculture	300 Year	16	$6,154
Food and Agriculture	700 Year	16	$10,773
Government Facilities	25 Year	8	$61,016

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	50 Year	8	$96,198
Government Facilities	100 Year	8	$138,884
Government Facilities	300 Year	8	$230,815
Government Facilities	700 Year	8	$274,610
Healthcare and Public Health	25 Year	2	$194
Healthcare and Public Health	50 Year	2	$346
Healthcare and Public Health	100 Year	2	$663
Healthcare and Public Health	300 Year	2	$3,286
Healthcare and Public Health	700 Year	2	$8,248
Transportation Systems	25 Year	3	$9,398
Transportation Systems	50 Year	3	$15,099
Transportation Systems	100 Year	3	$22,422
Transportation Systems	300 Year	3	$41,679
Transportation Systems	700 Year	3	$57,135
All Categories	**25 Year**	**92**	**$86,856**
All Categories	**50 Year**	**92**	**$141,694**
All Categories	**100 Year**	**92**	**$217,117**
All Categories	**300 Year**	**92**	**$460,195**
All Categories	**700 Year**	**92**	**$693,714**

Source: GIS Analysis

Table 6-242: Critical Facilities Exposed to the Thunderstorm Winds - Town of Erwin

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$286
Banking and Finance	50 Year	3	$468
Banking and Finance	100 Year	3	$870
Banking and Finance	300 Year	3	$3,466
Banking and Finance	700 Year	3	$7,475

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	91	$46,505
Commercial Facilities	50 Year	91	$85,006
Commercial Facilities	100 Year	91	$156,225
Commercial Facilities	300 Year	91	$530,537
Commercial Facilities	700 Year	91	$1,044,269
Critical Manufacturing	25 Year	15	$15,795
Critical Manufacturing	50 Year	15	$30,125
Critical Manufacturing	100 Year	15	$57,008
Critical Manufacturing	300 Year	15	$191,585
Critical Manufacturing	700 Year	15	$365,732
Emergency Services	25 Year	1	$1,499
Emergency Services	50 Year	1	$3,457
Emergency Services	100 Year	1	$7,170
Emergency Services	300 Year	1	$25,174
Emergency Services	700 Year	1	$44,583
Food and Agriculture	25 Year	21	$495
Food and Agriculture	50 Year	21	$1,249
Food and Agriculture	100 Year	21	$2,804
Food and Agriculture	300 Year	21	$10,101
Food and Agriculture	700 Year	21	$17,345
Government Facilities	25 Year	25	$8,806
Government Facilities	50 Year	25	$17,141
Government Facilities	100 Year	25	$34,600
Government Facilities	300 Year	25	$148,980
Government Facilities	700 Year	25	$318,869
Healthcare and Public Health	25 Year	11	$19,245
Healthcare and Public Health	50 Year	11	$35,772
Healthcare and Public Health	100 Year	11	$64,425
Healthcare and Public Health	300 Year	11	$186,297

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	700 Year	11	$310,543
Transportation Systems	25 Year	21	$2,044
Transportation Systems	50 Year	21	$3,802
Transportation Systems	100 Year	21	$7,465
Transportation Systems	300 Year	21	$32,961
Transportation Systems	700 Year	21	$73,781
Water	25 Year	2	$96
Water	50 Year	2	$159
Water	100 Year	2	$296
Water	300 Year	2	$1,280
Water	700 Year	2	$2,977
All Categories	**25 Year**	**190**	**$94,771**
All Categories	**50 Year**	**190**	**$177,179**
All Categories	**100 Year**	**190**	**$330,863**
All Categories	**300 Year**	**190**	**$1,130,381**
All Categories	**700 Year**	**190**	**$2,185,574**

Source: GIS Analysis

Table 6-243: Critical Facilities Exposed to the Thunderstorm Winds - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	9	$1,305
Banking and Finance	50 Year	9	$2,617
Banking and Finance	100 Year	9	$5,334
Banking and Finance	300 Year	9	$20,160
Banking and Finance	700 Year	9	$39,656
Commercial Facilities	25 Year	125	$30,929
Commercial Facilities	50 Year	125	$56,867
Commercial Facilities	100 Year	125	$102,607
Commercial Facilities	300 Year	125	$307,021
Commercial Facilities	700 Year	125	$555,241
Critical Manufacturing	25 Year	29	$33,216

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	50 Year	29	$61,738
Critical Manufacturing	100 Year	29	$110,659
Critical Manufacturing	300 Year	29	$316,068
Critical Manufacturing	700 Year	29	$541,211
Defense Industrial Base	25 Year	1	$4,673
Defense Industrial Base	50 Year	1	$7,579
Defense Industrial Base	100 Year	1	$13,554
Defense Industrial Base	300 Year	1	$47,349
Defense Industrial Base	700 Year	1	$97,866
Emergency Services	25 Year	4	$907
Emergency Services	50 Year	4	$1,514
Emergency Services	100 Year	4	$2,856
Emergency Services	300 Year	4	$12,501
Emergency Services	700 Year	4	$28,897
Energy	25 Year	1	$24
Energy	50 Year	1	$40
Energy	100 Year	1	$75
Energy	300 Year	1	$342
Energy	700 Year	1	$801
Food and Agriculture	25 Year	3	$412
Food and Agriculture	50 Year	3	$813
Food and Agriculture	100 Year	3	$1,642
Food and Agriculture	300 Year	3	$5,883
Food and Agriculture	700 Year	3	$10,597
Government Facilities	25 Year	82	$46,391
Government Facilities	50 Year	82	$90,900
Government Facilities	100 Year	82	$177,296
Government Facilities	300 Year	82	$631,635
Government Facilities	700 Year	82	$1,205,204
Healthcare and Public Health	25 Year	12	$22,839
Healthcare and Public Health	50 Year	12	$48,190

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	100 Year	12	$96,803
Healthcare and Public Health	300 Year	12	$349,290
Healthcare and Public Health	700 Year	12	$650,295
Transportation Systems	25 Year	7	$1,256
Transportation Systems	50 Year	7	$2,161
Transportation Systems	100 Year	7	$4,167
Transportation Systems	300 Year	7	$17,868
Transportation Systems	700 Year	7	$42,132
Water	25 Year	8	$45
Water	50 Year	8	$73
Water	100 Year	8	$141
Water	300 Year	8	$659
Water	700 Year	8	$1,553
All Categories	**25 Year**	**281**	**$141,997**
All Categories	**50 Year**	**281**	**$272,492**
All Categories	**100 Year**	**281**	**$515,134**
All Categories	**300 Year**	**281**	**$1,708,776**
All Categories	**700 Year**	**281**	**$3,173,453**

Source: GIS Analysis

Table 6-244: Critical Facilities Exposed to the Thunderstorm Winds - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	4	$1,754
Banking and Finance	50 Year	4	$3,705
Banking and Finance	100 Year	4	$7,230
Banking and Finance	300 Year	4	$24,602
Banking and Finance	700 Year	4	$46,626
Commercial Facilities	25 Year	851	$217,625
Commercial Facilities	50 Year	851	$447,108

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	100 Year	851	$892,787
Commercial Facilities	300 Year	851	$3,337,826
Commercial Facilities	700 Year	851	$6,530,508
Critical Manufacturing	25 Year	267	$60,186
Critical Manufacturing	50 Year	267	$116,092
Critical Manufacturing	100 Year	267	$219,173
Critical Manufacturing	300 Year	267	$761,071
Critical Manufacturing	700 Year	267	$1,487,373
Emergency Services	25 Year	22	$3,895
Emergency Services	50 Year	22	$8,499
Emergency Services	100 Year	22	$18,718
Emergency Services	300 Year	22	$86,841
Emergency Services	700 Year	22	$183,828
Energy	25 Year	10	$94,999
Energy	50 Year	10	$156,041
Energy	100 Year	10	$269,665
Energy	300 Year	10	$931,536
Energy	700 Year	10	$2,061,197
Food and Agriculture	25 Year	8,411	$92,009
Food and Agriculture	50 Year	8,411	$238,034
Food and Agriculture	100 Year	8,411	$550,400
Food and Agriculture	300 Year	8,411	$2,096,870
Food and Agriculture	700 Year	8,411	$3,700,288
Government Facilities	25 Year	162	$69,915
Government Facilities	50 Year	162	$148,680
Government Facilities	100 Year	162	$324,885
Government Facilities	300 Year	162	$1,637,461
Government Facilities	700 Year	162	$3,683,254
Healthcare and Public Health	25 Year	18	$14,726
Healthcare and Public Health	50 Year	18	$31,268
Healthcare and Public Health	100 Year	18	$60,955

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	300 Year	18	$196,998
Healthcare and Public Health	700 Year	18	$348,258
Nuclear Reactors, Materials and Waste	25 Year	1	$12
Nuclear Reactors, Materials and Waste	50 Year	1	$34
Nuclear Reactors, Materials and Waste	100 Year	1	$84
Nuclear Reactors, Materials and Waste	300 Year	1	$355
Nuclear Reactors, Materials and Waste	700 Year	1	$655
Transportation Systems	25 Year	149	$75,378
Transportation Systems	50 Year	149	$158,639
Transportation Systems	100 Year	149	$311,621
Transportation Systems	300 Year	149	$1,051,262
Transportation Systems	700 Year	149	$1,907,029
Water	25 Year	1	$19,726
Water	50 Year	1	$42,131
Water	100 Year	1	$94,706
Water	300 Year	1	$485,775
Water	700 Year	1	$1,100,713
All Categories	**25 Year**	**9,896**	**$650,225**
All Categories	**50 Year**	**9,896**	**$1,350,231**
All Categories	**100 Year**	**9,896**	**$2,750,224**
All Categories	**300 Year**	**9,896**	**$10,610,597**
All Categories	**700 Year**	**9,896**	**$21,049,729**

Source: GIS Analysis

Table 6-245: Critical Facilities Exposed to the Thunderstorm Winds - Town of Archer Lodge

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	7	$2,329

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	7	$4,725
Commercial Facilities	100 Year	7	$9,171
Commercial Facilities	300 Year	7	$32,431
Commercial Facilities	700 Year	7	$62,934
Critical Manufacturing	25 Year	6	$988
Critical Manufacturing	50 Year	6	$2,025
Critical Manufacturing	100 Year	6	$3,918
Critical Manufacturing	300 Year	6	$12,537
Critical Manufacturing	700 Year	6	$22,158
Emergency Services	25 Year	1	$323
Emergency Services	50 Year	1	$887
Emergency Services	100 Year	1	$2,312
Emergency Services	300 Year	1	$13,459
Emergency Services	700 Year	1	$29,492
Food and Agriculture	25 Year	120	$936
Food and Agriculture	50 Year	120	$2,401
Food and Agriculture	100 Year	120	$5,554
Food and Agriculture	300 Year	120	$21,329
Food and Agriculture	700 Year	120	$37,931
Government Facilities	25 Year	3	$4,441
Government Facilities	50 Year	3	$8,912
Government Facilities	100 Year	3	$16,274
Government Facilities	300 Year	3	$44,912
Government Facilities	700 Year	3	$74,736
All Categories	**25 Year**	**137**	**$9,017**
All Categories	**50 Year**	**137**	**$18,950**
All Categories	**100 Year**	**137**	**$37,229**
All Categories	**300 Year**	**137**	**$124,668**
All Categories	**700 Year**	**137**	**$227,251**

Source: GIS Analysis

Table 6-246: Critical Facilities Exposed to the Thunderstorm Winds - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	13	$2,226
Banking and Finance	50 Year	13	$3,937
Banking and Finance	100 Year	13	$7,588
Banking and Finance	300 Year	13	$32,215
Banking and Finance	700 Year	13	$71,072
Chemical	25 Year	1	$1,679
Chemical	50 Year	1	$3,384
Chemical	100 Year	1	$7,893
Chemical	300 Year	1	$42,890
Chemical	700 Year	1	$101,148
Commercial Facilities	25 Year	298	$79,122
Commercial Facilities	50 Year	298	$153,752
Commercial Facilities	100 Year	298	$299,541
Commercial Facilities	300 Year	298	$1,096,035
Commercial Facilities	700 Year	298	$2,176,099
Critical Manufacturing	25 Year	114	$38,939
Critical Manufacturing	50 Year	114	$79,421
Critical Manufacturing	100 Year	114	$169,451
Critical Manufacturing	300 Year	114	$745,951
Critical Manufacturing	700 Year	114	$1,575,302
Emergency Services	25 Year	2	$352
Emergency Services	50 Year	2	$603
Emergency Services	100 Year	2	$1,213
Emergency Services	300 Year	2	$5,900
Emergency Services	700 Year	2	$14,288
Energy	25 Year	4	$40,652
Energy	50 Year	4	$67,045
Energy	100 Year	4	$126,480
Energy	300 Year	4	$564,331
Energy	700 Year	4	$1,319,919
Food and Agriculture	25 Year	311	$2,849
Food and Agriculture	50 Year	311	$7,091

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	100 Year	311	$16,417
Food and Agriculture	300 Year	311	$66,614
Food and Agriculture	700 Year	311	$124,627
Government Facilities	25 Year	44	$23,570
Government Facilities	50 Year	44	$39,678
Government Facilities	100 Year	44	$75,978
Government Facilities	300 Year	44	$332,196
Government Facilities	700 Year	44	$765,477
Healthcare and Public Health	25 Year	34	$15,348
Healthcare and Public Health	50 Year	34	$28,593
Healthcare and Public Health	100 Year	34	$56,500
Healthcare and Public Health	300 Year	34	$224,026
Healthcare and Public Health	700 Year	34	$470,374
Transportation Systems	25 Year	35	$9,637
Transportation Systems	50 Year	35	$18,917
Transportation Systems	100 Year	35	$35,875
Transportation Systems	300 Year	35	$125,319
Transportation Systems	700 Year	35	$242,954
All Categories	**25 Year**	**856**	**$214,374**
All Categories	**50 Year**	**856**	**$402,421**
All Categories	**100 Year**	**856**	**$796,936**
All Categories	**300 Year**	**856**	**$3,235,477**
All Categories	**700 Year**	**856**	**$6,861,260**

Source: GIS Analysis

Table 6-247: Critical Facilities Exposed to the Thunderstorm Winds - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	14	$2,291

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	50 Year	14	$4,143
Banking and Finance	100 Year	14	$7,860
Banking and Finance	300 Year	14	$32,451
Banking and Finance	700 Year	14	$70,513
Commercial Facilities	25 Year	114	$8,980
Commercial Facilities	50 Year	114	$18,066
Commercial Facilities	100 Year	114	$36,830
Commercial Facilities	300 Year	114	$149,361
Commercial Facilities	700 Year	114	$305,322
Critical Manufacturing	25 Year	25	$4,949
Critical Manufacturing	50 Year	25	$9,075
Critical Manufacturing	100 Year	25	$17,313
Critical Manufacturing	300 Year	25	$65,050
Critical Manufacturing	700 Year	25	$129,886
Emergency Services	25 Year	1	$115
Emergency Services	50 Year	1	$201
Emergency Services	100 Year	1	$375
Emergency Services	300 Year	1	$1,351
Emergency Services	700 Year	1	$2,705
Food and Agriculture	25 Year	383	$3,611
Food and Agriculture	50 Year	383	$9,290
Food and Agriculture	100 Year	383	$21,287
Food and Agriculture	300 Year	383	$79,605
Food and Agriculture	700 Year	383	$139,043
Government Facilities	25 Year	10	$8,739
Government Facilities	50 Year	10	$16,725
Government Facilities	100 Year	10	$33,324
Government Facilities	300 Year	10	$121,653
Government Facilities	700 Year	10	$232,437
Healthcare and Public Health	25 Year	4	$1,000
Healthcare and Public Health	50 Year	4	$2,185

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	100 Year	4	$4,850
Healthcare and Public Health	300 Year	4	$21,695
Healthcare and Public Health	700 Year	4	$44,849
Transportation Systems	25 Year	15	$3,077
Transportation Systems	50 Year	15	$6,386
Transportation Systems	100 Year	15	$12,683
Transportation Systems	300 Year	15	$46,851
Transportation Systems	700 Year	15	$90,452
All Categories	**25 Year**	**566**	**$32,762**
All Categories	**50 Year**	**566**	**$66,071**
All Categories	**100 Year**	**566**	**$134,522**
All Categories	**300 Year**	**566**	**$518,017**
All Categories	**700 Year**	**566**	**$1,015,207**

Source: GIS Analysis

Table 6-248: Critical Facilities Exposed to the Thunderstorm Winds - Town of Kenly

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$482
Banking and Finance	50 Year	3	$836
Banking and Finance	100 Year	3	$1,521
Banking and Finance	300 Year	3	$6,285
Banking and Finance	700 Year	3	$13,964
Commercial Facilities	25 Year	105	$18,104
Commercial Facilities	50 Year	105	$35,835
Commercial Facilities	100 Year	105	$71,274
Commercial Facilities	300 Year	105	$270,325
Commercial Facilities	700 Year	105	$534,790
Critical Manufacturing	25 Year	17	$3,173
Critical Manufacturing	50 Year	17	$5,939
Critical Manufacturing	100 Year	17	$11,732

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	300 Year	17	$50,701
Critical Manufacturing	700 Year	17	$110,242
Emergency Services	25 Year	2	$508
Emergency Services	50 Year	2	$952
Emergency Services	100 Year	2	$1,936
Emergency Services	300 Year	2	$9,182
Emergency Services	700 Year	2	$21,275
Energy	25 Year	4	$582
Energy	50 Year	4	$1,007
Energy	100 Year	4	$1,868
Energy	300 Year	4	$7,132
Energy	700 Year	4	$14,931
Food and Agriculture	25 Year	73	$2,867
Food and Agriculture	50 Year	73	$5,163
Food and Agriculture	100 Year	73	$9,169
Food and Agriculture	300 Year	73	$27,321
Food and Agriculture	700 Year	73	$47,429
Government Facilities	25 Year	5	$1,105
Government Facilities	50 Year	5	$2,298
Government Facilities	100 Year	5	$4,954
Government Facilities	300 Year	5	$26,962
Government Facilities	700 Year	5	$64,245
Healthcare and Public Health	25 Year	4	$252
Healthcare and Public Health	50 Year	4	$454
Healthcare and Public Health	100 Year	4	$933
Healthcare and Public Health	300 Year	4	$4,888
Healthcare and Public Health	700 Year	4	$11,740
Transportation Systems	25 Year	23	$4,524
Transportation Systems	50 Year	23	$8,426

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	100 Year	23	$16,789
Transportation Systems	300 Year	23	$75,268
Transportation Systems	700 Year	23	$171,574
Water	25 Year	1	$15,125
Water	50 Year	1	$26,412
Water	100 Year	1	$52,996
Water	300 Year	1	$255,630
Water	700 Year	1	$596,739
All Categories	**25 Year**	**237**	**$46,722**
All Categories	**50 Year**	**237**	**$87,322**
All Categories	**100 Year**	**237**	**$173,172**
All Categories	**300 Year**	**237**	**$733,694**
All Categories	**700 Year**	**237**	**$1,586,929**

Source: GIS Analysis

Table 6-249: Critical Facilities Exposed to the Thunderstorm Winds - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$47
Banking and Finance	50 Year	1	$81
Banking and Finance	100 Year	1	$139
Banking and Finance	300 Year	1	$512
Banking and Finance	700 Year	1	$1,038
Commercial Facilities	25 Year	36	$4,684
Commercial Facilities	50 Year	36	$9,617
Commercial Facilities	100 Year	36	$19,733
Commercial Facilities	300 Year	36	$82,195
Commercial Facilities	700 Year	36	$172,287
Critical Manufacturing	25 Year	6	$1,538
Critical Manufacturing	50 Year	6	$3,026
Critical Manufacturing	100 Year	6	$6,161
Critical Manufacturing	300 Year	6	$25,558
Critical Manufacturing	700 Year	6	$52,272

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	25 Year	76	$516
Food and Agriculture	50 Year	76	$1,355
Food and Agriculture	100 Year	76	$3,174
Food and Agriculture	300 Year	76	$12,298
Food and Agriculture	700 Year	76	$21,802
Government Facilities	25 Year	20	$6,850
Government Facilities	50 Year	20	$12,843
Government Facilities	100 Year	20	$26,622
Government Facilities	300 Year	20	$125,886
Government Facilities	700 Year	20	$291,628
Transportation Systems	25 Year	2	$161
Transportation Systems	50 Year	2	$321
Transportation Systems	100 Year	2	$654
Transportation Systems	300 Year	2	$2,792
Transportation Systems	700 Year	2	$5,898
All Categories	**25 Year**	**141**	**$13,796**
All Categories	**50 Year**	**141**	**$27,243**
All Categories	**100 Year**	**141**	**$56,483**
All Categories	**300 Year**	**141**	**$249,241**
All Categories	**700 Year**	**141**	**$544,925**

Source: GIS Analysis

Table 6-250: Critical Facilities Exposed to the Thunderstorm Winds - Town of Pine Level

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$150
Banking and Finance	50 Year	1	$271
Banking and Finance	100 Year	1	$517
Banking and Finance	300 Year	1	$1,914
Banking and Finance	700 Year	1	$3,904
Commercial Facilities	25 Year	45	$7,870
Commercial Facilities	50 Year	45	$17,343
Commercial Facilities	100 Year	45	$37,565

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	300 Year	45	$164,302
Commercial Facilities	700 Year	45	$339,040
Critical Manufacturing	25 Year	9	$1,872
Critical Manufacturing	50 Year	9	$3,856
Critical Manufacturing	100 Year	9	$8,178
Critical Manufacturing	300 Year	9	$35,742
Critical Manufacturing	700 Year	9	$76,714
Emergency Services	25 Year	2	$396
Emergency Services	50 Year	2	$742
Emergency Services	100 Year	2	$1,441
Emergency Services	300 Year	2	$5,624
Emergency Services	700 Year	2	$10,830
Food and Agriculture	25 Year	138	$1,691
Food and Agriculture	50 Year	138	$4,378
Food and Agriculture	100 Year	138	$10,056
Food and Agriculture	300 Year	138	$37,446
Food and Agriculture	700 Year	138	$64,965
Government Facilities	25 Year	12	$16,502
Government Facilities	50 Year	12	$25,994
Government Facilities	100 Year	12	$40,702
Government Facilities	300 Year	12	$114,963
Government Facilities	700 Year	12	$208,658
Healthcare and Public Health	25 Year	1	$1,421
Healthcare and Public Health	50 Year	1	$3,055
Healthcare and Public Health	100 Year	1	$6,123
Healthcare and Public Health	300 Year	1	$21,052
Healthcare and Public Health	700 Year	1	$37,603
Transportation Systems	25 Year	5	$2,049
Transportation Systems	50 Year	5	$4,363

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	100 Year	5	$8,626
Transportation Systems	300 Year	5	$29,452
Transportation Systems	700 Year	5	$53,102
All Categories	**25 Year**	**213**	**$31,951**
All Categories	**50 Year**	**213**	**$60,002**
All Categories	**100 Year**	**213**	**$113,208**
All Categories	**300 Year**	**213**	**$410,495**
All Categories	**700 Year**	**213**	**$794,816**

Source: GIS Analysis

Table 6-251: Critical Facilities Exposed to the Thunderstorm Winds - Town of Princeton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$170
Banking and Finance	50 Year	3	$354
Banking and Finance	100 Year	3	$754
Banking and Finance	300 Year	3	$3,339
Banking and Finance	700 Year	3	$7,094
Commercial Facilities	25 Year	64	$8,261
Commercial Facilities	50 Year	64	$16,869
Commercial Facilities	100 Year	64	$34,867
Commercial Facilities	300 Year	64	$153,926
Commercial Facilities	700 Year	64	$332,909
Critical Manufacturing	25 Year	11	$1,615
Critical Manufacturing	50 Year	11	$3,566
Critical Manufacturing	100 Year	11	$8,000
Critical Manufacturing	300 Year	11	$37,683
Critical Manufacturing	700 Year	11	$80,394
Emergency Services	25 Year	1	$185
Emergency Services	50 Year	1	$364
Emergency Services	100 Year	1	$786
Emergency Services	300 Year	1	$3,944
Emergency Services	700 Year	1	$9,028

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	25 Year	1	$16,970
Energy	50 Year	1	$32,715
Energy	100 Year	1	$69,720
Energy	300 Year	1	$347,910
Energy	700 Year	1	$798,816
Food and Agriculture	25 Year	56	$549
Food and Agriculture	50 Year	56	$1,411
Food and Agriculture	100 Year	56	$3,224
Food and Agriculture	300 Year	56	$11,913
Food and Agriculture	700 Year	56	$20,625
Government Facilities	25 Year	20	$6,487
Government Facilities	50 Year	20	$12,989
Government Facilities	100 Year	20	$28,181
Government Facilities	300 Year	20	$141,224
Government Facilities	700 Year	20	$320,890
Healthcare and Public Health	25 Year	4	$369
Healthcare and Public Health	50 Year	4	$615
Healthcare and Public Health	100 Year	4	$1,085
Healthcare and Public Health	300 Year	4	$3,677
Healthcare and Public Health	700 Year	4	$7,200
Transportation Systems	25 Year	16	$2,207
Transportation Systems	50 Year	16	$4,373
Transportation Systems	100 Year	16	$8,617
Transportation Systems	300 Year	16	$33,638
Transportation Systems	700 Year	16	$68,723
All Categories	**25 Year**	**176**	**$36,813**
All Categories	**50 Year**	**176**	**$73,256**
All Categories	**100 Year**	**176**	**$155,234**
All Categories	**300 Year**	**176**	**$737,254**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**700 Year**	**176**	**$1,645,679**

Source: GIS Analysis

Table 6-252: Critical Facilities Exposed to the Thunderstorm Winds - Town of Selma

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$843
Banking and Finance	50 Year	7	$1,617
Banking and Finance	100 Year	7	$3,193
Banking and Finance	300 Year	7	$13,673
Banking and Finance	700 Year	7	$29,707
Commercial Facilities	25 Year	255	$66,328
Commercial Facilities	50 Year	255	$140,516
Commercial Facilities	100 Year	255	$285,506
Commercial Facilities	300 Year	255	$1,065,041
Commercial Facilities	700 Year	255	$2,062,121
Critical Manufacturing	25 Year	42	$12,078
Critical Manufacturing	50 Year	42	$21,793
Critical Manufacturing	100 Year	42	$42,171
Critical Manufacturing	300 Year	42	$177,794
Critical Manufacturing	700 Year	42	$383,061
Emergency Services	25 Year	2	$296
Emergency Services	50 Year	2	$488
Emergency Services	100 Year	2	$836
Emergency Services	300 Year	2	$3,337
Emergency Services	700 Year	2	$7,643
Energy	25 Year	3	$11,847
Energy	50 Year	3	$19,499
Energy	100 Year	3	$36,929
Energy	300 Year	3	$167,155
Energy	700 Year	3	$391,643
Food and Agriculture	25 Year	206	$2,418
Food and Agriculture	50 Year	206	$5,533

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	100 Year	206	$11,958
Food and Agriculture	300 Year	206	$43,540
Food and Agriculture	700 Year	206	$75,899
Government Facilities	25 Year	28	$10,405
Government Facilities	50 Year	28	$21,855
Government Facilities	100 Year	28	$49,392
Government Facilities	300 Year	28	$272,521
Government Facilities	700 Year	28	$637,946
Healthcare and Public Health	25 Year	16	$3,362
Healthcare and Public Health	50 Year	16	$6,928
Healthcare and Public Health	100 Year	16	$14,109
Healthcare and Public Health	300 Year	16	$55,283
Healthcare and Public Health	700 Year	16	$111,463
Transportation Systems	25 Year	49	$13,179
Transportation Systems	50 Year	49	$25,854
Transportation Systems	100 Year	49	$50,036
Transportation Systems	300 Year	49	$184,103
Transportation Systems	700 Year	49	$361,943
All Categories	**25 Year**	**608**	**$120,756**
All Categories	**50 Year**	**608**	**$244,083**
All Categories	**100 Year**	**608**	**$494,130**
All Categories	**300 Year**	**608**	**$1,982,447**
All Categories	**700 Year**	**608**	**$4,061,426**

Source: GIS Analysis

Table 6-253: Critical Facilities Exposed to the Thunderstorm Winds - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	17	$8,653

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	50 Year	17	$16,469
Banking and Finance	100 Year	17	$31,728
Banking and Finance	300 Year	17	$113,614
Banking and Finance	700 Year	17	$220,282
Commercial Facilities	25 Year	445	$131,598
Commercial Facilities	50 Year	445	$266,273
Commercial Facilities	100 Year	445	$529,794
Commercial Facilities	300 Year	445	$1,963,621
Commercial Facilities	700 Year	445	$3,839,323
Communications	25 Year	1	$178
Communications	50 Year	1	$291
Communications	100 Year	1	$524
Communications	300 Year	1	$1,773
Communications	700 Year	1	$3,403
Critical Manufacturing	25 Year	105	$46,986
Critical Manufacturing	50 Year	105	$85,203
Critical Manufacturing	100 Year	105	$163,179
Critical Manufacturing	300 Year	105	$616,823
Critical Manufacturing	700 Year	105	$1,264,065
Defense Industrial Base	25 Year	2	$13,783
Defense Industrial Base	50 Year	2	$22,756
Defense Industrial Base	100 Year	2	$41,032
Defense Industrial Base	300 Year	2	$159,292
Defense Industrial Base	700 Year	2	$357,233
Emergency Services	25 Year	4	$1,842
Emergency Services	50 Year	4	$3,032
Emergency Services	100 Year	4	$5,666
Emergency Services	300 Year	4	$24,044
Emergency Services	700 Year	4	$54,576
Energy	25 Year	10	$54,222
Energy	50 Year	10	$89,097
Energy	100 Year	10	$161,665

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	300 Year	10	$652,209
Energy	700 Year	10	$1,495,002
Food and Agriculture	25 Year	349	$4,451
Food and Agriculture	50 Year	349	$11,548
Food and Agriculture	100 Year	349	$26,837
Food and Agriculture	300 Year	349	$102,797
Food and Agriculture	700 Year	349	$181,754
Government Facilities	25 Year	112	$47,215
Government Facilities	50 Year	112	$91,198
Government Facilities	100 Year	112	$187,143
Government Facilities	300 Year	112	$838,912
Government Facilities	700 Year	112	$1,830,945
Healthcare and Public Health	25 Year	57	$26,851
Healthcare and Public Health	50 Year	57	$49,421
Healthcare and Public Health	100 Year	57	$94,480
Healthcare and Public Health	300 Year	57	$439,901
Healthcare and Public Health	700 Year	57	$1,072,179
Transportation Systems	25 Year	55	$15,211
Transportation Systems	50 Year	55	$30,547
Transportation Systems	100 Year	55	$60,622
Transportation Systems	300 Year	55	$220,889
Transportation Systems	700 Year	55	$432,003
All Categories	**25 Year**	**1,157**	**$350,990**
All Categories	**50 Year**	**1,157**	**$665,835**
All Categories	**100 Year**	**1,157**	**$1,302,670**
All Categories	**300 Year**	**1,157**	**$5,133,875**
All Categories	**700 Year**	**1,157**	**$10,750,765**

Source: GIS Analysis

Table 6-254: Critical Facilities Exposed to the Thunderstorm Winds - Town of Wilson's Mills

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	45	$13,308
Commercial Facilities	50 Year	45	$27,163
Commercial Facilities	100 Year	45	$54,156
Commercial Facilities	300 Year	45	$199,616
Commercial Facilities	700 Year	45	$382,350
Critical Manufacturing	25 Year	11	$2,962
Critical Manufacturing	50 Year	11	$5,319
Critical Manufacturing	100 Year	11	$9,826
Critical Manufacturing	300 Year	11	$33,219
Critical Manufacturing	700 Year	11	$61,360
Emergency Services	25 Year	1	$117
Emergency Services	50 Year	1	$306
Emergency Services	100 Year	1	$707
Emergency Services	300 Year	1	$2,585
Emergency Services	700 Year	1	$4,452
Energy	25 Year	7	$13,845
Energy	50 Year	7	$23,277
Energy	100 Year	7	$44,627
Energy	300 Year	7	$202,170
Energy	700 Year	7	$471,277
Food and Agriculture	25 Year	94	$1,554
Food and Agriculture	50 Year	94	$4,077
Food and Agriculture	100 Year	94	$9,528
Food and Agriculture	300 Year	94	$36,635
Food and Agriculture	700 Year	94	$64,653
Government Facilities	25 Year	9	$2,545
Government Facilities	50 Year	9	$5,228
Government Facilities	100 Year	9	$11,378
Government Facilities	300 Year	9	$55,842
Government Facilities	700 Year	9	$126,099
Healthcare and Public Health	25 Year	1	$51

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	50 Year	1	$101
Healthcare and Public Health	100 Year	1	$220
Healthcare and Public Health	300 Year	1	$1,108
Healthcare and Public Health	700 Year	1	$2,557
Transportation Systems	25 Year	9	$1,159
Transportation Systems	50 Year	9	$2,573
Transportation Systems	100 Year	9	$5,583
Transportation Systems	300 Year	9	$22,744
Transportation Systems	700 Year	9	$45,862
All Categories	**25 Year**	**177**	**$35,541**
All Categories	**50 Year**	**177**	**$68,044**
All Categories	**100 Year**	**177**	**$136,025**
All Categories	**300 Year**	**177**	**$553,919**
All Categories	**700 Year**	**177**	**$1,158,610**

Source: GIS Analysis

Table 6-255: Critical Facilities Exposed to the Thunderstorm Winds - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	36	$17,261
Banking and Finance	50 Year	36	$35,671
Banking and Finance	100 Year	36	$72,253
Banking and Finance	300 Year	36	$260,661
Banking and Finance	700 Year	36	$481,957
Commercial Facilities	25 Year	845	$692,608
Commercial Facilities	50 Year	845	$1,280,512
Commercial Facilities	100 Year	845	$2,270,453
Commercial Facilities	300 Year	845	$6,372,345
Commercial Facilities	700 Year	845	$10,931,124
Communications	25 Year	1	$113

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	50 Year	1	$184
Communications	100 Year	1	$330
Communications	300 Year	1	$1,107
Communications	700 Year	1	$2,116
Critical Manufacturing	25 Year	250	$947,004
Critical Manufacturing	50 Year	250	$1,830,103
Critical Manufacturing	100 Year	250	$3,236,932
Critical Manufacturing	300 Year	250	$8,324,247
Critical Manufacturing	700 Year	250	$12,963,171
Defense Industrial Base	25 Year	2	$2,273
Defense Industrial Base	50 Year	2	$4,231
Defense Industrial Base	100 Year	2	$8,376
Defense Industrial Base	300 Year	2	$30,839
Defense Industrial Base	700 Year	2	$57,467
Emergency Services	25 Year	6	$23,362
Emergency Services	50 Year	6	$46,839
Emergency Services	100 Year	6	$85,355
Emergency Services	300 Year	6	$231,000
Emergency Services	700 Year	6	$369,502
Energy	25 Year	19	$9,836
Energy	50 Year	19	$16,215
Energy	100 Year	19	$26,933
Energy	300 Year	19	$78,849
Energy	700 Year	19	$157,409
Food and Agriculture	25 Year	105	$3,516
Food and Agriculture	50 Year	105	$6,062
Food and Agriculture	100 Year	105	$11,533
Food and Agriculture	300 Year	105	$39,556
Food and Agriculture	700 Year	105	$73,514
Government Facilities	25 Year	177	$404,277
Government Facilities	50 Year	177	$774,543
Government Facilities	100 Year	177	$1,367,968

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	300 Year	177	$3,473,143
Government Facilities	700 Year	177	$5,394,212
Healthcare and Public Health	25 Year	102	$119,937
Healthcare and Public Health	50 Year	102	$232,109
Healthcare and Public Health	100 Year	102	$428,666
Healthcare and Public Health	300 Year	102	$1,336,526
Healthcare and Public Health	700 Year	102	$2,402,590
Transportation Systems	25 Year	225	$98,886
Transportation Systems	50 Year	225	$184,843
Transportation Systems	100 Year	225	$347,202
Transportation Systems	300 Year	225	$1,141,091
Transportation Systems	700 Year	225	$2,127,802
All Categories	**25 Year**	**1,768**	**$2,319,073**
All Categories	**50 Year**	**1,768**	**$4,411,312**
All Categories	**100 Year**	**1,768**	**$7,856,001**
All Categories	**300 Year**	**1,768**	**$21,289,364**
All Categories	**700 Year**	**1,768**	**$34,960,864**

Source: GIS Analysis

Table 6-256: Critical Facilities Exposed to the Thunderstorm Winds - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	440	$345,368
Commercial Facilities	50 Year	440	$619,683
Commercial Facilities	100 Year	440	$1,056,463
Commercial Facilities	300 Year	440	$2,628,881
Commercial Facilities	700 Year	440	$4,100,283
Critical Manufacturing	25 Year	256	$285,777
Critical Manufacturing	50 Year	256	$481,264

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	100 Year	256	$793,347
Critical Manufacturing	300 Year	256	$1,959,269
Critical Manufacturing	700 Year	256	$3,087,564
Defense Industrial Base	25 Year	1	$496
Defense Industrial Base	50 Year	1	$816
Defense Industrial Base	100 Year	1	$1,481
Defense Industrial Base	300 Year	1	$5,960
Defense Industrial Base	700 Year	1	$13,661
Emergency Services	25 Year	9	$34,666
Emergency Services	50 Year	9	$70,344
Emergency Services	100 Year	9	$126,567
Emergency Services	300 Year	9	$289,530
Emergency Services	700 Year	9	$401,064
Energy	25 Year	8	$2,458
Energy	50 Year	8	$3,883
Energy	100 Year	8	$5,938
Energy	300 Year	8	$14,997
Energy	700 Year	8	$28,180
Food and Agriculture	25 Year	1,170	$23,977
Food and Agriculture	50 Year	1,170	$51,504
Food and Agriculture	100 Year	1,170	$110,638
Food and Agriculture	300 Year	1,170	$444,197
Food and Agriculture	700 Year	1,170	$874,278
Government Facilities	25 Year	34	$57,698
Government Facilities	50 Year	34	$97,291
Government Facilities	100 Year	34	$161,234
Government Facilities	300 Year	34	$446,279
Government Facilities	700 Year	34	$835,674
Healthcare and Public Health	25 Year	27	$14,168
Healthcare and Public Health	50 Year	27	$24,500
Healthcare and Public Health	100 Year	27	$41,538

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	300 Year	27	$116,922
Healthcare and Public Health	700 Year	27	$207,575
Transportation Systems	25 Year	123	$70,222
Transportation Systems	50 Year	123	$128,951
Transportation Systems	100 Year	123	$223,742
Transportation Systems	300 Year	123	$578,019
Transportation Systems	700 Year	123	$929,782
All Categories	**25 Year**	**2,068**	**$834,830**
All Categories	**50 Year**	**2,068**	**$1,478,236**
All Categories	**100 Year**	**2,068**	**$2,520,948**
All Categories	**300 Year**	**2,068**	**$6,484,054**
All Categories	**700 Year**	**2,068**	**$10,478,061**

Source: GIS Analysis

Table 6-257: Critical Facilities Exposed to the Thunderstorm Winds - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$826
Banking and Finance	50 Year	7	$1,427
Banking and Finance	100 Year	7	$2,642
Banking and Finance	300 Year	7	$9,717
Banking and Finance	700 Year	7	$19,368
Chemical	25 Year	1	$181
Chemical	50 Year	1	$407
Chemical	100 Year	1	$936
Chemical	300 Year	1	$4,854
Chemical	700 Year	1	$10,940
Commercial Facilities	25 Year	967	$436,783
Commercial Facilities	50 Year	967	$822,597
Commercial Facilities	100 Year	967	$1,469,524
Commercial Facilities	300 Year	967	$4,070,982

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	700 Year	967	$6,785,622
Critical Manufacturing	25 Year	303	$107,914
Critical Manufacturing	50 Year	303	$194,468
Critical Manufacturing	100 Year	303	$334,771
Critical Manufacturing	300 Year	303	$872,079
Critical Manufacturing	700 Year	303	$1,440,872
Emergency Services	25 Year	8	$16,148
Emergency Services	50 Year	8	$26,982
Emergency Services	100 Year	8	$43,199
Emergency Services	300 Year	8	$98,043
Emergency Services	700 Year	8	$154,704
Energy	25 Year	4	$609
Energy	50 Year	4	$1,176
Energy	100 Year	4	$2,302
Energy	300 Year	4	$7,520
Energy	700 Year	4	$14,033
Food and Agriculture	25 Year	3,782	$40,592
Food and Agriculture	50 Year	3,782	$105,567
Food and Agriculture	100 Year	3,782	$250,090
Food and Agriculture	300 Year	3,782	$1,016,375
Food and Agriculture	700 Year	3,782	$1,851,385
Government Facilities	25 Year	89	$57,752
Government Facilities	50 Year	89	$110,181
Government Facilities	100 Year	89	$201,450
Government Facilities	300 Year	89	$605,916
Government Facilities	700 Year	89	$1,069,033
Healthcare and Public Health	25 Year	40	$10,874
Healthcare and Public Health	50 Year	40	$20,840
Healthcare and Public Health	100 Year	40	$38,713
Healthcare and Public Health	300 Year	40	$118,259

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	700 Year	40	$206,115
Nuclear Reactors, Materials and Waste	25 Year	1	$86
Nuclear Reactors, Materials and Waste	50 Year	1	$136
Nuclear Reactors, Materials and Waste	100 Year	1	$240
Nuclear Reactors, Materials and Waste	300 Year	1	$754
Nuclear Reactors, Materials and Waste	700 Year	1	$1,401
Transportation Systems	25 Year	194	$113,878
Transportation Systems	50 Year	194	$205,377
Transportation Systems	100 Year	194	$350,492
Transportation Systems	300 Year	194	$886,931
Transportation Systems	700 Year	194	$1,431,419
Water	25 Year	9	$11,919
Water	50 Year	9	$19,625
Water	100 Year	9	$35,766
Water	300 Year	9	$145,758
Water	700 Year	9	$334,931
All Categories	**25 Year**	**5,405**	**$797,562**
All Categories	**50 Year**	**5,405**	**$1,508,783**
All Categories	**100 Year**	**5,405**	**$2,730,125**
All Categories	**300 Year**	**5,405**	**$7,837,188**
All Categories	**700 Year**	**5,405**	**$13,319,823**

Source: GIS Analysis

Table 6-258: Critical Facilities Exposed to the Thunderstorm Winds - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$1,362
Banking and Finance	50 Year	6	$2,376
Banking and Finance	100 Year	6	$4,346

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	300 Year	6	$13,427
Banking and Finance	700 Year	6	$23,928
Commercial Facilities	25 Year	290	$139,060
Commercial Facilities	50 Year	290	$282,331
Commercial Facilities	100 Year	290	$545,823
Commercial Facilities	300 Year	290	$1,752,906
Commercial Facilities	700 Year	290	$3,095,219
Communications	25 Year	1	$1,066
Communications	50 Year	1	$2,068
Communications	100 Year	1	$4,155
Communications	300 Year	1	$14,966
Communications	700 Year	1	$26,866
Critical Manufacturing	25 Year	98	$90,393
Critical Manufacturing	50 Year	98	$180,530
Critical Manufacturing	100 Year	98	$348,078
Critical Manufacturing	300 Year	98	$1,120,157
Critical Manufacturing	700 Year	98	$1,947,484
Defense Industrial Base	25 Year	1	$406
Defense Industrial Base	50 Year	1	$768
Defense Industrial Base	100 Year	1	$1,511
Defense Industrial Base	300 Year	1	$7,656
Defense Industrial Base	700 Year	1	$18,626
Emergency Services	25 Year	6	$2,661
Emergency Services	50 Year	6	$5,019
Emergency Services	100 Year	6	$9,953
Emergency Services	300 Year	6	$34,638
Emergency Services	700 Year	6	$64,066
Energy	25 Year	3	$135
Energy	50 Year	3	$236
Energy	100 Year	3	$465
Energy	300 Year	3	$2,141
Energy	700 Year	3	$5,150

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	25 Year	27	$140
Food and Agriculture	50 Year	27	$380
Food and Agriculture	100 Year	27	$926
Food and Agriculture	300 Year	27	$3,878
Food and Agriculture	700 Year	27	$7,124
Government Facilities	25 Year	39	$18,423
Government Facilities	50 Year	39	$37,033
Government Facilities	100 Year	39	$72,069
Government Facilities	300 Year	39	$260,162
Government Facilities	700 Year	39	$507,792
Healthcare and Public Health	25 Year	15	$7,654
Healthcare and Public Health	50 Year	15	$14,845
Healthcare and Public Health	100 Year	15	$28,880
Healthcare and Public Health	300 Year	15	$105,367
Healthcare and Public Health	700 Year	15	$208,026
Transportation Systems	25 Year	62	$26,032
Transportation Systems	50 Year	62	$50,854
Transportation Systems	100 Year	62	$96,357
Transportation Systems	300 Year	62	$301,329
Transportation Systems	700 Year	62	$531,588
All Categories	**25 Year**	**548**	**$287,332**
All Categories	**50 Year**	**548**	**$576,440**
All Categories	**100 Year**	**548**	**$1,112,563**
All Categories	**300 Year**	**548**	**$3,616,627**
All Categories	**700 Year**	**548**	**$6,435,869**

Source: GIS Analysis

Table 6-259: Critical Facilities Exposed to the Thunderstorm Winds - Town of Cameron

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	48	$17,478
Commercial Facilities	50 Year	48	$32,551
Commercial Facilities	100 Year	48	$56,894
Commercial Facilities	300 Year	48	$143,213
Commercial Facilities	700 Year	48	$224,306
Critical Manufacturing	25 Year	10	$1,741
Critical Manufacturing	50 Year	10	$3,074
Critical Manufacturing	100 Year	10	$5,274
Critical Manufacturing	300 Year	10	$13,734
Critical Manufacturing	700 Year	10	$22,803
Food and Agriculture	25 Year	31	$200
Food and Agriculture	50 Year	31	$534
Food and Agriculture	100 Year	31	$1,278
Food and Agriculture	300 Year	31	$5,149
Food and Agriculture	700 Year	31	$9,297
Government Facilities	25 Year	9	$2,781
Government Facilities	50 Year	9	$5,219
Government Facilities	100 Year	9	$10,045
Government Facilities	300 Year	9	$35,210
Government Facilities	700 Year	9	$69,179
Transportation Systems	25 Year	5	$2,052
Transportation Systems	50 Year	5	$3,376
Transportation Systems	100 Year	5	$5,335
Transportation Systems	300 Year	5	$11,875
Transportation Systems	700 Year	5	$18,660
All Categories	**25 Year**	**103**	**$24,252**
All Categories	**50 Year**	**103**	**$44,754**
All Categories	**100 Year**	**103**	**$78,826**
All Categories	**300 Year**	**103**	**$209,181**
All Categories	**700 Year**	**103**	**$344,245**

Source: GIS Analysis

Table 6-260: Critical Facilities Exposed to the Thunderstorm Winds - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	5	$1,056
Banking and Finance	50 Year	5	$2,117
Banking and Finance	100 Year	5	$4,001
Banking and Finance	300 Year	5	$12,110
Banking and Finance	700 Year	5	$20,889
Commercial Facilities	25 Year	147	$75,682
Commercial Facilities	50 Year	147	$147,612
Commercial Facilities	100 Year	147	$272,565
Commercial Facilities	300 Year	147	$790,279
Commercial Facilities	700 Year	147	$1,318,508
Critical Manufacturing	25 Year	34	$7,884
Critical Manufacturing	50 Year	34	$13,785
Critical Manufacturing	100 Year	34	$24,525
Critical Manufacturing	300 Year	34	$78,118
Critical Manufacturing	700 Year	34	$149,209
Emergency Services	25 Year	4	$641
Emergency Services	50 Year	4	$1,182
Emergency Services	100 Year	4	$2,176
Emergency Services	300 Year	4	$10,451
Emergency Services	700 Year	4	$26,095
Food and Agriculture	25 Year	32	$7,039
Food and Agriculture	50 Year	32	$15,751
Food and Agriculture	100 Year	32	$32,260
Food and Agriculture	300 Year	32	$97,398
Food and Agriculture	700 Year	32	$156,284
Government Facilities	25 Year	126	$89,730
Government Facilities	50 Year	126	$181,857
Government Facilities	100 Year	126	$341,222
Government Facilities	300 Year	126	$1,005,017
Government Facilities	700 Year	126	$1,682,287
Healthcare and Public Health	25 Year	6	$2,113

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	50 Year	6	$3,354
Healthcare and Public Health	100 Year	6	$5,838
Healthcare and Public Health	300 Year	6	$20,163
Healthcare and Public Health	700 Year	6	$40,695
Transportation Systems	25 Year	25	$8,990
Transportation Systems	50 Year	25	$15,042
Transportation Systems	100 Year	25	$24,627
Transportation Systems	300 Year	25	$63,007
Transportation Systems	700 Year	25	$106,558
Water	25 Year	4	$582
Water	50 Year	4	$1,061
Water	100 Year	4	$1,932
Water	300 Year	4	$6,081
Water	700 Year	4	$10,854
All Categories	**25 Year**	**383**	**$193,717**
All Categories	**50 Year**	**383**	**$381,761**
All Categories	**100 Year**	**383**	**$709,146**
All Categories	**300 Year**	**383**	**$2,082,624**
All Categories	**700 Year**	**383**	**$3,511,379**

Source: GIS Analysis

Table 6-261: Critical Facilities Exposed to the Thunderstorm Winds - Town of Pinebluff

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$363
Banking and Finance	50 Year	2	$612
Banking and Finance	100 Year	2	$1,079
Banking and Finance	300 Year	2	$3,234
Banking and Finance	700 Year	2	$5,702
Commercial Facilities	25 Year	37	$136,647

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	37	$275,976
Commercial Facilities	100 Year	37	$497,915
Commercial Facilities	300 Year	37	$1,152,117
Commercial Facilities	700 Year	37	$1,606,588
Critical Manufacturing	25 Year	7	$15,541
Critical Manufacturing	50 Year	7	$32,477
Critical Manufacturing	100 Year	7	$60,020
Critical Manufacturing	300 Year	7	$163,320
Critical Manufacturing	700 Year	7	$258,285
Emergency Services	25 Year	1	$269
Emergency Services	50 Year	1	$420
Emergency Services	100 Year	1	$680
Emergency Services	300 Year	1	$2,062
Emergency Services	700 Year	1	$3,754
Food and Agriculture	25 Year	26	$163
Food and Agriculture	50 Year	26	$435
Food and Agriculture	100 Year	26	$1,039
Food and Agriculture	300 Year	26	$4,162
Food and Agriculture	700 Year	26	$7,497
Government Facilities	25 Year	5	$279
Government Facilities	50 Year	5	$455
Government Facilities	100 Year	5	$790
Government Facilities	300 Year	5	$2,948
Government Facilities	700 Year	5	$6,604
Healthcare and Public Health	25 Year	4	$356
Healthcare and Public Health	50 Year	4	$602
Healthcare and Public Health	100 Year	4	$1,096
Healthcare and Public Health	300 Year	4	$4,442
Healthcare and Public Health	700 Year	4	$10,316

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	25 Year	5	$1,072
Transportation Systems	50 Year	5	$2,257
Transportation Systems	100 Year	5	$4,668
Transportation Systems	300 Year	5	$16,887
Transportation Systems	700 Year	5	$30,451
Water	25 Year	4	$13,374
Water	50 Year	4	$22,059
Water	100 Year	4	$41,689
Water	300 Year	4	$186,830
Water	700 Year	4	$437,335
All Categories	**25 Year**	**91**	**$168,064**
All Categories	**50 Year**	**91**	**$335,293**
All Categories	**100 Year**	**91**	**$608,976**
All Categories	**300 Year**	**91**	**$1,536,002**
All Categories	**700 Year**	**91**	**$2,366,532**

Source: GIS Analysis

Table 6-262: Critical Facilities Exposed to the Thunderstorm Winds - Town of Robbins

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$434
Banking and Finance	50 Year	6	$766
Banking and Finance	100 Year	6	$1,430
Banking and Finance	300 Year	6	$5,183
Banking and Finance	700 Year	6	$9,972
Commercial Facilities	25 Year	99	$43,855
Commercial Facilities	50 Year	99	$85,009
Commercial Facilities	100 Year	99	$151,601
Commercial Facilities	300 Year	99	$392,952
Commercial Facilities	700 Year	99	$613,060
Critical Manufacturing	25 Year	19	$48,322
Critical Manufacturing	50 Year	19	$73,978
Critical Manufacturing	100 Year	19	$112,366

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	300 Year	19	$278,114
Critical Manufacturing	700 Year	19	$475,761
Emergency Services	25 Year	2	$1,333
Emergency Services	50 Year	2	$3,052
Emergency Services	100 Year	2	$6,193
Emergency Services	300 Year	2	$18,846
Emergency Services	700 Year	2	$30,427
Energy	25 Year	1	$108
Energy	50 Year	1	$178
Energy	100 Year	1	$321
Energy	300 Year	1	$1,257
Energy	700 Year	1	$2,865
Food and Agriculture	25 Year	41	$76
Food and Agriculture	50 Year	41	$211
Food and Agriculture	100 Year	41	$526
Food and Agriculture	300 Year	41	$2,328
Food and Agriculture	700 Year	41	$4,368
Government Facilities	25 Year	20	$11,365
Government Facilities	50 Year	20	$23,554
Government Facilities	100 Year	20	$50,611
Government Facilities	300 Year	20	$187,993
Government Facilities	700 Year	20	$333,042
Healthcare and Public Health	25 Year	4	$243
Healthcare and Public Health	50 Year	4	$383
Healthcare and Public Health	100 Year	4	$665
Healthcare and Public Health	300 Year	4	$2,345
Healthcare and Public Health	700 Year	4	$5,003
Transportation Systems	25 Year	13	$4,947
Transportation Systems	50 Year	13	$10,509

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	100 Year	13	$20,707
Transportation Systems	300 Year	13	$66,420
Transportation Systems	700 Year	13	$114,013
Water	25 Year	3	$588
Water	50 Year	3	$952
Water	100 Year	3	$1,409
Water	300 Year	3	$2,805
Water	700 Year	3	$4,338
All Categories	**25 Year**	**208**	**$111,271**
All Categories	**50 Year**	**208**	**$198,592**
All Categories	**100 Year**	**208**	**$345,829**
All Categories	**300 Year**	**208**	**$958,243**
All Categories	**700 Year**	**208**	**$1,592,849**

Source: GIS Analysis

Table 6-263: Critical Facilities Exposed to the Thunderstorm Winds - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	27	$8,857
Banking and Finance	50 Year	27	$17,250
Banking and Finance	100 Year	27	$33,265
Banking and Finance	300 Year	27	$114,450
Banking and Finance	700 Year	27	$214,130
Chemical	25 Year	1	$581
Chemical	50 Year	1	$990
Chemical	100 Year	1	$1,728
Chemical	300 Year	1	$5,203
Chemical	700 Year	1	$8,878
Commercial Facilities	25 Year	524	$327,435
Commercial Facilities	50 Year	524	$625,965
Commercial Facilities	100 Year	524	$1,126,680
Commercial Facilities	300 Year	524	$3,147,252
Commercial Facilities	700 Year	524	$5,296,187

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	25 Year	3	$10,480
Communications	50 Year	3	$21,500
Communications	100 Year	3	$39,698
Communications	300 Year	3	$95,017
Communications	700 Year	3	$133,718
Critical Manufacturing	25 Year	97	$26,558
Critical Manufacturing	50 Year	97	$53,547
Critical Manufacturing	100 Year	97	$101,490
Critical Manufacturing	300 Year	97	$317,834
Critical Manufacturing	700 Year	97	$565,909
Defense Industrial Base	25 Year	1	$6,915
Defense Industrial Base	50 Year	1	$16,121
Defense Industrial Base	100 Year	1	$33,725
Defense Industrial Base	300 Year	1	$119,282
Defense Industrial Base	700 Year	1	$212,214
Emergency Services	25 Year	2	$1,435
Emergency Services	50 Year	2	$2,381
Emergency Services	100 Year	2	$4,232
Emergency Services	300 Year	2	$13,818
Emergency Services	700 Year	2	$27,664
Energy	25 Year	3	$546
Energy	50 Year	3	$1,054
Energy	100 Year	3	$2,124
Energy	300 Year	3	$8,067
Energy	700 Year	3	$15,133
Food and Agriculture	25 Year	87	$537
Food and Agriculture	50 Year	87	$1,462
Food and Agriculture	100 Year	87	$3,571
Food and Agriculture	300 Year	87	$15,028
Food and Agriculture	700 Year	87	$27,647
Government Facilities	25 Year	111	$79,208
Government Facilities	50 Year	111	$152,839

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	100 Year	111	$282,532
Government Facilities	300 Year	111	$862,020
Government Facilities	700 Year	111	$1,513,940
Healthcare and Public Health	25 Year	53	$136,241
Healthcare and Public Health	50 Year	53	$272,026
Healthcare and Public Health	100 Year	53	$509,328
Healthcare and Public Health	300 Year	53	$1,408,485
Healthcare and Public Health	700 Year	53	$2,255,403
Transportation Systems	25 Year	132	$33,395
Transportation Systems	50 Year	132	$57,815
Transportation Systems	100 Year	132	$99,231
Transportation Systems	300 Year	132	$298,997
Transportation Systems	700 Year	132	$566,179
Water	25 Year	1	$22
Water	50 Year	1	$35
Water	100 Year	1	$67
Water	300 Year	1	$296
Water	700 Year	1	$697
All Categories	**25 Year**	**1,042**	**$632,210**
All Categories	**50 Year**	**1,042**	**$1,222,985**
All Categories	**100 Year**	**1,042**	**$2,237,671**
All Categories	**300 Year**	**1,042**	**$6,405,749**
All Categories	**700 Year**	**1,042**	**$10,837,699**

Source: GIS Analysis

Table 6-264: Critical Facilities Exposed to the Thunderstorm Winds - Town of Taylortown

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$205

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$317
	100 Year	1	$504
	300 Year	1	$1,501
	700 Year	1	$2,704
Commercial Facilities	25 Year	21	$30,860
	50 Year	21	$63,499
	100 Year	21	$118,698
	300 Year	21	$344,636
	700 Year	21	$571,499
Critical Manufacturing	25 Year	5	$1,299
	50 Year	5	$2,584
	100 Year	5	$5,128
	300 Year	5	$17,539
	700 Year	5	$31,384
Government Facilities	25 Year	10	$10,008
	50 Year	10	$21,546
	100 Year	10	$43,487
	300 Year	10	$149,983
	700 Year	10	$276,532
Healthcare and Public Health	25 Year	4	$3,924
	50 Year	4	$7,528
	100 Year	4	$13,626
	300 Year	4	$39,146
	700 Year	4	$67,332
Transportation Systems	25 Year	4	$1,219
	50 Year	4	$2,112
	100 Year	4	$3,731
	300 Year	4	$11,320
	700 Year	4	$19,978
All Categories	**25 Year**	**45**	**$47,515**
	50 Year	**45**	**$97,586**
	100 Year	**45**	**$185,174**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**45**	**$564,125**
	700 Year	**45**	**$969,429**

Source: GIS Analysis

Table 6-265: Critical Facilities Exposed to the Thunderstorm Winds - Town of Vass

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$525
Banking and Finance	50 Year	6	$986
Banking and Finance	100 Year	6	$1,918
Banking and Finance	300 Year	6	$7,073
Banking and Finance	700 Year	6	$14,123
Commercial Facilities	25 Year	83	$23,210
Commercial Facilities	50 Year	83	$44,967
Commercial Facilities	100 Year	83	$84,470
Commercial Facilities	300 Year	83	$270,345
Commercial Facilities	700 Year	83	$484,350
Critical Manufacturing	25 Year	12	$394
Critical Manufacturing	50 Year	12	$686
Critical Manufacturing	100 Year	12	$1,327
Critical Manufacturing	300 Year	12	$5,467
Critical Manufacturing	700 Year	12	$12,362
Emergency Services	25 Year	2	$429
Emergency Services	50 Year	2	$676
Emergency Services	100 Year	2	$1,146
Emergency Services	300 Year	2	$3,563
Emergency Services	700 Year	2	$6,575
Food and Agriculture	25 Year	94	$1,057
Food and Agriculture	50 Year	94	$2,828
Food and Agriculture	100 Year	94	$6,786
Food and Agriculture	300 Year	94	$27,436
Food and Agriculture	700 Year	94	$49,645
Government Facilities	25 Year	12	$11,219

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	50 Year	12	$22,672
Government Facilities	100 Year	12	$42,925
Government Facilities	300 Year	12	$137,091
Government Facilities	700 Year	12	$247,804
Healthcare and Public Health	25 Year	3	$188
Healthcare and Public Health	50 Year	3	$308
Healthcare and Public Health	100 Year	3	$558
Healthcare and Public Health	300 Year	3	$2,239
Healthcare and Public Health	700 Year	3	$5,089
Transportation Systems	25 Year	10	$4,331
Transportation Systems	50 Year	10	$7,334
Transportation Systems	100 Year	10	$12,118
Transportation Systems	300 Year	10	$30,898
Transportation Systems	700 Year	10	$51,551
All Categories	**25 Year**	**222**	**$41,353**
All Categories	**50 Year**	**222**	**$80,457**
All Categories	**100 Year**	**222**	**$151,248**
All Categories	**300 Year**	**222**	**$484,112**
All Categories	**700 Year**	**222**	**$871,499**

Source: GIS Analysis

Table 6-266: Critical Facilities Exposed to the Thunderstorm Winds - Village of Foxfire

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	19	$8,124
Commercial Facilities	50 Year	19	$14,150
Commercial Facilities	100 Year	19	$23,705
Commercial Facilities	300 Year	19	$60,118
Commercial Facilities	700 Year	19	$97,685

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	25 Year	3	$132
Critical Manufacturing	50 Year	3	$212
Critical Manufacturing	100 Year	3	$371
Critical Manufacturing	300 Year	3	$1,347
Critical Manufacturing	700 Year	3	$2,878
Emergency Services	25 Year	2	$317
Emergency Services	50 Year	2	$545
Emergency Services	100 Year	2	$966
Emergency Services	300 Year	2	$3,024
Emergency Services	700 Year	2	$5,594
Food and Agriculture	25 Year	48	$157
Food and Agriculture	50 Year	48	$426
Food and Agriculture	100 Year	48	$1,035
Food and Agriculture	300 Year	48	$4,304
Food and Agriculture	700 Year	48	$7,882
Transportation Systems	25 Year	2	$450
Transportation Systems	50 Year	2	$740
Transportation Systems	100 Year	2	$1,172
Transportation Systems	300 Year	2	$2,663
Transportation Systems	700 Year	2	$4,305
All Categories	**25 Year**	**74**	**$9,180**
All Categories	**50 Year**	**74**	**$16,073**
All Categories	**100 Year**	**74**	**$27,249**
All Categories	**300 Year**	**74**	**$71,456**
All Categories	**700 Year**	**74**	**$118,344**

Source: GIS Analysis

Table 6-267: Critical Facilities Exposed to the Thunderstorm Winds - Village of Pinehurst

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	10	$2,347
Banking and Finance	50 Year	10	$4,448
Banking and Finance	100 Year	10	$8,583

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	300 Year	10	$30,571
Banking and Finance	700 Year	10	$60,060
Commercial Facilities	25 Year	164	$162,225
Commercial Facilities	50 Year	164	$316,299
Commercial Facilities	100 Year	164	$583,985
Commercial Facilities	300 Year	164	$1,728,868
Commercial Facilities	700 Year	164	$3,017,377
Critical Manufacturing	25 Year	16	$10,287
Critical Manufacturing	50 Year	16	$19,898
Critical Manufacturing	100 Year	16	$35,009
Critical Manufacturing	300 Year	16	$87,098
Critical Manufacturing	700 Year	16	$134,441
Emergency Services	25 Year	3	$384
Emergency Services	50 Year	3	$652
Emergency Services	100 Year	3	$1,264
Emergency Services	300 Year	3	$6,059
Emergency Services	700 Year	3	$14,558
Food and Agriculture	25 Year	59	$404
Food and Agriculture	50 Year	59	$1,081
Food and Agriculture	100 Year	59	$2,599
Food and Agriculture	300 Year	59	$10,540
Food and Agriculture	700 Year	59	$19,100
Government Facilities	25 Year	18	$8,212
Government Facilities	50 Year	18	$16,997
Government Facilities	100 Year	18	$33,109
Government Facilities	300 Year	18	$109,539
Government Facilities	700 Year	18	$196,651
Healthcare and Public Health	25 Year	96	$270,758
Healthcare and Public Health	50 Year	96	$528,339
Healthcare and Public Health	100 Year	96	$956,726

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	300 Year	96	$2,464,356
Healthcare and Public Health	700 Year	96	$3,851,050
Transportation Systems	25 Year	25	$15,385
Transportation Systems	50 Year	25	$28,178
Transportation Systems	100 Year	25	$49,170
Transportation Systems	300 Year	25	$138,533
Transportation Systems	700 Year	25	$244,206
All Categories	**25 Year**	**391**	**$470,002**
All Categories	**50 Year**	**391**	**$915,892**
All Categories	**100 Year**	**391**	**$1,670,445**
All Categories	**300 Year**	**391**	**$4,575,564**
All Categories	**700 Year**	**391**	**$7,537,443**

Source: GIS Analysis

Table 6-268: Critical Facilities Exposed to the Thunderstorm Winds - Village of Whispering Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	32	$14,426
Commercial Facilities	50 Year	32	$25,878
Commercial Facilities	100 Year	32	$45,280
Commercial Facilities	300 Year	32	$123,568
Commercial Facilities	700 Year	32	$205,616
Critical Manufacturing	25 Year	7	$2,536
Critical Manufacturing	50 Year	7	$4,269
Critical Manufacturing	100 Year	7	$6,860
Critical Manufacturing	300 Year	7	$15,654
Critical Manufacturing	700 Year	7	$24,337
Emergency Services	25 Year	3	$676
Emergency Services	50 Year	3	$1,279
Emergency Services	100 Year	3	$2,390
Emergency Services	300 Year	3	$7,244

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	700 Year	3	$12,234
Food and Agriculture	25 Year	38	$133
Food and Agriculture	50 Year	38	$363
Food and Agriculture	100 Year	38	$886
Food and Agriculture	300 Year	38	$3,730
Food and Agriculture	700 Year	38	$6,865
Government Facilities	25 Year	11	$10,549
Government Facilities	50 Year	11	$21,808
Government Facilities	100 Year	11	$41,008
Government Facilities	300 Year	11	$119,463
Government Facilities	700 Year	11	$199,556
Healthcare and Public Health	25 Year	1	$77
Healthcare and Public Health	50 Year	1	$131
Healthcare and Public Health	100 Year	1	$247
Healthcare and Public Health	300 Year	1	$1,035
Healthcare and Public Health	700 Year	1	$2,498
Transportation Systems	25 Year	10	$2,888
Transportation Systems	50 Year	10	$4,741
Transportation Systems	100 Year	10	$7,563
Transportation Systems	300 Year	10	$17,997
Transportation Systems	700 Year	10	$28,478
All Categories	**25 Year**	**102**	**$31,285**
All Categories	**50 Year**	**102**	**$58,469**
All Categories	**100 Year**	**102**	**$104,234**
All Categories	**300 Year**	**102**	**$288,691**
All Categories	**700 Year**	**102**	**$479,584**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-269: Critical Facilities Exposed to the Thunderstorm Winds (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	262	$115,028
Banking and Finance	50 Year	262	$222,131
Banking and Finance	100 Year	262	$411,436
Banking and Finance	300 Year	262	$1,244,453
Banking and Finance	700 Year	262	$2,206,454
Chemical	25 Year	5	$5,796
Chemical	50 Year	5	$12,494
Chemical	100 Year	5	$26,500
Chemical	300 Year	5	$105,852
Chemical	700 Year	5	$209,814
Commercial Facilities	25 Year	8,653	$6,121,552
Commercial Facilities	50 Year	8,653	$11,814,990
Commercial Facilities	100 Year	8,653	$21,367,929
Commercial Facilities	300 Year	8,653	$59,429,409
Commercial Facilities	700 Year	8,653	$99,255,633
Communications	25 Year	9	$13,925
Communications	50 Year	9	$27,594
Communications	100 Year	9	$50,966
Communications	300 Year	9	$130,462
Communications	700 Year	9	$194,286
Critical Manufacturing	25 Year	2,656	$2,964,215
Critical Manufacturing	50 Year	2,656	$5,643,865
Critical Manufacturing	100 Year	2,656	$10,023,045
Critical Manufacturing	300 Year	2,656	$27,132,315
Critical Manufacturing	700 Year	2,656	$44,541,615
Defense Industrial Base	25 Year	8	$28,546
Defense Industrial Base	50 Year	8	$52,271
Defense Industrial Base	100 Year	8	$99,679
Defense Industrial Base	300 Year	8	$370,378

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	700 Year	8	$757,067
Emergency Services	25 Year	131	$229,645
Emergency Services	50 Year	131	$461,010
Emergency Services	100 Year	131	$846,677
Emergency Services	300 Year	131	$2,269,912
Emergency Services	700 Year	131	$3,609,683
Energy	25 Year	98	$279,844
Energy	50 Year	98	$466,116
Energy	100 Year	98	$850,760
Energy	300 Year	98	$3,418,527
Energy	700 Year	98	$7,775,954
Food and Agriculture	25 Year	22,750	$310,087
Food and Agriculture	50 Year	22,750	$783,321
Food and Agriculture	100 Year	22,750	$1,806,656
Food and Agriculture	300 Year	22,750	$7,024,155
Food and Agriculture	700 Year	22,750	$12,629,962
Government Facilities	25 Year	1,946	$2,417,147
Government Facilities	50 Year	1,946	$4,773,336
Government Facilities	100 Year	1,946	$8,805,975
Government Facilities	300 Year	1,946	$25,643,505
Government Facilities	700 Year	1,946	$43,853,286
Healthcare and Public Health	25 Year	730	$1,019,889
Healthcare and Public Health	50 Year	730	$2,030,974
Healthcare and Public Health	100 Year	730	$3,776,539
Healthcare and Public Health	300 Year	730	$10,888,740
Healthcare and Public Health	700 Year	730	$18,340,365
Nuclear Reactors, Materials and Waste	25 Year	4	$5,803
Nuclear Reactors, Materials and Waste	50 Year	4	$10,079

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	100 Year	4	$16,875
Nuclear Reactors, Materials and Waste	300 Year	4	$48,809
Nuclear Reactors, Materials and Waste	700 Year	4	$87,870
Transportation Systems	25 Year	1,580	$826,649
Transportation Systems	50 Year	1,580	$1,572,351
Transportation Systems	100 Year	1,580	$2,842,236
Transportation Systems	300 Year	1,580	$8,167,274
Transportation Systems	700 Year	1,580	$14,018,888
Water	25 Year	72	$198,300
Water	50 Year	72	$335,140
Water	100 Year	72	$610,629
Water	300 Year	72	$2,385,338
Water	700 Year	72	$5,347,950
All Categories	**25 Year**	**38,904**	**$14,536,426**
All Categories	**50 Year**	**38,904**	**$28,205,672**
All Categories	**100 Year**	**38,904**	**$51,535,902**
All Categories	**300 Year**	**38,904**	**$148,259,129**
All Categories	**700 Year**	**38,904**	**$252,828,827**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-270: High Potential Loss Properties Exposed to the Thunderstorm Winds - Chatham County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	19	$539,782
Commercial	50 Year	19	$1,047,509
Commercial	100 Year	19	$1,823,798
Commercial	300 Year	19	$4,101,853

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	700 Year	19	$5,784,150
Government	25 Year	8	$52,132
Government	50 Year	8	$102,875
Government	100 Year	8	$192,225
Government	300 Year	8	$584,135
Government	700 Year	8	$1,016,573
Industrial	25 Year	11	$341,435
Industrial	50 Year	11	$615,808
Industrial	100 Year	11	$983,526
Industrial	300 Year	11	$2,054,932
Industrial	700 Year	11	$2,932,278
Religious	25 Year	4	$28,887
Religious	50 Year	4	$56,252
Religious	100 Year	4	$97,489
Religious	300 Year	4	$236,658
Religious	700 Year	4	$354,457
Residential	25 Year	116	$432,948
Residential	50 Year	116	$661,052
Residential	100 Year	116	$996,006
Residential	300 Year	116	$2,716,765
Residential	700 Year	116	$5,037,847
Utilities	25 Year	13	$88,946
Utilities	50 Year	13	$143,539
Utilities	100 Year	13	$242,246
Utilities	300 Year	13	$791,074
Utilities	700 Year	13	$1,720,346
All Categories	**25 Year**	**171**	**$1,484,130**
All Categories	**50 Year**	**171**	**$2,627,035**
All Categories	**100 Year**	**171**	**$4,335,290**
All Categories	**300 Year**	**171**	**$10,485,417**
All Categories	**700 Year**	**171**	**$16,845,651**

Source: GIS Analysis

Table 6-271: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Goldston

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	25 Year	1	$1,700
Industrial	50 Year	1	$2,639
Industrial	100 Year	1	$4,640
Industrial	300 Year	1	$14,245
Industrial	700 Year	1	$26,157
All Categories	**25 Year**	**1**	**$1,700**
All Categories	**50 Year**	**1**	**$2,639**
All Categories	**100 Year**	**1**	**$4,640**
All Categories	**300 Year**	**1**	**$14,245**
All Categories	**700 Year**	**1**	**$26,157**

Source: GIS Analysis

Table 6-272: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Pittsboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	10	$61,631
Commercial	50 Year	10	$131,820
Commercial	100 Year	10	$263,838
Commercial	300 Year	10	$878,583
Commercial	700 Year	10	$1,557,179
Government	25 Year	5	$13,845
Government	50 Year	5	$28,152
Government	100 Year	5	$53,885
Government	300 Year	5	$175,920
Government	700 Year	5	$321,328
Industrial	25 Year	1	$14,105
Industrial	50 Year	1	$28,892
Industrial	100 Year	1	$52,196
Industrial	300 Year	1	$118,041
Industrial	700 Year	1	$160,131
Religious	25 Year	2	$13,350
Religious	50 Year	2	$27,626

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	100 Year	2	$50,730
Religious	300 Year	2	$121,480
Religious	700 Year	2	$170,850
Residential	25 Year	1	$305
Residential	50 Year	1	$496
Residential	100 Year	1	$843
Residential	300 Year	1	$2,892
Residential	700 Year	1	$5,632
Utilities	25 Year	2	$11,166
Utilities	50 Year	2	$18,320
Utilities	100 Year	2	$30,854
Utilities	300 Year	2	$96,900
Utilities	700 Year	2	$208,996
All Categories	**25 Year**	**21**	**$114,402**
All Categories	**50 Year**	**21**	**$235,306**
All Categories	**100 Year**	**21**	**$452,346**
All Categories	**300 Year**	**21**	**$1,393,816**
All Categories	**700 Year**	**21**	**$2,424,116**

Source: GIS Analysis

Table 6-273: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Siler City

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	11	$41,651
Commercial	50 Year	11	$84,931
Commercial	100 Year	11	$168,323
Commercial	300 Year	11	$602,737
Commercial	700 Year	11	$1,142,367
Government	25 Year	6	$198,453
Government	50 Year	6	$416,928
Government	100 Year	6	$769,468
Government	300 Year	6	$1,923,031
Government	700 Year	6	$2,820,627

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	25 Year	7	$281,470
Industrial	50 Year	7	$586,695
Industrial	100 Year	7	$1,081,179
Industrial	300 Year	7	$2,771,200
Industrial	700 Year	7	$4,198,826
Religious	25 Year	2	$1,174
Religious	50 Year	2	$1,825
Religious	100 Year	2	$3,103
Religious	300 Year	2	$9,566
Religious	700 Year	2	$17,822
Residential	25 Year	2	$469
Residential	50 Year	2	$767
Residential	100 Year	2	$1,319
Residential	300 Year	2	$4,566
Residential	700 Year	2	$8,940
Utilities	25 Year	6	$23,654
Utilities	50 Year	6	$38,599
Utilities	100 Year	6	$64,912
Utilities	300 Year	6	$204,783
Utilities	700 Year	6	$441,861
All Categories	**25 Year**	**34**	**$546,871**
All Categories	**50 Year**	**34**	**$1,129,745**
All Categories	**100 Year**	**34**	**$2,088,304**
All Categories	**300 Year**	**34**	**$5,515,883**
All Categories	**700 Year**	**34**	**$8,630,443**

Source: GIS Analysis

Table 6-274: High Potential Loss Properties Exposed to the Thunderstorm Winds - City of Dunn

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	80	$164,079
Commercial	50 Year	80	$303,008
Commercial	100 Year	80	$543,506

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	300 Year	80	$1,646,704
Commercial	700 Year	80	$2,983,369
Government	25 Year	20	$75,552
Government	50 Year	20	$155,894
Government	100 Year	20	$299,660
Government	300 Year	20	$995,499
Government	700 Year	20	$1,797,561
Industrial	25 Year	16	$32,143
Industrial	50 Year	16	$64,940
Industrial	100 Year	16	$124,183
Industrial	300 Year	16	$407,445
Industrial	700 Year	16	$746,170
Religious	25 Year	17	$32,605
Religious	50 Year	17	$59,655
Religious	100 Year	17	$107,081
Religious	300 Year	17	$314,823
Religious	700 Year	17	$551,969
Residential	25 Year	8	$14,780
Residential	50 Year	8	$24,557
Residential	100 Year	8	$40,639
Residential	300 Year	8	$118,006
Residential	700 Year	8	$214,599
All Categories	**25 Year**	**141**	**$319,159**
All Categories	**50 Year**	**141**	**$608,054**
All Categories	**100 Year**	**141**	**$1,115,069**
All Categories	**300 Year**	**141**	**$3,482,477**
All Categories	**700 Year**	**141**	**$6,293,668**

