Sampson Duplin Regional Hazard Mitigation Plan

Sampson County, Duplin County

Prepared by:

Sampson Duplin Regional Hazard Mitigation Planning Committee

With Professional Planning Assistance from

AECOM

FINAL DRAFT

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SECTION 1: INTRODUCTION

Section 1 introduces the Sampson-Duplin Regional Hazard Mitigation Plan. It consists of the following subsections:

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1.1 Background

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses incurred by insurance companies and non-governmental organizations are not reimbursed by tax dollars. Many natural disasters are predictable, and much of the damage caused by these events can be reduced or even eliminated.

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) to invoke new and revitalized approaches to mitigation planning. Section 322 of DMA 2000 emphasizes the need for state and local 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 government applying for federal mitigation grant funds. These funds include the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation (PDM) program, and the Flood Mitigation Assistance (FMA) Program, all 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.

This Plan was prepared in coordination with FEMA Region IV and the North Carolina Division of Emergency Management (NCEM) to ensure that it meets all applicable DMA 2000 planning requirements. A Local Mitigation Plan Review Tool, found in Appendix B, provides a summary of FEMA's current minimum standards of acceptability and notes the location within the Plan where each planning requirement is met.

1.2 Purpose and Need

As defined by FEMA, "hazard mitigation" means any sustained action taken to reduce or eliminate the long-term risk to life and property from a hazard event. Hazard mitigation planning is the process through which hazards are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented.

The purpose of this plan is to identify, assess and mitigate risk in order to better protect the people and property of The Sampson-Duplin Region from the effects of natural and man-made hazards. This plan documents the hazard mitigation planning process and identifies relevant hazards and strategies the participating communities will use to decrease vulnerability and increase resiliency and sustainability. This plan demonstrates the participating communities' commitment to reducing risks from identified hazards and serves as a tool to help decision-makers direct mitigation activities and resources. This plan

will ensure the involved communities' continued eligibility for federal disaster assistance, including the HMGP, PDM and FMA programs.

1.3 Scope

This document comprises a Hazard Mitigation Plan Update for Sampson and Duplin Counties in North Carolina. The jurisdictions participating in this plan are All the municipalities within these two counties are also participants in this plan, including Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, and Warsaw.

Sampson County	Duplin County
Town of Autryville	Town of Beulaville
City of Clinton	Town of Calypso
Town of Garland	Town of Faison
Town of Harrells	Town of Greenevers
Town of Newton Grove	Town of Kenansville
Town of Roseboro	Town of Magnolia
Town of Salemburg	Town of Rose Hill
Town of Turkey	Town of Teachey
	Town of Wallace
	Town of Warsaw

1.4 Authority

This Hazard Mitigation Plan Update will be adopted by Sampson and Duplin Counties in accordance with the authority and police powers granted to counties as defined by the State of North Carolina (N.C.G.S., Chapter 153A). This Hazard Mitigation Plan will be adopted by the participating municipalities under the authority granted to cities and towns as defined by the State of North Carolina (N.C.G.S., Chapter 160A).

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

- Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-390) and by FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, at 44 CFR Part 201;
- National Flood Insurance Act of 1968, as amended 42 U.S.C. 4001 et seq; and
- North Carolina General Statutes, Chapter 166A: North Carolina Emergency Management Act, as amended by Senate Bill 300: An Act to Amend the Laws Regarding Emergency Management as Recommended by the Legislative Disaster Response and Recovery Commission (2001).
- Also utilized the Local Mitigation Panning Handbook, March 2013. The Handbook was used together with the Local Mitigation Plan Review Guide, October 2011. The handbook offers practical approaches and examples for how communities can engage in effective planning to reduce long-term risk from natural hazards and disasters.

1.5 Plan Update

CFR Subchapter D §201.6(d)(3)
A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The previous Sampson Duplin County Hazard Mitigation Plans contained risk assessments of identified hazards for the jurisdictions and mitigation strategies to address the risks and vulnerabilities from these hazards. Since that time, progress has been made by all participating jurisdictions on implementation of the mitigation strategies. This section includes an overview of the approach to updating the plan and identifies new analyses and information included in this plan update.

1.5.1 What's New in the Plan

The plan update involved a comprehensive review and update of each section of the previous plan and an assessment of the success of the participating jurisdictions in evaluating, monitoring and implementing the mitigation strategy outlined in their existing plan. The decision was made in 2015 to create one regional mitigation plan (Sampson-Duplin Regional Plan) in order to accomplish the following planning goals:

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

Only the information and data still valid from the existing plan was carried forward as applicable. The following requirements were addressed during the development of the plan update:

- Consider changes in vulnerability due to action implementation;
- Document success stories where mitigation efforts have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Incorporate new data or studies on hazards and risks;
- Incorporate new capabilities or changes in capabilities;
- Incorporate growth and development-related changes to inventories; and
- Incorporate new action recommendations or changes in action prioritization.

In addition to the specific changes in hazard analyses identified above, the following items were also addressed in the plan update:

- GIS was used, to the extent data allowed, to analyze the priority hazards as part of the vulnerability assessment. This involved utilizing mapped hazard data combined with local parcel data.
- Assets at risk to identified hazards were identified by property type and values of properties based
- on tax assessment data from the Region.
- A discussion on climate change and its projected effect on specific hazards was included in Section 5 Hazard Profiles.

- The discussion on growth and development trends was enhanced utilizing current Census data.
- Enhanced public outreach and agency coordination efforts were conducted throughout the plan
- update process in order to meet the more rigorous requirements of the 2013 CRS Coordinator's Manual, in addition to DMA requirements.

Past Goals Update1-1 provides a summary of updates to the goals from the Regional Plan as decided by the MAC. The revised goals for the Plan Update can be found in Section 8 – Mitigation Strategy.

Table 1-1.Summary of Updates to Existing Goals

Existing Goals	Plan Update Notes
Goal 1 **Protect the public health, safety, and welfare by increasing public a wareness of hazards and by enco uraging collective and individual r esponsibility for mitigatinghazard risks.**	Deemed to still be applicable and relevant to the plan update.
Goal 2 **Improve technical capability to re spond to hazards and to improve the effectiveness of hazard mitigation actions.**	Deemed to still be applicable and relevant to the plan update.
Goal 3 **Enhance existing or create new p olicies and ordinances that will he lp reduce thedamaging effects of natural hazards.**	Deemed to still be applicable to the plan update
Goal 4 **Protect the most vulnerable popu lations, buildings, and critical facil ities through the implementation of cost-effective and technically feasible mitigation actions.**	Deemed to still be applicable to the plan update

1.5.2 Past Mitigation Strategy Update

Details on mitigation projects carried forward from the previous plans into this plan update as well as new projects, can be found in Section 9 – Mitigation Action Plan.

1.6 Organization of the Plan

The Regional Hazard Mitigation Plan is organized as follows:

- Section 1 – Introduction
- Section 2 – Planning Process
- Section 3 – Community Profile

- Section 4 – Hazard Identification
- Section 5 – Hazard Profiles
- Section 6 – Vulnerability Assessment
- Section 7 – Capability Assessment
- Section 8 – Mitigation Strategy
- Section 9 – Mitigation Action Plan
- Section 10 – Plan Maintenance
- Appendix A – Adoptions
- Appendix B – Local Mitigation Plan Review Tool
- Appendix C – Approval Letters
- Appendix D – Public Outreach
- Appendix E – Project Information Fact Sheet
- Appendix F - Public Survey
- Appendix G - Meeting Files
- Appendix H – CWPPs (Community Wildfire Protection Plans)

SECTION 2: PLANNING PROCESS

Section 2 provides an overview of the planning process used to develop the Hazard Mitigation Plan Update. It consists of the following subsections:

- 2.1 Local Government Participation
- 2.2 The 10-Step Planning Process

Requirement §201.6(b)
An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: 1. An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval; 2. 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 private and nonprofit interests to be involved in the planning process; and 3. Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
Requirement §201.6(c)(1)
The plan shall include the following: 1. 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.

This Hazard Mitigation Plan Update was developed under the guidance of a Mitigation Action Committee (MAC). Information in this plan will be used to help guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce the cost of disaster response and recovery to communities and their residents by protecting critical community facilities, reducing liability exposure, and minimizing overall community impacts and disruptions. This plan identifies activities that can be undertaken by both the public and the private sectors to reduce safety hazards, health hazards, and property damage caused by hazards.

2.1 Local Government Participation

The DMA planning regulations and guidance stress that each local government seeking FEMA approval of their mitigation plan must participate in the planning effort in the following ways:

- Participate in the process as part of the MAC;
- Detail where within the planning area the risk differs from that facing the entire area;
- Identify potential mitigation actions; and
- Formally adopt the plan.

For the Regional MAC, “participation” meant the following:

- Providing facilities for meetings;
- Attending and participating in the MAC meetings;

- Collecting and providing requested data (as available);
- Managing administrative details;
- Making decisions on plan process and content;
- Identifying mitigation actions for the plan;
- Reviewing and providing comments on plan drafts;
- Informing the public, local officials, and other interested parties about the planning process and providing opportunity for them to comment on the plan;
- Coordinating, and participating in the public input process; and
- Coordinating the formal adoption of the plan by the local governing body.

The MAC met all the above participation requirements. Stakeholders such as local emergency management agencies, participating municipalities, state agencies, neighboring jurisdictions (Bladen, Cumberland, Harnett, Johnston, Jones, Lenoir, Onslow, Pender, and Wayne counties), businesses, academia, and non-profits were given the opportunity to be involved in the planning process through email invitations, follow up phone calls and announcements at related government meetings. The Committee's representatives included representatives of County, City and Town Departments; and other stakeholders. The participants comprising the Sampson Duplin County Mitigation Advisory Committee as lead agents included the following:

Sampson-Duplin Regional Mitigation Advisory Committee	
MAC Member	**Jurisdiction/Agency**
Ronald Bass, Emergency Management Director	Sampson County Representative
Richard Carr, Projects and Communications Specialist	Sampson County Representative
Mike Aldridge, County Manager	Duplin County Representative
Reid Southerland, Emergency Management Director	Duplin County Representative
Elizabeth Stalls, Planning Director	Duplin County Representative

Table 2-1 details the MAC (Mitigation Action Committee) meeting dates and the MAC members in attendance. A more detailed summary of MAC meeting dates including topics discussed and meeting locations follows in Table 2.4. During the planning process, the MAC members communicated through face-to-face meetings, virtual meetings, email and telephone conversations. Although all MAC members could not be physically present at every meeting, coordination was ongoing throughout the entire planning process. In particular, the communities of Town of Kenansville, Town of Rose Hill, Town of Autryville, Town of Garland, Town of Harrells, and Town of Turkey participated in the planning process through emails and phone conversations and in direct contact with Sampson and Duplin Counties, who acted as proxies. Also, these jurisdictions were provided planning process materials during the planning process.

Table 2-1: Mitigation Action Committee Meeting Attendance Record

Member	Affiliation	Meeting Date			
		12/19/2019	2/13/2020	4/9/2020	5/14/2020
Reid Southerland, Area Coordinator	Duplin County	X	X		
Elizabeth Stalls, Planning Director	Duplin County	X	X	X	X
Matthew Barwick, Emergency Management	Duplin County	X	X	X	
Davis H. Brinson, County Manager	Duplin County	X			
Jesse Dowe, County Commissioner	Duplin County	X			
Ryan Cox, Streets and Ditches Commissioner	Duplin County			X	
Lori Williams, Town Manager	Town of Beulaville	X	X		
Alice Dixon, Town Clerk	Town of Calypso	X			
Debbie Jones, Mayor Pro-tem	Town of Calypso	X			
Carolyn Kenyon, Mayor	Town of Faison	X	X	X	X
Emma Brinson, Town Administrator	Town of Greenevers		X	X	
Annette Dunn, Town Clerk	Town of Kenansville				
Barbara Jones, Deputy Clerk	Town of Magnolia				X
Tom Drum, Town Administrator	Town of Rose Hill				
James Moore, Commissioner	Town of Teachy	X	X		
Leonard Fillyaw, Mayor	Town of Teachy	X	X		X
Donna Delfaco-Dube, Town Clerk	Town of Teachy			X	
Laurence Bergman, Town Manager	Town of Wallace	X	X		X
Larry Berg, Town Manager	Town of Wallace			X	
Scotty Summerlin, Town Manager	Town of Warsaw	X	X		
AJ Connors, Mayor	Town of Warsaw	X	X		
Clifton Will, Mayor Pro-tem	Town of Warsaw	X			
Ronald Bass, Emergency Management Director	Sampson County	X	X	X	

Richard Carr, Public Info Officer Communication Specialist	Sampson County	X	X		
Kelsey Carter, Emergency Services	Sampson County		X	X	
Richard Spell, Mayor	Town of Autryville				
Steven Lovette, Fire Chief	City of Clinton		X		
Michael Marshburn, Fire	City of Clinton		X		
Winifred Hill Murphy, Mayor	Town of Garland				
Cindy Ezzell, Town Administrator	Town of Harrells				
Amanda Turner, Town Clerk	Town of Newton Grove	X			
Janet Dunn, Town Clerk	Town of Roseboro			X	
Marilyn Walters, Finance Officer	Town of Salemburg		X	X	
Teresa Frack, Town Clerk	Town of Turkey				
Melissa Reese, Community Relations	Eastpointe	X	X	X	X
Gerri Hansen, Director of Digital Engagement	Red Cross		X		
Mark Tomeucci, Regional Program Manager	American Red Cross		X	X	
Jacazza Jones, Emergency Management Planner	NCEM		X	X	X
Carl Baker, Planner	NCEM				X
John Mello, Mitigation Planner	NCEM	X			
Edwardine Marrone, FIT-NC HM Program Analyst	FEMA	X			X

Based on the area of expertise of each representative participating on the MAC,

Table 2-2 demonstrates each member's expertise in the six mitigation categories (Prevention, Property Protection, Natural Resource Protection, Emergency Services, Structural Flood Control Projects and Public Information).

Table 2-2: Staff Capability with Six Mitigation Categories

Community Department/Office	Prevention	Property Protection	Natural Resource Protection	Emergency Services	Structural Flood Control Projects	Public Information
Emergency Services	X	X		X		X
Planning and Zoning	X	X	X			X
Public Works	X		X		X	X

2.2 The 10-Step Planning Process

The planning process for preparing the HMP Update was based on DMA planning requirements and FEMA's associated guidance. This guidance is structured around a four-phase process:

1. Planning Process;
2. Risk Assessment;
3. Mitigation Strategy; and
4. Plan Maintenance.

Into this process, the participating jurisdictions integrated a more detailed 10-step planning process used for FEMA's Community Rating System (CRS) and Flood Mitigation Assistance programs. Thus, the modified 10-step process used for this plan meets the requirements of six major programs: FEMA's Hazard Mitigation Grant Program; Pre-Disaster Mitigation Program; Community Rating System; Flood Mitigation Assistance Program; Severe Repetitive Loss Program; and new flood control projects authorized by the Army Corps of Engineers.

Table 2-3 shows how the 10-step CRS planning process aligns with the four phases of hazard mitigation planning pursuant to the Disaster Mitigation Act of 2000.

Table 2-3: Mitigation Planning and CRS 10-Step Process Reference Table

DMA Process	CRS Process
Phase I – Planning Process	
§201.6(c)(1)	Step 1. Organize to Prepare the Plan
§201.6(b)(1)	Step 2. Involve the Public
§201.6(b)(2) & (3)	Step 3. Coordinate
Phase II – Risk Assessment	
§201.6(c)(2)(i)	Step 4. Assess the Hazard
§201.6(c)(2)(ii) & (iii)	Step 5. Assess the Problem
Phase III – Mitigation Strategy	
§201.6(c)(3)(i)	Step 6. Set Goals
§201.6(c)(3)(ii)	Step 7. Review Possible Activities
§201.6(c)(3)(iii)	Step 8. Draft an Action Plan

Phase IV – Plan Maintenance	
§201.6(c)(5)	Step 9. Adopt the Plan
§201.6(c)(4)	Step 10. Implement, Evaluate and Revise the Plan

2.2.1 Phase 1 – Planning Process

Planning Step 1: Organize to Prepare the Plan

In alignment with the commitment to participate in the DMA planning process and the CRS, community officials worked to establish the framework and organization for development of the plan. An initial coordination call was held with key community representatives to discuss the organizational aspects of the plan development process. The planning process timeframe kicked off in December of 2019 and concluded in October of 2020.

The formal MAC meetings followed the 10 CRS Planning Steps. Meeting agendas, minutes and sign-in sheets for the MAC meetings are included in Appendix G – Planning Process Documentation. The meeting dates and topics discussed are summarized in Table 2-4.

Table 2-4: Summary of MAC Meetings Dates

Meeting Type	Meeting Topic	Meeting Date/ Time	Meeting Location
MAC #1 (Kick-Off)	1. Welcome and Introductions 2. Project overview 3. Plan update process 4. Review and discussion of existing plan 5. Capability Assessment surveys 6. Public participation survey 7. Mitigation goals 8. "Mayor for a Day" 9. Exercise results and discussion 10. Maintaining momentum and implementing the plan 11. Review the final draft 12. Questions and open discussion	December 19, 2019 at 10am	Duplin County Emergency Operations Center, 209 Seminary Street, Kenansville, NC
MAC #2	1. Welcome and Introductions 2. Risk Assessment Discussion 3. Capability Assessment Update 4. Updating Mitigation Action Plans (MAP) 5. Review and Update Process 6. Adoption Process 7. Open Discussion	February 13, 2020 at 10am	Health and Human Services Bldg E, 360 County Complex Road, NC 28329
MAC #3	1. Welcome and Introductions 2. Mitigation Actions Update	April 9, 2020 at 9:30am	Microsoft Teams (virtual meeting)
MAC #4	1. Welcome and Introductions 2. Capability Assessment Review 3. Mitigation Actions Update Workshop 4. Reviewing the Draft Plan 5. Adoption Process	May 14, 2020 at 9:30am	Microsoft Teams (virtual meeting)

Planning Step 2: Involve the Public

The public was given the opportunity to be involved in the planning process via invitations to open meetings, access to interactive websites and through use of public surveys. The first public meeting to introduce the planning process during plan development was held on June 15th, 2020 at 2pm. As documented in Appendix G, a public notice was posted on the county webpages and Facebook pages prior to the public meeting inviting members of the public to attend. Seven members of the public participated and had questions and concerns regarding previous flooding and the status of mitigation grants in the Region. This opportunity for public participation occurred during plan development (prior to the comment period on the final plan) The public will again be offered another opportunity to provide feedback at the plan adoption meetings. Other topics included emergency response preparedness activities. The public meeting dates and topics discussed are summarized below in Table 2-5.

Table 2-5: Summary of Public Meeting Dates

Meeting Type	Meeting Topic	Meeting Date/Time	Meeting Location
Public Meeting #1	1. Introduction to DMA and the planning process 2. Introduction to hazard identification 3. Review Hazard Mitigation Plan 4. Solicit comments and feedback from the public	June 15, 2020 2 PM	Duplin County Board of County Commissioners Rm

Involving the Public beyond Attending Public Meetings

Early discussions with the MAC established the initial plan for public involvement. The MAC agreed to an approach using established public information mechanisms and resources within the communities. Public involvement activities for this plan update included stakeholder and public meetings, and the collection of public and stakeholder comments (Appendix G) on the draft plan.

The MAC found different ways to involve the public beyond attending public meetings. Documentation to support the additional public outreach efforts can be found in Appendix D – Public Outreach. The public outreach activities beyond the formal public meetings are summarized below in Table 2-6.

Table 2-6: Public Outreach Efforts

	Location	Event/Message	Date
1	Duplin County	HMP meeting information posted on Facebook	June 2020
2	Sampson County	HMP meeting information posted on Facebook	June 2020

Planning Step 3: Coordinate

Early in the planning process, the MAC determined that the risk assessment, mitigation strategy development, and plan approval would be greatly enhanced by inviting other local, state and federal agencies and organizations to participate in the process. Coordination involved sending these stakeholders coordination emails asking for their assistance and input and telling them how to become involved in the plan development process. The MAC contacted the following agencies and organizations with specific data requests and a request for their input into the planning process:

- NCEM
  - Natural Hazards Risk Data
  - Repetitive Loss Data
- ISO/FEMA
  - Repetitive Loss Data
  - BCEGS Classifications
- NC Forest Service
  - Sampson County CWPPs
  - Duplin County CWPPs
- NC Dam Safety
  - Dam Inventory

2.2.2 Coordination with Other Community Planning Efforts and Hazard Mitigation Activities

Coordination with other community planning efforts is also paramount to the success of this plan. Mitigation planning involves identifying existing policies, tools, and actions that will reduce a community's risk and vulnerability to hazards. Integrating existing planning efforts and mitigation policies and action strategies into this plan establishes a credible and comprehensive plan that ties into and supports other community programs. The development of this plan incorporated information from the following existing plans, studies, reports, technical information and initiatives, such as hazard mitigation plans, local comprehensive plans, and flood insurance studies as well as other relevant data from neighboring communities and other jurisdictions, like Bladen, Cumberland, Harnett, Johnston, Jones, Lenoir, Onslow, Pender, and Wayne counties through review and analysis.

- Ordinances
  - The following ordinances were used to develop the capability assessment and the mitigation strategy for the participating jurisdictions:
    - Zoning Ordinance
    - Flood Damage Prevention Ordinance
    - Subdivision Ordinance
    - State Building Code
- The Region Incorporated Areas Flood Insurance Study,
  - Used to identify flooding sources and SFHAs within the Region and Incorporated Areas. The SFHAs were used to prepare the inland flooding vulnerability assessment.
- The Regional Hazard Mitigation Plan, 2015
  - Used to identify previously profiled hazards and to capture relevant information to be carried forward in the plan update. Also used to identify existing mitigation actions and to prepare a status update for existing actions.

These and other documents were reviewed, considered, and incorporated as appropriate, during the collection of data to support Planning Steps 4 and 5, which include the hazard identification, vulnerability assessment, and capability assessment. Data from these plans and ordinances were incorporated into the risk assessment and hazard vulnerability sections of the plan as appropriate. The

data was also used in determining the capability of each community in being able to implement certain mitigation strategies. The Capability Assessment can be found in Section 7 – Capability Assessment.

2.2.3 Phase II – Risk Assessment

Planning Steps 4 and 5: Identify/Assess the Hazard and Assess the Problem

The MAC completed a comprehensive effort to identify, document, and profile all hazards that have, or could have, an impact on the planning area. Geographic information systems (GIS) were used to display, analyze, and quantify hazards and vulnerabilities.

The MAC also conducted a capability assessment to review and document the planning area's current capabilities to mitigate risk from and vulnerability to hazards. By collecting information about existing government programs, policies, regulations, ordinances, and emergency plans, the MAC could assess those activities and measures already in place that contribute to mitigating some of the risks and vulnerabilities identified. A more detailed description of the risk assessment process and the results are included in Section 4 – Hazard Identification, Section 5 – Hazard Profiles, and Section 6 – Vulnerability Assessment.

2.2.4 Phase III – Mitigation Strategy

Planning Steps 6 and 7: Set Goals and Review Possible Activities

AECOM facilitated brainstorming and discussion sessions with the MAC that described the purpose and process of developing planning goals, a comprehensive range of mitigation alternatives, and a method of selecting and defending recommended mitigation actions using a series of selection criteria.

Planning Step 8: Draft an Action Plan

A complete first draft of the plan was prepared based on input from the MAC regarding the draft risk assessment and the goals and activities identified in Planning Steps 6 and 7. This complete draft was posted for MAC and public review and comment on the planning project website https://gis.aecomonline.net/irisk2/NCHMP.aspx?region=26. Other agencies were invited by email and phone calls to comment on this draft as well. MAC, public, and agency comments were integrated into the final draft for the NCEM and FEMA Region IV to review and approve, contingent upon final adoption by the governing body of each participating jurisdiction.

2.2.5 Phase IV – Plan Maintenance

Planning Step 9: Adopt the Plan

In order to secure buy-in and officially implement the plan, the plan will be reviewed and adopted by the governing body of each participating jurisdiction and the corresponding resolutions will be included in Appendix A: Plan Adoptions.

Planning Step 10: Implement, Evaluate and Revise the Plan

Implementation and maintenance of the plan is critical to the overall success of hazard mitigation planning. Up to this point in the planning process, all the MAC's efforts have been directed at researching data, coordinating input from participating entities, and developing appropriate mitigation actions. Section 10 - Plan Maintenance provides an overview of the overall strategy for plan implementation and maintenance and outlines the method and schedule for monitoring, updating, and evaluating the plan. Section 10 also discusses incorporating the plan into existing planning mechanisms and how to address continued public involvement.

SECTION 3: COMMUNITY PROFILE

General information topics such as location, topography/geology, climate, and history are presented in this section. Following the introductory information are summaries for the counties as well as its municipalities, containing pertinent information regarding demographics such as population, housing, and economic characteristics. It consists of the following subsections:

- 3.1 Location
- 3.2 Topography & Geology
- 3.3 Climate
- 3.4 History
- 3.5 Population
- 3.6 Housing
- 3.7 Economy

A more detailed profile for each participating jurisdiction is provided within each community's Annex.

3.1 Location

Sampson and Duplin Counties are centrally located within the Southeastern Coastal Plain of North Carolina. Key transportation routes through the Region include US 421 running north-south through Sampson County and Interstate 40 running north-south from Wilmington to Raleigh. The primary east-west route through the two counties is NC Highway 24. CSX Transportation provides service running north-south through both Wallace and Warsaw. A spur line also extends west to provide service to the City of Clinton. The closest regional airport serving the Sampson-Duplin Region is in the City of Goldsboro. Most of the residents rely, however, on either the Wilmington International Airport (ILM) or the Raleigh-Durham International Airport (RDU) for air transportation service. The following provides the general location of these facilities, as well as the two-county region. The figure below provides a regional location map of Sampson and Duplin Counties.

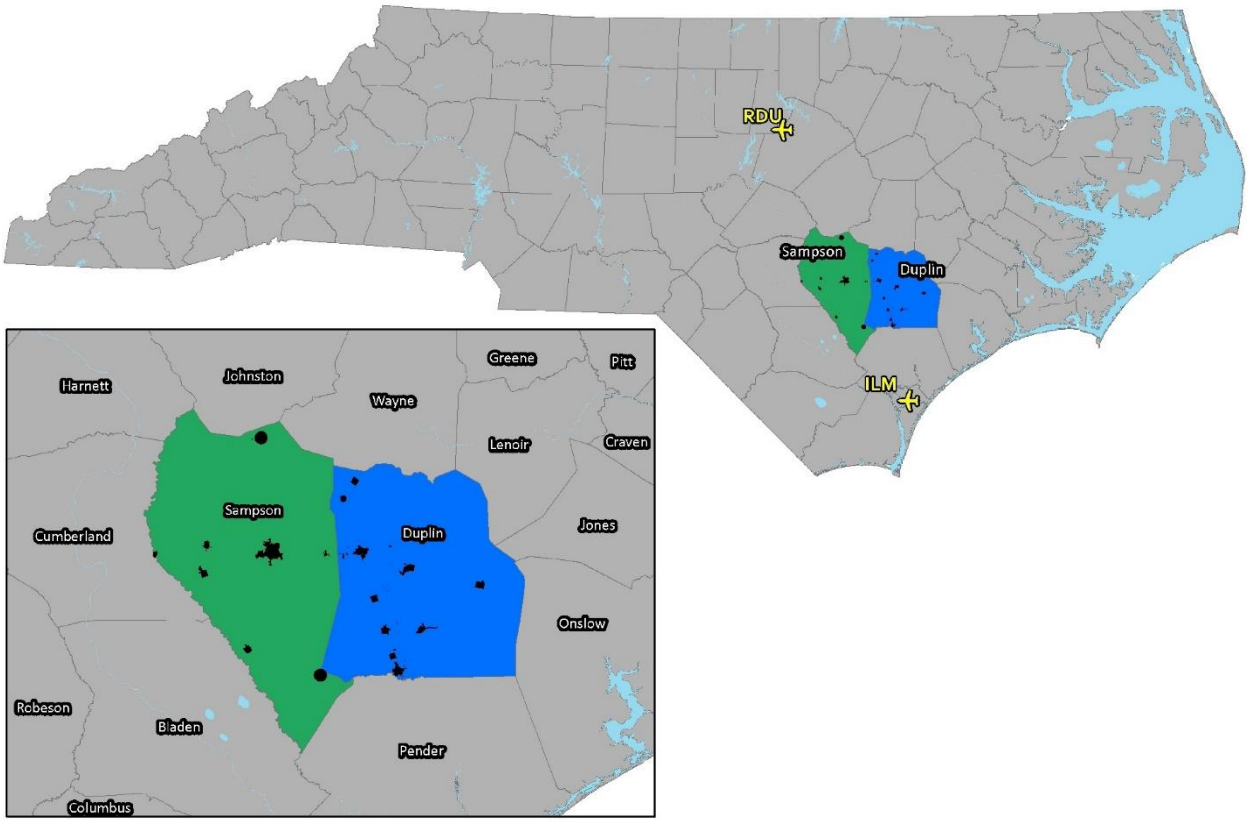


Figure 3-1: Regional Location

3.2 Topography & Geology

As previously noted, the Sampson-Duplin Region is located within the Coastal Plain of North Carolina. Elevations throughout the two counties ranges from approximately 20 feet to roughly 210 feet above sea level within northern portions of the region. The land surfaces throughout the region are nearly level to gently sloping; however, some steep slopes exist along stream banks and river courses. Drainage throughout the two counties flows southward to the Black River, except for the Goshen Swamp which drains eastward into the Neuse River Basin. Within the northern and southern extant of the region, there are several large bays and pocosins. Flooding is fairly limited throughout the region; this issue is covered in greater detail in Section 5 (Vulnerability Analysis) of this plan.

3.3 Climate

The Sampson-Duplin Region gets an average of 49 inches of rainfall per year. The US average is 37 inches per year. Snowfall average is 2 inches for the region. The average US city gets 25 inches of snow per year. The number of days with any measurable precipitation is 107. On average, there are 216 sunny days per year in the Region. The July high temperature is around 90 degrees Fahrenheit. The January low temperature is 32 degrees Fahrenheit. The comfort index, which is based on humidity during the hot months, is a 31 out of 100, where higher is more comfortable. The US average on the comfort index is 44.

Table *3-1* provides some basic statistics regarding annual climatic conditions throughout the Sampson-Duplin Region.

Table 3-1: Sampson-Duplin Region Climate Conditions

Climate Condition	Sampson-Duplin Region
Rainfall (inches)	48.9
Snowfall (inches)	2.4
Precipitation Days	107
Sunny Days	216
Average July High	89.5
Average January Low	31.8
UV Index	4.5
Elevation Above Sea Level (in feet)	124

Source: National Oceanic and Atmospheric Association.

3.4 History

3.4.1 Sampson County

Sampson County was established in April of 1784 by the North Carolina General Assembly from an area taken from neighboring Duplin County. Additional land was later annexed from Wayne and New Hanover Counties. Early settlers were Scotch-Irish immigrants who arrived under the protection of Henry McCulloch. In 1745, McCulloch, a London merchant who was awarded a large land grant from the British king, allowed numerous settlers from Northern Ireland to inhabit and develop the early colony. The Scotch-Irish immigrants were ultimately joined by descendants of the Swiss colony in New Bern and pioneers from the northern states of New Jersey, Connecticut, and Massachusetts. One of the many Scotch-Irish drawn to the area was John Sampson. Sampson was Duplin County's first Register of Deeds and served as Lt. Colonel and then Lt. General in the county's militia. Richard Clinton, Sampson's stepson, also established himself in governmental and military service, serving as Duplin County's Register of Deeds for ten years, and then in the Provincial Congress held in Hillsborough. In 1776, Clinton organized a company of militia minutemen and led them as captain in the defense of Wilmington against the British. Richard Clinton served as one of the first members of the House of Commons representing Duplin County, and continued as a representative of Duplin County until the creation of Sampson County in 1784. Clinton secured the passage of the act creating the new county and proposed the name "Sampson" in honor of his stepfather, John Sampson. The county seat was established in 1852, and it took the name Clinton, in honor of the other founding father of Sampson County.

3.4.2 Duplin County

Duplin County was established by the General Assembly on April 7, 1750, from what was the northern part of New Hanover County. At the time, the boundaries of Duplin County included what would eventually become Sampson County. Duplin County was named after Sir Thomas Hays, Lord Dupplin, who served on the Board of Trade and Plantations for the Crown in the 1740s. Duplin County's earliest immigrants were the Welsh (arriving in the 1700s) and followed by German Palatines and the Swiss in the 1730s and 1740s. The Scotch-Irish arrived in the area with Henry McCulloch, a wealthy London merchant, to settle a 71,160-acre land granted to him by the British Crown. Early settlers to the area also included French Huguenots and English who migrated from Virginia and Scottish Highlanders who came from the upper Cape Fear Region.

The early settlements were primarily along the river and larger creeks, which afforded the best means of transportation. One such settlement named Sarecta was located on the east bank of the Northeast Cape Fear and became the County's first incorporated town. Another settlement located at a place referred to as Golden Grove, later became the Town of Kenansville. In 1751, the first County court was held in the home of William McRee. Shortly thereafter, the first courthouse was built near the present-day Duplin/Sampson County line. When Sampson was created in 1784 from the western half of Duplin County, the courthouse was relocated to a more central location. In 1840, the Wilmington and Weldon Railroad was completed, running through the western portion of the County, sparking growth and investment. Along the rail line, the towns of Wallace, Teachey, Rose Hill, Magnolia, Warsaw, Faison, and Calypso were incorporated.

3.5 Population

3.5.1 Sampson County

The population for Sampson County increased overall by 27.2% from 1990 to 2000, and by 5.4% from 2000 to 2010. Table 3-2 provides Sampson County's population figures by municipality.

Table 3-2: Sampson County/Municipalities Population, 1990-2010

Between the years 1990 and 2013, the unincorporated areas and almost all of Sampson County's municipalities experienced population growth. The Towns of Garland and Roseboro experienced slight declines (by 10.2% and 8.5% respectively). Clinton, the county seat, has the largest population of the county's municipalities. The NC Office of State Planning predicts a continuing slight increasing trend for Sampson County's overall population, with the total 2015 county population projection estimated at 64,717 persons, a 2.0% increase from the 2010 population.

3.5.2 Duplin County

The population of Duplin County increased by 22.7% from 1990 to 2000, and by 19.2% from 2000 to 2010. Table 3-3 provides a summary of Duplin County's population figures by municipality.

Table 3-3: Duplin County/Municipalities Population, 1990-2010

Duplin County experienced an overall 47.9% increase in population from 1990 to 2013. Except for the Town of Teachey, all municipalities in Duplin County experienced an increase in population from 1990 to 2013. Wallace has the largest population of the county's municipalities. The NC Office of State Planning predicts a continuing slight increasing trend for Duplin County's overall population, with the total 2015 county population projection estimated at 60,742 persons, a 3.8% increase from the 2010 population.

3.6 Housing

3.6.1 Sampson County

The number of occupied housing units for the County, as reported in the 2010 American Community Survey, was 23,336, or 86.2% of the total number of housing units. Vacant housing units (3,747) comprised 13.8% of the total number of units. Table 3-4 summarizes the County's and municipalities' dwelling units by tenure. Harrells has the highest vacancy rate of Sampson County's municipalities, at 17.6%. Autryville has the highest percentage of rental units, at 63.1%. Overall, the County's 86.2% occupancy rate is relatively high.

Table 3-4: Sampson County/Municipalities Summary of Housing Units by Tenure, 2010

Almost 70% of the County's housing units were built after 1970. Table 3-5 presents housing units for the County and its municipalities by year the structures were built.

Table 3-5: Sampson County/Municipalities Housing Units by Year Structure Built, 2010

3.6.2 Duplin County

The number of occupied housing units for the County, as reported in the 2010 American Community Survey, was 22,052, or 86.5% of the total number of housing units. Vacant housing units (3,443) comprised 13.5% of the total number of units. Table 3-6 summarizes the County's and municipalities' dwelling units by tenure. Greenevers has the highest vacancy rate of Duplin County's municipalities, at 16.8%, while Kenansville has the highest percentage of rental units, at 50.6%. Overall, the County's 86.5% occupancy rate is quite high.

Table 3-6: Duplin County/Municipalities Summary of Housing Units by Tenure, 2010

Most of the County's housing units (68.1%) were built after 1970. Table 3-7 presents housing units for the County and its municipalities by year the structures were built.

Table 3-7: Duplin County/Municipalities Housing Units by Year Structure Built, 2010

3.7 Economy

3.7.1 Sampson County

In 2013, there was a total of 27,089 employed persons in Sampson County. Table 3-8 provides the county's and municipalities' unemployment rates for the civilian labor force for selected years. While the overall unemployment rate almost doubled for the county between 2000 and 2013, the Town of Harrells had an impressive 0% unemployment rate for 2000. The unemployment rates increased substantially for all the County's municipalities, except for the Town of Autryville, where unemployment decreased by 6.7% between 2000 and 2013, from 10.5% to 9.8%.

Table 3-8: Sampson County/Municipalities Civilian Unemployment Rate, 16 years and over

Sampson County's civilian employment is heavily concentrated in the education/health/social service and manufacturing sectors. The largest single employment category is the educational services, and health care and social assistance sector, which constitutes 20.8% of all those employed who are 16 years of age and older. Manufacturing accounts for the second largest category with 15.2%. Of the County's total 2013 employed labor force, 12.6% were employed in the agriculture/forestry, fishing/hunting, and mining industry and 12.2% in the retail trade sector. Table 3-9 provides a summary of Sampson County's employment by industry.

Table 3-9: Sampson County Employment by Industry, 2010

Normally, per capita income is considered a good indicator of an area's income producing capability or strength. Table 3-10 provides a comparison of per capita incomes for Sampson County, its municipalities, and North Carolina.

Table 3-10: Sampson County and North Carolina *Per Capita* Income, 2000 and 2010

The Town of Turkey had the lowest and Harrells had the highest per capita income of all of the county's municipalities for 2000, while the Town of Garland had the lowest and Clinton had the highest per capita income for 2010. Overall, the County's per capita income increased from 2000 to 2010 by $4,110, or 27.4%.

3.7.2 Duplin County

In 2013, there was a total of 24,488 employed persons in Duplin County. Table 3-11 provides the county's and municipalities' unemployment rates for the civilian labor force for selected years. While the overall unemployment rate increased for the county, the Town of Faison had an impressive 2.4% unemployment rate for 2000. The unemployment rates increased substantially for all of the County's municipalities, except for the Town of Kenansville, where unemployment decreased by 75.3% between 2000 and 2013, from 36.9% to 9.1%.

Table 3-11: Duplin County/Municipalities Civilian Unemployment Rate, 16 years and over

Duplin County's civilian employment is heavily concentrated in the manufacturing and education/health/social service sectors. The largest single employment category is the manufacturing, which constitutes 20.8% of all those employed who are 16 years of age and older. The educational services, and health care and social assistance sector accounts for the second largest category with 19.8%. Of the County's total 2013 employed labor force, 11.2% were employed in the agriculture/forestry, fishing/hunting, and mining industry and 9.5% in the construction sector. Table 3-12 provides a summary of Duplin County's employment by industry.

Table 3-12: Duplin County Employment by Industry, 2010

Normally, per capita income is considered a good indicator of an area's income producing capability or strength. Table 3-13 provides a comparison of per capita incomes for Duplin County, municipalities, and North Carolina.

Table 3-13: Duplin County and North Carolina *Per Capita* Income, 2000 and 2010

The Town of Greenevers had the lowest and Teachey had the highest per capita income of all the county's municipalities for 2000, while the Town of Magnolia had the lowest and Kenansville had the highest per capita income of all the county's municipalities for 2010. Overall, the County's per capita income increased from 2000 to 2010 by $2,194, or 15.1%.

SECTION 4: HAZARD IDENTIFICATION

44 CFR Subsection D §201.6(c)(2): [The plan shall include] A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

44 CFR Subsection D §201.6(c)(2)
[The plan shall include] A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

The following section describes the Risk Assessment process for the development of the Regional Hazard Mitigation Plan. It describes how the MAC met the following requirements from the 10-step planning process:

- Planning Step 4: Assess the Hazard
- Planning Step 5: Assess the Problem

As defined by FEMA, risk is a combination of hazard, vulnerability, and exposure. “It is the impact that a hazard would have on people, services, facilities, and structures in a community and refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage.”

This risk assessment covers the entire geographical area of the Sampson Duplin Regional Plan in North Carolina. The risk assessment process identifies and profiles relevant hazards and assesses the exposure of lives, property, and infrastructure to these hazards. The process allows for a better understanding of a jurisdiction’s potential risk to natural hazards and provides a framework for developing and prioritizing mitigation actions to reduce risk from future hazard events. This risk assessment followed the methodology described in the FEMA publication Understanding Your Risks—Identifying Hazards and Estimating Losses (FEMA 386-2, 2002), which breaks the assessment down to a four-step process:

Data collected through this process has been incorporated into the following sections of this plan:

- **Section 4**: **Hazard Identification** identifies the natural and man-made hazards that threaten the planning area.
- **Section 5**: **Hazard Profiles** discusses the threat to the planning area and describes previous occurrences of hazard events and the likelihood of future occurrences.
- **Section 6: Vulnerability Assessment** assesses the planning area’s exposure to the hazards; considering assets at risk, critical facilities, and future development trends.
- **Section 7: Capability Assessment** inventories existing mitigation activities and policies, regulations, and plans that pertain to mitigation and can affect net vulnerability.

The MAC conducted a hazard identification study to determine the natural and man-made hazards that threaten the Region. Existing hazard data from NCEM, FEMA, the National Oceanic and Atmospheric

Administration (NOAA), and other sources were examined to assess the significance of these hazards to the planning area. Significance was measured in general terms and focused on key criteria such as frequency and resulting damage, which includes deaths and injuries, as well as property and economic damage.

To further focus on the list of identified hazards for this plan update, the MAC researched past events that resulted in a federal disaster declaration for the County. Table 4-1 presents a list of all major disaster declarations that have occurred in the Region since 1984. This table presents the foundation for identifying which hazards pose the greatest risk to the region.