Source: GIS Analysis

Table 6-275: High Potential Loss Properties Exposed to the Thunderstorm Winds - Harnett County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$275
Agricultural	50 Year	1	$505
Agricultural	100 Year	1	$965
Agricultural	300 Year	1	$3,782
Agricultural	700 Year	1	$7,499
Commercial	25 Year	86	$221,061
Commercial	50 Year	86	$406,819
Commercial	100 Year	86	$704,618
Commercial	300 Year	86	$1,821,525
Commercial	700 Year	86	$2,950,088
Government	25 Year	88	$867,743
Government	50 Year	88	$1,746,549
Government	100 Year	88	$3,163,542
Government	300 Year	88	$7,887,439
Government	700 Year	88	$11,820,480
Industrial	25 Year	13	$60,240
Industrial	50 Year	13	$118,543
Industrial	100 Year	13	$214,573
Industrial	300 Year	13	$592,260
Industrial	700 Year	13	$994,753
Religious	25 Year	98	$330,596
Religious	50 Year	98	$596,276
Religious	100 Year	98	$996,309
Religious	300 Year	98	$2,322,352
Religious	700 Year	98	$3,544,690
Residential	25 Year	28	$33,641
Residential	50 Year	28	$60,928
Residential	100 Year	28	$111,156
Residential	300 Year	28	$358,040
Residential	700 Year	28	$638,742
All Categories	**25 Year**	**314**	**$1,513,556**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**314**	**$2,929,620**
All Categories	**100 Year**	**314**	**$5,191,163**
All Categories	**300 Year**	**314**	**$12,985,398**
All Categories	**700 Year**	**314**	**$19,956,252**

Source: GIS Analysis

Table 6-276: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Angier

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	10	$24,329
Commercial	50 Year	10	$41,859
Commercial	100 Year	10	$67,034
Commercial	300 Year	10	$152,162
Commercial	700 Year	10	$237,279
Government	25 Year	3	$15,451
Government	50 Year	3	$30,176
Government	100 Year	3	$61,568
Government	300 Year	3	$252,157
Government	700 Year	3	$481,841
Industrial	25 Year	4	$51,726
Industrial	50 Year	4	$93,658
Industrial	100 Year	4	$147,575
Industrial	300 Year	4	$304,280
Industrial	700 Year	4	$437,377
Religious	25 Year	8	$22,694
Religious	50 Year	8	$38,986
Religious	100 Year	8	$62,871
Religious	300 Year	8	$163,030
Religious	700 Year	8	$293,983
Residential	25 Year	4	$2,620
Residential	50 Year	4	$5,909
Residential	100 Year	4	$11,920
Residential	300 Year	4	$34,445

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	700 Year	4	$54,184
All Categories	**25 Year**	**29**	**$116,820**
All Categories	**50 Year**	**29**	**$210,588**
All Categories	**100 Year**	**29**	**$350,968**
All Categories	**300 Year**	**29**	**$906,074**
All Categories	**700 Year**	**29**	**$1,504,664**

Source: GIS Analysis

Table 6-277: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Benson

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$30,194
Commercial	50 Year	7	$67,255
Commercial	100 Year	7	$141,201
Commercial	300 Year	7	$534,888
Commercial	700 Year	7	$1,029,252
Government	25 Year	7	$10,579
Government	50 Year	7	$19,300
Government	100 Year	7	$38,317
Government	300 Year	7	$160,320
Government	700 Year	7	$343,170
Industrial	25 Year	4	$12,292
Industrial	50 Year	4	$28,528
Industrial	100 Year	4	$67,955
Industrial	300 Year	4	$378,061
Industrial	700 Year	4	$855,297
Religious	25 Year	4	$1,774
Religious	50 Year	4	$2,848
Religious	100 Year	4	$4,997
Religious	300 Year	4	$17,933
Religious	700 Year	4	$36,916
Utilities	25 Year	3	$14,132
Utilities	50 Year	3	$23,382

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	100 Year	3	$44,941
Utilities	300 Year	3	$209,060
Utilities	700 Year	3	$492,308
All Categories	**25 Year**	**25**	**$68,971**
All Categories	**50 Year**	**25**	**$141,313**
All Categories	**100 Year**	**25**	**$297,411**
All Categories	**300 Year**	**25**	**$1,300,262**
All Categories	**700 Year**	**25**	**$2,756,943**

Source: GIS Analysis

Table 6-278: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Broadway

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	2	$2,810
Government	50 Year	2	$4,302
Government	100 Year	2	$6,787
Government	300 Year	2	$18,185
Government	700 Year	2	$31,045
Religious	25 Year	2	$647
Religious	50 Year	2	$1,065
Religious	100 Year	2	$1,816
Religious	300 Year	2	$5,770
Religious	700 Year	2	$11,045
All Categories	**25 Year**	**4**	**$3,457**
All Categories	**50 Year**	**4**	**$5,367**
All Categories	**100 Year**	**4**	**$8,603**
All Categories	**300 Year**	**4**	**$23,955**
All Categories	**700 Year**	**4**	**$42,090**

Source: GIS Analysis

Table 6-279: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Coats

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$9,365
Commercial	50 Year	3	$15,148
Commercial	100 Year	3	$22,674
Commercial	300 Year	3	$41,989
Commercial	700 Year	3	$55,208
Government	25 Year	2	$60,747
Government	50 Year	2	$95,677
Government	100 Year	2	$137,801
Government	300 Year	2	$224,613
Government	700 Year	2	$258,576
Religious	25 Year	4	$8,764
Religious	50 Year	4	$14,371
Religious	100 Year	4	$22,960
Religious	300 Year	4	$57,380
Religious	700 Year	4	$100,337
Residential	25 Year	1	$249
Residential	50 Year	1	$435
Residential	100 Year	1	$799
Residential	300 Year	1	$2,733
Residential	700 Year	1	$5,104
All Categories	**25 Year**	**10**	**$79,125**
All Categories	**50 Year**	**10**	**$125,631**
All Categories	**100 Year**	**10**	**$184,234**
All Categories	**300 Year**	**10**	**$326,715**
All Categories	**700 Year**	**10**	**$419,225**

Source: GIS Analysis

Table 6-280: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Erwin

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	15	$38,508
Commercial	50 Year	15	$69,356

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	100 Year	15	$125,201
Commercial	300 Year	15	$404,663
Commercial	700 Year	15	$773,717
Government	25 Year	8	$9,003
Government	50 Year	8	$17,995
Government	100 Year	8	$36,369
Government	300 Year	8	$151,608
Government	700 Year	8	$316,525
Industrial	25 Year	5	$14,601
Industrial	50 Year	5	$28,069
Industrial	100 Year	5	$53,299
Industrial	300 Year	5	$178,510
Industrial	700 Year	5	$338,549
Religious	25 Year	15	$16,904
Religious	50 Year	15	$30,902
Religious	100 Year	15	$54,897
Religious	300 Year	15	$163,371
Religious	700 Year	15	$290,716
Residential	25 Year	1	$497
Residential	50 Year	1	$972
Residential	100 Year	1	$1,971
Residential	300 Year	1	$7,426
Residential	700 Year	1	$14,031
All Categories	**25 Year**	**44**	**$79,513**
All Categories	**50 Year**	**44**	**$147,294**
All Categories	**100 Year**	**44**	**$271,737**
All Categories	**300 Year**	**44**	**$905,578**
All Categories	**700 Year**	**44**	**$1,733,538**

Source: GIS Analysis

Table 6-281: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Lillington

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	15	$19,200
Commercial	50 Year	15	$32,649
Commercial	100 Year	15	$58,427
Commercial	300 Year	15	$188,382
Commercial	700 Year	15	$357,920
Government	25 Year	25	$48,468
Government	50 Year	25	$95,594
Government	100 Year	25	$184,954
Government	300 Year	25	$637,023
Government	700 Year	25	$1,194,333
Industrial	25 Year	7	$22,850
Industrial	50 Year	7	$42,072
Industrial	100 Year	7	$74,947
Industrial	300 Year	7	$219,343
Industrial	700 Year	7	$388,670
Religious	25 Year	7	$17,261
Religious	50 Year	7	$32,448
Religious	100 Year	7	$56,791
Religious	300 Year	7	$139,157
Religious	700 Year	7	$211,020
Residential	25 Year	4	$6,425
Residential	50 Year	4	$9,985
Residential	100 Year	4	$14,668
Residential	300 Year	4	$32,696
Residential	700 Year	4	$54,794
All Categories	**25 Year**	**58**	**$114,204**
All Categories	**50 Year**	**58**	**$212,748**
All Categories	**100 Year**	**58**	**$389,787**
All Categories	**300 Year**	**58**	**$1,216,601**
All Categories	**700 Year**	**58**	**$2,206,737**

Source: GIS Analysis

Table 6-282: High Potential Loss Properties Exposed to the Thunderstorm Winds - Johnston County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	2	$930
Agricultural	50 Year	2	$1,948
Agricultural	100 Year	2	$4,208
Agricultural	300 Year	2	$18,075
Agricultural	700 Year	2	$37,383
Commercial	25 Year	54	$92,453
Commercial	50 Year	54	$188,924
Commercial	100 Year	54	$364,899
Commercial	300 Year	54	$1,228,651
Commercial	700 Year	54	$2,284,259
Government	25 Year	25	$58,194
Government	50 Year	25	$124,179
Government	100 Year	25	$273,846
Government	300 Year	25	$1,424,019
Government	700 Year	25	$3,248,726
Industrial	25 Year	4	$4,244
Industrial	50 Year	4	$7,407
Industrial	100 Year	4	$14,290
Industrial	300 Year	4	$62,750
Industrial	700 Year	4	$144,006
Religious	25 Year	24	$25,026
Religious	50 Year	24	$52,258
Religious	100 Year	24	$107,624
Religious	300 Year	24	$447,082
Religious	700 Year	24	$915,640
Residential	25 Year	11	$26,953
Residential	50 Year	11	$51,153
Residential	100 Year	11	$96,528
Residential	300 Year	11	$325,074
Residential	700 Year	11	$590,547
Utilities	25 Year	2	$114,530

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	50 Year	2	$197,852
Utilities	100 Year	2	$363,812
Utilities	300 Year	2	$1,415,288
Utilities	700 Year	2	$3,157,386
All Categories	**25 Year**	**122**	**$322,330**
All Categories	**50 Year**	**122**	**$623,721**
All Categories	**100 Year**	**122**	**$1,225,207**
All Categories	**300 Year**	**122**	**$4,920,939**
All Categories	**700 Year**	**122**	**$10,377,947**

Source: GIS Analysis

Table 6-283: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Archer Lodge

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	2	$4,336
Government	50 Year	2	$8,688
Government	100 Year	2	$15,793
Government	300 Year	2	$42,812
Government	700 Year	2	$70,362
Religious	25 Year	1	$618
Religious	50 Year	1	$1,319
Religious	100 Year	1	$2,966
Religious	300 Year	1	$15,213
Religious	700 Year	1	$34,471
All Categories	**25 Year**	**3**	**$4,954**
All Categories	**50 Year**	**3**	**$10,007**
All Categories	**100 Year**	**3**	**$18,759**
All Categories	**300 Year**	**3**	**$58,025**
All Categories	**700 Year**	**3**	**$104,833**

Source: GIS Analysis

Table 6-284: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Clayton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	40	$54,944
Commercial	50 Year	40	$108,018
Commercial	100 Year	40	$207,886
Commercial	300 Year	40	$706,380
Commercial	700 Year	40	$1,323,088
Government	25 Year	11	$20,358
Government	50 Year	11	$33,886
Government	100 Year	11	$64,387
Government	300 Year	11	$279,807
Government	700 Year	11	$646,347
Industrial	25 Year	22	$29,356
Industrial	50 Year	22	$62,796
Industrial	100 Year	22	$139,673
Industrial	300 Year	22	$650,584
Industrial	700 Year	22	$1,402,572
Religious	25 Year	11	$10,164
Religious	50 Year	11	$18,726
Religious	100 Year	11	$35,954
Religious	300 Year	11	$140,866
Religious	700 Year	11	$302,038
Residential	25 Year	8	$253,502
Residential	50 Year	8	$430,570
Residential	100 Year	8	$653,568
Residential	300 Year	8	$1,226,539
Residential	700 Year	8	$1,777,082
Utilities	25 Year	4	$40,652
Utilities	50 Year	4	$67,045
Utilities	100 Year	4	$126,480
Utilities	300 Year	4	$564,331
Utilities	700 Year	4	$1,319,919
All Categories	**25 Year**	**96**	**$408,976**
All Categories	**50 Year**	**96**	**$721,041**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**100 Year**	**96**	**$1,227,948**
All Categories	**300 Year**	**96**	**$3,568,507**
All Categories	**700 Year**	**96**	**$6,771,046**

Source: GIS Analysis

Table 6-285: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Four Oaks

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$3,248
Commercial	50 Year	3	$6,853
Commercial	100 Year	3	$13,891
Commercial	300 Year	3	$51,961
Commercial	700 Year	3	$99,963
Government	25 Year	3	$8,225
Government	50 Year	3	$15,838
Government	100 Year	3	$31,676
Government	300 Year	3	$115,156
Government	700 Year	3	$218,644
Industrial	25 Year	1	$1,511
Industrial	50 Year	1	$2,374
Industrial	100 Year	1	$3,761
Industrial	300 Year	1	$9,925
Industrial	700 Year	1	$16,116
All Categories	**25 Year**	**7**	**$12,984**
All Categories	**50 Year**	**7**	**$25,065**
All Categories	**100 Year**	**7**	**$49,328**
All Categories	**300 Year**	**7**	**$177,042**
All Categories	**700 Year**	**7**	**$334,723**

Source: GIS Analysis

Table 6-286: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Kenly

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$7,641
Commercial	50 Year	7	$14,753
Commercial	100 Year	7	$30,095
Commercial	300 Year	7	$123,144
Commercial	700 Year	7	$251,040
Government	25 Year	1	$454
Government	50 Year	1	$998
Government	100 Year	1	$2,166
Government	300 Year	1	$12,410
Government	700 Year	1	$29,987
Industrial	25 Year	1	$457
Industrial	50 Year	1	$844
Industrial	100 Year	1	$1,553
Industrial	300 Year	1	$4,942
Industrial	700 Year	1	$8,900
Religious	25 Year	1	$299
Religious	50 Year	1	$486
Religious	100 Year	1	$858
Religious	300 Year	1	$3,169
Religious	700 Year	1	$6,928
Utilities	25 Year	1	$15,125
Utilities	50 Year	1	$26,412
Utilities	100 Year	1	$52,996
Utilities	300 Year	1	$255,630
Utilities	700 Year	1	$596,739
All Categories	**25 Year**	**11**	**$23,976**
All Categories	**50 Year**	**11**	**$43,493**
All Categories	**100 Year**	**11**	**$87,668**
All Categories	**300 Year**	**11**	**$399,295**
All Categories	**700 Year**	**11**	**$893,594**

Source: GIS Analysis

Table 6-287: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Micro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$2,803
Commercial	50 Year	3	$6,046
Commercial	100 Year	3	$12,400
Commercial	300 Year	3	$48,035
Commercial	700 Year	3	$94,682
Government	25 Year	2	$5,856
Government	50 Year	2	$10,721
Government	100 Year	2	$21,790
Government	300 Year	2	$100,363
Government	700 Year	2	$233,758
Industrial	25 Year	1	$595
Industrial	50 Year	1	$1,292
Industrial	100 Year	1	$2,928
Industrial	300 Year	1	$15,076
Industrial	700 Year	1	$34,096
All Categories	**25 Year**	**6**	**$9,254**
All Categories	**50 Year**	**6**	**$18,059**
All Categories	**100 Year**	**6**	**$37,118**
All Categories	**300 Year**	**6**	**$163,474**
All Categories	**700 Year**	**6**	**$362,536**

Source: GIS Analysis

Table 6-288: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Pine Level

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	2	$2,599
Commercial	50 Year	2	$6,028
Commercial	100 Year	2	$13,287
Commercial	300 Year	2	$58,797
Commercial	700 Year	2	$119,134
Government	25 Year	1	$2,289
Government	50 Year	1	$4,174

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	100 Year	1	$7,880
Government	300 Year	1	$30,544
Government	700 Year	1	$58,177
Religious	25 Year	1	$399
Religious	50 Year	1	$985
Religious	100 Year	1	$2,394
Religious	300 Year	1	$14,191
Religious	700 Year	1	$33,166
Residential	25 Year	1	$10,422
Residential	50 Year	1	$15,362
Residential	100 Year	1	$22,293
Residential	300 Year	1	$54,261
Residential	700 Year	1	$94,440
All Categories	**25 Year**	**5**	**$15,709**
All Categories	**50 Year**	**5**	**$26,549**
All Categories	**100 Year**	**5**	**$45,854**
All Categories	**300 Year**	**5**	**$157,793**
All Categories	**700 Year**	**5**	**$304,917**

Source: GIS Analysis

Table 6-289: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Princeton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$534
Commercial	50 Year	1	$1,179
Commercial	100 Year	1	$2,629
Commercial	300 Year	1	$15,199
Commercial	700 Year	1	$37,484
Government	25 Year	3	$5,026
Government	50 Year	3	$10,050
Government	100 Year	3	$21,850
Government	300 Year	3	$110,192
Government	700 Year	3	$251,719

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	25 Year	2	$1,221
Religious	50 Year	2	$2,633
Religious	100 Year	2	$5,966
Religious	300 Year	2	$33,214
Religious	700 Year	2	$78,154
Residential	25 Year	1	$231
Residential	50 Year	1	$614
Residential	100 Year	1	$1,442
Residential	300 Year	1	$5,860
Residential	700 Year	1	$10,720
Utilities	25 Year	1	$16,970
Utilities	50 Year	1	$32,715
Utilities	100 Year	1	$69,720
Utilities	300 Year	1	$347,910
Utilities	700 Year	1	$798,816
All Categories	**25 Year**	**8**	**$23,982**
All Categories	**50 Year**	**8**	**$47,191**
All Categories	**100 Year**	**8**	**$101,607**
All Categories	**300 Year**	**8**	**$512,375**
All Categories	**700 Year**	**8**	**$1,176,893**

Source: GIS Analysis

Table 6-290: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Selma

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$30,680
Commercial	50 Year	16	$67,813
Commercial	100 Year	16	$138,226
Commercial	300 Year	16	$481,985
Commercial	700 Year	16	$881,984
Government	25 Year	3	$7,797
Government	50 Year	3	$16,535
Government	100 Year	3	$37,809

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	300 Year	3	$212,354
Government	700 Year	3	$501,089
Industrial	25 Year	5	$7,893
Industrial	50 Year	5	$14,162
Industrial	100 Year	5	$27,855
Industrial	300 Year	5	$125,921
Industrial	700 Year	5	$279,191
Religious	25 Year	3	$3,124
Religious	50 Year	3	$6,668
Religious	100 Year	3	$13,686
Religious	300 Year	3	$54,207
Religious	700 Year	3	$110,982
Utilities	25 Year	3	$12,065
Utilities	50 Year	3	$19,982
Utilities	100 Year	3	$38,186
Utilities	300 Year	3	$174,952
Utilities	700 Year	3	$410,689
All Categories	**25 Year**	**30**	**$61,559**
All Categories	**50 Year**	**30**	**$125,160**
All Categories	**100 Year**	**30**	**$255,762**
All Categories	**300 Year**	**30**	**$1,049,419**
All Categories	**700 Year**	**30**	**$2,183,935**

Source: GIS Analysis

Table 6-291: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	48	$109,648
Commercial	50 Year	48	$223,635
Commercial	100 Year	48	$440,476
Commercial	300 Year	48	$1,637,558
Commercial	700 Year	48	$3,296,103
Government	25 Year	25	$36,881

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	50 Year	25	$69,774
Government	100 Year	25	$140,925
Government	300 Year	25	$613,375
Government	700 Year	25	$1,331,093
Industrial	25 Year	9	$31,926
Industrial	50 Year	9	$55,694
Industrial	100 Year	9	$103,956
Industrial	300 Year	9	$402,683
Industrial	700 Year	9	$872,662
Religious	25 Year	12	$6,857
Religious	50 Year	12	$12,710
Religious	100 Year	12	$24,146
Religious	300 Year	12	$87,048
Religious	700 Year	12	$171,359
Residential	25 Year	4	$14,767
Residential	50 Year	4	$23,837
Residential	100 Year	4	$38,637
Residential	300 Year	4	$106,437
Residential	700 Year	4	$180,408
Utilities	25 Year	8	$54,093
Utilities	50 Year	8	$88,887
Utilities	100 Year	8	$161,282
Utilities	300 Year	8	$650,794
Utilities	700 Year	8	$1,492,065
All Categories	**25 Year**	**106**	**$254,172**
All Categories	**50 Year**	**106**	**$474,537**
All Categories	**100 Year**	**106**	**$909,422**
All Categories	**300 Year**	**106**	**$3,497,895**
All Categories	**700 Year**	**106**	**$7,343,690**

Source: GIS Analysis

Table 6-292: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Wilson's Mills

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$597
Agricultural	50 Year	1	$1,556
Agricultural	100 Year	1	$3,607
Agricultural	300 Year	1	$13,656
Agricultural	700 Year	1	$23,903
Government	25 Year	1	$2,322
Government	50 Year	1	$4,779
Government	100 Year	1	$10,413
Government	300 Year	1	$51,090
Government	700 Year	1	$115,434
Industrial	25 Year	1	$1,859
Industrial	50 Year	1	$3,247
Industrial	100 Year	1	$5,778
Industrial	300 Year	1	$17,459
Industrial	700 Year	1	$30,113
Religious	25 Year	2	$2,567
Religious	50 Year	2	$4,354
Religious	100 Year	2	$7,204
Religious	300 Year	2	$20,229
Religious	700 Year	2	$38,362
Utilities	25 Year	6	$13,672
Utilities	50 Year	6	$22,992
Utilities	100 Year	6	$44,107
Utilities	300 Year	6	$200,033
Utilities	700 Year	6	$466,360
All Categories	**25 Year**	**11**	**$21,017**
All Categories	**50 Year**	**11**	**$36,928**
All Categories	**100 Year**	**11**	**$71,109**
All Categories	**300 Year**	**11**	**$302,467**
All Categories	**700 Year**	**11**	**$674,172**

Category	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-293: High Potential Loss Properties Exposed to the Thunderstorm Winds - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	63	$300,222
Commercial	50 Year	63	$546,797
Commercial	100 Year	63	$985,274
Commercial	300 Year	63	$2,976,650
Commercial	700 Year	63	$5,298,395
Government	25 Year	37	$291,583
Government	50 Year	37	$564,138
Government	100 Year	37	$1,005,539
Government	300 Year	37	$2,536,415
Government	700 Year	37	$3,865,511
Industrial	25 Year	22	$719,242
Industrial	50 Year	22	$1,412,587
Industrial	100 Year	22	$2,494,038
Industrial	300 Year	22	$6,263,312
Industrial	700 Year	22	$9,499,115
Religious	25 Year	9	$46,937
Religious	50 Year	9	$74,382
Religious	100 Year	9	$119,150
Religious	300 Year	9	$352,897
Religious	700 Year	9	$684,541
Residential	25 Year	7	$7,278
Residential	50 Year	7	$15,689
Residential	100 Year	7	$31,046
Residential	300 Year	7	$99,038
Residential	700 Year	7	$169,664
Utilities	25 Year	8	$4,919
Utilities	50 Year	8	$7,864
Utilities	100 Year	8	$12,595

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	300 Year	8	$33,449
Utilities	700 Year	8	$68,034
All Categories	**25 Year**	**146**	**$1,370,181**
All Categories	**50 Year**	**146**	**$2,621,457**
All Categories	**100 Year**	**146**	**$4,647,642**
All Categories	**300 Year**	**146**	**$12,261,761**
All Categories	**700 Year**	**146**	**$19,585,260**

Source: GIS Analysis

Table 6-294: High Potential Loss Properties Exposed to the Thunderstorm Winds - Lee County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	32	$111,875
Commercial	50 Year	32	$194,264
Commercial	100 Year	32	$325,520
Commercial	300 Year	32	$786,535
Commercial	700 Year	32	$1,201,752
Government	25 Year	11	$49,385
Government	50 Year	11	$83,293
Government	100 Year	11	$138,390
Government	300 Year	11	$391,918
Government	700 Year	11	$748,212
Industrial	25 Year	16	$192,936
Industrial	50 Year	16	$315,740
Industrial	100 Year	16	$511,968
Industrial	300 Year	16	$1,262,871
Industrial	700 Year	16	$2,007,835
Religious	25 Year	5	$6,727
Religious	50 Year	5	$11,227
Religious	100 Year	5	$17,889
Religious	300 Year	5	$38,385
Religious	700 Year	5	$54,736

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	25 Year	1	$1,413
Residential	50 Year	1	$3,284
Residential	100 Year	1	$5,981
Residential	300 Year	1	$12,322
Residential	700 Year	1	$17,207
Utilities	25 Year	1	$419
Utilities	50 Year	1	$689
Utilities	100 Year	1	$1,218
Utilities	300 Year	1	$4,551
Utilities	700 Year	1	$10,261
All Categories	**25 Year**	**66**	**$362,755**
All Categories	**50 Year**	**66**	**$608,497**
All Categories	**100 Year**	**66**	**$1,000,966**
All Categories	**300 Year**	**66**	**$2,496,582**
All Categories	**700 Year**	**66**	**$4,040,003**

Source: GIS Analysis

Table 6-295: High Potential Loss Properties Exposed to the Thunderstorm Winds - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	13	$36,741
Commercial	50 Year	13	$66,140
Commercial	100 Year	13	$109,738
Commercial	300 Year	13	$247,802
Commercial	700 Year	13	$358,246
Government	25 Year	9	$25,338
Government	50 Year	9	$50,230
Government	100 Year	9	$95,072
Government	300 Year	9	$308,074
Government	700 Year	9	$567,150
Industrial	25 Year	2	$6,670
Industrial	50 Year	2	$12,102

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	100 Year	2	$20,345
Industrial	300 Year	2	$55,520
Industrial	700 Year	2	$109,470
Religious	25 Year	7	$20,037
Religious	50 Year	7	$38,845
Religious	100 Year	7	$69,623
Religious	300 Year	7	$189,023
Religious	700 Year	7	$308,006
Residential	25 Year	6	$34,580
Residential	50 Year	6	$52,224
Residential	100 Year	6	$73,410
Residential	300 Year	6	$146,678
Residential	700 Year	6	$229,169
Utilities	25 Year	9	$11,919
Utilities	50 Year	9	$19,625
Utilities	100 Year	9	$35,766
Utilities	300 Year	9	$145,758
Utilities	700 Year	9	$334,931
All Categories	**25 Year**	**46**	**$135,285**
All Categories	**50 Year**	**46**	**$239,166**
All Categories	**100 Year**	**46**	**$403,954**
All Categories	**300 Year**	**46**	**$1,092,855**
All Categories	**700 Year**	**46**	**$1,906,972**

Source: GIS Analysis

Table 6-296: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Aberdeen

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	12	$41,995
Commercial	50 Year	12	$88,041
Commercial	100 Year	12	$172,359
Commercial	300 Year	12	$568,366
Commercial	700 Year	12	$1,021,407

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	4	$15,128
Government	50 Year	4	$30,994
Government	100 Year	4	$60,650
Government	300 Year	4	$216,134
Government	700 Year	4	$416,964
Industrial	25 Year	5	$28,745
Industrial	50 Year	5	$58,486
Industrial	100 Year	5	$114,685
Industrial	300 Year	5	$380,419
Industrial	700 Year	5	$655,457
Religious	25 Year	2	$1,485
Religious	50 Year	2	$3,231
Religious	100 Year	2	$6,446
Religious	300 Year	2	$20,128
Religious	700 Year	2	$34,109
Residential	25 Year	2	$3,967
Residential	50 Year	2	$6,250
Residential	100 Year	2	$9,126
Residential	300 Year	2	$23,436
Residential	700 Year	2	$46,647
All Categories	**25 Year**	**25**	**$91,320**
All Categories	**50 Year**	**25**	**$187,002**
All Categories	**100 Year**	**25**	**$363,266**
All Categories	**300 Year**	**25**	**$1,208,483**
All Categories	**700 Year**	**25**	**$2,174,584**

Source: GIS Analysis

Table 6-297: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Cameron

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$1,089
Government	50 Year	1	$1,795
Government	100 Year	1	$3,337

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	300 Year	1	$14,358
Government	700 Year	1	$33,353
All Categories	**25 Year**	**1**	**$1,089**
All Categories	**50 Year**	**1**	**$1,795**
All Categories	**100 Year**	**1**	**$3,337**
All Categories	**300 Year**	**1**	**$14,358**
All Categories	**700 Year**	**1**	**$33,353**

Source: GIS Analysis

Table 6-298: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Carthage

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	7	$7,658
Commercial	50 Year	7	$13,770
Commercial	100 Year	7	$24,993
Commercial	300 Year	7	$78,028
Commercial	700 Year	7	$140,040
Government	25 Year	11	$47,099
Government	50 Year	11	$98,672
Government	100 Year	11	$187,094
Government	300 Year	11	$561,979
Government	700 Year	11	$954,783
Residential	25 Year	2	$10,661
Residential	50 Year	2	$15,927
Residential	100 Year	2	$21,615
Residential	300 Year	2	$36,015
Residential	700 Year	2	$49,497
All Categories	**25 Year**	**20**	**$65,418**
All Categories	**50 Year**	**20**	**$128,369**
All Categories	**100 Year**	**20**	**$233,702**
All Categories	**300 Year**	**20**	**$676,022**
All Categories	**700 Year**	**20**	**$1,144,320**

Category	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-299: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Pinebluff

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$112,170
Commercial	50 Year	1	$230,748
Commercial	100 Year	1	$422,636
Commercial	300 Year	1	$977,543
Commercial	700 Year	1	$1,330,034
Utilities	25 Year	4	$13,374
Utilities	50 Year	4	$22,059
Utilities	100 Year	4	$41,689
Utilities	300 Year	4	$186,830
Utilities	700 Year	4	$437,335
All Categories	**25 Year**	**5**	**$125,544**
All Categories	**50 Year**	**5**	**$252,807**
All Categories	**100 Year**	**5**	**$464,325**
All Categories	**300 Year**	**5**	**$1,164,373**
All Categories	**700 Year**	**5**	**$1,767,369**

Source: GIS Analysis

Table 6-300: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Robbins

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$688
Commercial	50 Year	1	$1,004
Commercial	100 Year	1	$1,593
Commercial	300 Year	1	$3,977
Commercial	700 Year	1	$6,590
Government	25 Year	1	$7,467
Government	50 Year	1	$16,488
Government	100 Year	1	$37,638

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	300 Year	1	$145,913
Government	700 Year	1	$257,897
Industrial	25 Year	1	$39,526
Industrial	50 Year	1	$55,451
Industrial	100 Year	1	$76,967
Industrial	300 Year	1	$177,991
Industrial	700 Year	1	$317,864
Religious	25 Year	1	$516
Religious	50 Year	1	$794
Religious	100 Year	1	$1,248
Religious	300 Year	1	$3,673
Religious	700 Year	1	$6,574
Residential	25 Year	1	$338
Residential	50 Year	1	$557
Residential	100 Year	1	$908
Residential	300 Year	1	$2,545
Residential	700 Year	1	$4,227
All Categories	**25 Year**	**5**	**$48,535**
All Categories	**50 Year**	**5**	**$74,294**
All Categories	**100 Year**	**5**	**$118,354**
All Categories	**300 Year**	**5**	**$334,099**
All Categories	**700 Year**	**5**	**$593,152**

Source: GIS Analysis

Table 6-301: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Southern Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	66	$325,213
Commercial	50 Year	66	$627,333
Commercial	100 Year	66	$1,122,969
Commercial	300 Year	66	$2,906,507
Commercial	700 Year	66	$4,599,750

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	27	$61,144
Government	50 Year	27	$119,922
Government	100 Year	27	$222,857
Government	300 Year	27	$671,503
Government	700 Year	27	$1,156,374
Industrial	25 Year	1	$6,915
Industrial	50 Year	1	$16,121
Industrial	100 Year	1	$33,725
Industrial	300 Year	1	$119,282
Industrial	700 Year	1	$212,214
Religious	25 Year	6	$8,479
Religious	50 Year	6	$16,362
Religious	100 Year	6	$31,896
Religious	300 Year	6	$112,634
Religious	700 Year	6	$210,253
Residential	25 Year	46	$56,965
Residential	50 Year	46	$104,160
Residential	100 Year	46	$175,443
Residential	300 Year	46	$453,762
Residential	700 Year	46	$762,036
All Categories	**25 Year**	**146**	**$458,716**
All Categories	**50 Year**	**146**	**$883,898**
All Categories	**100 Year**	**146**	**$1,586,890**
All Categories	**300 Year**	**146**	**$4,263,688**
All Categories	**700 Year**	**146**	**$6,940,627**

Source: GIS Analysis

Table 6-302: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Taylortown

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	3	$19,426
Commercial	50 Year	3	$40,614
Commercial	100 Year	3	$75,082

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	300 Year	3	$204,231
Commercial	700 Year	3	$322,180
Government	25 Year	2	$8,462
Government	50 Year	2	$18,399
Government	100 Year	2	$37,244
Government	300 Year	2	$127,321
Government	700 Year	2	$233,031
All Categories	**25 Year**	**5**	**$27,888**
All Categories	**50 Year**	**5**	**$59,013**
All Categories	**100 Year**	**5**	**$112,326**
All Categories	**300 Year**	**5**	**$331,552**
All Categories	**700 Year**	**5**	**$555,211**

Source: GIS Analysis

Table 6-303: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town of Vass

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$1,706
Commercial	50 Year	1	$2,816
Commercial	100 Year	1	$4,360
Commercial	300 Year	1	$8,892
Commercial	700 Year	1	$13,524
Government	25 Year	3	$10,310
Government	50 Year	3	$21,060
Government	100 Year	3	$39,819
Government	300 Year	3	$125,056
Government	700 Year	3	$223,149
Residential	25 Year	3	$24,045
Residential	50 Year	3	$37,539
Residential	100 Year	3	$63,258
Residential	300 Year	3	$224,987
Residential	700 Year	3	$434,239
All Categories	**25 Year**	**7**	**$36,061**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**50 Year**	**7**	**$61,415**
All Categories	**100 Year**	**7**	**$107,437**
All Categories	**300 Year**	**7**	**$358,935**
All Categories	**700 Year**	**7**	**$670,912**

Source: GIS Analysis

Table 6-304: High Potential Loss Properties Exposed to the Thunderstorm Winds - Village of Foxfire

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$5,548
Commercial	50 Year	1	$9,258
Commercial	100 Year	1	$14,230
Commercial	300 Year	1	$26,763
Commercial	700 Year	1	$34,911
All Categories	**25 Year**	**1**	**$5,548**
All Categories	**50 Year**	**1**	**$9,258**
All Categories	**100 Year**	**1**	**$14,230**
All Categories	**300 Year**	**1**	**$26,763**
All Categories	**700 Year**	**1**	**$34,911**

Source: GIS Analysis

Table 6-305: High Potential Loss Properties Exposed to the Thunderstorm Winds - Village of Pinehurst

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	54	$282,776
Commercial	50 Year	54	$556,556
Commercial	100 Year	54	$1,029,272
Commercial	300 Year	54	$2,850,373
Commercial	700 Year	54	$4,713,933
Government	25 Year	4	$6,104
Government	50 Year	4	$13,165
Government	100 Year	4	$25,828
Government	300 Year	4	$82,567

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	700 Year	4	$141,545
Religious	25 Year	4	$9,136
Religious	50 Year	4	$18,380
Religious	100 Year	4	$33,539
Religious	300 Year	4	$93,906
Religious	700 Year	4	$152,706
Residential	25 Year	66	$142,464
Residential	50 Year	66	$232,484
Residential	100 Year	66	$358,514
Residential	300 Year	66	$842,188
Residential	700 Year	66	$1,413,734
Utilities	25 Year	1	$2,106
Utilities	50 Year	1	$3,467
Utilities	100 Year	1	$6,333
Utilities	300 Year	1	$25,972
Utilities	700 Year	1	$59,758
All Categories	**25 Year**	**129**	**$442,586**
All Categories	**50 Year**	**129**	**$824,052**
All Categories	**100 Year**	**129**	**$1,453,486**
All Categories	**300 Year**	**129**	**$3,895,006**
All Categories	**700 Year**	**129**	**$6,481,676**

Source: GIS Analysis

Table 6-306: High Potential Loss Properties Exposed to the Thunderstorm Winds - Village of Whispering Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	6	$4,791
Commercial	50 Year	6	$8,705
Commercial	100 Year	6	$15,699
Commercial	300 Year	6	$46,029
Commercial	700 Year	6	$80,339
Government	25 Year	1	$6,759

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	50 Year	1	$14,051
Government	100 Year	1	$26,725
Government	300 Year	1	$80,173
Government	700 Year	1	$136,456
All Categories	**25 Year**	**7**	**$11,550**
All Categories	**50 Year**	**7**	**$22,756**
All Categories	**100 Year**	**7**	**$42,424**
All Categories	**300 Year**	**7**	**$126,202**
All Categories	**700 Year**	**7**	**$216,795**

Source: GIS Analysis

6.5.14 Tornado

There is not sufficient data to identify a preferred path that tornados seek in the Region. The jurisdictions of Mooresville and Salisbury will experience more damage, as they are the most densely developed areas of the county; however, all of the Region and the jurisdictions in the planning area are vulnerable to the effects of a tornado. All mitigation projects will consider a countywide approach. All of the inventoried assets in the Region are exposed to potential tornado activity. Any specific vulnerability of individual assets would depend greatly on individual design, building characteristics, and any existing mitigation measures currently in place. Such site-specific vulnerability determinations are outside the scope of this risk assessment but may be considered during future plan updates.

The largest impact of tornadoes is the economic damage caused by widespread destruction along their paths. More directly, there are many people killed by these storms, and to a lesser extent pets and farm animals. The major damage is the complete destruction of homes, buildings, and farms, the wrecking of cars and trucks, and the loss of power distribution systems. Winds as high as 300 mph blow down walls, tear up trees, and throw debris in every direction at high speeds. Indirect losses include workers who cannot report to jobs and commercial entities that most close to repair damages. The rate of onset of tornado events is rapid, giving those in danger minimal time to seek shelter. The current average lead time according to NOAA is 13 minutes. Injury may result from the direct impact of a tornado, or it may occur afterward when people walk among debris and enter damaged buildings. A study of injuries after a tornado in Marion, Illinois, showed that 50 percent of the tornado-related injuries were suffered during rescue attempts, cleanup, and other post-tornado activities. Common causes of injury included falling objects and heavy, rolling objects. Because tornadoes often damage power lines, gas lines, or electrical systems, there is a risk of fire, electrocution, or an explosion.

The following tables provide counts and values by jurisdiction relevant to Tornado hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-307: Population Impacted by the EF0 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-308: Population Impacted by the EF1 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-309: Population Impacted by the EF2 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-310: Population Impacted by the EF3 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-311: Population Impacted by the EF4 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	42,266	100%	7,745	7,745	100%	2,608	2,608	100%
Town of Goldston	263	263	100%	48	48	100%	16	16	100%
Town of Pittsboro	6,417	6,417	100%	1,176	1,176	100%	396	396	100%
Town of Siler City	13,243	13,243	100%	2,427	2,427	100%	817	817	100%
Subtotal Chatham	*62,189*	*62,189*	*100%*	*11396*	*11396*	*100%*	*3837*	*3837*	*100%*
Harnett									
City of Dunn	10,132	10,132	100%	1,056	1,056	100%	822	822	100%
Harnett County (Unincorporated Area)	85,585	85,585	100%	8,921	8,921	100%	6,948	6,948	100%
Town of Angier	5,712	5,712	100%	594	594	100%	462	462	100%
Town of Broadway	1,813	1,813	100%	246	246	100%	133	133	100%
Town of Coats	2,860	2,860	100%	298	298	100%	232	232	100%
Town of Erwin	6,272	6,272	100%	654	654	100%	509	509	100%
Town of Lillington	4,071	4,071	100%	424	424	100%	330	330	100%
Subtotal Harnett	*121,431*	*121,431*	*100%*	*12702*	*12702*	*100%*	*9815*	*9815*	*100%*
Johnston									
Johnston County (Unincorporated Area)	94,330	94,330	100%	9,632	9,632	100%	7,169	7,169	100%
Town of Archer Lodge	4,150	4,150	100%	424	424	100%	315	315	100%
Town of Benson	4,986	4,986	100%	509	509	100%	379	379	100%
Town of Clayton	27,459	27,459	100%	2,804	2,804	100%	2,087	2,087	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Four Oaks	4,719	4,719	100%	482	482	100%	359	359	100%
Town of Kenly	2,087	2,087	100%	222	222	100%	156	156	100%
Town of Micro	950	950	100%	97	97	100%	72	72	100%
Town of Pine Level	2,767	2,767	100%	283	283	100%	210	210	100%
Town of Princeton	1,729	1,729	100%	177	177	100%	131	131	100%
Town of Selma	8,565	8,565	100%	875	875	100%	651	651	100%
Town of Smithfield	14,194	14,194	100%	1,449	1,449	100%	1,079	1,079	100%
Town of Wilson's Mills	3,324	3,324	100%	339	339	100%	253	253	100%
Subtotal Johnston	*164,274*	*164,274*	*100%*	*16784*	*16784*	*100%*	*12482*	*12482*	*100%*
Lee									
City of Sanford	30,778	30,778	100%	4,222	4,222	100%	2,245	2,245	100%
Lee County (Unincorporated Area)	25,355	25,355	100%	3,478	3,478	100%	1,850	1,850	100%
Subtotal Lee	*56,133*	*56,133*	*100%*	*7700*	*7700*	*100%*	*4095*	*4095*	*100%*
Moore									
Moore County (Unincorporated Area)	34,917	34,917	100%	7,910	7,910	100%	1,996	1,996	100%
Town of Aberdeen	7,402	7,402	100%	1,677	1,677	100%	423	423	100%
Town of Cameron	655	655	100%	148	148	100%	37	37	100%
Town of Carthage	2,724	2,724	100%	617	617	100%	156	156	100%
Town of Pinebluff	2,609	2,609	100%	591	591	100%	149	149	100%
Town of Robbins	1,907	1,907	100%	432	432	100%	109	109	100%
Town of Southern Pines	15,394	15,394	100%	3,487	3,487	100%	880	880	100%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Taylortown	754	754	100%	171	171	100%	43	43	100%
Town of Vass	1,294	1,294	100%	293	293	100%	74	74	100%
Village of Foxfire	1,195	1,195	100%	271	271	100%	68	68	100%
Village of Pinehurst	15,514	15,514	100%	3,514	3,514	100%	887	887	100%
Village of Whispering Pines	3,864	3,864	100%	875	875	100%	221	221	100%
Subtotal Moore	*88,229*	*88,229*	*100%*	*19986*	*19986*	*100%*	*5043*	*5043*	*100%*
TOTAL PLAN	**492,256**	**492,256**	**100%**	**68568**	**68568**	**100%**	**35272**	**35272**	**100%**

Source: GIS Analysis

Table 6-312: Population Impacted by the EF5 Tornado

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	0	0%	7,745	0	0%	2,608	0	0%
Town of Goldston	263	0	0%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	0	0%	1,176	0	0%	396	0	0%
Town of Siler City	13,243	0	0%	2,427	0	0%	817	0	0%
Subtotal Chatham	*62,189*	*0*	*0%*	*11396*	*0*	*0%*	*3837*	*0*	*0%*
Harnett									
City of Dunn	10,132	0	0%	1,056	0	0%	822	0	0%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Harnett County (Unincorporated Area)	85,585	0	0%	8,921	0	0%	6,948	0	0%
Town of Angier	5,712	0	0%	594	0	0%	462	0	0%
Town of Broadway	1,813	0	0%	246	0	0%	133	0	0%
Town of Coats	2,860	0	0%	298	0	0%	232	0	0%
Town of Erwin	6,272	0	0%	654	0	0%	509	0	0%
Town of Lillington	4,071	0	0%	424	0	0%	330	0	0%
Subtotal Harnett	*121,431*	*0*	*0%*	*12702*	*0*	*0%*	*9815*	*0*	*0%*
Johnston									
Johnston County (Unincorporated Area)	94,330	0	0%	9,632	0	0%	7,169	0	0%
Town of Archer Lodge	4,150	0	0%	424	0	0%	315	0	0%
Town of Benson	4,986	0	0%	509	0	0%	379	0	0%
Town of Clayton	27,459	0	0%	2,804	0	0%	2,087	0	0%
Town of Four Oaks	4,719	0	0%	482	0	0%	359	0	0%
Town of Kenly	2,087	0	0%	222	0	0%	156	0	0%
Town of Micro	950	0	0%	97	0	0%	72	0	0%
Town of Pine Level	2,767	0	0%	283	0	0%	210	0	0%
Town of Princeton	1,729	0	0%	177	0	0%	131	0	0%
Town of Selma	8,565	0	0%	875	0	0%	651	0	0%
Town of Smithfield	14,194	0	0%	1,449	0	0%	1,079	0	0%
Town of Wilson's Mills	3,324	0	0%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*0*	*0%*	*16784*	*0*	*0%*	*12482*	*0*	*0%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Lee									
City of Sanford	30,778	0	0%	4,222	0	0%	2,245	0	0%
Lee County (Unincorporated Area)	25,355	0	0%	3,478	0	0%	1,850	0	0%
Subtotal Lee	*56,133*	*0*	*0%*	*7700*	*0*	*0%*	*4095*	*0*	*0%*
Moore									
Moore County (Unincorporated Area)	34,917	0	0%	7,910	0	0%	1,996	0	0%
Town of Aberdeen	7,402	0	0%	1,677	0	0%	423	0	0%
Town of Cameron	655	0	0%	148	0	0%	37	0	0%
Town of Carthage	2,724	0	0%	617	0	0%	156	0	0%
Town of Pinebluff	2,609	0	0%	591	0	0%	149	0	0%
Town of Robbins	1,907	0	0%	432	0	0%	109	0	0%
Town of Southern Pines	15,394	0	0%	3,487	0	0%	880	0	0%
Town of Taylortown	754	0	0%	171	0	0%	43	0	0%
Town of Vass	1,294	0	0%	293	0	0%	74	0	0%
Village of Foxfire	1,195	0	0%	271	0	0%	68	0	0%
Village of Pinehurst	15,514	0	0%	3,514	0	0%	887	0	0%
Village of Whispering Pines	3,864	0	0%	875	0	0%	221	0	0%
Subtotal Moore	*88,229*	*0*	*0%*	*19986*	*0*	*0%*	*5043*	*0*	*0%*
TOTAL PLAN	**492,256**	**0**	**0%**	**68568**	**0**	**0%**	**35272**	**0**	**0%**

Source: GIS Analysis

Table 6-313: Buildings Impacted by the EF0 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$256,211,974	4,716	16.9%	$89,206,634	384	1.4%	$11,451,834	27,826	99.9%	$356,870,442
Town of Goldston	244	244	100%	193	79.1%	$1,942,378	41	16.8%	$1,121,990	10	4.1%	$198,653	244	100%	$3,263,021
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$31,215,444	409	11.1%	$15,209,153	94	2.6%	$3,783,123	3,676	99.9%	$50,207,720
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$45,681,849	982	14.8%	$38,605,359	153	2.3%	$9,513,530	6,621	99.9%	$93,800,738
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$335,051,645*	*6,148*	*16%*	*$144,143,136*	*641*	*1.7%*	*$24,947,140*	*38,367*	*99.9%*	*$504,141,921*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$29,311,978	545	11.1%	$20,804,147	126	2.6%	$5,382,124	4,924	100%	$55,498,249
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$252,058,698	2,644	6.5%	$49,184,197	643	1.6%	$35,515,438	40,440	100%	$336,758,333
Town of Angier	2,541	2,490	98%	2,344	92.2%	$16,419,224	158	6.2%	$3,504,709	39	1.5%	$2,311,346	2,541	100%	$22,235,278
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$6,176,948	98	9.4%	$1,614,127	19	1.8%	$841,856	1,048	100%	$8,632,930
Town of Coats	1,457	1,457	100%	1,364	93.6%	$8,512,514	69	4.7%	$1,046,504	24	1.6%	$2,512,330	1,457	100%	$12,071,348
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$19,104,374	120	3.8%	$6,657,042	72	2.3%	$2,373,904	3,115	99.9%	$28,135,320
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$9,726,952	159	10%	$7,133,756	114	7.2%	$4,225,625	1,580	99.4%	$21,086,333
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$355,252,423*	*4,389*	*7.6%*	*$99,220,504*	*1,087*	*1.9%*	*$55,047,187*	*57,863*	*100%*	*$509,520,111*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$259,355,025	9,432	19.7%	$54,574,752	448	0.9%	$12,597,101	47,784	100%	$326,526,879
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$10,070,961	133	8.3%	$491,777	4	0.3%	$161,820	1,599	100%	$10,724,558
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$13,941,735	596	21.6%	$9,276,022	50	1.8%	$1,884,564	2,758	99.9%	$25,102,320

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$72,980,136	751	7.6%	$24,376,761	102	1%	$5,887,777	9,841	100%	$103,244,674
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$13,952,548	539	19%	$3,377,267	27	1%	$1,399,811	2,838	100%	$18,729,626
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$6,449,982	216	16.4%	$3,784,229	20	1.5%	$353,206	1,313	99.9%	$10,587,418
Town of Micro	577	534	92.5%	436	75.6%	$2,535,952	106	18.4%	$869,020	35	6.1%	$1,336,804	577	100%	$4,741,776
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$7,081,414	185	13%	$1,445,756	22	1.5%	$548,468	1,426	100%	$9,075,639
Town of Princeton	1,000	724	72.4%	824	82.4%	$4,837,660	140	14%	$1,475,396	35	3.5%	$1,280,959	999	99.9%	$7,594,015
Town of Selma	3,784	3,520	93%	3,176	83.9%	$18,332,316	530	14%	$11,793,507	75	2%	$1,978,058	3,781	99.9%	$32,103,880
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$41,375,803	956	13.8%	$37,109,818	197	2.8%	$6,673,538	6,916	99.9%	$85,159,160
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$7,683,888	139	9.9%	$1,844,900	31	2.2%	$649,544	1,390	99.5%	$10,178,332
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$444,655,685*	*13,127*	*16.7%*	*$141,143,183*	*996*	*1.3%*	*$32,867,086*	*78,464*	*100%*	*$618,665,957*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$75,994,388	1,469	12.1%	$103,965,577	309	2.6%	$22,361,950	12,098	99.9%	$202,321,915
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$88,103,151	1,932	13.1%	$40,356,313	128	0.9%	$7,218,136	14,753	99.9%	$135,677,599
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$164,097,539*	*3,401*	*12.7%*	*$144,321,890*	*437*	*1.6%*	*$29,580,086*	*26,851*	*99.9%*	*$337,999,514*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$170,710,957	5,035	17.5%	$72,205,397	382	1.3%	$11,575,615	28,687	100%	$254,491,968
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$25,498,874	467	13.7%	$24,660,516	83	2.4%	$2,909,081	3,401	100%	$53,068,471
Town of Cameron	594	497	83.7%	491	82.7%	$2,800,023	83	14%	$1,216,763	20	3.4%	$565,002	594	100%	$4,581,789
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$10,848,340	211	10.5%	$7,648,577	172	8.6%	$5,897,173	2,007	99.8%	$24,394,090
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$10,114,855	76	5.1%	$3,275,929	12	0.8%	$154,635	1,496	99.7%	$13,545,418
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$7,460,829	160	11.2%	$4,243,083	48	3.4%	$1,767,861	1,424	99.8%	$13,471,773

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$80,631,891	845	10.9%	$40,250,003	199	2.6%	$7,950,947	7,754	100%	$128,832,841
Town of Taylortown	458	457	99.8%	413	90.2%	$2,983,991	31	6.8%	$2,819,121	14	3.1%	$870,242	458	100%	$6,673,354
Town of Vass	960	948	98.8%	738	76.9%	$5,411,462	189	19.7%	$3,051,272	33	3.4%	$1,383,453	960	100%	$9,846,187
Village of Foxfire	589	330	56%	515	87.4%	$7,185,185	68	11.5%	$704,658	6	1%	$74,066	589	100%	$7,963,909
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$135,998,314	345	4.2%	$33,506,293	47	0.6%	$1,503,449	8,290	100%	$171,008,056
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$23,893,108	85	4.7%	$1,638,674	17	0.9%	$734,790	1,795	100%	$26,266,573
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$483,537,829*	*7,595*	*13.2%*	*$195,220,286*	*1,033*	*1.8%*	*$35,386,314*	*57,455*	*100%*	*$714,144,429*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$1,782,595,121**	**34,660**	**13.4%**	**$724,048,999**	**4,194**	**1.6%**	**$177,827,813**	**259,000**	**99.9%**	**$2,684,471,932**

Source: GIS Analysis

Table 6-314: Buildings Impacted by the EF1 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$1,867,210,130	4,716	16.9%	$601,681,583	384	1.4%	$70,204,176	27,826	99.9%	$2,539,095,888
Town of Goldston	244	244	100%	193	79.1%	$14,254,128	41	16.8%	$7,501,270	10	4.1%	$1,541,258	244	100%	$23,296,657
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$227,727,027	409	11.1%	$84,450,292	94	2.6%	$22,240,690	3,676	99.9%	$334,418,009
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$330,800,724	982	14.8%	$249,703,059	153	2.3%	$49,663,454	6,621	99.9%	$630,167,236
Subtotal Chatham	38,411	36,765	95.7%	31,578	82.2%	$2,439,992,009	6,148	16%	$943,336,204	641	1.7%	$143,649,578	38,367	99.9%	$3,526,977,790

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$212,035,510	545	11.1%	$124,918,238	126	2.6%	$30,271,818	4,924	100%	$367,225,566
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$1,823,412,648	2,644	6.5%	$315,378,200	643	1.6%	$188,554,708	40,440	100%	$2,327,345,556
Town of Angier	2,541	2,490	98%	2,344	92.2%	$118,182,035	158	6.2%	$22,130,405	39	1.5%	$12,216,621	2,541	100%	$152,529,061
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$44,306,977	98	9.4%	$10,454,790	19	1.8%	$4,216,864	1,048	100%	$58,978,632
Town of Coats	1,457	1,457	100%	1,364	93.6%	$61,485,652	69	4.7%	$6,483,966	24	1.6%	$12,332,602	1,457	100%	$80,302,220
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$139,147,572	120	3.8%	$41,156,104	72	2.3%	$13,772,756	3,115	99.9%	$194,076,433
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$69,478,470	159	10%	$44,630,351	114	7.2%	$27,147,213	1,580	99.4%	$141,256,034
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$2,568,245,181*	*4,389*	*7.6%*	*$626,024,198*	*1,087*	*1.9%*	*$299,328,440*	*57,863*	*100%*	*$3,493,597,821*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$1,869,319,270	9,432	19.7%	$363,872,030	448	0.9%	$68,647,297	47,784	100%	$2,301,838,597
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$73,290,121	133	8.3%	$3,599,010	4	0.3%	$922,147	1,599	100%	$77,811,278
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$100,196,317	596	21.6%	$60,872,144	50	1.8%	$10,815,858	2,758	99.9%	$171,884,319
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$530,832,393	751	7.6%	$161,986,905	102	1%	$29,577,083	9,841	100%	$722,396,382
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$100,089,293	539	19%	$23,200,673	27	1%	$6,828,003	2,838	100%	$130,117,969
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$45,743,519	216	16.4%	$23,838,471	20	1.5%	$2,220,602	1,313	99.9%	$71,802,592
Town of Micro	577	534	92.5%	436	75.6%	$18,121,259	106	18.4%	$5,778,479	35	6.1%	$5,995,901	577	100%	$29,895,640
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$51,284,163	185	13%	$9,486,489	22	1.5%	$3,093,756	1,426	100%	$63,864,408
Town of Princeton	1,000	724	72.4%	824	82.4%	$34,829,399	140	14%	$9,179,610	35	3.5%	$6,195,194	999	99.9%	$50,204,203
Town of Selma	3,784	3,520	93%	3,176	83.9%	$131,452,694	530	14%	$77,323,596	75	2%	$11,136,855	3,781	99.9%	$219,913,146
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$298,958,913	956	13.8%	$240,331,955	197	2.8%	$40,936,509	6,916	99.9%	$580,227,377

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$54,772,849	139	9.9%	$12,369,349	31	2.2%	$3,805,099	1,390	99.5%	$70,947,296
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$3,208,693,873*	*13,127*	*16.7%*	*$930,966,567*	*996*	*1.3%*	*$179,358,446*	*78,464*	*100%*	*$4,319,018,888*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$546,120,138	1,469	12.1%	$667,123,753	309	2.6%	$119,832,385	12,098	99.9%	$1,333,076,277
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$630,125,849	1,932	13.1%	$264,988,200	128	0.9%	$41,552,684	14,753	99.9%	$936,666,733
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$1,176,245,987*	*3,401*	*12.7%*	*$932,111,953*	*437*	*1.6%*	*$161,385,069*	*26,851*	*99.9%*	*$2,269,743,010*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$1,218,890,212	5,035	17.5%	$477,594,839	382	1.3%	$75,587,366	28,687	100%	$1,772,072,417
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$182,226,374	467	13.7%	$156,860,922	83	2.4%	$15,575,280	3,401	100%	$354,662,576
Town of Cameron	594	497	83.7%	491	82.7%	$19,772,211	83	14%	$7,612,521	20	3.4%	$3,141,763	594	100%	$30,526,495
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$77,058,826	211	10.5%	$49,599,359	172	8.6%	$34,586,087	2,007	99.8%	$161,244,273
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$72,385,429	76	5.1%	$18,714,293	12	0.8%	$1,198,469	1,496	99.7%	$92,298,191
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$53,017,764	160	11.2%	$25,983,990	48	3.4%	$9,777,799	1,424	99.8%	$88,779,553
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$576,689,833	845	10.9%	$258,720,380	199	2.6%	$47,227,476	7,754	100%	$882,637,689
Town of Taylortown	458	457	99.8%	413	90.2%	$21,416,087	31	6.8%	$16,777,221	14	3.1%	$4,100,494	458	100%	$42,293,801
Town of Vass	960	948	98.8%	738	76.9%	$37,993,262	189	19.7%	$18,614,800	33	3.4%	$7,230,559	960	100%	$63,838,621
Village of Foxfire	589	330	56%	515	87.4%	$51,748,632	68	11.5%	$5,813,741	6	1%	$596,275	589	100%	$58,158,648
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$996,875,515	345	4.2%	$204,154,473	47	0.6%	$10,816,207	8,290	100%	$1,211,846,196
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$175,231,554	85	4.7%	$12,262,571	17	0.9%	$3,945,674	1,795	100%	$191,439,799
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$3,483,305,699*	*7,595*	*13.2%*	*$1,252,709,110*	*1,033*	*1.8%*	*$213,783,449*	*57,455*	*100%*	*$4,949,798,259*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$12,876,482,749**	**34,660**	**13.4%**	**$4,685,148,032**	**4,194**	**1.6%**	**$997,504,982**	**259,000**	**99.9%**	**$18,559,135,768**

Source: GIS Analysis

Table 6-315: Buildings Impacted by the EF2 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$3,531,723,249	4,716	16.9%	$1,167,931,310	384	1.4%	$231,278,351	27,826	99.9%	$4,930,932,910
Town of Goldston	244	244	100%	193	79.1%	$26,753,514	41	16.8%	$18,031,128	10	4.1%	$5,517,100	244	100%	$50,301,742
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$431,239,723	409	11.1%	$200,216,251	94	2.6%	$71,976,151	3,676	99.9%	$703,432,124
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$617,983,977	982	14.8%	$575,309,957	153	2.3%	$151,841,959	6,621	99.9%	$1,345,135,893
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$4,607,700,463*	*6,148*	*16%*	*$1,961,488,646*	*641*	*1.7%*	*$460,613,561*	*38,367*	*99.9%*	*$7,029,802,669*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$414,554,729	545	11.1%	$308,533,944	126	2.6%	$96,026,082	4,924	100%	$819,114,756
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$3,326,949,031	2,644	6.5%	$582,651,770	643	1.6%	$581,524,200	40,440	100%	$4,491,125,002
Town of Angier	2,541	2,490	98%	2,344	92.2%	$227,450,972	158	6.2%	$52,238,852	39	1.5%	$37,591,877	2,541	100%	$317,281,700
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$189,968,908	596	21.6%	$134,506,712	50	1.8%	$34,619,054	2,758	99.9%	$359,094,674
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$80,437,012	98	9.4%	$22,617,426	19	1.8%	$12,608,808	1,048	100%	$115,663,246
Town of Coats	1,457	1,457	100%	1,364	93.6%	$114,644,500	69	4.7%	$14,625,967	24	1.6%	$36,456,932	1,457	100%	$165,727,399
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$259,325,713	120	3.8%	$104,214,064	72	2.3%	$44,312,193	3,115	99.9%	$407,851,970

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$131,328,424	159	10%	$107,531,829	114	7.2%	$91,121,879	1,580	99.4%	$329,982,132
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$4,744,659,289*	*4,389*	*7.6%*	*$1,326,920,564*	*1,087*	*1.9%*	*$934,261,025*	*57,863*	*100%*	*$7,005,840,879*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$3,352,061,022	9,432	19.7%	$720,256,825	448	0.9%	$214,427,342	47,784	100%	$4,286,745,189
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$133,792,664	133	8.3%	$7,776,522	4	0.3%	$2,942,046	1,599	100%	$144,511,233
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$1,004,356,414	751	7.6%	$375,954,511	102	1%	$88,553,909	9,841	100%	$1,468,864,835
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$184,123,047	539	19%	$53,784,603	27	1%	$20,104,986	2,838	100%	$258,012,636
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$85,607,918	216	16.4%	$52,845,703	20	1.5%	$7,388,862	1,313	99.9%	$145,842,483
Town of Micro	577	534	92.5%	436	75.6%	$34,051,282	106	18.4%	$12,843,599	35	6.1%	$16,758,821	577	100%	$63,653,702
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$94,315,519	185	13%	$20,231,496	22	1.5%	$9,824,023	1,426	100%	$124,371,039
Town of Princeton	1,000	724	72.4%	824	82.4%	$65,685,043	140	14%	$21,191,958	35	3.5%	$18,151,067	999	99.9%	$105,028,068
Town of Selma	3,784	3,520	93%	3,176	83.9%	$247,554,634	530	14%	$176,264,520	75	2%	$35,333,622	3,781	99.9%	$459,152,776
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$569,345,724	956	13.8%	$579,242,772	197	2.8%	$134,853,509	6,916	99.9%	$1,283,442,006
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$95,202,310	139	9.9%	$25,229,370	31	2.2%	$12,291,341	1,390	99.5%	$132,723,021
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$5,866,095,577*	*13,127*	*16.7%*	*$2,045,621,879*	*996*	*1.3%*	*$560,629,528*	*78,464*	*100%*	*$8,472,346,988*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$1,073,481,833	1,469	12.1%	$1,577,753,216	309	2.6%	$371,319,988	12,098	99.9%	$3,022,555,037
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$1,114,810,774	1,932	13.1%	$570,742,604	128	0.9%	$133,224,004	14,753	99.9%	$1,818,777,381
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$2,188,292,607*	*3,401*	*12.7%*	*$2,148,495,820*	*437*	*1.6%*	*$504,543,992*	*26,851*	*99.9%*	*$4,841,332,418*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$2,188,062,003	5,035	17.5%	$895,681,714	382	1.3%	$255,298,503	28,687	100%	$3,339,042,220
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$362,716,179	467	13.7%	$381,449,384	83	2.4%	$48,241,066	3,401	100%	$792,406,629
Town of Cameron	594	497	83.7%	491	82.7%	$34,409,980	83	14%	$17,777,093	20	3.4%	$9,912,596	594	100%	$62,099,670
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$145,349,594	211	10.5%	$120,272,948	172	8.6%	$111,811,228	2,007	99.8%	$377,433,769
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$130,143,233	76	5.1%	$49,502,341	12	0.8%	$4,288,680	1,496	99.7%	$183,934,254
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$101,192,825	160	11.2%	$64,166,272	48	3.4%	$30,771,169	1,424	99.8%	$196,130,266
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,155,939,504	845	10.9%	$596,628,228	199	2.6%	$153,525,966	7,754	100%	$1,906,093,699
Town of Taylortown	458	457	99.8%	413	90.2%	$39,763,951	31	6.8%	$36,720,175	14	3.1%	$11,830,745	458	100%	$88,314,871
Town of Vass	960	948	98.8%	738	76.9%	$71,360,554	189	19.7%	$39,693,319	33	3.4%	$22,120,449	960	100%	$133,174,321
Village of Foxfire	589	330	56%	515	87.4%	$101,660,904	68	11.5%	$12,050,615	6	1%	$2,157,662	589	100%	$115,869,181
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$1,913,333,657	345	4.2%	$455,179,356	47	0.6%	$37,806,638	8,290	100%	$2,406,319,652
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$333,891,867	85	4.7%	$26,399,833	17	0.9%	$12,238,914	1,795	100%	$372,530,614
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$6,577,824,251*	*7,595*	*13.2%*	*$2,695,521,278*	*1,033*	*1.8%*	*$700,003,616*	*57,455*	*100%*	*$9,973,349,146*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$23,984,572,187**	**34,660**	**13.4%**	**$10,178,048,187**	**4,194**	**1.6%**	**$3,160,051,722**	**259,000**	**99.9%**	**$37,322,672,100**

Source: GIS Analysis

Table 6-316: Buildings Impacted by the EF3 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$4,234,097,042	4,716	16.9%	$1,337,579,218	384	1.4%	$362,780,960	27,826	99.9%	$5,934,457,220
Town of Goldston	244	244	100%	193	79.1%	$31,328,265	41	16.8%	$21,132,807	10	4.1%	$8,762,123	244	100%	$61,223,195
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$516,497,263	409	11.1%	$263,086,547	94	2.6%	$112,583,274	3,676	99.9%	$892,167,084
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$741,358,954	982	14.8%	$684,001,818	153	2.3%	$235,285,314	6,621	99.9%	$1,660,646,086
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$5,523,281,524*	*6,148*	*16%*	*$2,305,800,390*	*641*	*1.7%*	*$719,411,671*	*38,367*	*99.9%*	*$8,548,493,585*
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$521,984,762	545	11.1%	$400,379,338	126	2.6%	$149,715,989	4,924	100%	$1,072,080,089
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$3,898,675,634	2,644	6.5%	$676,138,586	643	1.6%	$902,428,582	40,440	100%	$5,477,242,801
Town of Angier	2,541	2,490	98%	2,344	92.2%	$284,898,458	158	6.2%	$64,741,844	39	1.5%	$58,313,857	2,541	100%	$407,954,159
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$235,436,099	596	21.6%	$158,073,944	50	1.8%	$54,055,237	2,758	99.9%	$447,565,280
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$95,587,197	98	9.4%	$29,167,202	19	1.8%	$19,462,671	1,048	100%	$144,217,070
Town of Coats	1,457	1,457	100%	1,364	93.6%	$138,021,743	69	4.7%	$18,873,576	24	1.6%	$56,160,719	1,457	100%	$213,056,038
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$306,350,644	120	3.8%	$133,511,813	72	2.3%	$69,247,030	3,115	99.9%	$509,109,486
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$164,209,572	159	10%	$137,609,136	114	7.2%	$143,347,983	1,580	99.4%	$445,166,690
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$5,645,164,109*	*4,389*	*7.6%*	*$1,618,495,439*	*1,087*	*1.9%*	*$1,452,732,068*	*57,863*	*100%*	*$8,716,391,613*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$3,890,490,725	9,432	19.7%	$821,692,893	448	0.9%	$333,471,390	47,784	100%	$5,045,655,007
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$154,964,531	133	8.3%	$8,479,251	4	0.3%	$4,591,385	1,599	100%	$168,035,167

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$1,211,113,516	751	7.6%	$444,458,464	102	1%	$136,721,375	9,841	100%	$1,792,293,354
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$222,121,368	539	19%	$64,248,799	27	1%	$30,949,197	2,838	100%	$317,319,364
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$107,707,166	216	16.4%	$66,705,676	20	1.5%	$11,608,345	1,313	99.9%	$186,021,188
Town of Micro	577	534	92.5%	436	75.6%	$42,332,869	106	18.4%	$14,763,908	35	6.1%	$25,551,405	577	100%	$82,648,181
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$111,365,074	185	13%	$23,795,422	22	1.5%	$15,319,671	1,426	100%	$150,480,167
Town of Princeton	1,000	724	72.4%	824	82.4%	$80,668,868	140	14%	$26,594,889	35	3.5%	$27,916,418	999	99.9%	$135,180,175
Town of Selma	3,784	3,520	93%	3,176	83.9%	$306,193,293	530	14%	$216,371,474	75	2%	$55,091,720	3,781	99.9%	$577,656,487
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$700,906,158	956	13.8%	$719,628,325	197	2.8%	$211,533,485	6,916	99.9%	$1,632,067,969
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$109,504,392	139	9.9%	$28,897,732	31	2.2%	$19,220,473	1,390	99.5%	$157,622,596
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$6,937,367,960*	*13,127*	*16.7%*	*$2,435,636,833*	*996*	*1.3%*	*$871,974,864*	*78,464*	*100%*	*$10,244,979,655*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$1,376,389,042	1,469	12.1%	$1,932,426,594	309	2.6%	$576,684,391	12,098	99.9%	$3,885,500,027
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$1,296,293,372	1,932	13.1%	$669,909,100	128	0.9%	$208,072,771	14,753	99.9%	$2,174,275,244
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$2,672,682,414*	*3,401*	*12.7%*	*$2,602,335,694*	*437*	*1.6%*	*$784,757,162*	*26,851*	*99.9%*	*$6,059,775,271*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$2,596,058,326	5,035	17.5%	$1,043,828,266	382	1.3%	$402,003,646	28,687	100%	$4,041,890,238
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$475,500,255	467	13.7%	$477,971,823	83	2.4%	$74,915,946	3,401	100%	$1,028,388,024
Town of Cameron	594	497	83.7%	491	82.7%	$40,523,342	83	14%	$22,109,534	20	3.4%	$15,441,255	594	100%	$78,074,131
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$183,502,058	211	10.5%	$154,564,447	172	8.6%	$174,862,881	2,007	99.8%	$512,929,387
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$153,852,322	76	5.1%	$64,688,394	12	0.8%	$6,810,869	1,496	99.7%	$225,351,585
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$129,093,433	160	11.2%	$82,231,880	48	3.4%	$47,913,275	1,424	99.8%	$259,238,587

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,522,489,233	845	10.9%	$776,351,185	199	2.6%	$240,313,238	7,754	100%	$2,539,153,655
Town of Taylortown	458	457	99.8%	413	90.2%	$48,333,564	31	6.8%	$49,349,555	14	3.1%	$18,145,196	458	100%	$115,828,316
Town of Vass	960	948	98.8%	738	76.9%	$91,955,022	189	19.7%	$49,542,130	33	3.4%	$34,280,141	960	100%	$175,777,293
Village of Foxfire	589	330	56%	515	87.4%	$129,714,646	68	11.5%	$13,486,204	6	1%	$3,432,001	589	100%	$146,632,852
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$2,301,334,474	345	4.2%	$607,523,601	47	0.6%	$59,837,477	8,290	100%	$2,968,695,551
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$398,042,193	85	4.7%	$32,114,943	17	0.9%	$19,011,133	1,795	100%	$449,168,270
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$8,070,398,868*	*7,595*	*13.2%*	*$3,373,761,962*	*1,033*	*1.8%*	*$1,096,967,058*	*57,455*	*100%*	*$12,541,127,889*
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$28,848,894,875**	**34,660**	**13.4%**	**$12,336,030,318**	**4,194**	**1.6%**	**$4,925,842,823**	**259,000**	**99.9%**	**$46,110,768,013**

Source: GIS Analysis

Table 6-317: Buildings Impacted by the EF4 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	26,213	94.1%	22,726	81.6%	$4,263,417,856	4,716	16.9%	$1,362,731,585	384	1.4%	$385,083,571	27,826	99.9%	$6,011,233,012
Town of Goldston	244	244	100%	193	79.1%	$31,367,890	41	16.8%	$21,731,080	10	4.1%	$9,101,051	244	100%	$62,200,021
Town of Pittsboro	3,678	3,678	100%	3,173	86.3%	$519,901,206	409	11.1%	$275,048,551	94	2.6%	$120,091,945	3,676	99.9%	$915,041,702
Town of Siler City	6,630	6,630	100%	5,486	82.7%	$747,241,860	982	14.8%	$703,811,337	153	2.3%	$255,096,478	6,621	99.9%	$1,706,149,675
Subtotal Chatham	*38,411*	*36,765*	*95.7%*	*31,578*	*82.2%*	*$5,561,928,812*	*6,148*	*16%*	*$2,363,322,553*	*641*	*1.7%*	*$769,373,045*	*38,367*	*99.9%*	*$8,694,624,410*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Harnett															
City of Dunn	4,925	4,925	100%	4,253	86.4%	$531,007,007	545	11.1%	$419,056,411	126	2.6%	$160,601,315	4,924	100%	$1,110,664,733
Harnett County (Unincorporated Area)	40,441	30,818	76.2%	37,153	91.9%	$3,912,168,097	2,644	6.5%	$694,868,697	643	1.6%	$975,919,129	40,440	100%	$5,582,955,923
Town of Angier	2,541	2,490	98%	2,344	92.2%	$289,732,548	158	6.2%	$67,180,882	39	1.5%	$63,104,707	2,541	100%	$420,018,137
Town of Benson	2,761	2,580	93.4%	2,112	76.5%	$239,029,846	596	21.6%	$161,581,277	50	1.8%	$57,836,639	2,758	99.9%	$458,447,763
Town of Broadway	1,048	1,021	97.4%	931	88.8%	$96,302,161	98	9.4%	$30,179,269	19	1.8%	$21,242,137	1,048	100%	$147,723,567
Town of Coats	1,457	1,457	100%	1,364	93.6%	$139,261,977	69	4.7%	$19,548,200	24	1.6%	$61,508,448	1,457	100%	$220,318,625
Town of Erwin	3,117	3,117	100%	2,923	93.8%	$307,601,835	120	3.8%	$139,582,497	72	2.3%	$73,985,874	3,115	99.9%	$521,170,206
Town of Lillington	1,589	1,398	88%	1,307	82.3%	$167,114,261	159	10%	$142,237,960	114	7.2%	$151,393,203	1,580	99.4%	$460,745,423
Subtotal Harnett	*57,879*	*47,806*	*82.6%*	*52,387*	*90.5%*	*$5,682,217,732*	*4,389*	*7.6%*	*$1,674,235,193*	*1,087*	*1.9%*	*$1,565,591,452*	*57,863*	*100%*	*$8,922,044,377*
Johnston															
Johnston County (Unincorporated Area)	47,795	20,553	43%	37,904	79.3%	$3,898,981,420	9,432	19.7%	$836,399,348	448	0.9%	$359,286,558	47,784	100%	$5,094,667,326
Town of Archer Lodge	1,599	0	0%	1,462	91.4%	$155,015,430	133	8.3%	$8,523,713	4	0.3%	$4,917,049	1,599	100%	$168,456,192
Town of Clayton	9,845	2,575	26.2%	8,988	91.3%	$1,221,300,222	751	7.6%	$454,854,568	102	1%	$149,157,497	9,841	100%	$1,825,312,287
Town of Four Oaks	2,838	2,593	91.4%	2,272	80.1%	$224,440,193	539	19%	$65,467,770	27	1%	$33,935,977	2,838	100%	$323,843,940
Town of Kenly	1,314	1,257	95.7%	1,077	82%	$109,847,533	216	16.4%	$68,963,806	20	1.5%	$12,288,375	1,313	99.9%	$191,099,714
Town of Micro	577	534	92.5%	436	75.6%	$43,037,012	106	18.4%	$15,106,173	35	6.1%	$28,481,232	577	100%	$86,624,417
Town of Pine Level	1,426	1,250	87.7%	1,219	85.5%	$111,910,028	185	13%	$24,371,409	22	1.5%	$16,428,153	1,426	100%	$152,709,591
Town of Princeton	1,000	724	72.4%	824	82.4%	$81,742,911	140	14%	$27,634,336	35	3.5%	$30,657,439	999	99.9%	$140,034,686
Town of Selma	3,784	3,520	93%	3,176	83.9%	$310,848,864	530	14%	$222,610,884	75	2%	$59,092,553	3,781	99.9%	$592,552,301
Town of Smithfield	6,924	5,022	72.5%	5,763	83.2%	$710,214,643	956	13.8%	$742,658,257	197	2.8%	$224,534,832	6,916	99.9%	$1,677,407,733

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Wilson's Mills	1,397	1,087	77.8%	1,220	87.3%	$109,739,387	139	9.9%	$29,410,343	31	2.2%	$20,512,386	1,390	99.5%	$159,662,116
Subtotal Johnston	*78,499*	*39,115*	*49.8%*	*64,341*	*82%*	*$6,977,077,643*	*13,127*	*16.7%*	*$2,496,000,607*	*996*	*1.3%*	*$939,292,051*	*78,464*	*100%*	*$10,412,370,303*
Lee															
City of Sanford	12,108	10,066	83.1%	10,320	85.2%	$1,405,906,028	1,469	12.1%	$1,994,402,493	309	2.6%	$622,792,335	12,098	99.9%	$4,023,100,857
Lee County (Unincorporated Area)	14,761	9,408	63.7%	12,693	86%	$1,301,055,068	1,932	13.1%	$686,415,659	128	0.9%	$222,529,970	14,753	99.9%	$2,210,000,697
Subtotal Lee	*26,869*	*19,474*	*72.5%*	*23,013*	*85.6%*	*$2,706,961,096*	*3,401*	*12.7%*	*$2,680,818,152*	*437*	*1.6%*	*$845,322,305*	*26,851*	*99.9%*	*$6,233,101,554*
Moore															
Moore County (Unincorporated Area)	28,697	21,033	73.3%	23,270	81.1%	$2,616,501,253	5,035	17.5%	$1,068,251,579	382	1.3%	$423,861,638	28,687	100%	$4,108,614,470
Town of Aberdeen	3,401	2,417	71.1%	2,851	83.8%	$487,909,033	467	13.7%	$497,414,640	83	2.4%	$80,916,206	3,401	100%	$1,066,239,879
Town of Cameron	594	497	83.7%	491	82.7%	$40,856,618	83	14%	$23,055,325	20	3.4%	$16,589,322	594	100%	$80,501,265
Town of Carthage	2,011	1,955	97.2%	1,624	80.8%	$187,212,386	211	10.5%	$161,406,289	172	8.6%	$186,579,774	2,007	99.8%	$535,198,450
Town of Pinebluff	1,500	996	66.4%	1,408	93.9%	$154,901,808	76	5.1%	$68,674,146	12	0.8%	$7,074,884	1,496	99.7%	$230,650,838
Town of Robbins	1,427	1,325	92.9%	1,216	85.2%	$131,937,441	160	11.2%	$86,160,162	48	3.4%	$51,513,311	1,424	99.8%	$269,610,914
Town of Southern Pines	7,755	5,419	69.9%	6,710	86.5%	$1,563,315,391	845	10.9%	$805,683,856	199	2.6%	$256,022,306	7,754	100%	$2,625,021,553
Town of Taylortown	458	457	99.8%	413	90.2%	$48,900,850	31	6.8%	$51,456,420	14	3.1%	$20,022,994	458	100%	$120,380,264
Town of Vass	960	948	98.8%	738	76.9%	$94,299,234	189	19.7%	$51,599,545	33	3.4%	$37,159,808	960	100%	$183,058,587
Village of Foxfire	589	330	56%	515	87.4%	$132,345,619	68	11.5%	$13,585,699	6	1%	$3,555,161	589	100%	$149,486,479
Village of Pinehurst	8,291	3,687	44.5%	7,898	95.3%	$2,316,961,892	345	4.2%	$625,444,467	47	0.6%	$62,528,330	8,290	100%	$3,004,934,689
Village of Whispering Pines	1,795	1,075	59.9%	1,693	94.3%	$400,013,136	85	4.7%	$33,030,119	17	0.9%	$20,524,990	1,795	100%	$453,568,246
Subtotal Moore	*57,478*	*40,139*	*69.8%*	*48,827*	*84.9%*	*$8,175,154,661*	*7,595*	*13.2%*	*$3,485,762,247*	*1,033*	*1.8%*	*$1,166,348,724*	*57,455*	*100%*	*$12,827,265,634*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
TOTAL PLAN	**259,136**	**183,299**	**70.7%**	**220,146**	**85%**	**$29,103,339,944**	**34,660**	**13.4%**	**$12,700,138,752**	**4,194**	**1.6%**	**$5,285,927,577**	**259,000**	**99.9%**	**$47,089,406,278**

Source: GIS Analysis

Table 6-318: Buildings Impacted by the EF5 Tornado

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Goldston	244	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pittsboro	3,678	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Siler City	6,630	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Chatham	*38,411*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Harnett															
City of Dunn	4,925	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Harnett County (Unincorporated Area)	40,441	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Angier	2,541	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Benson	2,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Broadway	1,048	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Coats	1,457	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Erwin	3,117	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Lillington	1,589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Harnett	*57,879*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Johnston															
Johnston County (Unincorporated Area)	47,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Archer Lodge	1,599	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Clayton	9,845	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Four Oaks	2,838	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Kenly	1,314	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Micro	577	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pine Level	1,426	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Princeton	1,000	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Selma	3,784	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Smithfield	6,924	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Wilson's Mills	1,397	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Johnston	*78,499*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
Lee															
City of Sanford	12,108	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Lee County (Unincorporated Area)	14,761	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Lee	*26,869*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Moore															
Moore County (Unincorporated Area)	28,697	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Aberdeen	3,401	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Cameron	594	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Carthage	2,011	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Pinebluff	1,500	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Robbins	1,427	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Southern Pines	7,755	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Taylortown	458	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Vass	960	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Foxfire	589	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Pinehurst	8,291	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Village of Whispering Pines	1,795	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Moore	*57,478*	*0*	*0%*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*	*0*	*0%*	*$0*
TOTAL PLAN	**259,136**	**0**	**0%**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-319: Critical Facilities Exposed to the Tornado - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	4	$424,415
Banking and Finance	EF1	4	$2,635,722
Banking and Finance	EF2	4	$7,475,025
Banking and Finance	EF3	4	$9,500,290
Banking and Finance	EF4	4	$9,593,410
Commercial Facilities	EF0	641	$28,305,783
Commercial Facilities	EF1	641	$199,675,941
Commercial Facilities	EF2	641	$500,712,950
Commercial Facilities	EF3	641	$658,587,948
Commercial Facilities	EF4	641	$683,139,268
Critical Manufacturing	EF0	375	$21,092,982
Critical Manufacturing	EF1	375	$150,050,994
Critical Manufacturing	EF2	375	$343,186,065
Critical Manufacturing	EF3	375	$373,279,233
Critical Manufacturing	EF4	375	$375,232,378
Emergency Services	EF0	10	$349,176
Emergency Services	EF1	10	$2,811,081
Emergency Services	EF2	10	$10,172,084
Emergency Services	EF3	10	$16,179,831
Emergency Services	EF4	10	$16,760,453
Energy	EF0	5	$4,433,051
Energy	EF1	5	$31,998,276
Energy	EF2	5	$72,307,090
Energy	EF3	5	$77,520,257
Energy	EF4	5	$77,520,257
Food and Agriculture	EF0	3,697	$37,636,157
Food and Agriculture	EF1	3,697	$248,162,300
Food and Agriculture	EF2	3,697	$351,439,445
Food and Agriculture	EF3	3,697	$360,126,483

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF4	3,697	$360,126,483
Government Facilities	EF0	173	$6,404,628
Government Facilities	EF1	173	$29,570,962
Government Facilities	EF2	173	$84,244,313
Government Facilities	EF3	173	$128,906,954
Government Facilities	EF4	173	$142,816,880
Healthcare and Public Health	EF0	73	$2,053,339
Healthcare and Public Health	EF1	73	$14,007,403
Healthcare and Public Health	EF2	73	$46,068,539
Healthcare and Public Health	EF3	73	$71,344,014
Healthcare and Public Health	EF4	73	$73,854,424
Transportation Systems	EF0	124	$4,331,020
Transportation Systems	EF1	124	$24,480,525
Transportation Systems	EF2	124	$54,135,133
Transportation Systems	EF3	124	$79,610,332
Transportation Systems	EF4	124	$83,365,385
Water	EF0	27	$31,097,591
Water	EF1	27	$224,466,007
Water	EF2	27	$507,229,944
Water	EF3	27	$543,800,000
Water	EF4	27	$543,800,000
All Categories	**EF0**	**5,129**	**$136,128,142**
All Categories	**EF1**	**5,129**	**$927,859,211**
All Categories	**EF2**	**5,129**	**$1,976,970,588**
All Categories	**EF3**	**5,129**	**$2,318,855,342**
All Categories	**EF4**	**5,129**	**$2,366,208,938**

Source: GIS Analysis

Table 6-320: Critical Facilities Exposed to the Tornado - Town of Goldston

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$33,358
Banking and Finance	EF1	1	$207,159
Banking and Finance	EF2	1	$587,511
Banking and Finance	EF3	1	$746,690
Banking and Finance	EF4	1	$754,008
Commercial Facilities	EF0	28	$449,407
Commercial Facilities	EF1	28	$2,887,243
Commercial Facilities	EF2	28	$8,665,856
Commercial Facilities	EF3	28	$12,538,328
Commercial Facilities	EF4	28	$13,245,384
Critical Manufacturing	EF0	15	$737,288
Critical Manufacturing	EF1	15	$5,260,726
Critical Manufacturing	EF2	15	$12,001,973
Critical Manufacturing	EF3	15	$13,015,854
Critical Manufacturing	EF4	15	$13,070,090
Emergency Services	EF0	2	$39,960
Emergency Services	EF1	2	$289,598
Emergency Services	EF2	2	$1,029,680
Emergency Services	EF3	2	$1,618,499
Emergency Services	EF4	2	$1,690,013
Government Facilities	EF0	4	$46,790
Government Facilities	EF1	4	$318,675
Government Facilities	EF2	4	$1,093,101
Government Facilities	EF3	4	$1,725,261
Government Facilities	EF4	4	$1,811,667
Transportation Systems	EF0	1	$13,840
Transportation Systems	EF1	1	$79,128
Transportation Systems	EF2	1	$170,108
Transportation Systems	EF3	1	$250,298
Transportation Systems	EF4	1	$260,970

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF0**	**51**	**$1,320,643**
All Categories	**EF1**	**51**	**$9,042,529**
All Categories	**EF2**	**51**	**$23,548,229**
All Categories	**EF3**	**51**	**$29,894,930**
All Categories	**EF4**	**51**	**$30,832,132**

Source: GIS Analysis

Table 6-321: Critical Facilities Exposed to the Tornado - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	18	$409,510
Banking and Finance	EF1	18	$2,543,160
Banking and Finance	EF2	18	$7,212,515
Banking and Finance	EF3	18	$9,166,657
Banking and Finance	EF4	18	$9,256,507
Commercial Facilities	EF0	180	$6,881,862
Commercial Facilities	EF1	180	$41,113,474
Commercial Facilities	EF2	180	$116,604,268
Commercial Facilities	EF3	180	$163,913,572
Commercial Facilities	EF4	180	$173,737,819
Critical Manufacturing	EF0	37	$1,485,808
Critical Manufacturing	EF1	37	$10,724,734
Critical Manufacturing	EF2	37	$24,234,877
Critical Manufacturing	EF3	37	$25,982,153
Critical Manufacturing	EF4	37	$25,982,153
Emergency Services	EF0	2	$92,975
Emergency Services	EF1	2	$748,504
Emergency Services	EF2	2	$2,708,512
Emergency Services	EF3	2	$4,308,189
Emergency Services	EF4	2	$4,462,791

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF0	1	$17,751
Energy	EF1	1	$84,482
Energy	EF2	1	$272,488
Energy	EF3	1	$398,256
Energy	EF4	1	$436,996
Food and Agriculture	EF0	159	$1,074,465
Food and Agriculture	EF1	159	$7,207,139
Food and Agriculture	EF2	159	$11,400,261
Food and Agriculture	EF3	159	$11,833,568
Food and Agriculture	EF4	159	$11,833,568
Government Facilities	EF0	51	$2,604,342
Government Facilities	EF1	51	$12,750,786
Government Facilities	EF2	51	$37,636,295
Government Facilities	EF3	51	$57,961,918
Government Facilities	EF4	51	$63,510,470
Healthcare and Public Health	EF0	25	$5,232,713
Healthcare and Public Health	EF1	25	$24,624,151
Healthcare and Public Health	EF2	25	$56,924,145
Healthcare and Public Health	EF3	25	$79,630,748
Healthcare and Public Health	EF4	25	$82,497,211
Transportation Systems	EF0	28	$1,160,950
Transportation Systems	EF1	28	$6,637,746
Transportation Systems	EF2	28	$14,269,767
Transportation Systems	EF3	28	$20,996,647
Transportation Systems	EF4	28	$21,891,825
Water	EF0	2	$3,516,921
Water	EF1	2	$25,385,545
Water	EF2	2	$57,364,181
Water	EF3	2	$61,500,000

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	EF4	2	$61,500,000
All Categories	**EF0**	**503**	**$22,477,297**
All Categories	**EF1**	**503**	**$131,819,721**
All Categories	**EF2**	**503**	**$328,627,309**
All Categories	**EF3**	**503**	**$435,691,708**
All Categories	**EF4**	**503**	**$455,109,340**

Source: GIS Analysis

Table 6-322: Critical Facilities Exposed to the Tornado - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	13	$379,632
Banking and Finance	EF1	13	$2,311,119
Banking and Finance	EF2	13	$6,613,810
Banking and Finance	EF3	13	$8,499,493
Banking and Finance	EF4	13	$8,645,683
Commercial Facilities	EF0	391	$14,271,392
Commercial Facilities	EF1	391	$88,734,051
Commercial Facilities	EF2	391	$246,008,386
Commercial Facilities	EF3	391	$339,546,354
Commercial Facilities	EF4	391	$358,457,411
Critical Manufacturing	EF0	123	$18,094,816
Critical Manufacturing	EF1	123	$129,304,178
Critical Manufacturing	EF2	123	$294,559,246
Critical Manufacturing	EF3	123	$319,235,190
Critical Manufacturing	EF4	123	$320,386,538
Emergency Services	EF0	4	$1,415,400
Emergency Services	EF1	4	$6,245,053
Emergency Services	EF2	4	$16,863,974
Emergency Services	EF3	4	$25,568,847
Emergency Services	EF4	4	$28,602,258
Energy	EF0	4	$648,310
Energy	EF1	4	$4,491,587

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF2	4	$10,501,092
Energy	EF3	4	$11,715,257
Energy	EF4	4	$11,882,109
Food and Agriculture	EF0	483	$3,681,204
Food and Agriculture	EF1	483	$24,361,419
Food and Agriculture	EF2	483	$36,655,906
Food and Agriculture	EF3	483	$38,109,310
Food and Agriculture	EF4	483	$38,215,725
Government Facilities	EF0	64	$6,115,705
Government Facilities	EF1	64	$27,301,064
Government Facilities	EF2	64	$76,089,037
Government Facilities	EF3	64	$115,948,075
Government Facilities	EF4	64	$129,369,139
Healthcare and Public Health	EF0	23	$3,046,998
Healthcare and Public Health	EF1	23	$14,838,919
Healthcare and Public Health	EF2	23	$36,362,020
Healthcare and Public Health	EF3	23	$51,796,165
Healthcare and Public Health	EF4	23	$53,645,544
Transportation Systems	EF0	31	$1,037,289
Transportation Systems	EF1	31	$5,906,853
Transportation Systems	EF2	31	$12,825,953
Transportation Systems	EF3	31	$18,868,443
Transportation Systems	EF4	31	$19,703,408
Water	EF0	8	$6,908,034
Water	EF1	8	$49,862,989
Water	EF2	8	$112,676,310
Water	EF3	8	$120,800,000
Water	EF4	8	$120,800,000
All Categories	**EF0**	**1,144**	**$55,598,780**
All Categories	**EF1**	**1,144**	**$353,357,232**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF2**	**1,144**	**$849,155,734**
All Categories	**EF3**	**1,144**	**$1,050,087,134**
All Categories	**EF4**	**1,144**	**$1,089,707,815**

Source: GIS Analysis

Table 6-323: Critical Facilities Exposed to the Tornado - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	27	$793,878
Banking and Finance	EF1	27	$4,843,113
Banking and Finance	EF2	27	$13,453,549
Banking and Finance	EF3	27	$17,589,613
Banking and Finance	EF4	27	$17,916,825
Chemical	EF0	1	$280,556
Chemical	EF1	1	$2,025,089
Chemical	EF2	1	$4,576,131
Chemical	EF3	1	$4,906,059
Chemical	EF4	1	$4,906,059
Commercial Facilities	EF0	360	$11,311,209
Commercial Facilities	EF1	360	$69,747,350
Commercial Facilities	EF2	360	$195,480,406
Commercial Facilities	EF3	360	$273,932,118
Commercial Facilities	EF4	360	$290,317,627
Communications	EF0	2	$32,403
Communications	EF1	2	$154,212
Communications	EF2	2	$497,395
Communications	EF3	2	$726,971
Communications	EF4	2	$797,687
Critical Manufacturing	EF0	80	$4,686,194
Critical Manufacturing	EF1	80	$32,540,857
Critical Manufacturing	EF2	80	$75,934,263
Critical Manufacturing	EF3	80	$84,532,269
Critical Manufacturing	EF4	80	$85,672,456

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	EF0	3	$59,636
Emergency Services	EF1	3	$480,103
Emergency Services	EF2	3	$1,737,285
Emergency Services	EF3	3	$2,763,345
Emergency Services	EF4	3	$2,862,509
Energy	EF0	3	$34,866
Energy	EF1	3	$191,799
Energy	EF2	3	$643,501
Energy	EF3	3	$970,054
Energy	EF4	3	$1,042,064
Food and Agriculture	EF0	42	$357,859
Food and Agriculture	EF1	42	$2,370,880
Food and Agriculture	EF2	42	$3,467,338
Food and Agriculture	EF3	42	$3,566,977
Food and Agriculture	EF4	42	$3,566,977
Government Facilities	EF0	51	$3,973,965
Government Facilities	EF1	51	$18,935,282
Government Facilities	EF2	51	$55,004,065
Government Facilities	EF3	51	$84,465,912
Government Facilities	EF4	51	$93,009,701
Healthcare and Public Health	EF0	46	$2,732,217
Healthcare and Public Health	EF1	46	$12,858,967
Healthcare and Public Health	EF2	46	$30,065,983
Healthcare and Public Health	EF3	46	$42,126,822
Healthcare and Public Health	EF4	46	$43,633,358
Nuclear Reactors, Materials and Waste	EF0	1	$33,098
Nuclear Reactors, Materials and Waste	EF1	1	$238,909

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	EF2	1	$539,866
Nuclear Reactors, Materials and Waste	EF3	1	$578,789
Nuclear Reactors, Materials and Waste	EF4	1	$578,789
Transportation Systems	EF0	57	$1,906,698
Transportation Systems	EF1	57	$10,901,570
Transportation Systems	EF2	57	$23,436,100
Transportation Systems	EF3	57	$34,484,061
Transportation Systems	EF4	57	$35,954,266
Water	EF0	1	$5,700
Water	EF1	1	$41,141
Water	EF2	1	$92,967
Water	EF3	1	$99,670
Water	EF4	1	$99,670
All Categories	**EF0**	**674**	**$26,208,279**
All Categories	**EF1**	**674**	**$155,329,272**
All Categories	**EF2**	**674**	**$404,928,849**
All Categories	**EF3**	**674**	**$550,742,660**
All Categories	**EF4**	**674**	**$580,357,988**

Source: GIS Analysis

Table 6-324: Critical Facilities Exposed to the Tornado - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$10,272
Banking and Finance	EF1	1	$63,791
Banking and Finance	EF2	1	$180,914
Banking and Finance	EF3	1	$229,931
Banking and Finance	EF4	1	$232,184
Chemical	EF0	1	$9,805
Chemical	EF1	1	$46,663
Chemical	EF2	1	$150,506

Sector	Event	Number of Buildings At Risk	Estimated Damages
Chemical	EF3	1	$219,973
Chemical	EF4	1	$241,371
Commercial Facilities	EF0	505	$18,728,135
Commercial Facilities	EF1	505	$130,852,776
Commercial Facilities	EF2	505	$386,297,876
Commercial Facilities	EF3	505	$555,844,936
Commercial Facilities	EF4	505	$580,808,737
Communications	EF0	1	$124,545
Communications	EF1	1	$1,002,664
Communications	EF2	1	$3,628,208
Communications	EF3	1	$5,771,068
Communications	EF4	1	$5,978,166
Critical Manufacturing	EF0	188	$6,267,433
Critical Manufacturing	EF1	188	$43,401,935
Critical Manufacturing	EF2	188	$101,446,026
Critical Manufacturing	EF3	188	$113,250,061
Critical Manufacturing	EF4	188	$114,870,180
Emergency Services	EF0	13	$547,759
Emergency Services	EF1	13	$4,409,791
Emergency Services	EF2	13	$15,957,125
Emergency Services	EF3	13	$25,381,581
Emergency Services	EF4	13	$26,292,414
Energy	EF0	2	$23,248
Energy	EF1	2	$110,644
Energy	EF2	2	$356,873
Energy	EF3	2	$521,589
Energy	EF4	2	$572,327
Food and Agriculture	EF0	2,093	$25,568,889
Food and Agriculture	EF1	2,093	$167,893,629
Food and Agriculture	EF2	2,093	$234,079,092
Food and Agriculture	EF3	2,093	$240,063,249
Food and Agriculture	EF4	2,093	$240,322,199

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF0	370	$27,258,154
Government Facilities	EF1	370	$122,078,535
Government Facilities	EF2	370	$340,975,717
Government Facilities	EF3	370	$519,809,485
Government Facilities	EF4	370	$579,569,521
Healthcare and Public Health	EF0	18	$2,246,253
Healthcare and Public Health	EF1	18	$9,479,466
Healthcare and Public Health	EF2	18	$18,600,315
Healthcare and Public Health	EF3	18	$24,221,079
Healthcare and Public Health	EF4	18	$25,091,151
Nuclear Reactors, Materials and Waste	EF0	1	$228,691
Nuclear Reactors, Materials and Waste	EF1	1	$1,650,721
Nuclear Reactors, Materials and Waste	EF2	1	$3,730,165
Nuclear Reactors, Materials and Waste	EF3	1	$3,999,101
Nuclear Reactors, Materials and Waste	EF4	1	$3,999,101
Transportation Systems	EF0	69	$2,887,093
Transportation Systems	EF1	69	$16,506,990
Transportation Systems	EF2	69	$35,486,581
Transportation Systems	EF3	69	$52,215,233
Transportation Systems	EF4	69	$54,441,396
Water	EF0	1	$17,156
Water	EF1	1	$123,832
Water	EF2	1	$279,825
Water	EF3	1	$300,000
Water	EF4	1	$300,000
All Categories	**EF0**	**3,263**	**$83,917,433**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF1**	**3,263**	**$497,621,437**
All Categories	**EF2**	**3,263**	**$1,141,169,223**
All Categories	**EF3**	**3,263**	**$1,541,827,286**
All Categories	**EF4**	**3,263**	**$1,632,718,747**

Source: GIS Analysis

Table 6-325: Critical Facilities Exposed to the Tornado - Town of Angier

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$99,419
Banking and Finance	EF1	6	$617,418
Banking and Finance	EF2	6	$1,751,024
Banking and Finance	EF3	6	$2,225,443
Banking and Finance	EF4	6	$2,247,256
Commercial Facilities	EF0	85	$1,926,478
Commercial Facilities	EF1	85	$13,509,158
Commercial Facilities	EF2	85	$38,343,738
Commercial Facilities	EF3	85	$53,132,088
Commercial Facilities	EF4	85	$55,409,443
Critical Manufacturing	EF0	21	$981,032
Critical Manufacturing	EF1	21	$6,471,824
Critical Manufacturing	EF2	21	$15,763,479
Critical Manufacturing	EF3	21	$18,381,567
Critical Manufacturing	EF4	21	$18,922,425
Emergency Services	EF0	2	$74,348
Emergency Services	EF1	2	$598,544
Emergency Services	EF2	2	$2,165,871
Emergency Services	EF3	2	$3,445,058
Emergency Services	EF4	2	$3,568,686
Energy	EF0	2	$7,820
Energy	EF1	2	$37,217
Energy	EF2	2	$120,041
Energy	EF3	2	$175,446

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF4	2	$192,513
Food and Agriculture	EF0	57	$331,044
Food and Agriculture	EF1	57	$2,226,071
Food and Agriculture	EF2	57	$3,574,325
Food and Agriculture	EF3	57	$3,716,216
Food and Agriculture	EF4	57	$3,716,216
Government Facilities	EF0	7	$1,701,649
Government Facilities	EF1	7	$7,308,194
Government Facilities	EF2	7	$19,830,404
Government Facilities	EF3	7	$30,062,261
Government Facilities	EF4	7	$33,839,285
Healthcare and Public Health	EF0	7	$418,486
Healthcare and Public Health	EF1	7	$2,011,356
Healthcare and Public Health	EF2	7	$4,861,734
Healthcare and Public Health	EF3	7	$6,886,744
Healthcare and Public Health	EF4	7	$7,132,219
Transportation Systems	EF0	10	$275,778
Transportation Systems	EF1	10	$1,567,244
Transportation Systems	EF2	10	$3,420,112
Transportation Systems	EF3	10	$5,030,877
Transportation Systems	EF4	10	$5,257,546
All Categories	**EF0**	**197**	**$5,816,054**
All Categories	**EF1**	**197**	**$34,347,026**
All Categories	**EF2**	**197**	**$89,830,728**
All Categories	**EF3**	**197**	**$123,055,700**
All Categories	**EF4**	**197**	**$130,285,589**

Source: GIS Analysis

Table 6-326: Critical Facilities Exposed to the Tornado - Town of Benson

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$119,664
Banking and Finance	EF1	6	$743,707
Banking and Finance	EF2	6	$2,109,560
Banking and Finance	EF3	6	$2,681,080
Banking and Finance	EF4	6	$2,707,341
Commercial Facilities	EF0	160	$4,175,399
Commercial Facilities	EF1	160	$28,300,301
Commercial Facilities	EF2	160	$69,398,553
Commercial Facilities	EF3	160	$87,611,303
Commercial Facilities	EF4	160	$90,744,741
Critical Manufacturing	EF0	31	$2,340,029
Critical Manufacturing	EF1	31	$16,881,687
Critical Manufacturing	EF2	31	$38,129,855
Critical Manufacturing	EF3	31	$40,882,435
Critical Manufacturing	EF4	31	$40,884,203
Emergency Services	EF0	2	$145,590
Emergency Services	EF1	2	$1,173,822
Emergency Services	EF2	2	$4,248,016
Emergency Services	EF3	2	$6,757,348
Emergency Services	EF4	2	$6,999,532
Energy	EF0	3	$3,432,000
Energy	EF1	3	$24,768,000
Energy	EF2	3	$55,968,001
Energy	EF3	3	$60,000,001
Energy	EF4	3	$60,000,001
Food and Agriculture	EF0	390	$1,486,744
Food and Agriculture	EF1	390	$10,188,812
Food and Agriculture	EF2	390	$18,203,979
Food and Agriculture	EF3	390	$19,132,395
Food and Agriculture	EF4	390	$19,132,395
Government Facilities	EF0	17	$1,333,231
Government Facilities	EF1	17	$6,370,741

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF2	17	$18,532,340
Government Facilities	EF3	17	$28,465,991
Government Facilities	EF4	17	$31,330,273
Healthcare and Public Health	EF0	19	$976,621
Healthcare and Public Health	EF1	19	$4,692,061
Healthcare and Public Health	EF2	19	$11,329,580
Healthcare and Public Health	EF3	19	$16,042,918
Healthcare and Public Health	EF4	19	$16,614,159
Transportation Systems	EF0	21	$583,306
Transportation Systems	EF1	21	$3,336,872
Transportation Systems	EF2	21	$7,173,882
Transportation Systems	EF3	21	$10,555,711
Transportation Systems	EF4	21	$11,005,273
All Categories	**EF0**	**649**	**$14,592,584**
All Categories	**EF1**	**649**	**$96,456,003**
All Categories	**EF2**	**649**	**$225,093,766**
All Categories	**EF3**	**649**	**$272,129,182**
All Categories	**EF4**	**649**	**$279,417,918**

Source: GIS Analysis

Table 6-327: Critical Facilities Exposed to the Tornado - Town of Broadway

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	2	$49,362
Banking and Finance	EF1	2	$306,552
Banking and Finance	EF2	2	$869,396
Banking and Finance	EF3	2	$1,104,948
Banking and Finance	EF4	2	$1,115,778
Commercial Facilities	EF0	54	$884,385
Commercial Facilities	EF1	54	$6,409,351
Commercial Facilities	EF2	54	$15,595,289

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF3	54	$20,276,744
Commercial Facilities	EF4	54	$20,987,606
Critical Manufacturing	EF0	5	$45,128
Critical Manufacturing	EF1	5	$325,739
Critical Manufacturing	EF2	5	$736,079
Critical Manufacturing	EF3	5	$789,149
Critical Manufacturing	EF4	5	$789,149
Emergency Services	EF0	1	$27,763
Emergency Services	EF1	1	$223,508
Emergency Services	EF2	1	$808,780
Emergency Services	EF3	1	$1,286,454
Emergency Services	EF4	1	$1,332,619
Food and Agriculture	EF0	32	$96,964
Food and Agriculture	EF1	32	$661,693
Food and Agriculture	EF2	32	$1,154,886
Food and Agriculture	EF3	32	$1,211,078
Food and Agriculture	EF4	32	$1,211,078
Government Facilities	EF0	8	$674,275
Government Facilities	EF1	8	$2,867,740
Government Facilities	EF2	8	$7,726,913
Government Facilities	EF3	8	$11,697,474
Government Facilities	EF4	8	$13,198,282
Transportation Systems	EF0	15	$678,105
Transportation Systems	EF1	15	$3,877,071
Transportation Systems	EF2	15	$8,334,892
Transportation Systems	EF3	15	$12,264,025
Transportation Systems	EF4	15	$12,786,894
All Categories	**EF0**	**117**	**$2,455,982**
All Categories	**EF1**	**117**	**$14,671,654**
All Categories	**EF2**	**117**	**$35,226,235**
All Categories	**EF3**	**117**	**$48,629,872**
All Categories	**EF4**	**117**	**$51,421,406**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-328: Critical Facilities Exposed to the Tornado - Town of Coats

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$69,355
Banking and Finance	EF1	3	$430,711
Banking and Finance	EF2	3	$1,221,516
Banking and Finance	EF3	3	$1,552,471
Banking and Finance	EF4	3	$1,567,688
Commercial Facilities	EF0	52	$796,190
Commercial Facilities	EF1	52	$5,874,542
Commercial Facilities	EF2	52	$18,020,475
Commercial Facilities	EF3	52	$26,584,615
Commercial Facilities	EF4	52	$27,592,584
Critical Manufacturing	EF0	7	$96,426
Critical Manufacturing	EF1	7	$651,589
Critical Manufacturing	EF2	7	$1,555,437
Critical Manufacturing	EF3	7	$1,775,585
Critical Manufacturing	EF4	7	$1,815,012
Emergency Services	EF0	1	$18,735
Emergency Services	EF1	1	$150,830
Emergency Services	EF2	1	$545,788
Emergency Services	EF3	1	$868,136
Emergency Services	EF4	1	$899,290
Food and Agriculture	EF0	16	$76,534
Food and Agriculture	EF1	16	$533,482
Food and Agriculture	EF2	16	$1,036,749
Food and Agriculture	EF3	16	$1,098,072
Food and Agriculture	EF4	16	$1,098,072
Government Facilities	EF0	8	$2,065,502
Government Facilities	EF1	8	$8,735,365
Government Facilities	EF2	8	$23,440,089

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF3	8	$35,455,983
Government Facilities	EF4	8	$40,060,710
Healthcare and Public Health	EF0	2	$69,097
Healthcare and Public Health	EF1	2	$329,151
Healthcare and Public Health	EF2	2	$661,015
Healthcare and Public Health	EF3	2	$909,515
Healthcare and Public Health	EF4	2	$945,577
Transportation Systems	EF0	3	$361,597
Transportation Systems	EF1	3	$2,067,433
Transportation Systems	EF2	3	$4,444,549
Transportation Systems	EF3	3	$6,539,744
Transportation Systems	EF4	3	$6,818,562
All Categories	**EF0**	**92**	**$3,553,436**
All Categories	**EF1**	**92**	**$18,773,103**
All Categories	**EF2**	**92**	**$50,925,618**
All Categories	**EF3**	**92**	**$74,784,121**
All Categories	**EF4**	**92**	**$80,797,495**

Source: GIS Analysis

Table 6-329: Critical Facilities Exposed to the Tornado - Town of Erwin

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$52,967
Banking and Finance	EF1	3	$328,938
Banking and Finance	EF2	3	$932,882
Banking and Finance	EF3	3	$1,185,635
Banking and Finance	EF4	3	$1,197,257
Commercial Facilities	EF0	91	$3,834,498
Commercial Facilities	EF1	91	$23,359,591

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF2	91	$71,056,514
Commercial Facilities	EF3	91	$102,768,862
Commercial Facilities	EF4	91	$109,194,741
Critical Manufacturing	EF0	15	$2,264,562
Critical Manufacturing	EF1	15	$16,345,869
Critical Manufacturing	EF2	15	$36,937,059
Critical Manufacturing	EF3	15	$39,600,132
Critical Manufacturing	EF4	15	$39,600,132
Emergency Services	EF0	1	$46,731
Emergency Services	EF1	1	$376,213
Emergency Services	EF2	1	$1,361,351
Emergency Services	EF3	1	$2,165,380
Emergency Services	EF4	1	$2,243,086
Food and Agriculture	EF0	21	$150,597
Food and Agriculture	EF1	21	$1,001,489
Food and Agriculture	EF2	21	$1,501,095
Food and Agriculture	EF3	21	$1,548,711
Food and Agriculture	EF4	21	$1,548,711
Government Facilities	EF0	25	$1,454,292
Government Facilities	EF1	25	$6,369,320
Government Facilities	EF2	25	$17,522,365
Government Facilities	EF3	25	$26,634,830
Government Facilities	EF4	25	$29,844,510
Healthcare and Public Health	EF0	11	$759,679
Healthcare and Public Health	EF1	11	$4,363,323
Healthcare and Public Health	EF2	11	$12,669,730
Healthcare and Public Health	EF3	11	$19,060,087
Healthcare and Public Health	EF4	11	$19,741,927
Transportation Systems	EF0	21	$420,262

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF1	21	$2,402,855
Transportation Systems	EF2	21	$5,165,637
Transportation Systems	EF3	21	$7,600,759
Transportation Systems	EF4	21	$7,924,812
Water	EF0	2	$25,110
Water	EF1	2	$181,245
Water	EF2	2	$409,562
Water	EF3	2	$439,090
Water	EF4	2	$439,090
All Categories	**EF0**	**190**	**$9,008,698**
All Categories	**EF1**	**190**	**$54,728,843**
All Categories	**EF2**	**190**	**$147,556,195**
All Categories	**EF3**	**190**	**$201,003,486**
All Categories	**EF4**	**190**	**$211,734,266**

Source: GIS Analysis

Table 6-330: Critical Facilities Exposed to the Tornado - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	9	$251,630
Banking and Finance	EF1	9	$1,543,346
Banking and Finance	EF2	9	$4,222,982
Banking and Finance	EF3	9	$5,463,869
Banking and Finance	EF4	9	$5,540,733
Commercial Facilities	EF0	125	$2,156,639
Commercial Facilities	EF1	125	$13,618,195
Commercial Facilities	EF2	125	$41,107,293
Commercial Facilities	EF3	125	$60,459,536
Commercial Facilities	EF4	125	$63,846,443
Critical Manufacturing	EF0	29	$3,010,901
Critical Manufacturing	EF1	29	$21,178,377
Critical Manufacturing	EF2	29	$48,159,168
Critical Manufacturing	EF3	29	$53,249,432

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	EF4	29	$53,621,714
Defense Industrial Base	EF0	1	$1,033,188
Defense Industrial Base	EF1	1	$5,907,265
Defense Industrial Base	EF2	1	$12,699,387
Defense Industrial Base	EF3	1	$18,685,977
Defense Industrial Base	EF4	1	$19,482,642
Emergency Services	EF0	4	$88,226
Emergency Services	EF1	4	$710,275
Emergency Services	EF2	4	$2,570,177
Emergency Services	EF3	4	$4,088,152
Emergency Services	EF4	4	$4,234,858
Energy	EF0	1	$4,258
Energy	EF1	1	$20,267
Energy	EF2	1	$65,369
Energy	EF3	1	$95,540
Energy	EF4	1	$104,833
Food and Agriculture	EF0	3	$57,736
Food and Agriculture	EF1	3	$416,748
Food and Agriculture	EF2	3	$941,733
Food and Agriculture	EF3	3	$1,009,630
Food and Agriculture	EF4	3	$1,009,630
Government Facilities	EF0	82	$3,451,334
Government Facilities	EF1	82	$20,913,699
Government Facilities	EF2	82	$68,565,494
Government Facilities	EF3	82	$107,469,546
Government Facilities	EF4	82	$114,227,247
Healthcare and Public Health	EF0	12	$998,799
Healthcare and Public Health	EF1	12	$5,699,100
Healthcare and Public Health	EF2	12	$16,422,445
Healthcare and Public Health	EF3	12	$24,661,762

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF4	12	$25,544,844
Transportation Systems	EF0	7	$299,848
Transportation Systems	EF1	7	$1,714,383
Transportation Systems	EF2	7	$3,685,565
Transportation Systems	EF3	7	$5,422,969
Transportation Systems	EF4	7	$5,654,174
Water	EF0	8	$10,786
Water	EF1	8	$77,852
Water	EF2	8	$175,924
Water	EF3	8	$188,608
Water	EF4	8	$188,608
All Categories	**EF0**	**281**	**$11,363,345**
All Categories	**EF1**	**281**	**$71,799,507**
All Categories	**EF2**	**281**	**$198,615,537**
All Categories	**EF3**	**281**	**$280,795,021**
All Categories	**EF4**	**281**	**$293,455,726**

Source: GIS Analysis

Table 6-331: Critical Facilities Exposed to the Tornado - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	4	$99,654
Banking and Finance	EF1	4	$619,340
Banking and Finance	EF2	4	$1,756,788
Banking and Finance	EF3	4	$2,232,735
Banking and Finance	EF4	4	$2,254,604
Commercial Facilities	EF0	851	$15,213,324
Commercial Facilities	EF1	851	$104,246,527
Commercial Facilities	EF2	851	$278,166,442
Commercial Facilities	EF3	851	$381,997,624
Commercial Facilities	EF4	851	$398,330,081
Critical Manufacturing	EF0	267	$6,062,581

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	EF1	267	$43,352,754
Critical Manufacturing	EF2	267	$96,779,685
Critical Manufacturing	EF3	267	$104,164,227
Critical Manufacturing	EF4	267	$104,288,181
Emergency Services	EF0	22	$423,122
Emergency Services	EF1	22	$3,036,326
Emergency Services	EF2	22	$8,117,856
Emergency Services	EF3	22	$11,313,416
Emergency Services	EF4	22	$11,641,094
Energy	EF0	10	$28,657,200
Energy	EF1	10	$206,812,800
Energy	EF2	10	$467,332,801
Energy	EF3	10	$501,000,001
Energy	EF4	10	$501,000,001
Food and Agriculture	EF0	8,411	$30,999,855
Food and Agriculture	EF1	8,411	$212,074,742
Food and Agriculture	EF2	8,411	$375,428,829
Food and Agriculture	EF3	8,411	$394,226,444
Food and Agriculture	EF4	8,411	$394,226,444
Government Facilities	EF0	162	$9,133,170
Government Facilities	EF1	162	$40,669,985
Government Facilities	EF2	162	$112,990,191
Government Facilities	EF3	162	$172,214,183
Government Facilities	EF4	162	$192,287,317
Healthcare and Public Health	EF0	18	$1,067,169
Healthcare and Public Health	EF1	18	$4,530,723
Healthcare and Public Health	EF2	18	$9,162,690
Healthcare and Public Health	EF3	18	$12,041,603
Healthcare and Public Health	EF4	18	$12,468,389

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	EF0	1	$6,569
Nuclear Reactors, Materials and Waste	EF1	1	$37,578
Nuclear Reactors, Materials and Waste	EF2	1	$80,788
Nuclear Reactors, Materials and Waste	EF3	1	$118,872
Nuclear Reactors, Materials and Waste	EF4	1	$123,934
Transportation Systems	EF0	149	$4,150,196
Transportation Systems	EF1	149	$23,741,683
Transportation Systems	EF2	149	$51,041,819
Transportation Systems	EF3	149	$75,103,362
Transportation Systems	EF4	149	$78,301,972
Water	EF0	1	$3,432,000
Water	EF1	1	$24,768,000
Water	EF2	1	$55,968,000
Water	EF3	1	$60,000,000
Water	EF4	1	$60,000,000
All Categories	**EF0**	**9,896**	**$99,244,840**
All Categories	**EF1**	**9,896**	**$663,890,458**
All Categories	**EF2**	**9,896**	**$1,456,825,889**
All Categories	**EF3**	**9,896**	**$1,714,412,467**
All Categories	**EF4**	**9,896**	**$1,754,922,017**

Source: GIS Analysis

Table 6-332: Critical Facilities Exposed to the Tornado - Town of Archer Lodge

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	7	$131,594
Commercial Facilities	EF1	7	$1,074,359
Commercial Facilities	EF2	7	$2,714,599
Commercial Facilities	EF3	7	$3,628,811

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF4	7	$3,730,170
Critical Manufacturing	EF0	6	$74,231
Critical Manufacturing	EF1	6	$535,706
Critical Manufacturing	EF2	6	$1,210,528
Critical Manufacturing	EF3	6	$1,297,736
Critical Manufacturing	EF4	6	$1,297,736
Emergency Services	EF0	1	$48,127
Emergency Services	EF1	1	$320,725
Emergency Services	EF2	1	$644,276
Emergency Services	EF3	1	$716,684
Emergency Services	EF4	1	$724,801
Food and Agriculture	EF0	120	$276,909
Food and Agriculture	EF1	120	$1,983,334
Food and Agriculture	EF2	120	$4,347,500
Food and Agriculture	EF3	120	$4,650,032
Food and Agriculture	EF4	120	$4,650,032
Government Facilities	EF0	3	$122,736
Government Facilities	EF1	3	$607,034
Government Facilities	EF2	3	$1,801,665
Government Facilities	EF3	3	$2,777,373
Government Facilities	EF4	3	$3,038,023
All Categories	**EF0**	**137**	**$653,597**
All Categories	**EF1**	**137**	**$4,521,158**
All Categories	**EF2**	**137**	**$10,718,568**
All Categories	**EF3**	**137**	**$13,070,636**
All Categories	**EF4**	**137**	**$13,440,762**

Source: GIS Analysis

Table 6-333: Critical Facilities Exposed to the Tornado - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	13	$406,032
Banking and Finance	EF1	13	$2,523,460

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF2	13	$7,157,917
Banking and Finance	EF3	13	$9,097,131
Banking and Finance	EF4	13	$9,186,238
Chemical	EF0	1	$336,535
Chemical	EF1	1	$2,428,701
Chemical	EF2	1	$5,488,110
Chemical	EF3	1	$5,883,480
Chemical	EF4	1	$5,883,480
Commercial Facilities	EF0	298	$10,023,795
Commercial Facilities	EF1	298	$67,893,697
Commercial Facilities	EF2	298	$172,604,547
Commercial Facilities	EF3	298	$222,507,833
Commercial Facilities	EF4	298	$231,866,253
Critical Manufacturing	EF0	114	$9,746,102
Critical Manufacturing	EF1	114	$70,272,845
Critical Manufacturing	EF2	114	$158,605,266
Critical Manufacturing	EF3	114	$170,092,616
Critical Manufacturing	EF4	114	$170,111,742
Emergency Services	EF0	2	$30,378
Emergency Services	EF1	2	$244,922
Emergency Services	EF2	2	$886,365
Emergency Services	EF3	2	$1,409,947
Emergency Services	EF4	2	$1,460,480
Energy	EF0	4	$10,296,000
Energy	EF1	4	$74,304,000
Energy	EF2	4	$167,904,000
Energy	EF3	4	$180,000,000
Energy	EF4	4	$180,000,000
Food and Agriculture	EF0	311	$1,001,446
Food and Agriculture	EF1	311	$6,979,218
Food and Agriculture	EF2	311	$13,560,311
Food and Agriculture	EF3	311	$14,361,535

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF4	311	$14,361,535
Government Facilities	EF0	44	$4,846,208
Government Facilities	EF1	44	$21,179,433
Government Facilities	EF2	44	$58,163,129
Government Facilities	EF3	44	$88,378,552
Government Facilities	EF4	44	$99,082,064
Healthcare and Public Health	EF0	34	$2,781,657
Healthcare and Public Health	EF1	34	$13,777,675
Healthcare and Public Health	EF2	34	$34,500,363
Healthcare and Public Health	EF3	34	$49,500,146
Healthcare and Public Health	EF4	34	$51,264,071
Transportation Systems	EF0	35	$1,086,013
Transportation Systems	EF1	35	$6,212,664
Transportation Systems	EF2	35	$13,356,494
Transportation Systems	EF3	35	$19,652,858
Transportation Systems	EF4	35	$20,489,862
All Categories	**EF0**	**856**	**$40,554,166**
All Categories	**EF1**	**856**	**$265,816,615**
All Categories	**EF2**	**856**	**$632,226,502**
All Categories	**EF3**	**856**	**$760,884,098**
All Categories	**EF4**	**856**	**$783,705,725**

Source: GIS Analysis

Table 6-334: Critical Facilities Exposed to the Tornado - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	14	$370,158
Banking and Finance	EF1	14	$2,300,505
Banking and Finance	EF2	14	$6,525,495

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF3	14	$8,293,375
Banking and Finance	EF4	14	$8,374,609
Commercial Facilities	EF0	114	$1,050,551
Commercial Facilities	EF1	114	$7,353,180
Commercial Facilities	EF2	114	$18,479,355
Commercial Facilities	EF3	114	$25,304,303
Commercial Facilities	EF4	114	$26,391,891
Critical Manufacturing	EF0	25	$953,591
Critical Manufacturing	EF1	25	$6,881,861
Critical Manufacturing	EF2	25	$15,550,873
Critical Manufacturing	EF3	25	$16,671,176
Critical Manufacturing	EF4	25	$16,671,176
Emergency Services	EF0	1	$29,304
Emergency Services	EF1	1	$195,284
Emergency Services	EF2	1	$392,290
Emergency Services	EF3	1	$436,378
Emergency Services	EF4	1	$441,321
Food and Agriculture	EF0	383	$782,854
Food and Agriculture	EF1	383	$5,596,698
Food and Agriculture	EF2	383	$12,174,479
Food and Agriculture	EF3	383	$13,014,006
Food and Agriculture	EF4	383	$13,014,006
Government Facilities	EF0	10	$1,239,585
Government Facilities	EF1	10	$5,536,181
Government Facilities	EF2	10	$15,429,930
Government Facilities	EF3	10	$23,512,554
Government Facilities	EF4	10	$26,232,804
Healthcare and Public Health	EF0	4	$59,177
Healthcare and Public Health	EF1	4	$477,116
Healthcare and Public Health	EF2	4	$1,726,666

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF3	4	$2,746,620
Healthcare and Public Health	EF4	4	$2,845,059
Transportation Systems	EF0	15	$291,858
Transportation Systems	EF1	15	$1,687,850
Transportation Systems	EF2	15	$3,610,500
Transportation Systems	EF3	15	$5,219,584
Transportation Systems	EF4	15	$5,432,881
All Categories	**EF0**	**566**	**$4,777,078**
All Categories	**EF1**	**566**	**$30,028,675**
All Categories	**EF2**	**566**	**$73,889,588**
All Categories	**EF3**	**566**	**$95,197,996**
All Categories	**EF4**	**566**	**$99,403,747**

Source: GIS Analysis

Table 6-335: Critical Facilities Exposed to the Tornado - Town of Kenly

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$83,828
Banking and Finance	EF1	3	$520,988
Banking and Finance	EF2	3	$1,477,807
Banking and Finance	EF3	3	$1,878,173
Banking and Finance	EF4	3	$1,896,570
Commercial Facilities	EF0	105	$2,166,429
Commercial Facilities	EF1	105	$13,985,681
Commercial Facilities	EF2	105	$33,188,647
Commercial Facilities	EF3	105	$43,740,956
Commercial Facilities	EF4	105	$45,510,575
Critical Manufacturing	EF0	17	$513,978
Critical Manufacturing	EF1	17	$3,709,419
Critical Manufacturing	EF2	17	$8,382,161
Critical Manufacturing	EF3	17	$8,986,127

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	EF4	17	$8,986,127
Emergency Services	EF0	2	$35,863
Emergency Services	EF1	2	$289,145
Emergency Services	EF2	2	$1,046,406
Emergency Services	EF3	2	$1,664,525
Emergency Services	EF4	2	$1,724,182
Energy	EF0	4	$79,856
Energy	EF1	4	$398,035
Energy	EF2	4	$1,232,805
Energy	EF3	4	$1,755,661
Energy	EF4	4	$1,914,074
Food and Agriculture	EF0	73	$293,270
Food and Agriculture	EF1	73	$2,001,092
Food and Agriculture	EF2	73	$3,491,953
Food and Agriculture	EF3	73	$3,661,693
Food and Agriculture	EF4	73	$3,661,693
Government Facilities	EF0	5	$172,065
Government Facilities	EF1	5	$760,722
Government Facilities	EF2	5	$2,105,760
Government Facilities	EF3	5	$3,204,610
Government Facilities	EF4	5	$3,583,350
Healthcare and Public Health	EF0	4	$96,424
Healthcare and Public Health	EF1	4	$390,302
Healthcare and Public Health	EF2	4	$725,213
Healthcare and Public Health	EF3	4	$912,876
Healthcare and Public Health	EF4	4	$945,153
Transportation Systems	EF0	23	$695,721
Transportation Systems	EF1	23	$4,003,689
Transportation Systems	EF2	23	$8,583,813

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF3	23	$12,509,401
Transportation Systems	EF4	23	$13,030,459
Water	EF0	1	$3,432,000
Water	EF1	1	$24,768,000
Water	EF2	1	$55,968,000
Water	EF3	1	$60,000,000
Water	EF4	1	$60,000,000
All Categories	**EF0**	**237**	**$7,569,434**
All Categories	**EF1**	**237**	**$50,827,073**
All Categories	**EF2**	**237**	**$116,202,565**
All Categories	**EF3**	**237**	**$138,314,022**
All Categories	**EF4**	**237**	**$141,252,183**

Source: GIS Analysis

Table 6-336: Critical Facilities Exposed to the Tornado - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$7,730
Banking and Finance	EF1	1	$48,039
Banking and Finance	EF2	1	$136,264
Banking and Finance	EF3	1	$173,180
Banking and Finance	EF4	1	$174,877
Commercial Facilities	EF0	36	$475,329
Commercial Facilities	EF1	36	$3,120,778
Commercial Facilities	EF2	36	$8,393,780
Commercial Facilities	EF3	36	$11,265,748
Commercial Facilities	EF4	36	$11,738,772
Critical Manufacturing	EF0	6	$258,759
Critical Manufacturing	EF1	6	$1,867,405
Critical Manufacturing	EF2	6	$4,219,757
Critical Manufacturing	EF3	6	$4,523,753
Critical Manufacturing	EF4	6	$4,523,753
Food and Agriculture	EF0	76	$194,508

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF1	76	$1,338,671
Food and Agriculture	EF2	76	$2,445,145
Food and Agriculture	EF3	76	$2,575,216
Food and Agriculture	EF4	76	$2,575,216
Government Facilities	EF0	20	$1,246,540
Government Facilities	EF1	20	$5,268,148
Government Facilities	EF2	20	$14,125,111
Government Facilities	EF3	20	$21,361,944
Government Facilities	EF4	20	$24,141,621
Transportation Systems	EF0	2	$22,959
Transportation Systems	EF1	2	$131,339
Transportation Systems	EF2	2	$282,363
Transportation Systems	EF3	2	$415,471
Transportation Systems	EF4	2	$433,166
All Categories	**EF0**	**141**	**$2,205,825**
All Categories	**EF1**	**141**	**$11,774,380**
All Categories	**EF2**	**141**	**$29,602,420**
All Categories	**EF3**	**141**	**$40,315,312**
All Categories	**EF4**	**141**	**$43,587,405**

Source: GIS Analysis

Table 6-337: Critical Facilities Exposed to the Tornado - Town of Pine Level

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$23,835
Banking and Finance	EF1	1	$148,133
Banking and Finance	EF2	1	$420,186
Banking and Finance	EF3	1	$534,022
Banking and Finance	EF4	1	$539,253
Commercial Facilities	EF0	45	$606,829
Commercial Facilities	EF1	45	$4,168,346
Commercial Facilities	EF2	45	$11,418,470
Commercial Facilities	EF3	45	$16,104,701

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF4	45	$16,823,104
Critical Manufacturing	EF0	9	$339,386
Critical Manufacturing	EF1	9	$2,427,077
Critical Manufacturing	EF2	9	$5,417,297
Critical Manufacturing	EF3	9	$5,829,256
Critical Manufacturing	EF4	9	$5,836,031
Emergency Services	EF0	2	$24,103
Emergency Services	EF1	2	$194,331
Emergency Services	EF2	2	$703,275
Emergency Services	EF3	2	$1,118,705
Emergency Services	EF4	2	$1,158,799
Food and Agriculture	EF0	138	$447,713
Food and Agriculture	EF1	138	$3,086,323
Food and Agriculture	EF2	138	$5,684,114
Food and Agriculture	EF3	138	$5,991,084
Food and Agriculture	EF4	138	$5,991,084
Government Facilities	EF0	12	$626,703
Government Facilities	EF1	12	$3,519,889
Government Facilities	EF2	12	$7,957,923
Government Facilities	EF3	12	$10,848,453
Government Facilities	EF4	12	$11,653,266
Healthcare and Public Health	EF0	1	$79,211
Healthcare and Public Health	EF1	1	$320,675
Healthcare and Public Health	EF2	1	$595,841
Healthcare and Public Health	EF3	1	$750,040
Healthcare and Public Health	EF4	1	$776,548
Transportation Systems	EF0	5	$107,232
Transportation Systems	EF1	5	$613,435
Transportation Systems	EF2	5	$1,318,812

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF3	5	$1,940,512
Transportation Systems	EF4	5	$2,023,157
All Categories	**EF0**	**213**	**$2,255,012**
All Categories	**EF1**	**213**	**$14,478,209**
All Categories	**EF2**	**213**	**$33,515,918**
All Categories	**EF3**	**213**	**$43,116,773**
All Categories	**EF4**	**213**	**$44,801,242**

Source: GIS Analysis

Table 6-338: Critical Facilities Exposed to the Tornado - Town of Princeton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$26,374
Banking and Finance	EF1	3	$163,916
Banking and Finance	EF2	3	$464,955
Banking and Finance	EF3	3	$590,920
Banking and Finance	EF4	3	$596,708
Commercial Facilities	EF0	64	$821,679
Commercial Facilities	EF1	64	$5,548,159
Commercial Facilities	EF2	64	$15,372,107
Commercial Facilities	EF3	64	$21,501,394
Commercial Facilities	EF4	64	$22,578,585
Critical Manufacturing	EF0	11	$272,803
Critical Manufacturing	EF1	11	$1,968,760
Critical Manufacturing	EF2	11	$4,448,788
Critical Manufacturing	EF3	11	$4,769,284
Critical Manufacturing	EF4	11	$4,769,284
Emergency Services	EF0	1	$13,253
Emergency Services	EF1	1	$106,852
Emergency Services	EF2	1	$386,692
Emergency Services	EF3	1	$615,114
Emergency Services	EF4	1	$637,160
Energy	EF0	1	$3,432,000

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF1	1	$24,768,000
Energy	EF2	1	$55,968,000
Energy	EF3	1	$60,000,000
Energy	EF4	1	$60,000,000
Food and Agriculture	EF0	56	$108,336
Food and Agriculture	EF1	56	$781,838
Food and Agriculture	EF2	56	$1,766,711
Food and Agriculture	EF3	56	$1,893,987
Food and Agriculture	EF4	56	$1,893,987
Government Facilities	EF0	20	$1,079,931
Government Facilities	EF1	20	$4,574,407
Government Facilities	EF2	20	$12,285,500
Government Facilities	EF3	20	$18,586,021
Government Facilities	EF4	20	$20,992,639
Healthcare and Public Health	EF0	4	$150,547
Healthcare and Public Health	EF1	4	$609,469
Healthcare and Public Health	EF2	4	$1,132,445
Healthcare and Public Health	EF3	4	$1,425,514
Healthcare and Public Health	EF4	4	$1,475,894
Transportation Systems	EF0	16	$283,432
Transportation Systems	EF1	16	$1,621,403
Transportation Systems	EF2	16	$3,485,826
Transportation Systems	EF3	16	$5,129,073
Transportation Systems	EF4	16	$5,347,518
All Categories	**EF0**	**176**	**$6,188,355**
All Categories	**EF1**	**176**	**$40,142,804**
All Categories	**EF2**	**176**	**$95,311,024**
All Categories	**EF3**	**176**	**$114,511,307**
All Categories	**EF4**	**176**	**$118,291,775**

Sector	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-339: Critical Facilities Exposed to the Tornado - Town of Selma

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	7	$134,771
Banking and Finance	EF1	7	$837,593
Banking and Finance	EF2	7	$2,375,873
Banking and Finance	EF3	7	$3,019,542
Banking and Finance	EF4	7	$3,049,119
Commercial Facilities	EF0	255	$7,164,444
Commercial Facilities	EF1	255	$48,243,523
Commercial Facilities	EF2	255	$116,929,249
Commercial Facilities	EF3	255	$150,788,629
Commercial Facilities	EF4	255	$156,394,441
Critical Manufacturing	EF0	42	$2,231,757
Critical Manufacturing	EF1	42	$16,106,109
Critical Manufacturing	EF2	42	$36,394,812
Critical Manufacturing	EF3	42	$39,016,736
Critical Manufacturing	EF4	42	$39,016,736
Emergency Services	EF0	2	$25,733
Emergency Services	EF1	2	$207,472
Emergency Services	EF2	2	$750,833
Emergency Services	EF3	2	$1,194,355
Emergency Services	EF4	2	$1,237,160
Energy	EF0	3	$2,867,557
Energy	EF1	3	$20,688,869
Energy	EF2	3	$46,699,553
Energy	EF3	3	$50,059,553
Energy	EF4	3	$50,059,553
Food and Agriculture	EF0	206	$560,273
Food and Agriculture	EF1	206	$4,002,516
Food and Agriculture	EF2	206	$8,680,275

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF3	206	$9,276,671
Food and Agriculture	EF4	206	$9,276,671
Government Facilities	EF0	28	$1,554,309
Government Facilities	EF1	28	$7,575,293
Government Facilities	EF2	28	$21,331,116
Government Facilities	EF3	28	$32,153,445
Government Facilities	EF4	28	$35,294,292
Healthcare and Public Health	EF0	16	$592,600
Healthcare and Public Health	EF1	16	$2,742,177
Healthcare and Public Health	EF2	16	$6,308,704
Healthcare and Public Health	EF3	16	$8,769,147
Healthcare and Public Health	EF4	16	$9,081,042
Transportation Systems	EF0	49	$1,611,822
Transportation Systems	EF1	49	$9,488,686
Transportation Systems	EF2	49	$20,393,657
Transportation Systems	EF3	49	$28,768,691
Transportation Systems	EF4	49	$29,860,938
All Categories	**EF0**	**608**	**$16,743,266**
All Categories	**EF1**	**608**	**$109,892,238**
All Categories	**EF2**	**608**	**$259,864,072**
All Categories	**EF3**	**608**	**$323,046,769**
All Categories	**EF4**	**608**	**$333,269,952**

Source: GIS Analysis

Table 6-340: Critical Facilities Exposed to the Tornado - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	17	$1,237,652
Banking and Finance	EF1	17	$7,659,916

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF2	17	$21,473,385
Banking and Finance	EF3	17	$27,450,584
Banking and Finance	EF4	17	$27,757,888
Commercial Facilities	EF0	445	$13,999,890
Commercial Facilities	EF1	445	$87,391,652
Commercial Facilities	EF2	445	$231,499,477
Commercial Facilities	EF3	445	$315,110,463
Commercial Facilities	EF4	445	$333,627,627
Communications	EF0	1	$43,689
Communications	EF1	1	$315,297
Communications	EF2	1	$712,473
Communications	EF3	1	$763,800
Communications	EF4	1	$763,800
Critical Manufacturing	EF0	105	$10,804,918
Critical Manufacturing	EF1	105	$77,443,601
Critical Manufacturing	EF2	105	$173,437,688
Critical Manufacturing	EF3	105	$186,499,537
Critical Manufacturing	EF4	105	$186,666,467
Defense Industrial Base	EF0	2	$3,573,892
Defense Industrial Base	EF1	2	$25,792,002
Defense Industrial Base	EF2	2	$58,281,928
Defense Industrial Base	EF3	2	$62,480,626
Defense Industrial Base	EF4	2	$62,480,626
Emergency Services	EF0	4	$168,455
Emergency Services	EF1	4	$1,358,165
Emergency Services	EF2	4	$4,915,150
Emergency Services	EF3	4	$7,818,562
Emergency Services	EF4	4	$8,098,780
Energy	EF0	10	$14,905,218
Energy	EF1	10	$107,535,101
Energy	EF2	10	$242,987,401
Energy	EF3	10	$260,551,210

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF4	10	$260,571,906
Food and Agriculture	EF0	349	$1,359,288
Food and Agriculture	EF1	349	$9,553,698
Food and Agriculture	EF2	349	$19,306,638
Food and Agriculture	EF3	349	$20,516,175
Food and Agriculture	EF4	349	$20,516,175
Government Facilities	EF0	112	$5,459,122
Government Facilities	EF1	112	$31,139,015
Government Facilities	EF2	112	$99,277,920
Government Facilities	EF3	112	$154,887,883
Government Facilities	EF4	112	$165,853,561
Healthcare and Public Health	EF0	57	$4,481,099
Healthcare and Public Health	EF1	57	$25,109,213
Healthcare and Public Health	EF2	57	$71,299,506
Healthcare and Public Health	EF3	57	$106,562,556
Healthcare and Public Health	EF4	57	$110,368,817
Transportation Systems	EF0	55	$2,577,477
Transportation Systems	EF1	55	$14,929,123
Transportation Systems	EF2	55	$31,912,159
Transportation Systems	EF3	55	$46,016,680
Transportation Systems	EF4	55	$47,885,536
All Categories	**EF0**	**1,157**	**$58,610,700**
All Categories	**EF1**	**1,157**	**$388,226,783**
All Categories	**EF2**	**1,157**	**$955,103,725**
All Categories	**EF3**	**1,157**	**$1,188,658,076**
All Categories	**EF4**	**1,157**	**$1,224,591,183**

Source: GIS Analysis

Table 6-341: Critical Facilities Exposed to the Tornado - Town of Wilson's Mills

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	45	$712,405
Commercial Facilities	EF1	45	$5,098,157
Commercial Facilities	EF2	45	$14,676,393
Commercial Facilities	EF3	45	$20,992,440
Commercial Facilities	EF4	45	$21,803,516
Critical Manufacturing	EF0	11	$534,841
Critical Manufacturing	EF1	11	$3,848,885
Critical Manufacturing	EF2	11	$8,664,171
Critical Manufacturing	EF3	11	$9,299,046
Critical Manufacturing	EF4	11	$9,302,387
Emergency Services	EF0	1	$27,491
Emergency Services	EF1	1	$183,201
Emergency Services	EF2	1	$368,017
Emergency Services	EF3	1	$409,377
Emergency Services	EF4	1	$414,014
Energy	EF0	7	$3,432,000
Energy	EF1	7	$24,768,000
Energy	EF2	7	$55,968,000
Energy	EF3	7	$60,000,000
Energy	EF4	7	$60,000,000
Food and Agriculture	EF0	94	$624,322
Food and Agriculture	EF1	94	$4,214,140
Food and Agriculture	EF2	94	$6,924,721
Food and Agriculture	EF3	94	$7,217,124
Food and Agriculture	EF4	94	$7,217,124
Government Facilities	EF0	9	$373,547
Government Facilities	EF1	9	$1,579,875
Government Facilities	EF2	9	$4,238,338
Government Facilities	EF3	9	$6,410,506
Government Facilities	EF4	9	$7,243,309
Healthcare and Public Health	EF0	1	$20,187

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF1	1	$81,726
Healthcare and Public Health	EF2	1	$151,855
Healthcare and Public Health	EF3	1	$191,153
Healthcare and Public Health	EF4	1	$197,909
Transportation Systems	EF0	9	$201,651
Transportation Systems	EF1	9	$1,168,462
Transportation Systems	EF2	9	$2,497,217
Transportation Systems	EF3	9	$3,598,558
Transportation Systems	EF4	9	$3,744,470
All Categories	**EF0**	**177**	**$5,926,444**
All Categories	**EF1**	**177**	**$40,942,446**
All Categories	**EF2**	**177**	**$93,488,712**
All Categories	**EF3**	**177**	**$108,118,204**
All Categories	**EF4**	**177**	**$109,922,729**

Source: GIS Analysis

Table 6-342: Critical Facilities Exposed to the Tornado - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	36	$1,616,762
Banking and Finance	EF1	36	$9,741,509
Banking and Finance	EF2	36	$26,756,653
Banking and Finance	EF3	36	$35,013,468
Banking and Finance	EF4	36	$35,741,055
Commercial Facilities	EF0	845	$33,478,565
Commercial Facilities	EF1	845	$214,466,422
Commercial Facilities	EF2	845	$570,803,476
Commercial Facilities	EF3	845	$774,961,766
Commercial Facilities	EF4	845	$817,194,126
Communications	EF0	1	$20,100

Sector	Event	Number of Buildings At Risk	Estimated Damages
Communications	EF1	1	$95,659
Communications	EF2	1	$308,539
Communications	EF3	1	$450,948
Communications	EF4	1	$494,814
Critical Manufacturing	EF0	250	$50,336,583
Critical Manufacturing	EF1	250	$352,778,727
Critical Manufacturing	EF2	250	$812,338,736
Critical Manufacturing	EF3	250	$898,250,337
Critical Manufacturing	EF4	250	$906,872,921
Defense Industrial Base	EF0	2	$401,402
Defense Industrial Base	EF1	2	$2,897,363
Defense Industrial Base	EF2	2	$6,547,224
Defense Industrial Base	EF3	2	$7,019,263
Defense Industrial Base	EF4	2	$7,019,263
Emergency Services	EF0	6	$536,104
Emergency Services	EF1	6	$4,315,962
Emergency Services	EF2	6	$15,617,596
Emergency Services	EF3	6	$24,841,523
Emergency Services	EF4	6	$25,732,975
Energy	EF0	19	$2,091,999
Energy	EF1	19	$14,181,047
Energy	EF2	19	$33,763,317
Energy	EF3	19	$38,432,523
Energy	EF4	19	$39,248,403
Food and Agriculture	EF0	105	$880,909
Food and Agriculture	EF1	105	$4,790,665
Food and Agriculture	EF2	105	$12,944,783
Food and Agriculture	EF3	105	$17,453,622
Food and Agriculture	EF4	105	$18,778,363
Government Facilities	EF0	177	$17,926,503
Government Facilities	EF1	177	$84,248,133
Government Facilities	EF2	177	$242,487,961

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF3	177	$371,761,086
Government Facilities	EF4	177	$410,434,674
Healthcare and Public Health	EF0	102	$8,699,124
Healthcare and Public Health	EF1	102	$42,345,962
Healthcare and Public Health	EF2	102	$102,384,380
Healthcare and Public Health	EF3	102	$144,686,136
Healthcare and Public Health	EF4	102	$149,763,837
Transportation Systems	EF0	225	$11,781,074
Transportation Systems	EF1	225	$67,270,074
Transportation Systems	EF2	225	$145,088,609
Transportation Systems	EF3	225	$213,470,571
Transportation Systems	EF4	225	$222,684,782
All Categories	**EF0**	**1,768**	**$127,769,125**
All Categories	**EF1**	**1,768**	**$797,131,523**
All Categories	**EF2**	**1,768**	**$1,969,041,274**
All Categories	**EF3**	**1,768**	**$2,526,341,243**
All Categories	**EF4**	**1,768**	**$2,633,965,213**

Source: GIS Analysis

Table 6-343: Critical Facilities Exposed to the Tornado - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	440	$11,564,698
Commercial Facilities	EF1	440	$80,486,354
Commercial Facilities	EF2	440	$212,487,850
Commercial Facilities	EF3	440	$286,734,771
Commercial Facilities	EF4	440	$299,043,155
Critical Manufacturing	EF0	256	$14,410,927

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	EF1	256	$100,379,236
Critical Manufacturing	EF2	256	$233,449,198
Critical Manufacturing	EF3	256	$259,198,969
Critical Manufacturing	EF4	256	$262,400,061
Defense Industrial Base	EF0	1	$96,666
Defense Industrial Base	EF1	1	$460,056
Defense Industrial Base	EF2	1	$1,483,866
Defense Industrial Base	EF3	1	$2,168,752
Defense Industrial Base	EF4	1	$2,379,718
Emergency Services	EF0	9	$335,413
Emergency Services	EF1	9	$2,700,279
Emergency Services	EF2	9	$9,771,140
Emergency Services	EF3	9	$15,542,085
Emergency Services	EF4	9	$16,099,822
Energy	EF0	8	$232,563
Energy	EF1	8	$1,678,666
Energy	EF2	8	$3,793,311
Energy	EF3	8	$4,066,800
Energy	EF4	8	$4,066,800
Food and Agriculture	EF0	1,170	$9,855,858
Food and Agriculture	EF1	1,170	$66,967,015
Food and Agriculture	EF2	1,170	$115,673,861
Food and Agriculture	EF3	1,170	$121,501,196
Food and Agriculture	EF4	1,170	$121,626,937
Government Facilities	EF0	34	$4,639,719
Government Facilities	EF1	34	$20,794,852

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF2	34	$58,110,398
Government Facilities	EF3	34	$88,596,234
Government Facilities	EF4	34	$98,765,948
Healthcare and Public Health	EF0	27	$2,160,250
Healthcare and Public Health	EF1	27	$9,033,877
Healthcare and Public Health	EF2	27	$17,314,658
Healthcare and Public Health	EF3	27	$22,329,662
Healthcare and Public Health	EF4	27	$23,135,472
Transportation Systems	EF0	123	$4,510,919
Transportation Systems	EF1	123	$25,719,215
Transportation Systems	EF2	123	$55,675,637
Transportation Systems	EF3	123	$81,910,203
Transportation Systems	EF4	123	$85,494,516
All Categories	**EF0**	**2,068**	**$47,807,013**
All Categories	**EF1**	**2,068**	**$308,219,550**
All Categories	**EF2**	**2,068**	**$707,759,919**
All Categories	**EF3**	**2,068**	**$882,048,672**
All Categories	**EF4**	**2,068**	**$913,012,429**

Source: GIS Analysis

Table 6-344: Critical Facilities Exposed to the Tornado - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	7	$165,565
Banking and Finance	EF1	7	$1,020,092
Banking and Finance	EF2	7	$2,828,474

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF3	7	$3,635,354
Banking and Finance	EF4	7	$3,680,756
Chemical	EF0	1	$20,443
Chemical	EF1	1	$97,293
Chemical	EF2	1	$313,809
Chemical	EF3	1	$458,649
Chemical	EF4	1	$503,264
Commercial Facilities	EF0	967	$24,361,362
Commercial Facilities	EF1	967	$178,888,486
Commercial Facilities	EF2	967	$470,232,685
Commercial Facilities	EF3	967	$638,957,190
Commercial Facilities	EF4	967	$664,371,649
Critical Manufacturing	EF0	303	$9,318,768
Critical Manufacturing	EF1	303	$67,019,530
Critical Manufacturing	EF2	303	$151,902,090
Critical Manufacturing	EF3	303	$163,448,107
Critical Manufacturing	EF4	303	$163,665,038
Emergency Services	EF0	8	$467,176
Emergency Services	EF1	8	$3,761,050
Emergency Services	EF2	8	$13,609,613
Emergency Services	EF3	8	$21,647,602
Emergency Services	EF4	8	$22,424,438
Energy	EF0	4	$75,322
Energy	EF1	4	$363,681
Energy	EF2	4	$1,158,254
Energy	EF3	4	$1,679,397
Energy	EF4	4	$1,839,158
Food and Agriculture	EF0	3,782	$32,821,510
Food and Agriculture	EF1	3,782	$216,398,871
Food and Agriculture	EF2	3,782	$308,481,419
Food and Agriculture	EF3	3,782	$316,827,376
Food and Agriculture	EF4	3,782	$317,007,736

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF0	89	$4,961,527
Government Facilities	EF1	89	$22,336,335
Government Facilities	EF2	89	$62,537,493
Government Facilities	EF3	89	$95,363,938
Government Facilities	EF4	89	$106,214,813
Healthcare and Public Health	EF0	40	$2,442,127
Healthcare and Public Health	EF1	40	$10,169,906
Healthcare and Public Health	EF2	40	$19,730,461
Healthcare and Public Health	EF3	40	$25,466,622
Healthcare and Public Health	EF4	40	$26,374,143
Nuclear Reactors, Materials and Waste	EF0	1	$17,632
Nuclear Reactors, Materials and Waste	EF1	1	$83,917
Nuclear Reactors, Materials and Waste	EF2	1	$270,665
Nuclear Reactors, Materials and Waste	EF3	1	$395,592
Nuclear Reactors, Materials and Waste	EF4	1	$434,074
Transportation Systems	EF0	194	$8,706,751
Transportation Systems	EF1	194	$49,633,660
Transportation Systems	EF2	194	$107,488,810
Transportation Systems	EF3	194	$158,136,631
Transportation Systems	EF4	194	$165,067,104
Water	EF0	9	$3,251,862
Water	EF1	9	$23,472,316
Water	EF2	9	$53,040,822
Water	EF3	9	$56,864,937
Water	EF4	9	$56,864,937
All Categories	**EF0**	**5,405**	**$86,610,045**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF1**	**5,405**	**$573,245,137**
All Categories	**EF2**	**5,405**	**$1,191,594,595**
All Categories	**EF3**	**5,405**	**$1,482,881,395**
All Categories	**EF4**	**5,405**	**$1,528,447,110**

Source: GIS Analysis

Table 6-345: Critical Facilities Exposed to the Tornado - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$228,885
Banking and Finance	EF1	6	$1,374,440
Banking and Finance	EF2	6	$3,523,774
Banking and Finance	EF3	6	$4,713,495
Banking and Finance	EF4	6	$4,816,327
Commercial Facilities	EF0	290	$10,569,919
Commercial Facilities	EF1	290	$65,562,844
Commercial Facilities	EF2	290	$173,866,174
Commercial Facilities	EF3	290	$233,429,280
Commercial Facilities	EF4	290	$247,672,891
Communications	EF0	1	$116,289
Communications	EF1	1	$553,443
Communications	EF2	1	$1,785,076
Communications	EF3	1	$2,608,987
Communications	EF4	1	$2,862,778
Critical Manufacturing	EF0	98	$10,004,717
Critical Manufacturing	EF1	98	$69,610,187
Critical Manufacturing	EF2	98	$162,520,350
Critical Manufacturing	EF3	98	$181,053,686
Critical Manufacturing	EF4	98	$183,433,431
Defense Industrial Base	EF0	1	$68,251
Defense Industrial Base	EF1	1	$324,821
Defense Industrial Base	EF2	1	$1,047,679
Defense Industrial Base	EF3	1	$1,531,241

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	EF4	1	$1,680,193
Emergency Services	EF0	6	$236,316
Emergency Services	EF1	6	$1,637,280
Emergency Services	EF2	6	$4,970,026
Emergency Services	EF3	6	$7,738,830
Emergency Services	EF4	6	$8,030,416
Energy	EF0	3	$23,953
Energy	EF1	3	$113,998
Energy	EF2	3	$367,688
Energy	EF3	3	$537,396
Energy	EF4	3	$589,672
Food and Agriculture	EF0	27	$86,127
Food and Agriculture	EF1	27	$604,468
Food and Agriculture	EF2	27	$1,212,660
Food and Agriculture	EF3	27	$1,287,899
Food and Agriculture	EF4	27	$1,287,899
Government Facilities	EF0	39	$2,222,681
Government Facilities	EF1	39	$10,049,342
Government Facilities	EF2	39	$28,245,088
Government Facilities	EF3	39	$43,110,121
Government Facilities	EF4	39	$47,969,009
Healthcare and Public Health	EF0	15	$1,130,149
Healthcare and Public Health	EF1	15	$6,026,620
Healthcare and Public Health	EF2	15	$16,008,691
Healthcare and Public Health	EF3	15	$23,547,846
Healthcare and Public Health	EF4	15	$24,398,881
Transportation Systems	EF0	62	$2,839,823
Transportation Systems	EF1	62	$16,236,724
Transportation Systems	EF2	62	$34,905,567

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF3	62	$51,360,324
Transportation Systems	EF4	62	$53,550,038
All Categories	**EF0**	**548**	**$27,527,110**
All Categories	**EF1**	**548**	**$172,094,167**
All Categories	**EF2**	**548**	**$428,452,773**
All Categories	**EF3**	**548**	**$550,919,105**
All Categories	**EF4**	**548**	**$576,291,535**

Source: GIS Analysis

Table 6-346: Critical Facilities Exposed to the Tornado - Town of Cameron

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	48	$919,285
Commercial Facilities	EF1	48	$5,843,686
Commercial Facilities	EF2	48	$15,863,504
Commercial Facilities	EF3	48	$21,658,696
Commercial Facilities	EF4	48	$22,744,733
Critical Manufacturing	EF0	10	$198,851
Critical Manufacturing	EF1	10	$1,435,332
Critical Manufacturing	EF2	10	$3,243,445
Critical Manufacturing	EF3	10	$3,477,290
Critical Manufacturing	EF4	10	$3,477,290
Food and Agriculture	EF0	31	$106,449
Food and Agriculture	EF1	31	$729,368
Food and Agriculture	EF2	31	$1,300,805
Food and Agriculture	EF3	31	$1,366,960
Food and Agriculture	EF4	31	$1,366,960
Government Facilities	EF0	9	$414,499
Government Facilities	EF1	9	$1,930,119
Government Facilities	EF2	9	$5,528,180
Government Facilities	EF3	9	$8,467,354
Government Facilities	EF4	9	$9,365,159
Transportation Systems	EF0	5	$142,681

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF1	5	$815,779
Transportation Systems	EF2	5	$1,753,755
Transportation Systems	EF3	5	$2,580,489
Transportation Systems	EF4	5	$2,690,506
All Categories	**EF0**	**103**	**$1,781,765**
All Categories	**EF1**	**103**	**$10,754,284**
All Categories	**EF2**	**103**	**$27,689,689**
All Categories	**EF3**	**103**	**$37,550,789**
All Categories	**EF4**	**103**	**$39,644,648**

Source: GIS Analysis

Table 6-347: Critical Facilities Exposed to the Tornado - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	5	$117,663
Banking and Finance	EF1	5	$730,716
Banking and Finance	EF2	5	$2,072,342
Banking and Finance	EF3	5	$2,633,818
Banking and Finance	EF4	5	$2,659,634
Commercial Facilities	EF0	147	$5,311,853
Commercial Facilities	EF1	147	$36,298,134
Commercial Facilities	EF2	147	$96,087,615
Commercial Facilities	EF3	147	$130,314,808
Commercial Facilities	EF4	147	$136,518,584
Critical Manufacturing	EF0	34	$1,200,587
Critical Manufacturing	EF1	34	$8,620,743
Critical Manufacturing	EF2	34	$19,564,998
Critical Manufacturing	EF3	34	$21,085,567
Critical Manufacturing	EF4	34	$21,125,715
Emergency Services	EF0	4	$63,367
Emergency Services	EF1	4	$510,141
Emergency Services	EF2	4	$1,845,981
Emergency Services	EF3	4	$2,936,237