Table 4-1: Major Disaster Declarations in (1984 - 2019)

Declaration #	Date	Event Details
Sampson County		
724	1984	HURRICANE DIANA
699	1984	SEVERE STORMS & TORNADOES
1134	1996	HURRICANE FRAN
1240	1998	HURRICANE BONNIE
3146	1999	HURRICANE FLOYD EMERGENCY DECLARATIONS
1292	1999	HURRICANE FLOYD MAJOR DISASTER DECLARATIONS
1490	2003	HURRICANE ISABEL
3222	2005	HURRICANE KATRINA EVACUATION
3254	2005	HURRICANE OPHELIA
4019	2011	HURRICANE IRENE
1969	2011	SEVERE STORMS, TORNADOES, AND FLOODING
4285	2016	HURRICANE MATTHEW
3380	2016	HURRICANE MATTHEW
4393	2018	HURRICANE FLORENCE
3401	2018	HURRICANE FLORENCE
4465	2019	HURRICANE DORIAN
3423	2019	HURRICANE DORIAN
3471	2020	COVID-19
4487	2020	COVID-19 PANDEMIC
3534	2020	HURRICANE ISAIAS

Duplin County		
699	1984	SEVERE STORMS & TORNADOES
1127	1996	HURRICANE BERTHA
1134	1996	HURRICANE FRAN
1240	1998	HURRICANE BONNIE
3146	1999	HURRICANE FLOYD EMERGENCY DECLARATIONS
1292	1999	HURRICANE FLOYD MAJOR DISASTER DECLARATIONS
1490	2003	HURRICANE ISABEL
3222	2005	HURRICANE KATRINA EVACUATION
3254	2005	HURRICANE OPHELIA
3314	2010	HURRICANE EARL
4019	2011	HURRICANE IRENE
3327	2011	HURRICANE IRENE
4285	2016	HURRICANE MATTHEW
3380	2016	HURRICANE MATTHEW
4393	2018	HURRICANE FLORENCE
3401	2018	HURRICANE FLORENCE
4465	2019	HURRICANE DORIAN
3423	2019	HURRICANE DORIAN
3471	2020	COVID-19
4487	2020	COVID-19 PANDEMIC
3534	2020	HURRICANE ISAIAS

Source: FEMA: https://www.fema.gov/data-visualization/disaster-declarations-states-and-counties

Table 4-2 documents the decisions made by the MAC as it relates to those hazards that were to be identified, analyzed, and addressed through the development of this plan. This table lists whether the hazard was included in the 2018 State of North Carolina Hazard Mitigation Plan and the Sampson Duplin Regional Hazard Mitigation Plan. This table summarizes those hazards identified for inclusion in this plan as well as those that were not included and the reason for the decision.

Table 4-2: Hazard Evaluation

Hazard	Included in State Plan?	Identified as a significant hazard to be included in the Plan?
Coastal Hazards (coastal flooding, coastal erosion, storm surge & sea level rise)	Yes	No
Dam Failure	Yes	Yes
Drought	Yes	Yes
Earthquake	Yes	Yes
Erosion	No	No
Extreme Heat	No	No
Hurricane/Tropical Storm	Yes	Yes
Inland Flooding	Yes	Yes
Severe Weather (thunderstorm wind, lightning, & hail)	Yes	Yes
Sinkhole	Yes	No
Tornado	Yes	Yes
Wildfire	Yes	Yes
Winter Storm	Yes	Yes

The following hazards were evaluated by the MAC and determined to be not significant hazards and should not be included in the plan update at this time:

- **Erosion -** This hazard may be possible, but the likelihood and magnitude are so minimal that the MAC decided not to provide a detailed description or risk assessment.
- **Extreme Heat -** This hazard may be possible, but the likelihood and magnitude are so minimal that the MAC decided not to provide a detailed description or risk assessment.
- **Sinkhole -** This hazard may be possible, but the likelihood and magnitude are so minimal that the MAC decided not to provide a detailed description or risk assessment.

The following hazards were evaluated by the MAC and determined to be non-prevalent hazards that should not be included in the plan:

- **Avalanche** – According to the Federal Emergency Management Agency's Multi-Hazard Identification and Risk Assessment, this hazard is only relevant to the western United States.
- **Landslide** – Based on the national U.S. Geological Survey map of landslide susceptibility and incidence, rests within a zone of low incidence. The topography of the upper coastal plain does not provide enough elevation relief to support a landslide event.
- **Tsunami** – According to a 2009 report by the USGS titled Regional Assessment of Tsunami Potential in the Gulf of Mexico, there are no significant earthquake sources within the Atlantic

Ocean that are likely to generate tsunamis. Furthermore, the Region lies over 40 miles inland from the coast.

- **Volcano** – There are no known active volcanoes in the United States east of central New Mexico.

SECTION 5: HAZARD PROFILES

The hazards identified in Section 4 – Hazard Identification, are profiled individually in this section. It consists of the following subsections:

- 5.1 Dam Failure
- 5.2 Drought
- 5.3 Earthquake
- 5.4 Hurricane/Tropical Storm
- 5.5 Inland Flooding
- 5.6 Severe Weather (Thunderstorm Wind, Lightning & Hail)
- 5.7 Tornado
- 5.8 Wildfire
- 5.9 Winter Storm
- 5.10 Hazard Profile Summary
-

44 CFR Subsection D §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.

The MAC recognizes the need to continually capture and update the data in the risk assessment as development and hazards occurs in the participating jurisdictions. Additionally, in some cases the data captured is at the county level, work will be done to capture more detailed data at the city-level. As progress is being made to mitigate hazards this section of the plan will also be reviewed and updated, as needed, along with any hazardous events. Information provided by members of the MAC has been integrated into this chapter with information from other data sources. Each hazard is profiled in the following format:

Hazard Description

This section provides a description of the hazard followed by details specific to the regional planning area.

Location and Spatial Extent

This section includes information on the hazard extent, seasonal patterns, speed of onset/duration, magnitude and any secondary effects.

Past Occurrences

This section contains information on historical events, including the extent or location of the hazard within or near the regional planning area.

Probability of Future Occurrence

This section gauges the likelihood of future occurrences based on past events and existing data. The definition of each category differs for each hazard to provide a more specific likelihood for each hazard. The likelihood of future flood occurrences, for example, is categorized into one of the classifications:

- Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less Than 1% Of Buildings Are In 100-Year Floodplain
- Medium: Between 1% And 10% Of Buildings Are In 100-Year Floodplain
- High: More Than 10% Of Buildings Are In 100-Year Floodplain

Consequence and Impact Analysis

This section examines effects and impacts of the hazard on people, first responders, continuity of operations, built environment, economy and natural environment.

Those hazards determined to be of high or medium significance were characterized as priority hazards that required further evaluation in Section 6 Vulnerability Assessment. Significance was determined by frequency of the hazard and resulting damage, including deaths/injuries and property, crop and economic damage. Hazards occurring infrequently or having little to no impact on the planning area were determined to be of low significance and not considered a priority hazard. These criteria allowed the MAC to prioritize hazards of greatest significance and focus resources where they are most needed.

Study Area

The Region includes 18 participating municipalities, listed below. Figure 5-1 on the following page provides a base map, for reference, of the Region and the participating municipalities.

Participating Jurisdictions

Sampson County

- Town of Autryville
- City of Clinton
- Town of Garland
- Town of Harrells
- Town of Newton Grove
- Town of Roseboro
- Town of Salemburg
- Town of Turkey

Duplin County

- Town of Beulaville
- Town of Calypso
- Town of Faison
- Town of Greenevers
- Town of Kenansvile
- Town of Magnolia
- Town of Rose Hill
- Town of Teachey
- Town of Wallace
- Town of Warsaw

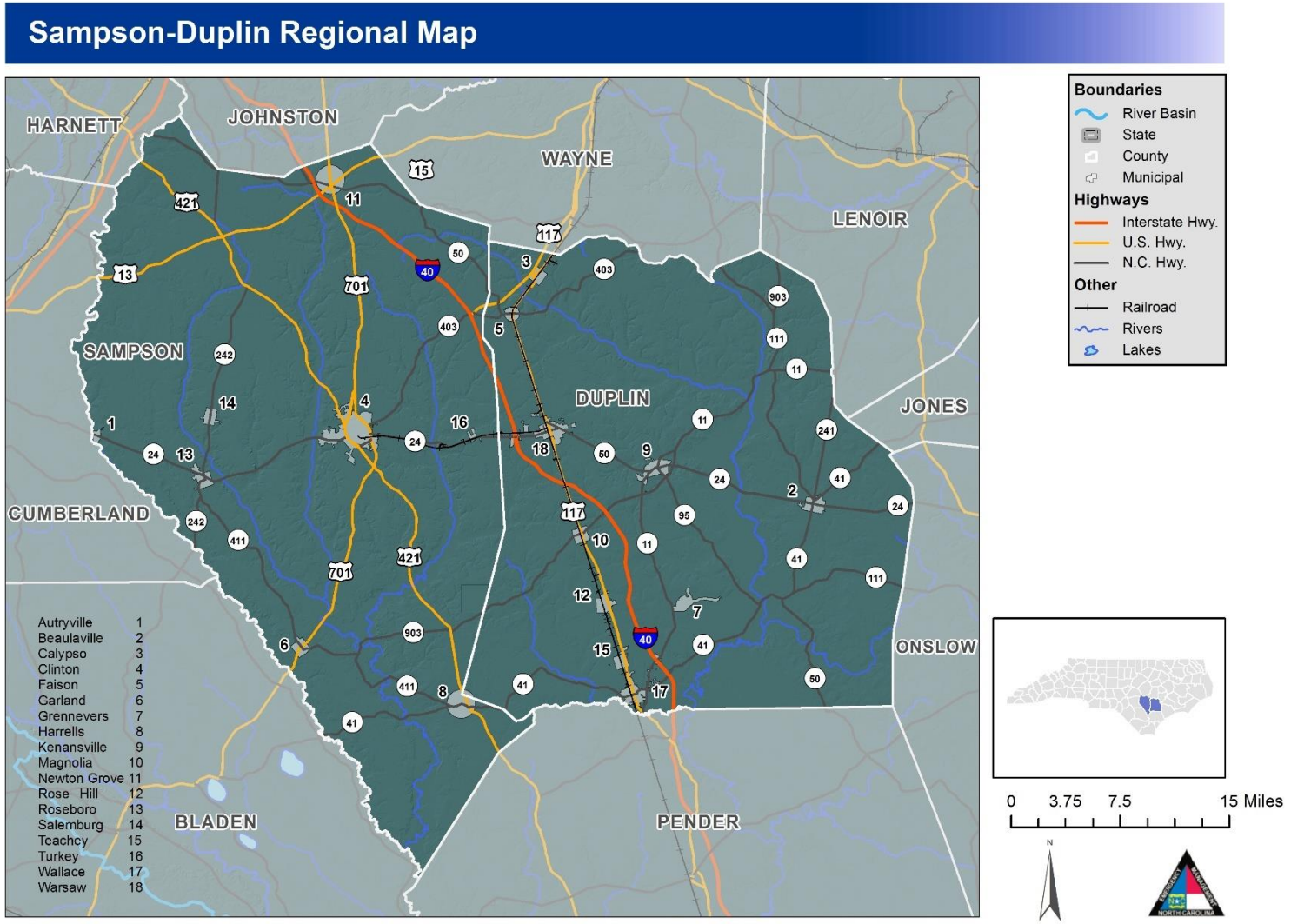


Figure 5-1: Sampson-Duplin Regional Map

Climate Change

Climate change refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use (11). Climate change is a natural occurrence in which the earth has warmed and cooled periodically over geologic time. The recent and rapid warming of the earth over the past century has been cause for concern, as this warming is very likely due to the accumulation of human-caused greenhouse gases, such as CO_2, in the atmosphere (12). This warming is occurring almost everywhere in the world which suggests a global cause rather than changes in localized weather patterns.

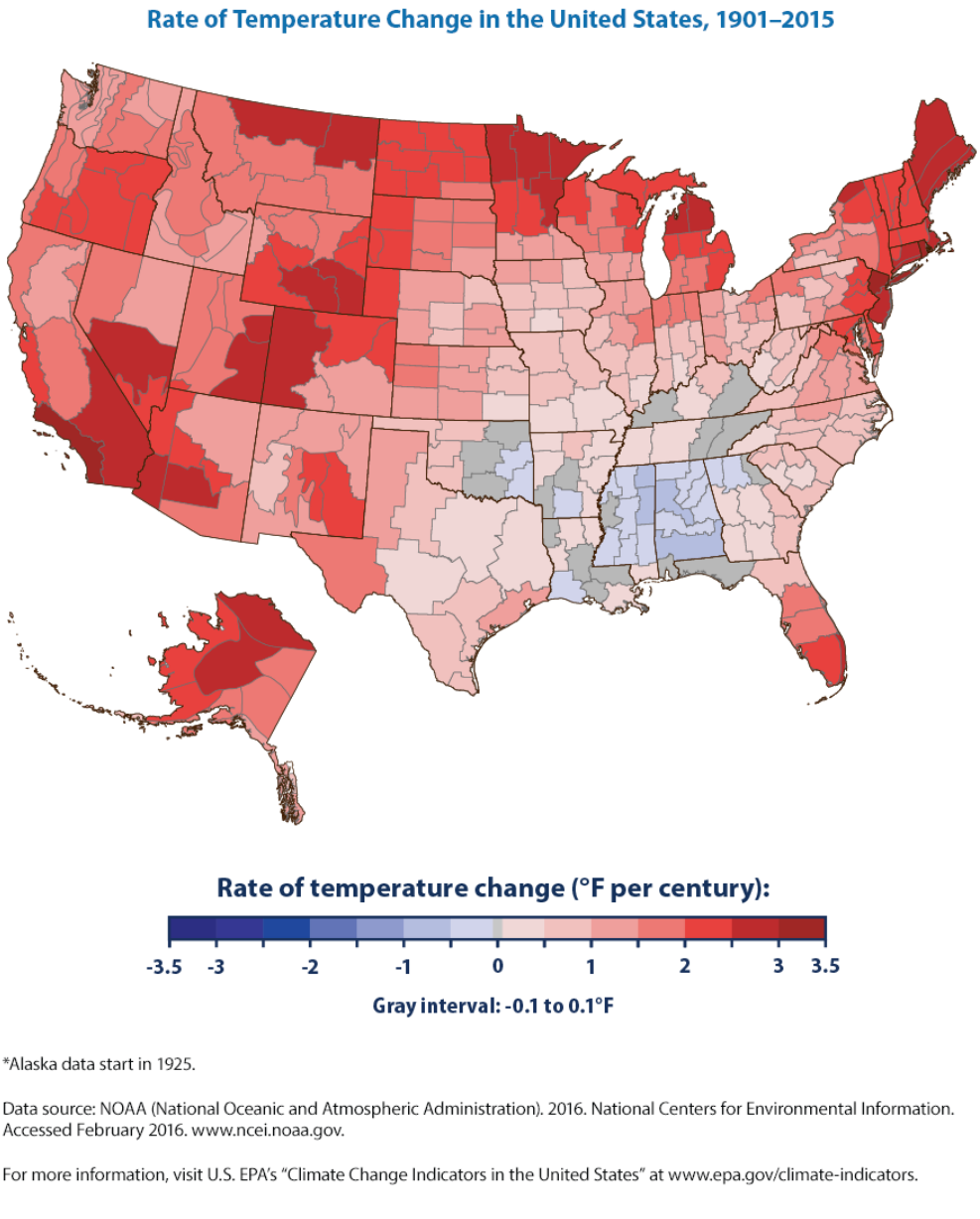


Figure 5-2: Figure 5-3: Rate of Temperature in the United States (1901-2015)

Since 1901, the average surface temperature across the contiguous 48 states has risen at an average rate of 0.14°F per decade (1.4°F per century). Average temperatures have risen more quickly since the late 1970s (0.36 to 0.55°F per decade). Seven of the top 10 warmest years on record for the contiguous 48 states have occurred since 1998, and 2012 was the warmest year on record. The figure below, based on data from NOAA and prepared by the EPA, shows how annual average air temperatures have changed in different parts of the United States since 1901. According to the National Climate Assessment (10), the Region is projected to experience an additional 20-30 days annually with temperatures above 95oF, drastically increasing the number of extreme heat days. Furthermore, the average temperature in the Southeast United States is expected to increase by four to eight degrees Fahrenheit by 2100(10).

The National Climate Assessment identifies the following climate risks projected to impact the Southeast U.S., including the Region: rising temperatures and more frequent extreme heat events; increasing frequency and intensity of severe weather events; more heavy rain events and flooding; and more frequent and prolonged drought. A discussion of the effect of these climate risks on the individual hazards profiled below has been included in the Probability of Future Occurrence subsection for each hazard as applicable.

5.1 Dam Failure

5.1.1 Hazard Description

Dam Failure

A dam is a barrier constructed across a watercourse that stores, controls, or diverts water. Dams are usually constructed of earth, rock, or concrete. The water impounded behind a dam is referred to as the reservoir and is measured in acre-feet. One acre-foot is the volume of water that covers one acre of land to a depth of one foot. Dams can benefit farmland, provide recreation areas, generate electrical power, and help control erosion and flooding issues.

A dam failure is the collapse or breach of a dam that causes downstream flooding. Dam failures may be caused by natural events, human-caused events, or a combination. Due to the lack of advance warning, failures resulting from natural events, such as hurricanes, earthquakes, or landslides, may be particularly severe. Prolonged rainfall and subsequent flooding are the most common cause of dam failure.

Dam failures usually occur when the spillway capacity is inadequate, and water overtops the dam or when internal erosion in dam foundation occurs (also known as piping). If internal erosion or overtopping cause a full structural breach, a high-velocity, debris-laden wall of water is released downstream, damaging or destroying anything in its path. Overtopping is the primary cause of earthen dam failure in the U.S.

Dam failures can result from any one or a combination of the following:

- Prolonged periods of rainfall and flooding;
- Inadequate spillway capacity, resulting in excess overtopping flows;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, replace lost material from the cross-section of the dam and abutments, or maintain gates, valves, and other operational components;
- Improper design, including the use of improper construction materials and practices;
- Negligent operation, including the failure to remove or open gates or valves during high flow periods;

- Failure of upstream dams on the same waterway; and
- High winds, which can cause significant wave action and result in substantial erosion.

Water released by a failed dam generates tremendous energy and can cause a flood that is catastrophic to life and property. A catastrophic dam failure could challenge local response capabilities and require evacuations to save lives. Impacts to life safety will depend on the warning time and the resources available to notify and evacuate the public. Major casualties and loss of life could result, as well as water quality and health issues. Potentially catastrophic effects to roads, bridges, and homes are also of major concern. Associated water quality and health concerns could also be issues. Factors that influence the potential severity of a full or partial dam failure are the amount of water impounded; the density, type, and value of development and infrastructure located downstream; and the speed of failure.

Each state has definitions and methods to determine the Hazard Potential of a dam. In North Carolina, dams are regulated by the state if they are 25 feet or more in height and impound 50 acre-feet or more. Dams and impoundments smaller than that may fall under state regulation if it is determined that failure of the dam could result in loss of human life or significant damage to property. The height of a dam is from the highest point on the crest of the dam to the lowest point on the downstream toe, and the storage capacity is the volume impounded at the elevation of the highest point on the crest of the dam.

Dam Safety Program engineers determine the "hazard potential" of a dam, meaning the probable damage that would occur if the structure failed, in terms of loss of human life and economic loss or environmental damage. Dams are assigned one of three classes based on the nature of their hazard potential:

1. Class A (Low Hazard) includes dams located where failure may damage uninhabited low value non- residential buildings, agricultural land, or low volume roads.
2. Class B (Intermediate Hazard) includes dams located where failure may damage highways or secondary railroads, cause interruption of use or service of public utilities, cause minor damage to isolated homes, or cause minor damage to commercial and industrial buildings. Damage to these structures will be considered minor only when they are located in backwater areas not subjected to the direct path of the breach flood wave; and they will experience no more than 1.5 feet of flood rise due to breaching above the lowest ground elevation adjacent to the outside foundation walls or no more than 1.5 feet of flood rise due to breaching above the lowest floor elevation of the structure.
3. Class C (High Hazard) includes dams located where failure will likely cause loss of life or serious damage to homes, industrial and commercial buildings, important public utilities, primary highways, or major railroads.

Table 5-1: Dam Hazard Classifications

Hazard Classification	Description	Quantitative Guidelines
Low	1) Interruption of road service, low volume roads 2) Economic damage	1) Less than 25 vehicles per day 2) Less than $30, 000
Intermediate	1) Damage to highways, interruption of service 2) Economic damage	1) 25 to less than 250 vehicles per day 2) $30, 000 to less than $200, 000
High	1) Probable loss of human life due to breached roadway or bridge on or below the dam 2) Economic damage	1) Probable loss of 1 or more human lives 2) More than $200, 000

5.1.2 Location and Spatial Extent

Dams

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

Table 5-2: Counts of High Hazard and Intermediate Hazard Dams by Jurisdiction

Jurisdiction	High	Intermediate
Duplin		
Duplin County (Unincorporated Area)	7	0
Subtotal Duplin	**7**	**0**
Sampson		
City of Clinton	1	0
Sampson County (Unincorporated Area)	5	0
Subtotal Sampson	**6**	**0**
TOTAL PLAN	**13**	**0**

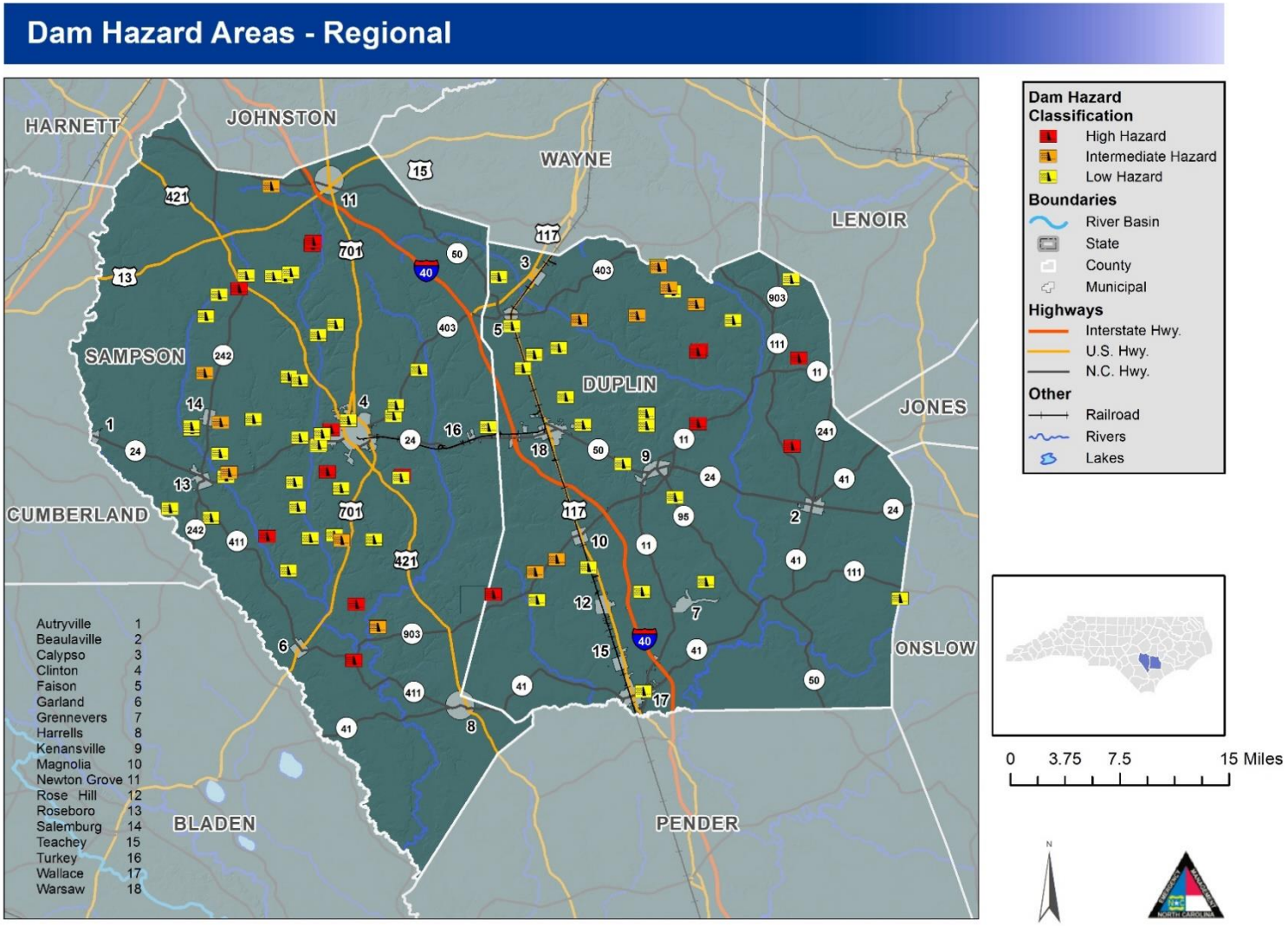


Figure 5-4: Dam Locations

5.1.3 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. 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.

5.1.4 Past Occurrences

There are no recorded past occurrences of failures at any of the above listed dams.

5.1.5 Probability of Future Occurrence

Based on the analyses performed in IRISK, the probability of future Dam Failure is shown in Table 5-3, 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

Table 5-3: Dam Failure - Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town of Garland	Low
Town of Greenevers	Low
Town of Harrells	Low
Town of Kenansville	Low

Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	Low
Town of Warsaw	Low

5.1.6 Consequence and Impact Analysis

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 County 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. Sampson County and the jurisdiction of Clinton 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 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 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.

5.2 Drought

5.2.1 Hazard Description

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, 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.

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

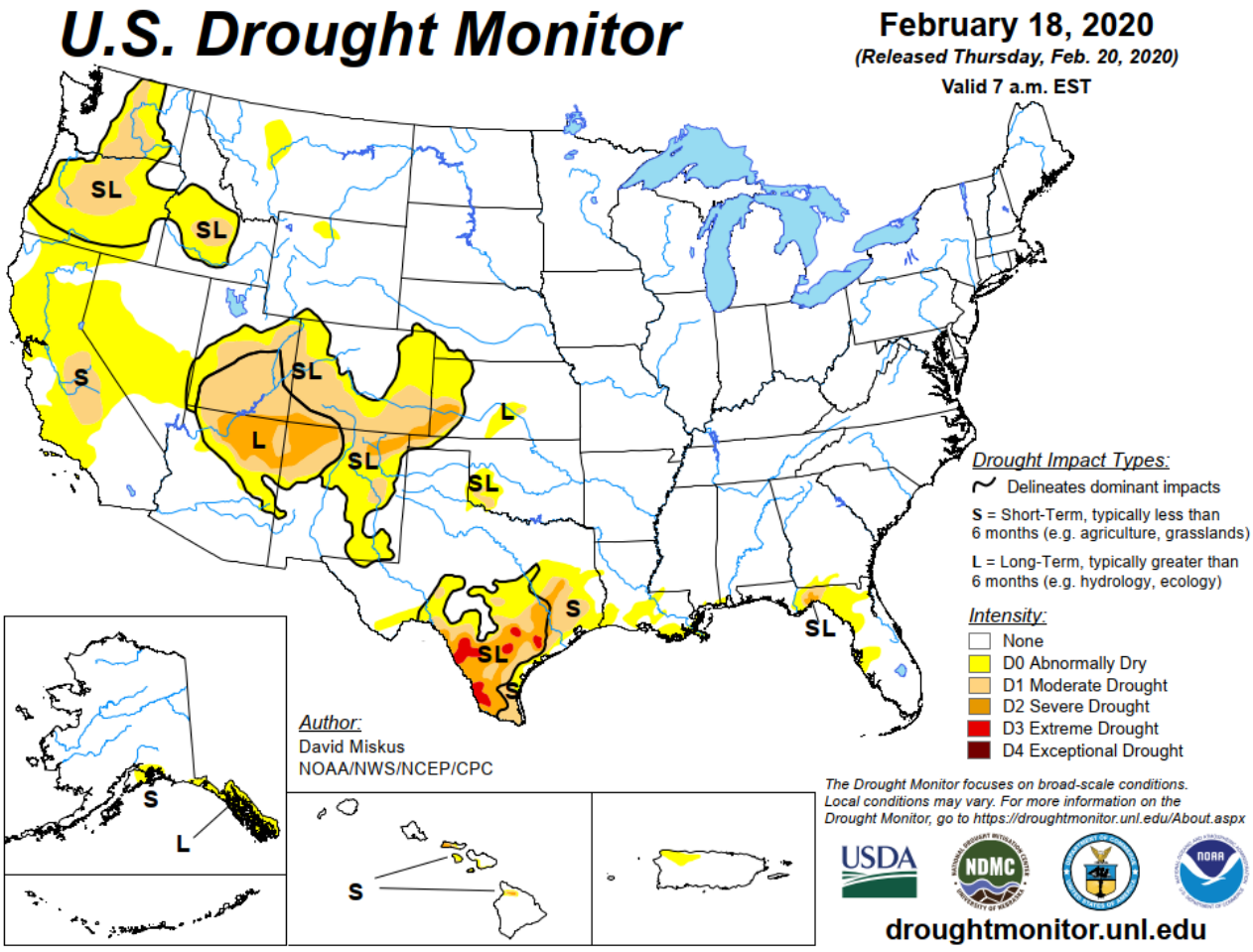
Table 5-4: Drought Classification Definitions

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 several 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 5-5, the Palmer Drought Severity Index Summary Map for the United States, drought affects most areas of the United States, but is less severe in the Eastern United States.



Source: National Drought Mitigation Center

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

The wide variety of disciplines affected by drought, its diverse geographical and temporal distribution, and the many scales drought operates on make it difficult to develop both a definition to describe drought and an index to measure it. Many quantitative measures of drought have been developed in the United States, depending on the discipline affected, the region being considered, and the particular application. Several indices developed by Wayne Palmer, as well as the Standardized Precipitation Index, are useful for describing the many scales of drought.

The U.S. Drought Monitor provides a summary of drought conditions across the United States and Puerto Rico. Often described as a blend of art and science, the map is updated weekly by combining a variety of data-based drought indices and indicators and local expert input into a single composite drought indicator.

The Standardized Precipitation Index (SPI) is a way of measuring drought that is different from the Palmer Drought Index (PDI). Like the PDI, this index is negative for drought, and positive for wet conditions. But the SPI is a probability index that considers only precipitation, while Palmer's indices are water balance indices that consider water supply (precipitation), demand (evapotranspiration) and loss (runoff).

The Palmer Drought Severity Index (PDSI) devised in 1965, was the first drought indicator to assess moisture status comprehensively. It uses temperature and precipitation data to calculate water supply and demand, incorporates soil moisture, and is considered most effective for unirrigated cropland. It primarily reflects long-term drought and has been used extensively to initiate drought relief. It is more complex than the SPI and the Drought Monitor.

5.2.2 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, eastern 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 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. Data from the North Carolina Drought Management Advisory Council and National Climatic Data Center (NCDC) were used to ascertain historical drought events in the Region. The North Carolina Drought Management Advisory Council reports data on North Carolina drought conditions from 2000 to 2019 through the North Carolina Drought Monitor. It classifies drought conditions by county on a scale of D0 to D4 (which are depicted below):

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

Category	Impact
	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
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

The maps below display the current drought conditions in the area at the time the map was created. It should be noted that the map display drought conditions at the time the map was created. Therefore, areas may have experienced moderate drought even though it is not indicated by the following maps below.

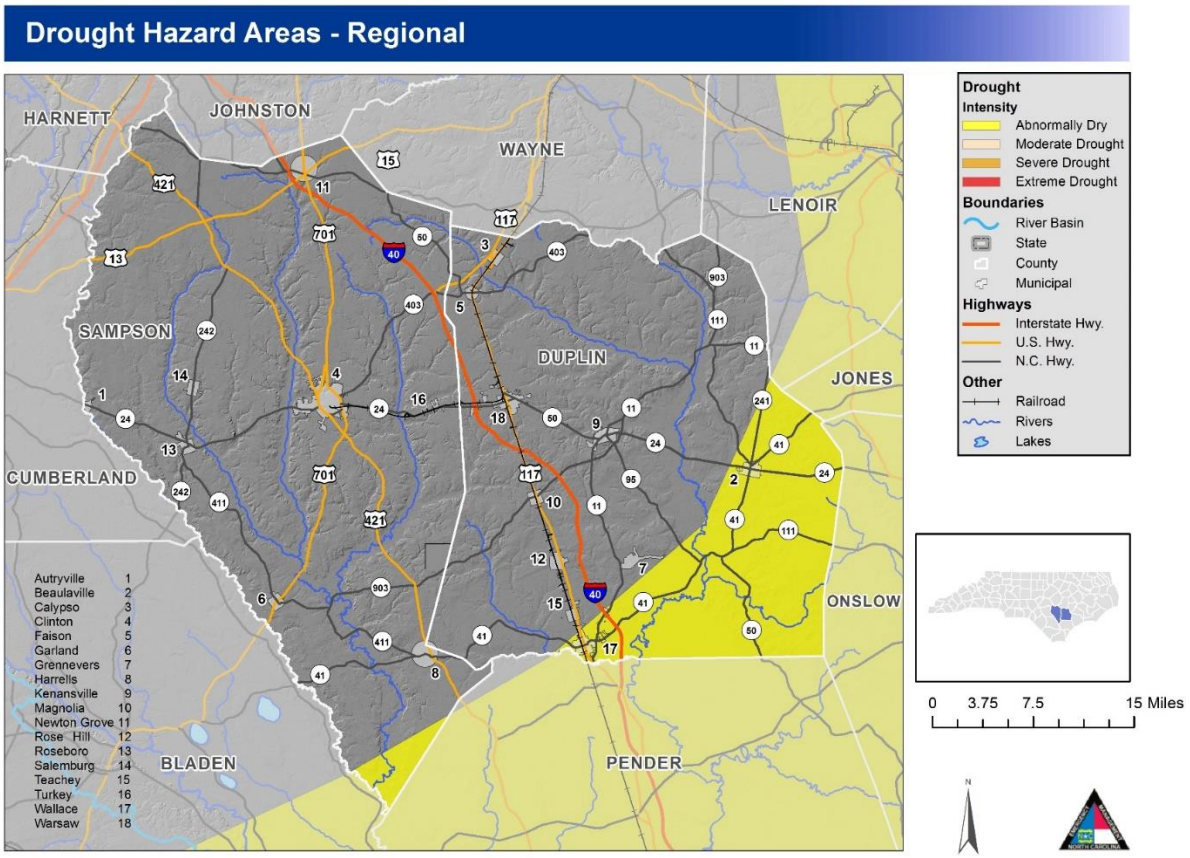


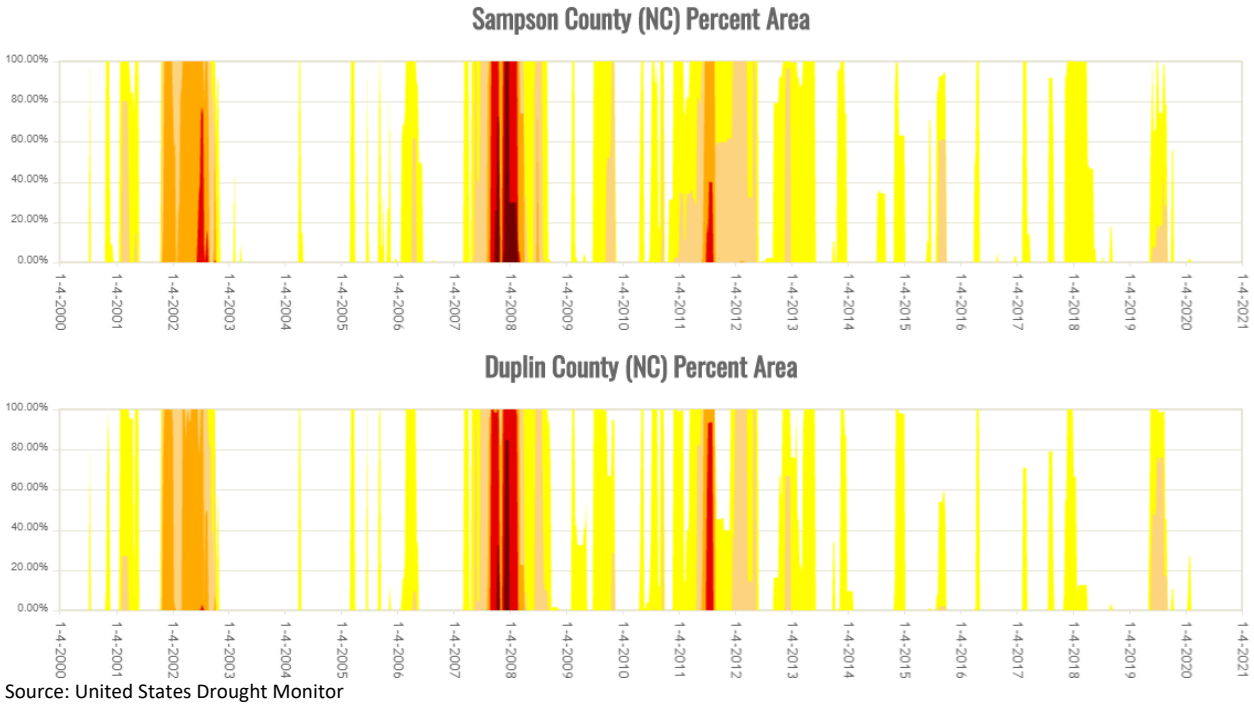
Figure 5-6: Drought Hazard Areas - Regional

5.2.3 Extent

According to the North Carolina Drought Monitor, all jurisdictions in the planning area in the Region had drought occurrences (including abnormally dry) in the last 20 years (2000-2020) (Figure 5-7) 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 most of the county may be in a less severe condition.

5.2.4 Past Occurrences

According to the North Carolina Drought Monitor, the Region has experienced drought conditions every year since 2000. Figure 5-7 shows the most severe classification for each year by County.



Source: United States Drought Monitor

Figure 5-7: Historical Drought Occurrences

5.2.5 Probability of Future Occurrence

The probability of future Drought is shown in Table 5-5, 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

Table 5-5: Droughts - Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Medium
Duplin County (Unincorporated Area)	Medium
Sampson County (Unincorporated Area)	Medium
Town of Autryville	Medium
Town of Beulaville	Medium
Town of Calypso	Medium
Town of Faison	Medium
Town of Garland	Medium

Town of Greenevers	Medium
Town of Harrells	Medium
Town of Kenansville	Medium
Town of Magnolia	Medium
Town of Newton Grove	Medium
Town of Rose Hill	Medium
Town of Roseboro	Medium
Town of Salemburg	Medium
Town of Teachey	Medium
Town of Turkey	Medium
Town of Wallace	Medium
Town of Warsaw	Medium

5.2.6 Consequence and Impact Analysis

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 jurisdictions in the Region are vulnerable to this impact.

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. The jurisdictions of Autryville and Faison are most vulnerable due to their high level of income based on agricultural.

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.

5.3 Earthquake

5.3.1 Hazard Description

An earthquake is a movement or shaking of the ground. 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.

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. A detailed description of the Richter Scale is given in Table 5-6.

Table 5-6: Richter Scale

Richter Magnitudes	Earthquake Effects
Less than 3.5	Generally, not felt, but recorded.
3.5-5.4	Often felt, but rarely causes damage.
Under 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 greater	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

Table 5-7: 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

5.3.2 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 8.0 on the Richter Scale during the last 200 years. In addition, there are several smaller fault lines throughout North Carolina.

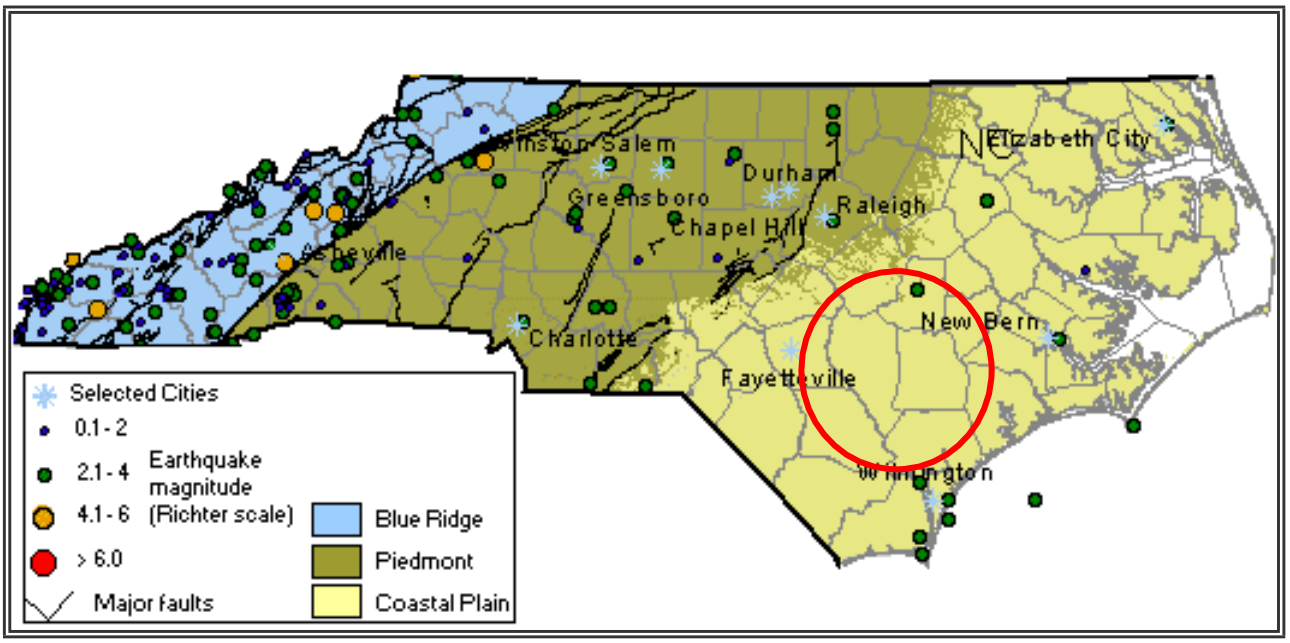
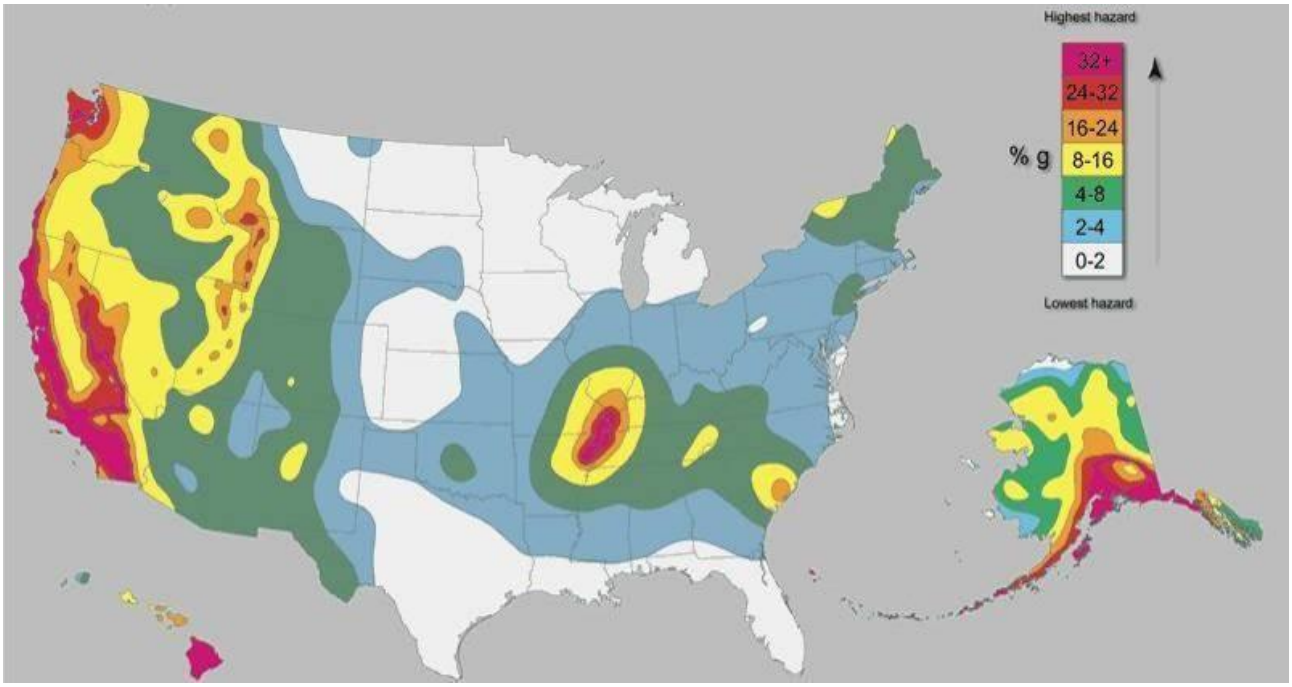


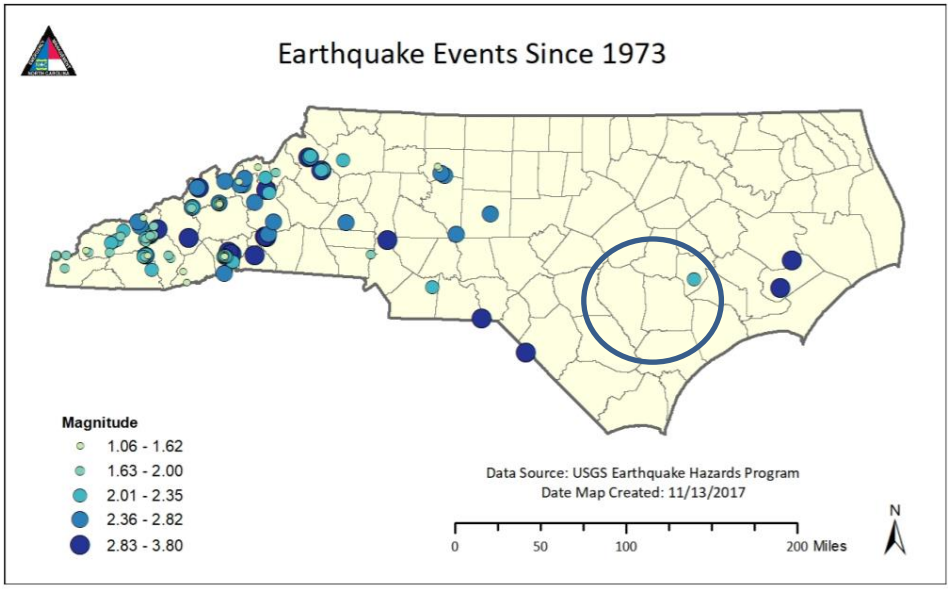
Figure 5-8: Geological and Seismic Information for North Carolina

Figure 5-9 depicts the intensity level for North Carolina based on the national USGS map of peak acceleration with 2 percent probability of exceedance in 50 years. It is the probability that ground motion will reach a certain level during an earthquake. The data shows 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 2 percent probability of exceedance in 50 years. According to this map, the Region lies within an approximate zone level between 6 and 14% ground acceleration. This indicates that the region exists within an area of moderate seismic risk.