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	EF4	4	$3,041,606
Food and Agriculture	EF0	32	$560,362
Food and Agriculture	EF1	32	$3,017,880
Food and Agriculture	EF2	32	$7,685,538
Food and Agriculture	EF3	32	$10,429,406
Food and Agriculture	EF4	32	$11,254,070
Government Facilities	EF0	126	$4,954,839
Government Facilities	EF1	126	$26,999,721
Government Facilities	EF2	126	$84,359,453
Government Facilities	EF3	126	$131,197,783
Government Facilities	EF4	126	$141,347,728
Healthcare and Public Health	EF0	6	$390,977
Healthcare and Public Health	EF1	6	$2,372,143
Healthcare and Public Health	EF2	6	$7,203,571
Healthcare and Public Health	EF3	6	$10,974,665
Healthcare and Public Health	EF4	6	$11,367,549
Transportation Systems	EF0	25	$848,973
Transportation Systems	EF1	25	$4,854,011
Transportation Systems	EF2	25	$10,435,111
Transportation Systems	EF3	25	$15,354,304
Transportation Systems	EF4	25	$16,008,925
Water	EF0	4	$62,769
Water	EF1	4	$453,072
Water	EF2	4	$1,023,815
Water	EF3	4	$1,097,629
Water	EF4	4	$1,097,629
All Categories	**EF0**	**383**	**$13,511,390**
All Categories	**EF1**	**383**	**$83,856,561**
All Categories	**EF2**	**383**	**$230,278,424**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF3**	**383**	**$326,024,217**
All Categories	**EF4**	**383**	**$344,421,440**

Source: GIS Analysis

Table 6-348: Critical Facilities Exposed to the Tornado - Town of Pinebluff

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	2	$60,251
Banking and Finance	EF1	2	$364,012
Banking and Finance	EF2	2	$951,447
Banking and Finance	EF3	2	$1,260,040
Banking and Finance	EF4	2	$1,284,635
Commercial Facilities	EF0	37	$2,021,694
Commercial Facilities	EF1	37	$10,608,724
Commercial Facilities	EF2	37	$32,237,848
Commercial Facilities	EF3	37	$46,206,023
Commercial Facilities	EF4	37	$50,108,720
Critical Manufacturing	EF0	7	$909,611
Critical Manufacturing	EF1	7	$6,522,554
Critical Manufacturing	EF2	7	$14,819,734
Critical Manufacturing	EF3	7	$15,993,043
Critical Manufacturing	EF4	7	$16,031,316
Emergency Services	EF0	1	$32,589
Emergency Services	EF1	1	$262,358
Emergency Services	EF2	1	$949,359
Emergency Services	EF3	1	$1,510,061
Emergency Services	EF4	1	$1,564,251
Food and Agriculture	EF0	26	$60,141
Food and Agriculture	EF1	26	$434,108
Food and Agriculture	EF2	26	$980,961
Food and Agriculture	EF3	26	$1,051,686
Food and Agriculture	EF4	26	$1,051,686
Government Facilities	EF0	5	$34,599

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF1	5	$232,111
Government Facilities	EF2	5	$791,849
Government Facilities	EF3	5	$1,248,769
Government Facilities	EF4	5	$1,313,186
Healthcare and Public Health	EF0	4	$188,769
Healthcare and Public Health	EF1	4	$780,708
Healthcare and Public Health	EF2	4	$1,509,757
Healthcare and Public Health	EF3	4	$1,940,753
Healthcare and Public Health	EF4	4	$2,009,494
Transportation Systems	EF0	5	$120,575
Transportation Systems	EF1	5	$689,389
Transportation Systems	EF2	5	$1,482,042
Transportation Systems	EF3	5	$2,180,688
Transportation Systems	EF4	5	$2,273,660
Water	EF0	4	$3,372,482
Water	EF1	4	$24,342,963
Water	EF2	4	$55,008,239
Water	EF3	4	$58,974,200
Water	EF4	4	$58,974,200
All Categories	**EF0**	**91**	**$6,800,711**
All Categories	**EF1**	**91**	**$44,236,927**
All Categories	**EF2**	**91**	**$108,731,236**
All Categories	**EF3**	**91**	**$130,365,263**
All Categories	**EF4**	**91**	**$134,611,148**

Source: GIS Analysis

Table 6-349: Critical Facilities Exposed to the Tornado - Town of Robbins

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$121,265
Banking and Finance	EF1	6	$753,087

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF2	6	$2,135,788
Banking and Finance	EF3	6	$2,714,453
Banking and Finance	EF4	6	$2,741,060
Commercial Facilities	EF0	99	$2,148,271
Commercial Facilities	EF1	99	$13,587,911
Commercial Facilities	EF2	99	$39,547,641
Commercial Facilities	EF3	99	$56,222,890
Commercial Facilities	EF4	99	$59,513,557
Critical Manufacturing	EF0	19	$1,494,738
Critical Manufacturing	EF1	19	$10,014,601
Critical Manufacturing	EF2	19	$24,077,957
Critical Manufacturing	EF3	19	$27,697,184
Critical Manufacturing	EF4	19	$28,384,678
Emergency Services	EF0	2	$50,350
Emergency Services	EF1	2	$405,345
Emergency Services	EF2	2	$1,466,766
Emergency Services	EF3	2	$2,333,055
Emergency Services	EF4	2	$2,416,778
Energy	EF0	1	$21,512
Energy	EF1	1	$102,378
Energy	EF2	1	$330,210
Energy	EF3	1	$482,620
Energy	EF4	1	$529,567
Food and Agriculture	EF0	41	$59,358
Food and Agriculture	EF1	41	$428,454
Food and Agriculture	EF2	41	$968,186
Food and Agriculture	EF3	41	$1,037,990
Food and Agriculture	EF4	41	$1,037,990
Government Facilities	EF0	20	$1,173,067
Government Facilities	EF1	20	$4,989,343
Government Facilities	EF2	20	$13,443,820
Government Facilities	EF3	20	$20,352,200

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF4	20	$22,963,191
Healthcare and Public Health	EF0	4	$105,680
Healthcare and Public Health	EF1	4	$457,534
Healthcare and Public Health	EF2	4	$955,698
Healthcare and Public Health	EF3	4	$1,274,996
Healthcare and Public Health	EF4	4	$1,320,269
Transportation Systems	EF0	13	$734,147
Transportation Systems	EF1	13	$4,197,496
Transportation Systems	EF2	13	$9,023,739
Transportation Systems	EF3	13	$13,277,601
Transportation Systems	EF4	13	$13,843,683
Water	EF0	3	$44,520
Water	EF1	3	$321,354
Water	EF2	3	$726,169
Water	EF3	3	$778,524
Water	EF4	3	$778,524
All Categories	**EF0**	**208**	**$5,952,908**
All Categories	**EF1**	**208**	**$35,257,503**
All Categories	**EF2**	**208**	**$92,675,974**
All Categories	**EF3**	**208**	**$126,171,513**
All Categories	**EF4**	**208**	**$133,529,297**

Source: GIS Analysis

Table 6-350: Critical Facilities Exposed to the Tornado - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	27	$1,191,160
Banking and Finance	EF1	27	$7,350,673
Banking and Finance	EF2	27	$20,474,770

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF3	27	$26,255,815
Banking and Finance	EF4	27	$26,569,478
Chemical	EF0	1	$87,535
Chemical	EF1	1	$416,599
Chemical	EF2	1	$1,343,700
Chemical	EF3	1	$1,963,891
Chemical	EF4	1	$2,154,930
Commercial Facilities	EF0	524	$21,018,757
Commercial Facilities	EF1	524	$155,757,953
Commercial Facilities	EF2	524	$367,897,777
Commercial Facilities	EF3	524	$475,818,767
Commercial Facilities	EF4	524	$494,936,845
Communications	EF0	3	$181,673
Communications	EF1	3	$977,415
Communications	EF2	3	$3,261,026
Communications	EF3	3	$4,895,008
Communications	EF4	3	$5,273,689
Critical Manufacturing	EF0	97	$3,134,959
Critical Manufacturing	EF1	97	$20,514,288
Critical Manufacturing	EF2	97	$49,788,084
Critical Manufacturing	EF3	97	$58,708,764
Critical Manufacturing	EF4	97	$60,500,294
Defense Industrial Base	EF0	1	$770,282
Defense Industrial Base	EF1	1	$5,559,984
Defense Industrial Base	EF2	1	$12,563,998
Defense Industrial Base	EF3	1	$13,469,832
Defense Industrial Base	EF4	1	$13,469,832
Emergency Services	EF0	2	$110,174
Emergency Services	EF1	2	$886,966
Emergency Services	EF2	2	$3,209,545
Emergency Services	EF3	2	$5,105,138
Emergency Services	EF4	2	$5,288,339

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	EF0	3	$62,173
Energy	EF1	3	$295,895
Energy	EF2	3	$954,381
Energy	EF3	3	$1,394,880
Energy	EF4	3	$1,530,568
Food and Agriculture	EF0	87	$442,338
Food and Agriculture	EF1	87	$2,989,407
Food and Agriculture	EF2	87	$4,942,970
Food and Agriculture	EF3	87	$5,155,198
Food and Agriculture	EF4	87	$5,155,198
Government Facilities	EF0	111	$6,219,006
Government Facilities	EF1	111	$33,284,289
Government Facilities	EF2	111	$103,071,612
Government Facilities	EF3	111	$160,059,981
Government Facilities	EF4	111	$172,889,114
Healthcare and Public Health	EF0	53	$9,804,597
Healthcare and Public Health	EF1	53	$48,244,424
Healthcare and Public Health	EF2	53	$118,542,877
Healthcare and Public Health	EF3	53	$169,421,071
Healthcare and Public Health	EF4	53	$175,504,875
Transportation Systems	EF0	132	$5,151,300
Transportation Systems	EF1	132	$29,452,619
Transportation Systems	EF2	132	$63,316,980
Transportation Systems	EF3	132	$93,165,100
Transportation Systems	EF4	132	$97,137,133
Water	EF0	1	$6,319
Water	EF1	1	$45,615
Water	EF2	1	$103,077
Water	EF3	1	$110,508

Sector	Event	Number of Buildings At Risk	Estimated Damages
Water	EF4	1	$110,508
All Categories	**EF0**	**1,042**	**$48,180,273**
All Categories	**EF1**	**1,042**	**$305,776,127**
All Categories	**EF2**	**1,042**	**$749,470,797**
All Categories	**EF3**	**1,042**	**$1,015,523,953**
All Categories	**EF4**	**1,042**	**$1,060,520,803**

Source: GIS Analysis

Table 6-351: Critical Facilities Exposed to the Tornado - Town of Taylortown

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$63,443
Banking and Finance	EF1	1	$362,735
Banking and Finance	EF2	1	$779,804
Banking and Finance	EF3	1	$1,147,410
Banking and Finance	EF4	1	$1,196,329
Commercial Facilities	EF0	21	$1,712,248
Commercial Facilities	EF1	21	$11,450,968
Commercial Facilities	EF2	21	$27,024,846
Commercial Facilities	EF3	21	$37,607,562
Commercial Facilities	EF4	21	$39,314,523
Critical Manufacturing	EF0	5	$213,188
Critical Manufacturing	EF1	5	$1,461,398
Critical Manufacturing	EF2	5	$3,447,045
Critical Manufacturing	EF3	5	$3,883,790
Critical Manufacturing	EF4	5	$3,952,501
Government Facilities	EF0	10	$754,234
Government Facilities	EF1	10	$3,166,561
Government Facilities	EF2	10	$8,451,248
Government Facilities	EF3	10	$12,769,730
Government Facilities	EF4	10	$14,454,627
Healthcare and Public Health	EF0	4	$713,970

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF1	4	$3,107,990
Healthcare and Public Health	EF2	4	$5,992,920
Healthcare and Public Health	EF3	4	$7,885,306
Healthcare and Public Health	EF4	4	$8,181,376
Transportation Systems	EF0	4	$232,280
Transportation Systems	EF1	4	$1,328,062
Transportation Systems	EF2	4	$2,855,057
Transportation Systems	EF3	4	$4,200,953
Transportation Systems	EF4	4	$4,380,058
All Categories	**EF0**	**45**	**$3,689,363**
All Categories	**EF1**	**45**	**$20,877,714**
All Categories	**EF2**	**45**	**$48,550,920**
All Categories	**EF3**	**45**	**$67,494,751**
All Categories	**EF4**	**45**	**$71,479,414**

Source: GIS Analysis

Table 6-352: Critical Facilities Exposed to the Tornado - Town of Vass

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$90,330
Banking and Finance	EF1	6	$560,971
Banking and Finance	EF2	6	$1,590,940
Banking and Finance	EF3	6	$2,021,986
Banking and Finance	EF4	6	$2,041,805
Commercial Facilities	EF0	83	$1,857,047
Commercial Facilities	EF1	83	$11,788,233
Commercial Facilities	EF2	83	$31,821,558
Commercial Facilities	EF3	83	$43,402,643
Commercial Facilities	EF4	83	$45,571,616
Critical Manufacturing	EF0	12	$114,542

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	EF1	12	$826,779
Critical Manufacturing	EF2	12	$1,868,288
Critical Manufacturing	EF3	12	$2,002,987
Critical Manufacturing	EF4	12	$2,002,987
Emergency Services	EF0	2	$48,682
Emergency Services	EF1	2	$391,921
Emergency Services	EF2	2	$1,418,191
Emergency Services	EF3	2	$2,255,790
Emergency Services	EF4	2	$2,336,741
Food and Agriculture	EF0	94	$749,036
Food and Agriculture	EF1	94	$4,947,143
Food and Agriculture	EF2	94	$7,086,033
Food and Agriculture	EF3	94	$7,271,349
Food and Agriculture	EF4	94	$7,271,349
Government Facilities	EF0	12	$1,029,445
Government Facilities	EF1	12	$4,380,580
Government Facilities	EF2	12	$11,807,608
Government Facilities	EF3	12	$17,876,422
Government Facilities	EF4	12	$20,167,432
Healthcare and Public Health	EF0	3	$101,772
Healthcare and Public Health	EF1	3	$411,901
Healthcare and Public Health	EF2	3	$765,344
Healthcare and Public Health	EF3	3	$963,379
Healthcare and Public Health	EF4	3	$997,452
Transportation Systems	EF0	10	$443,870
Transportation Systems	EF1	10	$2,537,830
Transportation Systems	EF2	10	$5,455,805
Transportation Systems	EF3	10	$8,027,714
Transportation Systems	EF4	10	$8,369,971

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF0**	**222**	**$4,434,724**
All Categories	**EF1**	**222**	**$25,845,358**
All Categories	**EF2**	**222**	**$61,813,767**
All Categories	**EF3**	**222**	**$83,822,270**
All Categories	**EF4**	**222**	**$88,759,353**

Source: GIS Analysis

Table 6-353: Critical Facilities Exposed to the Tornado - Village of Foxfire

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	19	$588,517
Commercial Facilities	EF1	19	$5,085,410
Commercial Facilities	EF2	19	$10,986,715
Commercial Facilities	EF3	19	$12,887,884
Commercial Facilities	EF4	19	$13,036,639
Critical Manufacturing	EF0	3	$43,726
Critical Manufacturing	EF1	3	$315,616
Critical Manufacturing	EF2	3	$713,204
Critical Manufacturing	EF3	3	$764,624
Critical Manufacturing	EF4	3	$764,624
Emergency Services	EF0	2	$23,470
Emergency Services	EF1	2	$188,947
Emergency Services	EF2	2	$683,716
Emergency Services	EF3	2	$1,087,527
Emergency Services	EF4	2	$1,126,553
Food and Agriculture	EF0	48	$77,785
Food and Agriculture	EF1	48	$561,461
Food and Agriculture	EF2	48	$1,268,744
Food and Agriculture	EF3	48	$1,360,217
Food and Agriculture	EF4	48	$1,360,217
Transportation Systems	EF0	2	$45,226
Transportation Systems	EF1	2	$258,582
Transportation Systems	EF2	2	$555,898

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	EF3	2	$817,952
Transportation Systems	EF4	2	$852,825
All Categories	**EF0**	**74**	**$778,724**
All Categories	**EF1**	**74**	**$6,410,016**
All Categories	**EF2**	**74**	**$14,208,277**
All Categories	**EF3**	**74**	**$16,918,204**
All Categories	**EF4**	**74**	**$17,140,858**

Source: GIS Analysis

Table 6-354: Critical Facilities Exposed to the Tornado - Village of Pinehurst

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	10	$397,312
Banking and Finance	EF1	10	$2,467,407
Banking and Finance	EF2	10	$6,997,675
Banking and Finance	EF3	10	$8,893,609
Banking and Finance	EF4	10	$8,980,782
Commercial Facilities	EF0	164	$11,835,088
Commercial Facilities	EF1	164	$101,728,155
Commercial Facilities	EF2	164	$220,505,115
Commercial Facilities	EF3	164	$281,144,688
Commercial Facilities	EF4	164	$287,501,416
Critical Manufacturing	EF0	16	$461,444
Critical Manufacturing	EF1	16	$3,288,708
Critical Manufacturing	EF2	16	$7,413,942
Critical Manufacturing	EF3	16	$8,086,000
Critical Manufacturing	EF4	16	$8,107,606
Emergency Services	EF0	3	$39,911
Emergency Services	EF1	3	$321,311
Emergency Services	EF2	3	$1,162,684
Emergency Services	EF3	3	$1,849,379
Emergency Services	EF4	3	$1,915,745
Food and Agriculture	EF0	59	$199,212

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF1	59	$1,386,721
Food and Agriculture	EF2	59	$2,677,351
Food and Agriculture	EF3	59	$2,834,091
Food and Agriculture	EF4	59	$2,834,091
Government Facilities	EF0	18	$646,903
Government Facilities	EF1	18	$3,920,487
Government Facilities	EF2	18	$12,854,012
Government Facilities	EF3	18	$20,147,551
Government Facilities	EF4	18	$21,414,108
Healthcare and Public Health	EF0	96	$20,645,922
Healthcare and Public Health	EF1	96	$98,190,424
Healthcare and Public Health	EF2	96	$233,724,897
Healthcare and Public Health	EF3	96	$329,359,909
Healthcare and Public Health	EF4	96	$341,111,197
Transportation Systems	EF0	25	$1,337,219
Transportation Systems	EF1	25	$7,645,568
Transportation Systems	EF2	25	$16,436,375
Transportation Systems	EF3	25	$24,184,611
Transportation Systems	EF4	25	$25,215,706
All Categories	**EF0**	**391**	**$35,563,011**
All Categories	**EF1**	**391**	**$218,948,781**
All Categories	**EF2**	**391**	**$501,772,051**
All Categories	**EF3**	**391**	**$676,499,838**
All Categories	**EF4**	**391**	**$697,080,651**

Source: GIS Analysis

Table 6-355: Critical Facilities Exposed to the Tornado - Village of Whispering Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	32	$1,079,544
Commercial Facilities	EF1	32	$9,043,985
Commercial Facilities	EF2	32	$21,407,348
Commercial Facilities	EF3	32	$27,475,854
Commercial Facilities	EF4	32	$28,379,880
Critical Manufacturing	EF0	7	$241,771
Critical Manufacturing	EF1	7	$1,745,131
Critical Manufacturing	EF2	7	$3,943,503
Critical Manufacturing	EF3	7	$4,227,821
Critical Manufacturing	EF4	7	$4,227,821
Emergency Services	EF0	3	$41,234
Emergency Services	EF1	3	$331,958
Emergency Services	EF2	3	$1,201,212
Emergency Services	EF3	3	$1,910,661
Emergency Services	EF4	3	$1,979,226
Food and Agriculture	EF0	38	$90,036
Food and Agriculture	EF1	38	$626,157
Food and Agriculture	EF2	38	$1,203,537
Food and Agriculture	EF3	38	$1,273,494
Food and Agriculture	EF4	38	$1,273,494
Government Facilities	EF0	11	$530,784
Government Facilities	EF1	11	$2,303,300
Government Facilities	EF2	11	$6,295,874
Government Facilities	EF3	11	$9,558,067
Government Facilities	EF4	11	$10,732,696
Healthcare and Public Health	EF0	1	$43,503
Healthcare and Public Health	EF1	1	$176,069
Healthcare and Public Health	EF2	1	$327,150
Healthcare and Public Health	EF3	1	$411,801

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF4	1	$426,366
Transportation Systems	EF0	10	$346,592
Transportation Systems	EF1	10	$1,981,645
Transportation Systems	EF2	10	$4,260,123
Transportation Systems	EF3	10	$6,268,379
Transportation Systems	EF4	10	$6,535,627
All Categories	**EF0**	**102**	**$2,373,464**
All Categories	**EF1**	**102**	**$16,208,245**
All Categories	**EF2**	**102**	**$38,638,747**
All Categories	**EF3**	**102**	**$51,126,077**
All Categories	**EF4**	**102**	**$53,555,110**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-356: Critical Facilities Exposed to the Tornado (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	262	$9,136,132
Banking and Finance	EF1	262	$56,122,268
Banking and Finance	EF2	262	$156,531,021
Banking and Finance	EF3	262	$201,505,230
Banking and Finance	EF4	262	$204,316,397
Chemical	EF0	5	$734,874
Chemical	EF1	5	$5,014,345
Chemical	EF2	5	$11,872,256
Chemical	EF3	5	$13,432,052
Chemical	EF4	5	$13,689,104
Commercial Facilities	EF0	8,653	$274,554,494
Commercial Facilities	EF1	8,653	$1,872,803,297
Commercial Facilities	EF2	8,653	$4,901,504,822
Commercial Facilities	EF3	8,653	$6,634,962,128

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF4	8,653	$6,942,185,153
Communications	EF0	9	$518,699
Communications	EF1	9	$3,098,690
Communications	EF2	9	$10,192,717
Communications	EF3	9	$15,216,782
Communications	EF4	9	$16,170,934
Critical Manufacturing	EF0	2,656	$184,979,958
Critical Manufacturing	EF1	2,656	$1,306,085,761
Critical Manufacturing	EF2	2,656	$2,994,845,127
Critical Manufacturing	EF3	2,656	$3,283,000,723
Critical Manufacturing	EF4	2,656	$3,307,262,333
Defense Industrial Base	EF0	8	$5,943,681
Defense Industrial Base	EF1	8	$40,941,491
Defense Industrial Base	EF2	8	$92,624,082
Defense Industrial Base	EF3	8	$105,355,691
Defense Industrial Base	EF4	8	$106,512,274
Emergency Services	EF0	131	$5,716,914
Emergency Services	EF1	131	$40,067,263
Emergency Services	EF2	131	$134,285,632
Emergency Services	EF3	131	$209,885,771
Emergency Services	EF4	131	$219,443,190
Energy	EF0	98	$74,778,657
Energy	EF1	98	$537,712,742
Energy	EF2	98	$1,218,694,176
Energy	EF3	98	$1,311,356,441
Energy	EF4	98	$1,313,100,802
Food and Agriculture	EF0	22,750	$153,156,088
Food and Agriculture	EF1	22,750	$1,020,517,650
Food and Agriculture	EF2	22,750	$1,583,692,333
Food and Agriculture	EF3	22,750	$1,647,650,140
Food and Agriculture	EF4	22,750	$1,650,471,011
Government Facilities	EF0	1,946	$128,445,589

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF1	1,946	$604,565,518
Government Facilities	EF2	1,946	$1,738,351,312
Government Facilities	EF3	1,946	$2,663,448,450
Government Facilities	EF4	1,946	$2,940,021,616
Healthcare and Public Health	EF0	730	$74,289,113
Healthcare and Public Health	EF1	730	$362,260,531
Healthcare and Public Health	EF2	730	$884,029,193
Healthcare and Public Health	EF3	730	$1,257,841,655
Healthcare and Public Health	EF4	730	$1,302,714,207
Nuclear Reactors, Materials and Waste	EF0	4	$285,990
Nuclear Reactors, Materials and Waste	EF1	4	$2,011,125
Nuclear Reactors, Materials and Waste	EF2	4	$4,621,484
Nuclear Reactors, Materials and Waste	EF3	4	$5,092,354
Nuclear Reactors, Materials and Waste	EF4	4	$5,135,898
Transportation Systems	EF0	1,580	$62,225,577
Transportation Systems	EF1	1,580	$355,697,658
Transportation Systems	EF2	1,580	$767,764,447
Transportation Systems	EF3	1,580	$1,127,128,809
Transportation Systems	EF4	1,580	$1,175,719,004
Water	EF0	72	$55,183,250
Water	EF1	72	$398,309,931
Water	EF2	72	$900,066,835
Water	EF3	72	$964,953,166
Water	EF4	72	$964,953,166
All Categories	**EF0**	**38,904**	**$1,029,949,016**
All Categories	**EF1**	**38,904**	**$6,605,208,270**

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF2**	**38,904**	**$15,399,075,437**
All Categories	**EF3**	**38,904**	**$19,440,829,392**
All Categories	**EF4**	**38,904**	**$20,161,695,089**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-357: High Potential Loss Properties Exposed to the Tornado - Chatham County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	19	$7,075,350
Commercial	EF1	19	$42,916,387
Commercial	EF2	19	$106,790,741
Commercial	EF3	19	$143,836,203
Commercial	EF4	19	$151,622,061
Government	EF0	8	$3,742,322
Government	EF1	8	$15,935,030
Government	EF2	8	$42,972,335
Government	EF3	8	$65,065,150
Government	EF4	8	$73,392,071
Industrial	EF0	11	$10,258,665
Industrial	EF1	11	$74,048,228
Industrial	EF2	11	$167,328,137
Industrial	EF3	11	$179,392,092
Industrial	EF4	11	$179,392,092
Religious	EF0	4	$391,068
Religious	EF1	4	$3,148,332
Religious	EF2	4	$11,392,452
Religious	EF3	4	$18,120,960
Religious	EF4	4	$18,771,242
Residential	EF0	116	$11,204,495

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	EF1	116	$80,717,271
Residential	EF2	116	$161,332,330
Residential	EF3	116	$209,067,730
Residential	EF4	116	$213,886,216
Utilities	EF0	13	$27,534,921
Utilities	EF1	13	$198,750,243
Utilities	EF2	13	$449,119,563
Utilities	EF3	13	$481,500,000
Utilities	EF4	13	$481,500,000
All Categories	**EF0**	**171**	**$60,206,821**
All Categories	**EF1**	**171**	**$415,515,491**
All Categories	**EF2**	**171**	**$938,935,558**
All Categories	**EF3**	**171**	**$1,096,982,135**
All Categories	**EF4**	**171**	**$1,118,563,682**

Source: GIS Analysis

Table 6-358: High Potential Loss Properties Exposed to the Tornado - Town of Goldston

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	EF0	1	$510,269
Industrial	EF1	1	$3,683,184
Industrial	EF2	1	$8,322,957
Industrial	EF3	1	$8,923,022
Industrial	EF4	1	$8,923,022
All Categories	**EF0**	**1**	**$510,269**
All Categories	**EF1**	**1**	**$3,683,184**
All Categories	**EF2**	**1**	**$8,322,957**
All Categories	**EF3**	**1**	**$8,923,022**
All Categories	**EF4**	**1**	**$8,923,022**

Source: GIS Analysis

Table 6-359: High Potential Loss Properties Exposed to the Tornado - Town of Pittsboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	10	$3,148,194
Commercial	EF1	10	$17,469,544
Commercial	EF2	10	$54,137,697
Commercial	EF3	10	$80,760,714
Commercial	EF4	10	$86,538,527
Government	EF0	5	$1,079,867
Government	EF1	5	$5,080,166
Government	EF2	5	$14,643,040
Government	EF3	5	$22,454,504
Government	EF4	5	$24,785,824
Industrial	EF0	1	$222,707
Industrial	EF1	1	$1,607,523
Industrial	EF2	1	$3,632,550
Industrial	EF3	1	$3,894,448
Industrial	EF4	1	$3,894,448
Religious	EF0	2	$125,342
Religious	EF1	2	$1,009,082
Religious	EF2	2	$3,651,432
Religious	EF3	2	$5,808,008
Religious	EF4	2	$6,016,432
Residential	EF0	1	$37,415
Residential	EF1	1	$224,973
Residential	EF2	1	$632,782
Residential	EF3	1	$1,256,280
Residential	EF4	1	$1,377,694
Utilities	EF0	2	$3,516,921
Utilities	EF1	2	$25,385,545
Utilities	EF2	2	$57,364,181
Utilities	EF3	2	$61,500,000
Utilities	EF4	2	$61,500,000
All Categories	**EF0**	**21**	**$8,130,446**
All Categories	**EF1**	**21**	**$50,776,833**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF2**	**21**	**$134,061,682**
All Categories	**EF3**	**21**	**$175,673,954**
All Categories	**EF4**	**21**	**$184,112,925**

Source: GIS Analysis

Table 6-360: High Potential Loss Properties Exposed to the Tornado - Town of Siler City

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	11	$3,284,584
Commercial	EF1	11	$17,759,069
Commercial	EF2	11	$52,787,027
Commercial	EF3	11	$77,961,270
Commercial	EF4	11	$82,998,916
Government	EF0	6	$5,298,360
Government	EF1	6	$22,320,281
Government	EF2	6	$59,721,055
Government	EF3	6	$90,283,391
Government	EF4	6	$102,108,248
Industrial	EF0	7	$9,648,085
Industrial	EF1	7	$69,640,994
Industrial	EF2	7	$157,369,028
Industrial	EF3	7	$168,714,955
Industrial	EF4	7	$168,714,955
Religious	EF0	2	$116,388
Religious	EF1	2	$936,994
Religious	EF2	2	$3,390,577
Religious	EF3	2	$5,393,089
Religious	EF4	2	$5,586,623
Residential	EF0	2	$55,714
Residential	EF1	2	$335,010
Residential	EF2	2	$942,284
Residential	EF3	2	$1,870,743
Residential	EF4	2	$2,051,542

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	EF0	6	$7,434,143
Utilities	EF1	6	$53,660,502
Utilities	EF2	6	$121,257,618
Utilities	EF3	6	$130,000,000
Utilities	EF4	6	$130,000,000
All Categories	**EF0**	**34**	**$25,837,274**
All Categories	**EF1**	**34**	**$164,652,850**
All Categories	**EF2**	**34**	**$395,467,589**
All Categories	**EF3**	**34**	**$474,223,448**
All Categories	**EF4**	**34**	**$491,460,284**

Source: GIS Analysis

Table 6-361: High Potential Loss Properties Exposed to the Tornado - City of Dunn

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	80	$10,500,626
Commercial	EF1	80	$57,834,157
Commercial	EF2	80	$149,975,328
Commercial	EF3	80	$205,430,573
Commercial	EF4	80	$218,018,949
Government	EF0	20	$3,677,233
Government	EF1	20	$17,162,965
Government	EF2	20	$49,228,953
Government	EF3	20	$75,422,750
Government	EF4	20	$83,381,719
Industrial	EF0	16	$3,055,277
Industrial	EF1	16	$22,053,340
Industrial	EF2	16	$49,834,337
Industrial	EF3	16	$53,427,272
Industrial	EF4	16	$53,427,272
Religious	EF0	17	$950,943
Religious	EF1	17	$7,655,670
Religious	EF2	17	$27,702,553

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	EF3	17	$44,063,989
Religious	EF4	17	$45,645,251
Residential	EF0	8	$541,041
Residential	EF1	8	$3,626,217
Residential	EF2	8	$7,036,751
Residential	EF3	8	$10,208,769
Residential	EF4	8	$10,726,442
All Categories	**EF0**	**141**	**$18,725,120**
All Categories	**EF1**	**141**	**$108,332,349**
All Categories	**EF2**	**141**	**$283,777,922**
All Categories	**EF3**	**141**	**$388,553,353**
All Categories	**EF4**	**141**	**$411,199,633**

Source: GIS Analysis

Table 6-362: High Potential Loss Properties Exposed to the Tornado - Harnett County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$160,663
Agricultural	EF1	1	$1,034,871
Agricultural	EF2	1	$1,226,653
Agricultural	EF3	1	$1,226,653
Agricultural	EF4	1	$1,226,653
Commercial	EF0	86	$12,031,069
Commercial	EF1	86	$67,536,834
Commercial	EF2	86	$168,660,264
Commercial	EF3	86	$228,164,130
Commercial	EF4	86	$242,530,050
Government	EF0	88	$23,098,435
Government	EF1	88	$105,549,053
Government	EF2	88	$298,714,959
Government	EF3	88	$456,516,757
Government	EF4	88	$506,845,782

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	EF0	13	$3,100,904
Industrial	EF1	13	$22,382,683
Industrial	EF2	13	$50,578,558
Industrial	EF3	13	$54,225,150
Industrial	EF4	13	$54,225,150
Religious	EF0	98	$5,455,319
Religious	EF1	98	$43,918,649
Religious	EF2	98	$158,922,570
Religious	EF3	98	$252,784,009
Religious	EF4	98	$261,855,312
Residential	EF0	28	$1,343,876
Residential	EF1	28	$9,830,406
Residential	EF2	28	$30,907,295
Residential	EF3	28	$50,718,937
Residential	EF4	28	$53,268,351
All Categories	**EF0**	**314**	**$45,190,266**
All Categories	**EF1**	**314**	**$250,252,496**
All Categories	**EF2**	**314**	**$709,010,299**
All Categories	**EF3**	**314**	**$1,043,635,636**
All Categories	**EF4**	**314**	**$1,119,951,298**

Source: GIS Analysis

Table 6-363: High Potential Loss Properties Exposed to the Tornado - Town of Angier

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	10	$1,206,069
Commercial	EF1	10	$7,597,869
Commercial	EF2	10	$18,897,252
Commercial	EF3	10	$24,146,589
Commercial	EF4	10	$25,113,348
Government	EF0	3	$1,715,671
Government	EF1	3	$7,421,072
Government	EF2	3	$20,238,863

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF3	3	$30,711,959
Government	EF4	3	$34,512,299
Industrial	EF0	4	$629,879
Industrial	EF1	4	$4,546,537
Industrial	EF2	4	$10,273,893
Industrial	EF3	4	$11,014,616
Industrial	EF4	4	$11,014,616
Religious	EF0	8	$327,697
Religious	EF1	8	$2,638,164
Religious	EF2	8	$9,546,372
Religious	EF3	8	$15,184,565
Religious	EF4	8	$15,729,472
Residential	EF0	4	$161,635
Residential	EF1	4	$1,060,800
Residential	EF2	4	$2,546,064
Residential	EF3	4	$4,313,840
Residential	EF4	4	$4,628,257
All Categories	**EF0**	**29**	**$4,040,951**
All Categories	**EF1**	**29**	**$23,264,442**
All Categories	**EF2**	**29**	**$61,502,444**
All Categories	**EF3**	**29**	**$85,371,569**
All Categories	**EF4**	**29**	**$90,997,992**

Source: GIS Analysis

Table 6-364: High Potential Loss Properties Exposed to the Tornado - Town of Benson

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	7	$1,765,489
Commercial	EF1	7	$10,267,666
Commercial	EF2	7	$23,048,023
Commercial	EF3	7	$28,948,607
Commercial	EF4	7	$29,904,620
Government	EF0	7	$1,354,127

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF1	7	$6,821,944
Government	EF2	7	$20,457,301
Government	EF3	7	$31,593,487
Government	EF4	7	$34,450,782
Industrial	EF0	4	$2,225,277
Industrial	EF1	4	$16,059,345
Industrial	EF2	4	$36,289,139
Industrial	EF3	4	$38,903,451
Industrial	EF4	4	$38,903,451
Religious	EF0	4	$156,461
Religious	EF1	4	$1,261,467
Religious	EF2	4	$4,565,201
Religious	EF3	4	$7,261,897
Religious	EF4	4	$7,522,164
Utilities	EF0	3	$3,432,000
Utilities	EF1	3	$24,768,000
Utilities	EF2	3	$55,968,001
Utilities	EF3	3	$60,000,001
Utilities	EF4	3	$60,000,001
All Categories	**EF0**	**25**	**$8,933,354**
All Categories	**EF1**	**25**	**$59,178,422**
All Categories	**EF2**	**25**	**$140,327,665**
All Categories	**EF3**	**25**	**$166,707,443**
All Categories	**EF4**	**25**	**$170,781,018**

Source: GIS Analysis

Table 6-365: High Potential Loss Properties Exposed to the Tornado - Town of Broadway

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	2	$679,212
Government	EF1	2	$2,950,188
Government	EF2	2	$8,069,456
Government	EF3	2	$12,252,218

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF4	2	$13,754,902
Religious	EF0	2	$63,274
Religious	EF1	2	$509,398
Religious	EF2	2	$1,843,291
Religious	EF3	2	$2,931,960
Religious	EF4	2	$3,037,175
All Categories	**EF0**	**4**	**$742,486**
All Categories	**EF1**	**4**	**$3,459,586**
All Categories	**EF2**	**4**	**$9,912,747**
All Categories	**EF3**	**4**	**$15,184,178**
All Categories	**EF4**	**4**	**$16,792,077**

Source: GIS Analysis

Table 6-366: High Potential Loss Properties Exposed to the Tornado - Town of Coats

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	3	$369,554
Commercial	EF1	3	$2,073,678
Commercial	EF2	3	$4,667,643
Commercial	EF3	3	$6,861,812
Commercial	EF4	3	$7,204,572
Government	EF0	2	$2,037,488
Government	EF1	2	$8,528,035
Government	EF2	2	$22,708,683
Government	EF3	2	$34,296,814
Government	EF4	2	$38,852,263
Religious	EF0	4	$315,132
Religious	EF1	4	$2,537,008
Religious	EF2	4	$9,180,333
Religious	EF3	4	$14,602,340
Religious	EF4	4	$15,126,354
Residential	EF0	1	$30,990
Residential	EF1	1	$186,341

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	EF2	1	$524,123
Residential	EF3	1	$1,040,556
Residential	EF4	1	$1,141,121
All Categories	**EF0**	**10**	**$2,753,164**
All Categories	**EF1**	**10**	**$13,325,062**
All Categories	**EF2**	**10**	**$37,080,782**
All Categories	**EF3**	**10**	**$56,801,522**
All Categories	**EF4**	**10**	**$62,324,310**

Source: GIS Analysis

Table 6-367: High Potential Loss Properties Exposed to the Tornado - Town of Erwin

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	15	$3,024,041
Commercial	EF1	15	$16,444,993
Commercial	EF2	15	$48,581,871
Commercial	EF3	15	$69,414,650
Commercial	EF4	15	$74,521,093
Government	EF0	8	$1,271,335
Government	EF1	8	$5,764,973
Government	EF2	8	$16,234,462
Government	EF3	8	$24,787,441
Government	EF4	8	$27,564,131
Industrial	EF0	5	$2,068,362
Industrial	EF1	5	$14,929,673
Industrial	EF2	5	$33,736,856
Industrial	EF3	5	$36,169,202
Industrial	EF4	5	$36,169,202
Religious	EF0	15	$551,442
Religious	EF1	15	$4,439,446
Religious	EF2	15	$16,064,433
Religious	EF3	15	$25,552,267
Religious	EF4	15	$26,469,225

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	EF0	1	$22,386
Residential	EF1	1	$180,218
Residential	EF2	1	$652,130
Residential	EF3	1	$1,037,285
Residential	EF4	1	$1,074,509
All Categories	**EF0**	**44**	**$6,937,566**
All Categories	**EF1**	**44**	**$41,759,303**
All Categories	**EF2**	**44**	**$115,269,752**
All Categories	**EF3**	**44**	**$156,960,845**
All Categories	**EF4**	**44**	**$165,798,160**

Source: GIS Analysis7

Table 6-368: High Potential Loss Properties Exposed to the Tornado - Town of Lillington

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	15	$2,604,544
Commercial	EF1	15	$14,624,321
Commercial	EF2	15	$35,028,449
Commercial	EF3	15	$51,127,461
Commercial	EF4	15	$53,634,260
Government	EF0	25	$3,160,267
Government	EF1	25	$19,334,601
Government	EF2	25	$63,642,335
Government	EF3	25	$99,815,698
Government	EF4	25	$105,976,116
Industrial	EF0	7	$2,452,206
Industrial	EF1	7	$17,700,303
Industrial	EF2	7	$39,997,698
Industrial	EF3	7	$42,881,436
Industrial	EF4	7	$42,881,436
Religious	EF0	7	$288,814
Religious	EF1	7	$2,325,126
Religious	EF2	7	$8,413,625

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	EF3	7	$13,382,806
Religious	EF4	7	$13,863,056
Residential	EF0	4	$274,206
Residential	EF1	4	$1,731,970
Residential	EF2	4	$2,987,292
Residential	EF3	4	$4,511,578
Residential	EF4	4	$4,808,403
All Categories	**EF0**	**58**	**$8,780,037**
All Categories	**EF1**	**58**	**$55,716,321**
All Categories	**EF2**	**58**	**$150,069,399**
All Categories	**EF3**	**58**	**$211,718,979**
All Categories	**EF4**	**58**	**$221,163,271**

Source: GIS Analysis

Table 6-369: High Potential Loss Properties Exposed to the Tornado - Johnston County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	2	$452,741
Agricultural	EF1	2	$2,915,861
Agricultural	EF2	2	$3,456,040
Agricultural	EF3	2	$3,456,040
Agricultural	EF4	2	$3,456,040
Commercial	EF0	54	$5,486,170
Commercial	EF1	54	$31,566,940
Commercial	EF2	54	$75,666,859
Commercial	EF3	54	$105,009,159
Commercial	EF4	54	$111,235,729
Government	EF0	25	$8,124,877
Government	EF1	25	$35,662,581
Government	EF2	25	$98,231,022
Government	EF3	25	$149,348,354
Government	EF4	25	$167,270,463

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	EF0	4	$674,836
Industrial	EF1	4	$4,870,145
Industrial	EF2	4	$11,005,018
Industrial	EF3	4	$11,797,833
Industrial	EF4	4	$11,797,833
Religious	EF0	24	$933,626
Religious	EF1	24	$7,527,358
Religious	EF2	24	$27,241,228
Religious	EF3	24	$43,332,808
Religious	EF4	24	$44,885,858
Residential	EF0	11	$2,379,345
Residential	EF1	11	$17,272,267
Residential	EF2	11	$32,741,340
Residential	EF3	11	$39,567,818
Residential	EF4	11	$39,887,885
Utilities	EF0	2	$32,032,000
Utilities	EF1	2	$231,168,000
Utilities	EF2	2	$522,368,000
Utilities	EF3	2	$560,000,000
Utilities	EF4	2	$560,000,000
All Categories	**EF0**	**122**	**$50,083,595**
All Categories	**EF1**	**122**	**$330,983,152**
All Categories	**EF2**	**122**	**$770,709,507**
All Categories	**EF3**	**122**	**$912,512,012**
All Categories	**EF4**	**122**	**$938,533,808**

Source: GIS Analysis

Table 6-370: High Potential Loss Properties Exposed to the Tornado - Town of Archer Lodge

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	2	$109,552
Government	EF1	2	$551,836
Government	EF2	2	$1,654,695

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF3	2	$2,555,416
Government	EF4	2	$2,786,588
Religious	EF0	1	$39,084
Religious	EF1	1	$315,113
Religious	EF2	1	$1,140,381
Religious	EF3	1	$1,814,012
Religious	EF4	1	$1,879,026
All Categories	**EF0**	**3**	**$148,636**
All Categories	**EF1**	**3**	**$866,949**
All Categories	**EF2**	**3**	**$2,795,076**
All Categories	**EF3**	**3**	**$4,369,428**
All Categories	**EF4**	**3**	**$4,665,614**

Source: GIS Analysis

Table 6-371: High Potential Loss Properties Exposed to the Tornado - Town of Clayton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	40	$6,460,945
Commercial	EF1	40	$41,656,569
Commercial	EF2	40	$104,854,721
Commercial	EF3	40	$134,730,665
Commercial	EF4	40	$140,061,461
Government	EF0	11	$4,391,889
Government	EF1	11	$18,736,151
Government	EF2	11	$50,580,961
Government	EF3	11	$76,599,877
Government	EF4	11	$86,367,554
Industrial	EF0	22	$7,375,073
Industrial	EF1	22	$53,224,305
Industrial	EF2	22	$120,270,425
Industrial	EF3	22	$128,934,847
Industrial	EF4	22	$128,934,847
Religious	EF0	11	$585,651

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	EF1	11	$4,721,815
Religious	EF2	11	$17,088,072
Religious	EF3	11	$27,182,113
Religious	EF4	11	$28,156,322
Residential	EF0	8	$4,322,775
Residential	EF1	8	$31,683,940
Residential	EF2	8	$61,186,750
Residential	EF3	8	$74,187,139
Residential	EF4	8	$74,815,180
Utilities	EF0	4	$10,296,000
Utilities	EF1	4	$74,304,000
Utilities	EF2	4	$167,904,000
Utilities	EF3	4	$180,000,000
Utilities	EF4	4	$180,000,000
All Categories	**EF0**	**96**	**$33,432,333**
All Categories	**EF1**	**96**	**$224,326,780**
All Categories	**EF2**	**96**	**$521,884,929**
All Categories	**EF3**	**96**	**$621,634,641**
All Categories	**EF4**	**96**	**$638,335,364**

Source: GIS Analysis

Table 6-372: High Potential Loss Properties Exposed to the Tornado - Town of Four Oaks

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	3	$211,490
Commercial	EF1	3	$1,361,214
Commercial	EF2	3	$3,844,150
Commercial	EF3	3	$5,513,795
Commercial	EF4	3	$5,670,819
Government	EF0	3	$1,194,442
Government	EF1	3	$5,199,129
Government	EF2	3	$14,237,956
Government	EF3	3	$21,622,704

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF4	3	$24,263,886
Industrial	EF0	1	$371,178
Industrial	EF1	1	$2,678,713
Industrial	EF2	1	$6,053,062
Industrial	EF3	1	$6,489,131
Industrial	EF4	1	$6,489,131
All Categories	**EF0**	**7**	**$1,777,110**
All Categories	**EF1**	**7**	**$9,239,056**
All Categories	**EF2**	**7**	**$24,135,168**
All Categories	**EF3**	**7**	**$33,625,630**
All Categories	**EF4**	**7**	**$36,423,836**

Source: GIS Analysis

Table 6-373: High Potential Loss Properties Exposed to the Tornado - Town of Kenly

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	7	$790,423
Commercial	EF1	7	$5,049,098
Commercial	EF2	7	$10,740,705
Commercial	EF3	7	$14,378,620
Commercial	EF4	7	$14,830,768
Government	EF0	1	$66,646
Government	EF1	1	$279,022
Government	EF2	1	$742,923
Government	EF3	1	$1,121,979
Government	EF4	1	$1,270,983
Industrial	EF0	1	$74,528
Industrial	EF1	1	$537,949
Industrial	EF2	1	$1,215,613
Industrial	EF3	1	$1,303,255
Industrial	EF4	1	$1,303,255
Religious	EF0	1	$37,568
Religious	EF1	1	$302,445

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	EF2	1	$1,094,418
Religious	EF3	1	$1,740,793
Religious	EF4	1	$1,803,262
Utilities	EF0	1	$3,432,000
Utilities	EF1	1	$24,768,000
Utilities	EF2	1	$55,968,000
Utilities	EF3	1	$60,000,000
Utilities	EF4	1	$60,000,000
All Categories	**EF0**	**11**	**$4,401,165**
All Categories	**EF1**	**11**	**$30,936,514**
All Categories	**EF2**	**11**	**$69,761,659**
All Categories	**EF3**	**11**	**$78,544,647**
All Categories	**EF4**	**11**	**$79,208,268**

Source: GIS Analysis

Table 6-374: High Potential Loss Properties Exposed to the Tornado - Town of Micro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	3	$256,148
Commercial	EF1	3	$1,630,551
Commercial	EF2	3	$3,841,781
Commercial	EF3	3	$4,574,804
Commercial	EF4	3	$4,738,691
Government	EF0	2	$1,115,725
Government	EF1	2	$4,671,139
Government	EF2	2	$12,437,375
Government	EF3	2	$18,783,197
Government	EF4	2	$21,277,687
Industrial	EF0	1	$100,506
Industrial	EF1	1	$725,331
Industrial	EF2	1	$1,639,023
Industrial	EF3	1	$1,757,100
Industrial	EF4	1	$1,757,100

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF0**	**6**	**$1,472,379**
All Categories	**EF1**	**6**	**$7,027,021**
All Categories	**EF2**	**6**	**$17,918,179**
All Categories	**EF3**	**6**	**$25,115,101**
All Categories	**EF4**	**6**	**$27,773,478**

Source: GIS Analysis

Table 6-375: High Potential Loss Properties Exposed to the Tornado - Town of Pine Level

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	2	$132,850
Commercial	EF1	2	$695,560
Commercial	EF2	2	$1,838,648
Commercial	EF3	2	$2,695,339
Commercial	EF4	2	$2,892,469
Government	EF0	1	$342,703
Government	EF1	1	$1,434,772
Government	EF2	1	$3,820,225
Government	EF3	1	$5,769,388
Government	EF4	1	$6,535,587
Religious	EF0	1	$23,649
Religious	EF1	1	$190,673
Religious	EF2	1	$690,039
Religious	EF3	1	$1,097,651
Religious	EF4	1	$1,136,990
Residential	EF0	1	$147,493
Residential	EF1	1	$1,090,238
Residential	EF2	1	$2,068,769
Residential	EF3	1	$2,417,916
Residential	EF4	1	$2,417,916
All Categories	**EF0**	**5**	**$646,695**
All Categories	**EF1**	**5**	**$3,411,243**
All Categories	**EF2**	**5**	**$8,417,681**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF3**	**5**	**$11,980,294**
All Categories	**EF4**	**5**	**$12,982,962**

Source: GIS Analysis

Table 6-376: High Potential Loss Properties Exposed to the Tornado - Town of Princeton

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$74,266
Commercial	EF1	1	$353,544
Commercial	EF2	1	$1,140,033
Commercial	EF3	1	$1,666,314
Commercial	EF4	1	$1,828,416
Government	EF0	3	$860,886
Government	EF1	3	$3,604,221
Government	EF2	3	$9,596,597
Government	EF3	3	$14,492,992
Government	EF4	3	$16,417,724
Religious	EF0	2	$84,609
Religious	EF1	2	$682,159
Religious	EF2	2	$2,468,707
Religious	EF3	2	$3,926,989
Religious	EF4	2	$4,067,733
Residential	EF0	1	$29,620
Residential	EF1	1	$177,828
Residential	EF2	1	$500,162
Residential	EF3	1	$993,028
Residential	EF4	1	$1,088,966
Utilities	EF0	1	$3,432,000
Utilities	EF1	1	$24,768,000
Utilities	EF2	1	$55,968,000
Utilities	EF3	1	$60,000,000
Utilities	EF4	1	$60,000,000
All Categories	**EF0**	**8**	**$4,481,381**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF1**	**8**	**$29,585,752**
All Categories	**EF2**	**8**	**$69,673,499**
All Categories	**EF3**	**8**	**$81,079,323**
All Categories	**EF4**	**8**	**$83,402,839**

Source: GIS Analysis

Table 6-377: High Potential Loss Properties Exposed to the Tornado - Town of Selma

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	16	$3,192,381
Commercial	EF1	16	$20,459,865
Commercial	EF2	16	$47,639,797
Commercial	EF3	16	$59,411,271
Commercial	EF4	16	$61,458,595
Government	EF0	3	$1,252,973
Government	EF1	3	$5,560,555
Government	EF2	3	$15,431,814
Government	EF3	3	$23,496,208
Government	EF4	3	$26,251,066
Industrial	EF0	5	$1,516,233
Industrial	EF1	5	$10,942,326
Industrial	EF2	5	$24,726,264
Industrial	EF3	5	$26,507,573
Industrial	EF4	5	$26,507,573
Religious	EF0	3	$104,333
Religious	EF1	3	$841,185
Religious	EF2	3	$3,044,216
Religious	EF3	3	$4,842,455
Religious	EF4	3	$5,016,009
Utilities	EF0	3	$2,974,400
Utilities	EF1	3	$21,465,600
Utilities	EF2	3	$48,505,600

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	EF3	3	$52,000,000
Utilities	EF4	3	$52,000,000
All Categories	**EF0**	**30**	**$9,040,320**
All Categories	**EF1**	**30**	**$59,269,531**
All Categories	**EF2**	**30**	**$139,347,691**
All Categories	**EF3**	**30**	**$166,257,507**
All Categories	**EF4**	**30**	**$171,233,243**

Source: GIS Analysis

Table 6-378: High Potential Loss Properties Exposed to the Tornado - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	48	$10,326,257
Commercial	EF1	48	$61,788,228
Commercial	EF2	48	$169,242,952
Commercial	EF3	48	$238,821,894
Commercial	EF4	48	$251,528,980
Government	EF0	25	$4,436,233
Government	EF1	25	$25,083,206
Government	EF2	25	$79,738,181
Government	EF3	25	$124,366,936
Government	EF4	25	$133,323,987
Industrial	EF0	9	$6,929,235
Industrial	EF1	9	$50,006,789
Industrial	EF2	9	$112,999,838
Industrial	EF3	9	$121,140,478
Industrial	EF4	9	$121,140,478
Religious	EF0	12	$448,242
Religious	EF1	12	$3,613,951
Religious	EF2	12	$13,078,751
Religious	EF3	12	$20,804,459
Religious	EF4	12	$21,550,093
Residential	EF0	4	$738,369

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	EF1	4	$5,188,405
Residential	EF2	4	$9,097,077
Residential	EF3	4	$10,938,200
Residential	EF4	4	$11,080,423
Utilities	EF0	8	$14,872,000
Utilities	EF1	8	$107,328,000
Utilities	EF2	8	$242,528,000
Utilities	EF3	8	$260,000,000
Utilities	EF4	8	$260,000,000
All Categories	**EF0**	**106**	**$37,750,336**
All Categories	**EF1**	**106**	**$253,008,579**
All Categories	**EF2**	**106**	**$626,684,799**
All Categories	**EF3**	**106**	**$776,071,967**
All Categories	**EF4**	**106**	**$798,623,961**

Source: GIS Analysis

Table 6-379: High Potential Loss Properties Exposed to the Tornado - Town of Wilson's Mills

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$315,738
Agricultural	EF1	1	$2,033,498
Agricultural	EF2	1	$2,410,214
Agricultural	EF3	1	$2,410,214
Agricultural	EF4	1	$2,410,214
Government	EF0	1	$342,186
Government	EF1	1	$1,432,611
Government	EF2	1	$3,814,471
Government	EF3	1	$5,760,698
Government	EF4	1	$6,525,743
Industrial	EF0	1	$352,477
Industrial	EF1	1	$2,543,753
Industrial	EF2	1	$5,748,094
Industrial	EF3	1	$6,162,193

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	EF4	1	$6,162,193
Religious	EF0	2	$65,676
Religious	EF1	2	$529,513
Religious	EF2	2	$1,916,286
Religious	EF3	2	$3,048,250
Religious	EF4	2	$3,157,499
Utilities	EF0	6	$3,385,072
Utilities	EF1	6	$24,429,329
Utilities	EF2	6	$55,202,708
Utilities	EF3	6	$59,179,575
Utilities	EF4	6	$59,179,575
All Categories	**EF0**	**11**	**$4,461,149**
All Categories	**EF1**	**11**	**$30,968,704**
All Categories	**EF2**	**11**	**$69,091,773**
All Categories	**EF3**	**11**	**$76,560,930**
All Categories	**EF4**	**11**	**$77,435,224**

Source: GIS Analysis

Table 6-380: High Potential Loss Properties Exposed to the Tornado - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	63	$18,226,954
Commercial	EF1	63	$101,995,925
Commercial	EF2	63	$285,271,197
Commercial	EF3	63	$402,646,225
Commercial	EF4	63	$428,807,465
Government	EF0	37	$13,967,700
Government	EF1	37	$64,609,606
Government	EF2	37	$184,281,127
Government	EF3	37	$282,039,993
Government	EF4	37	$312,357,933
Industrial	EF0	22	$31,042,373
Industrial	EF1	22	$224,067,434

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	EF2	22	$506,329,281
Industrial	EF3	22	$542,834,402
Industrial	EF4	22	$542,834,402
Religious	EF0	9	$890,455
Religious	EF1	9	$7,168,710
Religious	EF2	9	$25,940,456
Religious	EF3	9	$41,261,178
Religious	EF4	9	$42,741,860
Residential	EF0	7	$430,355
Residential	EF1	7	$2,587,715
Residential	EF2	7	$7,278,484
Residential	EF3	7	$14,450,168
Residential	EF4	7	$15,846,716
Utilities	EF0	8	$1,639,079
Utilities	EF1	8	$11,831,063
Utilities	EF2	8	$26,734,869
Utilities	EF3	8	$28,662,388
Utilities	EF4	8	$28,662,388
All Categories	**EF0**	**146**	**$66,196,916**
All Categories	**EF1**	**146**	**$412,260,453**
All Categories	**EF2**	**146**	**$1,035,835,414**
All Categories	**EF3**	**146**	**$1,311,894,354**
All Categories	**EF4**	**146**	**$1,371,250,764**

Source: GIS Analysis

Table 6-381: High Potential Loss Properties Exposed to the Tornado - Lee County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	32	$3,074,751
Commercial	EF1	32	$19,358,747
Commercial	EF2	32	$42,970,214
Commercial	EF3	32	$56,710,691

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF4	32	$59,333,639
Government	EF0	11	$3,980,509
Government	EF1	11	$17,942,067
Government	EF2	11	$50,327,551
Government	EF3	11	$76,785,162
Government	EF4	11	$85,494,884
Industrial	EF0	16	$7,646,753
Industrial	EF1	16	$55,195,147
Industrial	EF2	16	$124,725,484
Industrial	EF3	16	$133,717,890
Industrial	EF4	16	$133,717,890
Religious	EF0	5	$231,408
Religious	EF1	5	$1,862,972
Religious	EF2	5	$6,741,290
Religious	EF3	5	$10,722,770
Religious	EF4	5	$11,107,563
Residential	EF0	1	$81,818
Residential	EF1	1	$604,304
Residential	EF2	1	$1,146,666
Residential	EF3	1	$1,340,200
Residential	EF4	1	$1,340,200
Utilities	EF0	1	$121,018
Utilities	EF1	1	$873,524
Utilities	EF2	1	$1,973,917
Utilities	EF3	1	$2,116,232
Utilities	EF4	1	$2,116,232
All Categories	**EF0**	**66**	**$15,136,257**
All Categories	**EF1**	**66**	**$95,836,761**
All Categories	**EF2**	**66**	**$227,885,122**
All Categories	**EF3**	**66**	**$281,392,945**
All Categories	**EF4**	**66**	**$293,110,408**

Source: GIS Analysis

Table 6-382: High Potential Loss Properties Exposed to the Tornado - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	13	$1,621,514
Commercial	EF1	13	$11,287,074
Commercial	EF2	13	$26,085,994
Commercial	EF3	13	$34,282,238
Commercial	EF4	13	$35,947,771
Government	EF0	9	$2,955,622
Government	EF1	9	$12,530,334
Government	EF2	9	$33,683,432
Government	EF3	9	$50,968,416
Government	EF4	9	$57,553,011
Industrial	EF0	2	$566,941
Industrial	EF1	2	$4,092,243
Industrial	EF2	2	$9,247,317
Industrial	EF3	2	$9,914,027
Industrial	EF4	2	$9,914,027
Religious	EF0	7	$560,031
Religious	EF1	7	$4,508,589
Religious	EF2	7	$16,314,630
Religious	EF3	7	$25,950,232
Religious	EF4	7	$26,881,471
Residential	EF0	6	$878,758
Residential	EF1	6	$5,839,904
Residential	EF2	6	$7,968,408
Residential	EF3	6	$8,370,357
Residential	EF4	6	$8,370,357
Utilities	EF0	9	$3,251,862
Utilities	EF1	9	$23,472,316
Utilities	EF2	9	$53,040,822
Utilities	EF3	9	$56,864,937
Utilities	EF4	9	$56,864,937
All Categories	**EF0**	**46**	**$9,834,728**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF1**	**46**	**$61,730,460**
All Categories	**EF2**	**46**	**$146,340,603**
All Categories	**EF3**	**46**	**$186,350,207**
All Categories	**EF4**	**46**	**$195,531,574**

Source: GIS Analysis

Table 6-383: High Potential Loss Properties Exposed to the Tornado - Town of Aberdeen

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	12	$3,459,718
Commercial	EF1	12	$18,997,775
Commercial	EF2	12	$56,525,877
Commercial	EF3	12	$82,505,379
Commercial	EF4	12	$88,796,363
Government	EF0	4	$1,687,425
Government	EF1	4	$7,302,260
Government	EF2	4	$19,921,312
Government	EF3	4	$30,232,007
Government	EF4	4	$33,969,283
Industrial	EF0	5	$4,606,247
Industrial	EF1	5	$33,248,427
Industrial	EF2	5	$75,132,078
Industrial	EF3	5	$80,548,920
Industrial	EF4	5	$80,548,920
Religious	EF0	2	$79,105
Religious	EF1	2	$636,845
Religious	EF2	2	$2,304,467
Religious	EF3	2	$3,665,511
Religious	EF4	2	$3,797,050
Residential	EF0	2	$161,804
Residential	EF1	2	$1,127,689
Residential	EF2	2	$2,409,881
Residential	EF3	2	$3,494,410

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	EF4	2	$3,653,679
All Categories	**EF0**	**25**	**$9,994,299**
All Categories	**EF1**	**25**	**$61,312,996**
All Categories	**EF2**	**25**	**$156,293,615**
All Categories	**EF3**	**25**	**$200,446,227**
All Categories	**EF4**	**25**	**$210,765,295**

Source: GIS Analysis

Table 6-384: High Potential Loss Properties Exposed to the Tornado - Town of Cameron

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	1	$253,451
Government	EF1	1	$1,060,834
Government	EF2	1	$2,824,818
Government	EF3	1	$4,266,309
Government	EF4	1	$4,832,979
All Categories	**EF0**	**1**	**$253,451**
All Categories	**EF1**	**1**	**$1,060,834**
All Categories	**EF2**	**1**	**$2,824,818**
All Categories	**EF3**	**1**	**$4,266,309**
All Categories	**EF4**	**1**	**$4,832,979**

Source: GIS Analysis

Table 6-385: High Potential Loss Properties Exposed to the Tornado - Town of Carthage

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	7	$844,032
Commercial	EF1	7	$5,988,277
Commercial	EF2	7	$16,998,897
Commercial	EF3	7	$24,411,433
Commercial	EF4	7	$25,545,211
Government	EF0	11	$2,598,145
Government	EF1	11	$12,383,044

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF2	11	$35,976,626
Government	EF3	11	$55,248,414
Government	EF4	11	$60,833,780
Residential	EF0	2	$198,225
Residential	EF1	2	$1,464,078
Residential	EF2	2	$2,778,089
Residential	EF3	2	$3,246,974
Residential	EF4	2	$3,246,974
All Categories	**EF0**	**20**	**$3,640,402**
All Categories	**EF1**	**20**	**$19,835,399**
All Categories	**EF2**	**20**	**$55,753,612**
All Categories	**EF3**	**20**	**$82,906,821**
All Categories	**EF4**	**20**	**$89,625,965**

Source: GIS Analysis

Table 6-386: High Potential Loss Properties Exposed to the Tornado - Town of Pinebluff

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$1,369,080
Commercial	EF1	1	$6,515,745
Commercial	EF2	1	$21,015,905
Commercial	EF3	1	$30,715,907
Commercial	EF4	1	$33,703,808
Utilities	EF0	4	$3,372,482
Utilities	EF1	4	$24,342,963
Utilities	EF2	4	$55,008,239
Utilities	EF3	4	$58,974,200
Utilities	EF4	4	$58,974,200
All Categories	**EF0**	**5**	**$4,741,562**
All Categories	**EF1**	**5**	**$30,858,708**
All Categories	**EF2**	**5**	**$76,024,144**
All Categories	**EF3**	**5**	**$89,690,107**
All Categories	**EF4**	**5**	**$92,678,008**

Category	Event	Number of Buildings At Risk	Estimated Damages

Source: GIS Analysis

Table 6-387: High Potential Loss Properties Exposed to the Tornado - Town of Robbins

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$90,504
Commercial	EF1	1	$430,730
Commercial	EF2	1	$1,389,279
Commercial	EF3	1	$2,030,508
Commercial	EF4	1	$2,228,026
Government	EF0	1	$591,764
Government	EF1	1	$2,476,865
Government	EF2	1	$6,595,464
Government	EF3	1	$9,961,097
Government	EF4	1	$11,284,172
Industrial	EF0	1	$764,962
Industrial	EF1	1	$5,521,584
Industrial	EF2	1	$12,477,225
Industrial	EF3	1	$13,376,802
Industrial	EF4	1	$13,376,802
Religious	EF0	1	$64,902
Religious	EF1	1	$522,500
Religious	EF2	1	$1,890,700
Religious	EF3	1	$3,007,368
Religious	EF4	1	$3,115,290
Residential	EF0	1	$29,380
Residential	EF1	1	$236,523
Residential	EF2	1	$855,876
Residential	EF3	1	$1,361,366
Residential	EF4	1	$1,410,219
All Categories	**EF0**	**5**	**$1,541,512**
All Categories	**EF1**	**5**	**$9,188,202**
All Categories	**EF2**	**5**	**$23,208,544**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF3**	**5**	**$29,737,141**
All Categories	**EF4**	**5**	**$31,414,509**

Source: GIS Analysis

Table 6-388: High Potential Loss Properties Exposed to the Tornado - Town of Southern Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	66	$16,525,642
Commercial	EF1	66	$106,192,783
Commercial	EF2	66	$256,973,266
Commercial	EF3	66	$349,065,884
Commercial	EF4	66	$363,772,760
Government	EF0	27	$4,501,868
Government	EF1	27	$23,841,919
Government	EF2	27	$73,438,734
Government	EF3	27	$113,940,393
Government	EF4	27	$123,264,646
Industrial	EF0	1	$770,282
Industrial	EF1	1	$5,559,984
Industrial	EF2	1	$12,563,998
Industrial	EF3	1	$13,469,832
Industrial	EF4	1	$13,469,832
Religious	EF0	6	$599,883
Religious	EF1	6	$4,829,421
Religious	EF2	6	$17,475,583
Religious	EF3	6	$27,796,857
Religious	EF4	6	$28,794,363
Residential	EF0	46	$2,598,597
Residential	EF1	46	$18,109,231
Residential	EF2	46	$38,706,698
Residential	EF3	46	$56,141,923
Residential	EF4	46	$58,703,769
All Categories	**EF0**	**146**	**$24,996,272**

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF1**	**146**	**$158,533,338**
All Categories	**EF2**	**146**	**$399,158,279**
All Categories	**EF3**	**146**	**$560,414,889**
All Categories	**EF4**	**146**	**$588,005,370**

Source: GIS Analysis

Table 6-389: High Potential Loss Properties Exposed to the Tornado - Town of Taylortown

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	3	$906,073
Commercial	EF1	3	$5,278,569
Commercial	EF2	3	$13,154,104
Commercial	EF3	3	$18,866,550
Commercial	EF4	3	$20,090,405
Government	EF0	2	$575,011
Government	EF1	2	$2,406,743
Government	EF2	2	$6,408,740
Government	EF3	2	$9,679,089
Government	EF4	2	$10,964,707
All Categories	**EF0**	**5**	**$1,481,084**
All Categories	**EF1**	**5**	**$7,685,312**
All Categories	**EF2**	**5**	**$19,562,844**
All Categories	**EF3**	**5**	**$28,545,639**
All Categories	**EF4**	**5**	**$31,055,112**

Source: GIS Analysis

Table 6-390: High Potential Loss Properties Exposed to the Tornado - Town of Vass

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$83,876
Commercial	EF1	1	$479,563
Commercial	EF2	1	$1,030,960
Commercial	EF3	1	$1,516,962
Commercial	EF4	1	$1,581,637

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	3	$836,113
Government	EF1	3	$3,499,601
Government	EF2	3	$9,318,833
Government	EF3	3	$14,074,188
Government	EF4	3	$15,943,581
Residential	EF0	3	$301,739
Residential	EF1	3	$2,228,634
Residential	EF2	3	$4,228,833
Residential	EF3	3	$4,942,574
Residential	EF4	3	$4,942,574
All Categories	**EF0**	**7**	**$1,221,728**
All Categories	**EF1**	**7**	**$6,207,798**
All Categories	**EF2**	**7**	**$14,578,626**
All Categories	**EF3**	**7**	**$20,533,724**
All Categories	**EF4**	**7**	**$22,467,792**

Source: GIS Analysis

Table 6-391: High Potential Loss Properties Exposed to the Tornado - Village of Foxfire

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$241,011
Commercial	EF1	1	$2,573,240
Commercial	EF2	1	$4,839,632
Commercial	EF3	1	$5,345,334
Commercial	EF4	1	$5,347,304
All Categories	**EF0**	**1**	**$241,011**
All Categories	**EF1**	**1**	**$2,573,240**
All Categories	**EF2**	**1**	**$4,839,632**
All Categories	**EF3**	**1**	**$5,345,334**
All Categories	**EF4**	**1**	**$5,347,304**

Source: GIS Analysis

Table 6-392: High Potential Loss Properties Exposed to the Tornado - Village of Pinehurst

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	54	$21,876,105
Commercial	EF1	54	$136,464,456
Commercial	EF2	54	$309,897,758
Commercial	EF3	54	$421,110,229
Commercial	EF4	54	$433,387,990
Government	EF0	4	$390,623
Government	EF1	4	$2,247,978
Government	EF2	4	$7,206,303
Government	EF3	4	$11,254,731
Government	EF4	4	$12,037,216
Religious	EF0	4	$317,343
Religious	EF1	4	$2,554,803
Religious	EF2	4	$9,244,727
Religious	EF3	4	$14,704,766
Religious	EF4	4	$15,232,455
Residential	EF0	66	$5,041,558
Residential	EF1	66	$37,026,538
Residential	EF2	66	$71,100,369
Residential	EF3	66	$85,214,907
Residential	EF4	66	$85,711,717
Utilities	EF0	1	$571,857
Utilities	EF1	1	$4,127,731
Utilities	EF2	1	$9,327,509
Utilities	EF3	1	$10,000,000
Utilities	EF4	1	$10,000,000
All Categories	**EF0**	**129**	**$28,197,486**
All Categories	**EF1**	**129**	**$182,421,506**
All Categories	**EF2**	**129**	**$406,776,666**
All Categories	**EF3**	**129**	**$542,284,633**
All Categories	**EF4**	**129**	**$556,369,378**

Source: GIS Analysis

Table 6-393: High Potential Loss Properties Exposed to the Tornado - Village of Whispering Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	6	$497,001
Commercial	EF1	6	$4,067,251
Commercial	EF2	6	$8,628,145
Commercial	EF3	6	$10,669,561
Commercial	EF4	6	$11,028,825
Government	EF0	1	$323,923
Government	EF1	1	$1,355,799
Government	EF2	1	$3,610,258
Government	EF3	1	$5,452,555
Government	EF4	1	$6,176,787
All Categories	**EF0**	**7**	**$820,924**
All Categories	**EF1**	**7**	**$5,423,050**
All Categories	**EF2**	**7**	**$12,238,403**
All Categories	**EF3**	**7**	**$16,122,116**
All Categories	**EF4**	**7**	**$17,205,612**

Source: GIS Analysis

6.5.15 Winter Storm

All of the inventoried assets in the Region are exposed to potential winter weather. Any specific vulnerabilities of individual assets would depend greatly on individual design, building characteristics (such as a flat roof), and any existing mitigation measures currently in place. Such site-specific vulnerability determinations are outside the scope of this risk assessment but may be considered during future plan updates. A qualitative factor in terms of vulnerability is a general lack of awareness on the part of county residents in preparing for and responding to winter storm conditions, such as snow in a manner that will minimize the danger to themselves and others. This lack of awareness is especially apparent when driving/roadway conditions catch motorists off-guard.

Potential losses associated with winter storms, such as snow include the cost of the removal of snow from roadways, debris clean-up, and some indirect losses from power outages, etc. All future structures and infrastructure in the region will be vulnerable to winter storms.

6.5.16 Hazardous Materials Incident

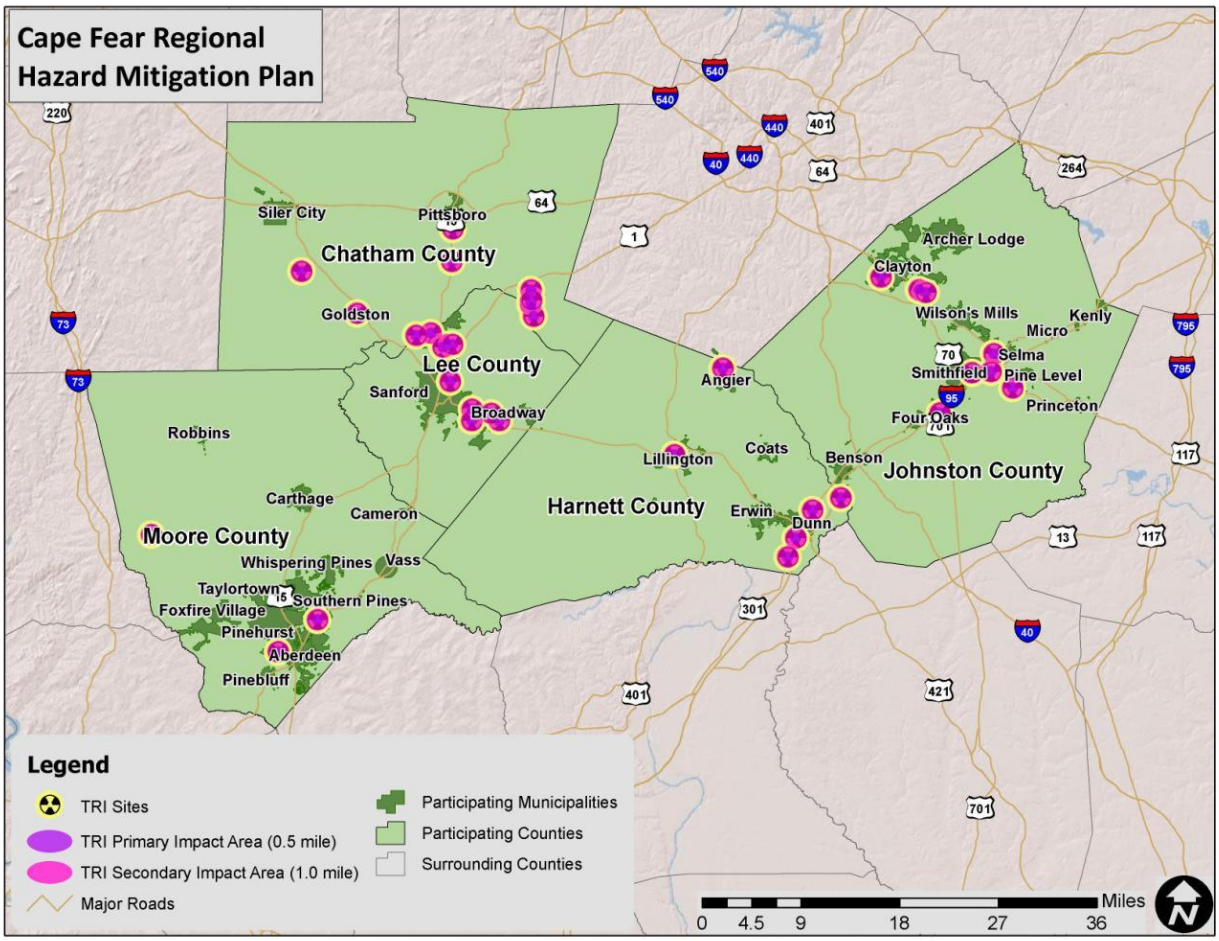
Historical evidence indicates that the Cape Fear Region is susceptible to hazardous materials events.

Most hazardous materials incidents that occur are contained and suppressed before destroying any property or threatening lives. However, they can have a significant negative impact. Such events can cause multiple deaths, completely shut down facilities for 30 days or more, and cause more than 50

percent of affected properties to be destroyed or suffer major damage. In a hazardous materials incident, solid, liquid, and/or gaseous contaminants may be released from fixed or mobile containers. Weather conditions will directly affect how the hazard develops. Certain chemicals may travel through the air or water, affecting a much larger area than the point of the incidence itself. Non-compliance with fire and building codes, as well as failure to maintain existing fire and containment features, can substantially increase the damage from a hazardous materials release. The duration of a hazardous materials incident can range from hours to days. Warning time is minimal to none.

In order to conduct the vulnerability assessment for this hazard, GIS intersection analysis was used for fixed and mobile areas and parcels. [7] In both scenarios, two sizes of buffers—0.5 mile and 1.0 mile—were used. These areas are assumed to respect the different levels of effect: immediate (primary) and secondary. Primary and secondary impact sites were selected based on guidance from FEMA 426, Reference Manual to Mitigate Potential Terrorist Attacks against Buildings and engineering judgment. For the fixed site analysis, geo-referenced TRI listed toxic sites in the Cape Fear Region, along with buffers, were used for analysis as shown in **Figure 6-4.** For the mobile analysis, the major roads (Interstate highway, U.S. highway, and State highway) and railroads, where hazardous materials are primarily transported that could adversely impact people and buildings, were used for the GIS buffer analysis. **Figure 6-5** shows the areas used for mobile toxic release buffer analysis. The results indicate the approximate number of parcels, improved value, as shown in **Table 6-394** (fixed sites), **Table 6-395** (mobile road sites) and **Table 6-396** (mobile railroad sites).[8]

[7] This type of analysis will likely yield inflated results (generally higher than what is actually reported after an actual event).
[8] Note that parcels included in the 1.0-mile analysis are also included in the 0.5-mile analysis.



Source: Environmental Protection Agency

Figure 6-4: Tri Sites with Buffers in the Cape Fear Region

Table 6-394: Exposure of Improved Property to Hazardous Materials (Fixed Sites)

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Chatham County	**829**	**802**	**$108,827,637**	**1,881**	**1,715**	**$202,857,142**
Goldston	191	207	$12,798,039	208	245	$14,109,087
Pittsboro	267	224	$40,835,250	543	429	$86,176,897
Siler City	0	0	$0	0	0	$0
Unincorporated Area	371	371	$55,194,348	1,130	1,041	$102,571,158
Harnett County	**1,222**	**964**	**$149,230,780**	**5,110**	**4,272**	**$451,854,131**
Angier	475	439	$49,692,030	1,283	1,180	$102,306,420
Coats	0	0	$0	0	0	$0
Dunn	118	97	$13,287,460	1,572	1,355	$131,464,850
Erwin	0	0	$0	0	0	$0

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Lillington	310	204	$23,614,090	1,020	755	$86,084,870
Unincorporated Area	319	224	$62,637,200	1,235	982	$131,997,991
Johnston County	**2,179**	**1,823**	**$466,467,500**	**7,921**	**6,553**	**$1,239,691,111**
Archer Lodge	0	0	$0	0	0	$0
Benson	0	0	$0	0	0	$0
Clayton	676	455	$89,812,190	2165	1492	$252,085,700
Four Oaks	47	47	$6,134,280	107	89	$13,623,180
Kenly	0	0	$0	0	0	$0
Micro	0	0	$0	0	0	$0
Pine Level	1	0	$0	33	82	$2,901,220
Princeton	0	0	$0	0	0	$0
Selma	223	205	$23,799,580	1,476	1,361	$138,515,920
Smithfield	738	642	$155,396,310	2,284	1,881	$471,013,961
Wilson's Mills	0	0	$0	0	0	$0
Unincorporated Area	494	474	$191,325,140	1,856	1,648	$361,551,130
Lee County	**1,490**	**2,092**	**$435,620,000**	**4,220**	**5,925**	**$713,980,600**
Broadway	0	0	$0	0	0	$0
Sanford	1,169	1,586	$241,133,700	2,972	4,079	$455,745,500
Unincorporated Area	321	506	$194,486,300	1,248	1,846	$258,235,100
Moore County	**835**	**684**	**$59,959,540**	**3,418**	**2,911**	**$354,457,430**
Aberdeen	50	69	$5,678,000	272	239	$37,631,880
Cameron	0	0	$0	0	0	$0
Carthage	0	0	$0	0	0	$0
Foxfire Village	0	0	$0	0	0	$0
Pinebluff	0	0	$0	0	0	$0
Pinehurst	0	0	$0	17	19	$7,611,530
Robbins	0	0	$0	0	0	$0
Southern Pines	618	458	$43,565,000	2,547	2,080	$269,029,140
Taylortown	0	0	$0	0	0	$0
Vass	0	0	$0	0	0	$0
Whispering Pines	0	0	$0	0	0	$0
Unincorporated Area	167	157	$10,716,540	582	573	$40,184,880
CAPE FEAR REGION TOTAL	**8,011**	**7,686**	**$1,590,626,487**	**28,199**	**26,348**	**$3,936,822,645**

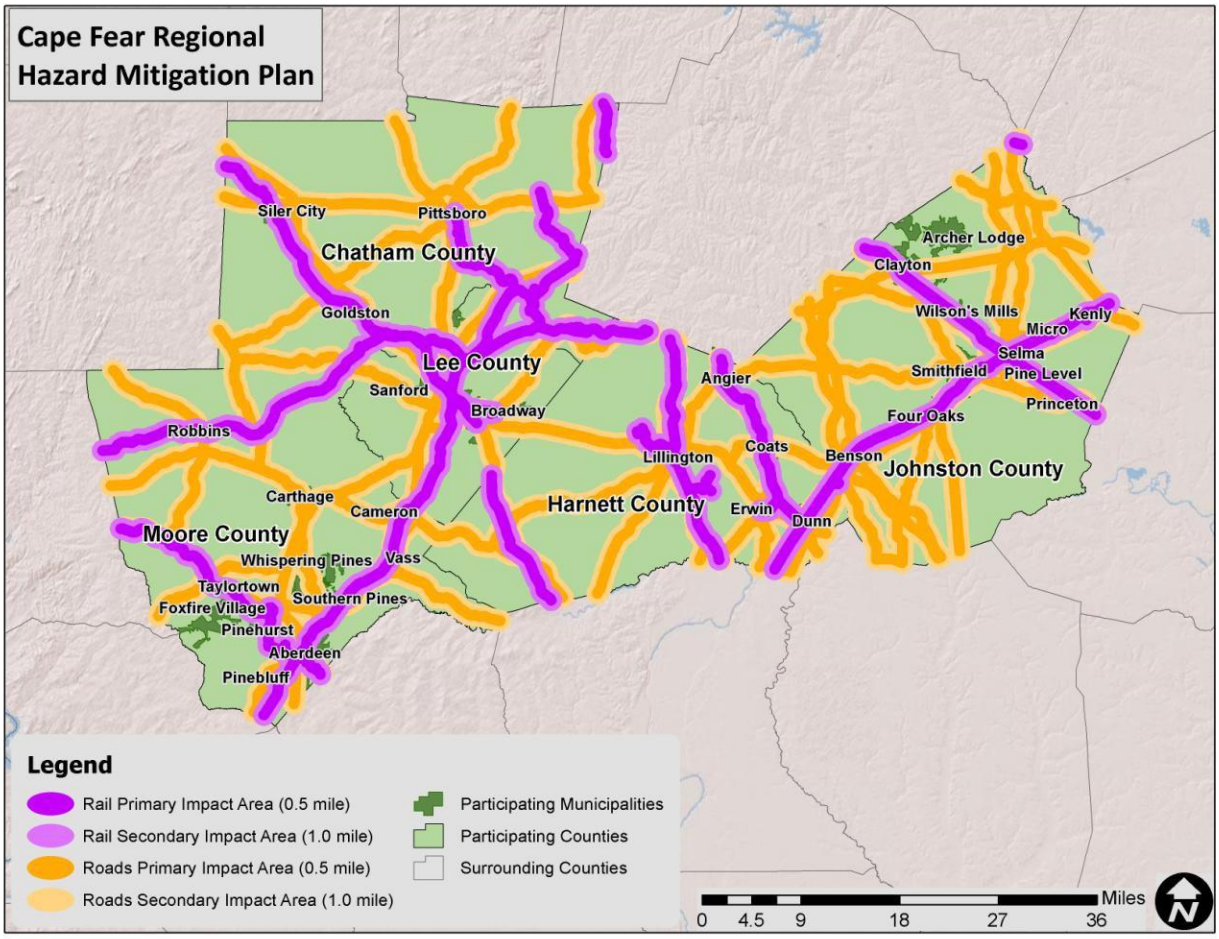


Figure 6-5: Mobile Hazmat Buffers in the Cape Fear Region

Table 6-395: Exposure of Improved Property to Hazardous Materials Spill (Mobile Analysis – Road)

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Chatham County	**13,913**	**13,539**	**$1,550,493,395**	**21,342**	**20,293**	**$2,310,617,755**
Goldston	61	69	$5,226,391	208	239	$14,109,087
Pittsboro	1,899	1,577	$278,581,181	1,923	1,591	$283,695,816
Siler City	1,555	1,525	$140,202,599	2,404	2,463	$215,052,134
Unincorporated Area	10,398	10,368	$1,126,483,224	16,807	16,000	$1,797,760,718
Harnett County	**29,870**	**25,890**	**$2,064,280,457**	**42,468**	**37,104**	**$2,974,403,705**
Angier	1,744	1,614	$144,327,984	1,862	1,722	$152,433,474
Coats	900	846	$53,792,220	997	974	$61,414,920

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Dunn	4,075	3,395	$372,827,698	4,829	4,113	$451,638,268
Erwin	2,173	1,902	$136,380,170	2,470	2,160	$159,419,650
Lillington	1,584	970	$141,390,598	1,632	1,049	$144,987,408
Unincorporated Area	19,394	17,163	$1,215,561,787	30,678	27,086	$2,004,509,985
Johnston County	**42,360**	**37,441**	**$4,389,025,032**	**61,201**	**54,421**	**$6,004,405,922**
Archer Lodge	0	0	$0	20	13	$1,164,490
Benson	1,712	1458	$178,956,673	1,712	1,458	$178,956,673
Clayton	3,534	2,712	$505,484,383	6,044	4,213	$817,554,253
Four Oaks	977	832	$85,536,644	1,131	915	$92,646,954
Kenly	741	742	$48,529,791	741	750	$48,529,791
Micro	244	254	$11,897,567	244	256	$11,897,567
Pine Level	754	808	$68,553,540	795	820	$70,814,330
Princeton	436	394	$67,521,100	707	628	$83,358,730
Selma	2,006	2,099	$186,057,540	2,311	2,506	$205,382,510
Smithfield	4,568	4,125	$704,429,091	5,208	4,763	$814,517,971
Wilson's Mills	434	377	$44,864,030	890	792	$70,463,670
Unincorporated Area	26,954	23,640	$2,487,194,673	41,398	37,307	$3,609,118,983
Lee County	**14,287**	**17,892**	**$1,749,760,180**	**21,922**	**27,836**	**$2,463,436,380**
Broadway	31	32	$1,391,180	223	269	$30,926,980
Sanford	8,139	9,662	$1,079,629,200	10,852	12,937	$1,353,784,100
Unincorporated Area	6,117	8,198	$668,739,800	10,847	14,630	$1,078,725,300
Moore County	**32,116**	**31,947**	**$4,122,295,218**	**47,638**	**47,271**	**$6,021,311,378**
Aberdeen	2,727	2,954	$302,590,390	3,261	3,328	$361,460,040
Cameron	222	362	$12,184,480	222	362	$12,184,480
Carthage	1,036	1,267	$127,870,220	1,216	1,424	$134,751,010
Foxfire Village	0	0	$0	0	0	$0
Pinebluff	605	688	$43,943,660	856	971	$62,333,510
Pinehurst	5,519	3,866	$1,387,032,900	8,116	5,929	$1,892,762,910
Robbins	549	666	$32,953,060	631	809	$36,792,390
Southern Pines	4,218	3,461	$679,321,908	6,631	5,223	$1,027,620,558
Taylortown	356	265	$41,625,120	644	571	$51,615,140
Vass	643	725	$45,044,780	662	770	$45,738,310
Whispering Pines	0	0	$0	219	148	$34,101,010

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Unincorporated Area	16,241	17,693	$1,449,728,700	25,180	27,736	$2,361,952,020
CAPE FEAR REGION TOTAL	**132,546**	**126,709**	**$13,875,854,282**	**194,571**	**186,925**	**$19,774,175,140**

Table 6-396: Exposure of Improved Property to Hazardous Materials Spill (Mobile Analysis – Railroad)

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Chatham County	**6,823**	**6,052**	**$777,646,801**	**11,699**	**10,350**	**$1,352,950,392**
Goldston	208	245	$14,109,087	208	245	$14,109,087
Pittsboro	980	773	$152,957,766	1,628	1,414	$237,350,609
Siler City	1,790	1,558	$152,421,343	2,613	2,371	$220,529,904
Unincorporated Area	3,845	3,476	$458,158,605	7,250	6,320	$880,960,792
Harnett County	**15,466**	**13,140**	**$1,114,687,502**	**24,820**	**21,470**	**$1,838,940,605**
Angier	1,600	1,414	$131,870,374	1,787	1,625	$146,193,924
Coats	878	771	$52,624,330	962	912	$58,097,190
Dunn	3,350	2,661	$295,703,910	4,744	4,011	$444,654,578
Erwin	1,379	1,260	$86,821,570	2,211	1,937	$139,041,490
Lillington	930	723	$84,644,550	1,242	919	$119,800,278
Unincorporated Area	7,329	6,311	$463,022,768	13,874	12,066	$931,153,145
Johnston County	**16,633**	**14,898**	**$1,950,368,209**	**24,037**	**21,041**	**$2,704,451,349**
Archer Lodge	0	0	$0	0	0	$0
Benson	1,223	1,117	$123,465,933	1,628	1,382	$169,048,163
Clayton	2,353	1,840	$289,210,633	3,851	2,462	$492,544,973
Four Oaks	1,014	854	$88,689,664	1,131	915	$92,646,954
Kenly	711	692	$46,486,171	741	750	$48,529,791
Micro	239	242	$11,694,027	244	256	$11,897,567
Pine Level	618	644	$56,764,240	756	737	$67,194,450
Princeton	696	618	$80,436,730	707	626	$83,358,730
Selma	2,087	2,163	$178,150,020	2,311	2,506	$205,382,510
Smithfield	3,092	2,734	$528,934,641	4,055	3,631	$683,811,301
Wilson's Mills	792	689	$58,194,890	997	836	$73,824,230

Location	0.5-mile buffer			1.0-mile buffer		
	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings	Approx. Number of Parcels	Approx. Number Buildings	Approx. Improved Value of Buildings
Unincorporated Area	3,808	3,305	$488,341,260	7,616	6,940	$776,212,680
Lee County	**8,928**	**11,489**	**$1,185,815,400**	**14,019**	**18,750**	**$1,640,390,600**
Broadway	0	0	$0	0	0	$0
Sanford	2,827	7,288	$756,695,900	8,791	10,557	$1,057,791,600
Unincorporated Area	6,101	4,201	$429,119,500	5,228	8,193	$582,599,000
Moore County	**16,039**	**15,691**	**$2,181,317,488**	**27,037**	**26,124**	**$3,876,597,248**
Aberdeen	2,275	2,592	$267,715,730	3,010	3,306	$346,408,630
Cameron	187	240	$9,970,980	216	344	$11,812,920
Carthage	0	0	$0	0	0	$0
Foxfire Village	0	0	$0	0	0	$0
Pinebluff	86	65	$5,347,930	329	321	$21,176,000
Pinehurst	2,721	2,052	$699,164,590	5,510	4,189	$1,483,220,110
Robbins	615	767	$35,900,470	629	800	$36,607,070
Southern Pines	2,157	2,051	$296,184,208	3,753	3,472	$453,906,838
Taylortown	0	0	$0	173	135	$37,626,040
Vass	577	612	$41,234,140	662	770	$45,738,310
Whispering Pines	0	0	$0	0	0	$0
Unincorporated Area	7,421	7,312	$825,799,440	12,755	12,787	$1,440,101,330
CAPE FEAR REGION TOTAL	**63,889**	**61,270**	**$7,209,835,400**	**101,612**	**97,735**	**$11,413,330,194**

6.5.17 Social Vulnerability

Given high susceptibility across the entire Cape Fear Region, it is assumed that the total population is at risk to hazardous materials incidents. It should be noted that areas of population concentration may be at an elevated risk due to a greater burden to evacuate population quickly.

6.5.18 Critical Facilities

Fixed Site Analysis:

The critical facility analysis for fixed TRI sites revealed that there are 120 facilities located in a HAZMAT risk zone. The primary impact zone includes 19 facilities: 3 fire stations and 1 school in Chatham County; 2 fire stations, 1 EMS/rescue station, 1 police station, and 1 other facility in Harnett County; 5 schools in Lee County; 1 medical care facility, 1 school, and 9 others in Johnston County; and 5 other facilities in Moore County. The remaining 90 at-risk critical facilities are located in the secondary, 1.0-mile, zone. A list of specific critical facilities and their associated risk can be found in **Table 6-465** at the end of this section.

Mobile Analysis:

The critical facility analysis for road and railroad transportation corridors in the Cape Fear Region revealed that there are 547 critical facilities located in the primary and secondary mobile HAZMAT buffer areas for roads and 223 critical facilities located in the railroad HAZMAT buffer areas. It should be noted that many of the facilities located in the buffer areas for railroad are also located in the buffer areas for road. The primary road buffer area includes 22 critical facilities in Chatham County, 81 critical facilities in Harnett County, 26 critical facilities in Lee County, 135 critical facilities in Johnston County, and 203 critical facilities in Moore County. The remaining 80 at-risk critical facilities are in the secondary road buffer area. The primary railroad buffer area includes the following critical facilities: 15 in Chatham County, 51 in Harnett County, 16 in Lee County, 97 in Johnston County, and 83 in Moore County. The remaining 80 at-risk critical facilities are in the secondary railroad buffer area. Although this is a worst-case scenario model, it indicates that many of the critical facilities in the Cape Fear Region are vulnerable to a potential mobile HAZMAT incident. A list of specific critical facilities and their associated risk can be found in **Table 6-465** at the end of this section.

In conclusion, a hazardous material incident has the potential to impact many existing and future buildings, critical facilities, and populations in the Cape Fear Region. Those areas in a primary buffer are at the highest risk, though all areas carry some vulnerability due to variations in conditions that could alter the impact area such direction and speed of wind, volume of release, etc. Further, incidents from neighboring counties could also impact the region.

6.5.19 Wildfire

The following tables provide counts and values by jurisdiction relevant to Wildfire hazard vulnerability in the Cape Fear Regional HMP Area.

Table 6-397: Population Impacted by the Wildfire Hazard Wildfire

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Chatham									
Chatham County (Unincorporated Area)	42,266	1,611	3.8%	7,745	295	3.8%	2,608	99	3.8%
Town of Goldston	263	3	1.1%	48	0	0%	16	0	0%
Town of Pittsboro	6,417	565	8.8%	1,176	103	8.8%	396	35	8.8%
Town of Siler City	13,243	789	6%	2,427	145	6%	817	49	6%
Subtotal Chatham	*62,189*	*2,968*	*4.8%*	*11396*	*543*	*4.8%*	*3837*	*183*	*4.8%*
Harnett									
City of Dunn	10,132	3,900	38.5%	1,056	406	38.4%	822	316	38.4%
Harnett County (Unincorporated Area)	85,585	53,670	62.7%	8,921	5,594	62.7%	6,948	4,357	62.7%
Town of Angier	5,712	1,819	31.8%	594	189	31.8%	462	147	31.8%
Town of Benson	4,986	289	5.8%	509	30	5.9%	379	22	5.8%
Town of Broadway	1,813	436	24%	246	59	24%	133	32	24.1%
Town of Coats	2,860	991	34.7%	298	103	34.6%	232	80	34.5%
Town of Erwin	6,272	1,750	27.9%	654	182	27.8%	509	142	27.9%
Town of Lillington	4,071	1,696	41.7%	424	177	41.7%	330	137	41.5%
Subtotal Harnett	*121,431*	*64,551*	*53.2%*	*12702*	*6740*	*53.1%*	*9815*	*5233*	*53.3%*

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Johnston									
Johnston County (Unincorporated Area)	94,330	8,001	8.5%	9,632	817	8.5%	7,169	608	8.5%
Town of Archer Lodge	4,150	0	0%	424	0	0%	315	0	0%
Town of Clayton	27,459	70	0.3%	2,804	7	0.2%	2,087	5	0.2%
Town of Four Oaks	4,719	327	6.9%	482	33	6.8%	359	25	7%
Town of Kenly	2,087	1,336	64%	222	142	64%	156	100	64.1%
Town of Micro	950	174	18.3%	97	18	18.6%	72	13	18.1%
Town of Pine Level	2,767	454	16.4%	283	46	16.3%	210	34	16.2%
Town of Princeton	1,729	648	37.5%	177	66	37.3%	131	49	37.4%
Town of Selma	8,565	3,296	38.5%	875	337	38.5%	651	251	38.6%
Town of Smithfield	14,194	2,238	15.8%	1,449	228	15.7%	1,079	170	15.8%
Town of Wilson's Mills	3,324	0	0%	339	0	0%	253	0	0%
Subtotal Johnston	*164,274*	*16,544*	*10.1%*	*16784*	*1694*	*10.1%*	*12482*	*1255*	*10.1%*
Lee									
City of Sanford	30,778	1,900	6.2%	4,222	261	6.2%	2,245	139	6.2%
Lee County (Unincorporated Area)	25,355	10,374	40.9%	3,478	1,423	40.9%	1,850	757	40.9%
Subtotal Lee	*56,133*	*12,274*	*21.9%*	*7700*	*1684*	*21.9%*	*4095*	*896*	*21.9%*
Moore									
Moore County (Unincorporated Area)	34,917	19,884	56.9%	7,910	4,505	57%	1,996	1,137	57%
Town of Aberdeen	7,402	4,984	67.3%	1,677	1,129	67.3%	423	285	67.4%
Town of Cameron	655	461	70.4%	148	104	70.3%	37	26	70.3%

Jurisdiction	Total Population	Population At Risk		All Elderly Population	Elderly Population At Risk		All Children Population	Children At Risk	
		Number	Percent		Number	Percent		Number	Percent
Town of Carthage	2,724	1,712	62.8%	617	388	62.9%	156	98	62.8%
Town of Pinebluff	2,609	1,676	64.2%	591	380	64.3%	149	96	64.4%
Town of Robbins	1,907	136	7.1%	432	31	7.2%	109	8	7.3%
Town of Southern Pines	15,394	11,848	77%	3,487	2,684	77%	880	677	76.9%
Town of Taylortown	754	682	90.5%	171	155	90.6%	43	39	90.7%
Town of Vass	1,294	1,185	91.6%	293	268	91.5%	74	68	91.9%
Village of Foxfire	1,195	828	69.3%	271	188	69.4%	68	47	69.1%
Village of Pinehurst	15,514	12,953	83.5%	3,514	2,934	83.5%	887	741	83.5%
Village of Whispering Pines	3,864	3,522	91.1%	875	797	91.1%	221	201	91%
Subtotal Moore	*88,229*	*59,871*	*67.9%*	*19986*	*13563*	*67.9%*	*5043*	*3423*	*67.9%*
TOTAL PLAN	**492,256**	**156,208**	**31.7%**	**68568**	**24224**	**35.3%**	**35272**	**10990**	**31.2%**

Source: GIS Analysis

Table 6-398: Buildings Impacted by the Wildfire Hazard Wildfire

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Chatham															
Chatham County (Unincorporated Area)	27,859	1,389	5%	869	3.1%	$138,243,389	549	2%	$83,181,933	24	0.1%	$36,342,542	1,442	5.2%	$257,767,863
Town of Goldston	244	2	0.8%	2	0.8%	$251,375	0	0%	$0	0	0%	$0	2	0.8%	$251,375
Town of Pittsboro	3,678	325	8.8%	280	7.6%	$43,036,730	37	1%	$20,226,186	8	0.2%	$17,964,932	325	8.8%	$81,227,849

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Siler City	6,630	447	6.7%	326	4.9%	$38,835,130	106	1.6%	$14,133,852	15	0.2%	$63,935,537	447	6.7%	$116,904,519
Subtotal Chatham	*38,411*	*2,163*	*5.6%*	*1,477*	*3.8%*	*$220,366,624*	*692*	*1.8%*	*$117,541,971*	*47*	*0.1%*	*$118,243,011*	*2,216*	*5.8%*	*$456,151,606*
Harnett															
City of Dunn	4,925	1,823	37%	1,639	33.3%	$217,850,326	151	3.1%	$124,698,336	32	0.6%	$48,363,807	1,822	37%	$390,912,469
Harnett County (Unincorporated Area)	40,441	15,576	38.5%	23,315	57.7%	$2,490,199,893	1,369	3.4%	$404,589,894	397	1%	$731,360,742	25,081	62%	$3,626,150,529
Town of Angier	2,541	800	31.5%	747	29.4%	$94,836,682	45	1.8%	$11,498,482	8	0.3%	$40,409,347	800	31.5%	$146,744,511
Town of Benson	2,761	172	6.2%	123	4.5%	$12,531,582	60	2.2%	$46,939,954	3	0.1%	$2,752,787	186	6.7%	$62,224,323
Town of Broadway	1,048	259	24.7%	224	21.4%	$25,497,782	37	3.5%	$12,662,238	3	0.3%	$14,189,789	264	25.2%	$52,349,809
Town of Coats	1,457	499	34.2%	473	32.5%	$53,296,721	18	1.2%	$7,708,978	8	0.5%	$54,972,032	499	34.2%	$115,977,731
Town of Erwin	3,117	873	28%	817	26.2%	$87,646,037	36	1.2%	$60,231,374	18	0.6%	$22,013,945	871	27.9%	$169,891,357
Town of Lillington	1,589	503	31.7%	542	34.1%	$64,403,524	49	3.1%	$80,958,356	32	2%	$90,078,805	623	39.2%	$235,440,685
Subtotal Harnett	*57,879*	*20,505*	*35.4%*	*27,880*	*48.2%*	*$3,046,262,547*	*1,765*	*3%*	*$749,287,612*	*501*	*0.9%*	*$1,004,141,254*	*30,146*	*52.1%*	*$4,799,691,414*
Johnston															
Johnston County (Unincorporated Area)	47,795	2,802	5.9%	3,214	6.7%	$298,669,061	1,263	2.6%	$87,687,098	33	0.1%	$30,518,429	4,510	9.4%	$416,874,588
Town of Archer Lodge	1,599	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town of Clayton	9,845	17	0.2%	23	0.2%	$2,798,057	8	0.1%	$3,461,664	0	0%	$0	31	0.3%	$6,259,721
Town of Four Oaks	2,838	181	6.4%	159	5.6%	$11,933,042	34	1.2%	$2,612,021	1	0%	$263,303	194	6.8%	$14,808,365
Town of Kenly	1,314	760	57.8%	691	52.6%	$74,187,197	81	6.2%	$25,709,634	15	1.1%	$9,047,394	787	59.9%	$108,944,224
Town of Micro	577	106	18.4%	80	13.9%	$8,997,845	37	6.4%	$4,050,017	0	0%	$0	117	20.3%	$13,047,862
Town of Pine Level	1,426	222	15.6%	199	14%	$17,186,338	43	3%	$5,271,294	4	0.3%	$1,360,899	246	17.3%	$23,818,531
Town of Princeton	1,000	271	27.1%	309	30.9%	$29,815,278	44	4.4%	$5,092,800	13	1.3%	$22,119,859	366	36.6%	$57,027,937

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Town of Selma	3,784	1,367	36.1%	1,224	32.3%	$118,577,708	201	5.3%	$67,788,778	40	1.1%	$39,363,474	1,465	38.7%	$225,729,960
Town of Smithfield	6,924	617	8.9%	907	13.1%	$128,339,729	195	2.8%	$318,273,934	22	0.3%	$34,967,043	1,124	16.2%	$481,580,707
Town of Wilson's Mills	1,397	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Johnston	*78,499*	*6,343*	*8.1%*	*6,806*	*8.7%*	*$690,504,255*	*1,906*	*2.4%*	*$519,947,240*	*128*	*0.2%*	*$137,640,401*	*8,840*	*11.3%*	*$1,348,091,895*
Lee															
City of Sanford	12,108	573	4.7%	634	5.2%	$83,365,422	109	0.9%	$110,379,568	31	0.3%	$99,579,888	774	6.4%	$293,324,879
Lee County (Unincorporated Area)	14,761	3,655	24.8%	5,195	35.2%	$480,239,140	762	5.2%	$166,362,735	54	0.4%	$96,483,429	6,011	40.7%	$743,085,304
Subtotal Lee	*26,869*	*4,228*	*15.7%*	*5,829*	*21.7%*	*$563,604,562*	*871*	*3.2%*	*$276,742,303*	*85*	*0.3%*	*$196,063,317*	*6,785*	*25.3%*	*$1,036,410,183*
Moore															
Moore County (Unincorporated Area)	28,697	10,754	37.5%	13,253	46.2%	$1,621,875,077	2,237	7.8%	$554,876,104	185	0.6%	$223,231,483	15,675	54.6%	$2,399,982,664
Town of Aberdeen	3,401	1,491	43.8%	1,920	56.5%	$344,411,221	251	7.4%	$277,355,946	52	1.5%	$60,837,397	2,223	65.4%	$682,604,565
Town of Cameron	594	354	59.6%	346	58.2%	$28,786,838	64	10.8%	$19,776,068	10	1.7%	$13,354,465	420	70.7%	$61,917,372
Town of Carthage	2,011	1,213	60.3%	1,019	50.7%	$114,681,126	128	6.4%	$122,552,638	106	5.3%	$110,524,680	1,253	62.3%	$347,758,444
Town of Pinebluff	1,500	633	42.2%	904	60.3%	$98,025,387	40	2.7%	$7,572,997	8	0.5%	$4,164,019	952	63.5%	$109,762,402
Town of Robbins	1,427	90	6.3%	87	6.1%	$10,678,492	5	0.4%	$3,249,801	5	0.4%	$4,876,879	97	6.8%	$18,805,173
Town of Southern Pines	7,755	3,899	50.3%	5,161	66.6%	$1,253,021,718	617	8%	$572,603,196	140	1.8%	$194,026,130	5,918	76.3%	$2,019,651,043
Town of Taylortown	458	410	89.5%	374	81.7%	$45,983,477	27	5.9%	$29,795,805	10	2.2%	$18,608,331	411	89.7%	$94,387,613
Town of Vass	960	852	88.8%	676	70.4%	$86,742,913	158	16.5%	$35,005,154	30	3.1%	$37,352,826	864	90%	$159,100,893
Village of Foxfire	589	234	39.7%	357	60.6%	$93,420,672	55	9.3%	$6,690,079	4	0.7%	$2,264,719	416	70.6%	$102,375,470
Village of Pinehurst	8,291	2,887	34.8%	6,602	79.6%	$1,933,817,133	250	3%	$567,865,673	33	0.4%	$45,940,263	6,885	83%	$2,547,623,070

Jurisdiction	All Buildings	Number of Pre-FIRM Buildings At Risk		Residential Buildings At Risk			Commercial Buildings At Risk			Public Buildings At Risk			Total Buildings at Risk		
	Num	Num	% of Total	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages	Num	% of Total	Estimated Damages
Village of Whispering Pines	1,795	946	52.7%	1,543	86%	$363,549,692	81	4.5%	$31,790,663	15	0.8%	$19,793,762	1,639	91.3%	$415,134,117
Subtotal Moore	*57,478*	*23,763*	*41.3%*	*32,242*	*56.1%*	*$5,994,993,746*	*3,913*	*6.8%*	*$2,229,134,124*	*598*	*1%*	*$734,974,954*	*36,753*	*63.9%*	*$8,959,102,826*
TOTAL PLAN	**259,136**	**57,002**	**22%**	**74,234**	**28.6%**	**$10,515,731,734**	**9,147**	**3.5%**	**$3,892,653,250**	**1,359**	**0.5%**	**$2,191,062,937**	**84,740**	**32.7%**	**$16,599,447,924**

Source: GIS Analysis

The following tables provide counts and estimated damages for CIKR buildings by jurisdiction in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event. Totals across all sectors are shown at the bottom of each table.

Table 6-399: Critical Facilities Exposed to the Wildfire - Chatham County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	29	$39,574,638
Critical Manufacturing	Wildfire Hazard	9	$4,036,194
Emergency Services	Wildfire Hazard	1	$4,826,232
Food and Agriculture	Wildfire Hazard	510	$48,711,092
Government Facilities	Wildfire Hazard	12	$13,261,415
Transportation Systems	Wildfire Hazard	12	$9,114,903
All Categories	**Wildfire Hazard**	**573**	**$119,524,474**

Source: GIS Analysis

Table 6-400: Critical Facilities Exposed to the Wildfire - Town of Pittsboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	10	$8,502,530
Critical Manufacturing	Wildfire Hazard	3	$4,784,830
Food and Agriculture	Wildfire Hazard	21	$1,259,667
Government Facilities	Wildfire Hazard	7	$15,629,827
Healthcare and Public Health	Wildfire Hazard	1	$3,600,162
Transportation Systems	Wildfire Hazard	3	$4,414,101
All Categories	**Wildfire Hazard**	**45**	**$38,191,117**

Source: GIS Analysis

Table 6-401: Critical Facilities Exposed to the Wildfire - Town of Siler City

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	10	$7,999,884
Critical Manufacturing	Wildfire Hazard	1	$760,356
Emergency Services	Wildfire Hazard	1	$25,371,810
Energy	Wildfire Hazard	1	$1,274,018

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	Wildfire Hazard	96	$6,481,485
Government Facilities	Wildfire Hazard	10	$35,449,292
Transportation Systems	Wildfire Hazard	2	$732,545
All Categories	**Wildfire Hazard**	**121**	**$78,069,390**

Source: GIS Analysis

Table 6-402: Critical Facilities Exposed to the Wildfire - City of Dunn

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	6	$3,543,637
Commercial Facilities	Wildfire Hazard	78	$68,325,122
Critical Manufacturing	Wildfire Hazard	29	$37,895,743
Food and Agriculture	Wildfire Hazard	14	$541,482
Government Facilities	Wildfire Hazard	21	$35,511,874
Healthcare and Public Health	Wildfire Hazard	23	$21,267,393
Transportation Systems	Wildfire Hazard	13	$6,317,856
Water	Wildfire Hazard	1	$99,670
All Categories	**Wildfire Hazard**	**185**	**$173,502,777**

Source: GIS Analysis

Table 6-403: Critical Facilities Exposed to the Wildfire - Harnett County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$232,184
Commercial Facilities	Wildfire Hazard	267	$364,776,969
Critical Manufacturing	Wildfire Hazard	78	$59,136,320
Emergency Services	Wildfire Hazard	10	$22,757,948
Energy	Wildfire Hazard	1	$280,368
Food and Agriculture	Wildfire Hazard	1,130	$143,871,576
Government Facilities	Wildfire Hazard	239	$503,482,499
Healthcare and Public Health	Wildfire Hazard	4	$9,188,595

Sector	Event	Number of Buildings At Risk	Estimated Damages
Nuclear Reactors, Materials and Waste	Wildfire Hazard	1	$3,999,101
Transportation Systems	Wildfire Hazard	34	$27,220,861
Water	Wildfire Hazard	1	$300,000
All Categories	**Wildfire Hazard**	**1,766**	**$1,135,246,421**

Source: GIS Analysis

Table 6-404: Critical Facilities Exposed to the Wildfire - Town of Angier

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$421,536
Commercial Facilities	Wildfire Hazard	16	$11,549,655
Critical Manufacturing	Wildfire Hazard	7	$4,963,478
Food and Agriculture	Wildfire Hazard	24	$1,206,370
Government Facilities	Wildfire Hazard	1	$30,609,643
Healthcare and Public Health	Wildfire Hazard	4	$3,157,147
All Categories	**Wildfire Hazard**	**53**	**$51,907,829**

Source: GIS Analysis

Table 6-405: Critical Facilities Exposed to the Wildfire - Town of Benson

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	7	$15,378,361
Critical Manufacturing	Wildfire Hazard	8	$31,008,801
Food and Agriculture	Wildfire Hazard	46	$1,597,212
Healthcare and Public Health	Wildfire Hazard	1	$1,282,306
Transportation Systems	Wildfire Hazard	1	$426,060
All Categories	**Wildfire Hazard**	**63**	**$49,692,740**

Source: GIS Analysis

Table 6-406: Critical Facilities Exposed to the Wildfire - Town of Broadway

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	16	$4,517,009
Critical Manufacturing	Wildfire Hazard	4	$732,249
Food and Agriculture	Wildfire Hazard	15	$820,766
Government Facilities	Wildfire Hazard	1	$12,796,655
Transportation Systems	Wildfire Hazard	4	$7,985,349
All Categories	**Wildfire Hazard**	**40**	**$26,852,028**

Source: GIS Analysis

Table 6-407: Critical Facilities Exposed to the Wildfire - Town of Coats

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	10	$18,072,984
Critical Manufacturing	Wildfire Hazard	2	$492,145
Food and Agriculture	Wildfire Hazard	11	$731,306
Government Facilities	Wildfire Hazard	1	$38,345,149
Healthcare and Public Health	Wildfire Hazard	1	$570,683
Transportation Systems	Wildfire Hazard	1	$4,468,741
All Categories	**Wildfire Hazard**	**26**	**$62,681,008**

Source: GIS Analysis

Table 6-408: Critical Facilities Exposed to the Wildfire - Town of Erwin

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$693,599
Commercial Facilities	Wildfire Hazard	21	$56,916,129
Critical Manufacturing	Wildfire Hazard	4	$1,600,561
Food and Agriculture	Wildfire Hazard	17	$1,272,436
Government Facilities	Wildfire Hazard	10	$13,690,085
Healthcare and Public Health	Wildfire Hazard	1	$8,072,510
Water	Wildfire Hazard	2	$439,090

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**Wildfire Hazard**	**56**	**$82,684,410**

Source: GIS Analysis

Table 6-409: Critical Facilities Exposed to the Wildfire - Town of Lillington

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	3	$2,068,096
Commercial Facilities	Wildfire Hazard	35	$27,621,023
Critical Manufacturing	Wildfire Hazard	9	$24,177,761
Defense Industrial Base	Wildfire Hazard	1	$19,896,332
Emergency Services	Wildfire Hazard	1	$1,089,297
Food and Agriculture	Wildfire Hazard	2	$59,156
Government Facilities	Wildfire Hazard	20	$70,812,569
Healthcare and Public Health	Wildfire Hazard	7	$21,767,913
Transportation Systems	Wildfire Hazard	2	$3,159,956
Water	Wildfire Hazard	2	$117,256
All Categories	**Wildfire Hazard**	**82**	**$170,769,359**

Source: GIS Analysis

Table 6-410: Critical Facilities Exposed to the Wildfire - Johnston County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	58	$21,394,593
Critical Manufacturing	Wildfire Hazard	35	$13,402,586
Food and Agriculture	Wildfire Hazard	1,171	$56,013,949
Government Facilities	Wildfire Hazard	15	$19,491,847
Healthcare and Public Health	Wildfire Hazard	4	$1,391,101
Transportation Systems	Wildfire Hazard	15	$6,929,494
All Categories	**Wildfire Hazard**	**1,298**	**$118,623,570**

Source: GIS Analysis

Table 6-411: Critical Facilities Exposed to the Wildfire - Town of Clayton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Critical Manufacturing	Wildfire Hazard	1	$3,113,698
Food and Agriculture	Wildfire Hazard	7	$347,966
All Categories	**Wildfire Hazard**	**8**	**$3,461,664**

Source: GIS Analysis

Table 6-412: Critical Facilities Exposed to the Wildfire - Town of Four Oaks

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	4	$755,598
Emergency Services	Wildfire Hazard	1	$441,321
Food and Agriculture	Wildfire Hazard	27	$870,529
Transportation Systems	Wildfire Hazard	3	$807,876
All Categories	**Wildfire Hazard**	**35**	**$2,875,324**

Source: GIS Analysis

Table 6-413: Critical Facilities Exposed to the Wildfire - Town of Kenly

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$463,880
Commercial Facilities	Wildfire Hazard	46	$20,186,522
Critical Manufacturing	Wildfire Hazard	9	$5,030,688
Emergency Services	Wildfire Hazard	1	$1,262,218
Energy	Wildfire Hazard	1	$127,273
Food and Agriculture	Wildfire Hazard	26	$2,130,663
Government Facilities	Wildfire Hazard	3	$1,322,604
Healthcare and Public Health	Wildfire Hazard	2	$643,559
Transportation Systems	Wildfire Hazard	7	$3,589,622
Water	Wildfire Hazard	1	$60,000,000
All Categories	**Wildfire Hazard**	**97**	**$94,757,029**

Source: GIS Analysis

Table 6-414: Critical Facilities Exposed to the Wildfire - Town of Micro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	1	$80,988
Critical Manufacturing	Wildfire Hazard	5	$2,766,653
Food and Agriculture	Wildfire Hazard	29	$760,009
Transportation Systems	Wildfire Hazard	2	$442,367
All Categories	**Wildfire Hazard**	**37**	**$4,050,017**

Source: GIS Analysis

Table 6-415: Critical Facilities Exposed to the Wildfire - Town of Pine Level

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	9	$3,500,619
Critical Manufacturing	Wildfire Hazard	3	$853,063
Emergency Services	Wildfire Hazard	1	$308,328
Food and Agriculture	Wildfire Hazard	31	$1,345,474
Transportation Systems	Wildfire Hazard	3	$624,709
All Categories	**Wildfire Hazard**	**47**	**$6,632,193**

Source: GIS Analysis

Table 6-416: Critical Facilities Exposed to the Wildfire - Town of Princeton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	23	$7,895,976
Critical Manufacturing	Wildfire Hazard	1	$72,158
Emergency Services	Wildfire Hazard	1	$637,160
Energy	Wildfire Hazard	1	$60,000,000
Food and Agriculture	Wildfire Hazard	25	$1,049,402
Government Facilities	Wildfire Hazard	6	$17,319,647
Transportation Systems	Wildfire Hazard	1	$238,316
All Categories	**Wildfire Hazard**	**58**	**$87,212,659**

Source: GIS Analysis

Table 6-417: Critical Facilities Exposed to the Wildfire - Town of Selma

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	73	$51,238,704
Critical Manufacturing	Wildfire Hazard	18	$15,915,426
Emergency Services	Wildfire Hazard	2	$1,237,160
Food and Agriculture	Wildfire Hazard	118	$3,973,052
Government Facilities	Wildfire Hazard	16	$26,944,934
Healthcare and Public Health	Wildfire Hazard	1	$92,445
Transportation Systems	Wildfire Hazard	13	$7,750,531
All Categories	**Wildfire Hazard**	**241**	**$107,152,252**

Source: GIS Analysis

Table 6-418: Critical Facilities Exposed to the Wildfire - Town of Smithfield

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	3	$1,462,698
Commercial Facilities	Wildfire Hazard	114	$151,894,251
Critical Manufacturing	Wildfire Hazard	22	$89,358,152
Defense Industrial Base	Wildfire Hazard	1	$59,618,991
Energy	Wildfire Hazard	3	$44,676,634
Food and Agriculture	Wildfire Hazard	52	$1,948,279
Government Facilities	Wildfire Hazard	10	$27,725,500
Healthcare and Public Health	Wildfire Hazard	4	$4,163,711
Transportation Systems	Wildfire Hazard	11	$17,069,395
All Categories	**Wildfire Hazard**	**220**	**$397,917,611**

Source: GIS Analysis

Table 6-419: Critical Facilities Exposed to the Wildfire - City of Sanford

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	44	$51,935,193
Critical Manufacturing	Wildfire Hazard	20	$40,535,636

Sector	Event	Number of Buildings At Risk	Estimated Damages
Energy	Wildfire Hazard	1	$1,833,607
Food and Agriculture	Wildfire Hazard	34	$1,091,614
Government Facilities	Wildfire Hazard	25	$91,961,260
Healthcare and Public Health	Wildfire Hazard	1	$1,234,068
Transportation Systems	Wildfire Hazard	14	$21,328,285
All Categories	**Wildfire Hazard**	**139**	**$209,919,663**

Source: GIS Analysis

Table 6-420: Critical Facilities Exposed to the Wildfire - Lee County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	161	$105,822,583
Critical Manufacturing	Wildfire Hazard	78	$29,728,044
Emergency Services	Wildfire Hazard	5	$12,842,375
Food and Agriculture	Wildfire Hazard	503	$35,146,725
Government Facilities	Wildfire Hazard	18	$44,405,481
Healthcare and Public Health	Wildfire Hazard	6	$7,413,743
Transportation Systems	Wildfire Hazard	45	$27,487,214
All Categories	**Wildfire Hazard**	**816**	**$262,846,165**

Source: GIS Analysis

Table 6-421: Critical Facilities Exposed to the Wildfire - Moore County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$876,747
Chemical	Wildfire Hazard	1	$504,726
Commercial Facilities	Wildfire Hazard	513	$376,988,177
Critical Manufacturing	Wildfire Hazard	142	$78,848,708
Emergency Services	Wildfire Hazard	6	$17,512,773
Energy	Wildfire Hazard	4	$1,844,394
Food and Agriculture	Wildfire Hazard	1,582	$125,342,750

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	Wildfire Hazard	36	$51,758,346
Healthcare and Public Health	Wildfire Hazard	23	$16,325,321
Transportation Systems	Wildfire Hazard	98	$92,883,490
Water	Wildfire Hazard	9	$56,864,937
All Categories	**Wildfire Hazard**	**2,415**	**$819,750,369**

Source: GIS Analysis

Table 6-422: Critical Facilities Exposed to the Wildfire - Town of Aberdeen

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$1,836,559
Commercial Facilities	Wildfire Hazard	149	$137,595,622
Communications	Wildfire Hazard	1	$2,871,096
Critical Manufacturing	Wildfire Hazard	64	$99,689,647
Emergency Services	Wildfire Hazard	5	$5,102,364
Food and Agriculture	Wildfire Hazard	13	$696,048
Government Facilities	Wildfire Hazard	24	$42,953,901
Healthcare and Public Health	Wildfire Hazard	8	$17,458,914
Transportation Systems	Wildfire Hazard	36	$27,949,882
All Categories	**Wildfire Hazard**	**301**	**$336,154,033**

Source: GIS Analysis

Table 6-423: Critical Facilities Exposed to the Wildfire - Town of Cameron

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	29	$17,397,014
Critical Manufacturing	Wildfire Hazard	8	$2,905,189
Food and Agriculture	Wildfire Hazard	26	$1,291,111
Government Facilities	Wildfire Hazard	7	$9,305,112
Transportation Systems	Wildfire Hazard	4	$2,232,107
All Categories	**Wildfire Hazard**	**74**	**$33,130,533**

Source: GIS Analysis

Table 6-424: Critical Facilities Exposed to the Wildfire - Town of Carthage

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$541,764
Commercial Facilities	Wildfire Hazard	94	$105,830,963
Critical Manufacturing	Wildfire Hazard	17	$13,427,257
Food and Agriculture	Wildfire Hazard	23	$11,006,463
Government Facilities	Wildfire Hazard	79	$79,846,633
Healthcare and Public Health	Wildfire Hazard	5	$10,907,879
Transportation Systems	Wildfire Hazard	13	$8,898,278
Water	Wildfire Hazard	4	$1,097,629
All Categories	**Wildfire Hazard**	**236**	**$231,556,866**

Source: GIS Analysis

Table 6-425: Critical Facilities Exposed to the Wildfire - Town of Pinebluff

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	18	$7,143,507
Critical Manufacturing	Wildfire Hazard	1	$432,977
Food and Agriculture	Wildfire Hazard	20	$923,066
Government Facilities	Wildfire Hazard	3	$907,473
Healthcare and Public Health	Wildfire Hazard	2	$1,153,924
Transportation Systems	Wildfire Hazard	3	$1,063,986
Water	Wildfire Hazard	4	$58,974,200
All Categories	**Wildfire Hazard**	**51**	**$70,599,133**

Source: GIS Analysis

Table 6-426: Critical Facilities Exposed to the Wildfire - Town of Robbins

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	6	$5,172,030
Critical Manufacturing	Wildfire Hazard	2	$909,678
Government Facilities	Wildfire Hazard	1	$814,596

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	Wildfire Hazard	1	$1,230,375
All Categories	**Wildfire Hazard**	**10**	**$8,126,679**

Source: GIS Analysis

Table 6-427: Critical Facilities Exposed to the Wildfire - Town of Southern Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	15	$12,688,367
Chemical	Wildfire Hazard	1	$2,161,191
Commercial Facilities	Wildfire Hazard	363	$369,072,153
Communications	Wildfire Hazard	1	$482,050
Critical Manufacturing	Wildfire Hazard	72	$52,803,945
Defense Industrial Base	Wildfire Hazard	1	$13,469,832
Emergency Services	Wildfire Hazard	1	$346,869
Energy	Wildfire Hazard	1	$114,951
Food and Agriculture	Wildfire Hazard	81	$4,885,951
Government Facilities	Wildfire Hazard	80	$135,302,932
Healthcare and Public Health	Wildfire Hazard	44	$109,535,285
Transportation Systems	Wildfire Hazard	95	$64,785,772
All Categories	**Wildfire Hazard**	**755**	**$765,649,298**

Source: GIS Analysis

Table 6-428: Critical Facilities Exposed to the Wildfire - Town of Taylortown

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	18	$19,133,484
Critical Manufacturing	Wildfire Hazard	5	$3,954,754
Government Facilities	Wildfire Hazard	7	$14,388,323
Healthcare and Public Health	Wildfire Hazard	3	$6,454,513
Transportation Systems	Wildfire Hazard	4	$4,473,063
All Categories	**Wildfire Hazard**	**37**	**$48,404,137**

Source: GIS Analysis

Table 6-429: Critical Facilities Exposed to the Wildfire - Town of Vass

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$478,400
Commercial Facilities	Wildfire Hazard	68	$36,235,904
Critical Manufacturing	Wildfire Hazard	10	$1,833,310
Emergency Services	Wildfire Hazard	2	$2,336,741
Food and Agriculture	Wildfire Hazard	90	$7,090,952
Government Facilities	Wildfire Hazard	9	$20,360,450
Healthcare and Public Health	Wildfire Hazard	2	$622,921
Transportation Systems	Wildfire Hazard	6	$3,399,302
All Categories	**Wildfire Hazard**	**188**	**$72,357,980**

Source: GIS Analysis

Table 6-430: Critical Facilities Exposed to the Wildfire - Village of Foxfire

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	13	$5,681,202
Critical Manufacturing	Wildfire Hazard	2	$541,238
Emergency Services	Wildfire Hazard	2	$1,126,553
Food and Agriculture	Wildfire Hazard	41	$1,095,605
Transportation Systems	Wildfire Hazard	1	$510,199
All Categories	**Wildfire Hazard**	**59**	**$8,954,797**

Source: GIS Analysis

Table 6-431: Critical Facilities Exposed to the Wildfire - Village of Pinehurst

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	10	$8,980,782
Commercial Facilities	Wildfire Hazard	121	$247,467,754
Critical Manufacturing	Wildfire Hazard	10	$5,114,887
Emergency Services	Wildfire Hazard	2	$1,427,302
Food and Agriculture	Wildfire Hazard	33	$1,704,625
Government Facilities	Wildfire Hazard	10	$16,342,329

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	Wildfire Hazard	76	$322,872,067
Transportation Systems	Wildfire Hazard	20	$19,004,045
All Categories	**Wildfire Hazard**	**282**	**$622,913,791**

Source: GIS Analysis

Table 6-432: Critical Facilities Exposed to the Wildfire - Village of Whispering Pines

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	29	$27,062,346
Critical Manufacturing	Wildfire Hazard	7	$4,227,821
Emergency Services	Wildfire Hazard	2	$1,646,651
Food and Agriculture	Wildfire Hazard	37	$1,209,828
Government Facilities	Wildfire Hazard	10	$10,334,042
Healthcare and Public Health	Wildfire Hazard	1	$429,335
Transportation Systems	Wildfire Hazard	10	$6,674,403
All Categories	**Wildfire Hazard**	**96**	**$51,584,426**

Source: GIS Analysis

The following table provides counts and estimated damages for CIKR buildings across all jurisdictions, by sector, in the plan. Because there is a large number of sectors and events, the table is sorted by sector and then by event.

Table 6-433: Critical Facilities Exposed to the Wildfire (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	45	$34,288,249
Chemical	Wildfire Hazard	2	$2,665,917
Commercial Facilities	Wildfire Hazard	2,453	$2,392,719,487
Communications	Wildfire Hazard	2	$3,353,146
Critical Manufacturing	Wildfire Hazard	686	$635,053,953
Defense Industrial Base	Wildfire Hazard	3	$92,985,155
Emergency Services	Wildfire Hazard	44	$100,273,102
Energy	Wildfire Hazard	13	$110,151,245

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	Wildfire Hazard	5,855	$466,476,609
Government Facilities	Wildfire Hazard	681	$1,381,074,418
Healthcare and Public Health	Wildfire Hazard	224	$569,605,495
Nuclear Reactors, Materials and Waste	Wildfire Hazard	1	$3,999,101
Transportation Systems	Wildfire Hazard	477	$383,213,083
Water	Wildfire Hazard	24	$177,892,782
All Categories	**Wildfire Hazard**	**10,510**	**$6,353,751,742**

Source: GIS Analysis

The following tables provide counts and estimated damages for High Potential Loss Properties by jurisdiction in the plan. Because there is a large number of categories and events, the table is sorted by category and then by event. Totals across all categories are shown at the bottom of each table.

Table 6-434: High Potential Loss Properties Exposed to the Wildfire - Chatham County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	1	$9,083,089
All Categories	**Wildfire Hazard**	**1**	**$9,083,089**

Source: GIS Analysis

Table 6-435: High Potential Loss Properties Exposed to the Wildfire - Town of Pittsboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	3	$6,834,430
Government	Wildfire Hazard	2	$11,846,052
Industrial	Wildfire Hazard	1	$3,894,448
All Categories	**Wildfire Hazard**	**6**	**$22,574,930**

Source: GIS Analysis

Table 6-436: High Potential Loss Properties Exposed to the Wildfire - Town of Siler City

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	2	$55,617,237
All Categories	**Wildfire Hazard**	**2**	**$55,617,237**

Source: GIS Analysis

Table 6-437: High Potential Loss Properties Exposed to the Wildfire - City of Dunn

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	25	$56,105,127
Government	Wildfire Hazard	5	$28,326,962
Industrial	Wildfire Hazard	10	$30,765,755
Religious	Wildfire Hazard	5	$14,011,484
Residential	Wildfire Hazard	2	$2,488,878
All Categories	**Wildfire Hazard**	**47**	**$131,698,206**

Source: GIS Analysis

Table 6-438: High Potential Loss Properties Exposed to the Wildfire - Harnett County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	Wildfire Hazard	1	$1,226,653
Commercial	Wildfire Hazard	37	$161,794,787
Government	Wildfire Hazard	60	$440,867,414
Industrial	Wildfire Hazard	8	$33,139,215
Religious	Wildfire Hazard	62	$164,676,823
Residential	Wildfire Hazard	12	$14,047,684
All Categories	**Wildfire Hazard**	**180**	**$815,752,576**

Source: GIS Analysis

Table 6-439: High Potential Loss Properties Exposed to the Wildfire - Town of Angier

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$1,171,142
Government	Wildfire Hazard	1	$30,609,643
Industrial	Wildfire Hazard	2	$3,229,316
Religious	Wildfire Hazard	3	$7,360,517
Residential	Wildfire Hazard	1	$1,060,541
All Categories	**Wildfire Hazard**	**8**	**$43,431,159**

Source: GIS Analysis

Table 6-440: High Potential Loss Properties Exposed to the Wildfire - Town of Benson

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	Wildfire Hazard	4	$38,903,451
Religious	Wildfire Hazard	1	$1,182,800
All Categories	**Wildfire Hazard**	**5**	**$40,086,251**

Source: GIS Analysis

Table 6-441: High Potential Loss Properties Exposed to the Wildfire - Town of Broadway

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	1	$12,796,655
Religious	Wildfire Hazard	1	$1,245,774
All Categories	**Wildfire Hazard**	**2**	**$14,042,429**

Source: GIS Analysis

Table 6-442: High Potential Loss Properties Exposed to the Wildfire - Town of Coats

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	2	$5,479,978
Government	Wildfire Hazard	1	$38,345,149
Religious	Wildfire Hazard	4	$15,126,354
All Categories	**Wildfire Hazard**	**7**	**$58,951,481**

Source: GIS Analysis

Table 6-443: High Potential Loss Properties Exposed to the Wildfire - Town of Erwin

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	6	$53,710,234
Government	Wildfire Hazard	3	$10,971,043
Religious	Wildfire Hazard	3	$6,229,084
All Categories	**Wildfire Hazard**	**12**	**$70,910,361**

Source: GIS Analysis

Table 6-444: High Potential Loss Properties Exposed to the Wildfire - Town of Lillington

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	7	$39,118,570
Government	Wildfire Hazard	13	$77,443,683
Industrial	Wildfire Hazard	3	$22,192,700
Religious	Wildfire Hazard	2	$4,692,757
Residential	Wildfire Hazard	1	$1,074,924
All Categories	**Wildfire Hazard**	**26**	**$144,522,634**

Source: GIS Analysis

Table 6-445: High Potential Loss Properties Exposed to the Wildfire - Johnston County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	3	$3,841,158
Government	Wildfire Hazard	1	$17,650,594
Religious	Wildfire Hazard	1	$1,881,224
All Categories	**Wildfire Hazard**	**5**	**$23,372,976**

Source: GIS Analysis

Table 6-446: High Potential Loss Properties Exposed to the Wildfire - Town of Kenly

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$1,294,894
Religious	Wildfire Hazard	1	$1,803,262
Utilities	Wildfire Hazard	1	$60,000,000
All Categories	**Wildfire Hazard**	**3**	**$63,098,156**

Source: GIS Analysis

Table 6-447: High Potential Loss Properties Exposed to the Wildfire - Town of Princeton

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	3	$16,913,283
Religious	Wildfire Hazard	1	$2,121,598
Utilities	Wildfire Hazard	1	$60,000,000
All Categories	**Wildfire Hazard**	**5**	**$79,034,881**

Source: GIS Analysis

Table 6-448: High Potential Loss Properties Exposed to the Wildfire - Town of Selma

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	7	$22,357,683
Government	Wildfire Hazard	2	$23,020,632
Industrial	Wildfire Hazard	2	$10,884,845
Religious	Wildfire Hazard	2	$3,593,809
All Categories	**Wildfire Hazard**	**13**	**$59,856,969**

Source: GIS Analysis

Table 6-449: High Potential Loss Properties Exposed to the Wildfire - Town of Smithfield

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	19	$101,391,415
Government	Wildfire Hazard	2	$21,721,598
Industrial	Wildfire Hazard	4	$81,083,266
Religious	Wildfire Hazard	2	$3,957,667

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	Wildfire Hazard	1	$1,614,342
Utilities	Wildfire Hazard	3	$44,676,634
All Categories	**Wildfire Hazard**	**31**	**$254,444,922**

Source: GIS Analysis

Table 6-450: High Potential Loss Properties Exposed to the Wildfire - City of Sanford

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	3	$23,594,817
Government	Wildfire Hazard	9	$81,950,455
Industrial	Wildfire Hazard	2	$29,573,313
Religious	Wildfire Hazard	1	$1,285,205
All Categories	**Wildfire Hazard**	**15**	**$136,403,790**

Source: GIS Analysis

Table 6-451: High Potential Loss Properties Exposed to the Wildfire - Lee County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	9	$15,648,699
Government	Wildfire Hazard	7	$40,590,003
Religious	Wildfire Hazard	1	$1,407,774
Residential	Wildfire Hazard	1	$1,340,200
All Categories	**Wildfire Hazard**	**18**	**$58,986,676**

Source: GIS Analysis

Table 6-452: High Potential Loss Properties Exposed to the Wildfire - Moore County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	8	$22,694,860
Government	Wildfire Hazard	4	$30,455,192
Industrial	Wildfire Hazard	1	$5,316,867

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	Wildfire Hazard	3	$8,257,376
Residential	Wildfire Hazard	5	$7,203,577
Utilities	Wildfire Hazard	9	$56,864,937
All Categories	**Wildfire Hazard**	**30**	**$130,792,809**

Source: GIS Analysis

Table 6-453: High Potential Loss Properties Exposed to the Wildfire - Town of Aberdeen

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	10	$63,256,665
Government	Wildfire Hazard	3	$31,929,838
Industrial	Wildfire Hazard	3	$41,376,074
Residential	Wildfire Hazard	2	$3,653,679
All Categories	**Wildfire Hazard**	**18**	**$140,216,256**

Source: GIS Analysis

Table 6-454: High Potential Loss Properties Exposed to the Wildfire - Town of Cameron

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	1	$4,978,631
All Categories	**Wildfire Hazard**	**1**	**$4,978,631**

Source: GIS Analysis

Table 6-455: High Potential Loss Properties Exposed to the Wildfire - Town of Carthage

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	4	$20,216,751
Government	Wildfire Hazard	3	$36,150,367
Residential	Wildfire Hazard	1	$1,832,663
All Categories	**Wildfire Hazard**	**8**	**$58,199,781**

Source: GIS Analysis

Table 6-456: High Potential Loss Properties Exposed to the Wildfire - Town of Pinebluff

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	Wildfire Hazard	4	$58,974,200
All Categories	**Wildfire Hazard**	**4**	**$58,974,200**

Source: GIS Analysis

Table 6-457: High Potential Loss Properties Exposed to the Wildfire - Town of Southern Pines

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	53	$266,562,057
Government	Wildfire Hazard	23	$98,602,055
Industrial	Wildfire Hazard	1	$13,469,832
Religious	Wildfire Hazard	4	$22,873,325
Residential	Wildfire Hazard	40	$50,847,103
All Categories	**Wildfire Hazard**	**121**	**$452,354,372**

Source: GIS Analysis

Table 6-458: High Potential Loss Properties Exposed to the Wildfire - Town of Taylortown

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$1,254,828
Government	Wildfire Hazard	2	$11,295,152
All Categories	**Wildfire Hazard**	**3**	**$12,549,980**

Source: GIS Analysis

Table 6-459: High Potential Loss Properties Exposed to the Wildfire - Town of Vass

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$1,615,221
Government	Wildfire Hazard	3	$16,424,075
Residential	Wildfire Hazard	3	$4,942,574
All Categories	**Wildfire Hazard**	**7**	**$22,981,870**

Source: GIS Analysis

Table 6-460: High Potential Loss Properties Exposed to the Wildfire - Village of Pinehurst

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	52	$431,095,185
Government	Wildfire Hazard	3	$10,473,722
Religious	Wildfire Hazard	3	$9,154,579
Residential	Wildfire Hazard	56	$70,835,983
Utilities	Wildfire Hazard	1	$10,000,000
All Categories	**Wildfire Hazard**	**115**	**$531,559,469**

Source: GIS Analysis

Table 6-461: High Potential Loss Properties Exposed to the Wildfire - Village of Whispering Pines

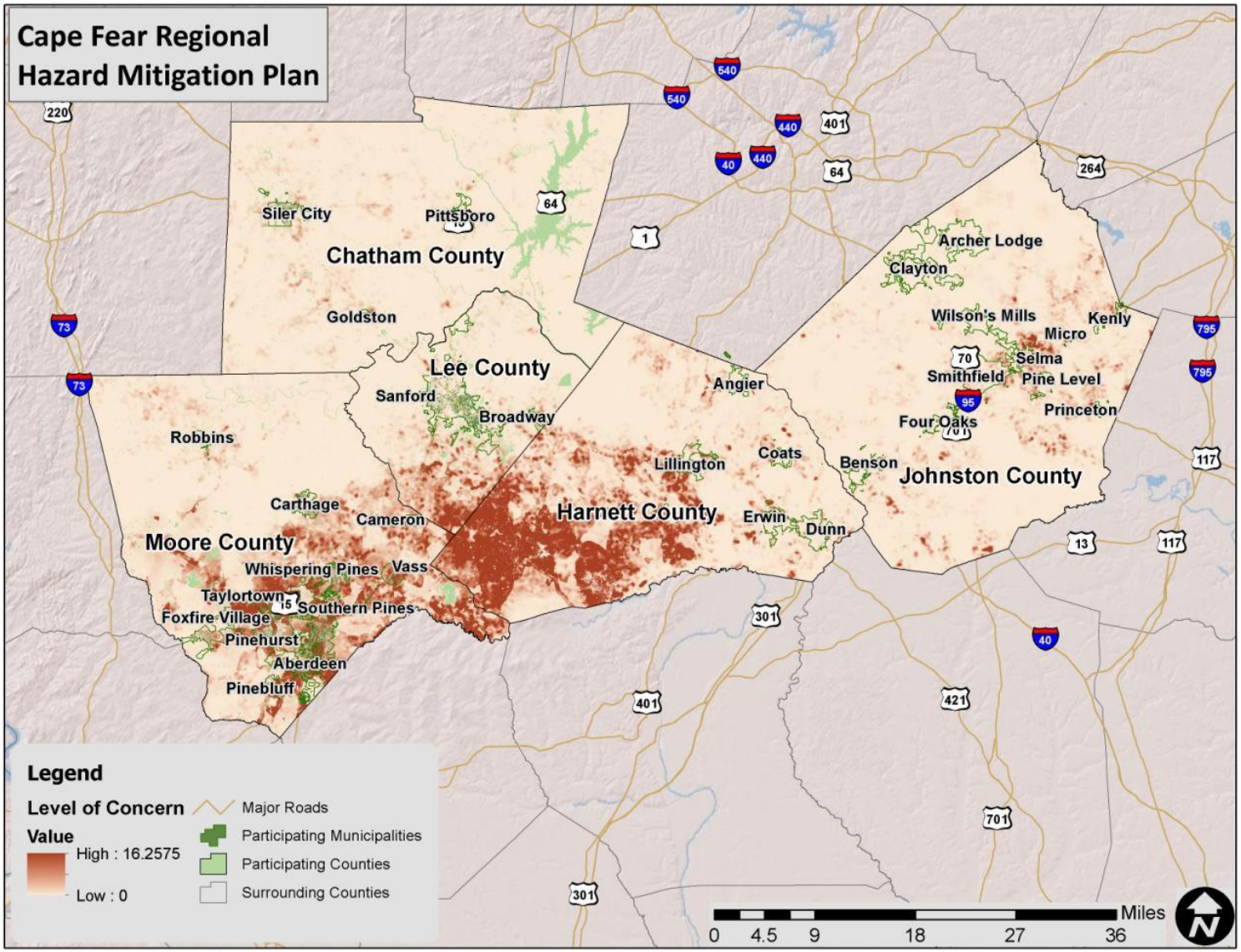
Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	6	$11,075,972
Government	Wildfire Hazard	1	$6,362,937
All Categories	**Wildfire Hazard**	**7**	**$17,438,909**

Source: GIS Analysis

Although historical evidence indicates that the Cape Fear Region is susceptible to wildfire events, there are few reports which include dollar damage. Therefore, it is difficult to calculate a reliable annualized loss figure. Annualized loss is considered negligible though it should be noted that a single event could result in significant damages throughout the region.

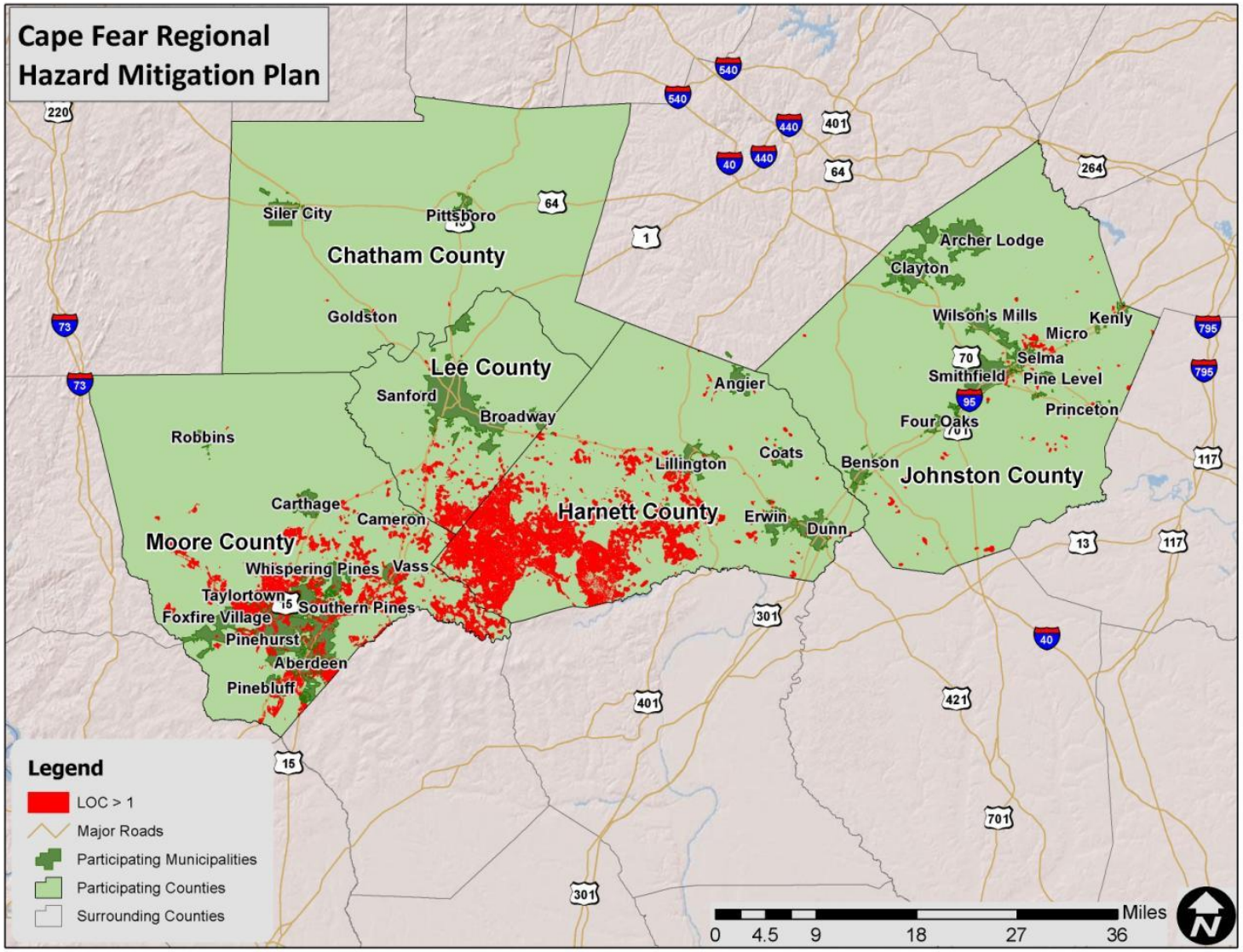
To estimate exposure to wildfire, the approximate number of parcels and their associated improved value was determined using GIS analysis. For the critical facility analysis, areas of concern were intersected with critical facility locations. **Figure 6-6** shows the Level of Concern data and **Figure 6-7** shows the areas of analysis where any grid cell is greater than or equal to 1.0. Initially provided as raster data, it was converted to a polygon to allow for analysis. The LOC data ranges from 1 – 100 with higher values being most severe (as noted previously, this is only a measure of relative risk). Sixteen was the highest level recorded in the Cape Fear planning area. Therefore, areas with a value above or equal to 1 were chosen to be displayed as areas of risk. The region contains some lands where the value falls into the at-risk category, and though it has somewhat less land labeled as at-risk compared to other regions of North Carolina, the level of concern in those areas that are considered at-risk is somewhat higher than other areas of the state. Since all of this land area is on the lower fifth of the overall LOC scale, there is likely considerably less risk in the region than in other areas of the country.

Table 6-462 shows the results of the analysis.



Source: Southern Wildfire Risk Assessment Data

Figure 6-6: Wildfire Risk Areas in the Cape Fear Region



Source: Southern Wildfire Risk Assessment Data

Figure 6-7: Wildfire Risk Areas in the Cape Fear Region

Table 6-462: Exposure of Improved Property to Wildfire Areas of Concern

Location	High Wildfire Risk Area		
	Approx. Number of Parcels	Approx. Number of Buildings	Approx. Improved Value
Chatham County	**51**	**30**	**$8,020,564**
Goldston	1	0	$23,683
Pittsboro	4	3	$565,768
Siler City	0	0	$0
Unincorporated Area	*46*	*27*	*$7,431,113*
Harnett County	**21,745**	**13,578**	**$1,629,662,809**
Angier	0	0	$0
Coats	31	17	$4,560,240
Dunn	491	264	$56,593,760
Erwin	115	43	$8,519,980
Lillington	127	15	$9,641,298
Unincorporated Area	*20,981*	*13,239*	*$1,550,347,531*
Johnston County	**1,277**	**570**	**$138,681,250**
Archer Lodge	0	0	$0
Benson	0	0	$0
Clayton	0	0	$0
Four Oaks	1	0	$0
Kenly	264	142	$14,562,830
Micro	6	0	$7,600
Pine Level	13	13	$1,340,190
Princeton	15	5	$471,680
Selma	146	73	$48,572,760
Smithfield	70	36	$42,369,820
Wilson's Mills	0	0	$0
Unincorporated Area	*762*	*301*	*$31,356,370*
Lee County	**2,086**	**2,679**	**$145,912,750**
Broadway	1	13	$102,350
Sanford	13	12	$7,770,000
Unincorporated Area	*2,072*	*2,654*	*$138,040,400*

Location	High Wildfire Risk Area		
	Approx. Number of Parcels	Approx. Number of Buildings	Approx. Improved Value
Moore County	**22,757**	**16,570**	**$3,685,311,100**
Aberdeen	1,233	1,091	$157,030,050
Cameron	7	10	$250,430
Carthage	278	198	$59,544,610
Foxfire Village	50	14	$4,716,320
Pinebluff	315	233	$24,031,590
Pinehurst	5,841	3,829	$1,434,214,860
Robbins	0	0	$0
Southern Pines	2,549	1,652	$446,086,160
Taylortown	500	307	$31,726,180
Vass	414	345	$35,304,090
Whispering Pines	242	91	$29,045,670
Unincorporated Area	*11,328*	*8,800*	*$1,463,361,140*
CAPE FEAR REGION TOTAL	**47,916**	**33,427**	**$5,607,588,473**
Source: Cape Fear Regional HMP, 2018 (Page 6:31)			

6.5.20 Social Vulnerability

Although not all areas have equal vulnerability, there is some susceptibility across the entire Cape Fear Region. It is assumed that the total population is at risk to the wildfire hazard. Determining the exact number of people in certain wildfire zones is difficult with existing data and could be misleading.

6.5.21 Critical Facilities

The critical facility analysis revealed that there are no critical facilities located in wildfire areas of concern in Chatham County or Johnston County. However, there are 10 in Harnett County, 4 in Lee County, and 44 in Moore County. This reflects the elevated risk in these three counties for critical facilities to wildfire. It should be noted, however, that several factors could impact the spread of a wildfire putting all facilities at risk. A list of specific critical facilities and their associated risk can be found in **Table 6-465** at the end of this section.

In conclusion, a wildfire event has the potential to impact many existing and future buildings, critical facilities, and populations in the Cape Fear Region.

6.5.22 Nuclear Accident

The location of Shearon Harris Nuclear Station north of the Cape Fear Region demonstrates that the region is at risk to the effects of a nuclear accident. Although there have not been any major events at this plant in the past, there have been major events at other nuclear stations around the country. Additionally, smaller scale incidents at Shearon-Harris Nuclear Station have occurred.

In order to assess nuclear risk, a GIS-based analysis was used to estimate exposure during a nuclear event within each of the risk zones described in Section 5: *Hazard Profiles*. The determination of assessed value at-risk (exposure) was calculated using GIS analysis by summing the total assessed building values for only those improved properties that were confirmed to be located within one of the risk zones. Nearly all areas of the Cape Fear Region are located within one of the risk zones. **Table 6-463** presents the potential at-risk property. Both the number of parcels/buildings and the approximate value are presented.

Table 6-463: Estimated Exposure of Parcels/Buildings to a Nuclear Accident

Location	10-mile buffer			50-mile buffer		
	Approx. Number of Parcels	Approx. Number Improved Buildings	Approx. Improved Value of Buildings*	Approx. Number of Parcels	Approx. Number Improved Buildings	Approx. Improved Value of Buildings**
Chatham County	**3,122**	**3,156**	**$340,412,640**	**42,136**	**39,487**	**$5,417,460,799**
Goldston	0	0	$0	208	245	$14,109,087
Pittsboro	0	0	$0	1,923	1,591	$283,695,816
Siler City	0	0	$0	2,808	2,889	$254,476,937
Unincorporated Area	*3,122*	*3,156*	*$340,412,640*	*37,197*	*34,762*	*$4,865,178,959*
Harnett County	**2,835**	**3,420**	**$168,946,050**	**64,570**	**57,035**	**$4,566,025,607**
Angier	0	0	$0	1,862	1,722	$152,433,474
Coats	0	0	$0	1,002	992	$61,881,400
Dunn	0	0	$0	4,829	4,114	$451,638,268
Erwin	0	0	$0	2,470	2,160	$159,419,650
Lillington	0	0	$0	1,639	1,055	$145,446,258
Unincorporated Area	*2,835*	*3,420*	*$168,946,050*	*52,768*	*46,992*	*$3,595,206,557*
Johnston County	**0**	**0**	**$0**	**91,719**	**80,508**	**$8,608,016,248**
Archer Lodge	0	0	$0	1,750	1,595	$170,585,060
Benson	0	0	$0	1,712	1,458	$178,956,673
Clayton	0	0	$0	7,504	4,762	$1,031,714,203
Four Oaks	0	0	$0	1,131	915	$92,646,954
Kenly	0	0	$0	741	750	$48,529,791
Micro	0	0	$0	244	256	$11,897,567
Pine Level	0	0	$0	795	820	$70,814,330
Princeton	0	0	$0	707	628	$83,358,730
Selma	0	0	$0	2,311	2,506	$205,382,510
Smithfield	0	0	$0	5,236	4,798	$815,559,431
Wilson's Mills	0	0	$0	1,093	895	$82,053,740
Unincorporated Area	*0*	*0*	*$0*	*68,495*	*61,125*	*$5,816,517,259*

Location	10-mile buffer			50-mile buffer		
	Approx. Number of Parcels	Approx. Number Improved Buildings	Approx. Improved Value of Buildings*	Approx. Number of Parcels	Approx. Number Improved Buildings	Approx. Improved Value of Buildings**
Lee County	**1,215**	**1,973**	**$66,555,100**	**31,547**	**43,630**	**$3,117,299,580**
Broadway	0	0	$0	700	844	$68,903,880
Sanford	0	0	$0	11,665	13,980	$1,439,592,100
Unincorporated Area	*1,215*	*1,973*	*$66,555,100*	*19,182*	*28,806*	*$1,608,803,600*
Moore County	**0**	**0**	**$0**	**69,536**	**74,453**	**$8,176,825,678**
Aberdeen	0	0	$0	3,268	3339	$362,337,820
Cameron	0	0	$0	222	362	$12,184,480
Carthage	0	0	$0	1,220	1428	$134,851,010
Foxfire Village	0	0	$0	887	472	$90,386,300
Pinebluff	0	0	$0	862	975	$62,333,510
Pinehurst	0	0	$0	9,496	7111	$2,164,614,510
Robbins	0	0	$0	631	809	$36,792,390
Southern Pines	0	0	$0	7,735	6285	$1,253,968,868
Taylortown	0	0	$0	644	575	$51,615,140
Vass	0	0	$0	662	770	$45,738,310
Whispering Pines	0	0	$0	1,788	1378	$274,595,350
Unincorporated Area	*0*	*0*	*$0*	*42121*	*50949*	*$3,687,407,990*
CAPE FEAR REGION TOTAL	**7,172**	**8,549**	**$575,913,790**	**299,508**	**295,113**	**$29,885,627,912**

Source: International Atomic Energy Agency

* Improved value of buildings is estimated based on the building value associated with parcels that have been identified as being located in the 10-mile buffer, since building footprints were not associated with dollar value data.