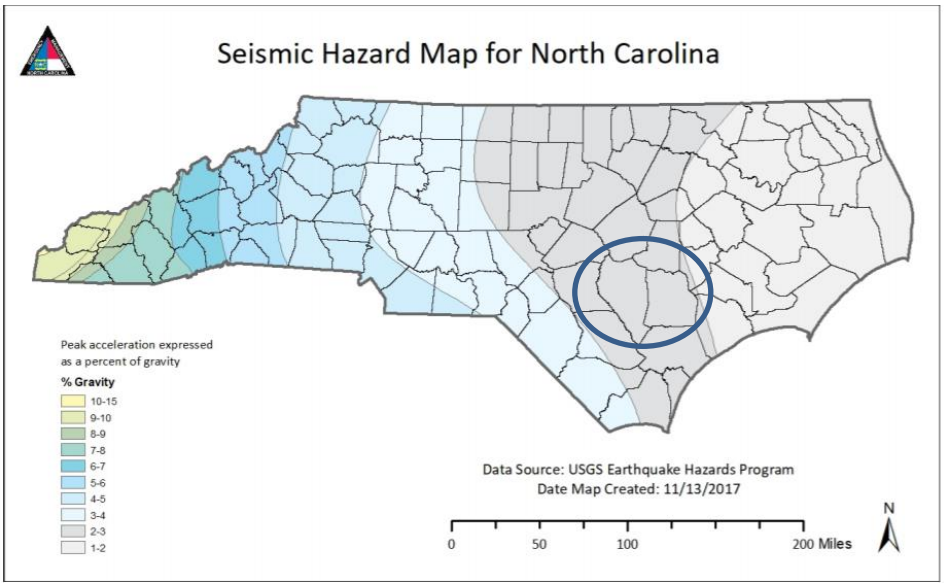


Source: United States Geological Survey

Figure 5-9: Seismic Hazard Information for North Carolina



Source: North Carolina State Hazard Mitigation Plan



Source: North Carolina State Hazard Mitigation Plan

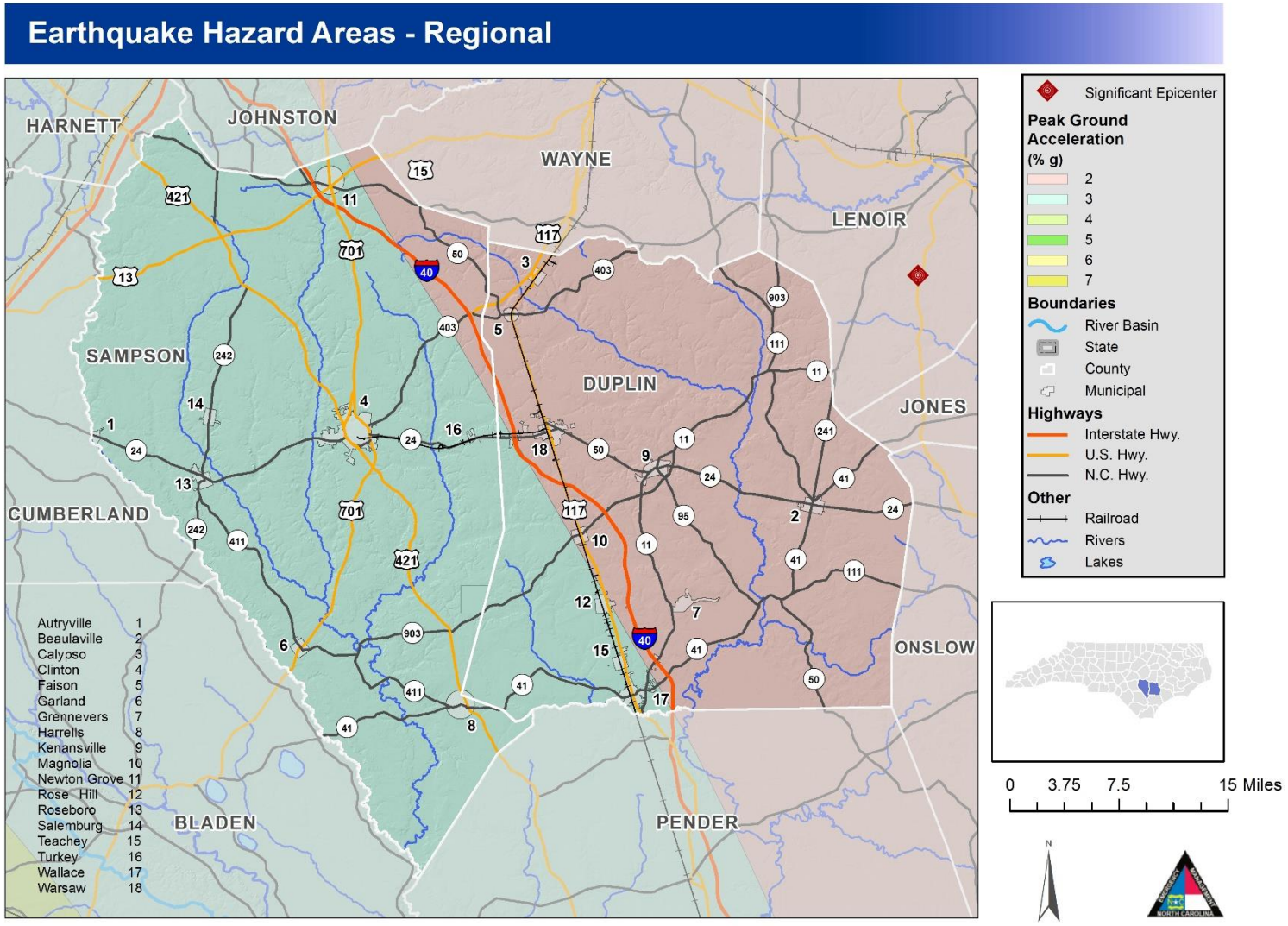


Figure 5-10: Earthquake Hazard Areas - Regional

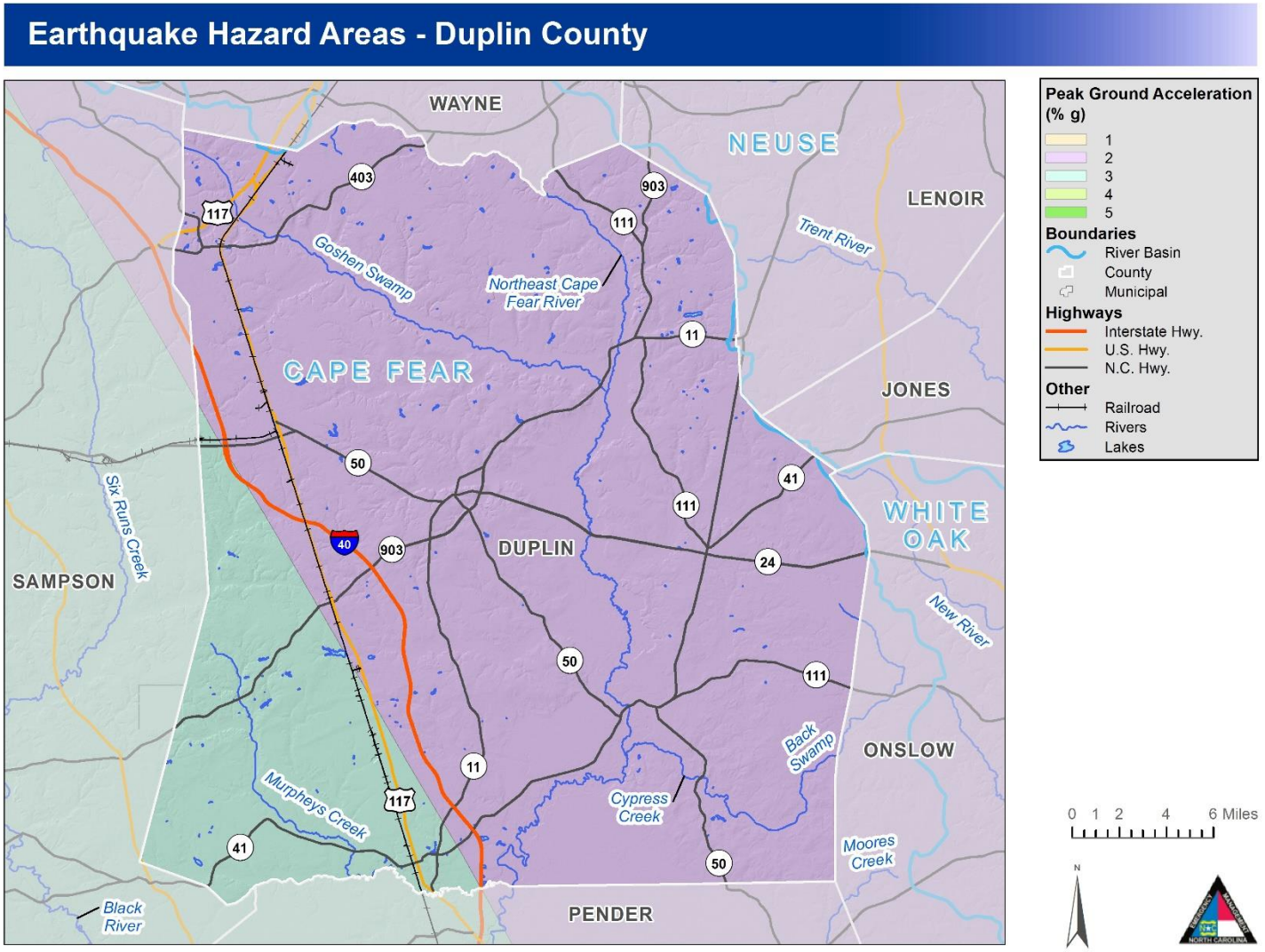


Figure 5-11: Earthquake Hazard Areas – Duplin County

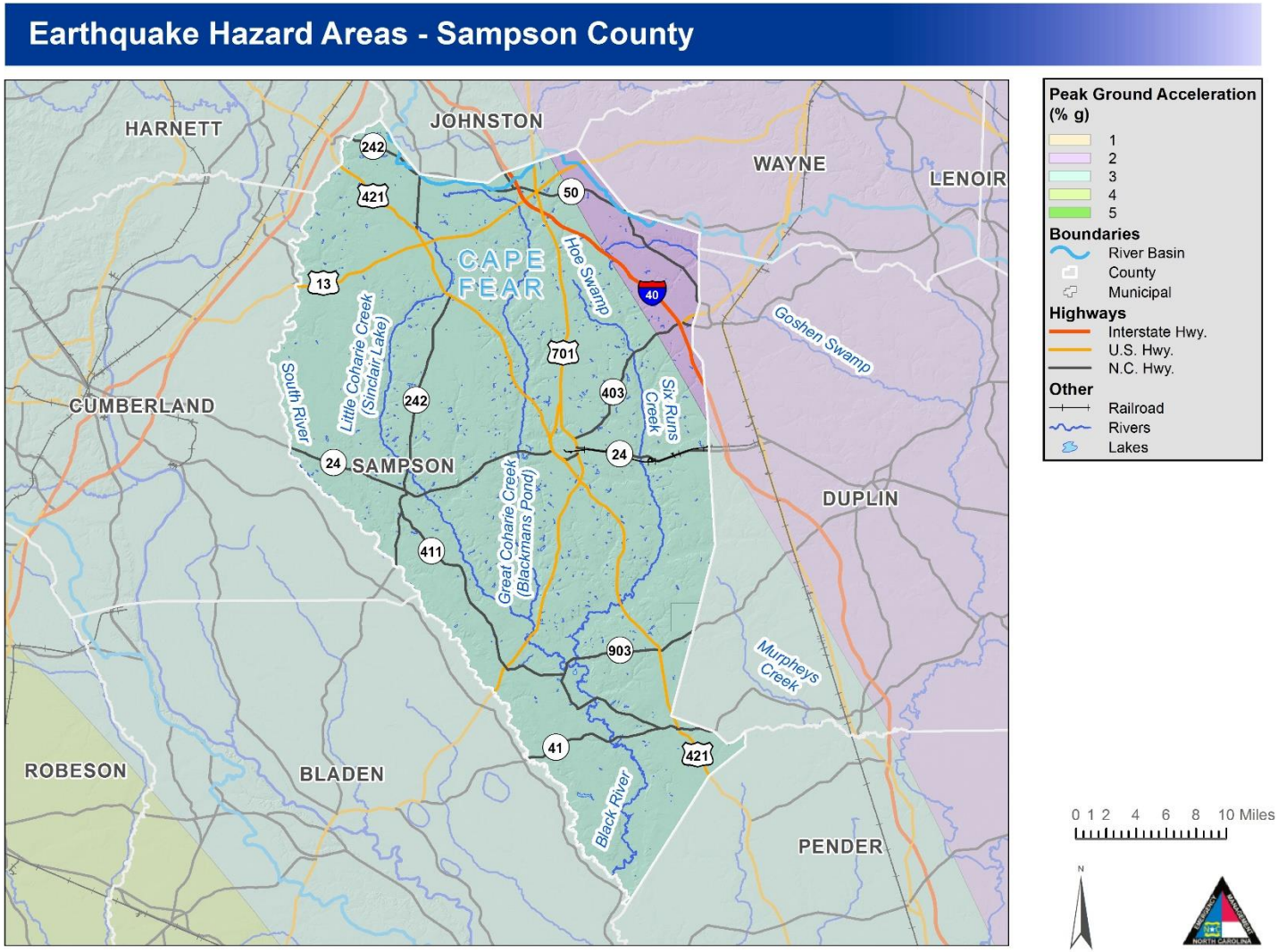


Figure 5-12: Earthquake Hazard Areas – Sampson County

5.3.3 Extent

Earthquake extent can be measured by the Richter Scale and the Modified Mercalli Intensity (MMI) scale. The most severe earthquake felt in the Region since the mid-1800s was a six (VI) on the Modified Mercalli Intensity Scale. This event occurred in 1886, and the effects of this magnitude earthquake typically include trees swaying, suspended objects swinging, and objects falling off of shelves. Earthquakes of greater magnitude may be possible within the Region; however, this is known to be the greatest severity currently on record.

5.3.4 Past Occurrences

Historical seismicity is an indicator of where earthquakes have happened. Paleo seismicity (the study of earthquake-induced ground failures during prehistoric times) provides further evidence as to the size and frequency of earthquakes. Since 1735, North Carolina has experienced 23 earthquakes, each of which caused at least architectural damage. From historical data, scientists from the U.S. Geological Survey (USGS) and several university research centers have produced maps that project the expected ground motion for various return periods. The last recorded damaging earthquake in which the epicenter was in North Carolina occurred in the vicinity of the Town of Hendersonville in 1981. The epicenter for the last recorded damaging event that affected the state was in Mineral Springs, Virginia in 2011. A list of earthquakes that have caused damaged in North Carolina is presented below in Table 5-8.

Table 5-8: Earthquakes Affecting North Carolina

Date	Location	Richter Scale
12/16/1811	NE Arkansas	8.5
12/16/1811	NE Arkansas	8.0
12/16/1811	NE Arkansas	8.0
01/23/1812	New Madrid, MO	8.4
02/07/1812	New Madrid, MO	8.7
04/29/1852	Wytheville, VA	5.0
08/31/1861	Wilkesboro, NC	5.1
12/23/1875	Central Virginia	5.0
08/31/1886	Charleston, SC	7.3
05/31/1897	Giles County, VA	5.8
01/01/1913	Union County, SC	4.8
02/21/1916	Asheville, NC	5.5
07/08/1926	Mitchell County, NC	5.2
11/03/1928	Newport, TN	4.5
05/13/1957	McDowell County, NC	4.1
07/02/1957	Buncombe County, NC	3.7
11/24/1957	Jackson County, NC	4.0
10/27/1959	Chesterfield, SC	4.0

Date	Location	Richter Scale
07/13/1971	Newry, SC	3.8
11/30/1973	Alcoa, TN	4.6
09/13/1976	Southwest Virginia	4.1
05/05/1981	Henderson County, NC	3.5
8/23/2011 Mineral Springs, VA 5.8 VIII V	Mineral Bluff, VA	5.8
Source: North Carolina State Hazard Mitigation Plan 2018; Southeast US Seismic Network, USGS		

At least 24 earthquakes are known to have affected the Region since 1811. The strongest of these measured a VI on the Modified Mercalli Intensity (MMI) scale. Table 5-9 provides a summary of earthquake events reported by the National Geophysical Data Center between 1811 and 2019.

Sampson County, NC has a very low earthquake risk, with a total of 2 earthquakes since 1811. The USGS Unified Hazard Tool shows that there is a 0.36% chance of a major earthquake within 50km of Sampson County, NC within the next 50 years.

Duplin County, NC has a very low earthquake risk, with a total of 10 earthquakes since 1811. The USGS Unified Hazard Tool shows that there is a 0.53% chance of a major earthquake within 50km of Duplin County, NC within the next 50 years.

Table 5-9: Summary of Seismic Activity in the Region

Location	Number of Occurrences	Greatest MMI Reported	Richter Scale Equivalent
Sampson County	**2**	II	--
Autryville	0	0	0
Clinton	0	0	0
Garland	0	0	0
Harrells	2	II	0
Newton Grove	0	0	0
Roseboro	0	0	0
Salemburg	0	0	0
Turkey	0	0	0
Unincorporated Area	0	0	0
Duplin County	**10**	**VI**	**--**
Beulaville	0	0	0
Calypso	4	III	--

Location	Number of Occurrences	Greatest MMI Reported	Richter Scale Equivalent
Faison	1	IV	4.7
Greenevers	1	IV	4.5
Kenansville	0	0	0
Magnolia	2	VI	0
Rose Hill	0	0	0
Teachey	0	0	0
Wallace	1	IV	4.5
Warsaw	0	0	0
Unincorporated Area	0	0	0
Total	**14**		
Data Source: National Geophysical Data Center			

5.3.5 Probability of Future Occurrence

Based on the analyses performed in IRISK, the probability of future Earthquake is shown in Table 5-10, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less Than 4% Annual Probability Of 500-Year Earthquake
- Medium: Between 4% And 20% Annual Probability Of 500-Year Earthquake
- High: More Than 20% Annual Probability Of 500-Year Earthquake

Table 5-10: Earthquake – Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town 0f Garland	Low
Town of Greenevers	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Harrells	Low
Town 0f Kenansville	Low
Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	Low
Town of Warsaw	Low

5.3.6 Consequence and Impact Analysis

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 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.

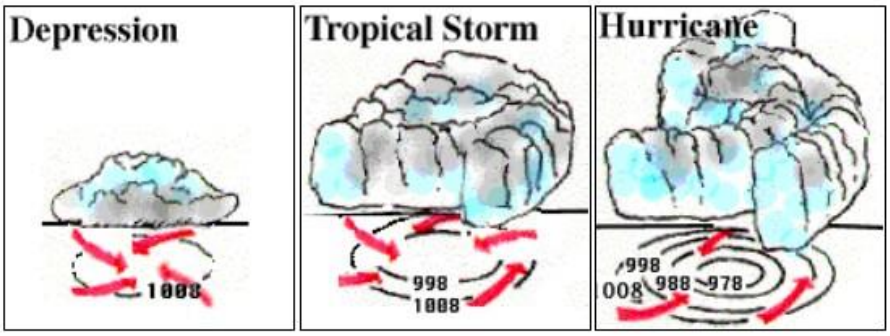
5.4 Hurricane/Tropical Storm

5.4.1 Hazard Description

A hurricane is a type of tropical cyclone or severe tropical storm that forms in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and in the eastern Pacific Ocean. All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October.

While hurricanes pose the greatest threat to life and property, tropical storms and depressions also can be devastating. A tropical disturbance can grow to a more intense stage through an increase in sustained wind speeds. The progression of a tropical disturbance is described below and shown in Figure 5-13.

- **Tropical Depression:** A tropical cyclone with maximum sustained winds of 38 mph (33 knots) or less.
- **Tropical Storm:** A tropical cyclone with maximum sustained winds of 39 to 73 mph (34 to 63 knots).
- **Hurricane:** A tropical cyclone with maximum sustained winds of 74 mph (64 knots) or higher. In the western North Pacific, hurricanes are called typhoons; similar storms in the Indian Ocean and South Pacific Ocean are called cyclones.
- **Major Hurricane:** A tropical cyclone with maximum sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale.



Source: Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign

Figure 5-13: Life Cycle of a Hurricane

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 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. Most 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 which rates hurricane intensity on a scale of 1 to 5, with 5 being the most intense.

The Saffir-Simpson Hurricane Wind Scale classifies hurricanes by intensity into one of five categories as shown in Table 5-11. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures.

Table 5-11: 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 (2012)

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 5-12 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 5-12: 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

Wind speed is the determining factor in the scale, as storm surge values are highly dependent on the slope of the continental shelf and the shape of the coastline in the landfall region. The following describes the characteristics of each category storm from the Saffir-Simpson Hurricane Wind Scale Extended Table:

Category 1 Hurricane - Winds 74 – 95 mph. Very dangerous winds will produce some damage. People, livestock, and pets struck by flying or falling debris could be injured or killed. Older (mainly pre-1994 construction) mobile homes could be destroyed, especially if they are not anchored properly as they tend to shift or roll off their foundations. Newer mobile homes that are anchored properly can sustain damage involving the removal of shingle or metal roof coverings, and loss of vinyl siding, as well as damage to carports, sunrooms, or lanais. Some poorly constructed frame homes can experience major damage, involving loss of the roof covering and damage to gable ends as well as the removal of porch coverings and awnings. Unprotected windows may break if struck by flying debris. Masonry chimneys can be toppled. Well-constructed frame homes could have damage to roof shingles, vinyl siding, soffit panels, and gutters. Failure of aluminum, screened-in, swimming pool enclosures can occur. Some apartment building and shopping center roof coverings could be partially removed. Industrial buildings can lose roofing and siding especially from windward corners, rakes, and eaves. Failures to overhead doors and unprotected windows will be common. Windows in high-rise buildings can be broken by flying debris. Falling and broken glass will pose a significant danger even after the storm. There will be occasional damage to commercial signage, fences, and canopies. Large branches of trees will snap, and

shallow rooted trees can be toppled. Extensive damage to power lines and poles will likely result in power outages that could last a few to several days.

Category 2 Hurricane - Winds 96-110 mph. Extremely dangerous winds will cause extensive damage.

There is a substantial risk of injury or death to people, livestock, and pets due to flying and falling debris. Older (mainly pre-1994 construction) mobile homes have a very high chance of being destroyed and the flying debris generated can shred nearby mobile homes. Newer mobile homes can also be destroyed. Poorly constructed frame homes have a high chance of having their roof structures removed especially if they are not anchored properly. Unprotected windows will have a high probability of being broken by flying debris. Well-constructed frame homes could sustain major roof and siding damage. Failure of aluminum, screened-in, swimming pool enclosures will be common. There will be a substantial percentage of roof and siding damage to apartment buildings and industrial buildings. Unreinforced masonry walls can collapse. Windows in high-rise buildings can be broken by flying debris. Falling and broken glass will pose a significant danger even after the storm. Commercial signage, fences, and canopies will be damaged and often destroyed. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks. Potable water could become scarce as filtration systems begin to fail.

Category 3 Hurricane - Winds 111-129 mph. Devastating damage will occur. There is a high risk of injury or death to people, livestock, and pets due to flying and falling debris. Nearly all older (pre-1994) mobile homes will be destroyed. Most post-1994 mobile homes will sustain severe damage with potential for complete roof failure and wall collapse. Poorly constructed frame homes can be destroyed by the removal of the roof and exterior walls. Unprotected windows will be broken by flying debris. Well-built frame homes can experience major damage involving the removal of roof decking and gable ends. There will be a high percentage of roof covering and siding damage to apartment buildings and industrial buildings. Isolated structural damage to wood or steel framing can occur. Complete failure of older metal buildings is possible, and older unreinforced masonry buildings can collapse. Numerous windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm. Most commercial signage, fences, and canopies will be destroyed. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to a few weeks after the storm passes.

Category 4 Hurricane - Winds 130 to 156 mph. Catastrophic damage will occur. There is a very high risk of injury or death to people, livestock, and pets due to flying and falling debris. Nearly all older (pre-1994) mobile homes will be destroyed. A high percentage of newer mobile homes also will be destroyed. Poorly constructed homes can sustain complete collapse of all walls as well as the loss of the roof structure. Well-built homes also can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Extensive damage to roof coverings, windows, and doors will occur. Large amounts of windborne debris will be lofted into the air. Windborne debris damage will break most unprotected windows and penetrate some protected windows. There will be a high percentage of structural damage to the top floors of apartment buildings. Steel frames in older industrial buildings can collapse. There will be a high percentage of collapse to older unreinforced masonry buildings. Most windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm. Nearly all commercial signage, fences, and canopies will be destroyed. Most trees will be snapped or uprooted, and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Long-term water shortages will increase human suffering. Most of the area will be uninhabitable for weeks or months.

Category 5 Hurricane - Winds 157 mph or higher. Catastrophic damage will occur. People, livestock, and pets are at very high risk of injury or death from flying or falling debris, even if indoors in mobile

homes or framed homes. Almost complete destruction of all mobile homes will occur, regardless of age or construction. A high percentage of frame homes will be destroyed, with total roof failure and wall collapse. Extensive damage to roof covers, windows, and doors will occur. Large amounts of windborne debris will be lofted into the air. Windborne debris damage will occur to nearly all unprotected windows and many protected windows. Significant damage to wood roof commercial buildings will occur due to loss of roof sheathing. Complete collapse of many older metal buildings can occur. Most unreinforced masonry walls will fail which can lead to the collapse of the buildings. A high percentage of industrial buildings and low-rise apartment buildings will be destroyed. Nearly all windows will be blown out of high-rise buildings resulting in falling glass, which will pose a threat for days to weeks after the storm. Nearly all commercial signage, fences, and canopies will be destroyed. Nearly all trees will be snapped or uprooted, and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Long-term water shortages will increase human suffering. Most of the area will be uninhabitable for weeks or months.

5.4.2 Location and Spatial Extent

All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes. While coastal areas are most directly exposed to land falling hurricanes and tropical storms, their impact can be felt hundreds of miles inland. All of the Region is equally susceptible to hurricanes and tropical storms. The maps below show all past hurricane paths through the Region.

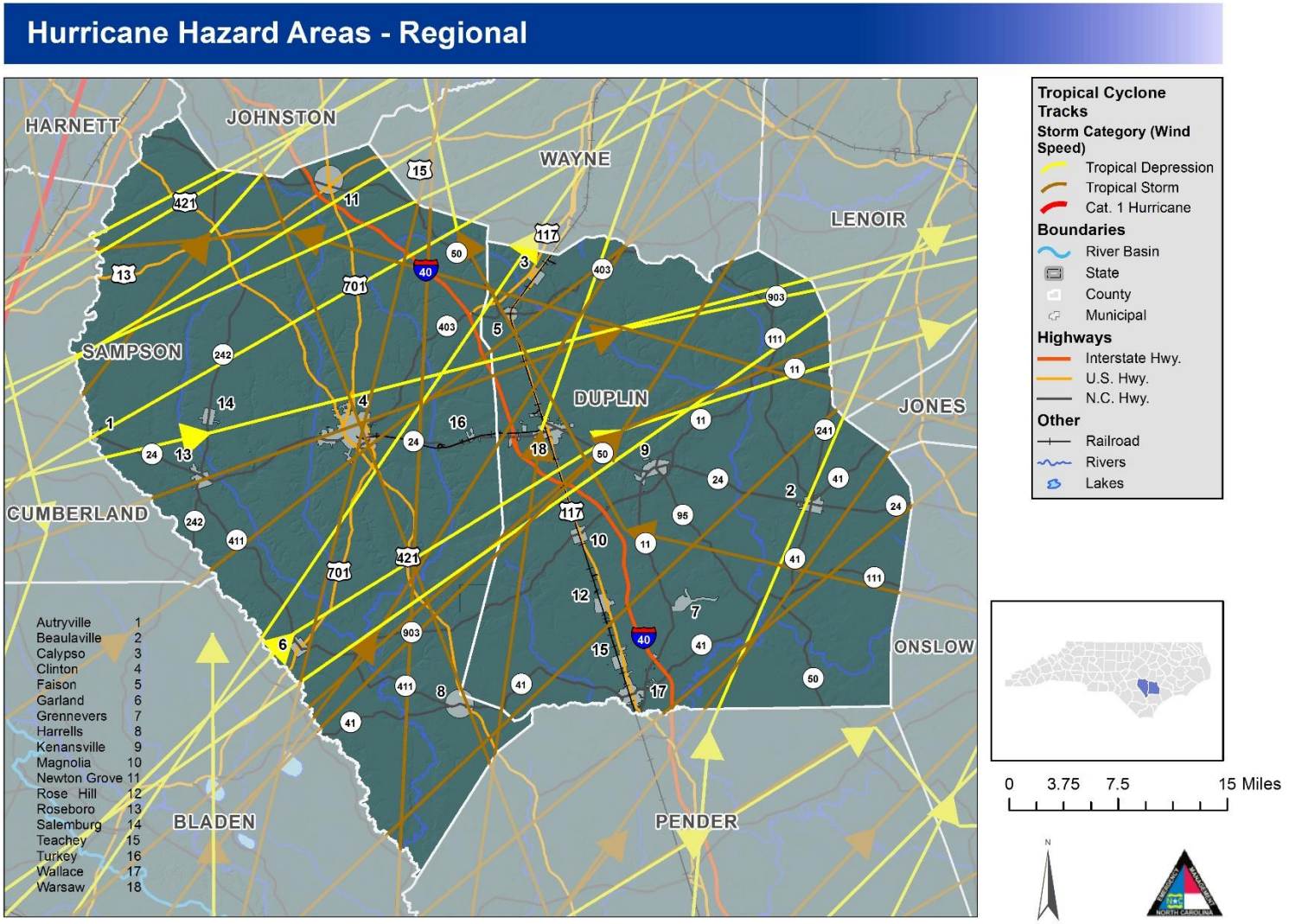


Figure 5-14: Hurricane Hazard Areas - Regional

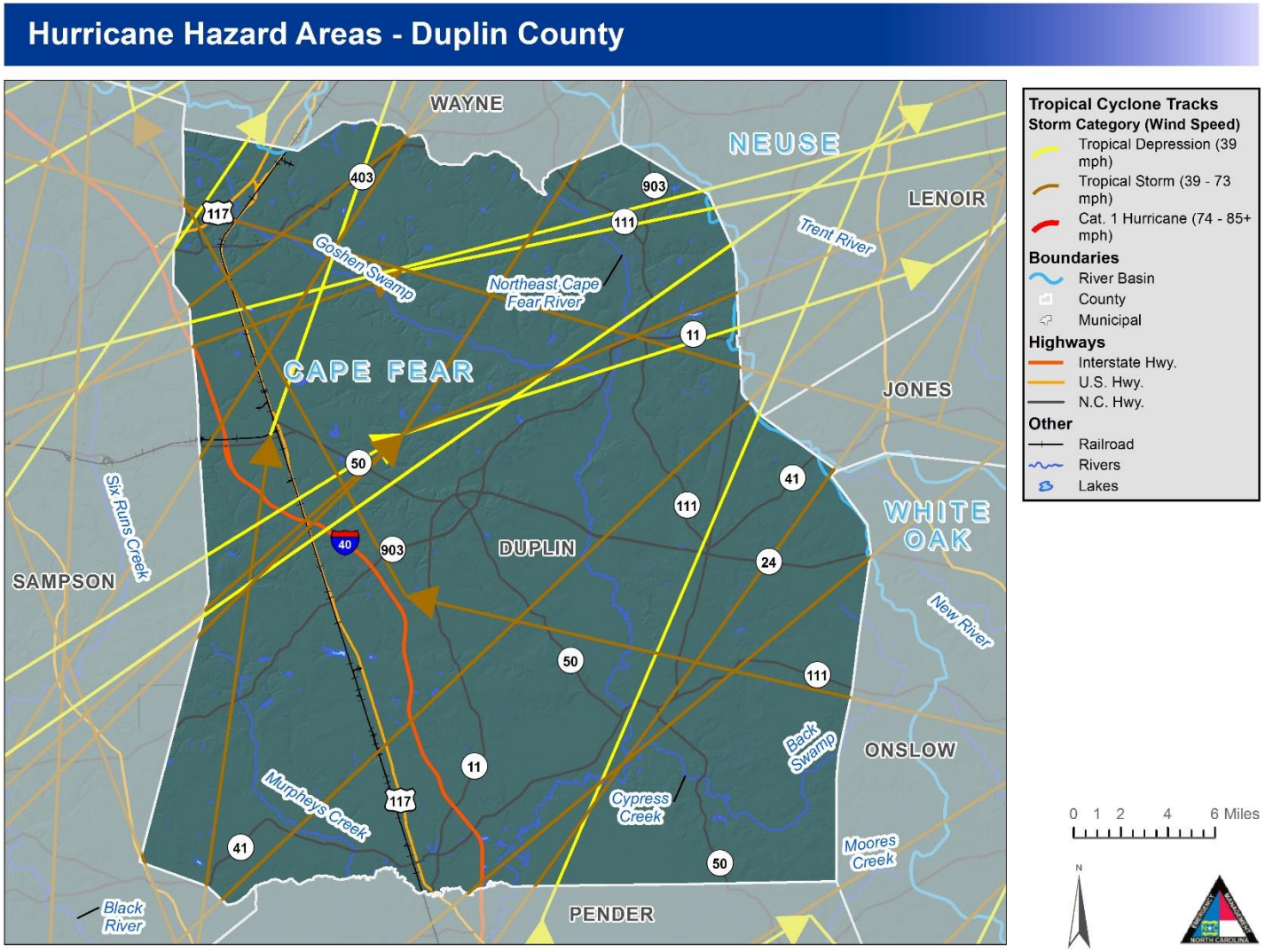


Figure 5-15: Hurricane Hazard Areas – Duplin County

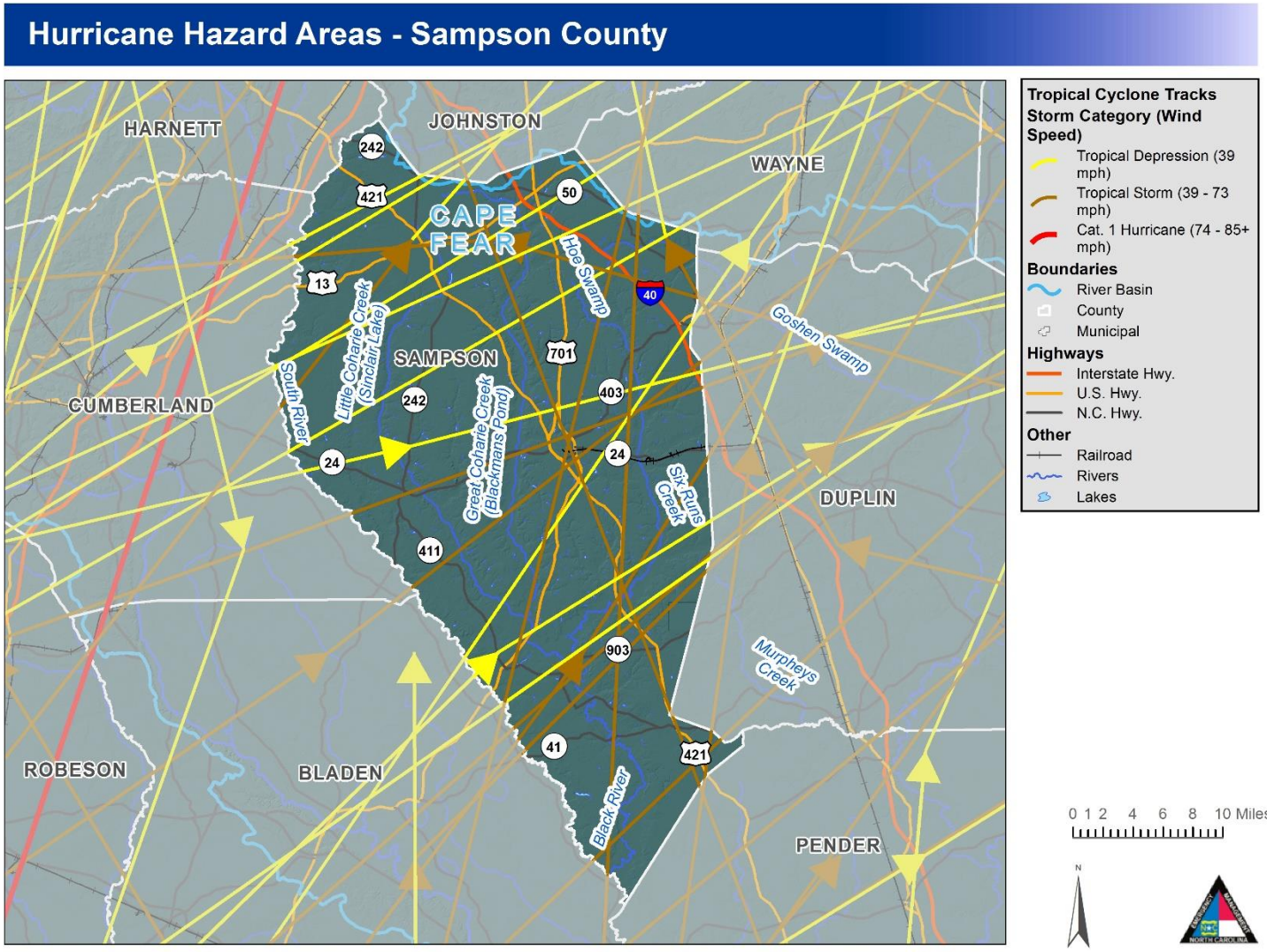


Figure 5-16: Hurricane Hazard Areas – Sampson County

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 impact the Region was category 1 Hurricane Isaias which carried tropical force winds of 75 knots upon arrival in the region. The following list is the greatest extent of hurricane winds to pass through the area, though it should be noted that stronger storms could impact the region without a direct hit:

- Duplin County and all jurisdictions: Hurricane Isaias (75 knots)
- Sampson County and all jurisdictions: Hurricane Isaias (75 knots)

5.4.3 Past Occurrences

Flooding and high winds are both hazards of concern with hurricane and tropical storm events in the 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 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 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. 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.

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. Duplin and Sampson 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.

Hurricane Isaias – August 4, 2020

On August 1, the storm made landfall on North Andros, Bahamas and subsequently weakened to a tropical storm before paralleling the east coast of Florida and Georgia. As it approached the Carolina coastline, it re-intensified to a hurricane shortly before making landfall near Ocean Isle Beach, North Carolina, at 11:10 PM EDT on August 3 as a high-end Category 1 hurricane and proceeded to accelerate up the East Coast of the United States. Across eastern North Carolina, Isaias produced heavy rainfall, minor storm surge and tornadoes.

NOAA's Office for Coastal Management keeps records of all historical hurricane tracks. Table 5-13 lists hurricanes and tropical storms that have passed within 75 miles of the Region as of August 2020. This is not an exhaustive list of all hurricanes that have affected the Region, as storms of large magnitude can have long reaching impacts on surrounding areas.

Despite its incomplete scope, by enumerating the hurricanes that have passed close to the Region, this list does provide some indication of the probability that the Region will be affected by a future hurricane.