** Improved value of buildings is estimated based on the building value associated with parcels that have been identified as being located in the 50-mile buffer, since building footprints were not associated with dollar value data.

6.5.23 Social Vulnerability

Since nearly all areas of the region are within at least the 50-mile buffer area, the total population is considered to be at risk to a nuclear accident. However, populations in the northeast part of the region are considered to be at an elevated risk.

6.5.24 Critical Facilities

The critical facility analysis revealed that there are a total of seven critical facilities located in the 10-mile nuclear buffer area. This includes the following: 3 fire stations and 1 school in Chatham County and 1 EMS/rescue station, 1 fire station, and 1 other facility in Harnett County. All critical facilities in all counties are located within the 50-mile nuclear buffer. A list of specific critical facilities and their associated risk can be found in **Table 6-465** at the end of this section.

In conclusion, a nuclear accident has the potential to impact many existing and future buildings, facilities, and populations in the Cape Fear Region, though areas in the northeast of the region are at a higher risk than others. All structures in the county are at some risk given that they are nearly all located within the 50-mile buffer area.

6.6 Conclusions on Hazard Vulnerability

The results of this vulnerability assessment are useful in at least three ways:

- Improving our understanding of the risk associated with the natural hazards in the Cape Fear through better understanding of the complexities and dynamics of risk, how levels of risk can be measured and compared, and the myriad of factors that influence risk. An understanding of these relationships is critical in making balanced and informed decisions on managing the risk.
- Providing a baseline for policy development and comparison of mitigation alternatives. The data used for this analysis presents a current picture of risk in the Cape Fear Region. Updating this risk "snapshot" with future data will enable comparison of the changes in risk with time. Baselines of this type can support the objective analysis of policy and program options for risk reduction in the region.
- Comparing the risk among the natural hazards addressed. The ability to quantify the risk to all these hazards relative to one another helps in a balanced, multi-hazard approach to risk management at each level of governing authority. This ranking provides a systematic framework to compare and prioritize the very disparate natural hazards that are present in the Cape Fear Region. This final step in the risk assessment provides the necessary information for local officials to craft a mitigation strategy to focus resources on only those hazards that pose the most threat to the Cape Fear counties.

Exposure to hazards can be an indicator of vulnerability. Economic exposure can be identified through locally assessed values for improvements (buildings), and social exposure can be identified by estimating the population exposed to each hazard. This information is especially important for decision-makers to use in planning for evacuation or other public safety related needs.

The types of assets included in these analyses include all building types in the participating jurisdictions. Specific information about the types of assets that are vulnerable to the identified hazards is included in each hazard subsection (for example all building types are considered at risk to the winter storm hazard and commercial, residential, and government owned facilities are at risk to repetitive flooding, etc.).

Table 6-464 presents a summary of annualized loss for each hazard in the Cape Fear Region. Due to the reporting of hazard damages primarily at the county level, it was difficult to determine an accurate annualized loss estimate for each municipality. Therefore, an annualized loss was determined through the damage reported through historical occurrences at the county level. These values should be used as an additional planning tool or measure risk for determining hazard mitigation strategies throughout the region.

Table 6-464: Annualized Loss for the Cape Fear Region

Event	Chatham County	Harnett County	Johnston County	Lee County	Moore County	Region Total
Atmospheric Hazards						
Drought	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Extreme Heat	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

Event	Chatham County	Harnett County	Johnston County	Lee County	Moore County	Region Total
Hurricane	$511,000	$1,669,000	$2,339,000	$674,000	$1,262,000	$6,445,000
Severe Weather	$25,249	$29,061	$26,524	$18,425	$61,319	$160,578
Tornado	$18,229	$411,492	$4,492,630	$1,040,079	$224,085	$6,186,516
Winter Storm	$40,343	$40,624	$40,624	$40,343	$40,343	$202,279
Geologic Hazards						
Earthquake	$12,000	$21,000	$20,000	$15,000	$35,000	$104,000
Hydrologic Hazards						
Dam Failure	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Flood	$452	$452	$2,293	Negligible	$22,742	$25,939
Other Hazards						
HAZMAT Incident	Negligible	$554	$858	$40	$16	$1,468
Wildfire	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Nuclear Accident	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Terror Threat	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

As noted previously, all existing and future buildings and populations (including critical facilities) are vulnerable to atmospheric hazards including drought, extreme heat, hurricane and tropical storm, severe weather, tornado, and winter storm. Some buildings may be more vulnerable to these hazards based on locations, construction, and building type. **Table 6-465** shows the critical facilities vulnerable to additional hazards analyzed in this section. The table lists those assets that are determined to be exposed to each of the identified hazards (marked with an "**X**").

Table 6-465: At-Risk Critical Facilities

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
CHATHAM COUNTY																			
BENNETT VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X					X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X					X
BONLEE VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X			X	X			X	X			X
BENNETT VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X					X
SILK HOPE VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
SILK HOPE VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
STALEY VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X						X		X			X
MONCURE VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X	X	X		X	X
NORTHVIEW VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X				X		X	X	X			X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X											X
NORTH CHATHAM VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X				X	X
MONCURE VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X			X	X			X	X		X	X
PITTSBORO SUBSTATION 2	Fire Station	X	X	X	X	X	X	X											X
PITTSBORO SUBSTATION 3	Fire Station	X	X	X	X	X	X	X					X	X					X
Bennett School	School	X	X	X	X	X	X	X					X	X					X
Siler City Elementary	School	X	X	X	X	X	X	X					X	X					X
J. S. Waters	School	X	X	X	X	X	X	X				X	X	X		X			X
Chatham Central H.S.	School	X	X	X	X	X	X	X					X	X	X	X			X
Bonlee School	School	X	X	X	X	X	X	X			X	X			X	X			X
Chatham Middle School	School	X	X	X	X	X	X	X							X	X			X
Silk Hope School	School	X	X	X	X	X	X	X											X
Moncure School	School	X	X	X	X	X	X	X					X	X	X	X		X	X
North Chatham School	School	X	X	X	X	X	X	X											X
Perry Harrison	School	X	X	X	X	X	X	X											X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Northwood H.S.	School	X	X	X	X	X	X	X					X	X					X
Virginia Cross School	School	X	X	X	X	X	X	X						X		X			X
Margaret Pollard Middle School	School	X	X	X	X	X	X	X											X
GOLDSTON VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X			X	X			X	X			X
CHATHAM COUNTY EMERGENCYOPERATIONS	EOC	X	X	X	X	X	X	X					X	X		X			X
PITTSBORO VOL FIRE DEPT	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
PITTSBORO POLICE	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
CHATHAM SHERIFF	Police Station	X	X	X	X	X	X	X					X	X		X			X
Horton Middle School	School	X	X	X	X	X	X	X				X	X	X	X	X			X
Pittsboro Elementary	School	X	X	X	X	X	X	X					X	X		X			X
School Administration	School	X	X	X	X	X	X	X					X	X		X			X
SILER CITY FIRE DEPT	Fire Station	X	X	X	X	X	X	X						X	X	X			X
CHATHAM HOSPITAL	Medical CareFacility	X	X	X	X	X	X	X					X	X					X
SILER CITY POLICE	PoliceStation	X	X	X	X	X	X	X						X	X	X			X
HIGHWAY PATROL	Police Station	X	X	X	X	X	X	X					X	X	X	X			X
SAGE Academy	School	X	X	X	X	X	X	X					X	X		X			X
Jordan Matthews H.S.	School	X	X	X	X	X	X	X						X		X			X
HARNETT COUNTY																			
BENHAVEN EMS	EMS/Rescue Station	X	X	X	X	X	X	X						X					X
HARNETT EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X					X
BENHAVEN EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X	X		X
SPOUT SPRINGS EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X	X		X
BOONE TRAIL EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X					X
BUIES CREEK EMS	EMS/Rescue Station	X	X	X	X	X	X	X					X	X					X
FLAT BRANCH EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X					X
FLATWOODS EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X			X
COUNTY EMS	EMS/RescueStation	X	X	X	X	X	X	X										X	X
ANDERSON CREEK EMS	EMS/RescueStation	X	X	X	X	X	X	X											X
BUIES CREEK FIRE	Fire Station	X	X	X	X	X	X	X					X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER							
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
FLATWOODS FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
FLAT BRANCH FIRE	Fire Station	X	X	X	X	X	X	X					X	X					X
BOONE TRAIL FIRE	Fire Station	X	X	X	X	X	X	X					X	X					X
BENHAVEN FIRE	Fire Station	X	X	X	X	X	X	X						X					X
BENHAVEN FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X	X		X
SPOUT SPRINGS FIRE	Fire Station	X	X	X	X	X	X	X					X	X			X		X
SPOUT SPRINGS FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X	X		X
BUNNLEVEL FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
BOONE TRAIL FIRE	Fire Station	X	X	X	X	X	X	X					X	X			X		X
NORTHWEST HARNETT FIRE	Fire Station	X	X	X	X	X	X	X										X	X
ANDERSON CREEK FIRE	Fire Station	X	X	X	X	X	X	X											X
CENTRAL HARNETT HOSPITAL	Medical CareFacility	X	X	X	X	X	X	X					X	X		X			X
CENTRAL HARNETT HOSPITAL	Medical Care Facility	X	X	X	X	X	X	X					X	X		X			X
Harnett County Airpo	Other	X	X	X	X	X	X	X						X					X
JOHNSON BETTER CARE FACILITY	Other	X	X	X	X	X	X	X						X	X	X			X
STAGE COACH MANOR	Other	X	X	X	X	X	X	X						X					X
PINECREST GARDENS OFLILLINGTON	Other	X	X	X	X	X	X	X					X	X		X			X
KNOLLWOOD GARDENS OFLILLINGTON	Other	X	X	X	X	X	X	X					X	X	X	X			X
CORE FAMILY CARE INC	Other	X	X	X	X	X	X	X					X	X		X			X
UNPRECEDENTED CARE	Other	X	X	X	X	X	X	X					X	X	X	X			X
SENTERS REST HOME	Other	X	X	X	X	X	X	X					X	X	X	X		X	X
CAMPBELL UNIVERSITY WELCOMECTR	PoliceStation	X	X	X	X	X	X	X					X	X					X
Benhaven Elem	School	X	X	X	X	X	X	X						X		X	X		X
West Harnett High	School	X	X	X	X	X	X	X					X	X					X
West Harnett Middle	School	X	X	X	X	X	X	X					X	X					X
Highland Elem	School	X	X	X	X	X	X	X											X
Johnsonville Elem	School	X	X	X	X	X	X	X					X	X		X	X		X
Cameron Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
Cape Fear Christian	School	X	X	X	X	X	X	X					X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Coats Elem	School	X	X	X	X	X	X	X					X	X					X
Coats-Erwin Middle	School	X	X	X	X	X	X	X					X	X	X	X			X
Buies Creek Elem	School	X	X	X	X	X	X	X						X					X
Harnett Central Middle	School	X	X	X	X	X	X	X					X	X					X
Harnett Central High	School	X	X	X	X	X	X	X						X					X
North Harnett Primary	School	X	X	X	X	X	X	X					X	X					X
Lafayette Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
Boone Tral Elem	School	X	X	X	X	X	X	X						X					X
Anderson Creek Primary	School	X	X	X	X	X	X	X					X	X					X
South Harnett Elem	School	X	X	X	X	X	X	X					X	X					X
Overhills Middle	School	X	X	X	X	X	X	X					X	X			X		X
Overhills High	School	X	X	X	X	X	X	X					X	X			X		X
ANGIER BLACK RIVER EMS	EMS/RescueStation	X	X	X	X	X	X	X				X	X	X	X	X			X
ANGIER & BLACK RIVER FIRE	Fire Station	X	X	X	X	X	X	X				X	X	X	X	X			X
PRIMROSE VILLA INC- (II, III, & IV)	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
OAK HILL LIVING CENTER	Other	X	X	X	X	X	X	X				X	X	X		X			X
ANGIER POLICE DEPT	Police Station	X	X	X	X	X	X	X				X	X	X	X	X			X
Angier Elem	School	X	X	X	X	X	X	X				X	X	X	X	X			X
COATS GROVE EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X			X
COATS GROVE FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
COATS POLICE DEPARTMENT	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Coats Christian	School	X	X	X	X	X	X	X					X	X	X	X			X
DUNN EMS	EMS/Rescue Station	X	X	X	X	X	X	X					X	X	X	X			X
CITY OF DUNN – PD	EOC	X	X	X	X	X	X	X					X	X	X	X			X
DUNN FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
DUNN FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
BETSY JOHNSON HOSPITAL	Medical CareFacility	X	X	X	X	X	X	X						X					X
BETSY JOHNSON HOSPITAL	Medical CareFacility	X	X	X	X	X	X	X						X					X
DUNN REHABILITATION & NURSING CENTER	Other	X	X	X	X	X	X	X				X		X		X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
SENIOR CITIZENS VILLAGE/MOOREHEALTH CAR	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
MAGNOLIA LIVING CENTER LLC	Other	X	X	X	X	X	X	X					X	X	X	X			X
DUNN POLICE DEPT	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Excel Christian	School	X	X	X	X	X	X	X					X	X	X	X			X
Faith Education	School	X	X	X	X	X	X	X					X	X	X	X			X
Gospel Tabernacle	School	X	X	X	X	X	X	X					X	X	X	X			X
Dunn Middle	School	X	X	X	X	X	X	X				X		X		X			X
Harnett Primary	School	X	X	X	X	X	X	X					X	X	X	X			X
Wayne Ave Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
ERWIN EMS	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X			X
ERWIN FIRE	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
GOOD HOPE BEHAVORIAL HEALTH SERVICES	Medical Care Facility	X	X	X	X	X	X	X					X	X	X	X			X
GOOD HOPE BEHAVORIAL HEALTHSERVICES	Medical CareFacility	X	X	X	X	X	X	X					X	X	X	X			X
BRITTHAVEN OF HARNETT	Other	X	X	X	X	X	X	X						X					X
ERWIN POLICE DEPARTMENT	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Malthouse Appleworks School	School	X	X	X	X	X	X	X					X	X	X	X			X
Erwin Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
Gentry Elem	School	X	X	X	X	X	X	X					X	X		X			X
Triton High	School	X	X	X	X	X	X	X					X	X		X			X
LILLINGTON FIRST RESPONDER	EMS/RescueStation	X	X	X	X	X	X	X			X	X	X	X	X	X			X
CENTRAL DISPATCH- SHERIFF DEPT	EOC	X	X	X	X	X	X	X				X	X	X	X	X			X
LILLINGTON FIRE	Fire Station	X	X	X	X	X	X	X			X	X	X	X	X	X			X
SUMMERVILLE FIRE	Fire Station	X	X	X	X	X	X	X			X	X	X	X	X	X			X
BROOKFIELD RETIREMENT CENTER	Other	X	X	X	X	X	X	X					X	X					X
HARNETT MANOR	Other	X	X	X	X	X	X	X					X	X					X
LILLINGTON POLICE DEPT	PoliceStation	X	X	X	X	X	X	X			X	X	X	X	X	X			X
NC STATE HIGHWAY PATROL	PoliceStation	X	X	X	X	X	X	X						X	X	X			X
SHERIFF DEPARTMENT	Police Station	X	X	X	X	X	X	X				X	X	X	X	X			X
HARNETT COUNTY DETENTIONCENTER	PoliceStation	X	X	X	X	X	X	X				X	X	X	X	X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Star Academy	School	X	X	X	X	X	X	X				X	X	X	X	X			X
Lillington-Shawtown Elem	School	X	X	X	X	X	X	X					X	X					X
JOHNSTON COUNTY																			
Bentonville Fire Department	Fire Station	X	X	X	X	X	X	X											X
Cleveland Fire Department Inc	Fire Station	X	X	X	X	X	X	X						X					X
Elevation Fire Dept Inc	Fire Station	X	X	X	X	X	X	X					X	X					X
50-210 Community Fire Dept Inc	Fire Station	X	X	X	X	X	X	X					X	X					X
50-210 Community Fire Dept Inc	Fire Station	X	X	X	X	X	X	X											X
Wilson Mills Fire Dept Inc	Fire Station	X	X	X	X	X	X	X											X
Corinth-Holder Vol Fire Dept	Fire Station	X	X	X	X	X	X	X					X	X					X
Autumn Care #1	Other	X	X	X	X	X	X	X						X					X
Autumn Wind Rest Home &Retirem	Other	X	X	X	X	X	X	X					X	X					X
Mclamb's Rest Home #1	Other	X	X	X	X	X	X	X					X	X					X
Oasis Of Four Oaks Rest Home	Other	X	X	X	X	X	X	X					X	X	X	X			X
Progressive Care	Other	X	X	X	X	X	X	X											X
Hester's Family Care	Other	X	X	X	X	X	X	X											X
Autumn Care #2	Other	X	X	X	X	X	X	X						X					X
Autumn Care #3	Other	X	X	X	X	X	X	X						X					X
Mclamb's Rest Home #2	Other	X	X	X	X	X	X	X					X	X					X
Landfill	Other	X	X	X	X	X	X	X					X	X					X
Johnston County Airport Authority	Other	X	X	X	X	X	X	X						X					X
Johnston County Livestock Arena	Other	X	X	X	X	X	X	X					X	X					X
Johnston County Garage	Other	X	X	X	X	X	X	X						X					X
Johnston County Landfill	Other	X	X	X	X	X	X	X						X					X
North Johnston High	School	X	X	X	X	X	X	X					X	X	X	X			X
Meadow Elementary	School	X	X	X	X	X	X	X					X	X					X
Glendale-Kenly Elem	School	X	X	X	X	X	X	X					X	X					X
South Johnston High	School	X	X	X	X	X	X	X					X	X		X			X
Mcgee's Crossroads Elem	School	X	X	X	X	X	X	X					X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
East Clayton Elem	School	X	X	X	X	X	X	X					X	X					X
Cleveland Elementary	School	X	X	X	X	X	X	X											X
Cleveland Middle	School	X	X	X	X	X	X	X											X
Corinth-Holders School	School	X	X	X	X	X	X	X					X	X					X
Polenta Elementary	School	X	X	X	X	X	X	X											X
Mcgees Crossroads Middle	School	X	X	X	X	X	X	X					X	X					X
River Dell Elem	School	X	X	X	X	X	X	X						X					X
West Johnston High	School	X	X	X	X	X	X	X						X					X
West Smithfield Elem	School	X	X	X	X	X	X	X					X	X					X
Dixon Road Elem	School	X	X	X	X	X	X	X						X					X
West View Elem	School	X	X	X	X	X	X	X					X	X					X
Corinth Holders High	School	X	X	X	X	X	X	X											X
Cleveland High	School	X	X	X	X	X	X	X											X
Archer Lodge Town Hall	Other	X	X	X	X	X	X	X											X
Archer Lodge Middle	School	X	X	X	X	X	X	X											X
Oasis Of Benson Rest Home (1 – 6)	Other	X	X	X	X	X	X	X					X	X	X	X			X
Liberty Commons	Other	X	X	X	X	X	X	X					X	X		X			X
Mary Duncan Public Library	Other	X	X	X	X	X	X	X					X	X	X	X			X
Benson Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Benson Housing Authority	Other	X	X	X	X	X	X	X					X	X		X			X
Benson Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Benson Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Benson Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Town of Benson Police	Police Station	X	X	X	X	X	X	X					X	X	X	X			X
Benson Elementary	School	X	X	X	X	X	X	X					X	X					X
Benson Middle	School	X	X	X	X	X	X	X					X	X	X	X			X
Brian Center	Other	X	X	X	X	X	X	X				X	X	X					X
Front Street Family Care	Other	X	X	X	X	X	X	X					X	X	X	X			X
Diversicare AL Of Clayton	Other	X	X	X	X	X	X	X				X	X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Johnston Medical Center	Other	X	X	X	X	X	X	X					X	X					X
Hocutt-Ellington Memorial Library	Other	X	X	X	X	X	X	X					X	X	X	X			X
Clayton Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Clayton Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Clayton Operations Center	Other	X	X	X	X	X	X	X			X	X	X	X					X
Johnston Medical Center Clayton	Other	X	X	X	X	X	X	X					X	X					X
Town of Clayton Police	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Clayton High	School	X	X	X	X	X	X	X					X	X	X	X			X
West Clayton Elem	School	X	X	X	X	X	X	X				X	X	X		X			X
Cooper Elementary	School	X	X	X	X	X	X	X						X	X	X			X
Riverwood Elementary	School	X	X	X	X	X	X	X											X
Riverwood Middle	School	X	X	X	X	X	X	X											X
Clayton Middle	School	X	X	X	X	X	X	X			X	X	X	X					X
Powhatan Elem	School	X	X	X	X	X	X	X											X
Four Oaks Rescue Inc	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Johnston County Group Home	Other	X	X	X	X	X	X	X					X	X	X	X			X
Jame Bryan Creech Public Library	Other	X	X	X	X	X	X	X						X	X	X			X
Smithfield Post Office 2	Other	X	X	X	X	X	X	X					X	X	X	X			X
Four Oaks Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Town of Four Oaks Police	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Four Oaks Elementary	School	X	X	X	X	X	X	X						X	X	X			X
Four Oaks Middle	School	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Volunteer Fire Depart	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Public Library	Other	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Village Association	Other	X	X	X	X	X	X	X					X	X	X	X			X
College Court Apartments	Other	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Kenly Maintenance/Storage Facility	Other	X	X	X	X	X	X	X					X	X	X	X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Town of Kenly Police	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Micro Volunteer Fire Dept Inc	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Hilmont Village	Other	X	X	X	X	X	X	X					X	X	X	X			X
Micro Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Micro Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Micro Public Works Department	Other	X	X	X	X	X	X	X					X	X	X	X			X
Micro Town Dump	Other	X	X	X	X	X	X	X					X	X	X	X			X
North Johnston Middle	School	X	X	X	X	X	X	X					X	X	X	X			X
Pine Level Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Pine Level Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Pine Level Public Works	Other	X	X	X	X	X	X	X					X	X	X	X			X
Town of Pine Level Police	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Micro-Pine Level Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Volunteer Fire	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Senior Center	Other	X	X	X	X	X	X	X						X	X	X			X
Princeton Public Library	Other	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Maintenance Building	Other	X	X	X	X	X	X	X						X	X	X			X
Princeton Parking Garage	Other	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Ms_Hs	School	X	X	X	X	X	X	X					X	X	X	X			X
Princeton Elem	School	X	X	X	X	X	X	X						X		X			X
Selma Public Library	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Selma Post Office	Other	X	X	X	X	X	X	X					X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X				X	X	X	X	X			X

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		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Selma Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Selma Housing Authority	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Selma Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Selma Public Works	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Town of Selma Police	Police Station	X	X	X	X	X	X	X				X	X	X	X	X			X
Selma Middle School	School	X	X	X	X	X	X	X					X	X		X			X
Selma Elementary	School	X	X	X	X	X	X	X					X	X	X	X			X
County Of Johnston Police	Eoc	X	X	X	X	X	X	X				X	X	X		X			X
Johnston Medical Center	Medical CareFacility	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Diversicare AL Of Smithfield Wes	Other	X	X	X	X	X	X	X	X			X	X	X		X			X
Classic Care #101	Other	X	X	X	X	X	X	X					X	X					X
Britthaven	Other	X	X	X	X	X	X	X						X					X
Smithfield Manor Inc.	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Council On Aging	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Meadowview Assisted Living Cente	Other	X	X	X	X	X	X	X		X			X	X					X
Carolina House Of Smithfield	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Pine Knoll Manor #2	Other	X	X	X	X	X	X	X					X	X					X
Pine Knoll Manor #1	Other	X	X	X	X	X	X	X					X	X					X
Greenwood Group Home	Other	X	X	X	X	X	X	X	X				X	X					X
Laurel Woods Group Home	Other	X	X	X	X	X	X	X						X					X
Rha Group Home	Other	X	X	X	X	X	X	X					X	X	X	X			X
Public Library Of Johnston CountyAnd Smithfield	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
The Heritage Center	Other	X	X	X	X	X	X	X				X	X	X		X			X
Smithfield Post Office	Other	X	X	X	X	X	X	X				X	X	X		X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X	X			X	X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X				X	X	X	X	X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Housing Authority	Other	X	X	X	X	X	X	X					X	X	X	X			X
Smithfield Town Hall	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Johnston County Court House	Other	X	X	X	X	X	X	X				X	X	X		X			X
Johnston County Happ	Other	X	X	X	X	X	X	X				X	X	X		X			X
Johnston County Human Resources	Other	X	X	X	X	X	X	X				X	X	X		X			X
Johnston County Maintenance	Other	X	X	X	X	X	X	X				X	X	X		X			X
Johnston County Land Use Center	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Johnston County AgriculturalBuilding	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Johnston County Division Of Social Services	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Johnston County Health Center	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Town of Smithfield Maintenance	Other	X	X	X	X	X	X	X	X			X	X	X		X			X
Johnston County Animal Shelter	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Smithfield Operation Center	Other	X	X	X	X	X	X	X		X		X	X	X		X			X
Johnston Memorial Hospital	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Smithfield Parks & Rec	Other	X	X	X	X	X	X	X				X	X	X		X			X
Town of Smithfield Police	Police Station	X	X	X	X	X	X	X				X	X	X	X	X			X
Smithfield-Selma High	School	X	X	X	X	X	X	X						X		X			X
Smithfield Middle	School	X	X	X	X	X	X	X											X
South Campus Cmty	School	X	X	X	X	X	X	X	X			X	X	X		X			X
South Smithfield Elem	School	X	X	X	X	X	X	X					X	X		X			X
Neuse Charter School	School	X	X	X	X	X	X	X						X		X			X
Board Of Education	School	X	X	X	X	X	X	X					X	X		X			X
Operations	School	X	X	X	X	X	X	X				X	X	X		X			X
Jo Co Middle College High	School	X	X	X	X	X	X	X				X	X	X	X	X			X
Jo Co Early Academy	School	X	X	X	X	X	X	X				X	X	X	X	X			X
Wilson Mills Fire Department	Fire Station	X	X	X	X	X	X	X						X	X	X			X

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		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Wilsons Mill Post Office	Other	X	X	X	X	X	X	X						X	X	X			X
Wilson's Mills Town Hall	Other	X	X	X	X	X	X	X						X	X	X			X
Town of Wilson's Mills Police	PoliceStation	X	X	X	X	X	X	X						X	X	X			X
Wilson's Mills Elem	School	X	X	X	X	X	X	X					X	X	X	X			X
LEE COUNTY																			
FD VFD FIRE DEPT POCKET	Fire Station	X	X	X	X	X	X	X					X	X					X
FD VFD FIRE LEMON SPRINGS VOL	Fire Station	X	X	X	X	X	X	X							X	X	X		X
FD DEPT TRAMWAY	Fire Station	X	X	X	X	X	X	X					X	X					X
FD DEPT CAROLINA TRACE	Fire Station	X	X	X	X	X	X	X					X	X					X
FD VFD DEEP RIVER	Fire Station	X	X	X	X	X	X	X											X
FD NORTHVIEW VFD STA # 6	Fire Station	X	X	X	X	X	X	X					X	X			X		X
FD VFD FIRE WEST SANFORD VFD	Fire Station	X	X	X	X	X	X	X				X		X	X	X			X
FD VFD DEEP RIVER FIRESUBSTATION	Fire Station	X	X	X	X	X	X	X								X			X
SCH GRACE CHAPEL SCHOOL	School	X	X	X	X	X	X	X					X	X			X		X
SCH GREENWOOD ELEMENTERY	School	X	X	X	X	X	X	X							X	X	X		X
SCH BETHEL BIBLE COLLEGE	School	X	X	X	X	X	X	X			X	X	X	X	X	X			X
SCH TRAMWAY ELEM	School	X	X	X	X	X	X	X					X	X					X
SCH CENT CAR COMM COLL MAINTBUILD	School	X	X	X	X	X	X	X				X		X		X			X
SCH J GLENN EDWARDS ELEM	School	X	X	X	X	X	X	X				X				X			X
SCH DEEP RIVER ELEM	School	X	X	X	X	X	X	X											X
FD CAPE FEAR VOL	Fire Station	X	X	X	X	X	X	X											X
BU BROADWAY POLICE DEPT	Police Station	X	X	X	X	X	X	X											X
SCH BROADWAY ELEMENTARY	School	X	X	X	X	X	X	X						X					X
BU EMERGENCY MANAGEMENT	EOC	X	X	X	X	X	X	X					X	X	X	X			X
FD CITY STA #3	Fire Station	X	X	X	X	X	X	X						X					X
BU CENTRAL CAROLINA HOSPITAL	Medical CareFacility	X	X	X	X	X	X	X					X	X		X			X
BU SANFORD MUNICIPAL CENTER	PoliceStation	X	X	X	X	X	X	X				X	X	X	X	X			X
BU LEE COUNTY SHERIFFS OFFICE	Police Station	X	X	X	X	X	X	X					X	X	X	X			X
SCH WEST LEE MIDDLE	School	X	X	X	X	X	X	X					X	X					X

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		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
SCH CENTRAL CAROLINA COMMCOLLEGE	School	X	X	X	X	X	X	X			X	X		X		X			X
SCH LEE SENIOR HIGH	School	X	X	X	X	X	X	X			X	X	X	X	X	X			X
SCH LEE CO BUS GARAGE	School	X	X	X	X	X	X	X					X	X		X			X
SCH JONESBORO ELEM	School	X	X	X	X	X	X	X					X	X		X			X
SCH EAST LEE MIDDLE	School	X	X	X	X	X	X	X			X	X	X	X	X	X			X
SCH BRAGG ST	School	X	X	X	X	X	X	X						X		X			X
SCH MONTESSORI	School	X	X	X	X	X	X	X					X	X	X	X			X
SCH FLOYD L KNIGHT	School	X	X	X	X	X	X	X					X	X	X	X			X
SCH OLD MCIVER	School	X	X	X	X	X	X	X					X	X	X	X			X
SCH LEE CHRISTIAN SCHOOL	School	X	X	X	X	X	X	X					X	X					X
SCH J R INGRAM ELEM	School	X	X	X	X	X	X	X					X	X					X
SCH MONTESSORI	School	X	X	X	X	X	X	X					X	X	X	X			X
SCH BENJAMIN T BULLOCK ELEM	School	X	X	X	X	X	X	X			X	X	X	X		X			X
SCH TRACY HOOVER MONTESSORI	School	X	X	X	X	X	X	X				X	X	X	X	X			X
SCH SOUTHERN LEE HIGH SCHOOL	School	X	X	X	X	X	X	X					X	X	X	X			X
SCH SAN LEE MIDDLE SCHOOL	School	X	X	X	X	X	X	X					X	X	X	X			X
MOORE COUNTY																			
Moore County Medic 1	EMS/Rescue Station	X	X	X	X	X	X	X											X
Moore County Medic 2	EMS/RescueStation	X	X	X	X	X	X	X											X
Moore County Medic 3	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X			X
Moore County Medic 5	EMS/RescueStation	X	X	X	X	X	X	X					X	X					X
Carthage Rescue 30	EMS/RescueStation	X	X	X	X	X	X	X						X					X
Seven Lakes Rescue 69	EMS/RescueStation	X	X	X	X	X	X	X						X		X			X
High Falls Station 12	Fire Station	X	X	X	X	X	X	X					X	X					X
Westmoore Station 14	Fire Station	X	X	X	X	X	X	X											X
Cypress Point Station Station 3(Woodlake)	Fire Station	X	X	X	X	X	X	X									X		X
Crains Creek Station 23	Fire Station	X	X	X	X	X	X	X					X	X					X
Carthage Station 31	Fire Station	X	X	X	X	X	X	X					X	X					X
Eastwood Station 52	Fire Station	X	X	X	X	X	X	X					X	X			X		X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
West End 60/61	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Eagle Springs Station 62	Fire Station	X	X	X	X	X	X	X				X	X	X	X	X			X
Seven Lakes Station 63	Fire Station	X	X	X	X	X	X	X						X		X			X
Crestline Station 72	Fire Station	X	X	X	X	X	X	X					X	X	X	X	X		X
Pinehurst Station 91	Fire Station	X	X	X	X	X	X	X											X
Pinehurst Station 92	Fire Station	X	X	X	X	X	X	X											X
Samarkand Youth DevelopmentCenter	Other	X	X	X	X	X	X	X											X
Beacon Ridge Golf and Country Club	Other	X	X	X	X	X	X	X											X
Hyland Hills Resort	Other	X	X	X	X	X	X	X					X	X		X	X		X
Legacy Golf Links	Other	X	X	X	X	X	X	X					X	X					X
Little River Golf Club	Other	X	X	X	X	X	X	X					X	X					X
Midland Country Club	Other	X	X	X	X	X	X	X					X	X					X
Pinebluff Golf Club	Other	X	X	X	X	X	X	X					X	X					X
Pine Needles Golf Club	Other	X	X	X	X	X	X	X						X					X
Pinewild Country Club	Other	X	X	X	X	X	X	X						X	X	X	X		X
The Pit Golf Links	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Riverside Country Club	Other	X	X	X	X	X	X	X					X	X					X
Seven Lakes Country Club	Other	X	X	X	X	X	X	X											X
Talamore	Other	X	X	X	X	X	X	X						X					X
Woodlake Country Club	Other	X	X	X	X	X	X	X	X					X					X
Water Treatment Facilities	Other	X	X	X	X	X	X	X					X	X					X
Main Office-Moore County PublicUtilitie	Other	X	X	X	X	X	X	X					X	X			X		X
Southern Pines	Other	X	X	X	X	X	X	X					X	X					X
Carthage	Other	X	X	X	X	X	X	X											X
Moore County Airport	Other	X	X	X	X	X	X	X					X	X			X		X
Progress Energy	Other	X	X	X	X	X	X	X											X
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X					X
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
REMC Substation	Other	X	X	X	X	X	X	X											X
REMC Station	Other	X	X	X	X	X	X	X								X			X
REMC Substation	Other	X	X	X	X	X	X	X											X
REMC Substation	Other	X	X	X	X	X	X	X					X	X					X
REMC Substation	Other	X	X	X	X	X	X	X					X	X					X
REMC Substation	Other	X	X	X	X	X	X	X					X	X					X
REMC Substation	Other	X	X	X	X	X	X	X											X
REMC Breaker Station	Other	X	X	X	X	X	X	X								X			X
CEMC Substation	Other	X	X	X	X	X	X	X					X	X					X
CEMC Substation	Other	X	X	X	X	X	X	X											X
CEMC	Other	X	X	X	X	X	X	X					X	X					X
Communications Center	Other	X	X	X	X	X	X	X											X
Carthage Tower	Other	X	X	X	X	X	X	X						X					X
Cranes Creek Tower	Other	X	X	X	X	X	X	X						X					X
Seven Lakes Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
Westmoore Tower	Other	X	X	X	X	X	X	X											X
Alltel, Sprint PCS Cell Tower	Other	X	X	X	X	X	X	X						X	X	X	X		X
Alltel, Nextel Cell Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
Alltel Substation	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
Alltel, Bellsouth, SunCom Cell Tower	Other	X	X	X	X	X	X	X					X	X		X	X		X
Alltel Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
Alltel Cell Tower	Other	X	X	X	X	X	X	X						X					X
Alltel Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
Bellsouth, Sprint Cell Tower	Other	X	X	X	X	X	X	X	X				X	X					X
Bellsouth, SunCom, Nextel CellTower	Other	X	X	X	X	X	X	X					X	X			X		X
Bellsouth, Sprint PCS Cell Tower	Other	X	X	X	X	X	X	X					X	X		X	X		X
Bellsouth, Alltel, SunCom CellTower	Other	X	X	X	X	X	X	X					X	X	X	X			X
Cell Tower	Other	X	X	X	X	X	X	X					X	X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER							
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
Cell Tower	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
Cingular Tower	Other	X	X	X	X	X	X	X					X	X					X
Cingular Wireless Tower	Other	X	X	X	X	X	X	X											X
Nextel Cell Tower	Other	X	X	X	X	X	X	X						X					X
Nextel Cell Tower	Other	X	X	X	X	X	X	X											X
Nextel, Sprint PCS, Bellsouth CellTower	Other	X	X	X	X	X	X	X					X	X			X		X
Cingular Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
Sprint PCS Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
Sprint PCS, SunCom Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
SunCom Cell Tower	Other	X	X	X	X	X	X	X	X				X	X	X	X	X		X
SunCom, Bellsouth Cell Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
SunCom Cell Tower	Other	X	X	X	X	X	X	X						X		X	X		X
US Cellular Tower	Other	X	X	X	X	X	X	X					X	X			X		X
US Cellular Tower	Other	X	X	X	X	X	X	X					X	X					X
Verizon Comm. Site	Other	X	X	X	X	X	X	X					X	X	X	X			X
Central Telephone Co	Other	X	X	X	X	X	X	X					X	X	X	X			X
Century Link	Other	X	X	X	X	X	X	X											X
Embarq Station	Other	X	X	X	X	X	X	X					X	X					X
Embarq Telephone Pedestal	Other	X	X	X	X	X	X	X					X	X					X
Embarq Station	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
Sprint Pedestal	Other	X	X	X	X	X	X	X											X
Sprint Distribution	Other	X	X	X	X	X	X	X							X	X			X
Sprint Switch Box	Other	X	X	X	X	X	X	X					X	X					X
Sprint Switch Box	Other	X	X	X	X	X	X	X											X
Sprint Phone Box	Other	X	X	X	X	X	X	X											X
Sprint 1001 #2	Other	X	X	X	X	X	X	X	X				X	X					X
Sprint Centel	Other	X	X	X	X	X	X	X					X	X	X	X			X
Sprint/Embarq Pedestal	Other	X	X	X	X	X	X	X					X	X		X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Telephone Utility	Other	X	X	X	X	X	X	X											X
Telephone Pad	Other	X	X	X	X	X	X	X											X
United Telephone Co	Other	X	X	X	X	X	X	X					X	X		X			X
Coastal Agrobusiness	Other	X	X	X	X	X	X	X					X	X					X
Southern States Propane	Other	X	X	X	X	X	X	X					X	X					X
Sandhills Propane	Other	X	X	X	X	X	X	X					X	X					X
Dixie Denning Propane	Other	X	X	X	X	X	X	X					X	X					X
Moore County Airport Fuel Tanks	Other	X	X	X	X	X	X	X					X	X			X		X
Woodlake Maintenance Shop	Other	X	X	X	X	X	X	X									X		X
RBI Retail Golf Balls	Other	X	X	X	X	X	X	X					X	X	X	X			X
Little River Golf	Other	X	X	X	X	X	X	X					X	X					X
Kens Body Works	Other	X	X	X	X	X	X	X						X					X
High Falls Oil	Other	X	X	X	X	X	X	X					X	X					X
Greens Fuel	Other	X	X	X	X	X	X	X					X	X			X		X
Eastwood Fire Department	Other	X	X	X	X	X	X	X					X	X			X		X
Deep River Mills	Other	X	X	X	X	X	X	X					X	X					X
Robbins Wastewater TreatmentPlant	Other	X	X	X	X	X	X	X					X	X		X			X
Hussey Oil	Other	X	X	X	X	X	X	X					X	X					X
Robbins Spies Rd. Booster Station	Other	X	X	X	X	X	X	X								X			X
Van DerVeers LP - Robbins	Other	X	X	X	X	X	X	X					X	X					X
McNeil Oil Company	Other	X	X	X	X	X	X	X					X	X	X	X			X
Synergy LP	Other	X	X	X	X	X	X	X					X	X					X
Coopers LP	Other	X	X	X	X	X	X	X						X	X	X			X
Seven Lakes South Maintenance	Other	X	X	X	X	X	X	X											X
Moore County Senior EnrichmentCenter	Other	X	X	X	X	X	X	X					X	X			X		X
Moore County Animal Control	Other	X	X	X	X	X	X	X					X	X					X
Moore County Public Works	Other	X	X	X	X	X	X	X					X	X					X
Moore County Water Pollution	Other	X	X	X	X	X	X	X							X	X			X
Vass Waste Water Treatment Plant	Other	X	X	X	X	X	X	X					X	X	X	X	X		X

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		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Carthage Town Hall	Other	X	X	X	X	X	X	X					X	X					X
Whispering Pines Police Department	Police Station	X	X	X	X	X	X	X											X
Carthage Police Department	PoliceStation	X	X	X	X	X	X	X					X	X					X
Southern Middle School	School	X	X	X	X	X	X	X					X	X					X
West End Elementary School	School	X	X	X	X	X	X	X					X	X	X	X			X
West Pine Elementary School	School	X	X	X	X	X	X	X					X	X	X	X			X
West Pine Middle School	School	X	X	X	X	X	X	X					X	X	X	X			X
Union Pines High School	School	X	X	X	X	X	X	X											X
North Moore High School	School	X	X	X	X	X	X	X											X
Sandhills Farmlife ElementarySchool	School	X	X	X	X	X	X	X											X
Crain's Creek Middle School	School	X	X	X	X	X	X	X						X		X			X
New Century Middle School	School	X	X	X	X	X	X	X						X					X
Moore County Schools AdminBuilding	School	X	X	X	X	X	X	X					X	X					X
Highfalls Elementary School	School	X	X	X	X	X	X	X					X	X					X
Westmoore Elementary School	School	X	X	X	X	X	X	X					X	X					X
Robbins Elementary School	School	X	X	X	X	X	X	X					X	X		X			X
Stars Charter School	School	X	X	X	X	X	X	X					X	X		X	X		X
Longleaf Academy	School	X	X	X	X	X	X	X					X	X	X	X			X
Highland Christian Academy	School	X	X	X	X	X	X	X					X	X		X	X		X
Moore County Medic 6	EMS/Rescue Station	X	X	X	X	X	X	X					X	X	X	X			X
Aberdeen Rescue 40	EMS/RescueStation	X	X	X	X	X	X	X	X				X	X	X	X			X
Aberdeen Station 41	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
CP & L Transmission	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
CP& L	Other	X	X	X	X	X	X	X					X	X	X	X			X
Transformer Station	Other	X	X	X	X	X	X	X				X		X		X	X		X
Alltel	Other	X	X	X	X	X	X	X					X	X		X			X
Sprint PCS, Aberdeen Water Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
SunCom Cell Tower	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
SunCom Cell Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X

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US Cellular Tower	Other	X	X	X	X	X	X	X					X	X		X			X
Sprint Equipment Box	Other	X	X	X	X	X	X	X					X	X	X	X			X
Telephone Drop	Other	X	X	X	X	X	X	X	X				X	X	X	X			X
Gulistan Carpet	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
WC Richards	Other	X	X	X	X	X	X	X					X	X	X	X			X
Ferrell Gas - Vann Pl	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Ferrell Gas - NC 5	Other	X	X	X	X	X	X	X			X	X	X	X	X	X			X
Cardinal Chemical	Other	X	X	X	X	X	X	X					X	X	X	X			X
Aberdeen Town Hall	Other	X	X	X	X	X	X	X	X				X	X	X	X			X
Aberdeen Police Department	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Aberdeen Elementary School	School	X	X	X	X	X	X	X					X	X	X	X			X
Aberdeen Primary School	School	X	X	X	X	X	X	X					X	X	X	X			X
Academy of Moore County	School	X	X	X	X	X	X	X					X	X					X
Soild Rock Christian School	School	X	X	X	X	X	X	X					X	X	X	X			X
Cypress Point Station 2 (Cameron)	Fire Station	X	X	X	X	X	X	X					X	X					X
Cameron Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Cameron Police Department	Police Station	X	X	X	X	X	X	X					X	X	X	X			X
Cameron Elementary School	School	X	X	X	X	X	X	X					X	X		X			X
Rick Rhyne-Public Safety MooreCnty EOC	EOC	X	X	X	X	X	X	X					X	X					X
Jail	Other	X	X	X	X	X	X	X					X	X					X
Sprint, SunCom Cellular Tower	Other	X	X	X	X	X	X	X					X	X					X
Carthage Agribusiness - SouthernStates	Other	X	X	X	X	X	X	X					X	X					X
Van DerVeers LP - Carthage	Other	X	X	X	X	X	X	X											X
Energy United	Other	X	X	X	X	X	X	X					X	X					X
Ferrell Gas	Other	X	X	X	X	X	X	X					X	X					X
Carthage Oil Company	Other	X	X	X	X	X	X	X					X	X					X
Moore County Jail	Other	X	X	X	X	X	X	X					X	X					X
Moore County Library	Other	X	X	X	X	X	X	X					X	X					X
Moore County Historic Courthouse	Other	X	X	X	X	X	X	X					X	X					X

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Moore County Board of Elections	Other	X	X	X	X	X	X	X					X	X			X		X
Moore County Child Support	Other	X	X	X	X	X	X	X					X	X					X
Moore County Register of Deeds	Other	X	X	X	X	X	X	X					X	X					X
Moore County Courthouse	Other	X	X	X	X	X	X	X					X	X					X
Moore County Social Services	Other	X	X	X	X	X	X	X					X	X					X
Moore County Health Department	Other	X	X	X	X	X	X	X					X	X					X
Moore County InformationTechnology	Other	X	X	X	X	X	X	X					X	X			X		X
Moore County Planning & Zoning	Other	X	X	X	X	X	X	X					X	X					X
Moore County Public Safety	Other	X	X	X	X	X	X	X					X	X					X
NC Cooperative Extension Service /Soil	Other	X	X	X	X	X	X	X					X	X					X
Moore County Day ReportingCenter / Yout	Other	X	X	X	X	X	X	X					X	X					X
Moore County EnvironmentalHealth	Other	X	X	X	X	X	X	X					X	X					X
Moore County Financial Services	Other	X	X	X	X	X	X	X					X	X			X		X
Moore County GIS / Transportation/ Vete	Other	X	X	X	X	X	X	X					X	X					X
Moore County Public Safety	PoliceStation	X	X	X	X	X	X	X					X	X					X
Rick Rhyne-Moore County SheriffsOffice	PoliceStation	X	X	X	X	X	X	X					X	X					X
Moore County Sheriff's Office	PoliceStation	X	X	X	X	X	X	X					X	X					X
Pinckney Academy AlternativeSchool	School	X	X	X	X	X	X	X					X	X					X
Carthage Elementary School	School	X	X	X	X	X	X	X					X	X					X
West End/Foxfire Substation	Fire Station	X	X	X	X	X	X	X											X
Foxfire Country Club	Other	X	X	X	X	X	X	X											X
Foxfire Village	Other	X	X	X	X	X	X	X											X
Foxfire Police Department	PoliceStation	X	X	X	X	X	X	X											X
Pinebluff Station 71	Fire Station	X	X	X	X	X	X	X					X	X					X
Pinebluff Tower	Other	X	X	X	X	X	X	X					X	X					X
Telephone Co	Other	X	X	X	X	X	X	X					X	X					X
Pinebluff Town Hall	Other	X	X	X	X	X	X	X					X	X		X			X
Pinebluff Police Department	PoliceStation	X	X	X	X	X	X	X					X	X		X			X
Moore County Medic 4	EMS/RescueStation	X	X	X	X	X	X	X					X	X		X	X		X

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Pinehurst Rescue 90	EMS/RescueStation	X	X	X	X	X	X	X					X	X		X	X		X
Moore Regional Hospital	Medical Care Facility	X	X	X	X	X	X	X					X	X		X	X		X
Country Club of North Carolina	Other	X	X	X	X	X	X	X					X	X			X		X
Mid Pines Inn and Golf Club	Other	X	X	X	X	X	X	X					X	X					X
Pinehurst Resort and Country Club	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
Pinehurst Village Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Pinehurst Police Department	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Pinehurst Police Department	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Pinehurst Elementary School	School	X	X	X	X	X	X	X					X	X	X	X			X
Robbins Station 11	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Robbins Rescue 10	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Robbins Tower	Other	X	X	X	X	X	X	X					X	X	X	X			X
Robbins Water Treatment Plant	Other	X	X	X	X	X	X	X		X			X	X	X	X			X
Robbins Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Robbins Police Department	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Elise Middle School	School	X	X	X	X	X	X	X					X	X	X	X			X
Moore County Medic 7	EMS/RescueStation	X	X	X	X	X	X	X				X	X	X	X	X			X
Southern Pines 81	Fire Station	X	X	X	X	X	X	X				X	X	X	X	X			X
The Carolina	Other	X	X	X	X	X	X	X						X					X
The Club at Longleaf	Other	X	X	X	X	X	X	X					X	X					X
Forest Creek Golf Club	Other	X	X	X	X	X	X	X						X					X
Knollwood Fairways	Other	X	X	X	X	X	X	X					X	X			X		X
Mid South	Other	X	X	X	X	X	X	X					X	X					X
National Golf Club	Other	X	X	X	X	X	X	X					X	X					X
Elks Lodge	Other	X	X	X	X	X	X	X						X	X	X			X
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X			X		X
Southern Pines Tower	Other	X	X	X	X	X	X	X						X		X			X
Bellsouth, SunCom Cell Tower	Other	X	X	X	X	X	X	X					X	X					X
Century Link	Other	X	X	X	X	X	X	X					X	X		X			X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Dixie Pipeline	Other	X	X	X	X	X	X	X					X	X					X
Southern Pines Town Hall	Other	X	X	X	X	X	X	X				X	X	X	X	X			X
Southern Pines Police Department	PoliceStation	X	X	X	X	X	X	X				X	X	X	X	X			X
Sandhills Police Department	Police Station	X	X	X	X	X	X	X						X					X
Southern Pines Police Department	PoliceStation	X	X	X	X	X	X	X				X	X	X	X	X			X
Sandhills Community College	School	X	X	X	X	X	X	X					X	X					X
Southern Pines Elementary School	School	X	X	X	X	X	X	X						X	X	X			X
Southern Pines Primary School	School	X	X	X	X	X	X	X				X		X					X
Pinecrest High School	School	X	X	X	X	X	X	X					X	X					X
Sandhills Community College	School	X	X	X	X	X	X	X					X	X					X
The O'Neal School	School	X	X	X	X	X	X	X					X	X					X
Episcol Day School	School	X	X	X	X	X	X	X						X	X	X			X
Calvary Christian School	School	X	X	X	X	X	X	X				X	X	X	X	X			X
Sandhills Classical Christian School	School	X	X	X	X	X	X	X					X	X					X
Pope John Paul II Catholic School	School	X	X	X	X	X	X	X				X		X	X	X			X
Sandhills Childrens Center	School	X	X	X	X	X	X	X					X	X					X
CP & L Sub Station	Other	X	X	X	X	X	X	X					X	X		X	X		X
Sprint Equipment Box	Other	X	X	X	X	X	X	X						X			X		X
Taylortown Village Hall	Other	X	X	X	X	X	X	X					X	X		X			X
Taylortown Police Department	PoliceStation	X	X	X	X	X	X	X					X	X		X			X
Academy Heights ElementarySchool	School	X	X	X	X	X	X	X					X	X					X
Moore County Medic 8	EMS/RescueStation	X	X	X	X	X	X	X					X	X	X	X	X		X
Cypress Point Station 1 (Vass)	Fire Station	X	X	X	X	X	X	X					X	X	X	X			X
Sprint	Other	X	X	X	X	X	X	X					X	X	X	X			X
Sandhills Pool and Spa	Other	X	X	X	X	X	X	X					X	X	X	X	X		X
Vass Town Hall	Other	X	X	X	X	X	X	X					X	X	X	X			X
Vass Police Department	PoliceStation	X	X	X	X	X	X	X					X	X	X	X			X
Vass-Lakeview Elementary School	School	X	X	X	X	X	X	X					X	X	X	X	X		X
Whispering Pines Rescue 50	EMS/Rescue Station	X	X	X	X	X	X	X						X					X

FACILITY NAME	FACILITY TYPE	ATMOSPHERIC						GEOLOGIC	HYDROLOGIC		OTHER								
		Drought	Extreme Heat	Hurricane and Tropical Storm	Severe Weather	Tornado	Winter Storm	Earthquake	Flood – 100 yr	Flood – 500 yr	Fixed HAZMAT 0.5 mile	Fixed HAZMAT 1 mile	Mobile HZMT 0.5 Mile (road)	Mobile HZMT 1 mile (road)	Mobile HZMT 0.5 mile (rail)	Mobile HZMT 1 mile (rail)	Wildfire	Nuclear Accident	Terror Threat
Whispering Pines Station 51	Fire Station	X	X	X	X	X	X	X											X
Country Club of Whispering Pines	Other	X	X	X	X	X	X	X											X
Whispering Woods	Other	X	X	X	X	X	X	X											X
Whispering Pines Village Hall	Other	X	X	X	X	X	X	X											X

SECTION 7: CAPABILITY ASSESSMENT

This section of the Plan discusses the capability of the communities in the Cape Fear Region to implement hazard mitigation activities. It consists of the following four subsections:

- 7.1 What is a Capability Assessment?
- 7.2 Conducting the Capability Assessment
- 7.3 Capability Assessment Findings
- 7.4 Conclusions on Local Capability

7.1 What is a Capability Assessment?

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs, or projects[1]. As in any planning process, it is important to try to establish which goals, objectives, and/or actions are feasible based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps to determine which mitigation actions are practical, and likely to be implemented over time, given a local government's planning and regulatory framework, level of administrative and technical support, amount of fiscal resources, and current political climate.

A capability assessment has two primary components: 1) an inventory of a local jurisdiction's relevant plans, ordinances, or programs already in place and 2) an analysis of its capacity to carry them out. Careful examination of local capabilities will detect any existing gaps, shortfalls, or weaknesses with ongoing government activities that could hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. A capability assessment also highlights the positive mitigation measures already in place or being implemented at the local government level, which should continue to be supported and enhanced through future mitigation efforts.

The capability assessment completed for the Cape Fear Region serves as a critical planning step and an integral part of the foundation for designing an effective hazard mitigation strategy. Coupled with the Risk Assessment, the Capability Assessment helps identify and target meaningful mitigation actions for incorporation in the Mitigation Strategy portion of the Plan. It not only helps establish the goals and objectives for the region to pursue under this Plan, but it also ensures that those goals and objectives are realistically achievable under given local conditions.

7.2 Conducting the Capability Assessment

In order to facilitate the inventory and analysis of local government capabilities within the Cape Fear counties, a detailed Capability Assessment Survey was completed for each of the participating jurisdictions based on the information found in existing hazard mitigation plans and local government websites. The survey questionnaire compiled information on a variety of "capability indicators" such as existing local plans, policies, programs, or ordinances that contribute to and/or hinder the region's ability to implement hazard mitigation actions. Other indicators included information related to the communities' fiscal, administrative, and technical capabilities, such as access to local budgetary and

[1] While the Final Rule for implementing the Disaster Mitigation Act of 2000 does not require a local capability assessment to be completed for local hazard mitigation plans, it is a critical step in developing a mitigation strategy that meets the needs of the region while considering their own unique abilities. The Rule does state that a community's mitigation strategy should be "based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools" (44 CFR, Part 201.6(c)(3)).

personnel resources for mitigation purposes. The current political climate, an important consideration for any local planning or decision-making process, was also evaluated with respect to hazard mitigation.

At a minimum, survey results provide an extensive inventory of existing local plans, ordinances, programs, and resources that are in place or under development in addition to their overall effect on hazard loss reduction. However, the survey instrument can also serve to identify gaps, weaknesses, or conflicts that counties and local jurisdictions can recast as opportunities for specific actions to be proposed as part of the hazard mitigation strategy.

The information collected in the survey questionnaire was incorporated into a database for further analysis. A general scoring methodology was then applied to quantify each jurisdiction's overall capability.[2] According to the scoring system, each capability indicator was assigned a point value based on its relevance to hazard mitigation.

Using this scoring methodology, a total score and an overall capability rating of "high," "moderate," or "limited" could be determined according to the total number of points received. These classifications are designed to provide nothing more than a general assessment of local government capability. The results of this capability assessment provide critical information for developing an effective and meaningful mitigation strategy.

7.3 Capability Assessment Findings

The findings of the capability assessment are summarized in this Plan to provide insight into the relevant capacity of the jurisdictions in the Cape Fear Region to implement hazard mitigation activities. All information is based upon the review of existing hazard mitigation plans and local government websites through the Capability Assessment Survey and input provided by local government officials during meetings of the Cape Fear Regional Hazard Mitigation Planning Team.

7.3.1 Planning and Regulatory Capability

Planning and regulatory capability is based on the implementation of plans, ordinances, and programs that demonstrate a local jurisdiction's commitment to guiding and managing growth, development, and redevelopment in a responsible manner while maintaining the general welfare of the community. It includes emergency response and mitigation planning, comprehensive land use planning, and transportation planning; the enforcement of zoning or subdivision ordinances and building codes that regulate how land is developed and structures are built; as well as protecting environmental, historic, and cultural resources in the community. Although some conflicts can arise, these planning initiatives generally present significant opportunities to integrate hazard mitigation principles and practices into the local decision-making process.

This assessment is designed to provide a general overview of the key planning and regulatory tools and programs that are in place or under development for the jurisdictions in the Cape Fear Region along with their potential effect on loss reduction. This information will help identify opportunities to address existing gaps, weaknesses, or conflicts with other initiatives in addition to integrating the implementation of this Plan with existing planning mechanisms where appropriate.

Table 7-1 provides a summary of the relevant local plans, ordinances, and programs already in place or under development for the jurisdictions in the Cape Fear Region. An arrow (➳) indicates that the given item is currently in place and being implemented. An asterisk (*) indicates that the given item is currently being developed for future implementation. Each of these local plans, ordinances, and programs should be considered available mechanisms for review and incorporating the existing plans,

[2] The scoring methodology used to quantify and rank the region's capability can be found at the end of this section.

studies, reports and technical information into the Cape Fear Regional Hazard Mitigation Plan in order to identify existing data and capabilities that will help implement the mitigation strategy.

Table 7-1: Relevant Plans, Ordinances, and Programs

Planning / Regulatory Tool	CHATHAM COUNTY	Goldston	Pittsboro	Siler City	HARNETT COUNTY	Angier	Coats	Dunn	Erwin	Lillington	JOHNSTON COUNTY	Archer Lodge	Benson	Clayton	Four Oaks	Kenly	Micro	Pine Level	Princeton	Selma	Smithfield	Wilson' s Mills	LEE COUNTY	Broadway	Sanford	MOORE COUNTY	Aberdeen	Cameron	Carthage	Foxfire Village	Pinebluff	Pinehurst	Robbins	Southern Pines	Taylortown	Vass	Whispering Pines
Hazard Mitigation Plan	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Comprehensive Land Use Plan	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	*	➳	➳		➳		➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Floodplain Management Plan																																					
Open Space Management Plan (Parks & Rec/Greenway Plan)	➳		➳		➳	➳	➳	➳	➳	➳	➳	*	➳	➳	*	*	*	*	*	*	*	*	➳		➳		➳					➳		➳			➳
Stormwater Management Plan/Ordinance	➳		➳	➳	➳	➳					➳			➳			➳		*		➳	➳				➳	➳					➳		➳			➳
Natural Resource Protection Plan	➳																																				
Flood Response Plan																																					
Emergency Operations Plan	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Continuity of Operations Plan	➳				➳						➳												➳			➳											
Evacuation Plan																																					
Disaster Recovery Plan																										*											

Planning / Regulatory Tool	CHATHAM COUNTY	Goldston	Pittsboro	Siler City	HARNETT COUNTY	Angier	Coats	Dunn	Erwin	Lillington	JOHNSTON COUNTY	Archer Lodge	Benson	Clayton	Four Oaks	Kenly	Micro	Pine Level	Princeton	Selma	Smithfield	Wilson's Mills	LEE COUNTY	Broadway	Sanford	MOORE COUNTY	Aberdeen	Cameron	Carthage	Foxfire Village	Pinebluff	Pinehurst	Robbins	Southern Pines	Taylortown	Vass	Whispering Pines
Capital Improvements Plan	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳					➳	➳	➳	➳		➳	➳	➳			➳		➳					➳
Economic Development Plan	➳	➳	➳	➳	➳						*		➳	➳							➳		➳	➳	➳	➳											
Historic Preservation Plan																																					
Flood Damage Prevention Ordinance	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Zoning Ordinance	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Subdivision Ordinance	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Unified Development Ordinance			*	➳	➳	➳							➳	➳						➳	➳		➳	➳	➳	➳	➳					➳		➳			➳
Post-Disaster Redevelopment																																					
Building Code	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Fire Code	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
National Flood Insurance Program (NFIP)	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
NFIP Community Rating System																																					

A more detailed discussion on the region's planning and regulatory capability follows.

7.3.2 Emergency Management

Hazard mitigation is widely recognized as one of the four primary phases of emergency management. The three other phases include preparedness, response, and recovery. Each phase is interconnected with hazard mitigation, as **Figure 7-1** suggests. Opportunities to reduce potential losses through mitigation practices are most often implemented before disaster strikes, such as the elevation of flood prone structures or the continuous enforcement of policies that prevent and regulate development that is vulnerable to hazards due to its location, design, or other characteristics. Mitigation opportunities will also be presented during immediate preparedness or response activities, such as installing storm shutters in advance of a hurricane, and certainly during the long-term recovery and redevelopment process following a hazard event.

Figure 7-1: The Four Phases of Emergency Management

Planning for each phase is a critical part of a comprehensive emergency management program and a key to the successful implementation of hazard mitigation actions. As a result, the Capability Assessment Survey asked several questions across a range of emergency management plans in order to assess the Cape Fear Region's willingness to plan and their level of technical planning proficiency.

Hazard Mitigation Plan: A hazard mitigation plan represents a community's blueprint for how it intends to reduce the impact of natural and human-caused hazards on people and the built environment. The essential elements of a hazard mitigation plan include a risk assessment, capability assessment, and mitigation strategy.

- Each of the five counties participating in this multi-jurisdictional plan have previously adopted the hazard mitigation plan.

Disaster Recovery Plan: A disaster recovery plan serves to guide the physical, social, environmental, and economic recovery and reconstruction process following a disaster. In many instances, hazard mitigation principles and practices are incorporated into local disaster recovery plans with the intent of capitalizing on opportunities to break the cycle of repetitive disaster losses. Disaster recovery plans can also lead to the preparation of disaster redevelopment policies and ordinances to be enacted following a hazard event.

- None of the counties or municipalities participating in this multi-jurisdictional plan have adopted a disaster recovery plan; however, Moore County is currently in the process of developing one. The other jurisdictions should consider developing a plan to guide the recovery and reconstruction process following a disaster.

Emergency Operations Plan: An emergency operation plan outlines responsibility and the means by which resources are deployed during and following an emergency or disaster.

- Chatham County, Harnett County, Johnston County, Lee County, and Moore County each maintain emergency operations plans through their respective Emergency Management Departments. These plans have been formally adopted by each of the municipalities located within their respective counties.
- The Village of Pinehurst also maintains a village emergency operation plan that is updated annually.

Continuity of Operations Plan: A continuity of operations plan establishes a chain of command, line of succession, and plans for backup or alternate emergency facilities in case of an extreme emergency or disaster event.

- Chatham County, Harnett County, Johnston County, Lee County, and Moore County each have continuity of operations plans in place. However, none of the municipalities participating in this multi-jurisdictional plan have developed a continuity of operations plan.

7.3.3 General Planning

The implementation of hazard mitigation activities often involves agencies and individuals beyond the emergency management profession. Stakeholders may include local planners, public works officials, economic development specialists, and others. In many instances, concurrent local planning efforts will help to achieve or complement hazard mitigation goals, even though they are not designed as such. Therefore, the Capability Assessment Survey also asked questions regarding general planning capabilities and the degree to which hazard mitigation is integrated into other on-going planning efforts in the Cape Fear Region.

Comprehensive Land Use Plan: A comprehensive land use plan establishes the overall vision for what a community wants to be and serves as a guide for future governmental decision making. Typically, a comprehensive plan contains sections on demographic conditions, land use, transportation elements, and community facilities. Given the broad nature of the plan and its regulatory standing in many communities, the integration of hazard mitigation measures into the comprehensive plan can enhance the likelihood of achieving risk reduction goals, objectives, and actions.

- Chatham County and the Town of Cary have adopted a joint land use plan which covers the area located east of Jordan Lake in Chatham County. The county has also adopted a countywide land conservation and development plan which was signed by the governing boards of Goldston, Pittsboro, and Siler City. Pittsboro and Siler City have also adopted municipal-level land use plans.
- Harnett County has adopted a comprehensive land use plan. Each of the participating municipalities in the county has also adopted a land use or comprehensive plan except the Town of Coats.
- Johnston County has adopted a comprehensive plan. Each of the participating municipalities has also adopted a land use or comprehensive plan except the Towns of Archer Lodge, Four Oaks, and Micro, and the Town of Archer Lodge is currently in the process of developing a comprehensive land use plan.
- Lee County and the City of Sanford have both adopted the Sanford-Lee County 2020 Land Use Plan.
- Moore County has also adopted a land use plan. Each of the municipalities in the county has adopted a land use or comprehensive plan as well.

Capital Improvements Plan: A capital improvements plan guides the scheduling of spending on public improvements. A capital improvements plan can serve as an important mechanism for guiding future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments.

- Chatham County, Pittsboro, and Siler City have capital improvement plans in place.
- Harnett County and all its municipalities have capital improvement plans in place.
- Johnston County maintains a tax-supported capital improvement plan. The Towns of Benson, Clayton, Four Oaks, Selma, Smithfield, and Wilson's Mills also have capital improvement plans in place.
- Lee County and the City of Sanford both have five-year capital improvement plans.
- Moore County, Aberdeen, Foxfire Village, Pinehurst, and Whispering Pines also have capital improvement plans.

Historic Preservation Plan: A historic preservation plan is intended to preserve historic structures or districts within a community. An often-overlooked aspect of the historic preservation plan is the assessment of buildings and sites located in areas subject to natural hazards and the identification of ways to reduce future damages. This may involve retrofitting or relocation techniques that account for the need to protect buildings that do not meet current building standards or are within a historic district that cannot easily be relocated out of harm's way.

- None of the counties or municipalities participating in this multi-jurisdictional plan have a historic preservation plan.

Zoning Ordinance: Zoning represents the primary means by which land use is controlled by local governments. As part of a community's police power, zoning is used to protect the public health, safety, and welfare of those in a given jurisdiction that maintains zoning authority. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable municipal governments to limit the type and density of development, a zoning ordinance can serve as a powerful tool when applied in identified hazard areas.

- All the counties and municipalities participating in this plan have adopted zoning ordinances, except the Town of Goldston. The following jurisdictions include zoning regulations as part of their local unified development ordinance: Siler City, Harnett County, Angier, Benson, Clayton, Selma, Smithfield, Lee County, Broadway, Sanford, Moore County, Aberdeen, Pinehurst, Southern Pines, and Whispering Pines. The remaining municipalities (excluding Goldston) and counties have adopted stand-alone zoning ordinances.

Subdivision Ordinance: A subdivision ordinance is intended to regulate the development of residential, commercial, industrial, or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.

- All the counties and municipalities participating in this plan, have adopted subdivision regulations, except the Town of Goldston and the Town of Kenly. Again, the following jurisdictions include subdivision regulations are part of their local unified development ordinance: Siler City, Harnett County, Angier, Benson, Clayton, Selma, Smithfield, Lee County, Broadway, Sanford, Moore County, Aberdeen, Pinehurst, Southern Pines, and Whispering Pines.

The other municipalities and counties with subdivision regulations have adopted stand-alone ordinances.

Building Codes, Permitting, and Inspections: Building codes regulate construction standards. In many communities, permits and inspections are required for new construction. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community.

- North Carolina has a state compulsory building code, which applies throughout the state; however, jurisdictions may adopt codes if approved as providing adequate minimum standards. All the participating counties and municipalities have adopted a building code.
- Chatham County Inspections is responsible for building code enforcement within the county, Pittsboro, and Goldston. Siler City administers its own building code enforcement.
- Harnett County Inspections provides building code inspections and enforcement to the county and all municipalities within the county, with the exception of Dunn, which enforces the building code within its jurisdiction.
- Johnston County Building Inspections provides building code enforcement to the unincorporated county as well as the following municipalities: Archer Lodge, Kenly, Micro, Pine Level, Smithfield, and Wilson's Mills. The remaining municipalities administer their own building code enforcement.
- Sanford/Lee County Inspections Services provides building code inspection services for Sanford, Broadway, and Lee County.
- Moore County Inspections provides building inspection services to the county and all municipalities except Aberdeen, Pinehurst, Southern Pines, and Pinebluff, which administer their own building code enforcement.

The adoption and enforcement of building codes by local jurisdictions is routinely assessed through the Building Code Effectiveness Grading Schedule (BCEGS) program developed by the Insurance Services Office, Inc. (ISO).[3] In North Carolina, the North Carolina Department of Insurance assesses the building codes in effect in a particular community and how the community enforces its building codes *with special emphasis on mitigation of losses from natural hazards*. The results of BCEGS assessments are routinely provided to ISO's member private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. The concept is that communities with well-enforced, up-to-date codes should experience fewer disaster-related losses and, as a result, should have lower insurance rates.

In conducting the assessment, ISO collects information related to personnel qualification and continuing education as well as the number of inspections performed per day. This type of information combined with local building codes is used to determine a grade for that jurisdiction. The grades range from 1 to 10 with a BCEGS grade of 1 representing exemplary commitment to building code enforcement and a grade of 10 indicating less than minimum recognized protection.

7.3.4 Floodplain Management

Flooding represents the greatest natural hazard facing the nation. At the same time, the tools available to reduce the impacts associated with flooding are among the most developed when compared to other hazard-specific mitigation techniques. In addition to approaches that cut across hazards such as education, outreach, and the training of local officials, the *National Flood Insurance Program* (NFIP) contains specific regulatory measures that enable government officials to determine where and how

[3] Participation in BCEGS is voluntary and may be declined by local governments if they do not wish to have their local building codes evaluated.

growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments; however, program participation is strongly encouraged by FEMA as a first step for implementing and sustaining an effective hazard mitigation program. It is therefore used as part of this assessment as a key indicator for measuring local capability.

In order for a county or municipality to participate in the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by a 100-year flood event and that new development in the floodplain will not exacerbate existing flood problems or increase damage to other properties.

A key service provided by the NFIP is the mapping of identified flood hazard areas. Once completed, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices, and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials, and the private sector about the likelihood of flooding in their community.

Table 7-2 provides NFIP policy and claim information for each participating jurisdiction in the Cape Fear Region.

Table 7-2: NFIP Policy and Claim Information

Jurisdiction	Date Joined NFIP	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Written Premium in Force	Closed Losses	Total Payments
Chatham							
Chatham County (Unincorporated Area)	05/19/78	02/02/08	112	$33,380,300	$45,102	1	$1,893
Town of Goldston	02/02/07	02/02/07	0	0	0	0	0
Town of Pittsboro	10/20/78	02/02/07	21	$4,959,200	$10,913	0	$0
Town of Siler City	02/15/74	02/02/07	17	$3,047,600	$13,470	4	$149,039
Subtotal Chatham	-	-	**150**	**$41,387,100**	**$69,485**	**5**	**$150,932**
Harnett							
City of Dunn	09/09/77	10/03/06	57	$9,711,800	$51,401	11	$178,579
Harnett County (Unincorporated Area)	08/18/78	10/03/06	298	$73,345,100	$136,356	28	$645,534
Town of Angier	08/18/78	10/03/06	7	$2,288,000	$4,562	0	$0
Town of Benson	10/20/00	12/02/05	8	$2,080,000	$5,645	1	$68,721
Town of Broadway	09/06/06	09/06/06	3	$770,000	$1,009	1	$20,239
Town of Coats	10/03/06	10/03/06	0	0	0	0	0
Town of Erwin	04/16/90	10/03/06	10	$2,519,700	$7,015	2	$202,472

Jurisdiction	Date Joined NFIP	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Written Premium in Force	Closed Losses	Total Payments
Town of Lillington	05/05/78	10/03/06	6	$1,410,300	$3,552	0	0
Subtotal Harnett	-	-	**389**	**$92,124,900**	**$209,540**	**43**	**$1,115,545**
Lee							
City of Sanford	04/15/77	09/06/06	51	$13,308,500	$59,595	9	$95,509
Lee County (Unincorporated Area)	06/30/78	09/06/06	61	$15,817,700	$42,663	11	$181,592
Subtotal Lee	-	-	**112**	**$29,126,200**	**$102,258**	**20**	**$277,101**
Johnston							
Johnston County (Unincorporated Area)	01/03/75	12/02/05	277	$63,473,600	$152,103	78	$3,204,906
Town of Clayton	12/28/73	12/02/05	51	$16,642,600	$23,663	3	$7,831
Town of Four Oaks	10/20/00	12/02/05	10	$2,481,400	$6,927	2	$56,264
Town of Kenly	10/20/00	12/02/05	4	$1,190,000	$1,459	2	$77,454
Town of Micro	10/20/00	12/02/05	1	$80,000	$854	0	0
Town of Pine Level	10/20/00	12/02/05	2	$630,000	$724	0	0
Town of Princeton	01/03/75	12/02/05	5	$635,000	$1,574	0	0
Town of Selma	10/20/00	12/02/05	9	$2,660,000	$3,201	0	0
Town of Smithfield	10/29/76	12/02/05	117	$27,038,600	$141,121	110	$5,922,850
Town of Wilson's Mills	10/20/00	12/02/05	0	0	0	0	0
Subtotal Johnston	-	-	**476**	**$114,831,200**	**$331,626**	**195**	**$9,269,305**
Moore							
Moore County (Unincorporated Area)	10/13/78	10/17/06	286	$69,022,600	$219,773	31	$826,940
Town of Aberdeen	11/30/73	10/17/06	24	$6,961,700	$24,410	1	$912
Town of Cameron	12/15/89	10/17/06	0	0	0	0	0
Town of Carthage	10/17/06	10/17/06	0	0	0	0	0
Town of Pinebluff	07/11/75	10/17/06	1	$300,000	$1,245	0	0

Jurisdiction	Date Joined NFIP	Current Effective Map Date	NFIP Policies in Force	Insurance in Force	Written Premium in Force	Closed Losses	Total Payments
Town of Robbins	11/22/74	10/17/06	0	0	0	0	0
Town of Southern Pines	04/25/75	10/17/06	65	$17,434,000	$26,153	3	$41,724
Town of Taylortown	10/13/78	10/17/06	0	0	0	0	0
Town of Vass	10/17/06	10/17/06	0	0	0	0	0
Village of Foxfire	12/15/89	10/17/06	1	$350,000	$525	0	0
Village of Pinehurst	12/15/89	10/17/06	110	$30,517,700	$66,689	9	$261,118
Village of Whispering Pines	12/15/89	10/17/06	40	$10,082,300	$25,330	1	$590
Subtotal Moore	**-**	**-**	**527**	**$134,668,300**	**$364,125**	**45**	**$1,131,284**
TOTAL PLAN	**-**	**-**	**1,654**	**$412,137,700**	**$1,077,034**	**308**	**$11,944,167**

Source: FEMA NFIP Policy Statistics.

Community Rating System: An additional indicator of floodplain management capability is the active participation of local jurisdictions in the Community Rating System (CRS). The CRS is an incentive-based program that encourages counties and municipalities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP by adding extra local measures to provide protection from flooding. All the 18 creditable CRS mitigation activities are assigned a range of point values. As points are accumulated and reach identified thresholds, communities can apply for an improved CRS class rating. Class ratings, which range from 10 to 1, are tied to flood insurance premium reductions as shown in **Table 7-3**. As class rating improves (the lower the number the better), the percent reduction in flood insurance premiums for NFIP policyholders in that community increases.

Table 7-3: CRS Premium Discounts, By Class

CRS Class	Premium Reduction
1	45%
2	40%
3	35%
4	30%
5	25%
6	20%
7	15%
8	10%
9	5%

CRS Class	Premium Reduction
10	0

Source: *FEMA*

Community participation in the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply to FEMA for a CRS classification better than class 10. The CRS application process has been greatly simplified over the past several years based on community comments. Changes were made with the intent to make the CRS more user-friendly and make extensive technical assistance available for communities who request it.

- Effective October 1, 2020, Whispering Pines is the only jurisdiction that is eligible for the CRS (National Flood Insurance Program - Community Rating System).
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Flood Damage Prevention Ordinance: A flood damage prevention ordinance establishes minimum building standards in the floodplain with the intent to minimize public and private losses due to flood conditions.

- All communities participating in the NFIP are required to adopt a local flood damage prevention ordinance. All counties and municipalities participating in this hazard mitigation plan, with the exception of Goldston and Coats, also participate in the NFIP and they all have adopted flood damage prevention regulations.

Floodplain Management Plan: A floodplain management plan (or a flood mitigation plan) provides a framework for action regarding corrective and preventative measures to reduce flood-related impacts.

- None of the counties or municipalities participating in this multi-jurisdictional plan have adopted floodplain management plans.

Open Space Management Plan*:* An open space management plan is designed to preserve, protect, and restore largely undeveloped lands in their natural state and to expand or connect areas in the public domain such as parks, greenways, and other outdoor recreation areas. In many instances, open space management practices are consistent with the goals of reducing hazard losses, such as the preservation of wetlands or other flood-prone areas in their natural state in perpetuity.

- Chatham County has adopted a comprehensive parks and recreation master plan which has also been adopted by the Town of Pittsboro.
- Harnett County has adopted a comprehensive recreation and parks systemwide master plan that includes all of its municipalities. The City of Dunn and the Town of Lillington have also adopted municipal-level parks and recreation plans.
- Johnston County is currently developing a county-wide parks and recreation master plan. The Towns of Benson and Clayton already have municipal parks and recreation plans in place. Johnston County, Clayton, and Smithfield have also developed a master plan for the county's portion of the Mountains-to-Sea Trail.
- Lee County has a parks and recreation master plan which was also adopted by the City of Sanford.
- Moore County does not have an open space management plan in place; however, Aberdeen, Pinehurst, Southern Pines, and Whispering Pines have all adopted parks, recreation, greenway, and/or open space plans.

Stormwater Management Plan: A stormwater management plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding.