Table 5-13: Historical Hurricane Tracks in the Region

Date of Occurrence	Storm Name	Maximum Wind Speed (knots)	Storm Category
10/30/1854	NOT NAMED	35	Tropical Storm
9/15/1859	NOT NAMED	35	Tropical Storm
9/2/1867	NOT NAMED	0	Tropical Depression
9/26/1877	NOT NAMED	48	Tropical Storm
9/1/1878	NOT NAMED	44	Tropical Storm
11/18/1885	NOT NAMED	35	Tropical Storm
9/15/1886	NOT NAMED	35	Tropical Storm
9/16/1886	NOT NAMED	31	Tropical Depression
10/9/1887	NOT NAMED	0	Tropical Depression

Date of Occurrence	Storm Name	Maximum Wind Speed (knots)	Storm Category
9/8/1888	NOT NAMED	31	Tropical Depression
9/12/1889	NOT NAMED	35	Tropical Storm
7/25/1891	NOT NAMED	35	Tropical Storm
9/27/1893	NOT NAMED	35	Tropical Storm
9/22/1896	NOT NAMED	62	Tropical Storm
7/4/1901	NOT NAMED	26	Tropical Depression
9/28/1901	NOT NAMED	0	Tropical Depression
6/12/1902	NOT NAMED	31	Tropical Depression
10/7/1902	NOT NAMED	31	Tropical Depression
9/13/1904	NOT NAMED	53	Tropical Storm
10/5/1905	NOT NAMED	0	Tropical Depression
9/21/1907	NOT NAMED	31	Tropical Depression
8/26/1911	NOT NAMED	22	Tropical Depression
6/7/1912	NOT NAMED	31	Tropical Depression
8/30/1913	NOT NAMED	26	Tropical Depression
7/31/1915	NOT NAMED	31	Tropical Depression
9/19/1920	NOT NAMED	31	Tropical Depression
10/1/1927	NOT NAMED	44	Tropical Storm
8/3/1928	NOT NAMED	26	Tropical Depression
10/3/1929	NOT NAMED	35	Tropical Storm
9/3/1935	NOT NAMED	48	Tropical Storm
8/11/1940	NOT NAMED	62	Tropical Storm
9/12/1945	NOT NAMED	35	Tropical Storm
10/14/1946	NOT NAMED	26	Tropical Depression
9/20/1947	NOT NAMED	53	Tropical Storm
8/23/1949	NOT NAMED	35	Tropical Storm
8/19/1952	NOT NAMED	35	Tropical Storm
7/5/1959	CINDY	26	Tropical Depression
9/20/1959	GRACIE	53	Tropical Storm
8/20/1964	CLEO	22	Tropical Depression
6/11/1965	UNNAMED	35	Tropical Storm
7/18/1968	CELESTE	31	Tropical Depression
5/24/1970	ALMA	22	Tropical Depression
9/16/1976	SUBTROP 3	53	Tropical Storm
9/3/1977	BABE	40	Tropical Storm
8/25/1979	DAVID	40	Tropical Storm
7/25/1985	BOB	40	Tropical Storm
8/20/1985	ONE-C	22	Tropical Depression
9/22/1989	HUGO	48	Tropical Storm
5/19/1990	NOT NAMED	35	Tropical Storm
7/20/1994	NOT NAMED	31	Tropical Depression
6/3/1995	ALLISON	40	Tropical Depression
7/5/1996	BERTHA	90	Tropical Depression
8/23/1996	FRAN	65	Hurricane
10/4/1996	JOSEPHINE	45	Tropical Depression
7/16/1997	DANNY	30	Tropical Depression
8/19/1998	BONNIE	95	Hurricane
8/31/1998	EARL	50	Tropical Depression

Date of Occurrence	Storm Name	Maximum Wind Speed (knots)	Storm Category
9/7/1999	FLOYD	90	Hurricane
9/14/2000	GORDON	20	Tropical Depression
9/15/2000	HELENE	25	Tropical Depression
6/5/2001	ALLISON	25	Tropical Storm
9/20/2002	KYLE	30	Tropical Storm
8/3/2004	BONNIE	25	Tropical Storm
8/9/2004	CHARLEY	60	Tropical Depression
8/27/2004	GASTON	30	Tropical Storm
6/10/2006	ALBERTO	35	Tropical Storm
8/24/2006	ERNESTO	50	Tropical Storm
5/31/2007	BARRY	40	Tropical Storm
8/28/2008	HANNA	60	Tropical Storm
5/25/2012	BERYL	40	Tropical Storm
6/5/2013	ANDREA	40	Tropical Storm
6/28/2014	ARTHUR	85	Hurricane
5/6/2015	ANA	30	Tropical Depression
6/5/2016	COLIN	45	Tropical Depression
8/28/2016	HERMINE	55	Tropical Storm
9/13/2016	JULIA	30	Tropical Depression
10/8/2016	MATTHEW	60	Tropical Storm
8/30/2018	FLORENCE	80	Hurricane
10/8/2018	MICHAEL	50	Tropical Storm
8/24/2019	DORIAN	90	Hurricane
10/17/2019	NESTOR	40	Tropical Depression
7/4/2020	FAY	25	Tropical Depression
8/4/2020	ISAIAS	75	Hurricane
Source: NOAA			

5.4.4 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Hurricane Winds is shown in Table 5-14, 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

Table 5-14: Hurricane Winds – Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Medium
Sampson County (Unincorporated Area)	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town 0f Garland	Low
Town of Greenevers	Low
Town of Harrells	Low
Town of Kenansville	Low
Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	Medium
Town of Warsaw	Low

5.4.5 Consequence and Impact Analysis

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 town of Wallace and Duplin County 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.

5.5 Inland Flooding

5.5.1 Hazard Description

Flooding is defined by the rising and overflowing of a body of water onto normally dry land. As defined by FEMA, a flood is a general and temporary condition of partial or complete inundation of 2 or more acres of normally dry land area or of 2 or more properties. Flooding can result from an overflow of inland waters or an unusual accumulation or runoff of surface waters from any source.

Sources and Types of Flooding

Flooding within the Region can be attributed to two sources: 1) flash flooding resulting from heavy rainfall that overburdens the drainage system within the community; and 2) riverine flooding resulting from heavy and prolonged rainfall over a given watershed which causes the capacity of the main

channel to be exceeded. Flooding on the larger streams results primarily from hurricanes, tropical storms and other major weather fronts, while flooding on the smaller streams is due mainly to localized thunderstorms.

Riverine Flooding: The Region has numerous streams and tributaries running throughout its jurisdiction that are susceptible to overflowing their banks during and following excessive precipitation events. While flash flooding caused by surface water runoff is not uncommon in the region, riverine flood events (such as the "100-year flood") will cause significantly more damage and economic disruption for the area.

Flash or Rapid Flooding: Flash flooding is the result of heavy, localized rainfall, possibly from slow-moving intense thunderstorms that cause small streams and drainage systems to overflow. Flash flood hazards caused by surface water runoff are most common in urbanized cities, where greater population density generally increases the amount of impervious surface (e.g., pavement and buildings) which increases the amount of surface water generated. Flooding can occur when the capacity of the stormwater system is exceeded or if conveyance is obstructed by debris, sediment and other materials that limit the volume of drainage.

In its common usage, the floodplain most often refers to that area that is inundated by the 100-year flood, the flood that has a 1% chance in any given year of being equaled or exceeded. The 100-year flood is the national minimum standard to which communities regulate their floodplains through the NFIP. The 500- year flood is the flood that has a 0.2 percent chance of being equaled or exceeded in any given year. The potential for flooding can change and increase through various land use changes and changes to land surface, which result in a change to the floodplain. A change in environment can create localized flooding problems inside and outside of natural floodplains by altering or confining natural drainage channels. These changes are most often created by human activity.

The 100-year flood, which is the minimum standard used by most federal and state agencies, is used by the NFIP as the standard for floodplain management and to determine the need for flood insurance. Participation in the NFIP requires adoption and enforcement of a local floodplain management ordinance which is intended to prevent unsafe development in the floodplain, thereby reducing future flood damages. Participation in the NFIP allows for the federal government to make flood insurance available within the community as a financial protection against flood losses. Since floods have an annual probability of occurrence, have a known magnitude, depth and velocity for each event, and in most cases, have a map indicating where they will occur, they are in many ways often the most predictable and manageable hazard.

5.5.2 Flooding and Floodplains

The area adjacent to a channel is the floodplain, as shown in Figure 5.21. A floodplain is flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which are areas covered by the flood, but which do not experience a strong current. Floodplains are made when floodwaters exceed the capacity of the main channel or escape the channel by eroding its banks. When this occurs, sediments (including rocks and debris) are deposited that gradually build up over time to create the floor of the floodplain. Floodplains generally contain unconsolidated sediments, often extending below the bed of the stream.

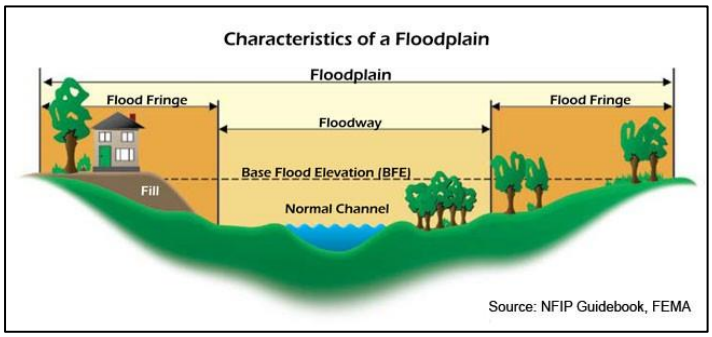


Figure 5-17: Characteristics of a Floodplain

5.5.3 Location and Spatial Extent

Regulated floodplains are illustrated on inundation maps called Flood Insurance Rate Maps (FIRMs). It is the official map for a community on which FEMA has delineated both the SFHAs and the risk premium zones applicable to the community. SFHAs represent the areas subject to inundation by the 100-year flood event. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Flood prone areas were identified using the most current FIS and associated FIRMs developed by FEMA. Table 5-15 summarizes the flood insurance zones identified by the DFIRMs.

Table 5-15: Mapped Flood Insurance Zones within the Region

Zone	Description
AE	AE Zones, also within the 100-year flood limits, are defined with BFEs that reflect the combined influence of stillwater flood elevations and wave effects less than 3 feet. The AE Zone generally extends from the landward VE zone limit to the limits of the 100-year flood from coastal sources, or until it reaches the confluence with riverine flood sources. The AE Zones also depict the SFHA due to riverine flood sources, but instead of being subdivided into separate zones of differing BFEs with possible wave effects added, they represent the flood profile determined by hydrologic and hydraulic investigations and have no wave effects.
A	Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.

Zone	Description
AH	Zone AH is the flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.
0.2% Annual Chance (Zone X Shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, e. No BFEs or base flood depths are shown within these zones. Zone X Shaded is used on new and revised maps in place of Zone B.
Zone X (unshaded)	Minimal risk areas outside the 1-percent and 0.2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. Zone X (unshaded) is used on new and revised maps in place of Zone C.

There are areas in the Region that are susceptible to flood events. Special flood hazard areas (SFHA) in the Region were mapped using Geographic Information System (GIS) and FEMA Digital Flood Insurance Rate Maps (DFIRM). This includes Zone AE (1-percent annual chance floodplain with elevation) and Zone X500 (0.2-percent annual chance floodplain). The figures below reflect the mapped flood zones for the Region. No SFHA exists in these communities: Beulaville, Calypso, Rose Hill in Duplin County and Greenevers, Teachy, Garland, Harrells, and Roseboro in Sampson County.

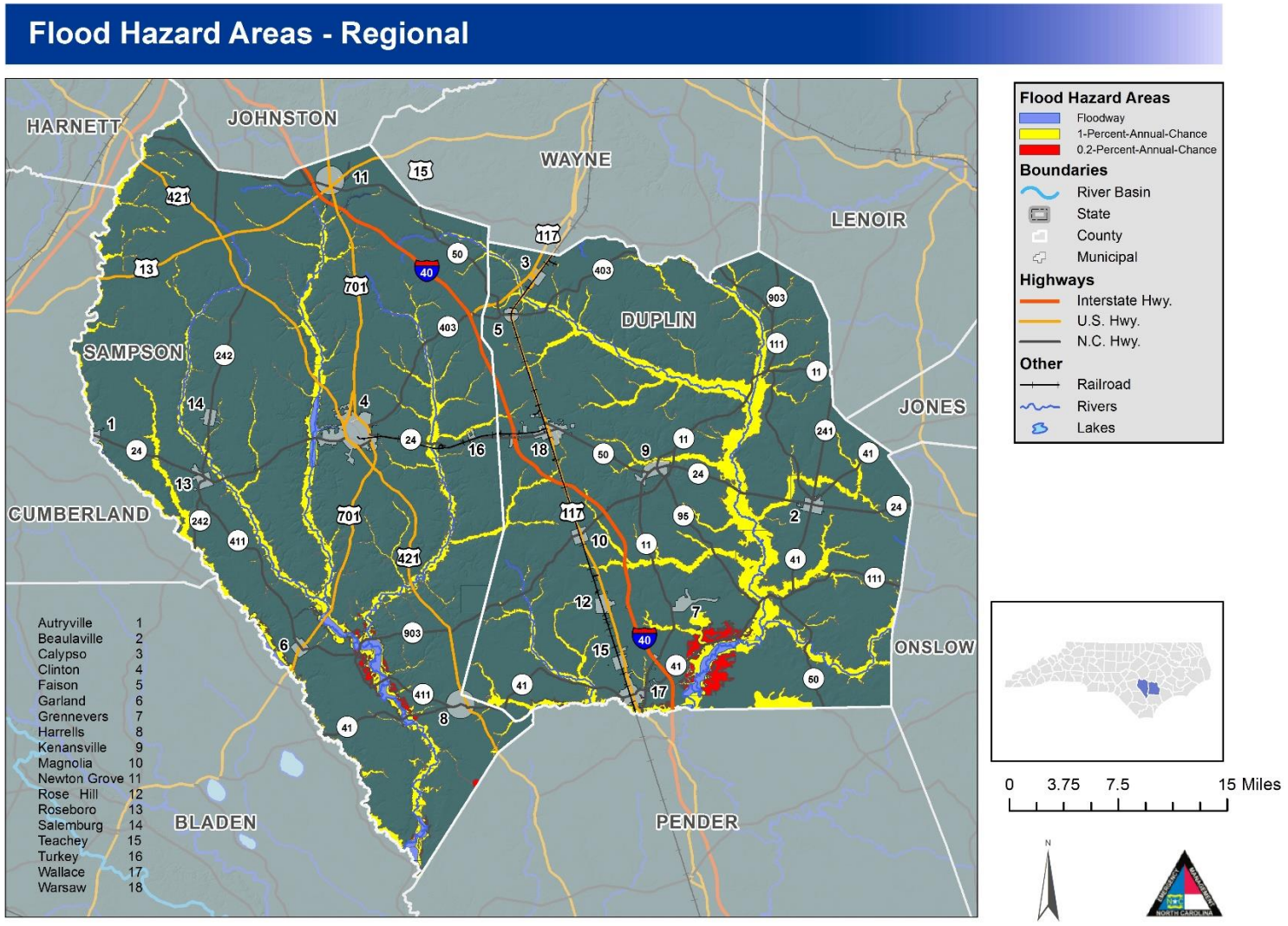


Figure 5-18: Flood Hazard Areas - Regional

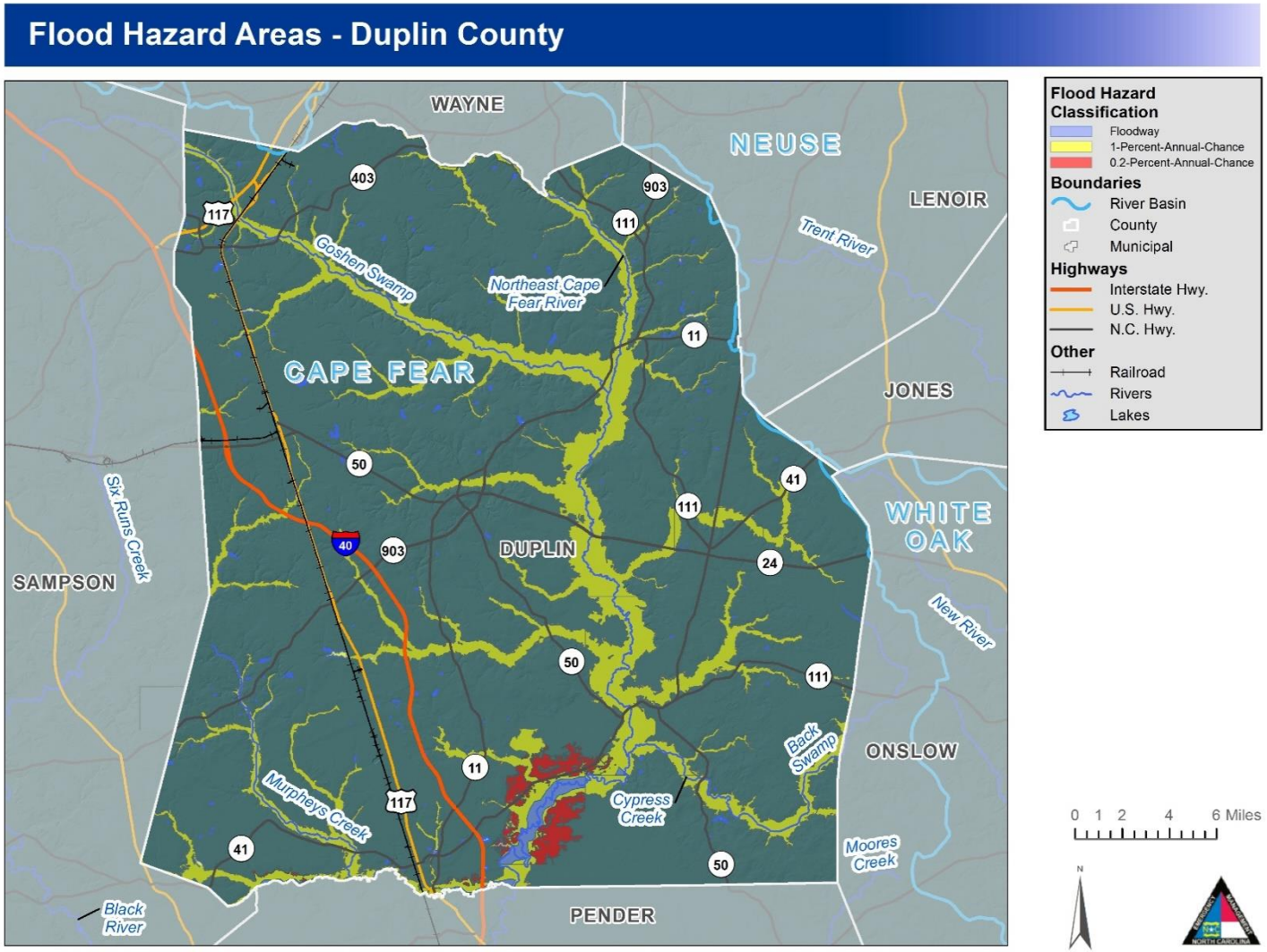


Figure 5-19: Flood Hazard Areas – Duplin County

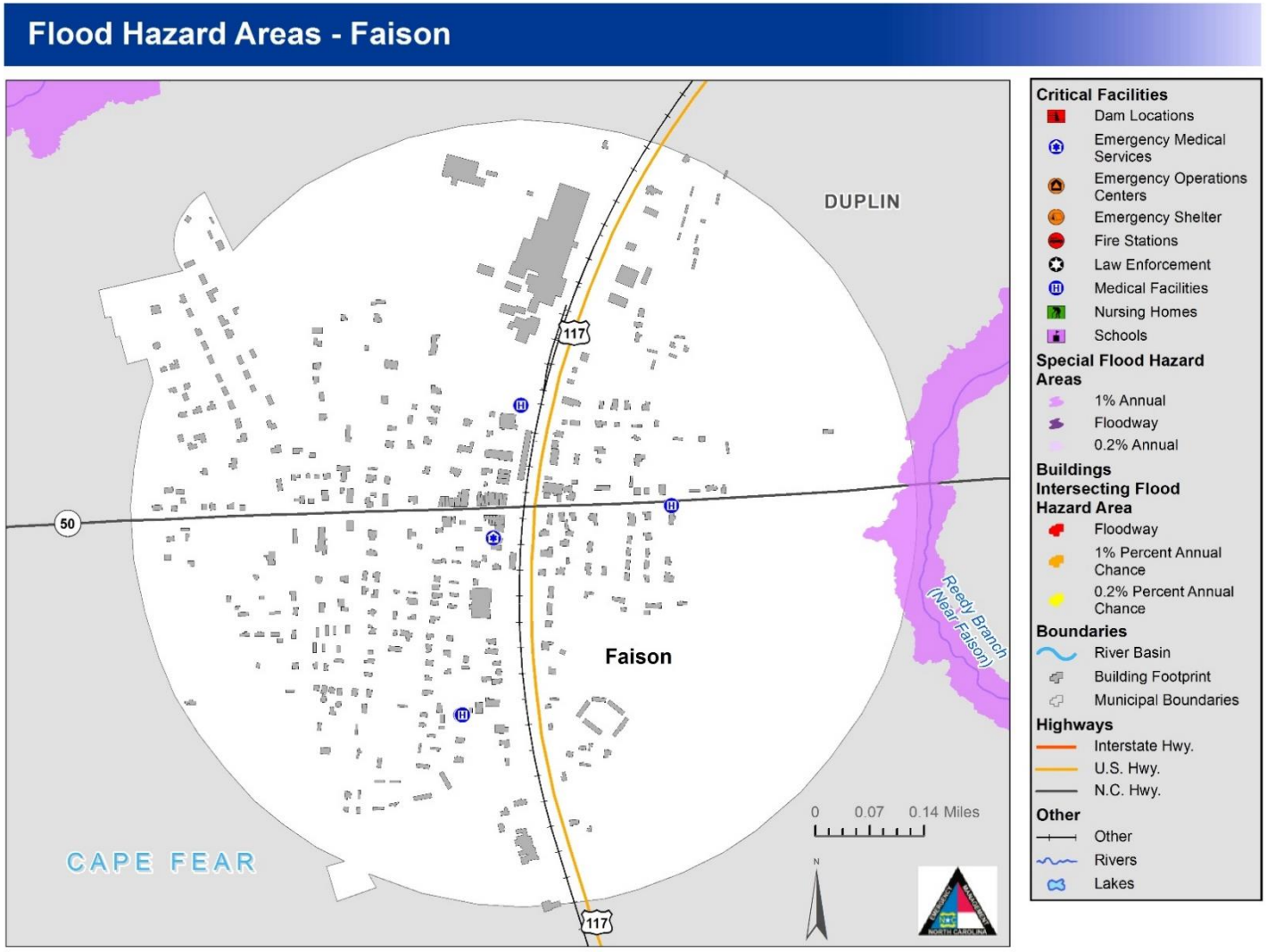


Figure 5-20: Flood Hazard Areas – Faison

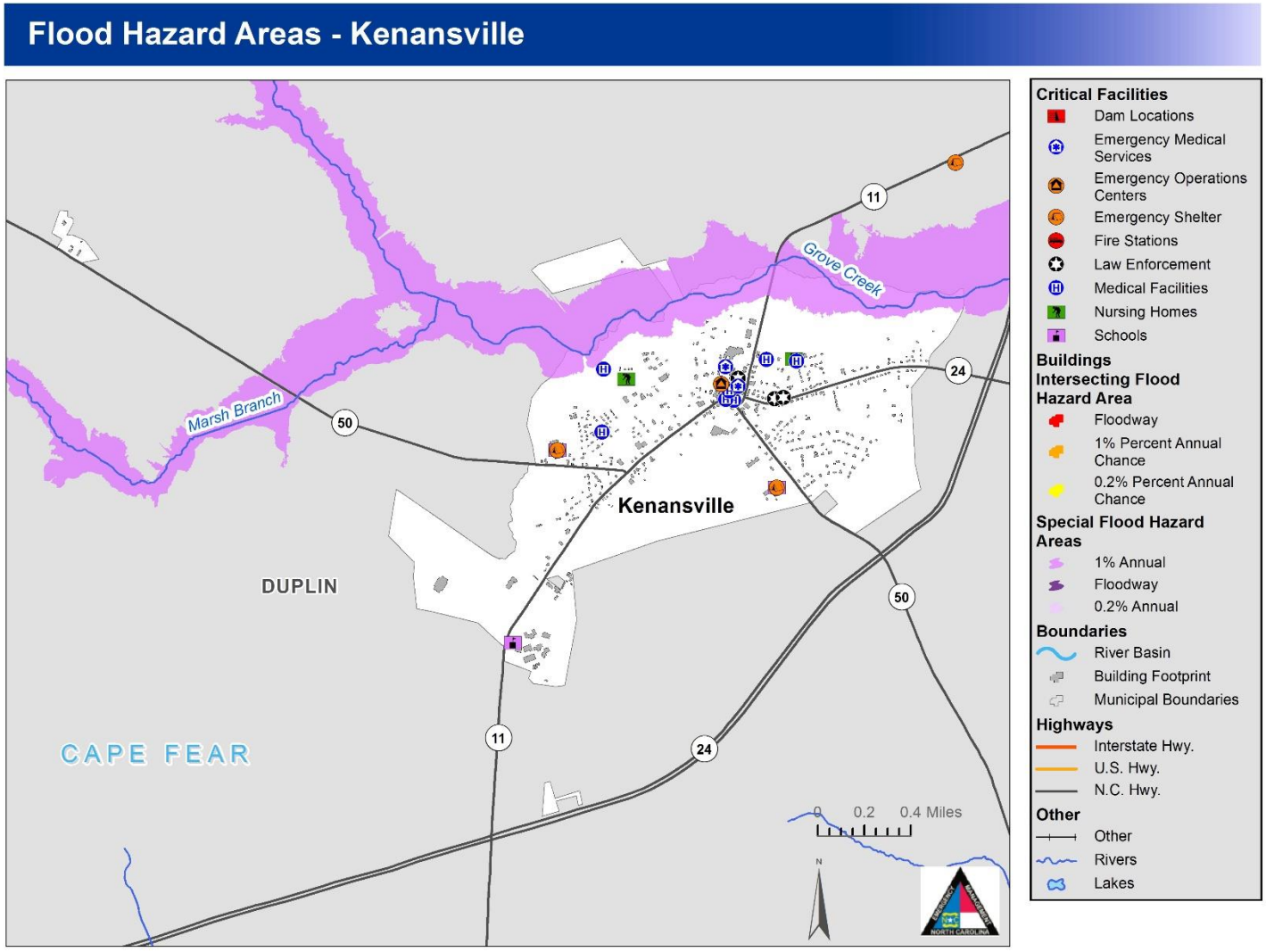


Figure 5-21: Flood Hazard Areas – Kenansville

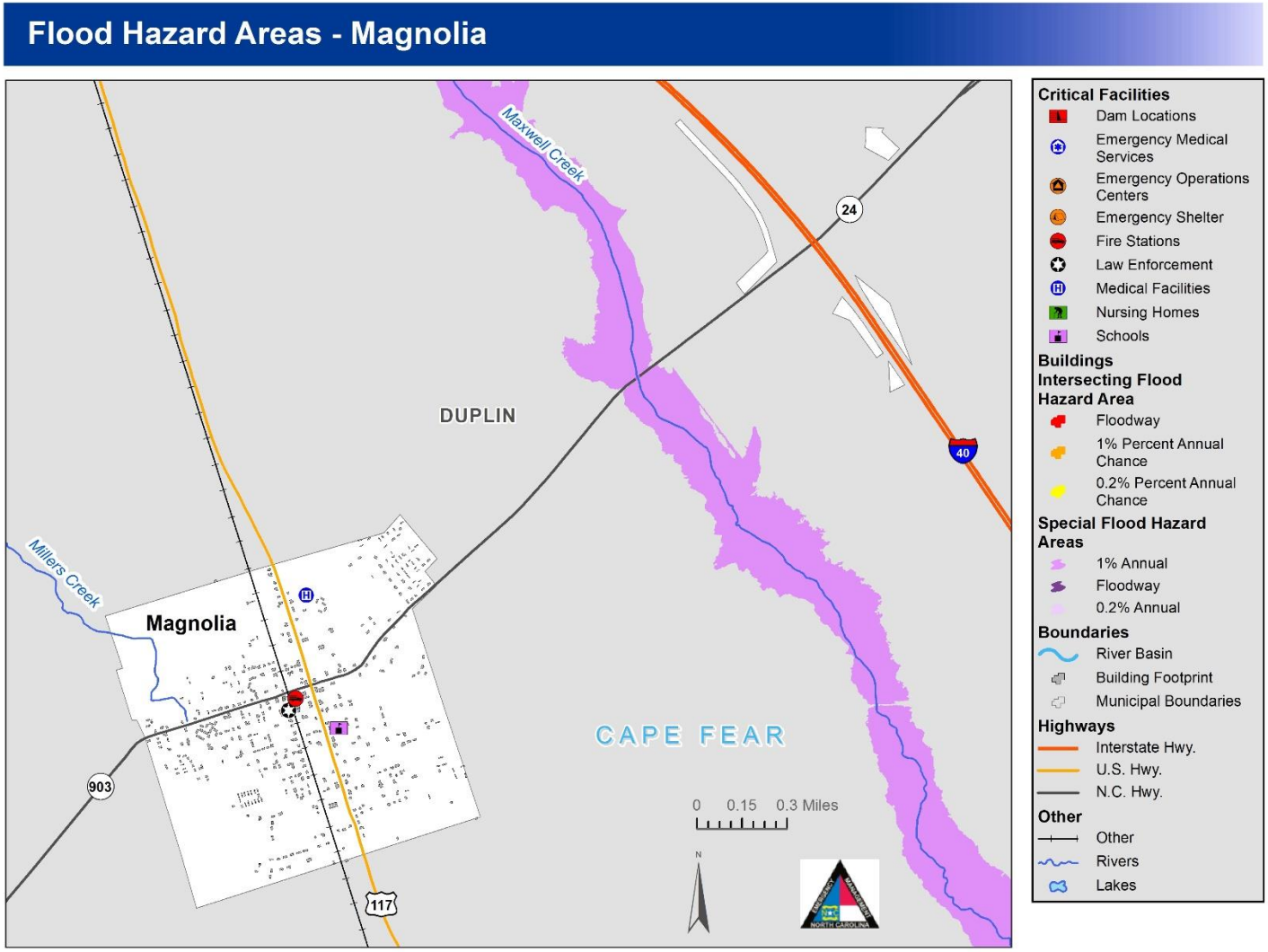


Figure 5-22: Flood Hazard Areas - Magnolia

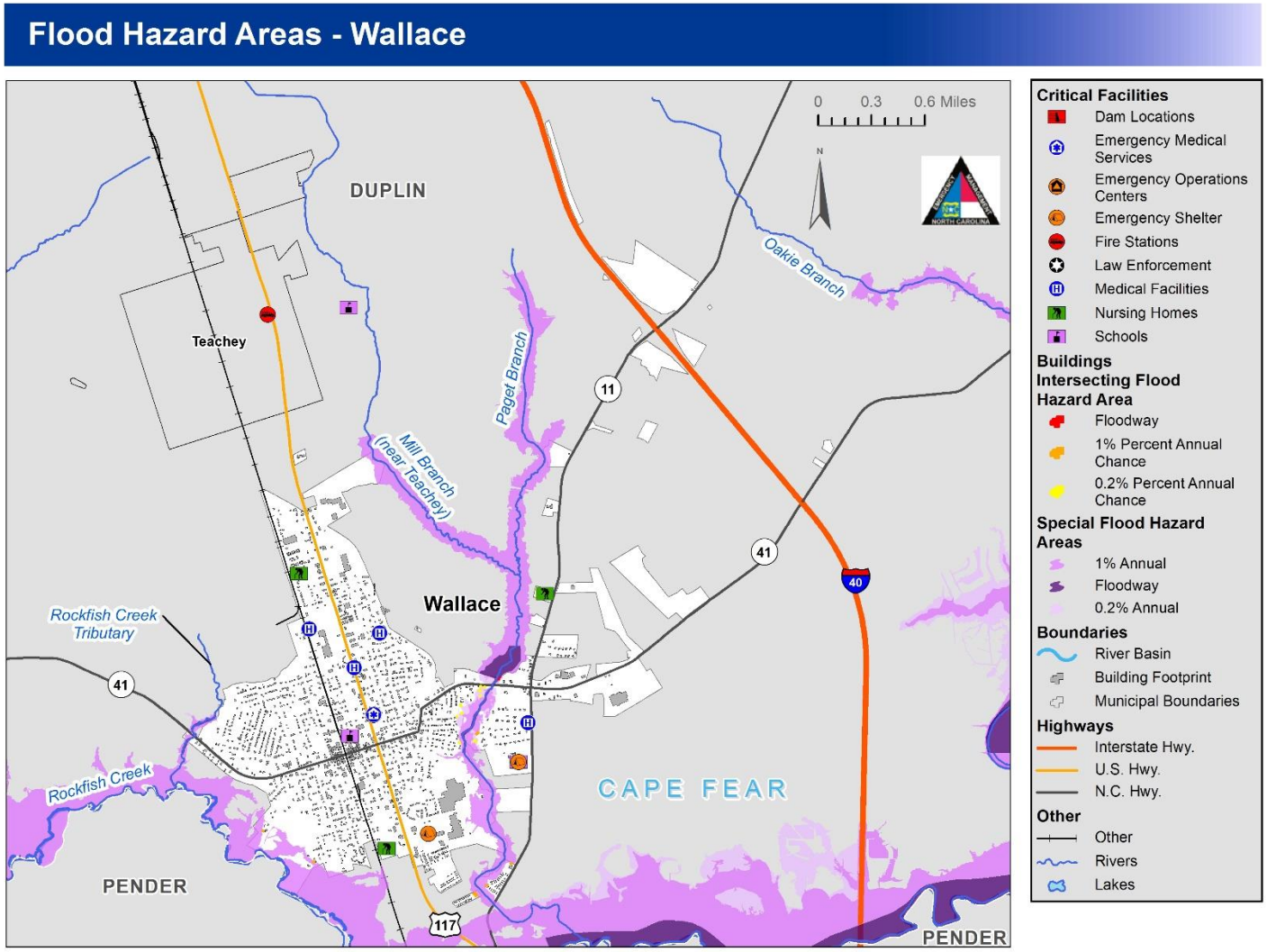


Figure 5-23: Flood Hazard Areas – Wallace

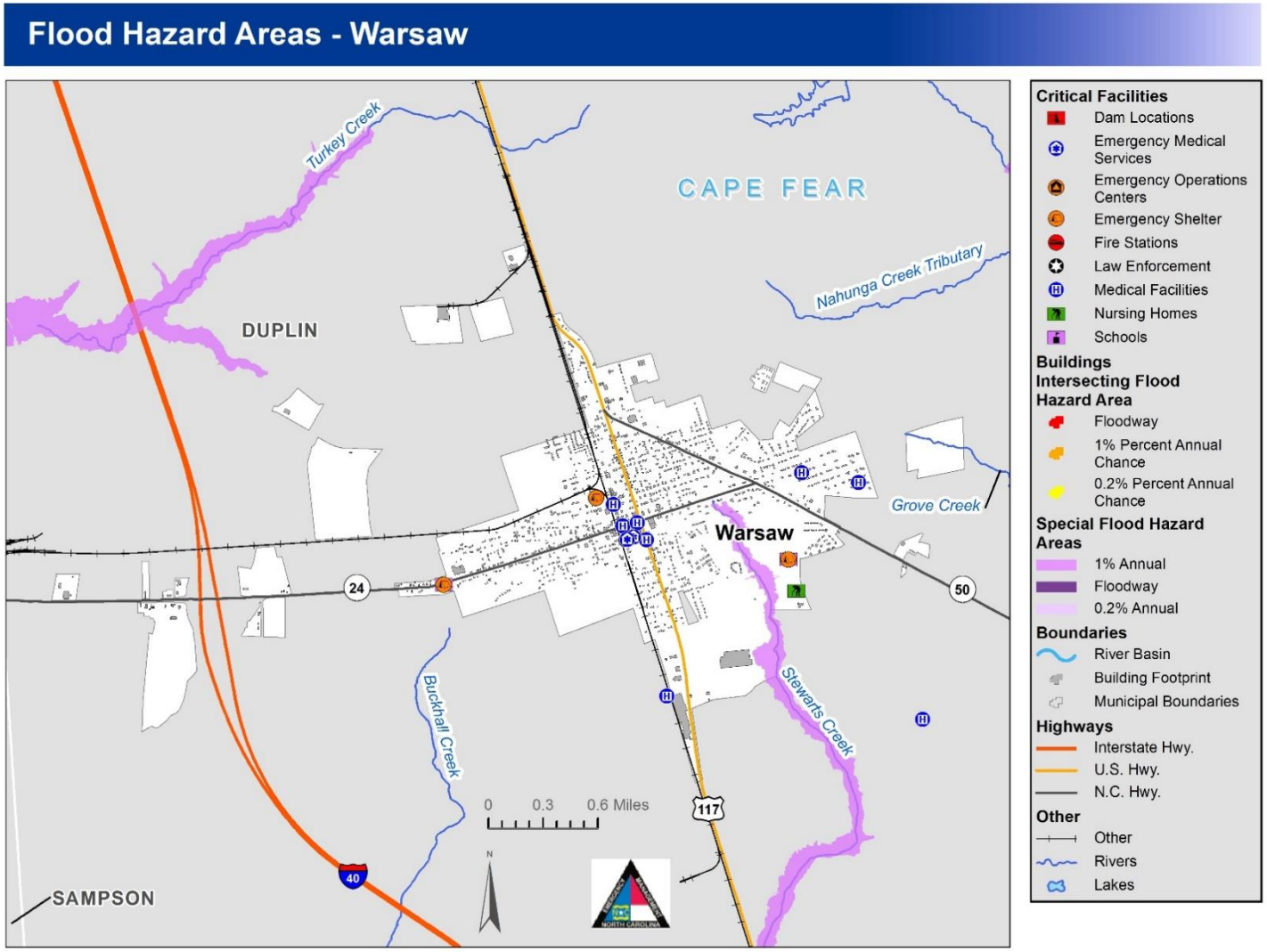


Figure 5-24: Flood Hazard Areas - Warsaw

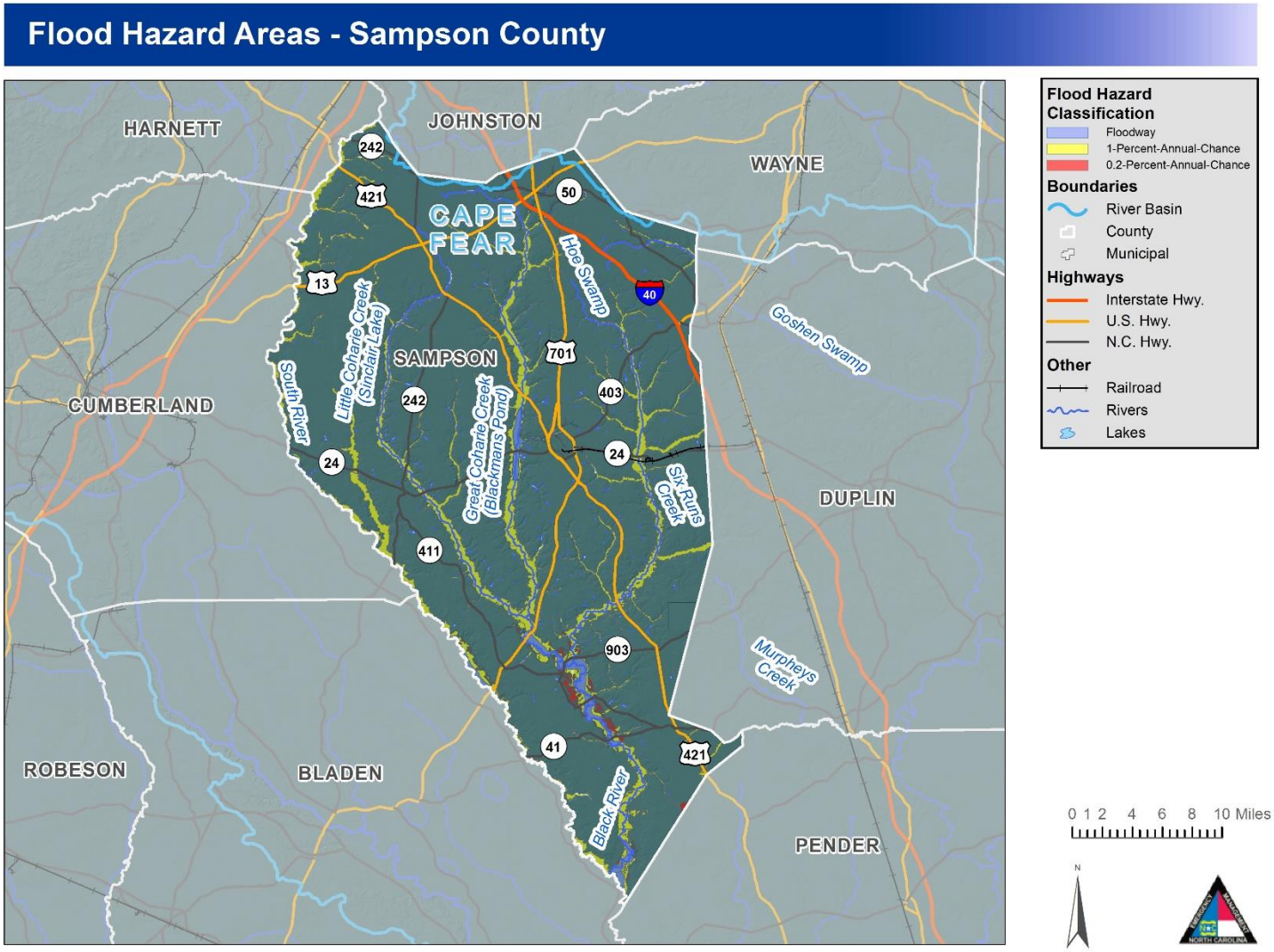


Figure 5-25: Flood Hazard Areas – Sampson County

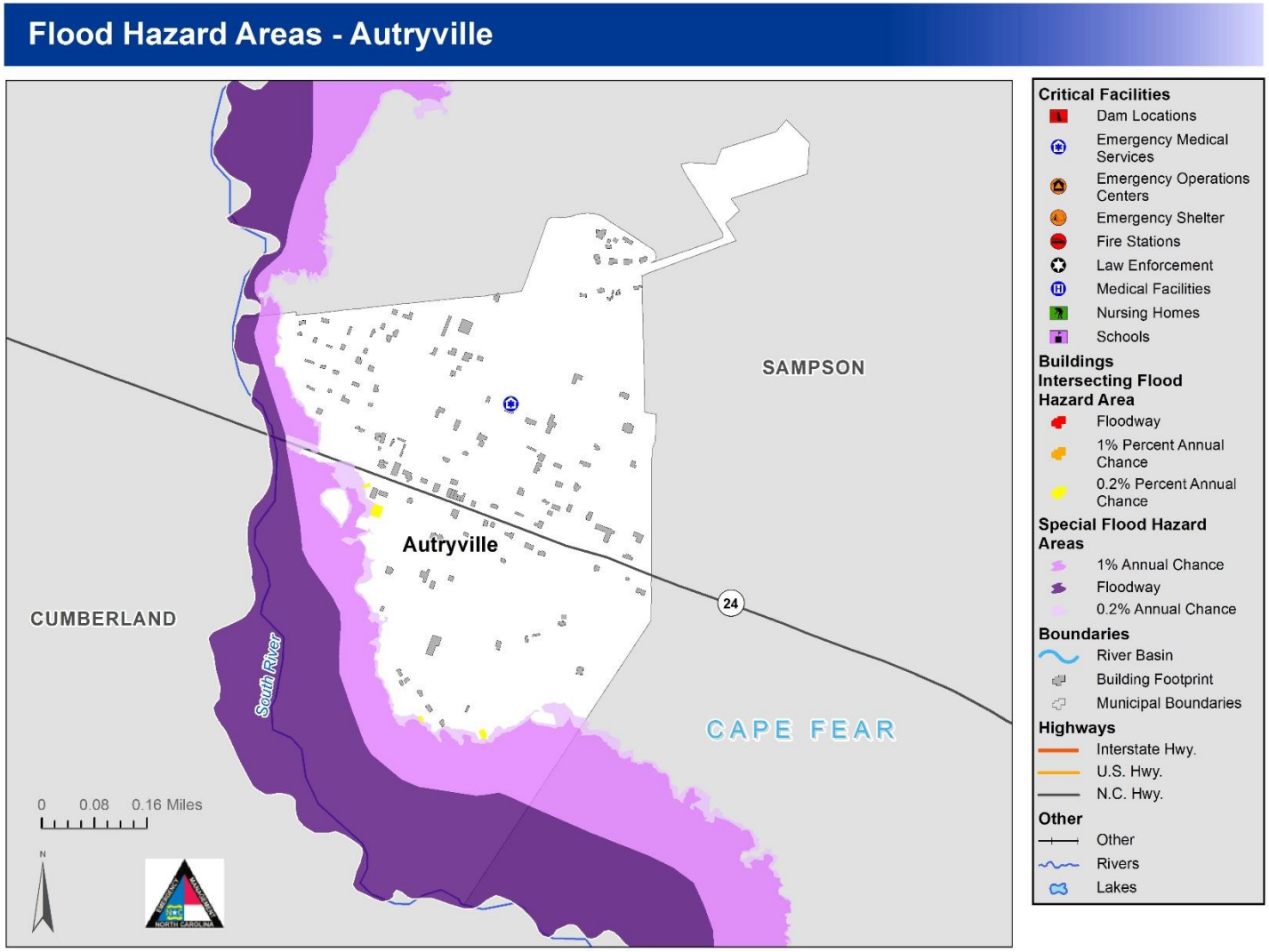


Figure 5-26: Flood Hazard Areas – Autryville

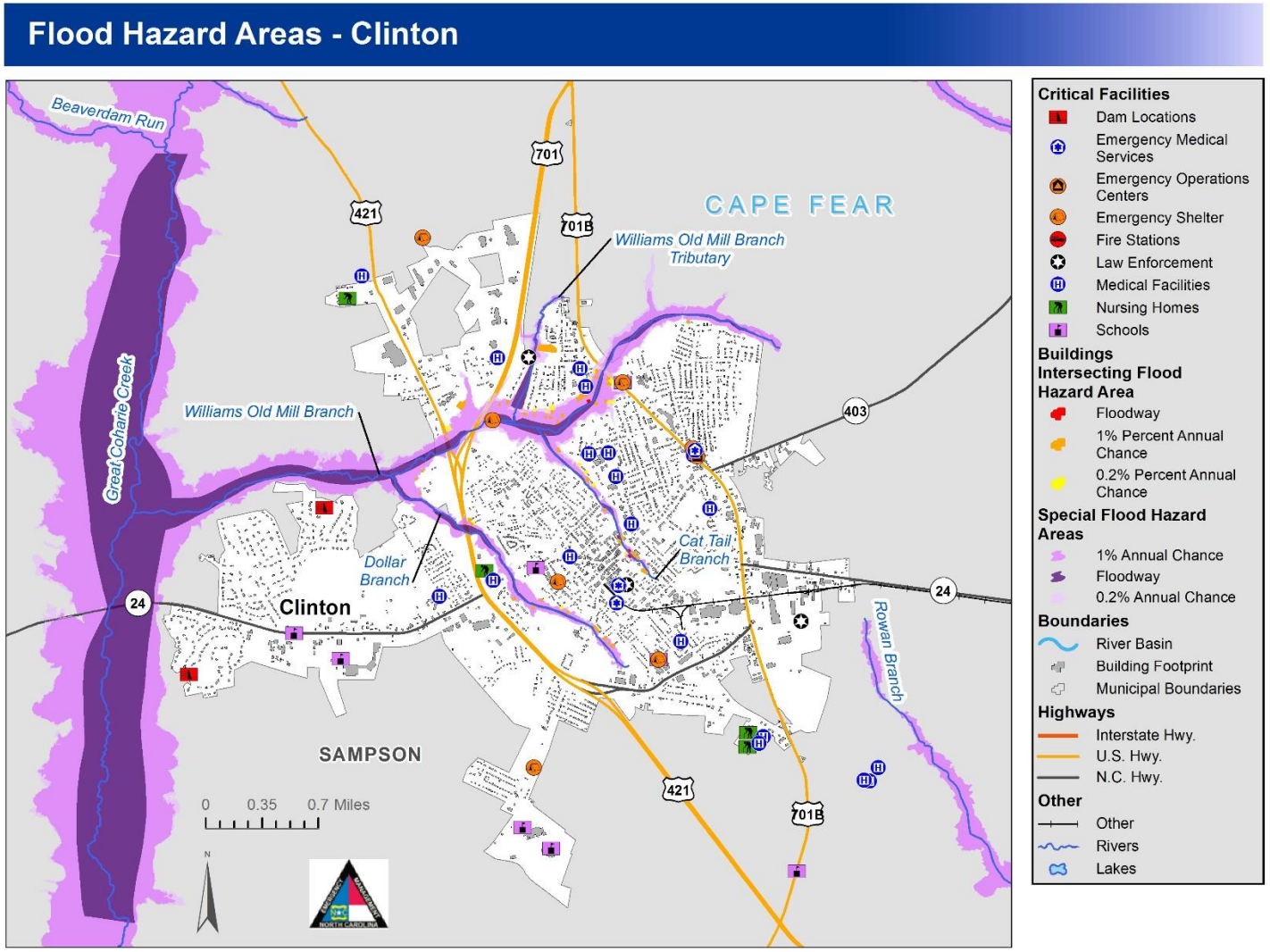


Figure 5-27: Flood Hazard Areas - Clinton

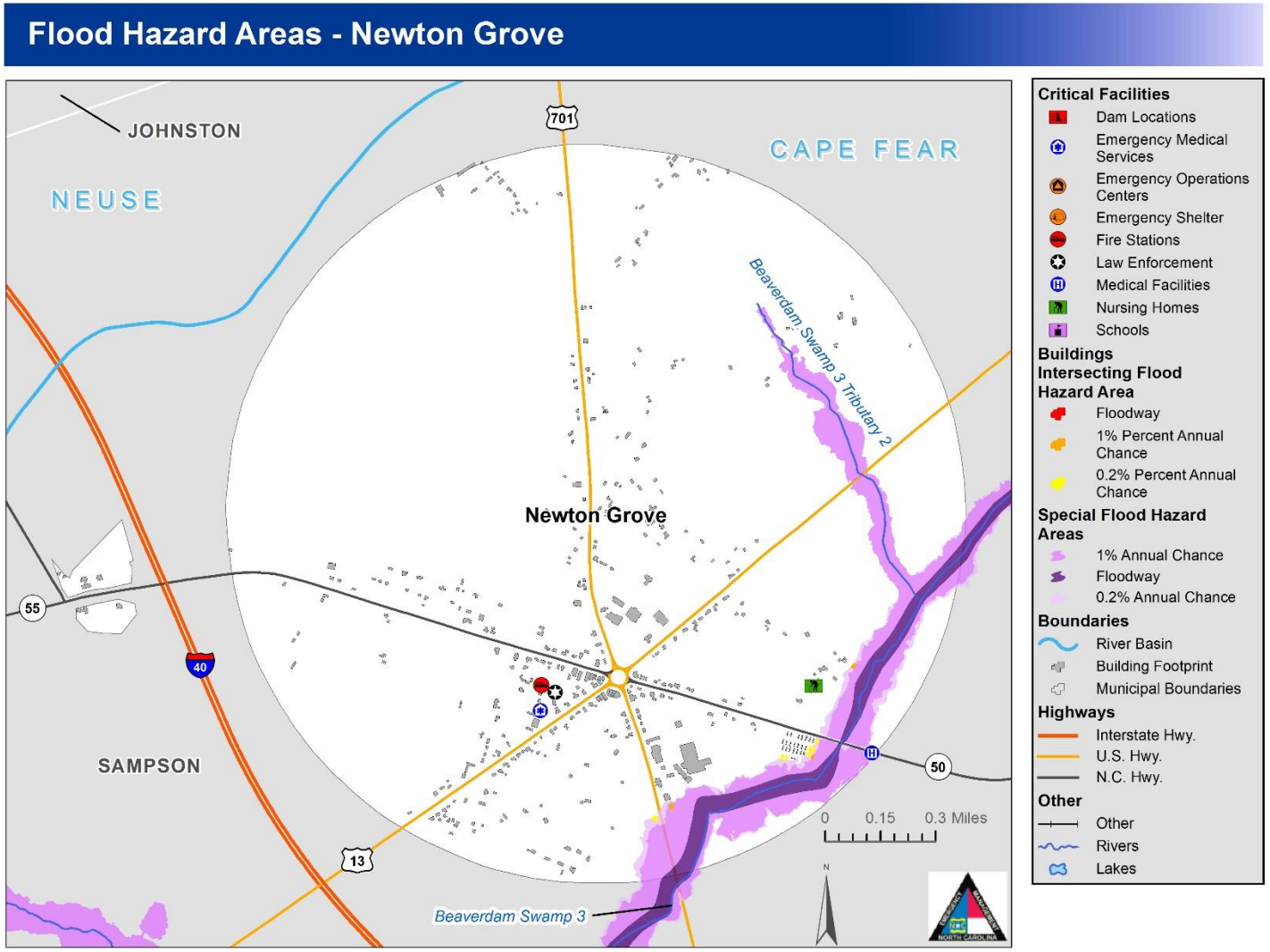


Figure 5-28: Flood Hazard Areas – Newton Grove

Flood Hazard Areas - Salemburg

Figure

5-29: Flood Hazard Areas – Salemburg

Flood Hazard Areas - Turkey

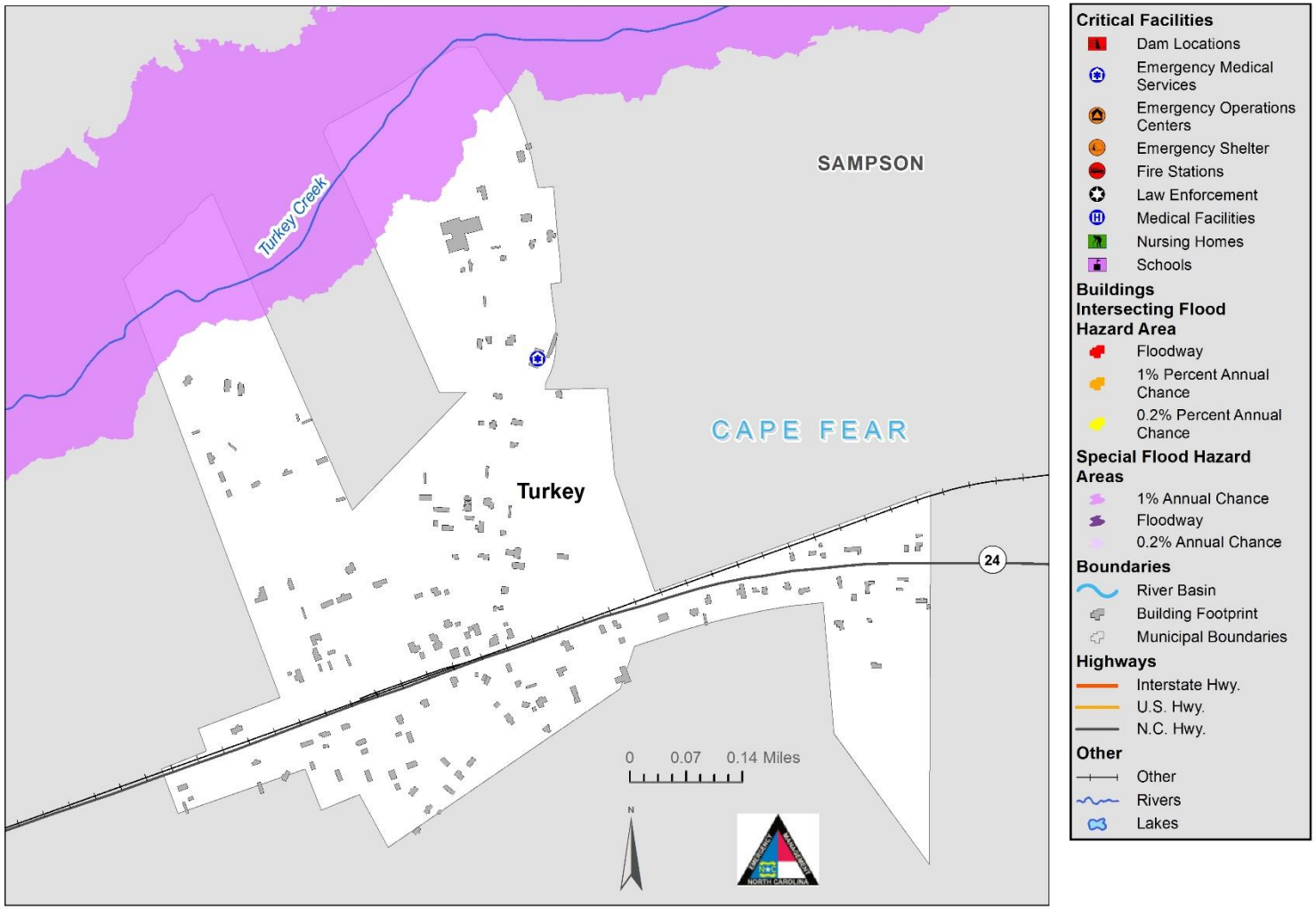


Figure 5-30: Flood Hazard Areas – Turkey

5.5.4 Extent

Table 5-16 provides peak river stage data according to USGS which shows the highest recorded peak river stage for all jurisdictions

Table 5-16: USGS Peak River Stage Data

Community	Flood Extent (Peak streamflow or Highest BFE) & NRI Flood Risk Index	Source (National Risk Index is a source for all)	Anecdotal
Sampson			
Sampson County	193.2 ft	FIRM Panel 3720154200J	Between 3ft to 4ft of backwater flooding street and local roadways
Autryville	98.0 ft	FIRM Panel 3720140400K	Less than 1ft of backwater flooding street and local roadways
Clinton	144.2 ft	FIRM Panel 7720240400K	Between 3ft to 4ft of backwater flooding street and local roadways
Faison	Mapped in Duplin County	N/A	No Recollections
Garland	82.9 ft	FIRM Panel 3720138600K	Less than 1ft of backwater flooding street and local roadways
Harrells	N/A	No BFE's	No Recollections
Newton Grove	176 ft	FIRM Panel 3720158400L	Less than 1ft of backwater flooding street and local roadways
Roseboro	95.3 ft	FIRM Panel 3720144400J	Less than 1ft of backwater flooding street and local roadways
Salemburg	156. 0 ft	FIRM Panel 3720144600K	Between 1ft to 2ft of backwater flooding street and local roadways
Turkey	110.2 ft	FIRM Panel 3720244400J	Less than 1ft of backwater flooding street and local roadways
Duplin			
Duplin County	164.0 ft	FIRM Panel 3720244800K	Between 1ft to 2ft of backwater flooding street and local roadways
Beulaville	64.0 ft	FIRM Panel 372346200K	Less than 1ft of backwater flooding

Community	Flood Extent (Peak streamflow or Highest BFE) & NRI Flood Risk Index	Source (National Risk Index is a source for all)	Anecdotal
			street and local roadways
Calypso	146.2 ft	FIRM Panel 3720256000K	Less than 1ft of backwater flooding street and local roadways
Faison	134.0 ft	FIRM Panel 3720254000K	Less than 1ft of backwater flooding street and local roadways
Greenevers	No mapped BFE's or gauge data	N/A	No Recollections
Kenansville	73.0 ft	FIRM Panel 3720340400J	Less than 1ft of backwater flooding street and local roadways
Magnolia	No mapped BFE's or gauge data	N/A	No Recollections
Rose Hill	No mapped BFE's or gauge data	N/A	No Recollections
Teachy	No mapped BFE's or gauge data	N/A	No Recollections
Wallace	66.0 ft	FIRM Panel 3720330700J	Less than 1ft of backwater flooding street and local roadways
Warsaw	137.9 ft	FIRM Panel 3720246400K	Less than 1ft of backwater flooding street and local roadways

5.5.5 Past 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 5-17). 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 River Flooding (2005 to 2019)

Location	Date	Type	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Duplin								
Duplin County (Unincorporated Area)	09/29/10	Flood	0	0	$100,000	$71,357	$1,000,000	$713,568
Duplin County (Unincorporated Area)	09/12/14	Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	04/24/17	Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	04/24/17	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	09/14/18	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	09/14/18	Flood	1	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	09/15/18	Flood	1	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	09/15/18	Flash Flood	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	09/17/18	Flood	0	0	$20,930,000	$19,652,979	$30,000,000	$28,169,583
Town of Beulaville	10/08/05	Flash Flood	0	0	0	$0	0	$0
Town of Faison	10/25/07	Flood	0	0	$0	$0	$0	$0
Town of Faison	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Town of Faison	04/24/17	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 Magnolia	08/06/11	Flood	0	0	$0	$0	$0	$0
Town of Wallace	07/28/18	Flash Flood	0	0	$0	$0	$0	$0
Town of Warsaw	07/05/08	Flash Flood	0	0	$50,000	$33,044	$0	$0
Town of Warsaw	04/24/17	Flood	0	0	$0	$0	$0	$0
Town of Warsaw	09/15/18	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Duplin	21 Events		2	0	$21,080,000	$19,757,379	$31,000,000	$28,883,150
Sampson								
City of Clinton	09/05/19	Flash Flood	0	0	$50,000	$48,542	$0	$0
City of Clinton	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	08/11/08	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	08/11/09	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	06/25/10	Flood	0	0	$5,000	$3,536	$0	$0
Sampson County (Unincorporated Area)	09/30/10	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	08/02/13	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	08/06/15	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	10/08/16	Flash Flood	0	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	09/15/18	Flood	1	0	$0	$0	$0	$0
Sampson County (Unincorporated Area)	09/17/18	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)
Sampson County (Unincorporated Area)	09/05/19	Flash Flood	0	0	$75,000	$72,814	$0	$0
Sampson County (Unincorporated Area)	09/05/19	Flash Flood	0	0	$0	$0	$0	$0
Town of Newton Grove	10/09/16	Flood	0	0	$4,100,000	$3,601,295	$25,000,000	$21,959,118
Town of Salemburg	09/08/14	Flash Flood	0	0	$0	$0	$0	$0
Subtotal Sampson	15 Events		1	0	$4,230,000	$3,726,187	$25,000,000	$21,959,118
TOTAL PLAN	36 Events		3	0	$25,310,000	$23,483,567	$56,000,000	$50,842,268

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

According to NCDC 36 recorded instances of River Flooding conditions have affected the planning area since 2005 to 2019 causing an estimated $25,310,000 in losses to property, $56,000,000 in losses to agricultural crops, 3 death(s), and 0 injury(ies).

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 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)
Duplin							
Duplin County (Unincorporated Area)	12	2	0	$21,030,000	$15,006,328	$31,000,000	$22,120,598
Town of Beulaville	1	0	0	$0	$0	$0	$0
Town of Faison	3	0	0	$0	$0	$0	$0
Town of Magnolia	1	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 Wallace	1	0	0	$0	$0	$0	$0
Town of Warsaw	3	0	0	$50,000	$33,044	$0	$0
Subtotal Duplin	**21**	**2**	**0**	**$21,080,000**	**$15,039,372**	**$31,000,000**	**$22,120,598**
Sampson							
City of Clinton	2	0	0	$50,000	$48,542	$0	$0
Sampson County (Unincorporated Area)	11	1	0	$80,000	$53,052	$0	$0
Town of Newton Grove	1	0	0	$4,100,000	$3,601,295	$25,000,000	$21,959,118
Town of Salemburg	1	0	0	$0	$0	$0	$0
Subtotal Sampson	**15**	**1**	**0**	**$4,230,000**	**$3,702,890**	**$25,000,000**	**$21,959,118**
TOTAL PLAN	**36**	**3**	**0**	**$25,310,000**	**$18,742,262**	**$56,000,000**	**$44,079,716**

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

5.5.6 Repetitive Loss Properties

Many of North Carolina's insured losses have involved repetitive loss properties. The Federal definition of a repetitive loss property is "any insured structure with at least two paid flood insurance losses of more than $1,000 each in any rolling 10-year period since 1978" (FEMA). Table 5-19 lists repetitive loss data by county, according to FEMA records. Types of repetitive loss properties can include residential, commercial, institutional etc. Properties that have suffered repetitive damage due to flooding are currently limited to residential structures.

Table 5-19: Summary of Residential Repetitive Loss Properties in the Sampson Duplin Region

Location	Number of Properties	Number of Losses	Total Payments
Town of Autryville	-	-	-
City of Clinton	1	10	$161,839.53
Town of Garland	-	-	-
Town of Harrells	-	-	-
Town of Newton Grove	1	2	$252,784.17
Town of Roseboro	-	-	-
Town of Salemburg	-	-	-
Town of Turkey	-	-	-
Sampson County Unincorporated	23	49	$362,3235
Sampson County	25	61	$4,037,858.70
Town of Beulaville	1	2	$28,753.77
Town of Calypso	1	3	$50,704.26
Town of Faison	-	-	-
Town of Greenevers	-	-	-
Town of Kenansville	-	-	-
Town of Magnolia	-	-	-
Town of Rose Hill	-	-	-
Town of Teachey	-	-	-
Town of Wallace	6	14	$479,589.20
Town of Warsaw	2	4	$166,021.20
Duplin County Unincorporated	47	133	$8,720,653.50

Location	Number of Properties	Number of Losses	Total Payments
Duplin County	57	156	$9,445,721.93
Sampson Duplin Regional Total	**164**	**434**	**$26,967,161.26**

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

Source: NCEM and National Flood Insurance Program

5.5.7 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future River Flooding is shown in Table 5-20, 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

Table 5-20: River Flooding – Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town of Garland	Low
Town of Greenevers	Low
Town of Harrells	Low
Town of Kenansville	Low
Town of Magnolia	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	High
Town of Warsaw	Low

5.5.8 Consequence and Impact Analysis

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 susceptible 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. Duplin County appears to be most vulnerable to flooding, especially the town of Wallace. 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.

5.6 Severe Weather (Thunderstorm Wind, Lightning & Hail)

5.6.1 Hazard Description

Thunderstorms

Thunderstorms result from the rapid upward movement of warm, moist air. They can occur inside warm,

moist air masses and at fronts. As the warm, moist air moves upward, it cools, condenses, and forms cumulonimbus clouds that can reach heights of greater than 35,000 ft. As the rising air reaches its dew point, water droplets and ice form and begin falling the long distance through the clouds towards Earth ‘s surface. As the droplets fall, they collide with other droplets and become larger. The falling droplets create a downdraft of air that spreads out at Earth ‘s surface and causes strong winds associated with thunderstorms.

There are four ways in which thunderstorms can organize: single cell, multi-cell cluster, multi-cell lines (squall lines), and supercells. Even though supercell thunderstorms are most frequently associated with severe weather phenomena, thunderstorms most frequently organize into clusters or lines. Warm, humid conditions are favorable for the development of thunderstorms. The average single cell thunderstorm is approximately 15 miles in diameter and lasts less than 30 minutes at a single location. However, thunderstorms, especially when organized into clusters or lines, can travel intact for distances exceeding 600 miles.

Thunderstorms are responsible for the development and formation of many severe weather phenomena, posing great hazards to the population and landscape. Damage that results from thunderstorms is mainly inflicted by downburst winds, large hailstones, and flash flooding caused by heavy precipitation. Stronger thunderstorms can produce tornadoes and waterspouts.

The NCEI divides wind events into several types including High Wind, Strong Wind, Thunderstorm Wind, Tornado and Hurricane. For the purpose of this severe weather risk assessment, the wind hazard will include data from High Wind, Strong Wind and Thunderstorm Wind. Hurricane Wind and Tornadoes are addressed as individual hazards. The following definitions come from the NCEI Storm Data Preparation document.

- High Wind – Sustained non-convective winds of 40mph or greater lasting for one hour or longer or winds (sustained or gusts) of 58 mph for any duration on a widespread or localized basis.
- Strong Wind – Non-convective winds gusting less than 58 mph, or sustained winds less than 40 mph, resulting in a fatality, injury, or damage.
- Thunderstorm Wind – Winds, arising from convection (occurring within 30 minutes of lightning being observed or detected), with speeds of at least 58 mph, or winds of any speed (non-severe thunderstorm winds below 58 mph) producing a fatality, injury or damage.

Lightning

Lightning is an electrical discharge between positive and negative regions of a thunderstorm. A lightning flash is composed of a series of strokes with an average of about four. The length and duration of each lightning stroke vary, but typically average about 30 microseconds.

Lightning is one of the more dangerous weather hazards in the United States. Each year, lightning is responsible for deaths, injuries, and millions of dollars in property damage, including damage to buildings, communications systems, power lines, and electrical systems. Lightning also causes forest and brush fires, and deaths and injuries to livestock and other animals. According to the National Lightning Safety Institute, lightning causes more than 26,000 fires in the United States each year. The institute estimates property damage, increased operating costs, production delays, and lost revenue from lightning and secondary effects to be in excess of $6 billion per year. Impacts can be direct or indirect. People or objects can be directly struck, or damage can occur indirectly when the current passes through or near it.

Hail

Hail is associated with thunderstorms that can also bring high winds and tornados. It forms when updrafts carry raindrops into extremely cold areas of the atmosphere where they freeze into ice. Hail falls when it becomes heavy enough to overcome the strength of the updraft and is pulled by gravity towards the earth. Hailstorms occur throughout the spring, summer, and fall in the region, but are more frequent in late spring and early summer. Hailstones are usually less than two inches in diameter and can fall at speeds of 120 mph. Hail causes nearly $1 billion in damage to crops and property each year in the United States.

5.6.2 Location and Spatial Extent

The entirety of the Region including all assets located within the Counties and each jurisdiction can be considered at risk to severe weather events. This includes the entire population and all critical facilities, buildings (commercial and residential), and infrastructure. Figures below 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.

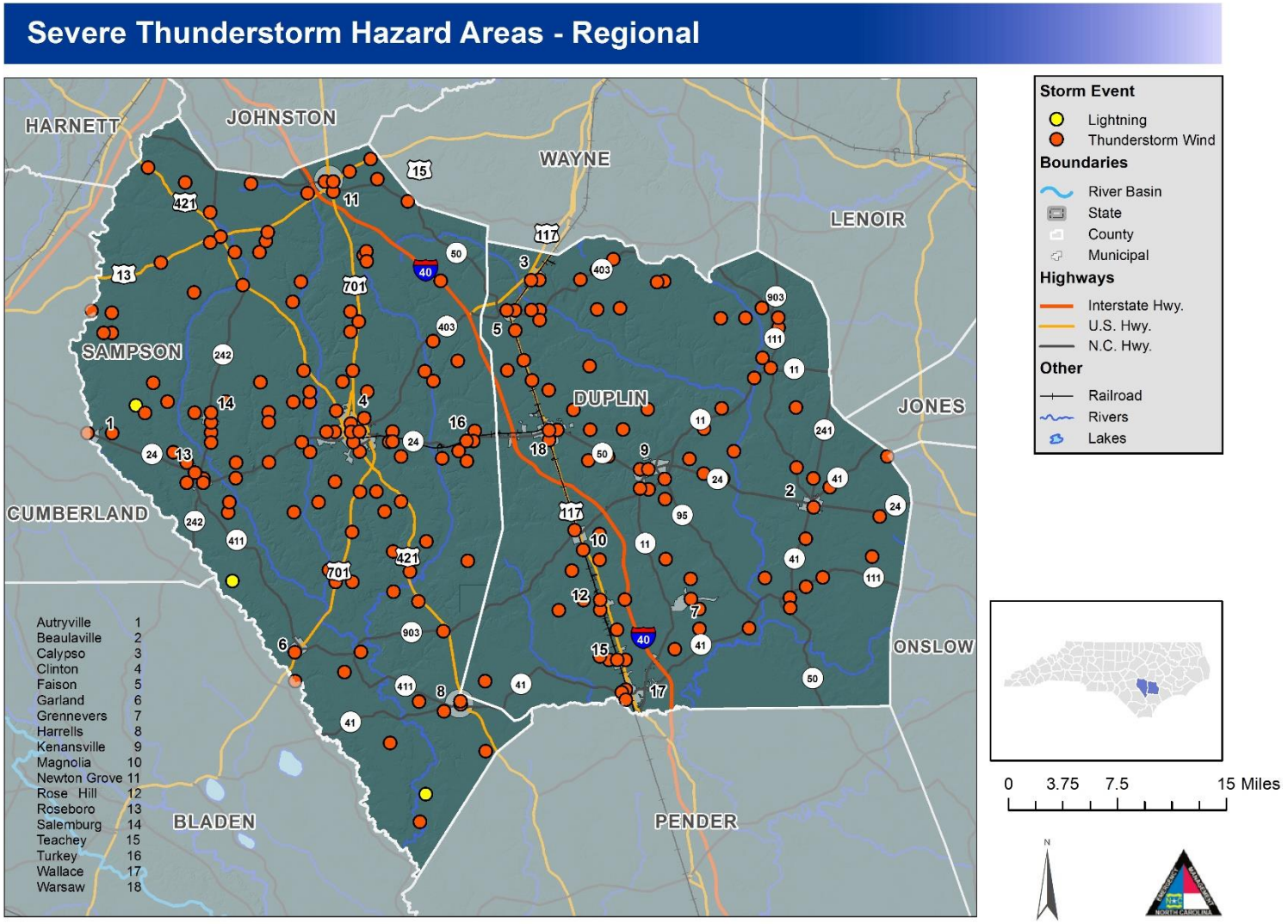


Figure 5-29: Severe Thunderstorm Hazard Areas - Regional

The figures below show the average annual cloud-to-ground lightning strikes in the Region with “High” being <100 strikes per year, “Medium” 99-50 strikes per year and “Low” being >50 strikes per year.

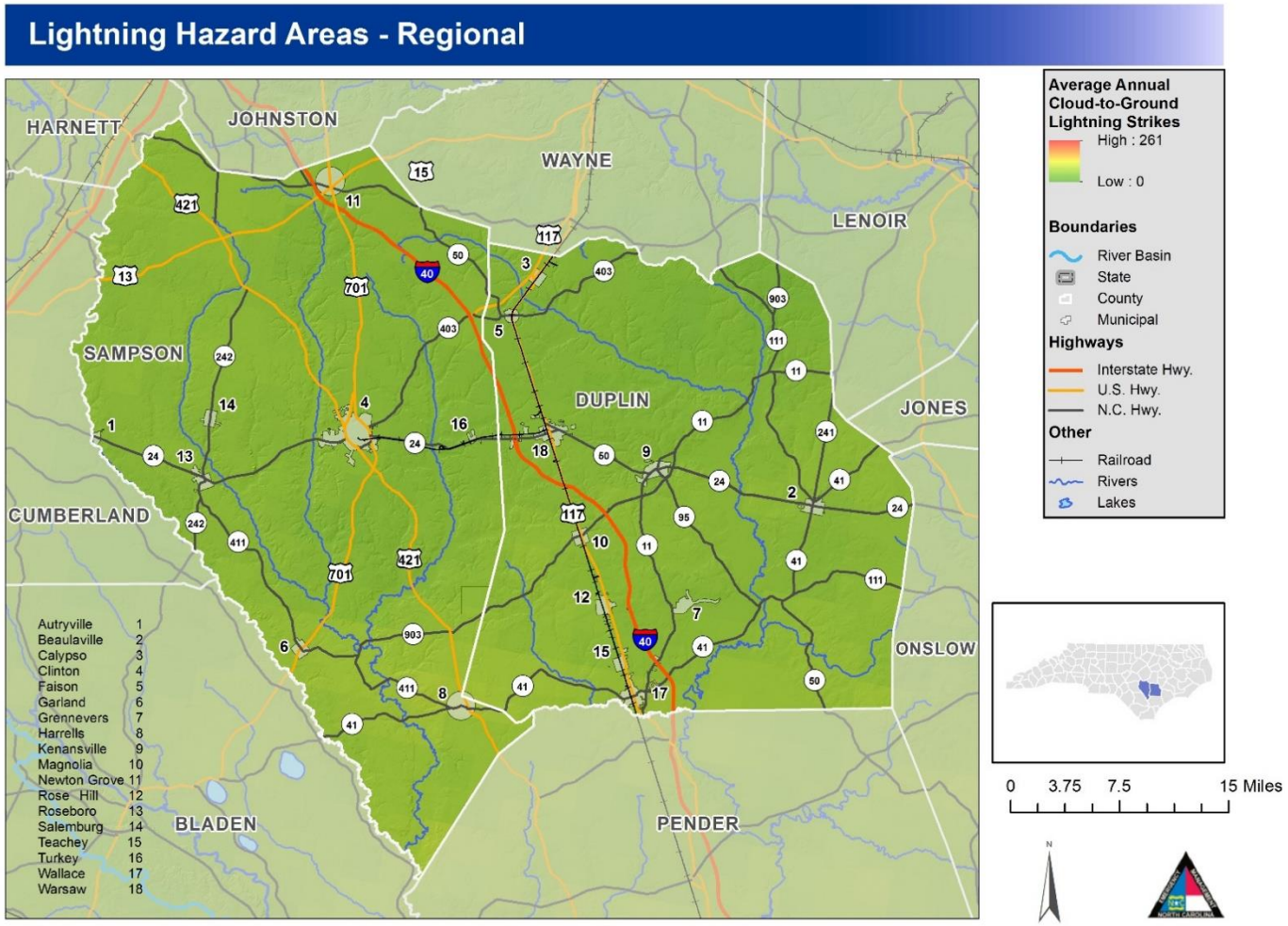


Figure 5-30: Lightning Hazard Areas - Regional

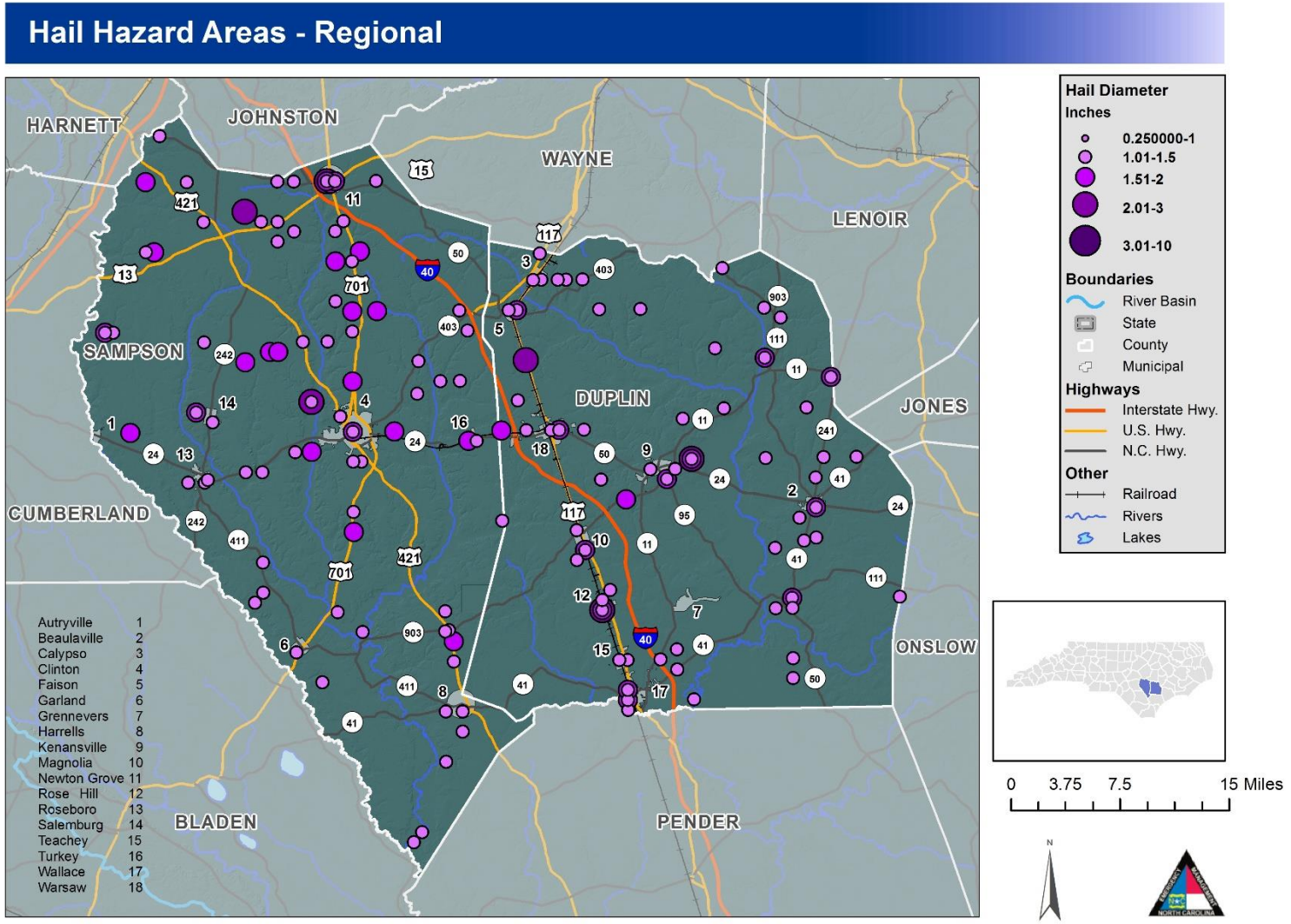


Figure 5-31: Hail Hazard Areas - Regional

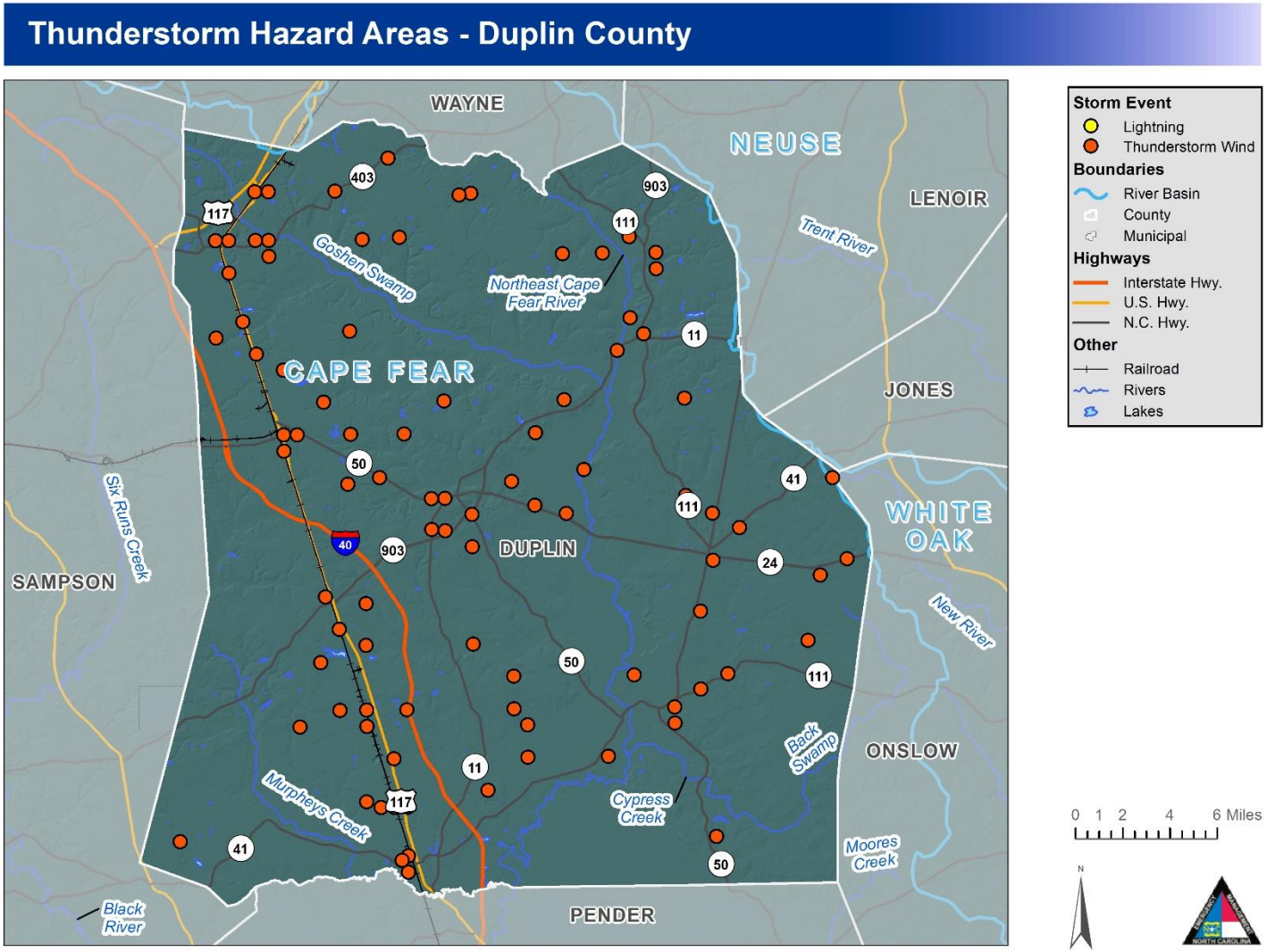


Figure 5-32: Severe Thunderstorm Hazard Areas – Duplin County

The figure below shows the average annual cloud-to-ground lightning strikes in the county with “High” being <100 strikes per year, “Medium” 99-50 strikes per year and “Low” being >50 strikes per year.