- Although none of the participating counties or municipalities have stormwater management plans in place, the following jurisdictions have adopted stormwater management regulations through various local ordinances: Chatham County, Pittsboro, Siler City, Harnett County, Angier, Johnston County, Clayton, Micro, Smithfield, Wilson's Mills, Moore County, Aberdeen, Pinehurst, Southern Pines, and Whispering Pines.
- The Town of Princeton has a study in progress that will lead to the development of a stormwater management plan.

7.3.5 Administrative and Technical Capability

The ability of a local government to develop and implement mitigation projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capability can be evaluated by determining how mitigation-related activities are assigned to local departments and if there are adequate personnel resources to complete these activities. The degree of intergovernmental coordination among departments will also affect administrative capability for the implementation and success of proposed mitigation activities.

Technical capability can generally be evaluated by assessing the level of knowledge and technical expertise of local government employees, such as personnel skilled in using Geographic Information Systems (GIS) to analyze and assess community hazard vulnerability. The Capability Assessment Survey was used to capture information on administrative and technical capability through the identification of available staff and personnel resources.

Table 7-4 provides a summary of the capability assessment results for the Cape Fear Region with regard to relevant staff and personnel resources. An arrow (➳) indicates the presence of a staff member(s) in that jurisdiction with the specified knowledge or skill.

Table 7-4: Relevant Staff / Personnel Resources

Staff / Personnel Resource	CHATHAM COUNTY	Goldston	Pittsboro	Siler City	HARNETT COUNTY	Angier	Coats	Dunn	Erwin	Lillington	JOHNSTON COUNTY	Archer Lodge	Benson	Clayton	Four Oaks	Kenly	Micro	Pine Level	Princeton	Selma	Smithfield	Wilson's Mills	LEE COUNTY	Broadway	Sanford	MOORE COUNTY	Aberdeen	Cameron	Carthage	Foxfire Village	Pinebluff	Pinehurst	Robbins	Southern Pines	Taylortown	Vass	Whispering Pines
Planners with knowledge of land development / land management practices	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳					➳	➳	➳	➳	➳	➳	➳	➳					➳		➳			➳
Engineers or professionals trained in construction practices related to buildings and/or infrastructure	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Planners or engineers with an understanding of natural and/or human-caused hazards	➳	➳	➳	➳	➳	➳		➳		➳	➳												➳	➳	➳	➳	➳					➳		➳			➳
Emergency Manager	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Floodplain Manager	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Land Surveyors																																					
Scientists familiar with the hazards of the community	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Staff with education or expertise to assess the community's vulnerability to hazards	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳		➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳	➳	➳	➳	➳	➳
Personnel skilled in GIS and/or HAZUS	➳			➳	➳						➳			➳							➳		➳		➳	➳								➳			
Resource development staff or grant writers	➳				➳																																

Credit for having a floodplain manager was given to those jurisdictions that have a flood damage prevention ordinance, and therefore an appointed floodplain administrator, regardless of whether the appointee was dedicated solely to floodplain management. Credit was given for having a scientist familiar with the hazards of the community if a jurisdiction has a Cooperative Extension Service or Soil and Water Conservation Department. Credit was also given for having staff with education or expertise to assess the community's vulnerability to hazards if a staff member from the jurisdiction was a participant on the existing hazard mitigation plan's planning committee.

7.3.6 Fiscal Capability

The ability of a local government to act is often closely associated with the amount of money available to implement policies and projects. This may take the form of outside grant funding awards or locally based revenue and financing. The costs associated with mitigation policy and project implementation vary widely. In some cases, policies are tied primarily to staff time or administrative costs associated with the creation and monitoring of a given program. In other cases, direct expenses are linked to an actual project, such as the acquisition of flood-prone homes, which can require a substantial commitment from local, state, and federal funding sources.

The Capability Assessment Survey was used to capture information on the region's fiscal capability through the identification of locally available financial resources.

Table 7-5 provides a summary of the results for the Cape Fear Region with regard to relevant fiscal resources. An arrow (➳) indicates that the given fiscal resource is locally available for hazard mitigation purposes (including match funds for state and federal mitigation grant funds) according to the previous county hazard mitigation plans.

Table 7-5: Relevant Fiscal Resources

Fiscal Tool / Resource	CHATHAM COUNTY	Goldston	Pittsboro	Siler City	HARNETT COUNTY	Angier	Coats	Dunn	Erwin	Lillington	JOHNSTON COUNTY	Archer Lodge	Benson	Clayton	Four Oaks	Kenly	Micro	Pine Level	Princeton	Selma	Smithfield	Wilson's Mills	LEE COUNTY	Broadway	Sanford	MOORE COUNTY	Aberdeen	Cameron	Carthage	Foxfire Village	Pinebluff	Pinehurst	Robbins	Southern Pines	Taylortown	Vass	Whispering Pines
Capital Improvement Programming	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳	➳					➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Community Development Block Grants (CDBG)	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳		➳	➳		➳		➳		➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Special Purpose Taxes (or taxing districts)	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳
Gas / Electric Utility Fees																																					
Water / Sewer Fees																																					
Stormwater Utility Fees																																					
Development Impact Fees																																					
General Obligation, Revenue, and/or Special Tax Bonds																																					
Partnering Arrangements or Intergovernmental Agreements	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳

Fiscal Tool / Resource	CHATHAM COUNTY	Goldston	Pittsboro	Siler City	HARNETT COUNTY	Angier	Coats	Dunn	Erwin	Lillington	JOHNSTON COUNTY	Archer Lodge	Benson	Clayton	Four Oaks	Kenly	Micro	Pine Level	Princeton	Selma	Smithfield	Wilson's Mills	LEE COUNTY	Broadway	Sanford	MOORE COUNTY	Aberdeen	Cameron	Carthage	Foxfire Village	Pinebluff	Pinehurst	Robbins	Southern Pines	Taylortown	Vass	Whispering Pines
Other: PDM, FMAP, HMGP, PA, SBA, and other Federal and state funding sources, etc.	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳	➳

7.3.7 Political Capability

One of the most difficult capabilities to evaluate involves the political will of a jurisdiction to enact meaningful policies and projects designed to reduce the impact of future hazard events. Hazard mitigation may not be a local priority or may conflict with or be an impediment to other goals of the community, such as growth and economic development. Therefore, the local political climate must be considered in designing mitigation strategies as it could be the most difficult hurdle to overcome in accomplishing their adoption and implementation.

The Capability Assessment Survey was used to capture information on political capability of the cape Fear Region. Previous county-level hazard mitigation plans were reviewed for general examples of local political capability, such as guiding development away from identified hazard areas, restricting public investments or capital improvements within hazard areas, or enforcing local development standards that go beyond minimum state or federal requirements (i.e., building codes, floodplain management, etc.).

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- Chatham County has experienced the devastating effects of natural hazards (i.e., recent hurricanes and ice storms). The citizens, property owners, business owners, and elected officials of the county are committed to implementing a hazard mitigation plan in order to reduce community vulnerability. The Chatham County Board of Commissioners, the professional staff, and the citizens of the county are continually striving to make Chatham County a safer community in which to live, work, and play. The county recognizes that implementation of a hazard mitigation plan is an essential component in helping to achieve these goals.
- Harnett County is working to establish hazard mitigation in its day-to-day operations. In taking this step, the county will have to de-politicize many of the issues surrounding mitigation efforts. Public education and awareness campaigns about the economic efficiency and social utility of mitigative measures can help foster its general acceptance by citizens and politicians in the long run. Close governmental coordination is needed for the prevention of damage and recovery from natural disasters. This refers to coordination and cooperation between agencies in a local government, between local governments within a county, and between local, state, and federal governments. This provides Harnett County, Angier, Coats, Dunn, Erwin, and Lillington with the political capability to carry out this plan and its hazard mitigation goals and objectives.
- The general populace and governing officials in Johnston County are open to mitigation efforts. Following the devastation that Hurricanes Fran and Floyd inflicted on Johnston County, and following several severe ice events in the last few years, the citizens and leaders of Johnston County are aware of the widespread damage that can be done by a natural event. Analyzing how mitigation can be inserted into everyday decision making as a routine course may help to depoliticize the issue. Public education and awareness campaigns about the economic efficiency and social utility of mitigation measures can help foster its general acceptance by citizens, and, in turn, by politicians.
- Lee County is currently a participant in the NFIP and has adopted the required flood damage prevention ordinance. Additionally, the Unified Development Ordinance includes sedimentation and erosion control and watershed protection standards. This demonstrates to some extent both favorable political support and willingness to adopt hazard mitigation efforts in an active manner.
- The following principles of political acceptability are applicable for Moore County and all of its incorporated municipalities: independent of existing regulations that directly address hazard mitigation (e.g., floodplain management ordinance), hazard mitigation is not a goal that should

be addressed independent of other goals and objectives of the local government, due to limited government resources. Hazard mitigation should be considered and incorporated into policies, procedures, and programs which affect land use and development, such as siting of roadways, siting and building of public facilities, zoning and subdivision ordinances, and extension of infrastructure necessary for growth. Local revenues are insufficient to support hazard mitigation projects for mitigation of existing hazards at the local level; however, Federal and state grant funds should be pursued when available. One of the local government's primary roles in implementing hazard mitigation is educating the public about the risks of natural hazards and how to reduce these risks and/or the costs of these risks.

7.4 Conclusions on Local Capability

In order to form meaningful conclusions on the assessment of local capability, a quantitative scoring methodology was designed and applied to results of the Capability Assessment Survey. This methodology, further described in Appendix B, attempts to assess the overall level of capability of the Cape Fear Region to implement hazard mitigation actions.

The overall capability to implement hazard mitigation actions varies among the participating jurisdictions. For planning and regulatory capability, many of the jurisdictions are in the moderate to high range. There is also variation in the administrative and technical capability among the jurisdictions with larger jurisdictions generally having greater staff and technical resources. Most of jurisdictions are in the moderate range for fiscal capability.

Table 7-6 shows the results of the capability assessment using the designed scoring methodology. The capability score is based solely on the information found in existing hazard mitigation plans and readily available on the jurisdictions' government websites. The scoring methods ranking is presented as follows:

- Limited: 0-29
- Moderate: 30-59
- High: 60-100

According to the assessment, the average local capability score for all jurisdictions is 30, which falls into the moderate capability ranking.

Table 7-6: Capability Assessment Results

Jurisdiction	Overall Capability Score	Overall Capability Rating
CHATHAM COUNTY	**66**	**High**
Goldston	16	Limited
Pittsboro	35	Moderate
Siler City	36	Moderate
HARNETT COUNTY	**75**	**High**
Angier	46	Moderate
Coats	17	Limited

Jurisdiction	Overall Capability Score	Overall Capability Rating
Dunn	33	Moderate
Erwin	30	Moderate
Lillington	42	Moderate
JOHNSTON COUNTY	**63**	**High**
Archer Lodge	41	Moderate
Benson	33	Moderate
Clayton	36	Moderate
Four Oaks	35	Moderate
Kenly	34	Moderate
Micro	16	Limited
Pine Level	34	Moderate
Princeton	35	Moderate
Selma	30	Moderate
Smithfield	34	Moderate
Wilson's Mills	38	Moderate
LEE COUNTY	**62**	**High**
Broadway	35	Moderate
Sanford	35	Moderate
MOORE COUNTY	**53**	**High**
Aberdeen	36	Moderate
Cameron	35	Moderate
Carthage	35	Moderate
Foxfire Village	35	Moderate
Pinebluff	36	Moderate
Pinehurst	37	Moderate
Robbins	35	Moderate
Southern Pines	36	Moderate
Taylortown	35	Moderate
Vass	35	Moderate
Whispering Pines	35	Moderate

As previously discussed, one of the reasons for conducting a Capability Assessment is to examine local capabilities to detect any existing gaps or weaknesses within ongoing government activities that could

hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. These gaps or weaknesses have been identified for each jurisdiction in the tables found throughout this section. The participating jurisdictions used the Capability Assessment as part of the basis for the Mitigation Actions that are identified in Section 9; therefore, each jurisdiction addresses their ability to expand on and improve their existing capabilities through the identification of their Mitigation Actions.

7.4.1 Linking the Capability Assessment with the Risk Assessment and the Mitigation Strategy

The conclusions of the Risk Assessment and Capability Assessment serve as the foundation for the development of a meaningful hazard mitigation strategy. During the process of identifying specific mitigation actions to pursue, the Planning Team considered not only each jurisdiction's level of hazard risk, but also their existing capability to minimize or eliminate that risk.

SECTION 8: MITIGATION STRATEGY

This section of the Plan provides the blueprint for the participating jurisdictions in the Cape Fear Region to follow in order to become less vulnerable to its identified hazards. It is based on general consensus of the Cape Fear Regional Hazard Mitigation Planning Team and the findings and conclusions of the *Capability Assessment* and *Risk Assessment*. It consists of the following five subsections:

- 8.1 Introduction
- 8.2 Mitigation Goals
- 8.3 Identification and Analysis of Mitigation Techniques
- 8.4 Selection of Mitigation Techniques for the Cape Fear Region
- 8.5 Plan Update Requirement

8.1 Introduction

The intent of the Mitigation Strategy is to provide the Cape Fear Region communities with the goals that will serve as guiding principles for future mitigation policy and project administration, along with an analysis of mitigation techniques available to meet those goals and reduce the impact of identified hazards. It is designed to be comprehensive, strategic, and functional in nature:

- In being *comprehensive*, the development of the strategy includes a thorough review of all hazards and identifies extensive mitigation measures intended to not only reduce the future impacts of high-risk hazards, but also to help the region achieve compatible economic, environmental, and social goals.
- In being *strategic*, the development of the strategy ensures that all policies and projects proposed for implementation are consistent with pre-identified, long-term planning goals.
- In being *functional,* each proposed mitigation action is linked to established priorities and assigned to specific departments or individuals responsible for their implementation with target completion deadlines. When necessary, funding sources are identified that can be used to assist in project implementation.

The first step in designing the Mitigation Strategy includes the identification of mitigation goals. Mitigation goals represent broad statements that are achieved through the implementation of more specific mitigation actions. These actions include both hazard mitigation policies (such as the regulation of land in known hazard areas through a local ordinance) and hazard mitigation projects that seek to address specifically targeted hazard risks (such as the acquisition and relocation of a repetitive loss structure).

The second step involves the identification, consideration, and analysis of available mitigation measures to help achieve the identified mitigation goals. This is a long-term, continuous process sustained through the development and maintenance of this Plan. Alternative mitigation measures will continue to be considered as future mitigation opportunities are identified, as data and technology improve, as mitigation funding becomes available, and as this Plan is maintained over time.

The third and last step in designing the Mitigation Strategy is the selection and prioritization of specific mitigation actions for the Cape Fear Region (provided separately in Section 9: *Mitigation Action Plan*). Each county and participating jurisdiction has its own Mitigation Action Plan (MAP) that reflects the needs and concerns of that jurisdiction. The MAP represents an unambiguous and functional plan for action and is considered to be the most essential outcome of the mitigation planning process.

The MAP includes a prioritized listing of proposed hazard mitigation actions (policies and projects) for Chatham, Lee, Harnett, Johnston, and Moore Counties and their municipal jurisdictions to complete. Each action has accompanying information, such as those departments or individuals assigned responsibility for implementation, potential funding sources, and an estimated target date for completion. The MAP provides those departments or individuals responsible for implementing mitigation actions with a clear roadmap that also serves as an important tool for monitoring success or progress over time. The cohesive collection of actions listed in the MAP can also serve as an easily understood menu of mitigation policies and projects for those local decision makers who want to quickly review the recommendations and proposed actions of the Regional Hazard Mitigation Plan.

In preparing each Mitigation Action Plan for the Cape Fear Region, officials considered the overall hazard risk and capability to mitigate the effects of hazards as recorded through the risk and capability assessment process, in addition to meeting the adopted mitigation goals and unique needs of the community.

8.1.1 Mitigation Action Prioritization

The Regional Hazard Mitigation Planning Team members were tasked with establishing a priority, implementation status, and completion timeline for each action. Prioritization of the proposed mitigation actions was based on the following six factors:

- Effect on overall risk to life and property
- Ease of implementation
- Political and community support
- A general economic cost/benefit review[1]
- Funding availability
- Continued compliance with the NFIP

The point of contact for each county helped coordinate the prioritization process by reviewing each action and working with the lead agency/department responsible to determine a priority for each action using the six factors listed above.

Using these criteria, actions were classified as high, moderate, or low priority by the participating jurisdiction officials.

44 CFR Requirement
44 CFR Part 201.6(c)(3)(i): The mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

[1] Only a general economic cost/benefit review was considered by the Regional Hazard Mitigation Planning Committee through the process of selecting and prioritizing mitigation actions. Mitigation actions with “high” priority were determined to be the most cost effective and most compatible with the participating jurisdictions’ unique needs. Actions with a “moderate” priority were determined to be cost-effective and compatible with jurisdictional needs but may be more challenging to complete administratively or fiscally than “high” priority actions. Actions with a “low” priority were determined to be important community needs, but the community likely identified several potential challenges in terms of implementation (e.g. lack of funding, technical obstacles). A more detailed cost/benefit analysis will be applied to particular projects prior to the application for or obligation of funding, as appropriate.

8.2 Mitigation Goals

The primary goal of all local governments is to promote the public health, safety, and welfare of its citizens. In keeping with this standard, Chatham, Lee, Harnett, Johnston, and Moore Counties and the participating municipalities have developed six goal statements for local hazard mitigation planning in the region. In developing these goals, the previous Plan's goals were reviewed to determine if they were still valid. The regional goals were presented, reviewed, voted on, and accepted by the Planning Team at their second meeting. Each goal, purposefully broad in nature, serves to establish parameters that were used in developing more mitigation actions. The Cape Fear Regional Mitigation Goals are presented in **Table 8-1**. Consistent implementation of actions over time will ensure that community goals are achieved.

Table 8-1: Cape Fear Regional Mitigation Goals

	Goal
Goal #1	Increase public awareness of hazards and encourage collective and individual responsibility for mitigating hazard risks.
Goal #2	Strive to reduce loss of life, personal injury, and property damage from natural hazards.
Goal #3	Strive to maintain existing structures and infrastructure in such a manner that they will be as resilient as possible from natural hazards.
Goal #4	Protect the most vulnerable populations, buildings, and critical facilities through the implementation of cost-effective and technically feasible mitigation actions.
Goal #5	Manage future development to minimize vulnerability of public and private property to natural hazards.
Goal #6	Protect and preserve the natural resources and environmentally sensitive areas within the region.

8.3 Identification and Analysis of Mitigation Techniques

44 CFR Requirement
44 CFR Part 201.6(c)(3)(ii): The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effect of each hazard, with particular emphasis on new and existing buildings and infrastructure.

In formulating the Mitigation Strategy for the Cape Fear Region, a wide range of activities were considered in order to help achieve the established mitigation goals, in addition to addressing any specific hazard concerns. These activities were discussed during the Planning Team meetings. In general, all activities considered by the Planning Team can be classified under one of the following six broad categories of mitigation techniques: Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, and Public Awareness and Education. These are discussed in detail below.

8.3.1 Prevention

Preventative activities are intended to keep hazard problems from getting worse and are typically administered through government programs or regulatory actions that influence the way land is developed and buildings are built. They are particularly effective in reducing a community's future

vulnerability, especially in areas where development has not occurred, or capital improvements have not been substantial. Examples of preventative activities include:

- Planning and zoning
- Building codes
- Open space preservation
- Floodplain regulations
- Stormwater management regulations
- Drainage system maintenance
- Capital improvements programming
- Riverine / fault zone setbacks

8.3.2 Property Protection

Property protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard, or removal of the structures from hazardous locations. Examples include:

- Acquisition
- Relocation
- Building elevation
- Critical facilities protection/generators
- Retrofitting (e.g., wind proofing, floodproofing, seismic design techniques, etc.)
- Safe rooms, shutters, shatter-resistant glass
- Insurance

8.3.3 Natural Resource Protection

Natural resource protection activities reduce the impact of natural hazards by preserving or restoring natural areas and their protective functions. Such areas include floodplains, wetlands, steep slopes, and sand dunes. Parks, recreation, or conservation agencies and organizations often implement these protective measures. Examples include:

- Floodplain protection
- Watershed management
- Riparian buffers
- Forest and vegetation management (e.g., fire resistant landscaping, fuel breaks, etc.)
- Erosion and sediment control
- Wetland preservation and restoration
- Habitat preservation
- Slope stabilization

8.3.4 Structural Projects

Structural mitigation projects are intended to lessen the impact of a hazard by modifying the environmental natural progression of the hazard event through construction. They are usually designed by engineers and managed or maintained by public works staff. Examples include:

- Reservoirs
- Dams / levees / dikes / floodwalls
- Diversions / detention / retention
- Channel modification

- Storm sewers

8.3.5 Emergency Services

Although not typically considered a "mitigation" technique, emergency service measures do minimize the impact of a hazard event on people and property. These commonly are actions taken immediately prior to, during, or in response to a hazard event. Examples include:

- Warning systems
- Generators
- Evacuation planning and management
- Emergency response training and exercises
- Sandbagging for flood protection
- Installing temporary shutters for wind protection

8.3.6 Public Education and Awareness

Public education and awareness activities are used to advise residents, elected officials, business owners, potential property buyers, and visitors about hazards, hazardous areas, and mitigation techniques they can use to protect themselves and their property. Examples of measures to educate and inform the public include:

- Outreach projects
- Speaker series / demonstration events
- Hazard map information
- Real estate disclosure
- Library materials
- School children educational programs
- Hazard expositions

8.4 Selection of Mitigation Techniques for the Cape Fear Region

In order to determine the most appropriate mitigation techniques for the communities in the Cape Fear Region, the Planning Team members thoroughly reviewed and considered the findings of the *Capability Assessment* and *Risk Assessment* to determine the best activities for their respective communities. Other considerations included the effect of each mitigation action on overall risk to life and property, its ease of implementation, its degree of political and community support, its general cost-effectiveness, and funding availability (if necessary).

8.5 Plan Update Requirement

In keeping with FEMA requirements for plan updates, the Mitigation Actions identified in the previous plan were evaluated to determine their current implementation status. Updates on the implementation status of each action are provided. The mitigation actions provided in Section 9: *Mitigation Action Plan* include the mitigation actions from the previous plan as well as any new mitigation actions proposed through the current planning process.

SECTION 9: Mitigation Action Plan

This section includes the listing of the mitigation actions proposed by the participating jurisdictions in the Cape Fear Region. It consists of the following two subsections:

- 9.1 Overview
- 9.2 Mitigation Action Plans

44 CFR Requirement
44 CFR Part 201.6(c)(3)(iii): The mitigation strategy shall include an action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction.

9.1 Overview

As described in the previous section, the Mitigation Action Plan, or MAP, provides a functional plan of action for each jurisdiction. It is designed to achieve the mitigation goals established in Section 8: *Mitigation Strategy* and will be maintained on a regular basis according to the plan maintenance procedures established in Section 10: *Plan Maintenance*.

Each proposed mitigation action has been identified as an effective measure (policy or project) to reduce hazard risk for the Cape Fear Region. Each action is listed in the MAP in conjunction with background information such as hazard(s) addressed, relative priority, and estimated cost. Other information provided in the MAP includes potential funding sources to implement the action should funding be required (not all proposed actions are contingent upon funding). Most importantly, implementation mechanisms are provided for each action, including the designation of a lead agency or department responsible for carrying the action out as well as a timeframe for its completion. These implementation mechanisms ensure that the Cape Fear Regional Hazard Mitigation Plan remains a functional document that can be monitored for progress over time. The proposed actions are not listed in priority order, though each has been assigned a priority level of “High,” “Moderate,” or “Low” as described below and in Section 8 (page 8.2).

The Mitigation Action Plan is organized by mitigation strategy category (Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, or Public Education and Awareness). The following are the key elements described in the Mitigation Action Plan:

- Hazard(s) Addressed—Hazard which the action addresses.
- Relative Priority—High, Moderate, or Low priority as assigned by the jurisdiction.
- Lead Agency/Department—Department responsible for undertaking the action.
- Potential Funding Sources—Local, State, or Federal sources of funds are noted here, where applicable.
- Cost Estimate—High (greater than $50,000) Medium (between $20,000 & $50,000) Low (less than $20,00)
- Implementation Schedule—Date by which the action the action should be completed. More information is provided when possible.
- Implementation Status (2020)—Indication of completion, progress, deferment, or no change since the previous plan. If the action is new, that will be noted here.

9.2 Mitigation Action Plans

The mitigation actions proposed by each of the participating jurisdictions are listed in 37 individual MAPs on the following pages.

Table 9-1: Chatham County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	At the next Land Use Plan Update, review and include hazard mitigation objectives for all hazards.	All Hazards	Moderate	Chatham County Planning and Zoning	Local	Medium	1-3 years	In progress: Incorporating into the Comprehensive Plan upon completion.
P-2	Building Inspections—Flood Damaged Structures. Any and all portions of buildings that have been submerged for any length of time will be inspected for flood related damage as well as other conditions that may be dangerous to life, health or other property. Plan for Damaged Structures: 1. Overall damage assessment/data collection (visual inspection from roadways). 2. Data compiled and geographical areas assigned to teams. 3. Second detailed assessment by area teams. 4. Portions of walls, floors, ceilings, etc. that have been exposed to water will be opened for evaluation. 5. All construction that is repaired, replaced, dried or sealed will be inspected before covered. 6. Structure inspected for certificate of compliance.	Flood	High	Chatham County Building Inspections	Local	Low	5 years	To be continued: Building inspectors have been trained to perform inspections of flood damaged structures and will perform those duties as needed.
P-3	Policy and procedures related to all hazard damage and disconnected utility services: 1) inform public via television, radio and newspaper of the necessary steps to have utilities restored; 2) restrict travel as necessary while collecting damage assessment data; 3) conduct inspections on first come, first serve basis; 4) work overtime to expedite utility reconnections.	All Hazards	High	Chatham County Building Inspections	Local	Medium	5 years	To be continued: The County has a public information officer who coordinates all communication with the media. Building inspectors job responsibilities include damage assessments, inspections, and overtime duty to expedite utility reconnections.
P-4	Create a Storm Water Management Ordinance to require storm water control from development.	Flood	High	Chatham County Public Works	Local	Medium	5 years	To be continued: Stormwater ordinance is in place and will be updated as needed. Stormwater Ordinance adopted in November 2008 and amended in 2012. The Stormwater Ordinance will need to be re-evaluated and updated in the future.
P-5	Revise the existing Watershed Protection Ordinance to provide onsite stream determinations and increased riparian buffer widths on existing streams and newly classified riparian areas.	Flood	High	Chatham County Planning and Zoning, Chatham County Public Works	Local	Medium	5 years	To e continued: Updated riparian buffer requirements adopted in 2008 and revised in 2012. The WPO will need to be re-evaluated and updated in the future.
Property Protection								
PP-1	Create and maintain a list of repetitive flood loss properties.	Flood	Moderate	Chatham County Planning and Zoning	Local	Medium	5 years	To be continued: List of repetitive flood loss properties is available from the NC Department of Public Safety and staff has direct contact with floodplain management staff. This list will continue to be updated annually.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PP-2	Improve critical facility and shelter capacities with alternate power sources. (such as generators)	All Hazards	High	Chatham County Emergency Services	Local	Medium	5 years	In progress: Increased from 4 to 6 shelters. The shelters either have backup generators or the county has portable generators for each shelter. The county will continue to try to improve shelter capacity and will work to outfit those shelters with alternate power.
PP-3	Create/Review a zoning map (digital) that can be easily reproduced/updated for staff and public use.	All Hazards	High	Chatham County Planning and Zoning	Local	Medium	5 years	To be continued: Reviewed annually.
Emergency Services								
ES-1	Ensure adequate hazard warning in case of all major hazard events.	All Hazards	High	Chatham County Emergency Services	Local	High	5 years	To be continued: Code Red emergency notification system. The minutes available for notifications increased from 30,000 to 60,000 in 2019. Going forward, the county will continue to work to improve warning time for citizens to evacuate.
Public Education and Awareness								
PEA-1	Advertise all-hazard education materials for public consumption.	All Hazards	High	Chatham County Planning and Zoning	Local	Low	5 years	To be continued: Educational materials are provided to the public as they are made available to the county. The county will continue to re-evaluate public education materials and update them on an annual basis as necessary.
PEA-2	Develop an Environmental Health program that will, in part, address environmental concerns that might develop from a natural disaster.	All Hazards	High	Chatham County Environmental Health, Chatham County Public Works	Local	High	5 years	To be continued: This program has been restructured to be in the Chatham County Public Works Department and includes two positions. The County has also created a position of Director of Environmental Quality within the department and filled the position with a professional engineer. On an annual basis, these people make numerous site visits to assist property owners and developers with problems and potential problems associated with drainage, erosion, and flooding. Site visits are made at the request of the property owners or developer and are usually handled through the development review process.
PEA-3	Update/Review the Floodplain Ordinance to raise the minimum flood protection level.	Flood	Moderate	Chatham County Planning and Zoning	Local	Medium	5 years	To be continued: Reviewed annually.
PEA-4	Update/Review the Subdivision Ordinance by reviewing and incorporating hazard mitigation objectives.	All Hazards	Moderate	Chatham County Planning and Zoning	Local	Medium	5 years	To be continued: Reviewed annually.
PEA-5	Review and revise the Planning Ordinance to allow for clustering of residential lots.	Flood	Moderate	Chatham County Planning and Zoning	Local	Medium	5 years	To be continued: Reviewed annually.
PEA-6	Revise/Review and update the regulator floodplain maps.	Flood	High	Chatham County Planning and Zoning	Federal, State	Medium	5 years	To be continued: Reviewed annually.

Table 9-2: Town of Goldston Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
P-1	At the next Land Use Plan Update, review and include hazard mitigation objectives.	All Hazards	Moderate	Chatham County Planning and Zoning	Local	Low	2025	In progress: Incorporating into the Comp plan upon completion.
P-2	Building Inspections—Flood Damaged Structures. Any and all portions of buildings that have been submerged for any length of time will be inspected for flood related damage as well as other conditions that may be dangerous to life, health or other property. Plan for Damaged Structures: 1. Overall damage assessment/data collection (visual inspection from roadways). 2. Data compiled and geographical areas assigned to teams. 3. Second detailed assessment by area teams. 4. Portions of walls, floors, ceilings, etc. that have been exposed to water will be opened for evaluation. 5. All construction that is repaired, replaced, dried or sealed will be inspected before covered. 6. Structure inspected for certificate of compliance.	Flood	High	Chatham County Building Inspections	Local	Medium	2025	To be continued: Building inspectors have been trained to perform inspections of flood damaged structures and will perform those duties as needed after disasters.
P-3	Policy and procedures related to hazard damage and disconnected utility services: 1) inform public via television, radio and newspaper of the necessary steps to have utilities restored; 2) restrict travel as necessary while collecting damage assessment data; 3) conduct inspections on first come, first serve basis; 4) work overtime to expedite utility reconnections.	All Hazards	High	Chatham County Building Inspections	Local	Medium	2025	To be continued: The County has a public information officer who coordinates all communication with the media. Building inspectors job responsibilities include damage assessments, inspections, and overtime duty to expedite utility reconnections.
P-4	Reevaluate Storm Water Management Ordinance to require storm water control from development.	Flood	High	Chatham County Public Works	Local	Low	2025	To be continued: reevaluated annually.
P-5	Reevaluate the existing Watershed Protection Ordinance to provide onsite stream determinations and increased riparian buffer widths on existing streams and newly classified riparian areas.	Flood	High	Chatham County Planning and Zoning, Chatham County Public Works	Local	Low	2025	To be continued: reevaluated annually.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Property Protection								
PP-1	Create and maintain a list of repetitive flood loss properties.	Flood	Moderate	Chatham County Planning and Zoning	Local	Low	2025	To be continued: List of repetitive flood loss properties is available from the NC Department of Public Safety and staff has direct contact with floodplain management staff. This list will continue to be updated annually.
PP-2	Improve critical facilities and shelter capacities with alternate power sources.	All Hazards	High	Chatham County Emergency Services	Local	High	2019	In progress: Increased from 4 to 6 shelters. The shelters either have backup generators or the county has portable generators for each shelter. The county will continue to try to improve shelter capacity and will work to outfit those shelters with alternate power.
Emergency Services								
ES-1	Ensure adequate evacuation warning in case of all major hazard events.	All Hazards	High	Chatham County Emergency Services	Local	High	2025	To be continued: Code Red emergency notification system. The minutes available for notifications increased from 30,000 to 60,000 in 2019. Going forward, the county will continue to work to improve warning time for citizens to evacuate.
Public Education and Awareness								
PEA-1	Advertise all-hazard education materials for public consumption.	All Hazards	High	Chatham County Planning and Zoning	Local	Low	2025	To be continued: Educational materials are provided to the public as they are made available to the county. The county will continue to evaluate public education materials and update them as necessary on an annual basis.
PEA-2	Develop an Environmental Health program that will, in part, address environmental concerns that might develop from a natural disaster.	All Hazards	High	Chatham County Environmental Health, Chatham County Public Works	Local	High	2025	To be continued: This program has been restructured to be in the Chatham County Public Works Department and includes two positions. The County has also created a position of Director of Environmental Quality within the department and filled the position with a professional engineer. On an annual basis, these people make numerous site visits to assist property owners and developers with problems and potential problems associated with drainage, erosion, and flooding. Site visits are made at the request of the property owners or developer and are usually handled through the development review process.

Table 9-3: Town of Pittsboro Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	At the next Land Use Plan Update, review and include hazard mitigation objectives.	All Hazards	Moderate	Chatham County Planning and Zoning, Jurisdiction	Local	Low	2025	To be continued: Land Use Plan Adopted October 22, 2012. This plan will be re-evaluated and updated on a regular basis so this action will remain in the plan.
P-2	Building Inspections—Flood Damaged Structures. Any and all portions of buildings that have been submerged for any length of time will be inspected for flood related damage as well as other conditions that may be dangerous to life, health or	Flood	High	Chatham County Building Inspections	Local	High	2025	To be continued: Building inspectors have been trained to perform inspections of flood damaged structures and will perform those duties as needed after a disaster.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	other property. Plan for Damaged Structures: 1. Overall damage assessment/data collection (visual inspection from roadways). 2. Data compiled and geographical areas assigned to teams. 3. Second detailed assessment by area teams. 4. Portions of walls, floors, ceilings, etc. that have been exposed to water will be opened for evaluation. 5. All construction that is repaired, replaced, dried or sealed will be inspected before covered. 6. Structure inspected for certificate of compliance.							
P-3	Policy and procedures related to storm damage and disconnected utility services: 1) inform public via television, radio and newspaper of the necessary steps to have utilities restored; 2) restrict travel as necessary while collecting damage assessment data; 3) conduct inspections on first come, first serve basis; 4) work overtime to expedite utility reconnections.	All Hazards	High	Chatham County Building Inspections	Local	High	2025	To be continued: The County has a public information officer who coordinates all communication with the media. Building inspectors job responsibilities include damage assessments, inspections, and overtime duty to expedite utility reconnections.
P-4	Reevaluate Storm Water Management Ordinance to require storm water control from development.	Flood	High	Chatham County Public Works	Local	Low	2025	To be continued: Adopted Stormwater Ordinance November 12, 2013. The Stormwater Ordinance will need to be re-evaluated and updated in the future.
P-5	Reevaluate the existing Watershed Protection Ordinance to provide onsite stream determinations and increased riparian buffer widths on existing streams and newly classified riparian areas.	Flood	High	Chatham County Planning and Zoning, Chatham County Public Works	Local	Low	2025	To be continued: Adopted Riparian Buffer Ordinance February 14, 2011. The WPO will need to be re-evaluated and updated in the future.
Property Protection								
PP-1	Maintain a list of repetitive flood loss properties.	Flood	Moderate	Chatham County Planning and Zoning, Jurisdiction	Local		2025	To be continued: List of repetitive flood loss properties is available from the NC Department of Public Safety and staff has direct contact with floodplain management staff. This list will continue to be updated annually.
PP-2	Improve shelter capacities with alternate power and heat sources.	All Hazards	High	Chatham County Emergency Services, Jurisdiction	Local	Low	2025	In progress: Increased from 4 to 6 shelters. The shelters either have backup generators or the county has portable generators for each shelter. The jurisdiction will continue to try to improve shelter capacity and will work to outfit those shelters with alternate power.
Emergency Services								
ES-1	Ensure adequate evacuation warning in case of all major hazard events.	All Hazards	High	Chatham County Emergency Services, Jurisdiction	Local	Low	2025	In progress: Code Red emergency notification system. The minutes available for notifications increased from 30,000 to 60,000 in 2019. Going forward, the county will continue to work to improve warning time for citizens to evacuate.
Public Education and Awareness								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PEA-1	Advertise all-hazard education materials for public consumption.	All Hazards	High	Chatham County Planning and Zoning, Jurisdiction	Local	Medium	2025	To be continued: Educational materials are provided to the public as they are made available to the county. The jurisdiction will continue to re-evaluate public education materials and update them on an annual basis as necessary.
PEA-2	The Chatham County Environmental Health has received training on erosion and sedimentation methods. This program has been restructured to be in the Chatham County Public Works Department and includes two positions. The County has also created a position of Director of Environmental Resources within the department and filled the position with a professional engineer that is also a certified flood manager (CFM). On an annual basis, these people make numerous site visits to assist property owners and developers with problems and potential problems associated with drainage, erosion, and flooding. Site visits are made at the request of the property owners or developer and are usually handled through the development review process.	Flood	High	Chatham County Environmental Health, Chatham County Public Works	Local	Low	2025	In progress: This program has been restructured to be in the Chatham County Public Works Department and includes two positions. The County has also created a position of Director of Environmental Quality within the department and filled the position with a professional engineer. On an annual basis, these people make numerous site visits to assist property owners and developers with problems and potential problems associated with drainage, erosion, and flooding. Site visits are made at the request of the property owners or developer and are usually handled through the development review process.

Table 9-4: Town of Siler City Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	Status 2020
Prevention								
P-1	At the next Land Use Plan Update, review and include hazard mitigation objectives.	All	Moderate	Siler City Planning Department	Local	Moderate	Town will revisit in 2022 to reassess situation, determine efficacy of existing objectives and strategies, and make revise as needed.	**In Progress**: The Land Use Plan update was completed with local funds in 2017 wherein hazard mitigation and prevention strategies and objectives were included. High-hazard properties were reclassified as “conservation” land.

P-2	Building Inspections—Flood Damaged Structures. Any and all portions of buildings that have been submerged for any length of time will be inspected for flood related damage as well as other conditions that may be dangerous to life, health or other property.	Flood	High	Siler City for Management, Chatham County for actual inspections.	Local	Moderate	2025, After Disaster Events	**In Progress**: Building inspections are requested by the Town of Siler City and performed by Chatham County Building Inspectors. The County is also available to do after-hours inspections. Post-flood damage assessments not meeting thoroughness of a full building inspection are performed by the Town of Siler City's Flood Plain Manager.
P-3	Policy and procedures related to storm damage and disconnected utility services: 1) inform public via television, radio and newspaper of the necessary steps to have utilities restored; 2) restrict travel as necessary while collecting damage assessment data; 3) conduct inspections on first come, first serve basis; 4) work overtime to expedite utility reconnections.	All	High	Siler City Planning Department	Local	Staff Time	2025, After Disaster Events	**In Progress: City Emergency Action Plan (EAP) has not been updated since 2006/7. The Town will assess their policies and procedures for any needed revisions and include same in their next EAP update. Work will be performed by city personnel following their policies and procedures.**
P-4	Create a Storm Water Management Ordinance to require storm water control from development.	Flood	High	Siler City Planning Department	Local	Staff Time	2025	**In Progress: Town maintains own Storm Water Ordinance and will continue to review and revise as required by state/federal law. Town is considering enhancing ordinance for future development projects.**

P-5	Revise the existing Watershed Protection Ordinance to provide onsite stream determinations and increased riparian buffer widths on existing streams and newly classified riparian areas.	Flood	High	Siler City Planning Department	Local	Staff Time	2025	**In Progress: Town maintains own watershed protection ordinance and will continue to revise as needed. Town is considering enhancing ordinance for future development projects.**
Property Protection								
PP-1	Create and maintain a list of repetitive flood loss properties.	Flood	Moderate	Chatham County Planning and Zoning	Local	Staff Time	2025, Annual Updates	**In Progress**: Process will continue annually to inform decision-making regarding mitigation projects undertaken by the Town.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Emergency Services								
ES-1	Ensure adequate evacuation warning in case of major hazard event.	All	High	Chatham County Emergency Management	Local	Staff Time	2025, Annual Review	**To Be Continued:** Chatham County Emergency Management maintains the CodeRed emergency notification and the Town of Siler City will continue to identify emergency alerting issues and will rely on the County to issue alerts on behalf of the Town.
ES-2	Improve shelter capacities with alternate power/heat sources.	Winter Storm	High	Chatham County Emergency Services	Local	Staff Time	2019	**Complete.** County will continue to bring facilities more conducive to sheltering online as is possible and Town will cooperate with county to support sheltering.
ES-3	Establish program to maintain continuity of government operations.	All	High	Siler City Town Manager's Office	Local	Staff Time	2025	**In Progress**: Town of Siler City will develop an Continuity of Operations and Continuity of Government Plan with the Town's EAP.

ES-4	Identify alternate Emergency Operations Center locations.	All	High	Siler City Town Manager's Office	Local	High	2022	**In Progress**: Siler City has collocated a municipal EOC within the Police Dept. Headquarters. Town will work on identifying and developing a location for back-up.
ES-5	Identify alternate detour routes from major arteries in the county.	All	High	Chatham County Emergency Services	Local	Staff Time	2025, Annual	**In Progress**: Town of Siler City will work with DOT and Chatham County to assess ingress/egress into planned residential and industrial development to ensure adequate evacuation routes exist.
Public Education and Awareness								
PEA-1	Place flood protection and other hazard education materials in all branches of the Chatham County public library system.	All	High	Chatham County Planning	Local	Staff Time	2025, Annual Updates	**In Progress**: Town will update their website to include educational information about flooding and all-hazards, links to NC FRIS, NCFIMAN, READYCHATHAM.ORG, and others.
PEA-2	The Chatham County Environmental Health has received training on erosion and sedimentation methods. This program has been restructured to be in the Chatham County Public Works Department and includes two positions. The County has also created a position of Director of Environmental Resources within the department and filled the position with a professional engineer that is also a certified flood manager (CFM). On an annual basis, these people make numerous site visits to assist property owners and developers with problems and potential problems associated with drainage, erosion, and flooding. Site visits are made at the request of the property owners or developer and are usually handled through the development review process.	Flood	High	Siler City Planning Department	Local	Staff Time	2025, Annual Evaluation	**In Progress**: The Town of Siler City has resumed management over this focus area, and serves as the lead agency in a partnership between the town and the Department of Environmental Quality.
Previously Completed Mitigation Actions								

	Develop a policy to minimize public services to proposed new structures that will be located in 100-year floodplain areas.	Flood	Moderate	Siler City	Local		2006-2007	Completed.
	Update the Floodplain Ordinance to raise the minimum flood protection level.	Flood	Moderate	Siler City	Local		2006	Completed.
	Update the Subdivision Ordinance by reviewing and incorporating hazard mitigation objectives.	All	Moderate	Siler City	Local		2008	Completed.
	Review and revise the Planning Ordinance to allow for clustering of residential lots.	Flood	Moderate	Siler City	Local		2008	Completed.
	Revise and update the regulator floodplain maps.	Flood	High	Siler City	Federal, State		2006	Completed.
	Create a zoning map (digital) that can be easily reproduced/updated for staff and public use.	All	High	Siler City	Local		2008	Completed.

Table 9-5: Harnett County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	The County will make it policy that any property owner wanting to build in a floodplain, must wait for 48 hours until a complete review of the elevation certificate can be made, to determine that the FEMA form is filled out correctly and the information is accurate.	Flood	High	Harnett County Planning Department	Local	Low	2025	To be continued. Reviewed annually. This is currently a part of our standard operating procedure when it comes to permitting in the floodplain. We will continue to adhere to this policy.
P-2	The County will create a data layer of all known properties that are located within the floodplain to be used for future development planning purposes.	Flood	High	Harnett County GIS, Planning Department	Local, State	High	2025	To be continued. Updated as new data becomes available. The County has mapped these properties in accordance with the latest FEMA studies, and the layers are continuously updated as we receive new data.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
P-3	The County will further extend its conservation zoning overlay district to protect more riparian zones of intermittent blue-line streams.	Flood	High	Harnett County Planning Department	Local	Medium	2025	In progress. Due to lack of funding and increased level of effort action is not complete. The county has been working on extending the conservation overlay district, but there were more affected blue line streams than anticipated.
Property Protection								
PP-1	Distribute information to citizens on how to retrofit homes to help prevent wind and flood damage during natural hazards.	Flood, High Wind, Hurricane, Thunderstorm, Tornado	Moderate	Harnett County Planning Department	FEMA, NCEM	Medium	2025	To be continued. Brochures on home retrofit for mitigation are available to citizens that visit the inspections department on a daily basis.
PP-2	Continue to apply for pre- & post- disaster grants to buyout or elevate flood prone properties within Country Walk subdivision.	Flood	High	Planning Department, Community Development, Building Inspections	Local/State/Federal	Low	2025	To be continued. Reviewed annually. The county has implemented buyout/elevation projects in the past and will continue to do so as opportunities exist annually for these projects through mitigation funding.
PP-3	The County will partner with a local sand mining facility to retrofit a pit into a future reservoir.	Flood	Moderate	Harnett County Planning Department	None; unless BRAC Regional Task Force acquires other funding	Low	2025	In progress. No measurable progress due to lack of staff, funding and opportunity.
PP-4	Provide backup power for critical facilities.	All Hazards	High	Harnett County Planning Department	Local/State/Federal	High	2025	New
Natural Resource Protection								
NRP-1	Explore requiring all new major subdivisions to set aside land for open space and restrict any building in environmentally sensitive areas.	Flood	High	Harnett County Planning Department	Local	Low	2025	To be continued: The Harnett County UDO has outlined this objective as the “Compatibility Concept Model” and solicits offerings of open space for greater density within a given development.
Emergency Services								
ES-1	The County will conduct a training exercise each year to ensure that County emergency resource distribution operations, such as response time, communication, and coordination with DOT, are adequate for all-natural hazard events.	All Hazards	High	Harnett County Emergency Management	Local	Low	2025	In progress, these were completed with coordination and/or participation from Harnett county Emergency Management. The County in conjunction with other local entities performs at least 3 exercises a year. These training sessions consist of a wide range of scenarios and settings.
Public Education and Awareness								
PEA-1	The County will hold an Emergency Management open house on October 1st each year to inform the public and County employees about all-natural hazards and their corresponding mitigation techniques.	All Hazards	Moderate	Emergency Management Director	Local, State, sell advertisements for public information handed out at meetings	Medium	2025	To be continued: Emergency Management conducts an annual “Open House” where they educate both the public and other staff members. These sessions are to take place in October which coincides with hurricane season. Combined training with EOC’s Hurricane exercise
PEA-2	The County will provide a GIS training tool that will be aimed at educating surveyors and builders about responsible growth in regard to hazard mitigation.	All Hazards	High	Harnett County GIS, Planning Department	Local, State	High	2025	To be continued: We are currently working interdepartmentally to devise a strategy, and tool that will be easy to access and operate by the general public.

Table 9-6: Town of Angier Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Create and define suitable areas for growth by updating existing land use plan or creation of a new land use plan that considers mitigation of all hazards.	All Hazards	Moderate	Zoning/Planning Administrator, Town Administrator	Local	Low	2025	To be continued: The town has updated its existing land use plan to identify areas suitable for growth. However, further updates of the land use plan will be required, so this action will remain in the plan. The Town adopted a Comprehensive Land Use Plan in 2017. The Land Use Map was updated in 2019 to account for the proposed NC 55 Bypass and encourage growth on the West side of Town.
P-2	Create a yearly checklist that will help monitor and protect infrastructure and existing structures from all hazards.	All Hazards	High	Public Works Director, Building Inspector	Local, State	Low	2025	To be continued. Reviewed annually. The town has developed a checklist that will help it to monitor its infrastructure and existing structures.
P-3	The Town will involve county officials with future growth plans and patterns and hold community- visioning meetings to educate the public and developers about future growth and hazard mitigation planning for all hazards.	All Hazards	Moderate	Town Administrator, Planning Director, Town/County Boards	Local	Low	2025	To be continued. Planning Staff is in periodic communication with County Planners to be sure County officials are aware of growth projections in Angier. The Town has also held public input sessions for various growth-related initiatives including updates to the Ordinance and the 2019 Land Use Plan update.
P-4	Create new ordinances and/or strengthen existing ordinances to protect and preserve environmentally sensitive areas and open space.	Flood	High	Town Administrator, Planning/Zoning Administrator, Town/County Boards	Local	Medium	2025	To be continued. Planning Staff has recently overhauled the Open Space chapter of the UDO to ensure adequate open space is dedicated in new development, ensure recreational opportunities are widely available, and to protect wetlands and flood plains as vacant land is developed. Ordinances have been developed in a way that attempts to minimize degradation to environmentally sensitive areas and to preserve open space. Nevertheless, there are still revisions that could be made to the town's ordinances that would further reduce risk and the town will look into making those changes going forward.
P-5	Pursue state and Federal grants that would help improve emergency services along with mitigation planning for all hazards.	All Hazards	Moderate	Town/County Manager, Planning Director, Finance Director	Local	Low	2025	To be continued: Town staff will continue to monitor and apply for grants, as it relates to identified mitigation projects.
Structural Projects								
SP-1	Try to set aside monies for long range Capital Improvement Projects that would help protect public health and safety from all hazards.	All Hazards	Moderate	Town/County Manager, Planning Director, Finance Director	Local	Medium	2025	To be continued. Through the collection of System Development Fees for new development, the Town has and will continue to set aside money for long-range capital improvement projects such as partnering in the future expansion of the Northwest Harnett Regional Treatment Plant to serve the needs of new development.
Property Protection								
PP-1	Provide backup power for critical facilities.	All Hazards	High	Town/County Manager, Planning Director,	Local/State/Federal	Medium	2025	New
Public Education and Awareness								
PEA-1	Make a list available for distribution at the Inspections Department of contractors and consultants knowledgeable or experienced in	All Hazards	Moderate	Chief Building Inspector, Harnett County Planning and	Low	Local, Possible Grant	2025	To be continued: The town has developed a list of contractors that are knowledgeable in the area of retrofitting homes and other structures. This list is available at the Inspections Department but

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	retrofitting/construction techniques for mitigation of all hazards.			Inspections Department				needs to be reviewed and updated annually.

Table 9-7: Town of Coats Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	The Town will initiate a policy to identify and remove potentially dangerous trees and vegetation along public roadways.	Thunderstorm, High Wind, Hurricane, Winter Storm	High	Town of Coats Board of Commissioners	Local	Medium	2025	To be continued: Town has, & Public Works staff will continue to work on this as part of their quarterly checklist.
P-2	The Town will conduct quarterly inspections of all storm sewers and open ditches in order to evaluate their readiness and to make corrections as needed. The Town will review and update its Storm Water Readiness Plan.	Flood	High	Town of Coats Public Works Department	Local	High	2025	To be continued: Town has completed this successfully and will continue to implement. Public Works staff will continue their work as part of quarterly checklist and before major predicted rain events. The town has regularly conducted inspections of all storm sewers and ditches in order to ensure they are in suitable condition for managing stormwater. The town will update its Stormwater Readiness Plan in the future and perform quarterly inspections of its infrastructure system.
P-3	Ensure that all redevelopment and growth is sustainable to all hazards through the development of new Zoning and Subdivision regulations.	All Hazards	High	Town of Coats Planning Board and Board of Commissioners	Local	High	2025	To be continued: Town staff believe new growth is adequately concentrating in non-hazard areas. Staff and Planning Board will review on monthly basis. The town has developed new zoning and subdivision regulations, but these regulations need to be reviewed and updated annually so that the town can improve the way it redevelops and grows in terms of mitigating hazards.
P-5	The Town will develop a checklist to be used for an annual inspection of all Public Buildings to ensure they remain as structurally secure as possible during all hazard events.	All Hazards	High	Coats Public Works Department, Town Manager, Town Board	Local	Low	2025	Completed: Major renovations completed to keep stormwater from entering parts of Town Hall complex.
P-6	The Town will utilize information obtained from the county GIS floodplain project to prevent redevelopment in flood prone areas and to help identify any currently developed areas that may be at risk.	Flood	Moderate	Town Manager, Town Planning Board, Town Board	Local	Medium	2025	In progress: The town has utilized its GIS database to help prevent development in known hazard areas such as the floodplain. The town will continue to regulate development in the floodplain in a way that will reduce risk. ETJ has been extended into floodplain areas. Town will work with County staff to develop procedure/policy for these areas.
P-7	The Town will include in its new Zoning Ordinance an Open Space District Classification that will effectively set aside any environmentally sensitive areas and restrict any development therein.	Flood	Moderate	Town Manager, Town Planning Board	Local	Medium	2025	In progress: Negotiating with new property owners to set land aside as Open Space. The town has included the Open Space District classification in its zoning ordinance, but the town will need to identify and protect additional areas by designating them as that classification in order to further reduce risk. Town will keep lookout for open tracts that could be converted to parkland.
P-8	The Town will update its Land Use Plan with special emphasis being given to any	Flood	Moderate	Town Manager, Town Planning Board	Local	Medium	2025	To be continued: The town has updated its Land Use Plan in 2014 and this has led to the identification of flood prone and environmentally sensitive

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	environmentally sensitive or flood-prone areas.							areas. However, the town will also work to identify additional flood prone areas in the future by reviewing the LUP on an annual basis. staff time.
Property Protection								
PP-1	Provide backup power for critical facilities.	All Hazards	High	City Council, Planning Department, Public Works Department	Local, State, Federal	Medium	2025	New
Structural Projects								
SP-1	The Town will target infrastructure needs during the development of the annual Town budget.	All Hazards	High	Coats Public Works Department, Town Manager, Town Board	Local	Low	2025	To be continued: In the past, the town has looked at long term infrastructure needs when developing the town budget. Many of these projects have overlapped with mitigation. On an annual basis going forward, the town will evaluate additional infrastructure projects that can help reduce risk and protect citizens.
Emergency Services								
ES-1	The Town will update and revise its Emergency Services and Disaster Response Readiness Plan.	All Hazards	High	Town of Coats Public Works Department, Coats Police Department, Town Manager, Town Board	Local	Medium	2025	To be continued: The town has kept up a consistent review and update process for its Emergency and Disaster Readiness Plan. in order to maintain its plan and ensure it is maximizing its risk- reducing capabilities, the town will update this plan at least twice per year.
Public Education and Awareness								
PEA-1	The Town will educate and solicit public input concerning hazard mitigation strategies and policies through semiannual Town Meetings.	All Hazards	Moderate	Board of Commissioners& Planning Board, Harnett County EMC	Local	Medium	2025	To be continued: Semi-annual town meetings have been held each year since the last update of this plan. The town has pushed out strategies for mitigation during these meetings and sought input from residents. As such, the town will continue to hold these meetings at least twice per year to review strategies and update citizens on the latest techniques for mitigation.
PEA-2	The Town will develop an informational flier to be distributed each year that will provide our citizenry with the information and suggestions useful during natural disasters.	All Hazards	Moderate	Coats Public Works Department, Town Manager, Town Board	Local	Medium	2025	To be continued: The town has developed an informational flyer and it has been distributed to citizens. This flyer will need to be updated and sent out again on at least an annual basis. The town will work on updating this with the latest information on pertaining to homeowner mitigation.

Table 9-8: City of Dunn Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Create policy to annually trim trees and cut down dead trees under the city's supervision prior to April 15th.	Thunderstorm, High Wind, Hurricane, Winter Storm	Moderate	Public Works Department, City Council & Planning Board	Local	Medium	2025, Annually	To be continued: A policy has been adopted to trim trees and cut down dead trees. This is done every year, at least twice a year. The city will continue to implement this action going forward.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
P-2	Create and modify existing policies to prevent building in areas prone to flooding and/or wind damage.	Flood, Thunderstorm, High Wind, Hurricane, Tornado	Moderate	Planning Department, City Council & Planning Board	Local, State	Medium	2025	In progress: The city has some policies in place to prevent building in flood/wind prone areas but needs to do a study of its stormwater system and lacks the funding to do so.
P-3	Create a policy to require private property owners to remove storm debris (trees, limbs, etc.) within 45 days to prevent potential fire hazards to existing structures.	Wildfire	Moderate	Planning Department, Planning Board, Inspections Department, City Council	Local, State, Federal	Medium	2025	In progress: An ordinance was created allowing inspections to site down and dead trees. A 45-day storm specific policy will be looked at as a possible revision
P-4	Create policy to inspect public buildings on annual basis for areas that need repair to keep the buildings as structurally sound as possible.	All Hazards	Moderate	Planning Department, Planning Board, Inspections Department, City Council	Local, State, Federal	Medium	2025, Annually	To be continued: Building inspectors do this at least once a year. The building inspections department will continue to inspect public buildings to ensure they are structurally sound.
P-5	Create a policy to prevent redevelopment in areas that are especially prone to flooding and wind damage, especially repetitive loss structures in the City.	Flood, High Wind, Hurricane, Thunderstorm, Tornado	Moderate	Inspections & Planning Department, Planning Board, City Council, Public Works	Local, State	Medium	2025	Deferred due to lack of funding for locating all flood and wind prone areas within the City.
P-6	Create a stormwater management ordinance and provide the inspectors and/or code enforcement officers with the authority to complete inspections of businesses that could cause potential harm to the environment in the case of a natural hazard occurrence.	Flood	Moderate	Planning Department, Planning Board, Inspections Department, City Council, Public Works, County Environmental Health Department	Local, State	Low	2025	In progress: This ordinance is not in place but is still a priority for the City. Funds are needed to hire the appropriate firm/engineer to draft the ordinance. Lack of funding currently but is still a priority of administration.
P-7	Ensure proper stormwater best management practices are implemented for repetitive loss property, and for area in its vicinity if development occurs	Flood	Moderate	City Council, Planning Department, Public Works Department	Local funding; Grants that may become available either annually or after a declared event	Low	2025	To be continued. Reviewed annually. Best Management Practices are in place for stormwater in the vicinity of the repetitive loss property, but the area will need to continue to be monitored and evaluated.
Property Protection								
PP-1	Seek funding to retrofit or acquire repetitive loss property.	Flood	Moderate	Planning Department, Planning Board, Inspections Department, City Council	Local, State, Federal	Medium	2025	In progress: No measurable progress to lack of funding.
PP-2	Provide backup power for critical facilities.	All Hazards	High	City Council, Planning Department, Public Works Department	Local, State, Federal	Medium	2025	New
Natural Resource Protection								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
NRP-1	Create a policy to establish vegetative buffers on all properties bordering drainage canals, creeks, streams, etc. to prevent water contamination.	Flood	Moderate	Planning Department, Planning Board, Inspections Department, City Council, Public Works, County Environmental Health Department	Local, State	Low	2025	To be continued: We have a landscape ordinance that requires buffers. This action will be removed as a capability during the next update.
NRP-2	Create policy to require quarterly checks on these buffers to ensure that they are free of debris and are being maintained properly.	Flood	Moderate	Planning Department, Planning Board, Inspections Department, City Council, Public Works, County Environmental Health Department	Local, State	Low	2025	To be continued: Currently laying the foundation on the combined effort of the Planning Department and Public work to adequately locate and create a maintenance plan to ensure compliance in these specific areas.
Public Education and Awareness								
PEA-1	Create a brochure to increase public awareness of the benefits of being more conscientious of mitigation activities that minimize loss of property/property damage from all hazards.	All Hazards	Moderate	Administration, City Council	Local, Grant Money	Low	2025	In progress: Recently hired a Communication Coordinator that will be creating this during this calendar year.

Table 9-9: Town of Erwin Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Encourage activities that will make structures less susceptible to damage during natural hazard events through improving the Erwin code of ordinances and creation of a storm- water management plan.	All Hazards	Moderate	Town of Erwin Planning Department and Planning Board	Local, Grant	Low	2025	To be continued: The town has developed a stormwater management plan that it updates regularly, Thee Town Engineer is working on 2 area drainage projects. We have completed Phase One of the East Erwin Drainage project. None of these homes are in a flood hazard zone (it is adjacent). This project should alleviate some flooding issues. I would estimate it should hopefully cut down on flooding in around 30 homes. Any development in a 100-year flood zone requires an elevation certificate.
P-2	Meet quarterly with other local governments to discuss new ideas that will help Erwin provide safe and responsible growth patterns for the future.	All Hazards	Moderate	Erwin Planning Department	Local	Low	2025	To be continued: Done on an as-needed basis, but staff will work to re-establish communication on a regular basis. I feel like all of the municipalities and county work well together.
P-3	Encourage growth only in areas suitable for development and preserve open space in environmentally sensitive areas	Flood	Moderate	Town of Erwin Planning Board	Local	Low	2025	To be continued: The Land Use Plan was updated and adopted in 2014. The town will continue to review and update the plan going forward so this action will remain in the plan. There has been no development or zoning changes involving any land that was identified for conservation.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	through enforcement of a Comprehensive Land Use Plan.							
P-4	Collect data on repetitive stormwater incidents to create GIS layer for the town.	Flood, Hurricane, Thunderstorm	Moderate	Planning and Zoning	Local Budget	Low	2025	To be continued: Done on an as-needed basis, but staff will work to re-establish communication on a regular basis. Data has been collected and it will continue to be collected.
P-5	Continue being a member of the National Flood Insurance Program. Review all zoning permit applications to ensure compliance with the Town's Flood Damage Prevention Ordinance.	Flood	High	Planning and Zoning; Town Engineer	Local Budget	Low	2025	To be continued: The Town updated its Flood Damage Prevention Ordinance in 2014 and, before the end of 2014, will have completed abatement projects to have its probationary status lifted. The Town completed the necessary work and was taken off probation.
Structural Projects								
SP-1	Implement East Erwin Drainage Project with design and permitting in FY2014.	Flood, Hurricane, Tornado, Thunderstorm	High	Town Engineer and Public Works	Local Operating Budget, Federal/State Grants	Low	2025	To be continued: The Town worked with Harnett County Emergency Management and obtained a $481,000 grant from the State of North Carolina (DRA 2017) to install larger culverts for storm water drainage on River Drive and Burton Avenue. The Town obtained a grant from The Golden Leaf Foundation ($319,000) to install the larger culvert on Maye Avenue. The Town has applied for a $150,000 grant from The Golden Leaf Foundation to complete the phase two study for this project. Grant funding for this project will be necessary. The first phase costs around $830,000.
SP-2	Implement South 13th Street Drainage Project, proposed for completion in FY2016.	Flood, Hurricane, Tornado, Thunderstorm	High	Town Engineer and Public Works	Local Operating Budget, Federal/State Grants	Low	2025	In progress: NCDOT came out and did some work on this street. I do not know why this was included for the Town. 13th Street is a NCDOT road/ROW and the Town has not authority to do any work on the road or the ditch. There are still issues with drainage though.
SP-3	As part of stormwater management plan, conduct regular schedule of ditch maintenance.	Flood, Hurricane, Tornado, Thunderstorm	High	Town Engineer and Public Works	Local Operating Budget, Federal/State Grants	Low	2025	In progress: Erwin Public Works maintains ditches in the Town ROW. Clean out drainpipes as well. We have upgraded some ditches to be more effective. We reach out to NCDOT to get them to clean their ditches out.
Property Protection								
PP-1	Provide backup power to critical facilities.	All Hazards	High	Emergency Services Director,	Public/private partnership, grants	High	2025	New
Emergency Services								
ES-1	Renew and update disaster response/readiness plan.	All Hazards	Moderate	Erwin Board of Commissioners, Fire & Emergency Services Director	Local	Low	2025	To be continued: In conjunction with Harnett County, the town updates its response/readiness plan on an annual basis and will continue to review and update annually.
Public Education and Awareness								
PEA-1	Improve education and outreach to the community regarding flood hazards and flood mitigation through dissemination of mitigation pamphlets in the Town Hall.	Flood	High	Chief Building Inspector	Local	Low	2025	To be continued: Have printed new FEMA brochures & handouts for citizen availability. The town will continue to evaluate and update education materials on an annual basis. The Town can still provide flyers at Town Hall but we feel like it is more beneficial to have an in-person meeting/phone call to go along with handouts. The County handles our building inspections now.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PEA-2	Maintain a system for identifying Town's special needs citizens.	All Hazards	Moderate	Police Department	Local	Low	2025	In progress: According to Police Chief a program was started "are you ok program". Town has record of where our special needs citizens live. Town will continue to look into upping the participation in the "are you ok" program.
PEA-3	Provide education materials on preparedness/mitigation measures on www.erwin-nc.org to include ReadyNC.org and www.dhs.gov/ready.	All Hazards	Moderate	Planning and Zoning	Local Budget	Low	2025	To be continued: Information has been posted on our website under the Planning Department. More information can be posted as needed.
PEA-4	Create a brochure to increase public awareness of the benefits of being more conscientious of mitigation activities that minimize loss of property/property damage.	All Hazards	Moderate	Administration, City Council	Local, Grant Money	Low	2025	New

Table 9-10: Town of Lillington Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	To include in our rewrite of our Zoning Ordinance and Subdivision Ordinance sound planning practices that allow only responsible growth in floodplain areas. Note: All new buildings are inspected by Harnett County. The Town will coordinate with the County to make sure that all applicable building codes are followed with regard to hurricane or high wind standards.	Flood, Hurricane, High Wind	High	Town Board of Commissioners, Town Manager	Local	Low	2025	To be continued: The town has worked to develop ordinances that include standards for responsible growth in hazard areas. These standards are in place but will need to be reviewed and updated in order to improve the allowable growth in high hazard areas further.
P-2	The Town will aim to have floodplain data and other useful tools available online to aid with responsible growth.	Flood	High	Town Manager	Local	Low	2025	To be continued: The town has developed a number of tools that have been displayed online and which can help citizens better understand responsible growth strategies. These tools and information will need to be updated on an annual basis.
Natural Resource Protection								
NRP-1	Rewrite Zoning Ordinance to protect natural areas along the Cape Fear River and to determine the correct riparian buffer to preserve open space and limit development.	Flood	High	Town Manager	Local	Low	2025	To be continued: The Zoning Ordinance has been re-written to protect natural areas along the Cape Fear River and to preserve open space and limit development. This ordinance is in place so this action is complete and will be removed from the next update as a capability.
Structural Projects								
SP-1	Retrofit all Town owned buildings to safeguard against all natural disasters and distribute information to the community on how to retrofit privately owned structures.	All Hazards	Low	Town Manager and Director of Public Works	Local	Low	2025	To be continued: The town has retrofitted many public buildings, but it will need to continue to work to meet the goal of retrofitting all buildings, especially as new techniques are developed to make structures more resilient. The town will additionally work to improve its outreach to homeowners to help them better understand the benefits of retrofitting and the best

								strategies for doing so.
Emergency Services								
ES-1	To protect life and property through continuing efforts to improve emergency response, mitigation and preparation.	All Hazards	Moderate	Town Manager, Local Fire Chiefs	Local	Low	2025	To be continued: The town is fully committed to emergency response and preparation activities and has been well prepared for major events in the past. In the future, the town will continue to put a strong emphasis on these activities and ensure it is ready for the next disaster event.
Public Education and Awareness								
PEA-1	Send out newsletter to inform the community of disasters and mitigation for all hazards.	All Hazards	Moderate	Town Manager	Local	Low	2025	To be continued: The town sends out an annual newsletter to let property owners know when hurricane season has begun and ends. The town also puts out a lot of information on the strategies that property owners can take to protect their property from all natural disasters.

Table 9-11: Johnston County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Johnston County will apply to reduce their NFIP-CRS (Community Rating System) score.	Flood, Hurricane, Thunderstorm	Moderate	Emergency Services Coordinator, Environmental Protection Administrator	In house staff	Low	2025	To be continued: Johnston County Planning Department continues to work on floodplain management program that will facilitate reducing the CRS score.
P-2	Conduct a county dam safety inventory. People downstream of hazardous dams would be notified. Owners would be notified of ways to reduce the risk of their dams.	Dam Failure	Low	Public Utilities Director	In house staff	Medium	2025	In progress: Not sufficient funding or resources to complete at this time.
P-3	Develop a Johnston County Burning Ordinance.	Wildfire	Low	Fire Marshal	In house staff	Low	2025	In progress: this item is currently work in progress and should be completed by 2021 dependent on adequate funding.
Property Protection								
PP-1	Relocation of 4 server boxes located in the basement of the Johnston County courthouse and/or increase from one to multiple servers at the Johnston County Health Department to increase redundancy.	Flood, Hurricane, Thunderstorm	High	Technology Services Director	Grants, General Fund budget	Low	2025	To be continued: the county continues to work to increase redundancy in all its systems and will replace as funding becomes available.
PP-2	Replace generator at Pine Level wastewater pump station.	All Hazards	High	Public Utilities Director	General Fund Budget	Medium	2025	In progress: No measurable progress due to a lack of funding.
PP-3	Provide auxiliary heating and cooling capability and generator connections to shelter sites at North Johnston Middle School, West Johnston High School, and First Baptist Church Smithfield.	All Hazards	Moderate	Emergency Services Director, Johnston County School System	Public/private partnership, industry donations, lease units, assistance groups (i.e. Red Cross)	High	2025	To be continued: identifying ways to facilitate generator power to critical structure such as shelter during disasters for specified locations.
PP-4	Provide backup power to critical facilities.	All Hazards	High	Emergency Services Director,	Public/private partnership, grants	High	2025	New
PP-5	Flood damage prevention ordinance	Flood	High	Town Administration	Archer Lodge & work performed by Town	Low	2025	To be continued: Reviewed and updated regularly. 2009 flood

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
					Administration			prevention ordinance updated and re-adopted June 4, 2018.
Structural Projects								
SP-1	Improve County water system to provide hydrant coverage to 85 percent of County Fire Districts.	Fire	High	Emergency Services Director	In house staff	High	2025	To be continued: improving hydrant coverage to 85 percent.
SP-2	Complete rehabilitation work on three gravity sewer outfalls to reduce system infiltration.	Flood, Hurricane, Thunderstorm	High	Public Utilities Director	General Fund Budget	High	2025	In progress: No measurable progress due to a lack of funding.
SP-3	Replace bridge No. 40 located on US 70 Business (Market St.) over Neuse River.	Flood	High	Emergency Services Director	In house staff	Low	2025	In progress: No measurable progress due to a lack of funding.
Emergency Services								
ES-1	The Johnston County Continuity of Operations Plan (COOP) will be upgraded.	All Hazards	Moderate	Emergency Services Director	NCEM grant	Medium	2025	In progress: COOP was updated in 2019 and will be updated annually.
ES-2	Establish a site for supporting an NCOEMS Medical Support Shelter. (CapRac).	All Hazards	High	Emergency Services Department	In house staff	High	2025	In progress: JCES, CapRac and NCEM have worked with C3 church to utilize their facility for a Special Medical Needs Shelter.
Public Education and Awareness								
PEA-1	On an annual basis, the FEMA repetitive loss property list will be obtained from NCEM. At that time, letters will be sent to the owners of the repetitive loss structures to notify them of their status and to offer information on programs that could help.	Flood, Hurricane, Thunderstorm	Moderate	GIS Application Analyst, Emergency Services Coordinator	In house staff	Low	2025	To be continued: The county continues to update its repetitive loss list and, will continue to attempt to notify property owners to institute mitigation.
PEA-2	Update and maintain educational information and links on County website for the public to access in order to stay informed regarding all-natural hazards.	All Hazards	Low	Emergency Services Department	In house staff	Medium	2025	In progress: The county website includes information for hazard and mitigation for the public.
PEA-3	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	To be continued: The county continues to work to develop a brochure concerning wind proofing methods.

Table 9-12: Town of Archer Lodge Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Property Protection								
PP-1	Provide backup power to critical facilities.	All Hazards	High	Public Works	Operating Budget, Federal/State Grants	High	2025	New
Structural Projects								
SP-1	Work with county to improve water system to provide hydrant coverage to 85 percent of County Fire Districts.	Fire	High	Emergency Services Director	In house staff	Low	2025	To be continued: continually working with county to meet goal.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Emergency Services								
ES-1	Work with Johnston County to upgrade Continuity of Operations Plan (COOP).	All Hazards	Moderate	Emergency Services Director	NCEM grant	Low	2025	To be continued: continually working with county to meet goal.
Public Education and Awareness								
PEA-1	Collaborate with Johnson County Emergency Management (EMS) by reviewing and suggesting applicable updates to available information on Johnston County's EMS Website for the public to access/stay informed on natural hazard risks and mitigation techniques	All Hazards	Low	Town Administration	Archer Lodge & action item work performed by Town Administration	Low	2025	To be continued: 2020 Annual Review completed of applicable information on Johnston County's Emergency Management Web site.
PEA-2	Make available to public any brochures/materials that may be available from the county, state, or federal level that outline homeowner mitigation techniques for all hazards.	All Hazards	Low	Town Administration	In house staff	Low	2025	To be continued: Dissemination of information occurs regularly. 2020 Archer Lodge Website updated. Under local Information Tab installed link to connect to: Johnston County Emergency Management web page https://www.johnstonnc.com/emerserv/em/ and also added link to preparedness information at: https//www.johnstonnc.com/emerserv/em/emprepinfo.cfm

Table 9-13: Town of Benson Mitigation Action Plan

Action#	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Propose a stormwater drainage study.	Flood, Hurricane, Tornado, Thunderstorm	Moderate	Planning, Public Works	Local, Federal/State Grants	Medium	2025	To be continued: Baseline model completed but needs to be updated every 5 years.
P-2	Maintain list of residents with special needs.	All Hazards	High	Administration	Local	Low	2025	To be continued: This information is kept in the utility software and updated as needed.
P-3	Maintain all utility rights-of-way by trimming trees around power lines and maintain right-of-way of water/sewer lines.	All Hazards	High	Electric Department, Public Works Department	Local	Low	2025, Annually	To be continued: Tree trimming is maintained on an annual basis by Electric & Public Works Departments to ensure all utilities are accessible.
P-4	Maintain a list of contractors to assist town in emergencies.	All Hazards	Moderate	Administration	Local	Low	2025, Annually	To be continued: Public Utilities has this information updated annually and submitted to the State with permits
Property Protection								
PP-1	Conduct smoke testing and camera system of existing sewer lines.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	High	2025, Every 10 years	To be continued: AIA study was performed in 2018 and due to be done every 10 years.
PP-2	Conduct a comprehensive drainage study.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	High	2025	To be continued: Baseline model completed to be updated every 5 years.

Action#	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PP-3	Replace three existing pump stations.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	High	2025	In progress: Funding not available at this time.
PP-4	On pump stations, raise all controls above Base Flood Elevation. Lift Station needs to be 2ft higher.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	High	2025	In progress: Funding not available at this time.
PP-5	Provide backup power to critical facilities.	All Hazards	High	Public Works	Operating Budget, Federal/State Grants	High	2025	New
Structural Projects								
SP-1	Continue upgrades of sanitary sewer system.	Flood, Hurricane, Tornado, Thunderstorm	Moderate	Wastewater Treatment, Public Works	Operating Budget, Federal/State Grants	High	2025	To be continued: $875,000 grant applied towards replacement and repairs to sewer system. This project is continuing as funding becomes available.
Emergency Services								
ES-1	Enter into agreement with Johnston County to use current county hazard notification system.	All Hazards	Low	Administration	Local	Low	2025	In progress: At one time we had use of Code Red to notify our citizens, we no longer have access to this until funding becomes available.
Public Education and Awareness								
PEA-1	Maintain and update the Town of Benson website.	All Hazards	Low	Administration	Local	Low	2025	To be continued: As events occur, we have a staff member that keeps this information updated.
PEA-2	Educate public of all potential natural disasters.	All Hazards	High	Administration	Local	Low	2025	To be continued: The town continues to keep the public well informed. We have a PIO on staff that continually monitors and educates as events occur.
PEA-3	Information regarding fire prevention and safe burning practices will be distributed to the public.	Wildfire	Moderate	Fire Department	Local	Low	2025	To be continued: Fire department continues to reach out to community organizations and schools to keep the public well informed.