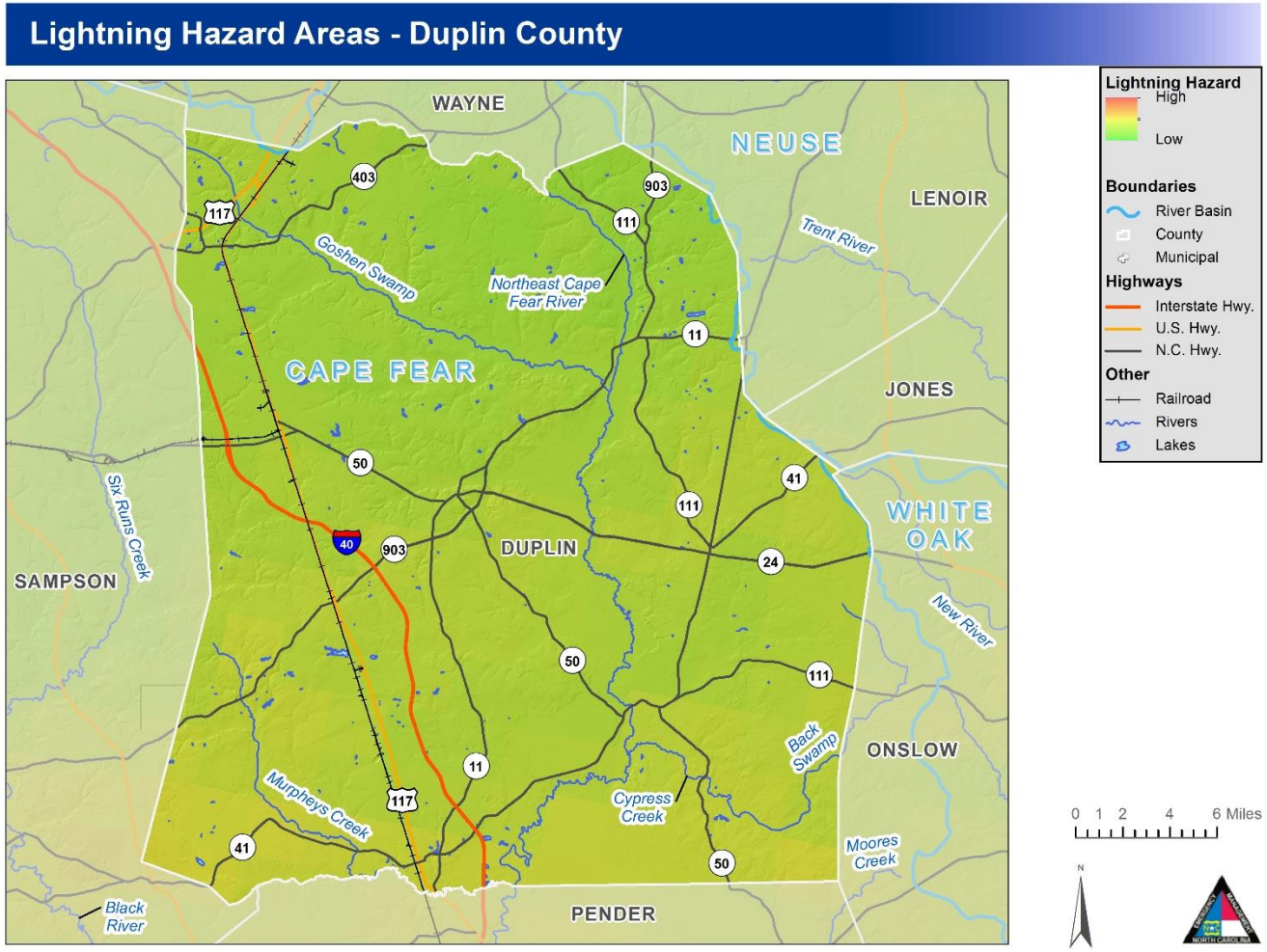


Figure 5-33: Lightning Hazard Areas – Duplin County

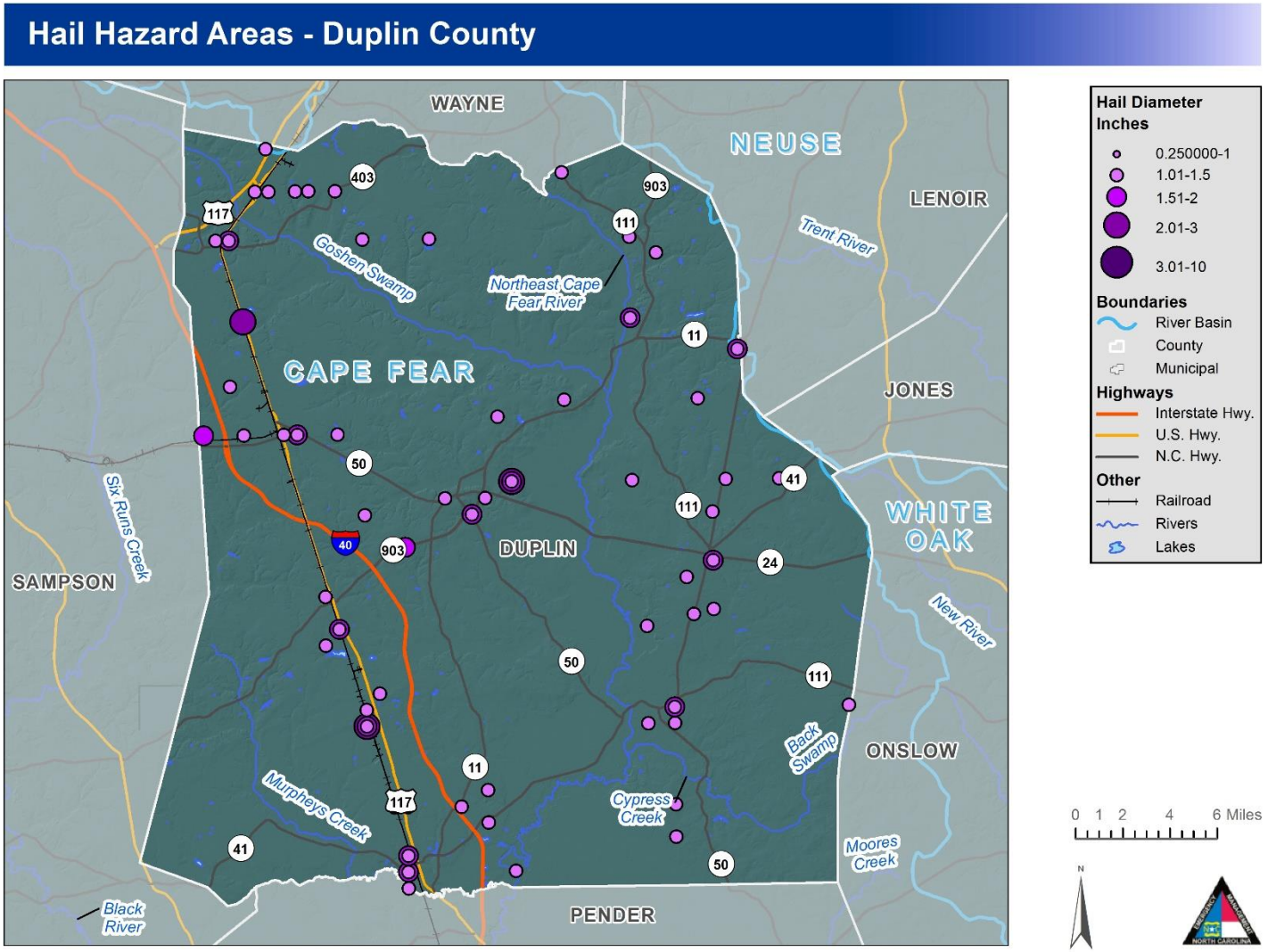


Figure 5-34: Hail Hazard Areas – Duplin County

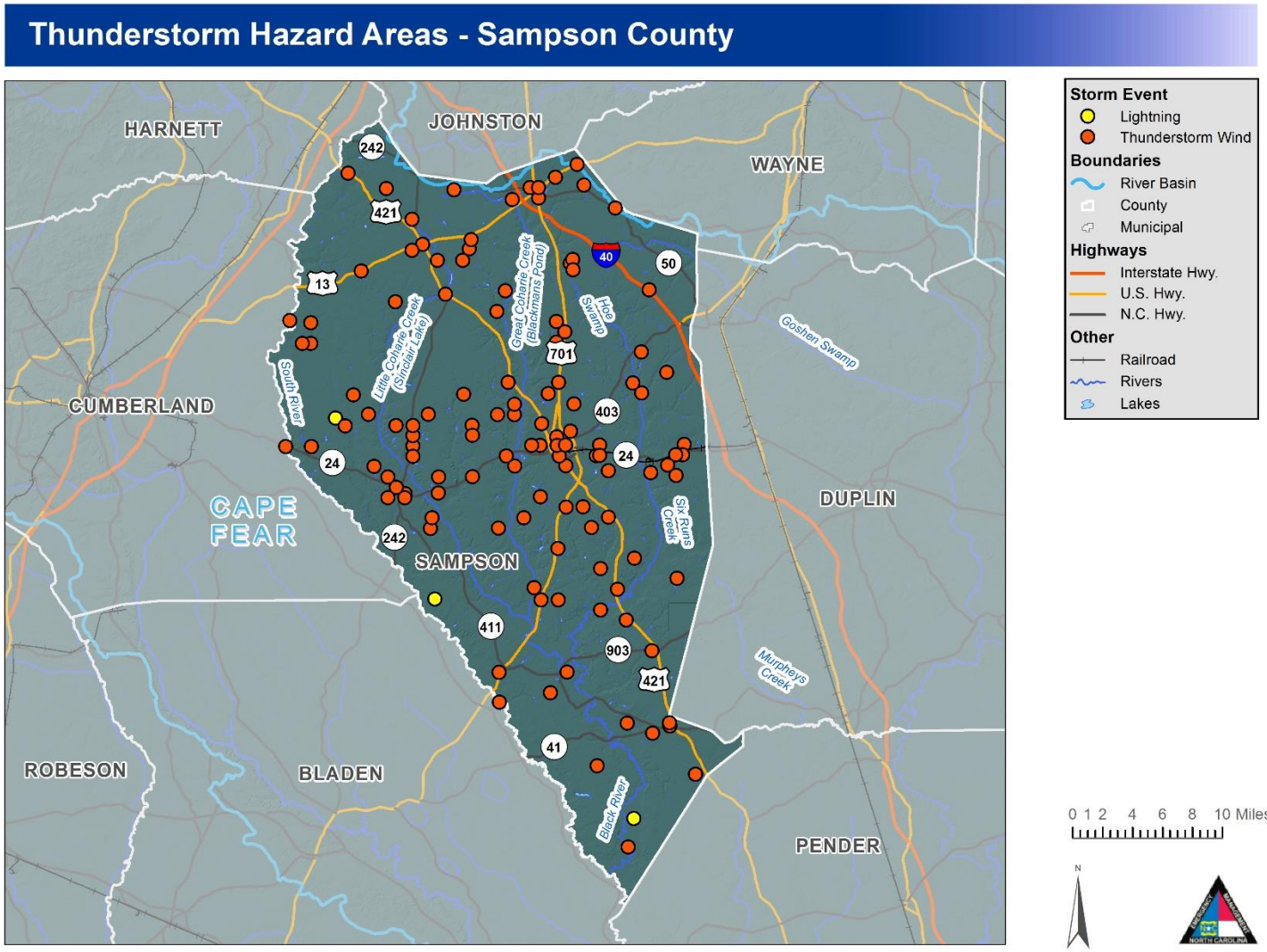


Figure 5-35: Severe Thunderstorm Hazard Areas – Sampson County

The figure below shows the average annual cloud-to-ground lightning strikes in the county with “High” being <100 strikes per year, “Medium” 99-50 strikes per year and “Low” being >50 strikes per year.

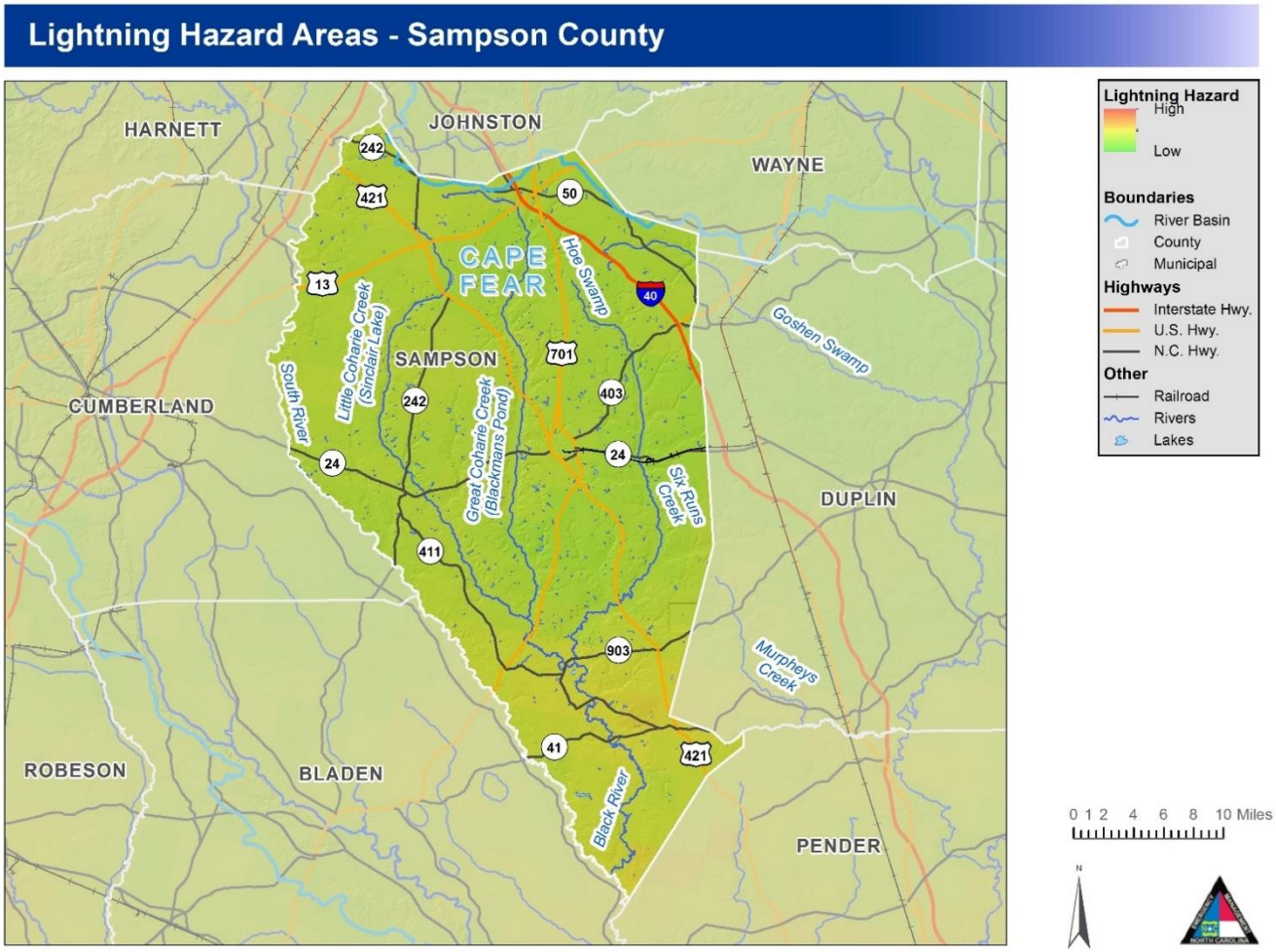


Figure 5-36: Lightning Hazard Areas – Sampson County

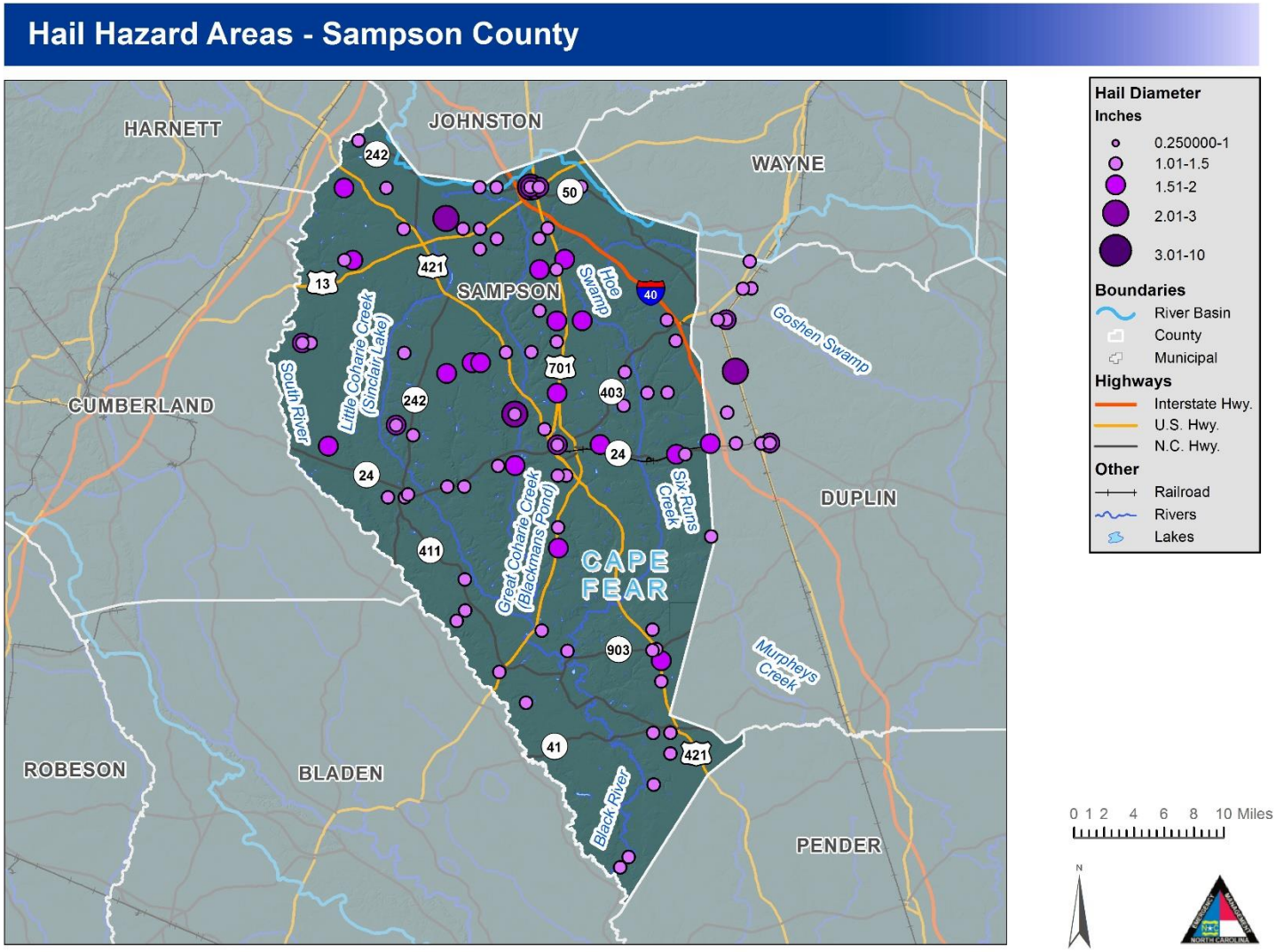


Figure 5-37: Hail Hazard Areas – Sampson County

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 May 29, 2017 at 78 knots (approximately 90 mph). It should be noted that future events may exceed these historical occurrences.

Table 5-21: Thunderstorm Events

Jurisdiction	Date of Event	Magnitude
Sampson		
Unincorporated	5/29/2017	78 kts
Autryville	3/8/2005	60 kts
Clinton	5/28/200	60 kts
Garland	6/24/1997	50 kts
Harrells	7/21/2015	50 kts
Newton Grove	4/11/1999	50 kts
Roseboro	7/24/2012	50 kts
Salemburg	3/9/1998	50 kts
Turkey	6/13/1998	50 kts
Duplin		
Unincorporated	5/28/2001	70 kts
Beulaville	6/13/1998	60 kts
Calypso	5/28/2001	70 kts
Faison	5/23/1998	53 kts
Greenevers	No Data	No Data
Kenansville	7/24/1999	55 kts
Magnolia	4/15/1999	55 kts
Rose Hill	7/10/2002	61 kts
Teachey	4/28/2001	55 kts
Wallace	3/9/1998	52 kts
Warsaw	2/21/1997	51 kts
*Magnitude is depicted in knots		

5.6.4 Past Occurrences

Table 5-22 shows detail for severe weather events reported by NCDC since 2019 for the Region. There have been over 500 recorded events causing 16 injuries and over $4.5M in property damage.

Table 5-22: NCDC Severe Weather Events in the Region

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Parkersburg	03/29/2010	Lightning		0	0	300.00K	0.00K
Salemburg	06/13/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Butlers Xrds	06/13/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Butlers Xrds	06/13/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton	06/13/2010	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Albertson	06/13/2010	Hail	0.75 in.	0	0	0.00K	0.00K
Magnolia	06/13/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	06/20/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kornegay	06/23/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Ingold	06/25/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mingo	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harrells	06/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Newton Grove	07/17/2010	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Calypso	07/21/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	07/29/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Moultonville	08/18/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Roseboro	09/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clement	09/26/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Warsaw	12/01/2010	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Butlers Xrds	03/06/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bowdens	03/06/2011	Thunderstorm Wind	70 kts. EG	0	0	3.50K	0.00K
Scott	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rose Hill	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bowdens	04/05/2011	Hail	0.88 in.	0	0	0.00K	0.00K
Clinton	04/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	04/16/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Teacheys	04/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Midway	05/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hayne	05/13/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Roseboro	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Salemburg	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Turkey	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Newton Grove	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Faison	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Faison	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Faison	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Faison	05/14/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	05/14/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Kenansville	05/14/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Snow Hill	05/14/2011	Hail	0.75 in.	0	0	0.00K	0.00K
Albertson	05/14/2011	Hail	0.88 in.	0	0	0.00K	0.00K
Clinton	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Magnolia	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Teacheys	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Wallace	06/18/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Turkey	06/20/2011	Hail	1.75 in.	0	0	0.00K	0.00K
Warsaw	06/20/2011	Hail	1.00 in.	0	0	0.00K	0.00K
Piney Green	06/21/2011	Hail	1.75 in.	0	0	0.00K	0.00K
Tomahawk	06/22/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Magnolia	06/22/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Magnolia	06/22/2011	Hail	0.75 in.	0	0	0.00K	0.00K
Kenansville	06/22/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	06/22/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Albertson	06/22/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	06/23/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Butlers Xrds	06/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Faison	06/27/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Timothy	06/28/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Petersburg Crossing	07/05/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beulaville	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Petersburg Crossing	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Petersburg Crossing	07/24/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Salemburg	08/07/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	08/12/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	08/12/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	08/12/2011	Thunderstorm Wind	70 kts. EG	0	0	60.00K	0.00K
Warsaw	08/12/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Newton Grove	08/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Roseboro	08/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Sarecta	08/21/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beulaville	10/13/2011	Hail	1.75 in.	0	0	0.00K	0.00K
Salemburg	12/07/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Ingold	12/07/2011	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Magnolia	02/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville Arpt	02/24/2012	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
Jackson Store	02/24/2012	Hail	1.25 in.	0	0	0.00K	0.00K
Beulaville	02/24/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Kornegay	02/24/2012	Thunderstorm Wind	55 kts. EG	0	1	4.00K	0.00K
Piney Green	03/24/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Harrells	03/25/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Magnolia	03/25/2012	Hail	0.88 in.	0	0	0.00K	0.00K
Rose Hill	03/25/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Petersburg Crossing	03/30/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Magnolia	04/21/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Mc Daniels	05/09/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Rose Hill	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Concord	05/22/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Clement	05/22/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Rosin Hill	05/23/2012	Hail	0.75 in.	0	0	0.00K	0.00K
Mc Clam Xrds	05/23/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Spiveys Corner	05/23/2012	Hail	1.25 in.	0	0	0.00K	0.00K
Hobbton	06/25/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Calypso	07/01/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Beautancus	07/01/2012	Hail	1.00 in.	0	0	0.00K	0.00K
Moultonville	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Warsaw	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
West	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beulaville	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Jackson Store	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Chinquapin	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Chinquapin	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Ivanhoe	07/01/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Midway	07/05/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kerr	07/21/2012	Lightning		0	0	125.00K	0.00K
Beulaville	07/22/2012	Hail	1.25 in.	0	0	0.00K	0.00K
Newton Grove	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Newton Grove	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Monks Xrds	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Suttontown	07/23/2012	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Roseboro	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Warsaw	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	07/24/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Jackson Store	08/02/2012	Hail	0.88 in.	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Harrells	08/02/2012	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Salemburg	04/19/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton Arpt	06/13/2013	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Clinton	06/13/2013	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
Butlers Xrds	06/13/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Giddensville	06/27/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Calypso	08/22/2013	Hail	0.75 in.	0	0	0.00K	0.00K
Calypso	08/22/2013	Hail	1.00 in.	0	0	0.00K	0.00K
Calypso	08/22/2013	Hail	0.75 in.	0	0	0.00K	0.00K
Faison	08/22/2013	Hail	1.00 in.	0	0	0.00K	0.00K
Wallace	08/22/2013	Hail	0.75 in.	0	0	0.00K	0.00K
Cartersville	08/22/2013	Hail	1.25 in.	0	0	0.00K	0.00K
Wallace	08/22/2013	Hail	0.75 in.	0	0	0.00K	0.00K
Murphey	08/22/2013	Hail	0.75 in.	0	0	0.00K	0.00K
Murphey	08/22/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Charity	08/22/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Murphey	08/22/2013	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Chinquapin	08/22/2013	Hail	0.88 in.	0	0	0.00K	0.00K
Mintz	08/22/2013	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Mintz	08/22/2013	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Friendship	01/11/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Halls Store	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rosin Hill	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Herring	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Newton Grove	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton Arpt	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Hobbton	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rose Hill	02/21/2014	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
Beulaville	02/21/2014	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Kenansville	02/21/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Salemburg	04/29/2014	Hail	1.00 in.	0	0	0.00K	0.00K
Faison	04/30/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Garland	05/27/2014	Hail	1.00 in.	0	0	0.00K	0.00K
Delway	05/27/2014	Hail	0.88 in.	0	0	0.00K	0.00K
Kerr	05/27/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Murphey	05/27/2014	Hail	0.75 in.	0	0	0.00K	0.00K
Wallace	05/27/2014	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
Moultonville	06/05/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton	06/05/2014	Hail	1.25 in.	0	0	0.00K	0.00K
Taylors Bridge	06/05/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bowdens	07/15/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kornegay	07/15/2014	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Roseboro	05/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Turkey	05/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Warsaw	05/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Taylors Bridge	06/18/2015	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Turkey	06/18/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Taylors Bridge	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	06/27/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton	07/21/2015	Thunderstorm Wind	43 kts. EG	0	0	5.00K	0.00K
Warsaw	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Albertson	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harrells	07/21/2015	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Kenansville	07/23/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Albertson	08/06/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Keener	08/11/2015	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
Teacheys	09/04/2015	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Rose Hill	02/16/2016	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
Hobbton	02/24/2016	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Hobbton	04/28/2016	Hail	1.75 in.	0	0	3.00K	0.00K
Faison	04/28/2016	Hail	1.50 in.	0	0	0.00K	0.00K
Chinquapin	05/03/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beulaville	06/05/2016	Hail	0.75 in.	0	0	0.00K	0.00K
Wallace	06/14/2016	Hail	1.00 in.	0	0	0.00K	0.00K
Wallace	06/14/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mt Pleasant	07/07/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	2.00K
Roseboro	07/11/2016	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Salemburg	07/11/2016	Thunderstorm Wind	50 kts. EG	0	0	2.50K	0.00K
Clinton	07/11/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Timothy	07/15/2016	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton Arpt	07/31/2016	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Clinton	05/05/2017	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Piney Green	05/29/2017	Thunderstorm Wind	78 kts. EG	0	12	3.500M	0.00K
Bowdens	05/29/2017	Thunderstorm Wind	80 kts. EG	0	0	0.00K	0.00K
Tomahawk	05/29/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clear Run	05/29/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harrells	05/29/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Harrells	05/29/2017	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Clement	05/31/2017	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Turkey	05/31/2017	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
Kenansville	05/31/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Warsaw	05/31/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mc Clam Xrds	07/06/2017	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
Chinquapin	07/15/2017	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Ingold	08/23/2017	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Rose Hill	04/15/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Giddensville	06/11/2018	Lightning		0	0	5.00K	0.00K
Faison	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Spiveys Corner	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Mc Clam Xrds	06/11/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	3.00K
Ingold	06/11/2018	Lightning		0	0	5.00K	0.00K
Spiveys Corner	06/17/2018	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Warsaw	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Magnolia	06/20/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Monks Xrds	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Suttontown	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
Midway	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Suttontown	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Calypso	06/24/2018	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
Calypso	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kornegay	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
Salemburg	06/24/2018	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Clement	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Halls Store	08/08/2018	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
Roseboro	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	25.00K
Newton Grove	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	25.00K
Mintz	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Clinton	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
Calypso	04/19/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Faison	05/30/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Calypso	05/30/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Calypso	05/30/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	05/30/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Beautancus	05/30/2019	Hail	1.00 in.	0	0	0.00K	0.00K
Beulaville	05/31/2019	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Halls Store	01/12/2020	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
Taylors Bridge	01/13/2020	Thunderstorm Wind	74 kts. EG	3	3	250.00K	0.00K
Clement	04/13/2020	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
Warsaw	04/13/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Bowdens	04/13/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Potters Hill	04/13/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Kenansville	04/13/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Salemburg	05/22/2020	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
Roseboro	05/22/2020	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
Warsaw	05/22/2020	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:				3	16	4.589M	55.00K

5.6.5 Probability of Future Occurrences

The probability of future Thunderstorm/Lightning/Hail is shown in Table 5-23, 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

Table 5-23: Thunderstorm/Lightening/Hail – Probability of Future Hazard Occurrences

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Medium
Duplin County (Unincorporated Area)	Medium
Sampson County (Unincorporated Area)	Medium
Town of Autryville	Medium
Town of Beulaville	Medium
Town of Calypso	Medium
Town of Faison	Medium
Town of Garland	Medium
Town of Greenevers	Medium
Town of Harrells	Medium
Town of Kenansville	Medium
Town of Magnolia	Medium
Town of Newton Grove	Medium
Town of Rose Hill	Medium
Town of Roseboro	Medium
Town of Salemburg	Medium
Town of Teachey	Medium
Town of Turkey	Medium
Town of Wallace	Medium
Town of Warsaw	Medium

5.6.6 Consequence and Impact Analysis

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. Duplin County, the towns of Beulaville and Rose Hill 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

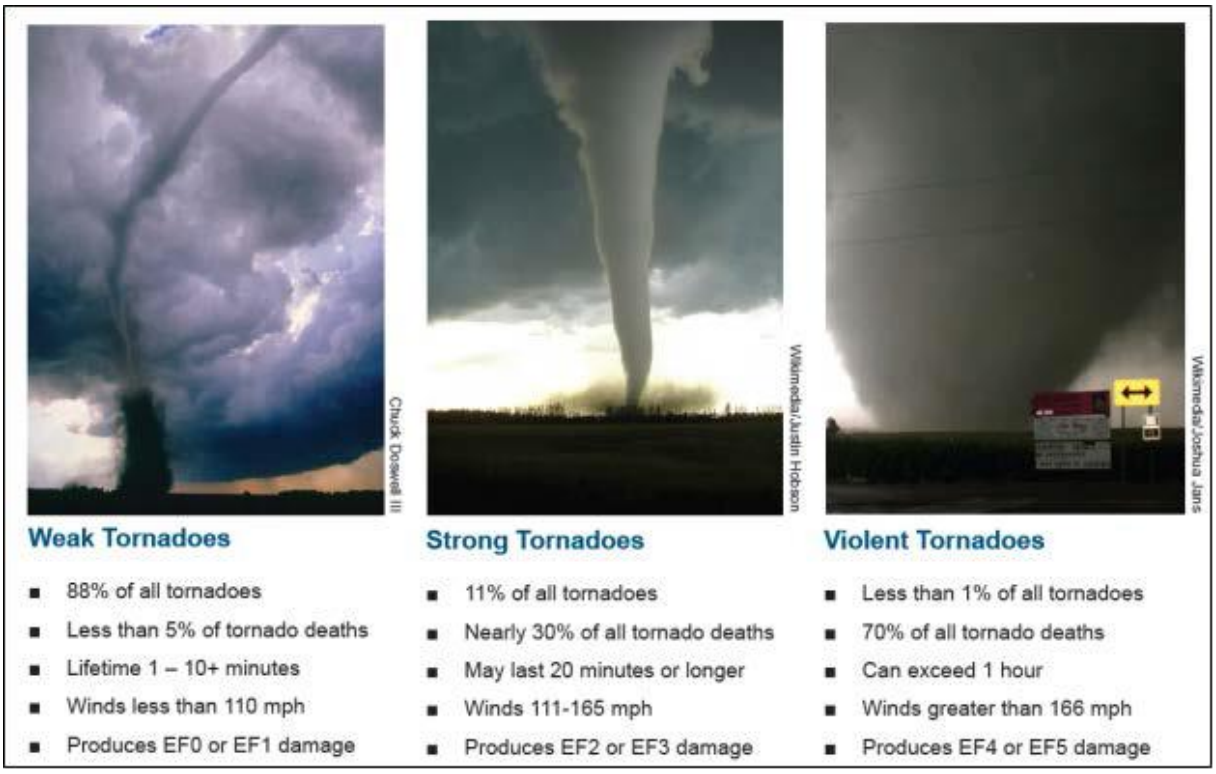
5.7.1 Hazard Description

According to the Glossary of Meteorology (AMS 2000), a tornado is "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud." Tornadoes can appear from any direction. Most move from southwest to northeast, or west to east. Some tornadoes have changed direction amid path, or even backtracked.

Tornadoes are commonly produced by land falling tropical cyclones. Those making landfall along the Gulf coast traditionally produce more tornadoes than those making landfall along the Atlantic coast. Tornadoes that form within hurricanes are more common in the right front quadrant with respect to the forward direction but can occur in other areas as well. According to the NHC, about 10% of the tropical cyclone-related fatalities are caused by tornadoes. Tornadoes are more likely to be spawned within 24 hours of landfall and are usually within 30 miles of the tropical cyclone’s center.

Tornadoes have the potential to produce winds in excess of 200 mph (EF5 on the Enhanced Fujita Scale) and can be very expansive – some in the Great Plains have exceeded two miles in width. Tornadoes

associated with tropical cyclones, however, tend to be of lower intensity (EF0 to EF2) and much smaller in size than ones that form in the Great Plains.



Source: NOAA National Weather Service

Figure 5-38: Types of Tornadoes

Prior to February 1, 2007, tornado intensity was measured by the Fujita (F) scale. This scale was revised and is now the Enhanced Fujita (EF) scale. Both scales are sets of wind estimates (not measurements) based on damage. The new scale provides more damage indicators (28) and associated degrees of damage, allowing for more detailed analysis, better correlation between damage and wind speed. It is also more precise because it considers the materials affected and the construction of structures damaged by a tornado. Table 5-24 shows the wind speeds associated with the enhanced Fujita scale ratings and the damage that could result at different levels of intensity.

Table 5-24: Enhanced Fujita Scale

Storm Category	Damage Level	3 Second Gust (mph)	Description of Damages	Photo Example
F0	GALE	65–85	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign boards	
F1	WEAK	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 might be destroyed.	

Storm Category	Damage Level	3 Second Gust (mph)	Description of Damages	Photo Example
F2	STRONG	111–135	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.	
F3	SEVERE	136–165	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.	
F4	DEVASTATING	166–200	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated.	
F5	INCREDIBLE	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.	

5.7.2 Location and Spatial Extent

Although tornadoes can occur in most locations, most of the tornado activity in the United States exists in the Mid-West and Southeast. An exact season does not exist for tornadoes; however, most occur within the time period of early spring to middle summer (February – June). Figure 5-39 shows tornado activity in the United States based on the number of recorded tornadoes per 1,000 square miles.

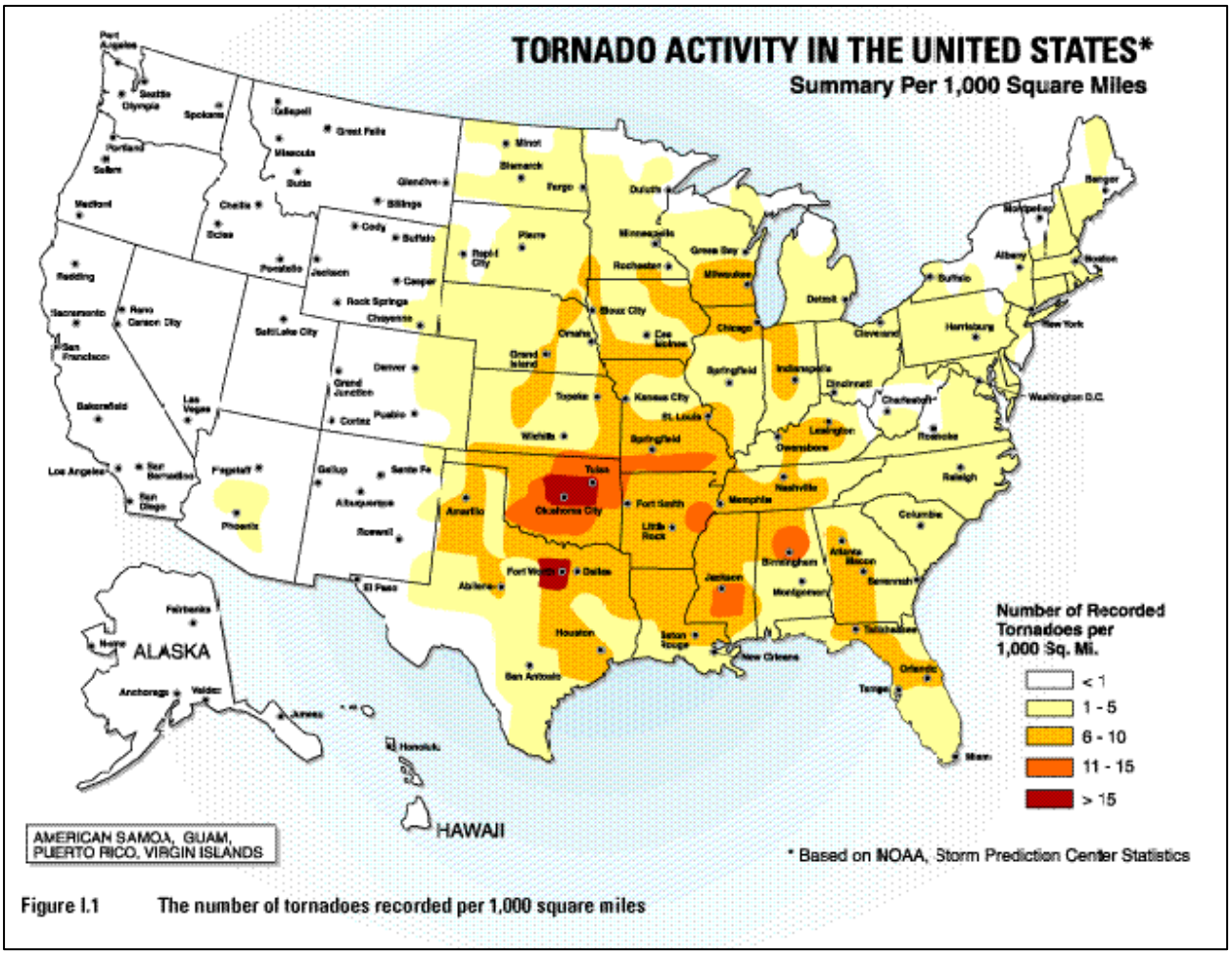


Figure 5-39: Tornado Activity in the United States

Tornadoes occur throughout the state of North Carolina, and thus in the 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 Region is uniformly exposed to this hazard. The figures below illustrate the paths of previous tornadoes in the Region.

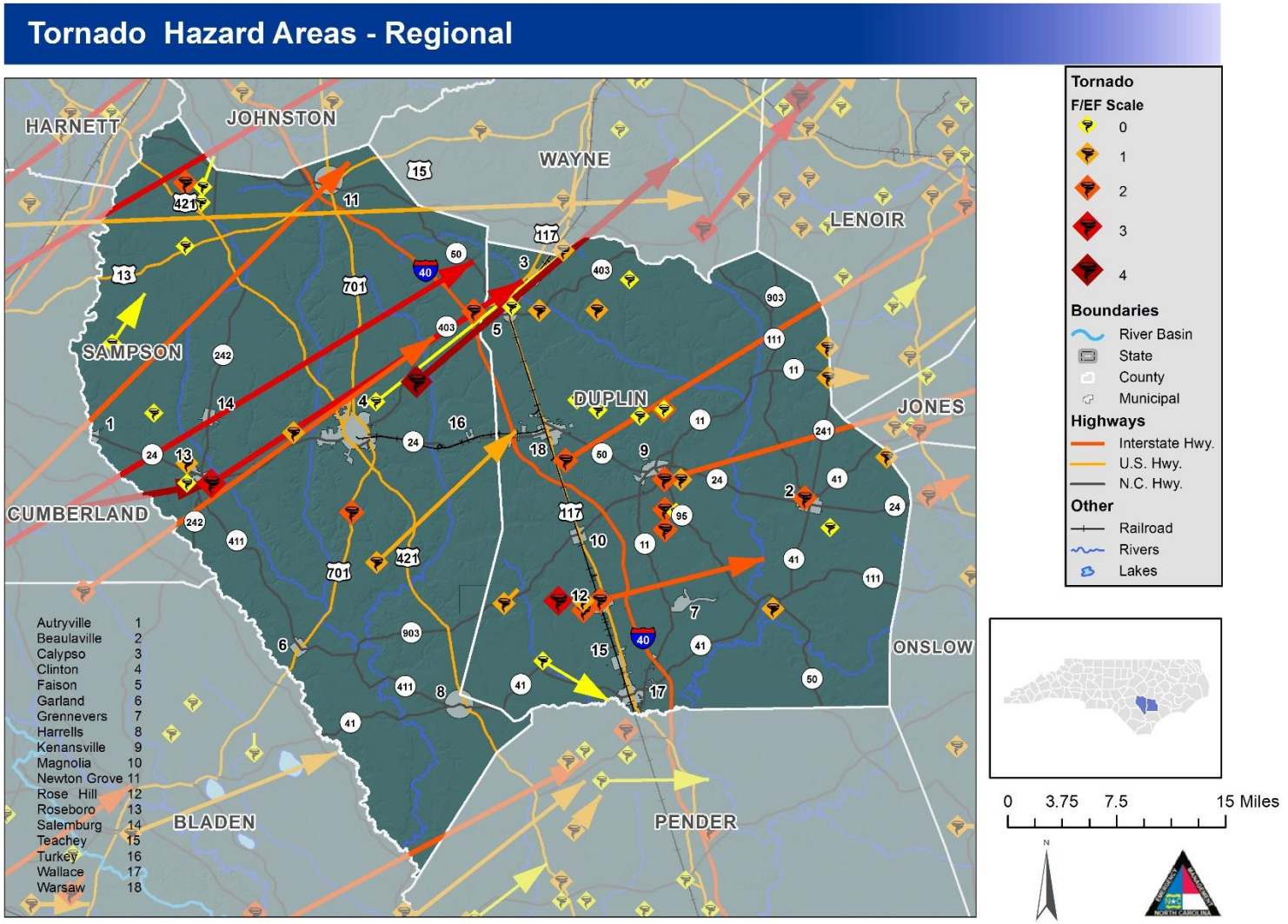


Figure 5-40: Tornado Hazard Areas - Regional

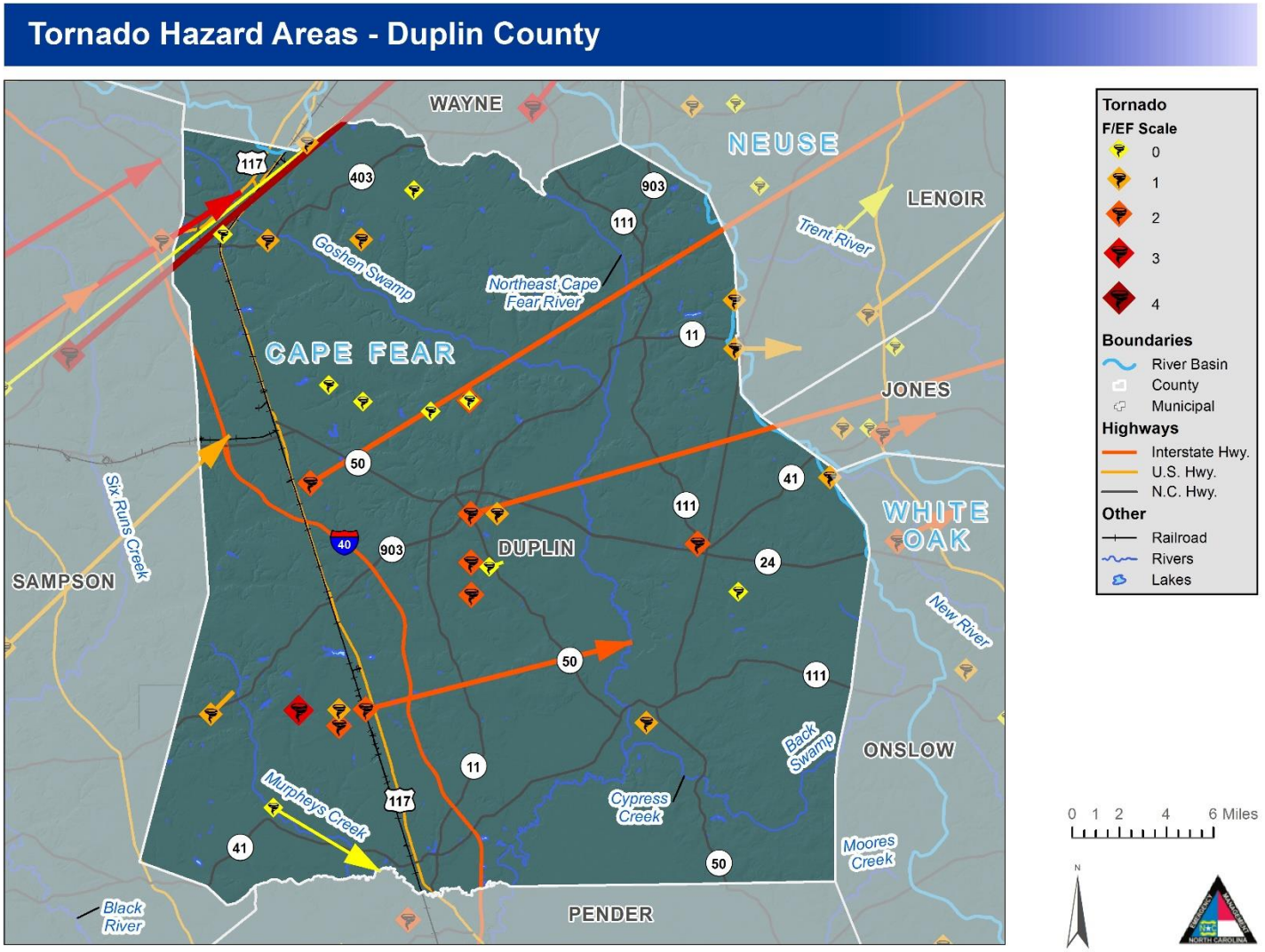


Figure 5-41: Tornado Hazard Areas – Duplin County

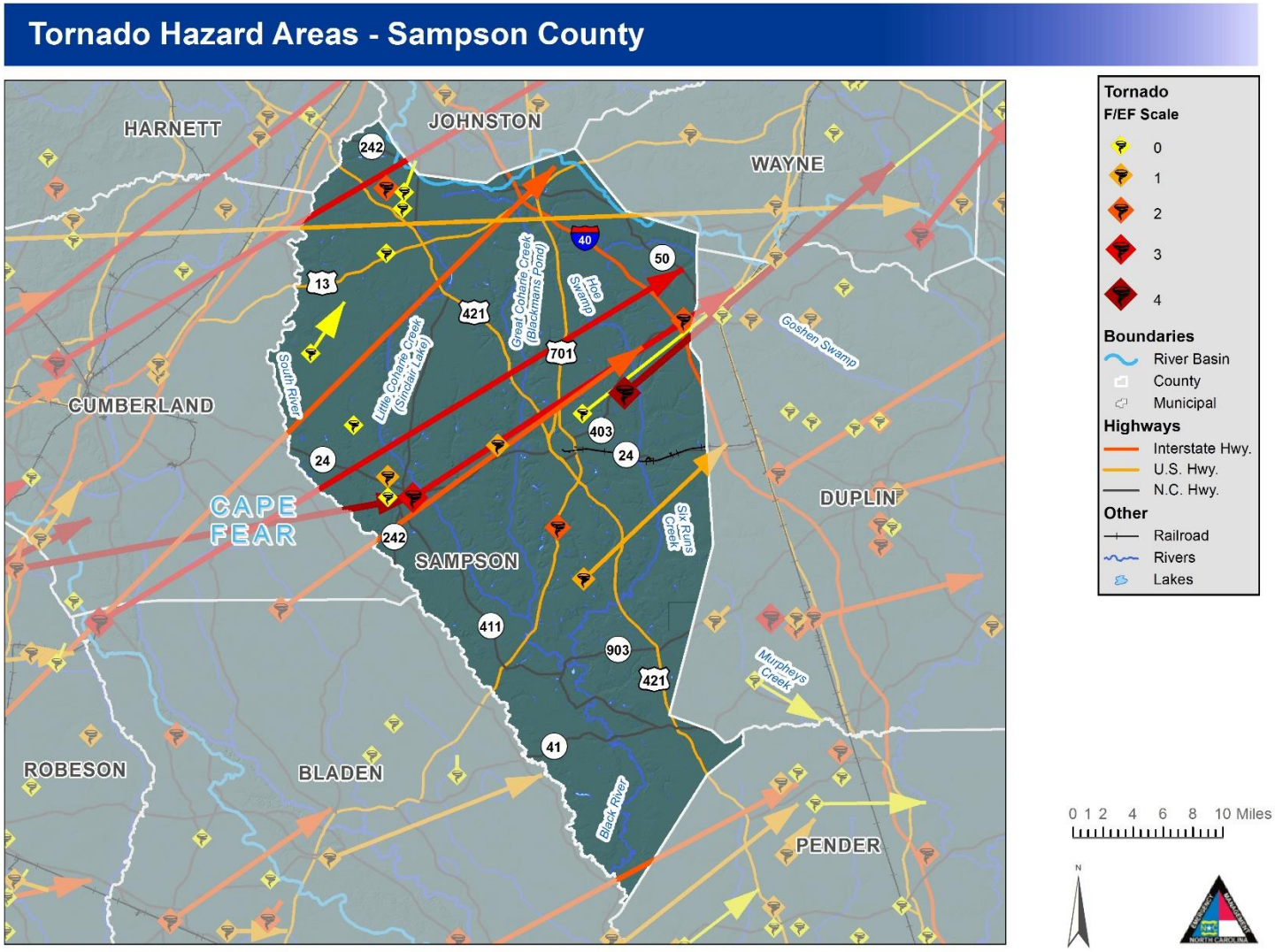


Figure 5-42: Tornado Hazard Areas – Sampson County

5.7.3 Extent

Tornado hazard extent is measured by tornado occurrences in the US provided by the Fujita/Enhanced Fujita Scale. Table 5-25 provides the highest recorded events in the jurisdictions (except Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey, Beulaville, Calypso, Greenevers, Teachey and Wallace; which haven't experienced tornadoes in their jurisdictions) in the Region below. It should be noted that jurisdictions can be affected by these events even though it is not depicted in the table.

Table 5-25: Tornado Hazard Events

Jurisdiction	Date of Event	Magnitude
Sampson		
Unincorporated	4/8/1957, 3/28/1984	F4
Autryville	5/23/2017	EF1
Clinton	1/7/1995	F1
Garland	N/A	N/A
Harrells	N/A	N/A
Newton Grove	N/A	N/A
Roseboro	N/A	N/A
Salemburg	N/A	N/A
Turkey	N/A	N/A
Duplin		
Unincorporated	3/28/1984	F4
Beulaville	N/A	N/A
Calypso	N/A	N/A
Faison	4/16/2011	EF0
Greenevers	N/A	N/A
Kenansville	4/15/1996, 4/15/1999	F2

Magnolia	4/15/1996	F1
Rose Hill	7/3/2014	EF1
Teachey		
Wallace		
Warsaw	5/5/2009, 2/24/2016	EF0

5.7.4 Past Occurrences

The following historical occurrences ranging from 1957 to 2019 have been identified based on the NCDC Storm Events database (Table 5-26). 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 5-26: Historical Occurrences of Tornado (1957 to 2019)

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Duplin								
Duplin County (Unincorporated Area)	04/08/57	EF3	0	29	$250,000	$28,309	$0	$0
Duplin County (Unincorporated Area)	06/21/61	EF2	0	0	$250,000	$32,720	$0	$0
Duplin County (Unincorporated Area)	03/14/75	EF2	0	0	$250,000	$52,474	$0	$0
Duplin County (Unincorporated Area)	09/08/75	EF1	0	0	$25,000	$5,337	$0	$0
Duplin County (Unincorporated Area)	08/18/85	EF1	0	0	$25,000	$7,515	$0	$0
Duplin County (Unincorporated Area)	04/15/96	EF2	0	0	$450,000	$195,259	0	$0
Duplin County (Unincorporated Area)	04/15/96	EF2	0	3	$70,000	$30,374	0	$0
Duplin County (Unincorporated Area)	04/15/96	EF2	0	0	$200,000	$86,782	0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Duplin County (Unincorporated Area)	04/15/96	EF1	0	0	$75,000	$32,543	0	$0
Duplin County (Unincorporated Area)	04/15/96	EF2	0	0	0	$0	0	$0
Duplin County (Unincorporated Area)	09/16/96	EF1	0	0	$40,000	$17,609	0	$0
Duplin County (Unincorporated Area)	08/26/98	EF1	0	0	$85,000	$40,001	0	$0
Duplin County (Unincorporated Area)	04/15/99	EF2	0	11	$4,000,000	$1,924,326	0	$0
Duplin County (Unincorporated Area)	04/15/99	EF1	0	2	0	$0	0	$0
Duplin County (Unincorporated Area)	07/23/06	EF0	0	0	$15,000	$9,270	0	$0
Duplin County (Unincorporated Area)	07/17/07	EF0	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	07/17/07	EF0	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	05/05/09	EF0	0	0	$10,000	$6,800	$0	$0
Duplin County (Unincorporated Area)	05/05/09	EF0	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	04/16/11	EF0	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	04/28/11	EF1	0	0	$10,000	$7,279	$0	$0
Duplin County (Unincorporated Area)	07/03/14	EF0	0	0	$0	$0	$0	$0
Duplin County (Unincorporated Area)	07/03/14	EF1	0	0	$150,000	$121,857	$0	$0
Duplin County (Unincorporated Area)	09/08/14	EF2	0	1	$200,000	$163,486	$0	$0
Duplin County (Unincorporated Area)	02/24/16	EF1	0	0	$100,000	$85,953	0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Town of Beulaville	06/01/74	EF2	0	1	$2,500,000	$510,850	$0	$0
Town of Faison	04/16/11	EF0	0	0	$0	$0	$0	$0
Town of Rose Hill	06/01/74	EF2	0	0	$250,000	$51,085	$0	$0
Town of Rose Hill	04/19/78	EF2	0	0	$250,000	$58,400	$0	$0
Town of Rose Hill	04/15/96	EF1	0	0	$30,000	$13,017	0	$0
Town of Warsaw	02/24/16	EF0	0	0	$5,000	$4,298	$0	$0
Subtotal Duplin	31 Events		0	47	$9,240,000	$3,485,544	$0	$0
Sampson								
Sampson County (Unincorporated Area)	05/08/60	EF1	0	0	$25,000	$3,148	$0	$0
Sampson County (Unincorporated Area)	09/11/60	EF2	0	8	$25,000	$3,185	$0	$0
Sampson County (Unincorporated Area)	04/08/62	EF0	0	0	$250,000	$33,622	$0	$0
Sampson County (Unincorporated Area)	02/25/80	EF0	0	0	$250	$62	$0	$0
Sampson County (Unincorporated Area)	07/10/80	EF1	0	0	$2,500	$630	$0	$0
Sampson County (Unincorporated Area)	03/28/84	EF4	0	50	$25,000,000	$7,164,025	$0	$0
Sampson County (Unincorporated Area)	03/28/84	EF3	10	90	$25,000,000	$7,164,025	$0	$0
Sampson County (Unincorporated Area)	03/28/84	EF4	0	40	$25,000,000	$7,164,025	$0	$0
Sampson County (Unincorporated Area)	09/16/96	EF2	0	0	$200,000	$88,045	0	$0
Sampson County (Unincorporated Area)	11/15/08	EF0	0	0	$25,000	$16,728	$0	$0

Location	Date	Magnitude	Deaths	Injuries	Reported Property Damage	Reported Property Damage (PV)	Reported Crop Damage	Reported Crop Damage (PV)
Sampson County (Unincorporated Area)	03/27/09	EF0	0	0	$5,000	$3,388	$15,000	$10,165
Sampson County (Unincorporated Area)	03/27/09	EF0	0	0	$0	$0	$50,000	$33,884
Sampson County (Unincorporated Area)	03/27/09	EF0	0	0	$0	$0	$50,000	$33,884
Sampson County (Unincorporated Area)	04/16/11	EF2	0	9	$10,000,000	$7,271,975	$0	$0
Sampson County (Unincorporated Area)	04/29/14	EF1	0	0	$355,000	$286,615	$0	$0
Sampson County (Unincorporated Area)	09/16/18	EF0	0	0	$250,000	$234,747	$0	$0
Sampson County (Unincorporated Area)	04/19/19	EF1	0	0	$650,000	$622,641	$0	$0
Town of Autryville	05/23/17	EF1	0	1	$1,500,000	$1,345,951	$0	$0
Town of Roseboro	04/18/69	EF3	0	0	$25,000	$4,284	$0	$0
Town of Roseboro	08/01/80	EF0	0	0	$250	$63	$0	$0
Subtotal Sampson	20 Events		10	198	$88,313,000	$31,407,159	$115,000	$77,933
TOTAL PLAN	51 Events		10	245	$97,553,000	$34,892,703	$115,000	$77,933

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

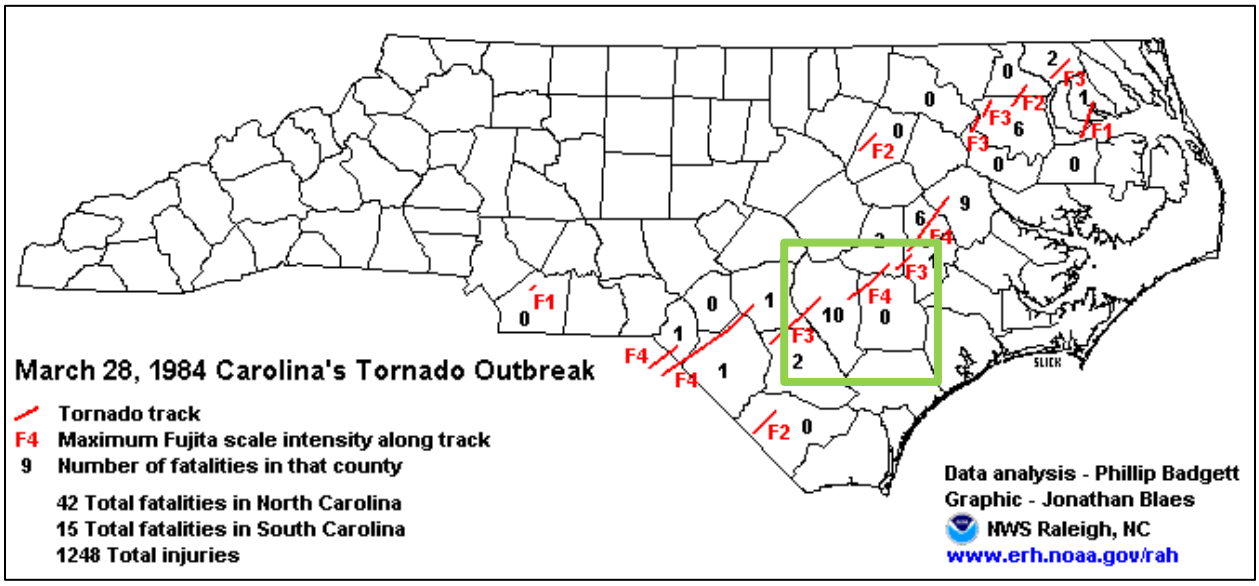
According to the information provided in Table 5-27, 51 recorded instances of Tornado have affected the planning area since 1957, causing an estimated $97,553,000 in property damage, $115,000 in crop damages, 10 death(s), and 245 injury(ies). The highest magnitude tornado on record is an Ef4. The lowest magnitude tornado on record is an Ef0

Table 5-27 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 5-27: 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)
Duplin							
Duplin County (Unincorporated Area)	25	0	46	$6,205,000	$702,617	$0	$0
Town of Beulaville	1	0	1	$2,500,000	$510,850	$0	$0
Town of Faison	1	0	0	$0	$0	$0	$0
Town of Rose Hill	3	0	0	$530,000	$108,300	$0	$0
Town of Warsaw	1	0	0	$5,000	$4,298	$0	$0
Subtotal Duplin	**31**	**0**	**47**	**$9,240,000**	**$1,326,065**	**$0**	**$0**
Sampson							
Sampson County (Unincorporated Area)	17	10	197	$86,787,750	$10,929,522	$115,000	$14,482
Town of Autryville	1	0	1	$1,500,000	$1,345,951	$0	$0
Town of Roseboro	2	0	0	$25,250	$4,326	$0	$0
Subtotal Sampson	**20**	**10**	**198**	**$88,313,000**	**$12,279,799**	**$115,000**	**$14,482**
TOTAL PLAN	**51**	**10**	**245**	**$97,553,000**	**$13,605,864**	**$115,000**	**$14,482**

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



Note: Green square indicates location of Sampson and Duplin Counties.

Figure 5-43: 1984 Tornado Outbreak

5.7.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Tornado is shown in Table 5-28, by jurisdiction.

Definitions for Descriptors Used for Probability of Future Hazard Occurrences

- Low: Less Than 1% Annual Probability of Ef2 Event
- Medium: Between 1% And 10% Annual Probability of Ef2 Event
- High: More Than 10% Annual Probability of Ef2 Event

Table 5-28: Tornado – Probability of Future Occurrences

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town of Garland	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Greenevers	Low
Town of Harrells	Low
Town of Kenansville	Low
Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	Low
Town of Warsaw	Low

5.7.6 Consequence and Impact Analysis

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. Mobile homes particularly susceptible to damage and fatalities during tornadoes. All jurisdictions in the Region are vulnerable to building damages.

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 Wildfire

5.8.1 Hazard Description

A wildfire is an uncontained fire that spreads through the environment. Wildfires have the ability to consume large areas, including infrastructure, property, and resources. When massive fires, or conflagrations, develop near populated areas, evacuations possibly ensue. Not only do the flames impact the environment, but the massive volumes of smoke spread by certain atmospheric conditions also impact the health of nearby populations. There are three general types of fire spread that are recognized.

- **Ground fires** – burn organic matter in the soil and are sustained by glowing combustion.
- **Surface fires** – spread with a flaming front and burn leaf litter, fallen branches and other fuels located at ground level.
- **Crown fires** – burn through the top layer of foliage on a tree, known as the canopy or crown fires. Crown fires, the most intense type of fire and often the most difficult to contain, need strong winds, steep slopes and a heavy fuel load to continue burning.

Generally, wildfires are started by humans, either through arson or carelessness. Fire intensity is controlled by both short-term weather conditions and longer-term vegetation conditions. During intense fires, understory vegetation, such as leaves, small branches, and other organic materials that accumulate on the ground, can become additional fuel for the fire. The most explosive conditions occur when dry, gusty winds blow across dry vegetation.

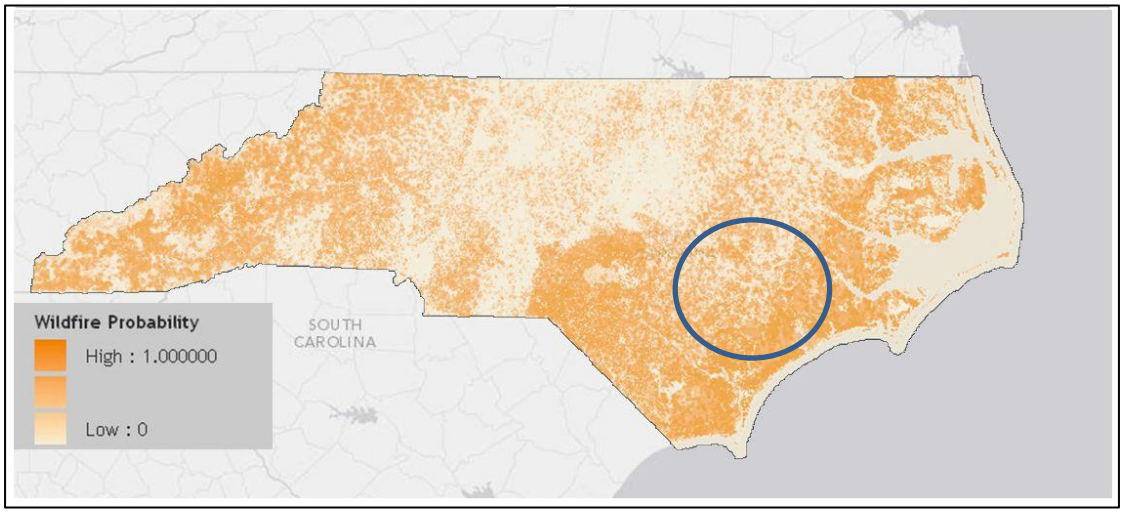
5.8.2 Location and Spatial Extent

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. Conversely, areas of high development limit wildfire risk. It is also important to note, areas in the urban-wildland interface (where

development abuts forest or open land) are particularly susceptible to wildfire hazard. When large wildfires burn on these open lands, it can be difficult to stop its spread to the built environment, thus endangering structures and population. The expansion of residential development from urban centers out into rural landscapes increases the potential for wildland fire threat to public safety and the potential for damage to forest resources and dependent industries. The Wildland Urban Interface (WUI) is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative or vegetative fuels. Population growth within the WUI substantially increases the risk of wildfire.

In an effort to identify specific potential wildfire hazard areas within the planning area, a GIS-based data layer called the Wildland Fire Susceptibility Index (WFSI) was obtained from the North Carolina Division of Forest Resources (NCDFR). The WFSI is a component layer derived from the Southern Wildfire Risk Assessment (SWRA), a multi-year project to assess and quantify wildfire risk for the 13 Southern states. The WFSI is a value between 0 and 1. It was developed consistent with the mathematical calculation process for determining the probability of an acre burning. The WFSI integrates the probability of an acre igniting and the expected final fire size based on the rate of spread in four weather percentile categories into a single measure of wildland fire susceptibility. Due to some necessary assumptions, mainly fuel homogeneity, it is not the true probability. But since all areas of the planning area have this value determined consistently, it allows for comparison and ordination of areas as to the likelihood of an acre burning.

Wildfires could potentially occur anywhere in the region. Figure 5-44 below shows areas of the state with a high probability of experiencing a wildfire. The Region is located within the highest probability category.



Source: NC 2013 State Hazard Mitigation Plan

Figure 5-44: Wildfire Probability Map

The below figures illustrate the level of wildfire potential for the planning area based on the WFSI data provided by NCDFR. Areas with a WFSI value of 0.01–0.05 were at moderate risk to the wildfire hazard. Areas with a WFSI value greater than 0.05 were at high risk to the wildfire hazard. Areas with a WFSI value less than 0.01 were considered to not be at risk to the wildfire hazard.