Table 9-14: Town of Clayton Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Town of Clayton public power tree trimming program.	Thunderstorm, Lightning, Severe Winter Storm, Hurricane, Tornado	High	Electric System Director	Town electric fund	Low	2025, Annually	To be continued; implemented annually.
P-2	Conduct a community risk assessment.	Hazardous Materials	Moderate	Fire Department	Local	Low	2025, Annually	To be continued Entered CPSE Global Accreditation process in 2019.
P-3	Develop comprehensive plan.	All Hazards	High	Planning Department	Town Budget	Low	2025	In progress, 10% complete. Anticipate completion July 2021.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Property Protection								
PP-1	Auxiliary power for Town of Clayton sewer lift stations.	All Hazards	High	Public Works Director	Town water/sewer fund budget	Medium	2025	In progress: Purchased 3 portable generators and 3 bypass pumps. Require all stations to be Duplex Station with either a permanently mounted or portable backup generator, either a permanently mounted bypass pump, bypass pump connections or the ability to maintain flow with pump trucks.
PP-2	Town of Clayton public power electric system upgrade and relocation of overhead power lines. Convert 1\0 ACSR conductor to 477 AL conductor.	All Hazards	High	Electric System Director	Town electric fund	Low	2025	To be continued: Continue to upgrade Oh Feeders to 477 conductor concepts. Added a 50 mva substation, doubling power grid reliability. Planning Main Street conversion of Oh to Ug. Requiring all new subdivisions to implement unground installations.
PP-3	Provide backup power for critical facilities.	All Hazards	High	Fire Department	FEMA grant	High	2025	New
Emergency Services								
ES-1	The Johnston County Continuity of Operations Plan (COOP) will be upgraded.	All Hazards	Moderate	Emergency Services Director	NCEM grant	Low	2025	In progress: no measurable progress due to limited funds.
ES-2	Conduct Annual EOC training.	All Hazards	Low	Fire Department	Town Budget	Low	2025, Annually	To be continued; training occurs annually.
ES-3	Develop Fire-wise Community Program.	Wildfire	Moderate	Fire Department	NC Forestry Service/ USFA	Low	2025	In progress: Limited results. Walden Woods subdivision became a Fire-wise Community.
Public Education and Awareness								
PEA-1	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	In progress: No measurable progress due to limited funds.
PEA-2	Develop hazard mitigation materials for all hazards for print and/or use on websites/social media.	All Hazards	Moderate	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	New

Table 9-15: Town of Four Oaks Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Maintain all utility rights-of-way by trimming trees around power lines and maintain right-of-way of water/sewer lines.	All Hazards	High	Public Works/ Duke Energy	Local	Medium	2025, Annually	To be continued: The town along with Duke Energy automatically has this on their check all the time list.
P-2	Maintain a list of contractors to assist town in natural hazards.	All Hazards	Moderate	Administration	Local	Low	2025, Annually	To be continued: This is updated when necessary
P-3	Digitize copies of town ordinances, polices, and procedures.	All Hazards	High	Administration and Town Council	Local, Grants	Low	2025	To be continued: Working on updates along with the Chapter 160D.
Property Protection								
PP-1	Town of Four Oaks public power electric	All Hazards	High	Public Works Duke	Federal or state grant	Low	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	system upgrade and relocation of overhead power lines.			Energy				
PP-2	Assess sewer lines due to infiltration issues. Need to address five to six manholes per year.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating budget, Federal/state grants	Medium	2025	In progress: no measurable progress due to lack of funding.
PP-3	Clean street grates before heavy rains and in large drain tiles to accommodate water.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating budget, Federal/state grants	Low	2025	In progress: no measurable progress due to lack of funding.
PP-4	Install drainage pipe to relieve storm runoff and clean culvert areas.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating budget, Federal/state grants	Medium	2025	In progress: no measurable progress due to lack of funding.
PP-5	Provide backup power for critical facilities.	All Hazards	High	Public Works	Operating budget, Federal/state grants	High	2025	New
Emergency Services								
ES-1	Maintain a system for identifying special needs citizens in the town.	All Hazards	High	Police Department, Administration	Local	Low	2025	In progress: no measurable progress due to lack of funding.
Public Education and Awareness								
PEA-1	Maintain town's website to include links to ReadyNC.org and FEMA-www.DHS.gov/ready.	All Hazards	Moderate	Administration	Local	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-2	Provide citizens with educational materials regarding the mitigation of all hazards through a variety of mediums.	All Hazards	Moderate	Administration	Operating budget, Federal/state grants	Medium	2015	New

Table 9-16: Town of Kenly Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Digitize copies of town ordinances, polices, and procedures.	All Hazards	High	Town Manager	Grants	Low	2025	In progress: no measurable progress due to lack of funding.
P-2	Develop a Town of Kenly burning ordinance.	Wildfire	Low	Town Manager, Fire Chief	Town Staff	Low	2025	In progress: no measurable progress due to lack of funding.
P-3	Develop ordinance to penalize intentional or malicious damage to canal and drainage system.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Manager, Town Council	Town Manager, Town Council	Low	2025	In progress: no measurable progress due to lack of funding.
P-4	Clean out and improve drainage pipe located on CSX Railroad right-of-way.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Manager, CSX Officials	CSX Transportation	Low	2025	In progress: no measurable progress due to lack of funding.
P-5	Remove beaver dam and trap beavers on east side of town to improve drainage and prevent	Flood, Hurricane, Thunderstorm,	High	Town Manager	Local Budget, Grants	Low	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	flooding of low-lying areas and streets.	Tornado						
P-6	Conduct study of drainage system to look for ways to improve drainage in southwest part of Town.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Manager, Engineering Firm	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.
P-7	Conduct smoke test and sewer system audit to study excess water that flows into sewer pipes from groundwater and storm water infiltration and inflow.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Manager	Grants	Low	2025	In progress: no measurable progress due to lack of funding.
P-8	Create a process and infrastructure to backup documents and records on town computers.	All Hazards	High	Town Manager Town Staff	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.
Property Protection								
PP-1	Provide backup power at critical facilities such as lift stations.	All Hazards	Moderate	Town Manager, Town Council	Grants	Medium	2025	New
PP-2	Acquire or elevate flood prone properties.	Flood	Moderate	Town Manager, Town Council	Grants	High	2025	New
Structural Projects								
SP-1	Provide a secondary means to connect the Town of Kenly water system to the Princeton-Kenly Water District.	Drought	High	Town Manager, Johnston County Director of Public Utilities	Grants	Low	2025	In progress: no measurable progress due to lack of funding.
SP-2	Improve drainage ditches and canal system in Town and other areas located in the ETJ.	Flood, Hurricane, Thunderstorm, Tornado	High	Town of Kenly, Johnston County, Wilson County	Grants	Low	2025	In progress: no measurable progress due to lack of funding.
SP-3	Water/Sewer Main Project – Upgrade and loop water mains to improve water for domestic consumption and fire protection, upgrade sewer lines to prevent infiltration of storm water into sewer system.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Manager	CDBG Grant	Low	2025	In progress: no measurable progress due to lack of funding.
SP-4	Install water main valves to grid town system in a manner to eliminate the disruption of water to the entire town during failures in the system.	Drought, Fire, Extreme Heat	High	Town Manager	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.
Emergency Services								
ES-1	Develop a Continuity of Operations Plan (COOP) for the Town of Kenly.	All Hazards	High	Town Council, Town Government	Grants	Low	2020	Complete
Public Education and Awareness								
PEA-1	On an annual basis, the FEMA repetitive loss property list will be obtained from NCEM. At that time, letters will be sent to the owners of the repetitive loss structures to notify them of their status and to offer information on	Flood, Hurricane, Thunderstorm	Moderate	GIS Analyst, Emergency Services Department	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	programs that could help.							
PEA-2	Conduct a dam/hog lagoon safety inventory. People downstream of hazardous dams/hog lagoons would be notified. Owners would be notified of ways to reduce the risk of their dams/lagoons.	Dam Failure	Low	Public Utilities Director for Johnston County	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-3	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Johnston County Planning and Inspections	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-4	Provide education materials on preparedness/mitigation measures for all-hazards and display at the Town Hall, Town Library, and Town Website.	All Hazards	Moderate	Town Staff	Local Budget	Low	2025	In progress: no measurable progress due to lack of funding.

Table 9-17: Town of Micro Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	Status 2020
Prevention								
P-1	Adopt and maintain NFIP compliance.	Flood, Hurricane, Thunderstorm	High	Town Board	Local budget	Low	2025	To be continued: The town is a participating member of the NFIP and will continue to maintain.
P-2	Improve drainage in Micro.	Flood, Hurricane, Thunderstorm	High	Town Board	Local budget, grants	Low	2025	In progress: The town is working to improve drainage throughout the town in many ways, but there are still several projects that need to be completed to improve drainage further.
P-3	Develop a burning ordinance.	Wildfire	Low	Fire Marshall, Zoning Enforcement	In house staff	Low	2025	To be continued: Review every 2 years. The county has developed a burning ordinance that is in place. This action will be removed as a capability at the next update.
P-4	Create a process and infrastructure to backup documents, forms, and utility records on town computers.	All Hazards	High	Town Staff	Local Budget	Low	2025	To be continued: Water and Sewer department has paper copies. Keeps for 5 years.
Property Protection								
PP-1	Provide for a secondary means of power for wells and sewer lift stations through the installation of appropriate electrical connections and purchase of 40 KW generator.	All Hazards	High	Town Board	Grants	Low	2025	In progress: Town has backup generator for sewer pump stations but not wells.
PP-2	Provide backup power for critical facilities.	All Hazards	High	Town Boards	Grants	High	2025	In progress: No measurable progress due to lack of funding.
Structural Projects								
SP-1	Upsize culvert located on CSX Railroad right-of-way to handle storm water drainage from the new North Johnston Middle School.	Flood, Hurricane, Thunderstorm, Tornado	High	Town Board, CSX Railroad	CSX Railroad	Low	2025	In progress: No communications with csx.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	Status 2020
SP-2	Provide a means to connect the Town of Micro water distribution system to the Johnston County water system on US Highway 301 near North Johnston High School.	Drought, Wildfire, Extreme Heat	High	Town Board, Johnston County	Grants	Low	2025	In progress: No measurable progress due to lack of funding.
Public Education and Awareness								
PEA-1	On an annual basis, the FEMA repetitive loss property list will be obtained from NCEM. At that time, letters will be sent to the owners of the repetitive loss structures to notify them of their status and to offer information on programs that could help.	Flood, Hurricane, Thunderstorm	Moderate	GIS Application Analyst, Emergency Services Coordinator	In house staff	Low	2025	In progress: The town currently has an up to date repetitive loss list and it will annually work to update that list and attempt to encourage property owners to take action to mitigate.
PEA-2	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	In progress: The town will work to develop a brochure concerning wind proofing methods and will offer help from the Inspections Department.
PEA-3	Provide education materials on preparedness/mitigation measures for all hazards and display at the Town Hall, and Town Website.	All Hazards	Moderate	Town Staff	Local Budget	Low	2025	In progress. No measurable progress due to lack of funding.

Table 9-18: Town of Pine Level Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Adopt a flood ordinance that is more restrictive on construction within a 100-year flood zone.	Flood, Hurricane, Thunderstorm	High	Zoning Administrator, Board of Commissioners	In house staff	Low	2025	The town has adopted an ordinance that is more restrictive on construction within the 100- year flood zone. This action will be removed from the next update as a capability.
P-2	Incorporate inspection and management of hazardous trees into the Town's systematic inspection process of public facilities and utilities.	All Hazards	High	Zoning Administrator	Town	Low	2025	To be continued: Annual updates. The town has incorporated the evaluation of hazardous trees into its inspection process, but this process will need to be reviewed and updated annually so this action will remain in the plan.
Property Protection								
PP-1	Develop a systematic inspection process of the Town's public facilities and utilities to prevent or minimize potential damage.	All Hazards	High	Director of Public Works	Town	Low	2025	To be continued: Update annually. The town has developed a systematic inspection process for its public utilities, but this process will need to be carried out, reviewed, and updated on at least an annual basis, so it will remain in the plan.
PP-2	Improve drainage in Southern part of town based on Comprehensive drainage study	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	Low	2025	To be continued: occurs annually.
PP-3	Provide backup power for critical facilities.	All Hazards	High	Public Works	Operating Budget, Federal/State	High	2025	New

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
					Grants			
Structural Projects								
SP-1	Upgrade lift station located on the East Side due to its location being in a low point in the flood plain.	Flood, Hurricane, Tornado, Thunderstorm	Moderate	Public Works	Federal/State Grants	Low	2025	In progress: Will be upgraded during the water and sewer project to be completed by 2021.
Public Education and Awareness								
PEA-1	Increase public awareness of risk and mitigation measures for all hazards available through a series of informative news articles.	All Hazards	Low	Zoning Administrator, Town Clerk	Town	Low	2025	To be continued: Updated annually. In the past, the town has developed and published articles on risks and mitigation for its citizens, but the town is planning to continue this process by developing these articles at least annually.
PEA-2	On an annual basis, the FEMA repetitive loss property list will be obtained from NCEM. At that time, letters will be sent to the owners of the repetitive loss structures to notify them of their status and to offer information on programs that could help.	Flood, Hurricane, Thunderstorm	Moderate	GIS Application Analyst, Emergency Services Coordinator	In house staff	Low	2025	To be continued: Updated annually. The town will annually update its repetitive loss list and, will continue to attempt the property owners to institute mitigation.
PEA-3	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	To be continued: The town will work to develop a brochure concerning wind proofing methods and will offer help from the Inspections Department.

Table 9-19: Town of Princeton Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Cost Estimate	Potential Funding Sources	Implementation Schedule	2020 Status
Prevention								
P-1	Maintain Moccasin Creek and right away from erosion.	Flood, Hurricane, Tornado, Thunderstorm	Moderate	Public Works	High	Operating Budget	2025	Permitting nearing completion. Expect bids in Fall 2020 with completion Fall 2021.
P-2	Maintain right of way for water and sewer lines.	Hurricane, Tornado, Thunderstorm, Winter Storm	High	Public Works	Low	Operating Budget	2025	To be continued: occurs on a regular as needed basis.
P-3	Maintain a list of contractors to assist town in emergencies.	All Hazards	Moderate	Administration	Low	Local	2025	To be continued: list is updated as needed.
P-4	Maintain town ordinances, policies, and procedures for the Town of Princeton on their website.	All Hazards	High	Administration	Low	In house staff, grants	2025	To be continued: ordinances updated as needed.
Property Protection								
PP-1	Conduct annual smoke testing of existing sewer lines. 10% of lines to be tested	Flood, Hurricane, Tornado,	High	Public Works	Low	Operating Budget, Federal/State grants	2025	To be continued: testing occurs annually.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Cost Estimate	Potential Funding Sources	Implementation Schedule	2020 Status
	annually.	Thunderstorm						
PP-2	Install auxiliary power generators at all sewage lift stations.	All Hazards	High	Water and Sewer Commission, Mayor	Medium	Federal, State, Local	2025	To be continued: Generators are exercised and maintained on a regular schedule.
PP-3	Install stationary 75kw generator for Town Hall.	All Hazards	High	Public Works	Medium	Federal/State grants	2025	In progress: no measurable progress due to lack of funding.
PP-4	Provide backup power at critical facilities.	All Hazards	High	Administration	High	Federal/State grants	2025	New
Structural Projects								
SP-1	Upgrade existing manual bar screen with an automatic bar screen at Wastewater Treatment Facility.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	High	Federal/State grants	2025	In progress: Project is funded. Expected to be permitted and bid in 2021.
SP-2	Upgrade grit removal system at Wastewater Treatment Plan.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	High	Operating budget, Federal/State grants	2025	In progress: Project is funded. Expected to be permitted and bid in 2021.
Emergency Services								
ES-1	Maintain a system at Town Hall for identifying towns' special needs citizens within the Princeton area.	All Hazards	High	Police Department, Administration	Low	Local	2025	In progress: no measurable progress due to lack of funding.
ES-2	Provide warning communications to citizens for all hazards.	All Hazards	High	Police Department, Administration	High	Grants	2025	New
Public Education and Awareness								
PEA-1	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	Low	Federal, State, Local	2025	To be continued: Johnston County is currently handling building inspections and providing this information.
PEA-2	Educate public on all potential natural disasters by maintaining town's website to include links to ReadyNC.org and FEMA – www.dhs.gov/ready.	All Hazards	Moderate	Town Administration	Medium	Federal, State, Local, Operating Budget	2025	In progress: no measurable progress due to lack of funding.

Table 9-20: Town of Selma Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Update Town Development Code with latest hazard mitigation measures; revise floodplain	All Hazards	High	Planning and Inspections	Local	Low	2025	In progress: no measurable progress due to lack funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	and stormwater regulations.							
P-2	Incorporate latest NC Building Code regulations.	All Hazards	Moderate	Planning and Inspections, Administration	Local	Low	2025	To be continued: will update as necessary.
P-3	Provide Cloud access for government software and date.	All	High	Administration	Local	Low	2019	Completed
P-4	Develop a fuel back up plan.	All Hazards	High	Public works, Fire	Local	Low	2025	In progress: no measurable progress due to lack funding.
P-5	Maintain a list of contractors to assist in town emergency recovery.	All Hazards	High	Public Works	Local	Low	2025	To be continued: will update as necessary.
P-6	Improve Storm water drainage.	All Hazards	High	Public Works	Local	High	2025	In progress: no measurable progress due to lack funding.
P-7	Complete storm water GIS mapping project.	All Hazards	High	Public Works	Local, State, Federal	Medium	2025	In progress: no measurable progress due to lack funding.
P-8	Complete sewer inspection to eliminate INI.	Flooding	High	Public Works	Local,	High	2025	In progress: no measurable progress due to lack funding.
Property Protection								
PP-1	Install emergency power back up to all critical facilities.	All Hazards	High	Administration	Local, State, Federal	High	2025	In progress: no measurable progress due to lack funding.
Natural Resource Protection								
NRP-1	Install emergency power back up to critical wells and lift stations.	All Hazards	High	Administration	Local	High	2019	In progress: no measurable progress due to lack of funding.
Structural Projects								
SP-1	Incorporate an EOC into the Town Hall.	Natural disaster	Moderate	Administration	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
SP-2	Improve drainage ditches and canal system in areas outside of the incorporated area.	Flooding	High	Public works	Local	High	2025	In progress: no measurable progress due to lack of funding.
Emergency Services								
ES-1	Increase staff of the Fire Department to meet NFPA 1710.	All Hazards	High	Fire	Local, State	High	2025	In progress: 80% complete.
ES-2	Develop the Fire Department Training room into an EOC by adding data, and phone lines.	Natural Disaster	Moderate	Fire, Police	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-3	Develop a list of special needs citizens in need of assistance during a disaster.	All Hazards	High	Fire, Police	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-4	Develop and exercise the towns emergency plan annually with all departments.	All Hazards	High	Fire	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-4	Develop a shelter plan for the Town.	All Hazards	High	Fire, Police	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
ES-6	Purchase a mobile Command Center.	All Hazards	Moderate	Police	Local, State, Federal	High	2025	In progress: no measurable progress due to lack of funding.
Public Education and Awareness								
PEA-1	Advertise and promote the availability of flood insurance to town residents and property owners by including such	Flood	Moderate	Planning and Inspections, Administration	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	information in the Town's water billing at least once a year.							
PEA-2	Collect education materials on preparedness/mitigation measures for all hazards and display at both the Town Hall and Town Library.	All Hazards	Moderate	Planning and Inspections, Administration	Local, State, Federal	Low	2025, Annually	In progress: no measurable progress due to lack of funding.

Table 9-21: Town of Smithfield Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Complete storm water GIS mapping project, with elevations showing where deficiencies exist in the storm water system.	Flood, Hurricane, Thunderstorm	High	Director of Public Works	General fund budget	Medium	2025	In progress: no measurable progress due to lack of funding and due to past budget constraints.
P-2	The development of a Continuity of Operations Plan (COOP) for the Town of Smithfield.	All Hazards	High	Emergency Services Director, Town Manager	Grant	Medium	2025	The Town of Smithfield adopts the County's COOP which was update last year.
Property Protection								
PP-1	Install generators to at least two, possibly three, critical sewer lift stations within the Town of Smithfield.	All Hazards	High	Director of Public Works	Annual budget (appropriations from utility fund)	High	2025	In progress: 15 of 19 Town lift stations are equipped with Generators. Two of the 4 without generators have "overflow" lines.
PP-2	Provide backup power to critical facilities.	All Hazards	High	Director of Public Works	Grants	High	2025	New
Structural Projects								
SP-1	Complete the Spring Branch Wetlands Restoration Project in order to improve the quality of stormwater runoff before it enters the Neuse River.	Flood, Hurricane, Thunderstorm	Moderate	Public Works Director	Local Funding, Grants	High	2025	In progress: The wetland facility was restored in 2019 and a grant has been applied for to do additional work. They also received grant funding for a constructed wetland and stream bank restoration project along the Spring Branch to be completed in 2022
SP-2	Eliminate Lift Station #3 and convert to a gravity sewer line.	Flood, Hurricane, Thunderstorm	High	Public Works Director	Local Funding, Utility Fund Budget	High	2016	Delete: Lift Station #3 was completely rebuilt (2016) and operates "like new". Removing this asset from the system is not feasible.
Public Education and Awareness								
PEA-1	On an annual basis, the FEMA repetitive loss property list will be obtained from NCEM. At that time, letters	Flood, Hurricane, Thunderstorm	Moderate	GIS Application Analyst, Emergency Services	In house staff	Low	2025, Annual review and update	To be continued: reviewed annually and updated as necessary.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
	will be sent to the owners of the repetitive loss structures to notify them of their status and to offer information on programs that could help.			Coordinator				
PEA-2	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	To be continued: Town staff will work together to develop a brochure.
PEA-3	Update and maintain educational information and links on website for the public to access in order to stay informed on all-natural hazard risks and mitigation techniques.	All Hazards	Low	Town Administration	In house staff	Low	2025, Annual review and update	To be continued: The Town of Smithfield will link to the County's website or educational information

Table 9-22: Town of Wilson's Mills Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Adopt NFIP.	Flood, Hurricane, Thunderstorm	High	Town staff	Local budget	Low	2025	In progress: no measurable progress due to lack of funding.
P-2	Improve drainage in Wilson's Mills.	Flood, Hurricane, Thunderstorm	Moderate	Town staff	Grants, local budget	Low	2025	In progress: no measurable progress due to lack of funding.
P-3	Maintain all utility rights-of-way by trimming trees around power lines and maintain right-of-way of water/sewer lines.	All Hazards	High	Public Works/ Duke Energy	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.
P-4	Maintain a list of contractors to assist town in emergencies.	All Hazards	Moderate	Administration	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.
P-5	Digitize copies of town ordinances, polices, and procedures.	All Hazards	High	Administration and Town Council	Local, Grants	Low	2025	In progress: no measurable progress due to lack of funding.
Property Protection								
PP-1	Work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the County & Town limits in particular. The goal of this effort will be to provide the pertinent agencies with better information regarding river water levels.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	Low	2025	In progress: no measurable progress due to lack of funding.
PP-2	Subsequent to the establishment of additional stream gauges as noted above, establish a working group including all individuals charged with floodplain and dam management within the County.	Flood, Hurricane, Tornado, Thunderstorm	High	Public Works	Operating Budget, Federal/State Grants	Low	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PP-3	Install generators to sewer pumps.	All Hazards	High	Public Works	Operating Budget, Federal/State Grants	Low	2025	In progress: no measurable progress due to lack of funding.
PP-4	Provide backup power to critical facilities.	All Hazards	High	Public Works	Operating Budget, Federal/State Grants	Medium	2025	New
				Natural Resource Protection				
NRP-1	When appropriate, continue accepting dedication of open space within all new major subdivisions, especially when environmentally sensitive areas are present.	Flood, Hurricane, Thunderstorm, Tornado	High	Planning	Local	Low	2025	In progress: no measurable progress due to lack of funding.
NRP-2	Continue ensuring that new developments have adequate hydrants per the Town development ordinances.	Flood, Hurricane, Tornado, Thunderstorm	High	Planning	Local	Low	2025	In progress: no measurable progress due to lack of funding.
				Emergency Services				
ES-1	Maintain a system for identifying special needs citizens in the town.	All Hazards	High	Police Department, Administration	Local	Low	2025	
ES-2	Establishment of additional Community Emergency Response Teams (CERT). This effort will so address the ongoing training and support of the eleven teams currently operating within the County.	All Hazards	Moderate	Administration/ Police	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-3	Utilize the Town's Blackboard Connect system to notify Town residents and business owners regarding natural and man-made hazard events. Town residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All Hazards	Moderate	Administration	Local	Low	2025	In progress: no measurable progress due to lack of funding.
				Public Education and Awareness				
PEA-1	Develop and print a brochure outlining wind proofing methods above and beyond Code. This will be offered in the Inspections Department receptionist area.	Hurricane, Thunderstorm, Tornado	Low	Steven Finn (Planning and Inspections Director)	In house staff	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-2	Maintain town's website to include links to ReadyNC.org and FEMA – www. dhs.gov/ready.	All Hazards	Moderate	Administration	In house	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-3	Conduct research activities aimed at educating business owners about how to address the issue of continuity of operations in the face of all natural and man-made disasters, since following a disaster, the reopening of commercial operations is critical to recovery efforts.	All Hazards	Moderate	Planning	Local	Low	2025, After disaster events	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
PEA-4	Advertise and promote the availability of flood insurance to town residents and property owners by including such information on the Town website as well as through a Blackboard Connect message.	Flood, Hurricane, Thunderstorm	Moderate	Planning	Local	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.
PEA-5	Information regarding fire prevention and safe burning practices will be available the Town Hall & published on the town website.	Wildfire	Moderate	Administration/ Planning	Local	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.
PEA-6	Update and maintain educational information and links on website for the public to access in order to stay informed on all-natural hazard risks and mitigation techniques.	All Hazards	Low	Town Administration	In house staff	Low	2025, Annual review and update	To be continued: The Town will link to the County's website or edu information

Table 9-23: Lee County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Incorporate digital floodplain and topographic data into automated permit database/system and Geographic Information System data layer inventory.	Flood	High	Community Development, GIS	Local, State	Low	2018	Completed
P-2	Evaluate flood damage potential of electric utility, water and sewer distribution systems.	Flood	High	Public Works, Utilities	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-3	Increase jurisdiction's classification in the NFIP Community Rating System.	Flood	High	Emergency Management, Community Development	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-4	Develop comprehensive open space/reuse plan to support floodplain acquisition initiatives and recreational opportunities by acquiring structures in the floodplain.	Flood	High	Community Development	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-5	Evaluate clear cutting and building in the floodplain.	Flood	High	Forest Service, UDO	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-6	Evaluate flood damage potential of transportation infrastructure.	Flood	High	GIS, Engineering	Local		2018	Completed
P-7	Identify high hazard dams on waterways that drain through county.	Dam Failure, Flood	High	DOT, Public Works	Local		2018	Completed
P-8	Obtain and maintain North Carolina Certified Floodplain Manager status.	Flood	High	Community Development	Local	Low	2025	To be continued: The county has continually worked to maintain a certified floodplain manager on staff and will continue to do so going forward. This action has been completed and will be removed from the

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
								next update as a capability.
P-9	Standardize procedures for handling certain post-damage permit processing procedures.	All Hazards	High	Community Development, Inspections	Local	Low	2025	To be continued: Standardized procedures for handling post-disaster damage permitting have not been established in full and current procedures need to be reviewed and updated.
P-10	Implement stronger building codes that recognize the importance of preparing new homes and businesses for wind events.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado	High	Community Development	Local	Low	2025	To be continued: Stronger building codes for new structures to resist damage from wind events have not been implemented. Higher standards will need to be developed and evaluated to determine which should be implemented.
Property Protection								
PP-1	Work to improve individual homes and businesses in terms of their resistance to wind event.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado	High	Community Development	Local	Low	2025	To be continued: Public education efforts have been undertaken to try to encourage property owners to improve the resistance of structures to wind, however, more outreach is still necessary to try to improve other existing buildings that have not implemented stronger wind protection measures.
PP-2	Provide backup power for critical facilities.	All Hazards	High	Community Development	Local/Federal	High	2025	New
Emergency Services								
Public Education and Awareness								
PEA-1	Develop and implement multi-year public awareness campaign concerning hazard mitigation for all hazards.	All Hazards	High	Emergency Management	Local	Low	2025	To be continued: The county has developed and implemented a public awareness campaign that addresses hazard mitigation. However, this campaign will need to be re-evaluated and continually implemented to ensure the public is informed with up to date hazard information. Therefore, this action will remain in the plan and be evaluated and reviewed annually.
	Improve pre-disaster flood warning and public safety.	Flood	High	San Lee Park	Local	Low	2016	Complete
	Identify hazardous materials handlers/waste sites in the mapped floodplain.	Hazardous Materials, Flood	High	GIS	Local	Low	2016	Complete

Table 9-24: Town of Broadway Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Cost Estimate	Potential Funding Sources	Implementation Schedule	2020 Status
Prevention								
P-1	Incorporate digital floodplain and topographic data into automated permit database/system and Geographic Information System data layer inventory.	Flood	High	Community Development, GIS	High	Local, State	2025	To be continued: incorporating digital floodplain and topographic data into automated permit database

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Cost Estimate	Potential Funding Sources	Implementation Schedule	2020 Status
P-2	Evaluate flood damage potential of electric utility, water and sewer distribution systems.	Flood	High	Public Works, Utilities	High	Local	2025	To be continued: evaluating flood damage
P-3	Increase jurisdiction's classification in the NFIP Community Rating System.	Flood	High	Emergency Management, Community Development	High	Local	2025	To be continued: increasing jurisdiction's classification in NFIP CRS
P-4	Develop comprehensive open space/reuse plan to support floodplain acquisition initiatives and recreational opportunities by acquiring structures in the floodplain.	Flood	High	Community Development	Moderate	Local	2025	To be continued: developing comprehensive open space/re-use plan
P-5	Evaluate clear cutting and building in the floodplain.	Flood	High	Forest Service, UDO	Moderate	Local	2025	To be continued: evaluating clear cutting and building in floodplain
P-6	Obtain and maintain North Carolina Certified Floodplain Manager status.	Flood	High	Community Development	High	Local	2025	To be continued: maintaining North Carolina CFM status
P-7	Standardize procedures for handling certain post-damage permit processing procedures.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado, Drought, Severe Heat, Wildfire, Dam Failure	High	Community Development, Inspections	Moderate	Local	2025	To be continued: standardizing procedures for handling post-damage permit processing
P-8	Implement stronger building codes that recognize the importance of preparing new homes and businesses for wind events.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado	High	Community Development	High	Local	2025	To be continued: implementing stronger building codes
Property Protection								
PP-1	Work to improve individual homes and businesses in terms of their resistance to wind event.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado	High	Community Development	High	Local	2025	To be continued: working to improve homes and businesses
PP-2	Provide backup power for critical facilities.	All Hazards	High	Harnett County Planning Department	Local/State/Federal	High	2025	New
Emergency Services								
Public Education and Awareness								
PEA-1	Develop and implement multi-year public awareness campaign concerning hazard mitigation.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado, Drought, Severe Heat, Wildfire, Dam Failure	High	Emergency Management	High	Local	2025	To be continued: developing and implanting multi-year public awareness campaign
PEA-2	Provide citizens with educational materials regarding the mitigation of all hazard through a variety of mediums.	All Hazards	Moderate	Administration	Operating budget, Federal/state grants	Medium	2025	New

Table 9-25: City of Sanford Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
Prevention								
P-1	Incorporate digital floodplain and topographic data into automated permit database/system and Geographic Information System data layer inventory.	Flood	High	Community Development, GIS	Local, State	Medium	Completed	Completed
P-2	Evaluate flood damage potential of electric utility, water and sewer distribution systems.	Flood	High	Public Works, Utilities	Local	Low	2025	To be continued: evaluating potential flood damage of electric, water, and sewer systems
P-3	Increase jurisdiction's classification in the NFIP Community Rating System.	Flood	High	Emergency Management, Community Development	Local	Low	2025	To be continued: increasing jurisdiction's classification in NFIP CRS
P-4	Develop comprehensive open space/reuse plan to support floodplain acquisition initiatives and recreational opportunities by acquiring structures in the floodplain.	Flood	High	Community Development	Local	Low	2025	To Be Continued: The county is in the process of developing an open space/reuse plan to support floodplain acquisition initiatives, so this action has not been completed and will require additional work in the future.
P-5	Evaluate clear cutting and building in the floodplain.	Flood	High	Forest Service, UDO	Local	Low	2025	To be continued: An in-depth evaluation of clear cutting and building in the floodplain has not been carried out. Additional coordination with the Forest Service is likely required in order to complete this action.
P-6	Obtain and maintain North Carolina Certified Floodplain Manager status.	Flood	High	Community Development	Local	Low	2025	To be continued: The county has continually worked to maintain a certified floodplain manager on staff and will continue to do so going forward. This action has been completed and will be removed from the next update as a capability.
P-7	Standardize procedures for handling certain post-damage permit processing procedures.	All Hazards	High	Community Development, Inspections	Local	Low	2025	To be continued: Standardized procedures for handling post-disaster damage permitting have not been established in full and current procedures need to be reviewed and updated.
P-8	Implement stronger building codes that recognize the importance of preparing new homes and businesses for wind events.	Thunderstorm, Flood, Winter Storm/Freeze, Hurricane, Severe Storm, Tornado	High	Community Development	Local	Low	2025	To be continued: Stronger building codes for new structures to resist damage from wind events have not been implemented. Higher standards will need to be developed and evaluated to determine which should be implemented.
Property Protection								
PP-1	Incorporate digital floodplain and topographic data into automated permit database/system and Geographic Information System data layer inventory.	Flood	High	Community Development, GIS	Local, State, Federal	Low	2025	To be continued: Digital floodplain and topographic data have been incorporated into the automated permit system and GIS data layer. This action is completed and will be removed as a capability during the next update.
PP-2	Provide backup power for critical facilities.	All Hazards	High	City	Local, State, Federal	High	2025	New
Emergency Services								
Public Education and Awareness								
PEA-1	Develop and implement multi-year public awareness campaign concerning hazard mitigation for all hazards.	All Hazards	High	Emergency Management	Local	Low	2025	To be continued: In conjunction with the towns, the county has developed and implemented a public awareness campaign that addresses hazard mitigation. However, this campaign will need to be re-evaluated and continually implemented to ensure the public is informed with up to date hazard information. Therefore, this

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Implementation Schedule	2020 Status
								action will remain in the plan and be evaluated and reviewed annually.

Table 9-26: Moore County Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	High, Local Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC	All Hazards	High	Moore County Office of Planning and	Local, NC DENR	High, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	State Building Code.			Community Development				
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	High, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation for all hazards.	All Hazards	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract for all hazards. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: The County has decided to not pursue the plan
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all hazards are minimized.	All Hazards, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing	Man-made	Low	Moore County Office of Planning and Community	Local	Staff Time	2019	Delete

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.			Development, the administrative staffs of all participating jurisdictions				
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP, Local	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence properties were identified.
P-18	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Village of Whispering Pines, Village of Pinehurst, Town of Vass, Town of Taylortown, Town of Robbins, Town of Southern Pines, Town of Pinebluff, Town of Cameron, Town of Carthage, Town of Aberdeen, Foxfire Village	Local, State	Medium	2025	In progress: no measurable progress due to lack of funding.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence applications were secured.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Village of Whispering Pines, Village of Pinehurst, Town of Vass, Town of Taylortown, Town of Robbins, Town of Southern Pines, Town of Pinebluff, Town of Cameron, Town of Carthage, Town of Aberdeen,	HMGP, Local, State, Federal	High	2025	New

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
				Foxfire Village				
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2019	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development, Jurisdiction	Local	Low, Staff Time	2025, Annual review and update	To be continued: The county will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the County's existing emergency notification system, and improve upon the accuracy and effectiveness of this system when feasible for all hazards	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	lead contact (as listed in the EOP) for each municipality.							
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All Hazards	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan.	All Hazards	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.							
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All Hazards	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	Completed	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness and hazard mitigation of all hazards and business owners about	All Hazards	Moderate	Moore County, Village of Whispering Pines, Village of Pinehurst,	Local, Federal, State	Medium	2025	New

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	addressing the issue of continuity of operations in the face of natural and man-made disasters.			Town of Vass, Town of Taylortown, Town of Robbins, Town of Southern Pines, Town of Pinebluff, Town of Cameron, Town of Carthage, Town of Aberdeen, Foxfire Village				

Table 9-27: Town of Aberdeen Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
				Prevention				
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction. The goal of this effort will be to provide the jurisdictions with better information regarding riverine water levels.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	Low	2025	In progress: NCEM has agreed to place three (3) flood gauges in Mo County via a Hazard Mitigation Grant. The site visits have been cor but the equipment has not been installed.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure	Moderate	Moore County Public Safety Department	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-3	Moore County Planning and Inspections, with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Low	2025	In progress: no measurable progress due to lack of funding.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-5	Moore County, as well as all participating	Flood, Hurricane,	High	Moore County Office of	Local	Low	2018	Complete.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	jurisdictions, will continue to support implementation of NC State stormwater regulations.	Dam Failure		Planning and Community Development				
P-6	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Low	2018	Completed
P-7	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Low	2025, Annually	In progress: no measurable progress due to lack of funding.
P-8	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Low	2018	Completed
P-9	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-10	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-11	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Low	2018	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development, Jurisdiction	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-13	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All Hazards	High	Moore County Public Safety Department	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-14	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg	All Hazards	High	Moore County Office of Planning and Community	Local, State	Low	2015, quarterly	Deleted: no longer deemed a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	are managed and that all associated hazards are minimized.			Development				
P-15	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-16	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP, Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-17	Implement at least one of the three stormwater BMP's identified through the Town's existing comprehensive stormwater mapping project.	Flood	High	Town Planning Director	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-18	Promote floodplain mapping of the Ray's Mill Pond (Pee Dee Lake) and Creek system).	Flood	High	Town Planning Director	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-19	Incorporate dam maintenance into the CIP. This task should be coordinated with County efforts.	Dam Failure	High	Town Planning Director	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-20	Revise Land Development Plan goals, objectives, and policies to address natural resource protection, hazard mitigation, and rail corridor protection.	All Hazards	High	Town Planning Director	Local, State, Federal	Low	2025	In progress: no measurable progress due to lack of funding.
P-21	Continue to show improvement and maintain ISO audit ratings of building inspections and the fire department at the highest levels possible with available funding.	All Hazards	High	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
P-22	Promote use of freeboard for construction of projects adjacent to floodplain boundaries.	Flood	High	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
				Property Protection				
PP-1	Moore County will work with residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local, HMA	Low	2025	In progress: no measurable progress due to lack of funding.
PP-2	Seek funding to relocate the repetitively flooded Rescue building located downstream of the Aberdeen Lake Dam.	Flood, Hurricane, Dam Failure	High	Town Planning Director	Local, Grants	Low	2025	In progress: no measurable progress due to lack of funding.
PP-3	Identify any sewer manholes within flood prone areas that require flood proofing.	Flood, Hurricane, Dam Failure	Moderate	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
PP-4	Investigate the feasibility and cost of floodproofing manholes within flood prone areas.	Flood, Hurricane, Dam Failure	Moderate	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
PP-5	Acquire or elevate flood prone properties.	Flood, Hurricane,	High	Town Planning Director	Local	Low	2015	New

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
		Dam Failure						
PP-6	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	All Hazards	High	Moore County Emergency Management, Public Utilities	HMGP	Low	2025	In progress: no measurable progress due to lack of funding.
				Natural Resource Protection				
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the jurisdiction that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Low	2025	In progress: no measurable progress due to lack of funding.
NRP-2	Add ½ mile of greenway trail to serve as a buffer to Aberdeen Lake Park.	Flood	Moderate	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
				Structural Projects				
SP-1	Moore County will monitor all areas identified as local drainage “hot spots” within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have “shovel-ready” to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Low	2021	Delete: Redundant
				Emergency Services				
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Low	2025	In progress: no measurable progress due to lack of funding.
ES-3	Moore County Public Safety will continue to utilize the existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annual review and update	To be continued: jurisdiction working with county to improve mass
ES-4	Moore County Public Safety will exercise the County’s EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, After a disaster	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	(as listed in the EOP) for each municipality.							
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annually exercise EOP	In progress: no measurable progress due to lack of funding.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annually review and update	In progress: no measurable progress due to lack of funding.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The jurisdiction will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-9	Moore County and the jurisdiction will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events.	All Hazards	Moderate	Moore County Public Safety Department	Local	Low	2025	To be continued: Utilize in advance of disaster event. Residents sho rely on this system in taking preparedness measures. The first line communication should come through a NOAA weather radio syste
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Utilize in advance of disaster event	In progress: no measurable progress due to lack of funding.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort	All Hazards	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	will require grant assistance.							
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All Hazards	Low	Moore County Public Safety Department	Local	Low	2025	In progress: no measurable progress due to lack of funding.
ES-14	Incorporate the Emergency Evacuation Limits of intermediate to high hazard dams onto maps in use in Town hall, Police, and Fire Departments. Notify all potentially affected property owners.	Dam Failure	Moderate	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
				Public Education and Awareness				
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing residents and business owners with information relating to emergency preparedness, mitigation and response for all hazards.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Bi-annually	In progress: no measurable progress due to lack of funding.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of all natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Annual review and update	In progress: no measurable progress due to lack of funding.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Bi-annually	In progress: no measurable progress due to lack of funding.
PEA-4	Moore County will work to establish the planning team as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the planning team will meet quarterly.	All Hazards	High	Moore County Public Safety Department	Local	Low	2025, Quarterly	In progress: no measurable progress due to lack of funding.
PEA-5	Members of the planning team will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All Hazards	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.
PEA-6	The planning team member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local	All Hazards	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Low	2025, Annually	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.							
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Low	2018	Completed
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Low	2017	Completed.
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-11	Ensure adequate notification of parties potentially affected by revisions to floodplain boundaries as a result of NCDOT road improvement projects.	Flood	Moderate	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Provide in-house training for Public Works administrators to ensure compliance of public infrastructure installation with the FDPO.	Flood	Low	Town Planning Director	Local	Low	2025	In progress: no measurable progress due to lack of funding.

Table 9-28: Town of Cameron Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	Local	Medium, Local Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department, V	Local, NC DENR	Staff Time	2015/2016	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development, V	Local, NC DENR	High, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development, V	Local	High, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and	Local	Low, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	maintaining the Community Rating System program.			Community Development, Jurisdiction				
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development, Jurisdiction	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: has decided to not pursue the plan.
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: this action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2021	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence applications were secured.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	relocation of repetitive loss properties.							
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Cameron	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Low, Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department, Jurisdiction	Local, NCEM	Moderate, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Moderate, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
								distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2019	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Town of Cameron	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-29: Town of Carthage Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	aimed at reducing the downstream effects of future development.							
P-5	Moore County, as well as all participating jurisdictions, will support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2019	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ.
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years.
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris	All	High	Moore County Public Safety Department	Local	Staff Time	2020	Delete: The County has decided to not pursue the plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.							
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2021	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Moderate	2025	To be continued: during the Hurricane Matthew and Hurricane Florence properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Moderate	2025	To be continued: during the Hurricane Matthew and Hurricane Florence Hazard Mitigation projects were applied for.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Carthage	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local, HMGP, EMPG	High, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	High, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the County's existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	High, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.							
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected	All	High	Moore County Public Safety Department, Moore County Office	Local	Staff Time	2015, Annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	bodies through established standard reporting mechanisms.			of Planning and Community Development				
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	Completed	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of	All Hazards	Moderate	Moore County, Town of Carthage	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	natural and man-made disasters.							
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Town of Carthage	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-30: Foxfire Village Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	High, Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	High, Staff Time	2025	To be continued: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-7	Moore County will address the issue of	Flood, Hurricane,	High	Moore County Office of	Local	Staff Time	Completed	Completed

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Dam Failure		Planning and Community Development				
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ.
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	Delete	Delete: The County has decided to not pursue the plan
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base	All, Man-made	High	Moore County Office of Planning and Community	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	and Fort Bragg are managed and that all associated hazards are minimized.			Development				
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2019	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning, Jurisdiction	HMGP	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium	2025	To be continued: during the Hurricane Matthew and Hurricane Florence applications were identified.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Foxfire Village	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.							
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2019	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Low, Staff Time	2025	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Foxfire Village	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Foxfire Village	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-31: Town of Pinebluff Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.							
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure, Flood	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the	All	High	Moore County Office	Local	Staff Time	2017	Completed

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.			of Planning and Community Development				
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: The County has decided to not pursue the plan
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2019	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2021	Delete: action not a priority.
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence Hazard Mitigation projects many properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium, Staff Time	2025	To be continued: submitted applications during the Hurricane Matthew and Hurricane Florence for hazard mitigation projects.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or	All Hazards	Moderate	Moore County, Town of Pinebluff,	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	purchase and install transfer switches to allow for fast hook-up of emergency generators.							
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete: Covered by SP-1 as an All Jurisdictions action item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-3	Moore County Public Safety will continue to utilize the County's existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.							
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	Operations Plan.							
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	businesses.							
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2018	Completed.
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural andownersto enroll in State and Federal land management programs to reduce	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices,	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	wildfire risks.			Cooperative Extension				
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Moore County, Town of Pinebluff,	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Town of Pinebluff,	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-32: Village of Pinehurst Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium, Local Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure,	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	future development.							
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed.
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed.
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years.
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed.
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: The County has decided to not pursue the plan.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	streamline the process of securing reimbursement and grant funds following a disaster.							
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2017	Delete.
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning, Jurisdiction	HMGP	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence applications were identified.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Pinebluff	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where	Flood, Hurricane	High	Emergency	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.			Management Departments, NCDOT				
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-3	Moore County Public Safety will continue to utilize the existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods.
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.							
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	issues should be addressed by all participating jurisdictions as deemed necessary.							
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2018	Completed.
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2017	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Town of Pinebluff	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Town of Pinebluff	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-33: Town of Robbins Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium, Local Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Medium	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	Delete	Delete: The County has decided to not pursue the plan.
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2018	Delete: action not a priority.
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning, Jurisdiction	HMGP	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence some properties were identified.
Property Protection								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence some applications were identified.
PP-2	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	All Hazards	High	Moore County Emergency Management, Public Utilities	HMGP	High	2025	In progress: no measurable progress due to lack of funding.
PP-3	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Robbins	HMGP, Local	High	2025	In progress: no measurable progress due to lack of funding
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage “hot spots” within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have “shovel-ready” to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
ES-2	Moore County Public Safety will continue to utilize the County's existing emergency notification system, and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.						event	
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	Completed	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about	All Hazards	Moderate	Moore County, Town of Robbins	Local, State, Federal	High	2025	In progress: no measurable progress due to lack of funding.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	addressing the issue of continuity of operations in the face of all natural and man-made disasters.							

Table 9-34: Town of Southern Pines Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department, Jurisdiction	Local, NC DENR	Medium, Staff Time	2015/2016	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2019	Completed

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In Progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2018	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	Delete	Delete: The County has decided to not pursue the plan.
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	minimized.							
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	Deleted	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence some properties were identified.
P-18	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Town of Southern Pines	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium, Staff Time	2025	To be continued: during the Hurricane Matthew and Hurricane Florence some applications were identified.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Southern Pines	HMGP, Local	Medium, Staff Time	2020	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where	Flood, Hurricane	High	Emergency	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.			Management Departments, NCDOT				item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-3	Moore County Public Safety will continue to utilize the County's existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.							
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	County will work to establish additional pet-friendly shelters to serve other portions of the County.							
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of	All	High	Moore County Public Safety Department, Moore County Office of Planning and	Local	Staff Time	2015, Annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.			Community Development				
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	Completed	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of all natural and man-made disasters.	All Hazards	Moderate	Moore County, Town of Southern Pines,	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-35: Town of Taylortown Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure	Moderate	Moore County Public Safety Department	Local	**High**	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2015/2016	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	participating jurisdictions requesting service.							FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2019	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: The County has decided to not pursue the plan
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2021	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase	Flood, Hurricane	High	Emergency Management,	HMGP	Medium	2025	To be continued: During the Hurricane Matthew and Hurricane Florence properties were identified.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	when HMPG funding is available.			Planning, Jurisdiction				
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium	2025	To be continued: During the Hurricane Matthew and Hurricane Florence applications were identified.
PP-2	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
PP-3	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Jurisdiction	HMGP, Local	Medium	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage “hot spots” within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have “shovel-ready” to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to	All Hazards	High	Moore County Public Safety Department	Local, NCEM	High, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	municipal staff members and elected officials.							Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the County's existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	High, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures.	All	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	The first line of communication should come through a NOAA weather radio system.							
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
PEA-3	Moore County Public Safety with the	All	High	Moore County Public	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.			Safety Department				
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2017	Completed
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas	Wildfire	Moderate	Emergency	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.			Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension				
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Jurisdiction	Local	Medium	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Jurisdiction	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

Table 9-36: Town of Vass Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Town of Vass	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels.
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Low, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is not a Public Safety project.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	Completed	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State Building Code.	All Hazards	High	Moore County Office of Planning and Community Development	Local, NC DENR	High, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	High, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Low, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency	All	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: The County has decided to not pursue the plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.							
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All Hazards, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.	Man-made	Low	Moore County Office of Planning and Community Development, the administrative staffs of all participating jurisdictions	Local	Staff Time	2021	Delete
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Medium	2025	To be continued: During the Hurricane Matthew and Hurricane Florence properties were identified.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium	2025	To be continued: During the Hurricane Matthew and Hurricane Florence properties were identified.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Town of Vass,	HMGP, Local	High	2025	In progress: no measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The jurisdiction will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events.	Flood, Hurricane	High	Emergency Management	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	(Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.			Departments, NCDOT				
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department	Local, NCEM	High, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the County's existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department	Local	High, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.							
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.	All Hazards	Moderate	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All Hazards	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: The jurisdiction has deemed this action not a priority
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All Hazards	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: The jurisdiction has deemed this action not a priority
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: The jurisdiction has deemed this action not a priority
Public Education and Awareness								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: The jurisdiction has deemed this action not a priority
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: The jurisdiction has deemed this action not a priority
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All Hazards	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the Planning Team will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All Hazards	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The Planning Team member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All Hazards	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will	Man-made,	High	Moore County Public	Local	Staff Time	Completed	Completed

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Nuclear		Safety Department				
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners to enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: The jurisdiction has deemed this action not a priority
PEA- 11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of natural and man-made disasters.	All Hazards	Moderate	Moore County, Town of Vass,	Local, State, Federal	Medium, Staff Time	2025	In progress: no measurable progress due to lack of funding.
PEA-12	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Town of Vass	Local, State, Federal	Medium, Staff Time	2025	In progress: no measurable progress due to lack of funding.

Table 9-37: Village of Whispering Pines Mitigation Action Plan

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Prevention								

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
P-1	Moore County Public Safety will work with NCEM to acquire grant funding that will be utilized to acquire and locate flood gauges strategically along watercourses impacting the jurisdiction.	Dam Failure, Flood	Moderate	Moore County Public Safety Department, Jurisdiction	HMGP	High	2025	In progress: NCEM has agreed to place three (3) flood gauges in Moore County via a Hazard Mitigation Grant. The site visits have been completed but the equipment has not been installed. The goal of this effort will be to provide the state and County with better information regarding riverine water levels. Moore County has initiated discussions with the POA of Woodlake to work on the reduction of repetitive loss to properties in the eastern part of the County. We have worked directly with the National Weather Service in an effort to seek funding from them without success. NCEM has been involved in the process throughout in an effort to seek Disaster Mitigation funding as well. Will seek funding possibilities
P-2	Subsequent to the establishment of additional stream gauges as noted above, Moore County Public Safety will convene a working group including all individuals charged with floodplain and dam management within the County. This working group will be charged with drafting a coordinated Dam Management Plan and Strategy.	Dam Failure, Flood	Moderate	Moore County Public Safety Department	Local	**Low**	2025	In progress: Moore County has initiated discussions with the POA of Woodlake to work on the reduction of repetitive loss to properties in the County. The County has worked directly with the National Weather Service in an effort to seek funding. The County continues to seek Disaster Mitigation funding, create a GIS layer naming bodies of water >25 acres and define emergency contact for the dam operations, create templates for downstream emergency notification process, hire experts to review stream flows, dam lock capacities, dam emergency action plans, blocking of primary roads by flooding affecting fire and EMS. Establish working groups and establish dam management group and develop a plan to mitigate specific hazards. No measurable progress has been made because the flood gauges have not been installed by NCEM.
P-3	Moore County with the assistance of all participating jurisdictions, will work towards the development of a vulnerability assessment to address the potential impacts of dam breaches throughout the County. This effort will aim to assess existing vulnerability, as well as mitigate future risk through informed planning efforts.	Dam Failure	Low	Moore County Public Safety Department	Local, NC DENR	Medium, Staff Time	2025	In progress: The US Army Civil Affairs group has worked on two projects over two consecutive years to map and gather emergency contact information for all the high hazards dams in Moore County.
P-4	Moore County will consider the development of stormwater regulations aimed at reducing the downstream effects of future development.	Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: This is no longer a jurisdictional priority.
P-5	Moore County, as well as all participating jurisdictions, will continue to support implementation of NC State stormwater regulations.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-7	Moore County will address the issue of drainage and stormwater management solutions within the context of the County Comprehensive Plan update.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Staff Time	2017	Completed
P-8	Moore County, as well as all participating jurisdictions, will continue to enforce the NC State	All Hazards	High	Moore County Office of	Local, NC DENR	Medium, Staff Time	2025, Annually	To be continued: Actively enforcing the International Building Code with NC amendments. Required by law.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	Building Code.			Planning and Community Development				
P-9	The Moore County Planning and Inspections Department will continue to maintain and enforce the County's Flood Damage Prevention Ordinance. The County will continue to provide this service for all participating jurisdictions requesting service.	Flood	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annually	To be continued: Continuous enforcement of the flood damage prevention provisions of the Flood Damage Prevention Ordinance as well as the new Flood Damage Prevention provisions of the Moore County Unified Development Ordinance (2/18/2014). These prevention measures are the most effective mitigation measures. FEMA RQ
P-10	Moore County will consider the establishment of a comprehensive stormwater management ordinance.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Staff Time	2015/2016	Delete: This is a repetitive action and can be deleted.
P-11	Moore County, as well as all participating jurisdictions, will consider joining and/or maintaining the Community Rating System program.	Flood, Hurricane, Dam Failure	Low	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	In progress: No measurable progress has been made in the last 5 years
P-12	Moore County will work towards the development of a Comprehensive Plan Update. This update will address a variety of issues, including open space preservation, floodplain development, sustainable development, and mitigation.	All Hazards	High	Moore County Office of Planning and Community Development	Local	Staff Time	2019	Completed
P-13	Moore County, as well as all participating jurisdictions, will continue to require elevation certificates for all development within a Special Flood Hazard Area (SFHA). All elevation certificates will be submitted on an official FEMA Elevation Certificate Form.	Flood, Hurricane, Dam Failure	High	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025	To be continued: performed as needed.
P-14	Moore County Public Safety will work with all municipalities on the establishment of a County-wide pre- disaster debris management contract. This effort will improve the efficiency of post-disaster recovery. Additionally, this effort will streamline the process of securing reimbursement and grant funds following a disaster.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2019	Delete: The County has decided to not pursue the plan
P-15	Moore County will work closely with Hoke and Cumberland Counties to ensure that all growth and expansion of Pope Air Force Base and Fort Bragg are managed and that all associated hazards are minimized.	All, Man-made	High	Moore County Office of Planning and Community Development	Local	Staff Time	2015, Quarterly review	Delete: action not a priority.
P-16	Moore County will consider the development of policy relating to the encroachment of development on the rail corridors traversing through County	Man-made	Low	Moore County Office of Planning and	Local	Staff Time	2021	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	within the County's Comprehensive Plan Update. Participating jurisdictions impacted by rail corridors will also consider the adoption of such a policy initiative.			Community Development, the administrative staffs of all participating jurisdictions				
P-17	Identify, map, and appraise repetitive loss properties and be prepared to purchase when HMPG funding is available.	Flood, Hurricane	High	Emergency Management, Planning	HMGP	Medium, Staff Time	2025	To be continued: During the Hurricane Matthew and Hurricane Florence properties were identified.
P-18	Continue monitor areas identified as hot spots where roadways flood during heavy rain events. Plan out storm water management projects with construction estimates and have ready to build when grant funds become available.	Flood Hurricane	Moderate	Moore County, Village of Whispering Pines	Local	High	2025	In progress: no measurable progress due to lack of funding.
Property Protection								
PP-1	Moore County will work with County residents on the application for Hazard Mitigation Assistance funding (HMA) for the elevation/floodproofing/acquisition/ relocation of repetitive loss properties.	Flood, Hurricane, Dam Failure	Moderate	Moore County Public Safety Department	Local, HMA	Medium, Staff Time	2025	To be continued: During the Hurricane Matthew and Hurricane Florence applications were identified.
PP-2	Purchase and install generators on critical infrastructure / key facilities; and/or purchase and install transfer switches to allow for fast hook-up of emergency generators.	All Hazards	Moderate	Moore County, Village of Whispering Pines	HMGP, Local	Medium	2025	In progress: No measurable progress due to lack of funding.
Natural Resource Protection								
NRP-1	Moore County will work closely with all local land preservation efforts and programs. These efforts will focus on land acquisition within portions of the County that are vulnerable to natural hazards.	Flood, Hurricane, Dam Failure	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
Structural Projects								
SP-1	Moore County will monitor all areas identified as local drainage "hot spots" within this plan and work towards drainage solutions where deemed feasible. The County acknowledges that not all drainage issues may be rectified; however, this plan establishes an inventory of drainage issues/concerns.	Flood, Hurricane, Dam Failure	Moderate	Moore County Office of Planning and Community Development	Local	Medium, Staff Time	2025, Annual review and update	To be continued: The county will continue to monitor hot spot areas for drainage issues and try to develop solutions where possible. However, as mentioned, drainage solutions are prevalent and may not all be able to be managed in the immediate future.
SP-2	Continue to identify and map areas where roadways flood during heavy rain events. (Midland Rd. & US Hwy #1; May Street, Southern Pines). Plan out stormwater management projects with construction estimates and have "shovel-ready" to build when grant funds become available.	Flood, Hurricane	High	Emergency Management Departments, NCDOT	HMGP, EMPG	Staff Time	2017	Delete because it is covered by SP-1 as an All Jurisdiction action item.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
Emergency Services								
ES-1	Moore County Public Safety will work to broaden efforts regarding the dissemination of information relating to natural and man-made hazard events. This effort will focus on forwarding information provided by NCEM to municipal staff members and elected officials.	All Hazards	High	Moore County Public Safety Department; Moore County, Village of Whispering Pines	Local, NCEM	Medium, Staff Time	2025	In progress: Moore County Public Safety continually updates and improves its email group list of employees, partner agencies, emergency services providers and municipalities. Look for ways to improve the POC database for each jurisdiction. Create short hard-hitting slide presentations for staff to use to educate residents and Boards as these would be helpful and used more often. Continue to refine distribution methods. Use social media, mobile apps, school administrators and principals & classrooms teachers.
ES-2	Moore County Public Safety will continue to utilize the existing emergency notification system and improve upon the accuracy and effectiveness of this system when feasible.	All Hazards	High	Moore County Public Safety Department; Moore County, Village of Whispering Pines	Local, State, Federal	Medium, Staff Time	2025, Annual review and update	To be continued: Switched to a new Emergency Notification System provider in FY 14 in an effort to improve citizen access to emergency information. Major work has been accomplished in terms of the website, Facebook and twitter accounts regarding this issue. Build more templates to speed up notifications. Continue to refine distribution of information and methods
ES-4	Moore County Public Safety will exercise the County's EOP once annually. All participating jurisdictions should attend and participate in this exercise.	All Hazards	High	Moore County Public Safety Department	Local	Staff Time	2015, Annually	Delete: action not a priority.
ES-5	In the event of a substantial natural and/or man-made disaster situation, Moore County Public Safety will deliver a VIPER radio to the lead contact (as listed in the EOP) for each municipality.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, After a disaster	Delete: action not a priority.
ES-6	The lead contact for all jurisdictions participating in this plan will acknowledge the importance of developing a strong functional understanding of the County EOP. Additionally, all participating jurisdictions shall provide support, as required, to implement the EOP.	All	High	Moore County Public Safety Department	Local	Staff Time mate	2015, Annually exercise EOP	Delete: action not a priority.
ES-7	Moore County Public Safety will work to improve upon the County's existing medically fragile population registry. This effort will require the cooperation and assistance of all participating jurisdictions.	All	High	Moore County Public Safety Department	Local	Cost Staff Time Estimate	2015, Annually review and update	Delete: action not a priority.
ES-8	Moore County Public Safety will work with local residents on the establishment of additional Community Emergency Response Teams (CERT). This effort will also address the ongoing training and support of the eleven teams currently operating within the County. The County will rely on grant funding for the training and equipment expense associated with establishing new CERT units.	All	High	Moore County Public Safety Department	Local	Staff Time	2017	Delete: action not a priority.
ES-9	Moore County will continue to utilize the County's existing emergency notification system as a	All	Moderate	Moore County Public Safety	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	secondary line of communication to all residents and business owners regarding natural and man-made hazard events. County residents should not rely on this system in taking preparedness measures. The first line of communication should come through a NOAA weather radio system.			Department				
ES-10	All participating jurisdictions shall subsidize the County's efforts to provide advance notification regarding natural and man-made hazard events. This effort should involve the use of first responders employed by each of the municipal jurisdictions.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Utilize in advance of disaster event	Delete: action not a priority.
ES-11	Moore County Public Safety will publish and disseminate evacuation information as soon as possible through media outlets defined in the County Emergency Operations Plan.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-12	Moore County Public Safety will work closely with the American Red Cross to ensure that adequate shelter facilities are available to address all hazards identified within this plan. This effort will involve securing an alternate power source for all shelter facilities. This will be achieved either through an ongoing memorandum of understanding with NCEM or acquisition. Additionally, the County will aim to install transfer switches at all shelter facilities. The County acknowledges that this effort will require grant assistance.	All	High	Moore County Public Safety Department	Local, Red Cross, NCEM	Staff Time	2015, Annual review and update	Delete: action not a priority.
ES-13	Moore County Public Safety currently provides one pet-friendly shelter, which is located at Southern Middle School. The County will work to establish additional pet-friendly shelters to serve other portions of the County.	All	Low	Moore County Public Safety Department	Local	Staff Time	2015/2016	Delete: action not a priority.
ES-14	Purchase and install generators on one of more water wells for small water systems (e.g. Foxfire Village); and/or purchase and install transfer switches to allow for fast hook-up of emergency generators, particularly for water wells.	Tornado, Hurricane, Winter Storm	High	Moore County Emergency Management, Public Utilities	HMGP	Staff Time	2017	Delete: action not a priority.
Public Education and Awareness								
PEA-1	Moore County will hold a minimum of two public outreach symposiums annually. The focus of these symposiums will be on providing county residents and business owners with information relating to emergency preparedness and response.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-2	Moore County will conduct outreach activities aimed at educating business owners about addressing the issue of continuity of operations in	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Annual review and update	Delete: action not a priority.

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
	the face of natural and man-made disasters. Following a disaster, the reopening of commercial operations is critical to recovery efforts.							
PEA-3	Moore County Public Safety with the assistance of the MAC will develop a public service campaign focused on stressing the importance of maintaining a National Oceanic and Atmospheric Administration (NOAA) weather radio within all homes and businesses.	All	High	Moore County Public Safety Department	Local	Staff Time	2015, Bi-annually	Delete: action not a priority.
PEA-4	Moore County will work to establish the MAC as a function of the Local Emergency Planning Committee (LEPC). Under this scenario, the MAC will meet quarterly.	All	High	Moore County Public Safety Department	Local4296805	Staff Time	2015, Quarterly	Delete: action not a priority.
PEA-5	Members of the MAC will report all implementation progress regarding the Mitigation Plan to their respective elected bodies through established standard reporting mechanisms.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-6	The MAC member representing each participating jurisdiction will ensure that mitigation issues and programs are addressed annually within the context of budget discussions. Programs and/or project identified through this plan, or quarterly MAC meetings, may require local contributions. In order to ensure that necessary funding is available, mitigation issues should be addressed by all participating jurisdictions as deemed necessary.	All	High	Moore County Public Safety Department, Moore County Office of Planning and Community Development	Local	Staff Time	2015, Annually	Delete: action not a priority.
PEA-7	Moore County Public Safety will establish an annual calendar of events outlining the dates of all emergency management, public safety, and mitigation functions and programs. This calendar will be disseminated to all elected officials and posted on the County's website.	All	High	Moore County Public Safety Department	Local	Staff Time	2015	Delete: action not a priority.
PEA-8	The Moore County Office of Public Safety will work to ensure that County residents are prepared for the potential effects of an incident at the Shearon Harris Nuclear Facility located near Holly Springs, NC.	Man-made, Nuclear	High	Moore County Public Safety Department	Local	Staff Time	2019	Completed

Action #	Description	Hazard(s) Addressed	Relative Priority	Lead Agency/ Department	Potential Funding Sources	Cost Estimate	Timeframe	2020 Status
PEA-9	Improve mapping and communication to property owners regarding the downstream flooding potential hazards from a dam breach and floodplains. Obtain and Catalog all dam emergency action plans and store at Public Safety Departments.	Flood, Hurricane	High	Moore County Emergency Management, NCDENR Dam Safety	HMGP, EMPG	Staff Time	2017	Delete: This is repetitive and needs to be combined with P-3.
PEA-10	Identify and map areas of urbanized areas adjacent to rural lands that are at risk of wildfire. Conduct outreach efforts to rural landowners enroll in State and Federal land management programs to reduce wildfire risks.	Wildfire	Moderate	Emergency Management, Planning, Soil and Water Conservation District Offices, Cooperative Extension	WHIP/EQIP Grants, EMPG	Staff Time	2019	Delete: action not a priority.
PEA-11	Conduct outreach activities aimed at educating citizens towards emergency preparedness, mitigation and business owners about addressing the issue of continuity of operations in the face of all natural and man-made disasters.	All Hazards	Moderate	Moore County, Village of Whispering Pines	Local	Medium	2025	In progress: no measurable progress due to lack of funding.

SECTION 10: PLAN MAINTENANCE

This section discusses how the Cape Fear Region Mitigation Strategy and Mitigation Action Plan will be implemented and how the Plan will be evaluated and enhanced over time. This section also discusses how the public will continue to be involved in a sustained hazard mitigation planning process. It consists of the following four subsections:

- 10.1 Monitoring and Evaluating the Previous Plan
- 10.2 Implementation and Integration
- 10.3 Monitoring, Evaluation, Update and Enhancement
- 10.4 Continued Public Involvement

44 CFR Requirement
44 CFR Part201.6(c)(4)(i):
The plan shall include a plan maintenance process that includes a section describing the method and schedule of monitoring, evaluating and updating the mitigation plan within a five-year cycle.
44 CFR Part 201.6(c)(4)(ii):
The plan maintenance process shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

10.1 Monitoring and Evaluating the Previous Plan

Since the previous plan was adopted each county has worked to ensure that mitigation was integrated into local activities and that the mitigation plan was appropriately implemented. Each of the counties outlined a process in their previous county-level mitigation plans for monitoring and evaluating the plan throughout the interim period between plan updates.

Each county was ultimately successful in implementing the monitoring and evaluation processes that were outlined in previous plan as all five counties held annual meetings to discuss the mitigation plan and the priorities that were outlined in it. Each county's specific process is outlined below with an explanation of how the monitoring and evaluating process was carried out as well as any changes that were identified by the county or its jurisdictions that would be useful to implement during the next update.

10.1.1 Chatham County

The Chatham County included an annual review process and progress report on the plan. This review process was carried out by the County Planner and Emergency Operations Director every year since the previous plan was approved. During this annual review process, the Planner and Emergency Operations Director developed a progress report on the plan and presented it to the Planning Team for review. The plan was also open to comments from the general public during this timeframe.

Moreover, the County Manager and County Board of Commissioners each received an annual presentation on the implementation status of the plan which included a review of mitigation actions in the plan and progress that had been made towards completing those actions.

Although there were some minor updates made to the plan during interim update period, there were few major updates identified during these annual reviews and the Planning Team generally agreed that

the plan was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the plan.

10.1.2 Harnett County

Harnett County included an annual evaluation and update process. This process was the responsibility of the Harnett County Planning and Emergency Management Departments along with members of the Harnett County Planning Team. Since the plan was approved, the Planning Team met annually to develop a report on the status of the plan and make any necessary updates to the plan. The Planning Team also assessed the mitigation goals and objectives in reference to the changing needs of the community and its vulnerabilities as well as evaluated the plan's effectiveness in terms of reduction of risks and efficient implementation of mitigation strategies according to county goals and objectives on an annual basis.

Although there were some minor updates made to the plan during interim update period, there were few major updates identified during these annual evaluations and the Planning Team generally agreed that the plan was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the plan.

10.1.3 Johnston County

Johnston County included an annual evaluation process to determine if the mitigation actions are on schedule and whether the goals of the plan are still relevant. This annual evaluation process was carried out by the Johnston County Emergency Services Department and each participating jurisdiction's designated Executive Officer every year since the previous plan was approved.

During the month of September every year since the plan was approved, each jurisdiction's Executive Officer was responsible for obtaining reports for each party responsible for the mitigation actions to determine if the mitigation action is on schedule. This was done through phone calls or email queries directed toward the responsible individual/department. The Executive Officer was also responsible for reviewing the risk assessment portion of the plan to determine if any information needs to be updated or modified. Following these tasks, the Executive Officer wrote a narrative on the progress which was sent to the Emergency Services Department. If any changes were noted, the Department of Emergency Services will keep the narratives for incorporation into future plan updates.

As necessary and appropriate, each October following the plan's approval, all Executive Officers convened for a meeting that was organized and preside over by the County Emergency Services Department. A report from each Executive Officer on the status of his or her jurisdiction was presented to the group at this time. The group also discussed whether the goals of the mitigation plan were still relevant as well as any other issues that required attention.

Although there were some minor updates made to the plan during interim update period, there were few major revisions identified during these annual evaluations and the Executive Officers generally agreed that the plan was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the plan.

10.1.4 Lee County

Lee County included an annual plan evaluation process that was primarily conducted by the Sanford/Lee County Community Development Department. Every year since the plan was approved, the Community Development department asked each of the municipalities to submit a progress report so that the county could ensure that implementation of the actions was taking place at a desirable pace.

Although there were some minor updates made to the plan during interim update period, there were few major updates identified during these yearly meetings and the update team generally agreed that the plan was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the plan.

10.1.5 Moore County

Moore County included an annual evaluation and update process. In order to track progress and updated the mitigation strategies identified in the plan, the county revisited the plan on a quarterly basis. The County Emergency Services Director was responsible for initiating this review and consulted with the Planning Team. Monitoring and updating took place through a formal review by the Planning Team twice annually since the plan was approved. Changes were made to accommodate for projects that failed or were no longer considered feasible. Priorities that were identified as potential mitigation strategies were also reviewed at this time to determine feasibility of future implementation.

The plan was updated by written updates and submissions as the Planning Team deemed appropriate and necessary and as approved by the Moore County Board of Commissioners. In keeping with the process that adopted the plan, a public involvement process to receive public comment on the Plan maintenance and updating was held once annually.

Although there were some minor updates made to the plan during interim update period, there were few major updates identified during these annual evaluations and the Planning Team generally agreed that the plan was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the Plan.

10.2 Implementation and Integration

Each agency, department, or other partner participating under the Cape Fear Regional Hazard Mitigation Plan is responsible for implementing specific mitigation actions as prescribed in the Mitigation Action Plan. Every proposed action listed in the Mitigation Action Plan is assigned to a specific “lead” agency or department in order to assign responsibility and accountability and increase the likelihood of subsequent implementation.

In addition to the assignment of a local lead department or agency, an implementation time period or a specific implementation date has been assigned in order to assess whether actions are being implemented in a timely fashion. The counties in the Cape Fear Region will seek outside funding sources to implement mitigation projects in both the pre-disaster and post-disaster environments. When applicable, potential funding sources have been identified for proposed actions listed in the Mitigation Action Plan.

The participating jurisdictions will integrate this Plan into relevant city and county government decision-making processes or mechanisms, where feasible. This includes integrating the requirements of the Plan into other local planning documents, processes, or mechanisms, such as comprehensive or capital improvement plans, when appropriate. The members of the Cape Fear Regional Hazard Mitigation Planning Team (CFRHMPT) will remain charged with ensuring that the goals and mitigation actions of new and updated local planning documents for their agencies or departments are consistent, or do not conflict with, the goals and actions of the Plan, and will not contribute to increased hazard vulnerability in the Cape Fear Region.

Since the previous Plan was adopted each county and participating jurisdiction has worked to integrate the Plan into other planning mechanisms where applicable/feasible. Examples of how this integration has occurred have been documented in the Implementation Status discussion provided for each of the mitigation actions found in Section 9. Specific examples of how integration has occurred include:

- Integrating the mitigation plan into reviews and updates of floodplain management ordinances;
- Integrating the mitigation plan into reviews and updates of County emergency operations plans;
- Integrating the mitigation plan into review and updates of building codes; and
- Integrating the mitigation plan into the capital improvements plan through identification of mitigation actions that require local funding

Opportunities to further integrate the requirements of this Plan into other local planning mechanisms shall continue to be identified through future meetings of the Regional Hazard Mitigation Planning Team, individual county meetings, and the annual review process described herein. Although it is recognized that there are many possible benefits to integrating components of this Plan into other local planning mechanisms, the development and maintenance of this stand-alone Regional Hazard Mitigation Plan is deemed by the Planning Team to be the most effective and appropriate method to implement local hazard mitigation actions at this time.

10.3 Monitoring, Evaluation, Update and Enhancement

Periodic revisions and updates of the Plan are required to ensure that the goals of the Plan are kept current, considering potential changes in hazard vulnerability and mitigation priorities. In addition, updates may be necessary to ensure that the Plan is in full compliance with applicable federal and state regulations. Periodic evaluation of the Plan will also ensure that specific mitigation actions are being reviewed and carried out according to the Mitigation Action Plan.

When determined necessary, the Planning Team shall meet in March of every year to evaluate the progress attained and to revise, where needed, the activities set forth in the Plan. The findings and recommendations of the Planning Team shall be documented in the form of a report that can be shared with interested City, Town, and County Council members. The Planning Team will also meet following any disaster events warranting a reexamination of the mitigation actions being implemented or proposed for future implementation. This will ensure that the Plan is continuously updated to reflect changing conditions and needs within the Cape Fear Region. The Moore County Emergency Management Coordinator will be responsible for reconvening the Regional Hazard Mitigation Planning Team for these reviews.

10.3.1 Five Year Plan Review and Update

The Plan will be thoroughly reviewed by the Regional Hazard Mitigation Planning Team every five years to determine whether there have been any significant changes in the Cape Fear Region that may, in turn, necessitate updates in the types of mitigation actions proposed. New development in identified hazard areas, an increased exposure to hazards, an increase or decrease in capability to address hazards, and changes to federal or state legislation are examples of factors that may affect the necessary content of the Plan.

The Plan review provides Cape Fear county officials with an opportunity to evaluate those actions that have been successful and to explore the possibility of documenting potential losses avoided due to the implementation of specific mitigation measures. The Plan review also provides the opportunity to address mitigation actions that may not have been successfully implemented as assigned. The Moore County Emergency Management Coordinator will be responsible for reconvening the Regional Hazard Mitigation Planning Team and conducting the five-year review and update.

During the five-year plan review and update process, the following questions will be considered as criteria for assessing the effectiveness and appropriateness of the Plan:

- Do the goals address current and expected conditions?

- Has the nature or magnitude of risks changed?
- Are the current resources appropriate for implementing the Plan?
- Are there implementation problems, such as technical, political, legal or coordination issues with other agencies?
- Have the outcomes occurred as expected?
- Did County departments participate in the plan implementation process as assigned?

Following the five-year review and update, any updates deemed necessary will be summarized and implemented according to the reporting procedures and plan amendment process outlined herein. Upon completion of the review and update/amendment process, the Cape Fear Regional Hazard Mitigation Plan will be submitted to the State Hazard Mitigation Officer at the North Carolina Division of Emergency Management (NCDEM) for final review and approval in coordination with the Federal Emergency Management Agency (FEMA).

Because the plan update process can take several months to complete, and because Federal funding may be needed to update the plan, it is recommended that the five-year review process begin at the beginning of the third year after the plan was last approved. This will allow the participants in the Cape Fear Regional Hazard Mitigation Plan to organize in order to seek Federal funding if necessary and complete required plan update documentation before the plan expires at the end of the fifth year.

10.3.2 Disaster Declaration

Following a disaster declaration, the Cape Fear Regional Hazard Mitigation Plan will be revised as necessary to reflect lessons learned, or to address specific issues and circumstances arising from the event. It will be the responsibility of the Moore County Emergency Management Coordinator to reconvene the Regional Hazard Mitigation Planning Team and ensure the appropriate stakeholders are invited to participate in the plan revision and update process following declared disaster events.

10.3.3 Reporting Procedures

The results of the five-year review and update will be summarized by the Regional Hazard Mitigation Planning Team in a report that will include an evaluation of the effectiveness of the Plan and any required or recommended changes or amendments. The report will also include an evaluation of implementation progress for each of the proposed mitigation actions, identifying reasons for delays or obstacles to their completion along with recommended strategies to overcome them.

10.3.4 Plan Amendment Process

Upon the initiation of the amendment process, representatives from the Cape Fear counties will forward information on the proposed change(s) to all interested parties including, but not limited to, all directly affected County departments, residents, and businesses. Information will also be forwarded to the North Carolina Division of Emergency Management. This information will be disseminated in order to seek input on the proposed amendment(s) for no less than a 45-day review and comment period.

At the end of the 45-day review and comment period, the proposed amendment(s) and all comments will be forwarded to the Regional Hazard Mitigation Planning Team for final consideration. The Planning Team will review the proposed amendment along with the comments received from other parties, and if acceptable, the committee will submit a recommendation for the approval and adoption of changes to the Plan.

In determining whether to recommend approval or denial of a Plan amendment request, the following factors will be considered by the Regional Hazard Mitigation Planning Team:

- There are errors, inaccuracies, or omissions made in the identification of issues or needs in the Plan.
- New issues or needs have been identified which are not adequately addressed in the Plan.
- There has been a change in information, data, or assumptions from those on which the Plan is based.

Upon receiving the recommendation from the Regional Hazard Mitigation Planning Team, and prior to adoption of the Plan, the participating jurisdictions will hold a public hearing, if deemed necessary. The governing bodies of each participating jurisdiction will review the recommendation from the Regional Hazard Mitigation Planning Team (including the factors listed above) and any oral or written comments received at the public hearing. Following that review, the governing bodies will take one of the following actions:

- Adopt the proposed amendments as presented;
- Adopt the proposed amendments with modifications;
- Refer the amendments request back to the Planning Team for further revision; or
- Defer the amendment request back to the Planning Team for further consideration and/or additional hearings.

10.4 Continued Public Involvement

44 CFR Requirement
44 CFR Part201.6(c)(4)(iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

Public participation is an integral component to the mitigation planning process and will continue to be essential as this Plan evolves over time. As described above, significant changes or amendments to the Plan shall require a public hearing prior to any adoption procedures.

Other efforts to involve the public in the maintenance, evaluation, and update process will be made as necessary. These efforts may include:

- Advertising meetings of the Regional Hazard Mitigation Planning Team in local newspapers, public bulletin boards and/or County office buildings;
- Designating willing and voluntary citizens and private sector representatives as official members of the Regional Hazard Mitigation Planning Team;
- Utilizing local media to update the public on any maintenance and/or periodic review activities taking place;
- Utilizing social media;
- Utilizing the websites of participating jurisdictions to advertise any maintenance and/or periodic review activities taking place; and
- Keeping copies of the Plan in public libraries.