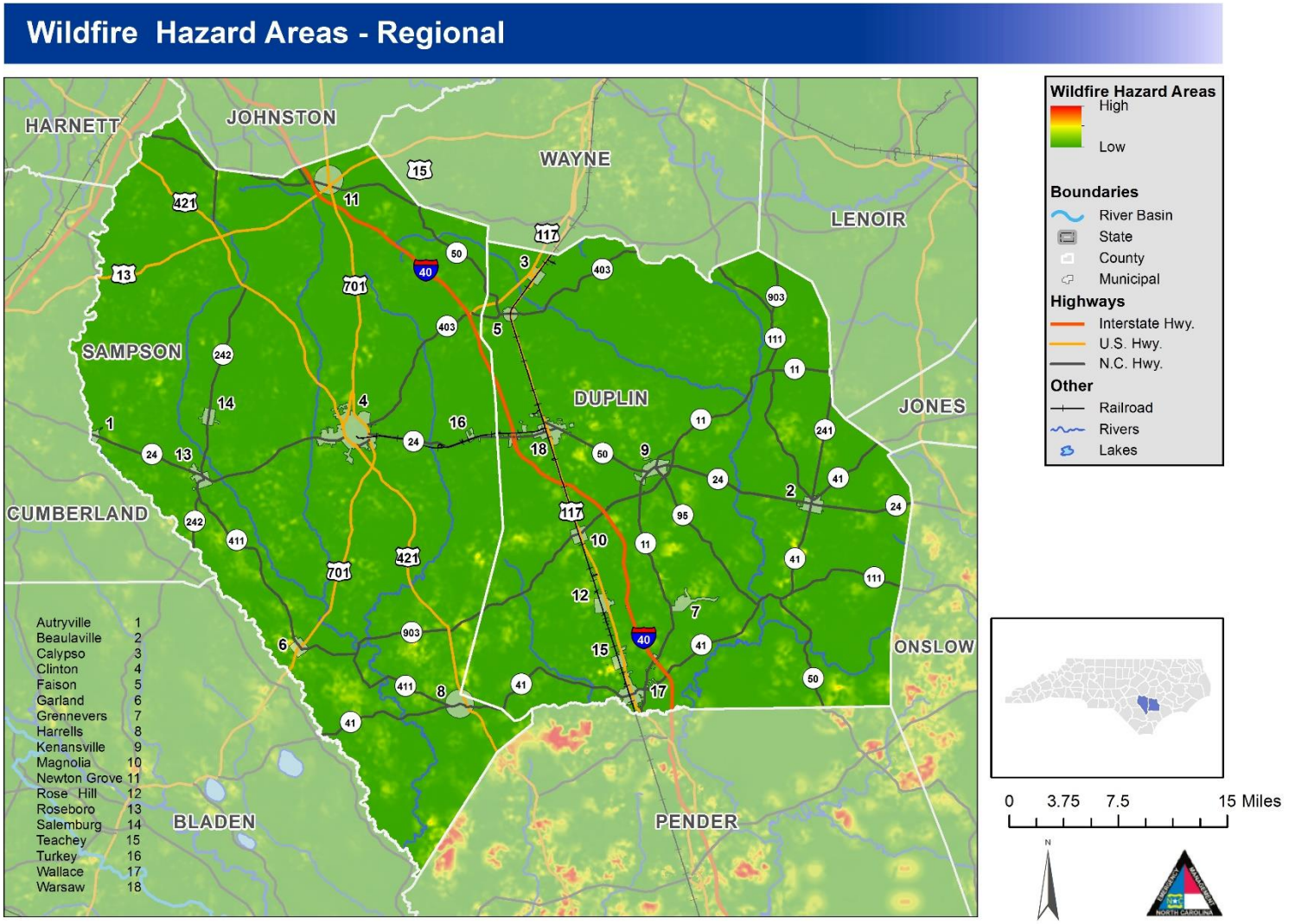


Figure 5-45: Wildfire Hazard Areas – Regional

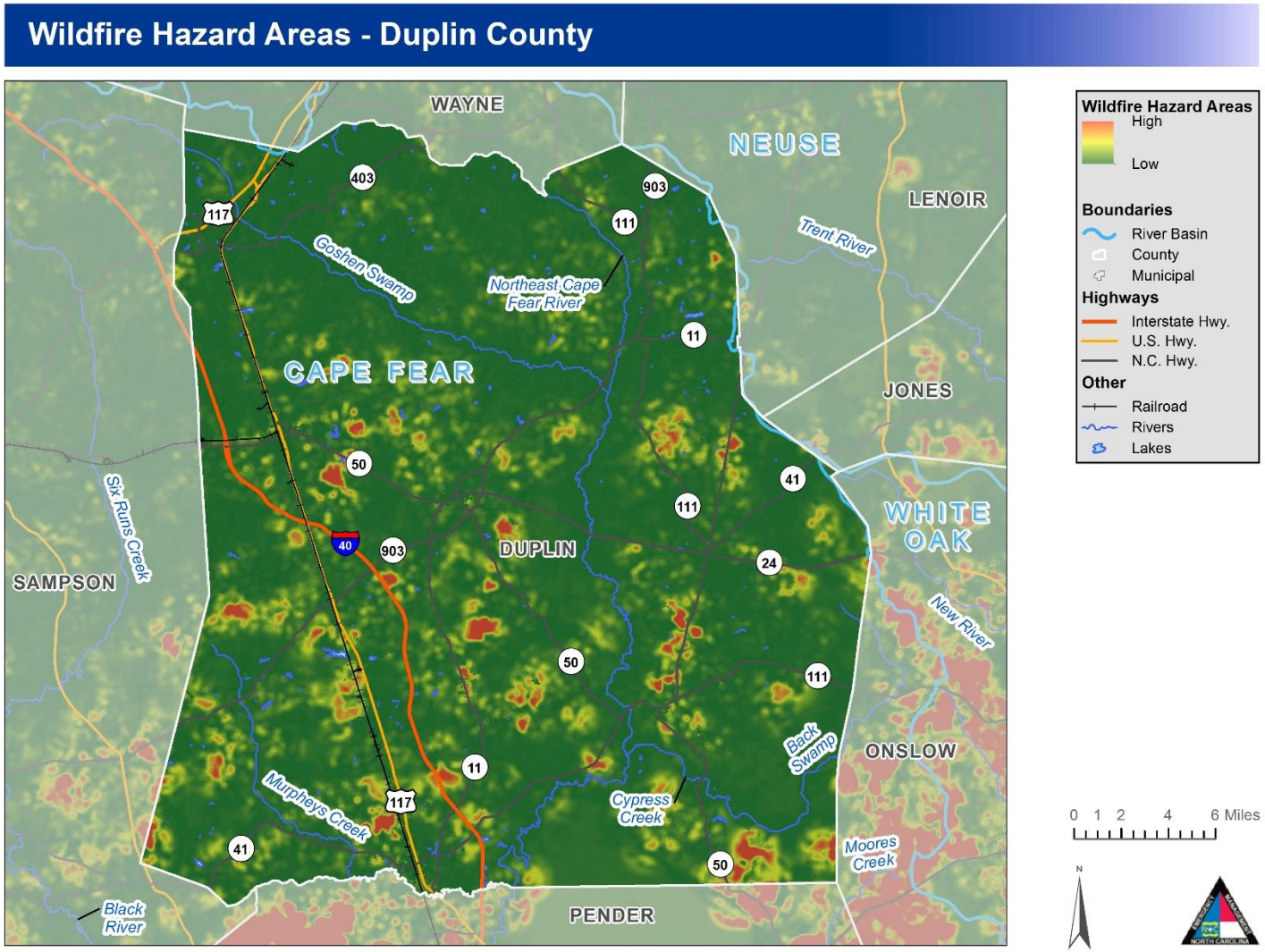


Figure 5-46: Wildfire Hazard Areas – Duplin County

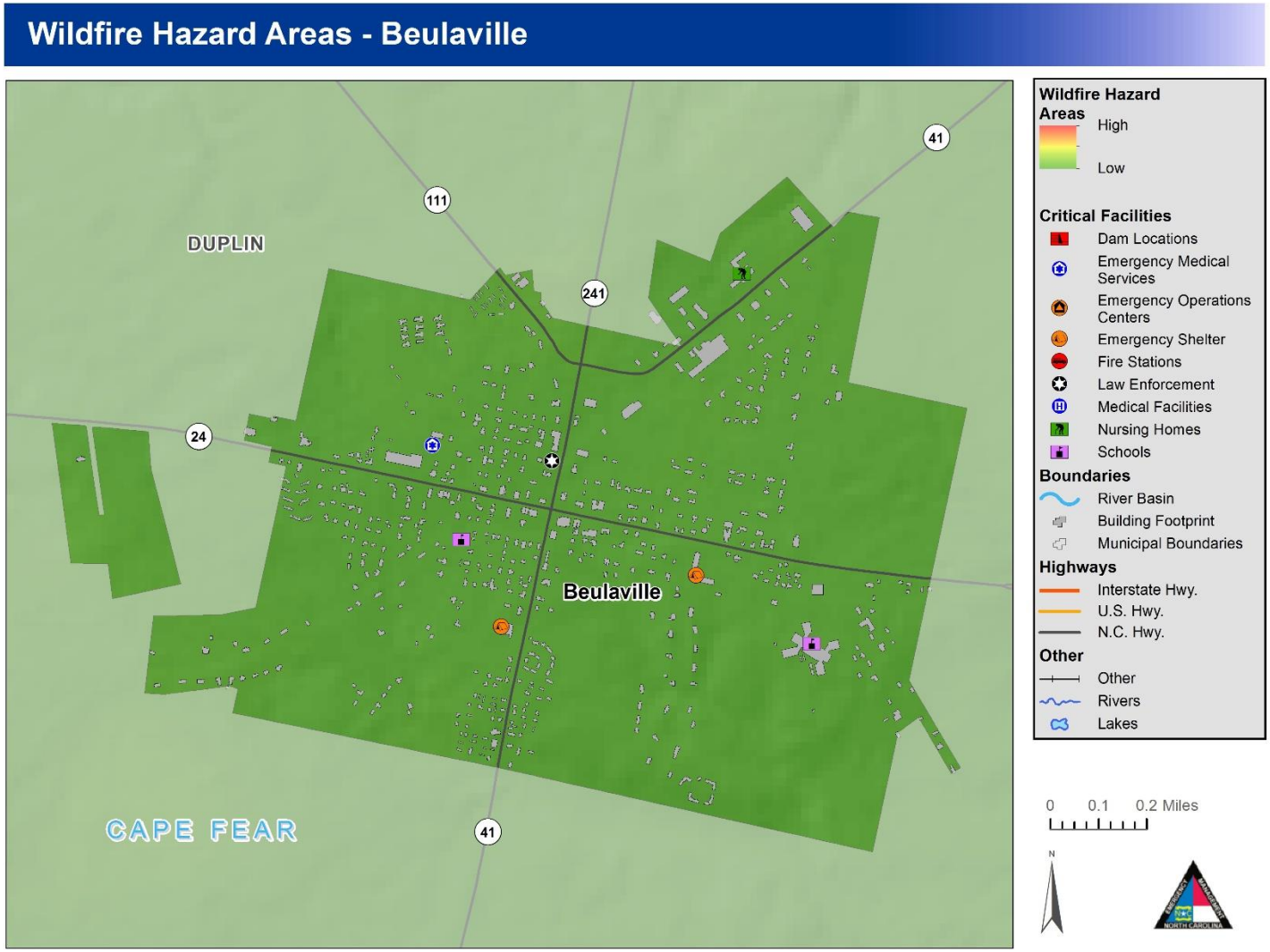


Figure 5-47: Wildfire Hazard Areas – Beulaville

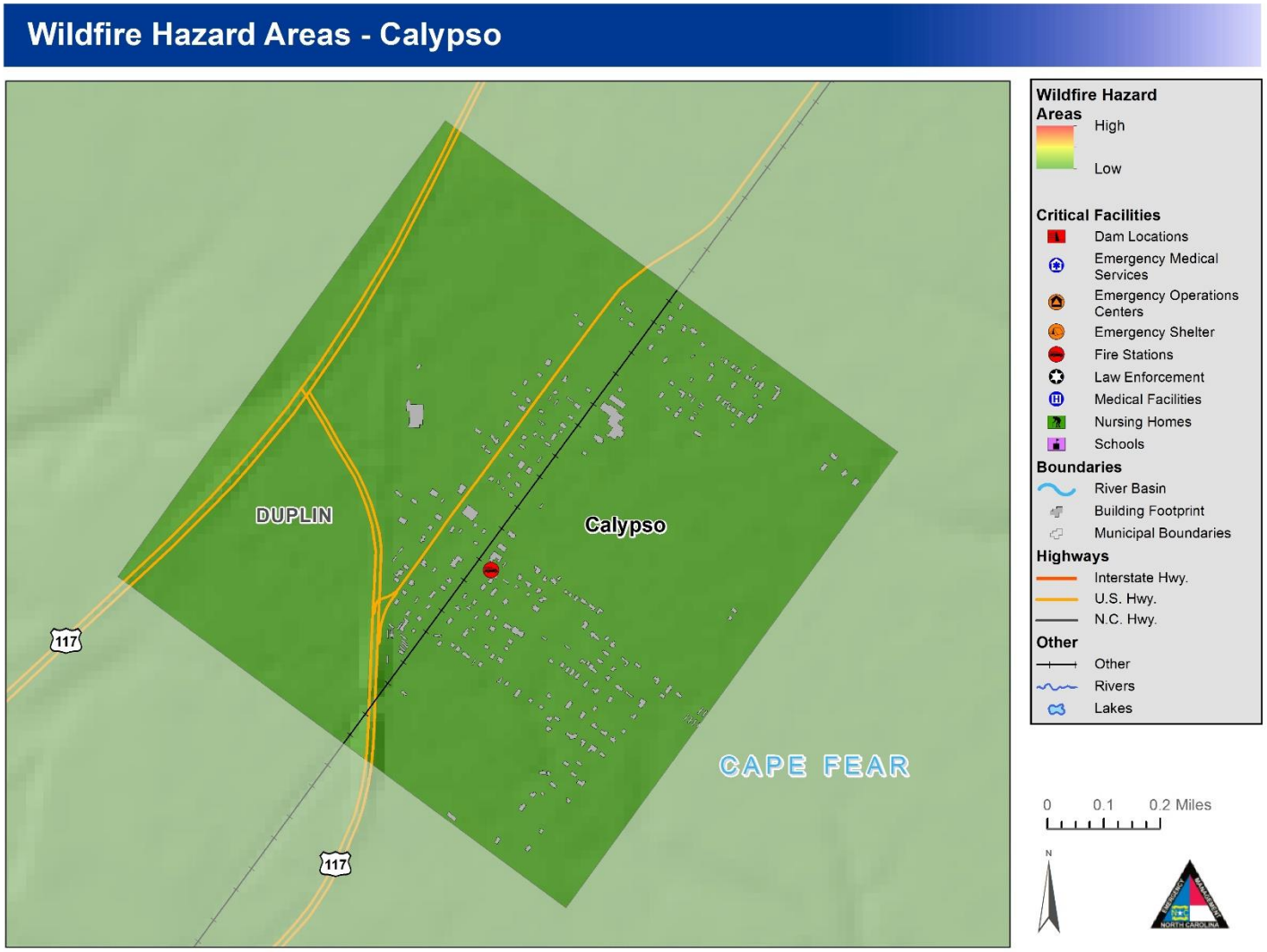


Figure 5-48: Wildfire Hazard Areas – Calypso

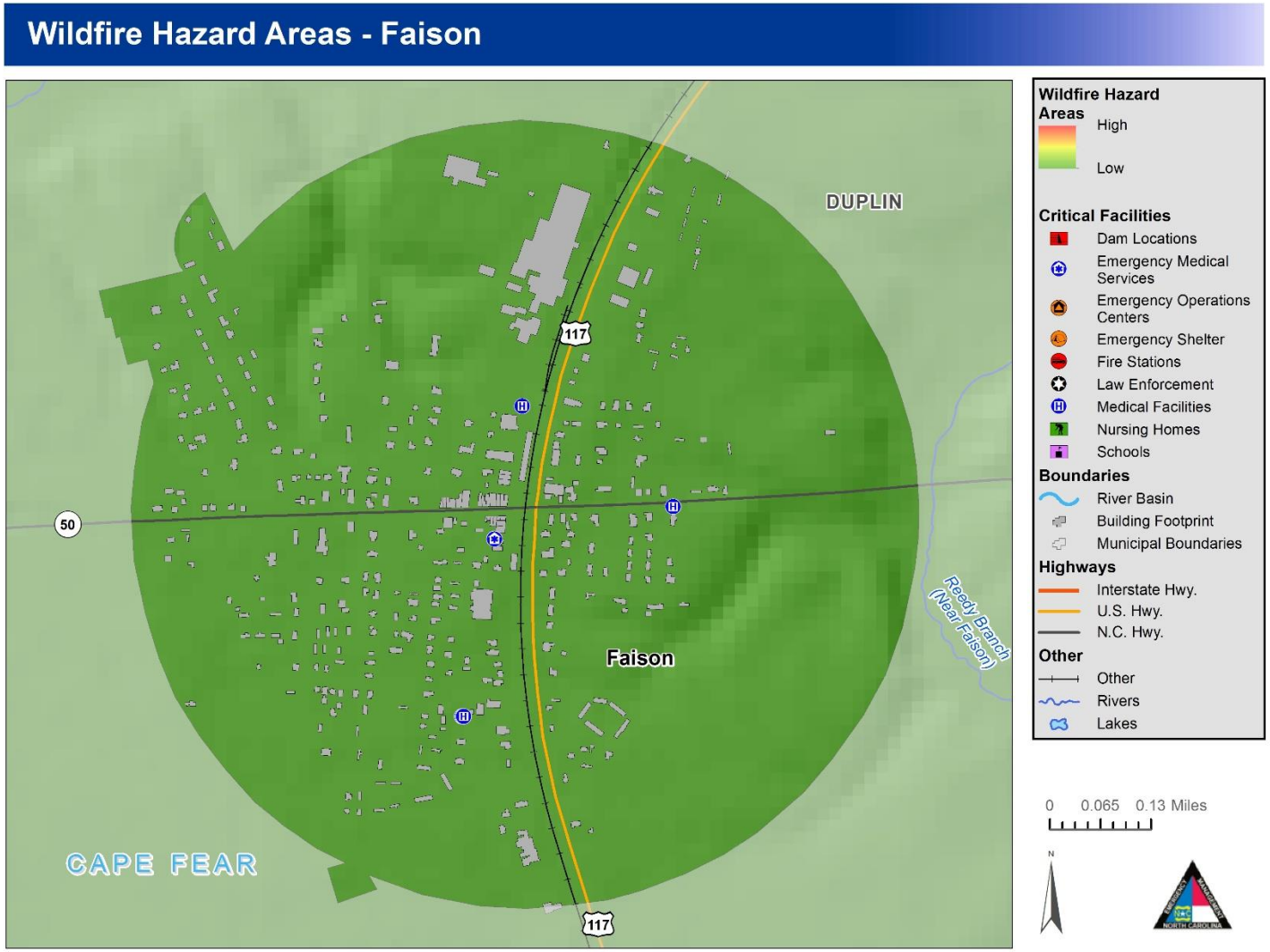


Figure 5-49: Wildfire Hazard Areas – Faison

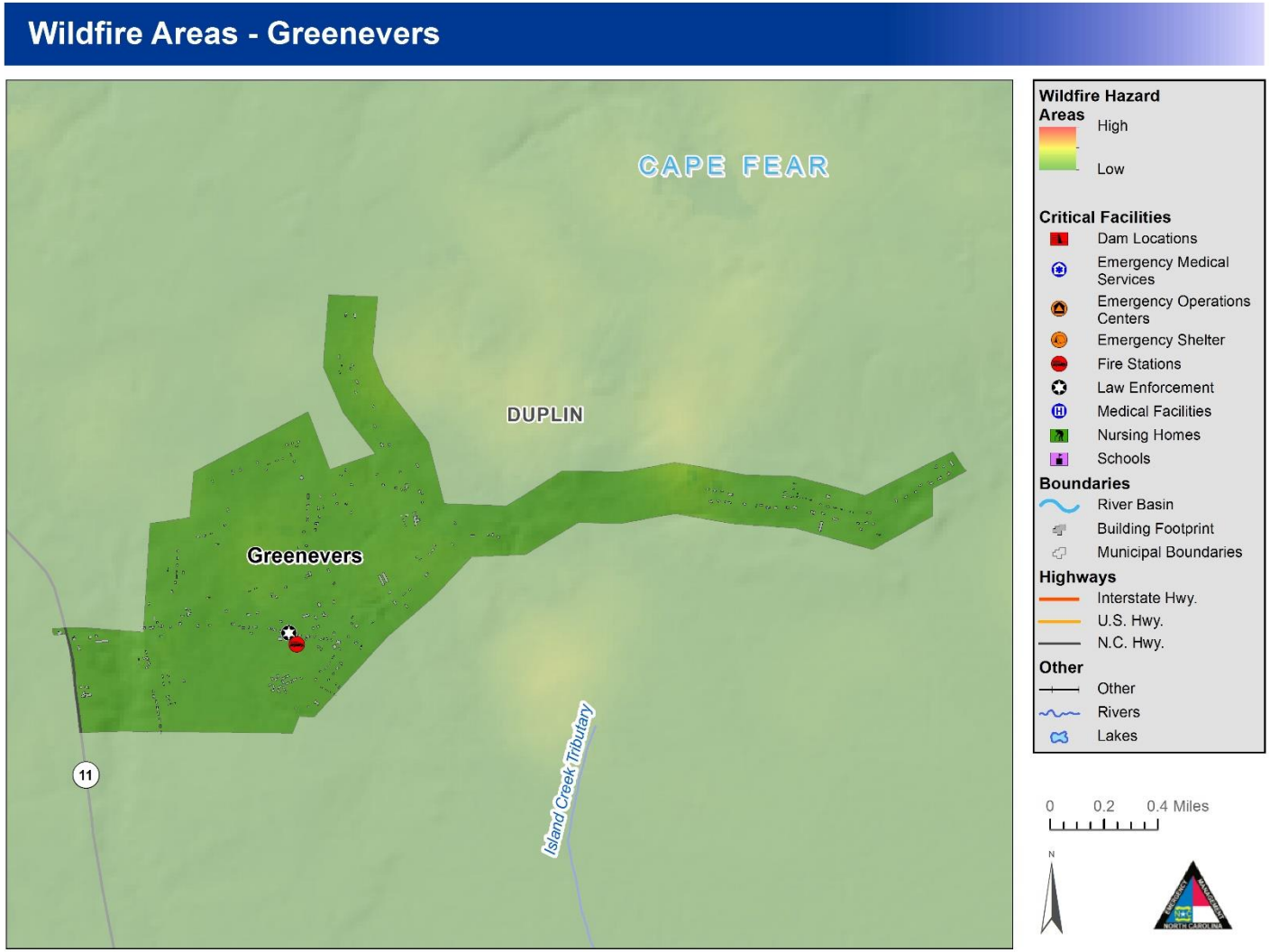


Figure 5-50: Wildfire Hazard Areas – Greenevers

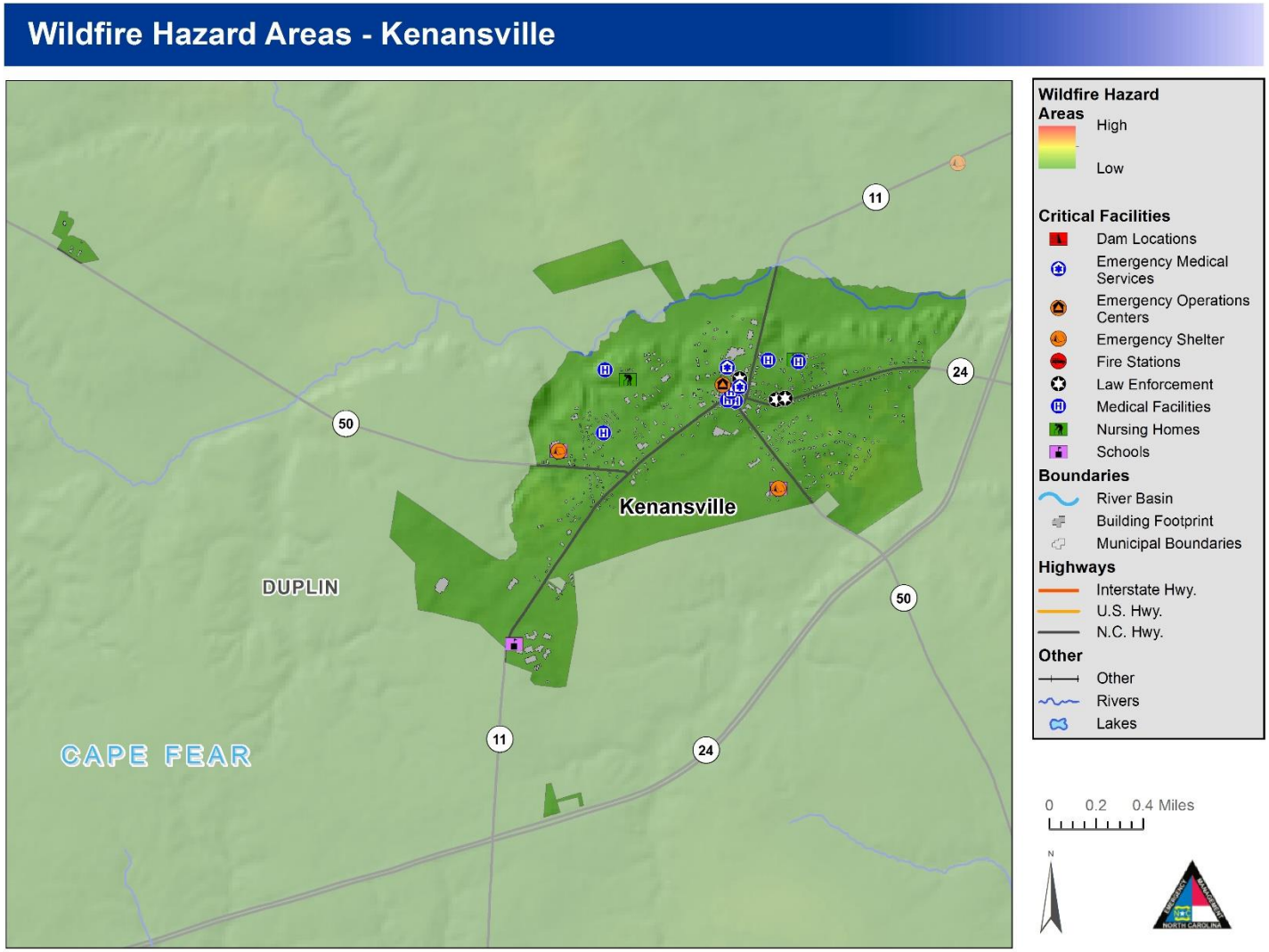


Figure 5-51: Wildfire Hazard Areas – Kenansville

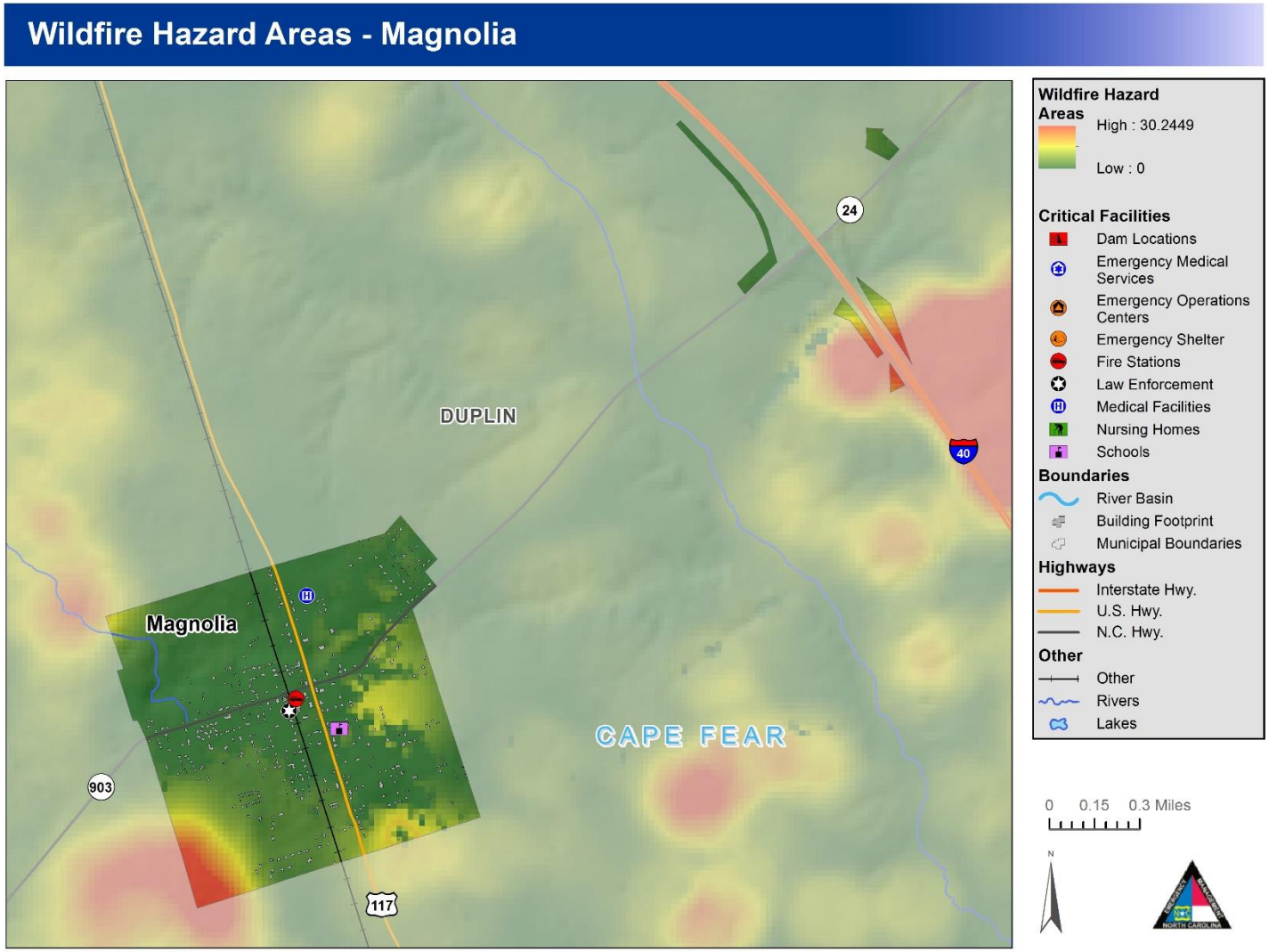


Figure 5-52: Wildfire Hazard Areas – Magnolia

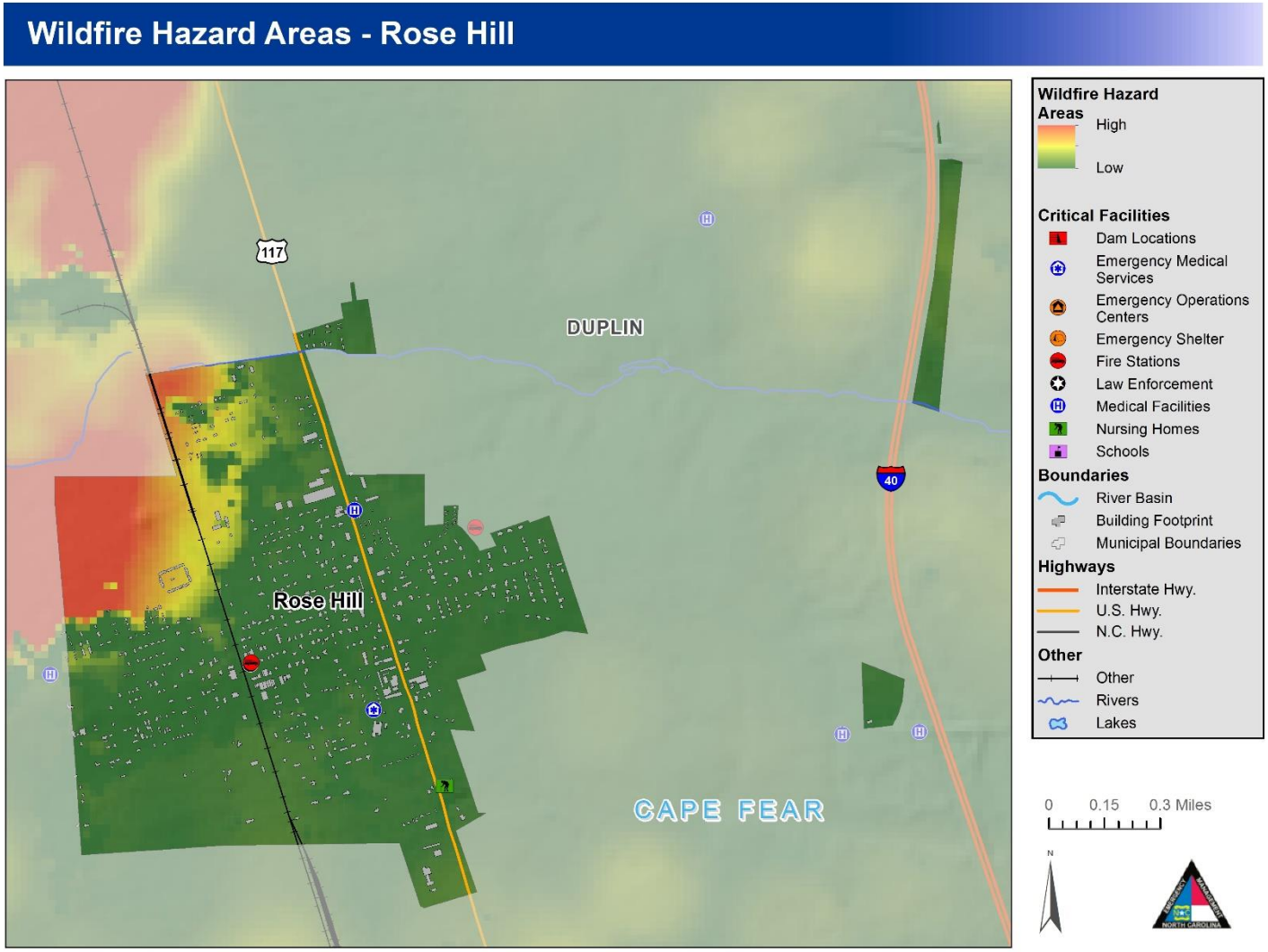


Figure 5-53: Wildfire Hazard Areas – Rose Hill

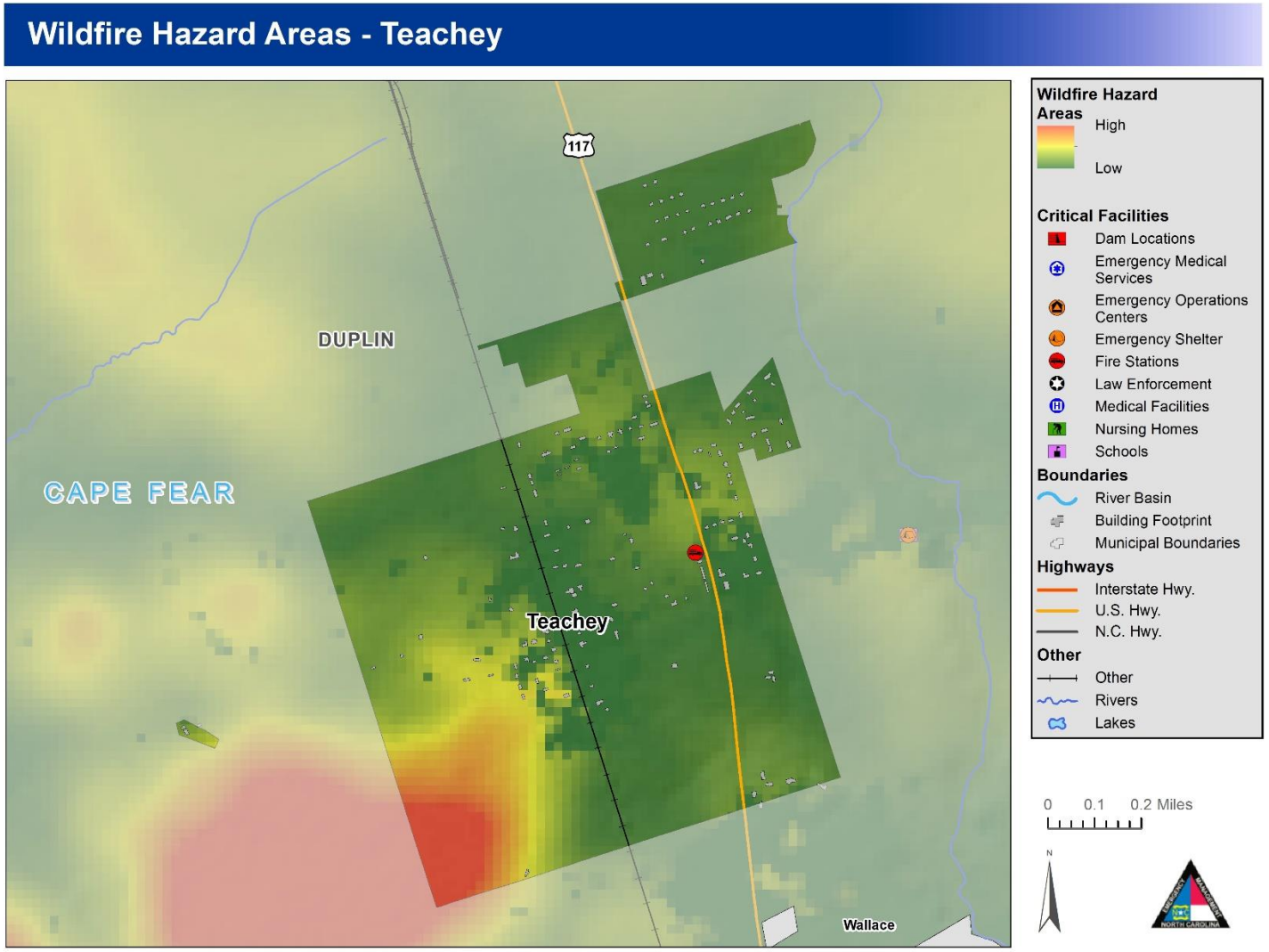


Figure 5-54: Wildfire Hazard Areas – Teachey

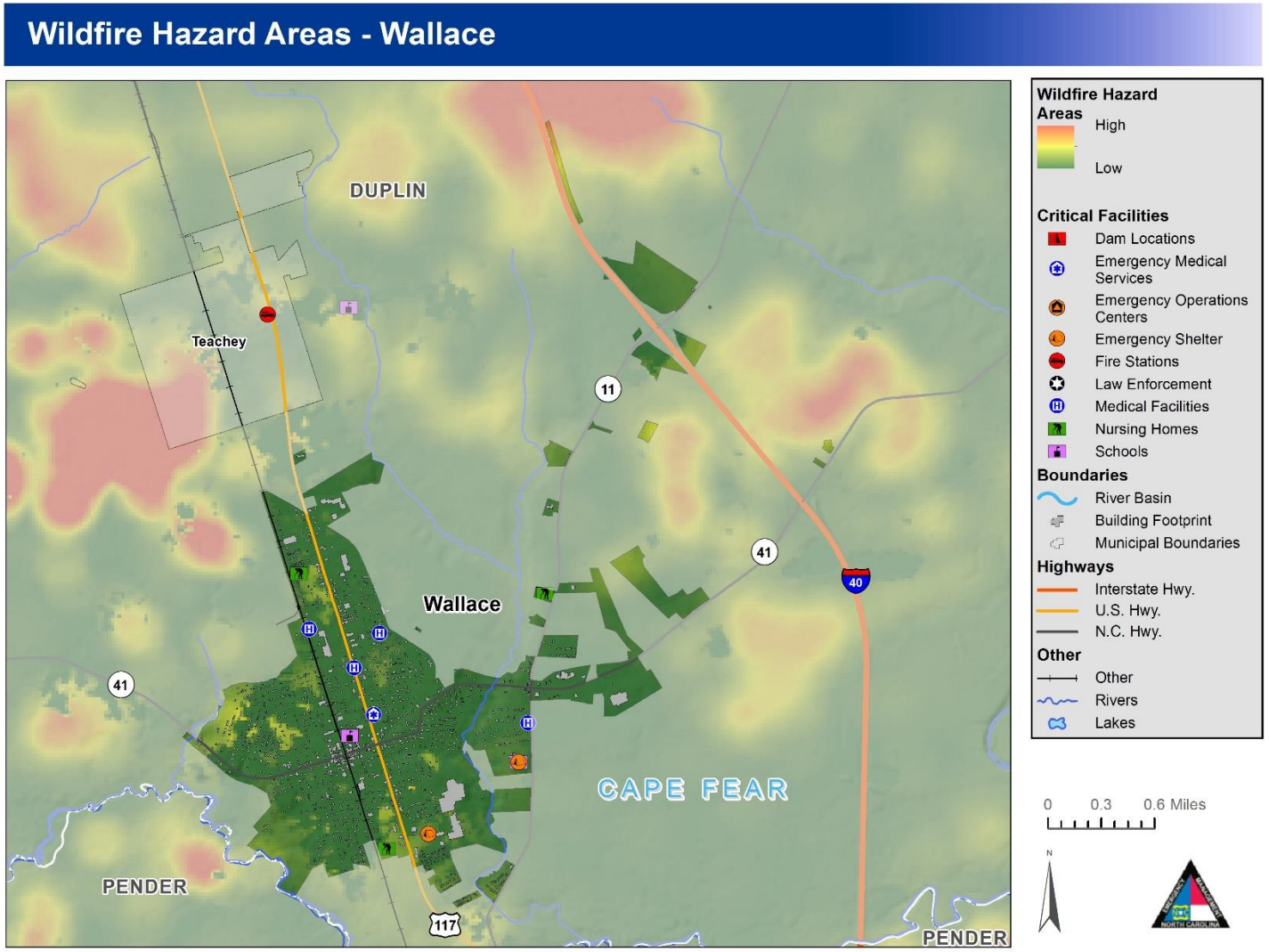


Figure 5-55: Wildfire Hazard Areas – Wallace

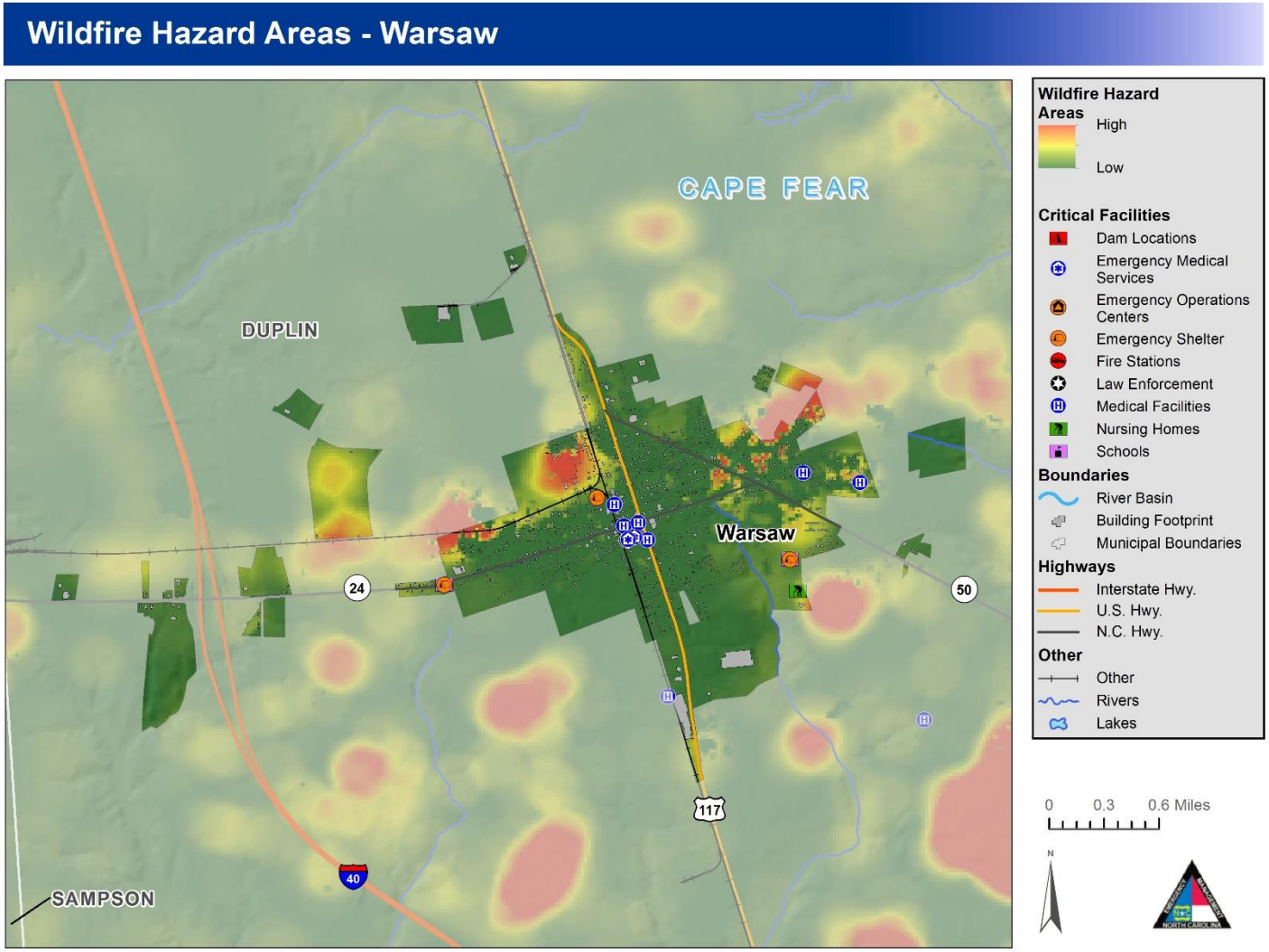


Figure 5-56: Wildfire Hazard Areas – Warsaw

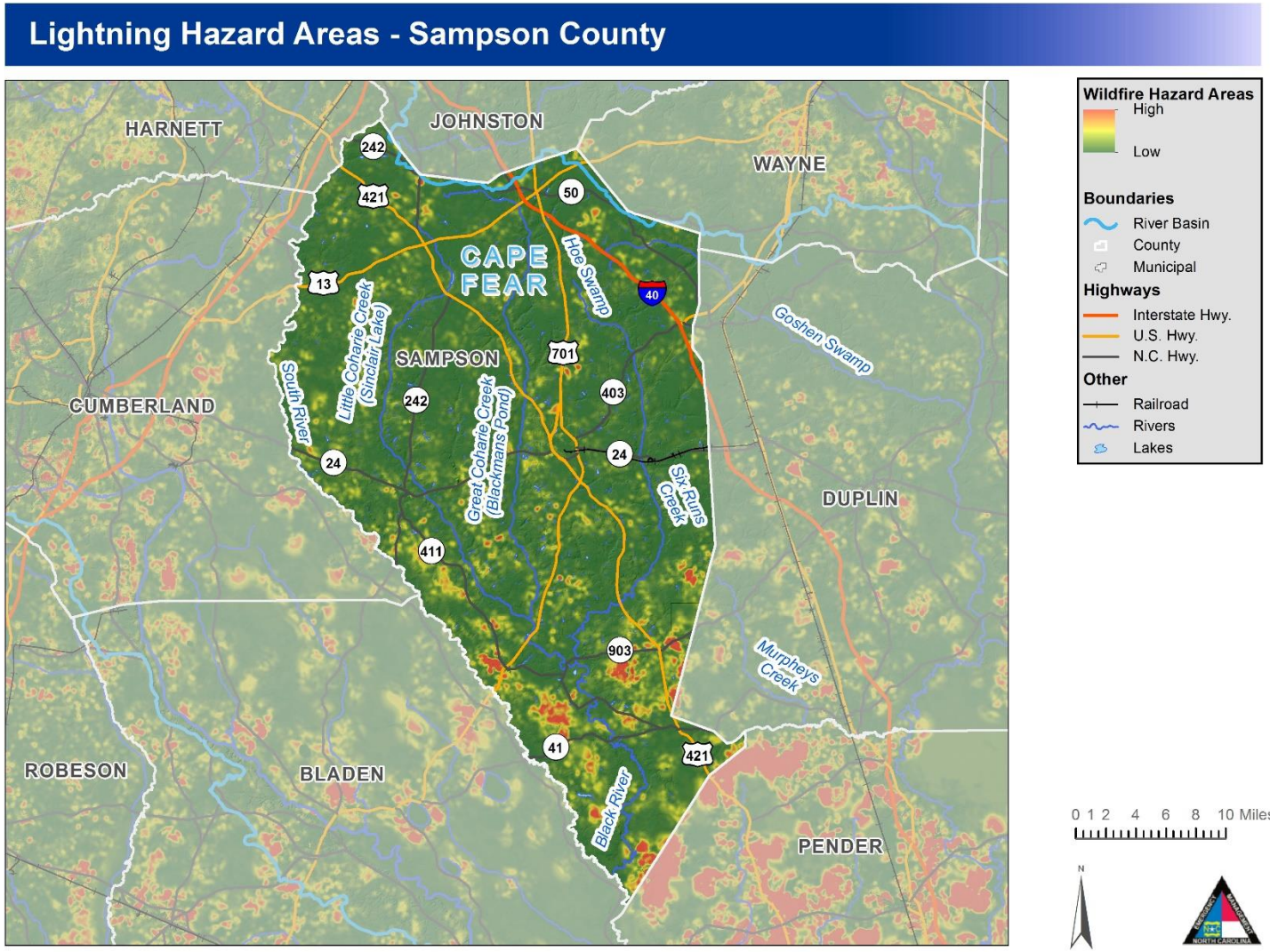


Figure 5-57: Wildfire Hazard Areas – Sampson County

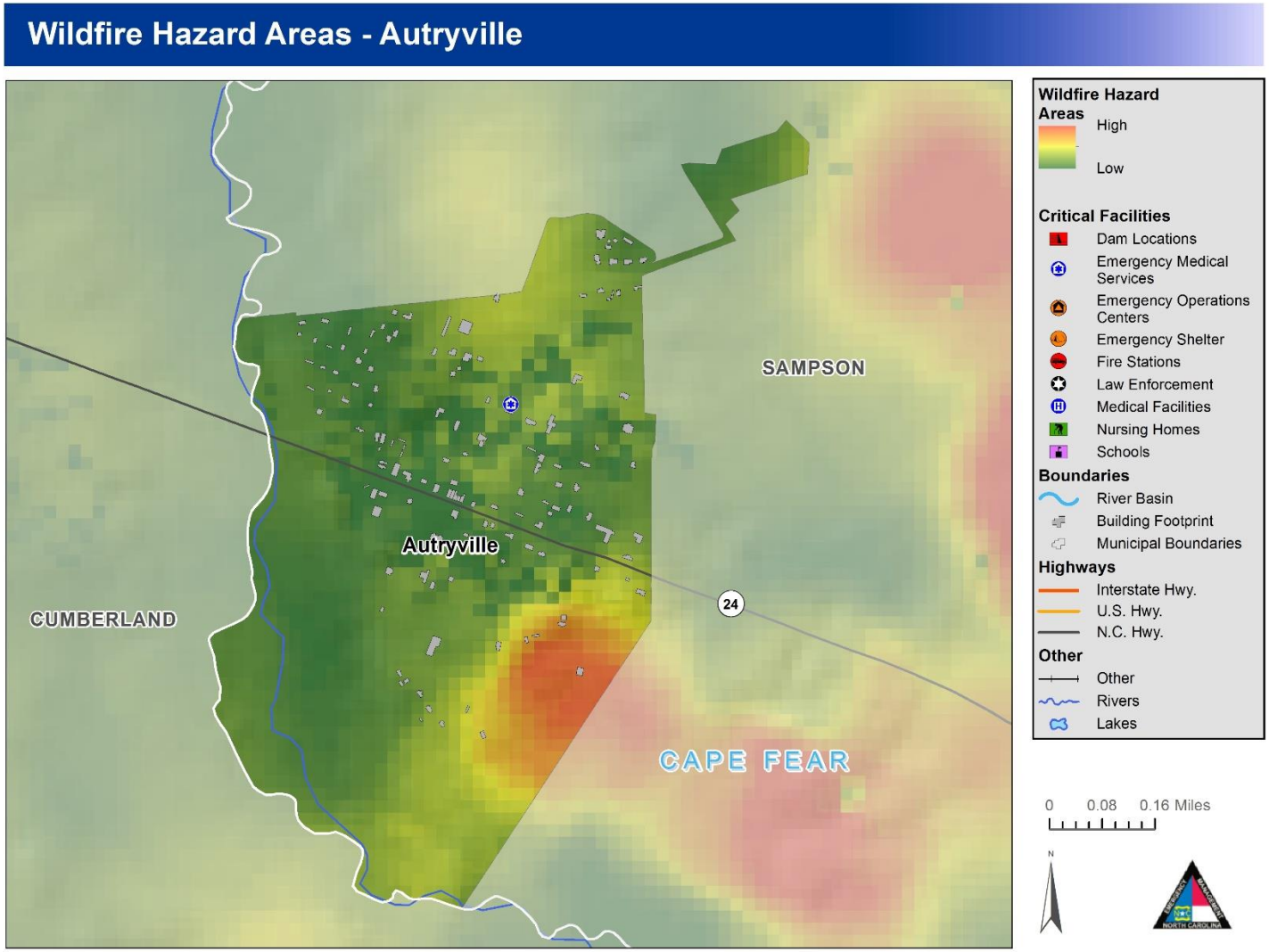


Figure 5-58: Wildfire Hazard Areas – Autryville

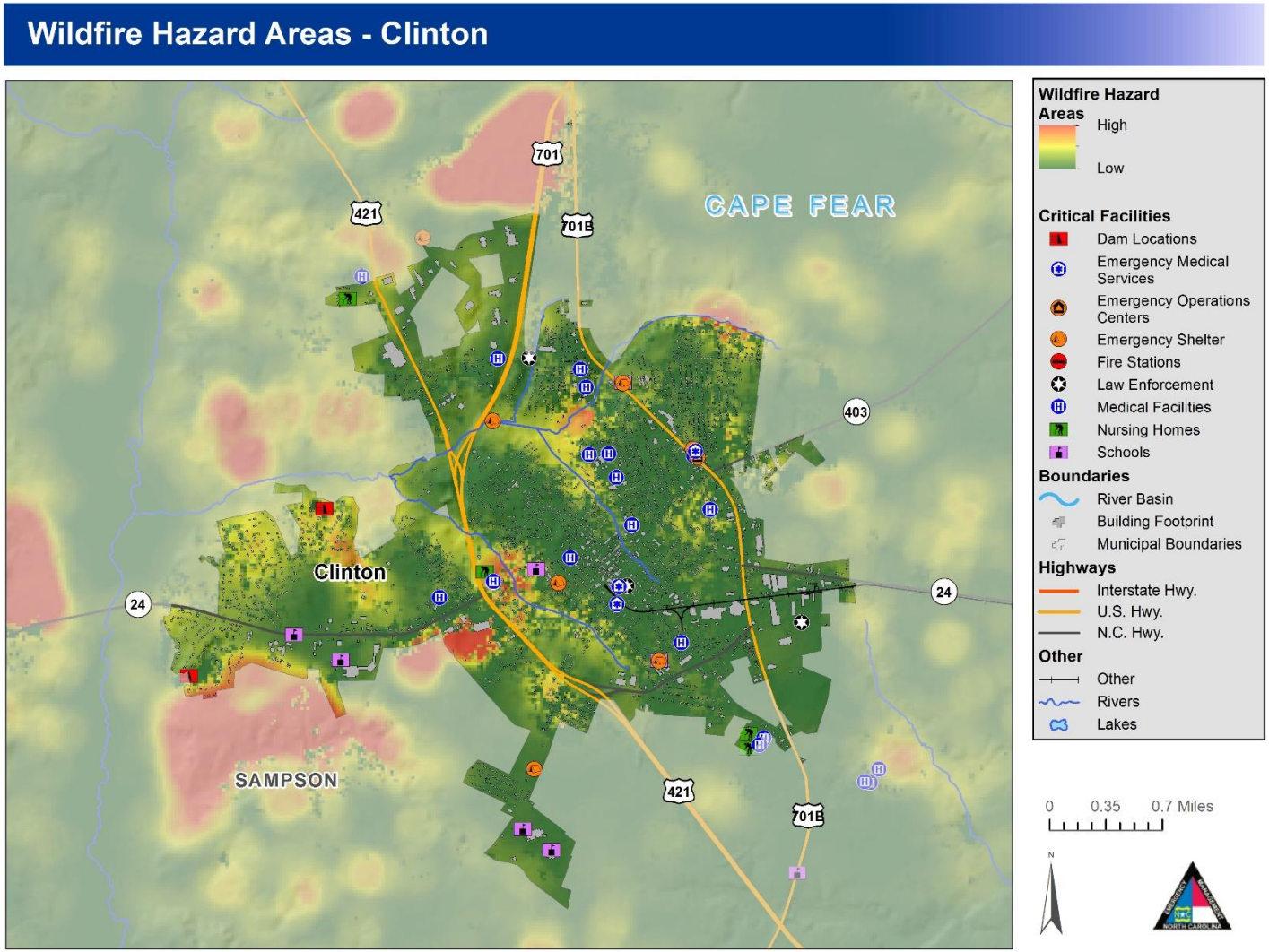


Figure 5-59: Wildfire Hazard Areas – Clinton

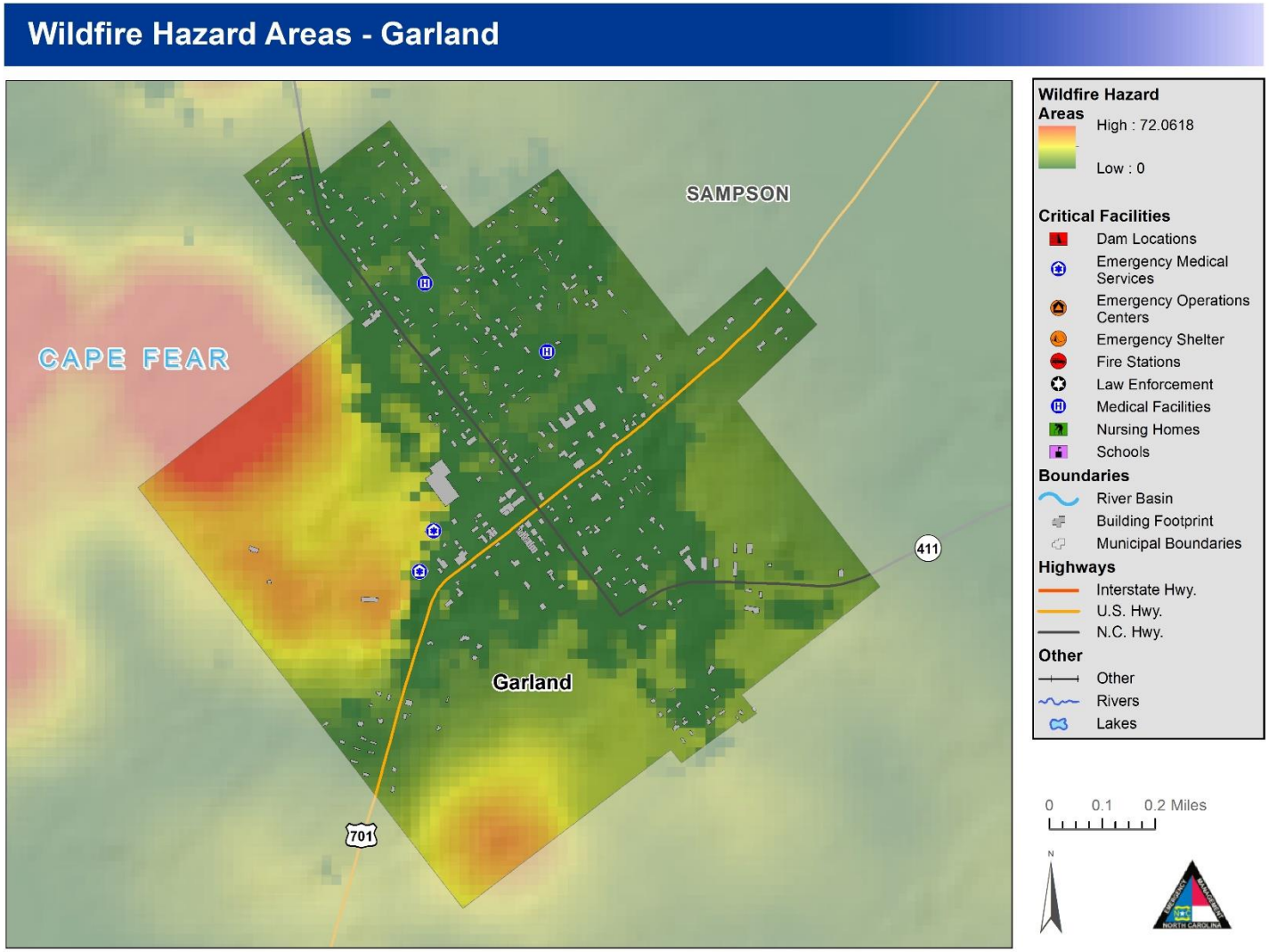


Figure 5-60: Wildfire Hazard Areas – Garland

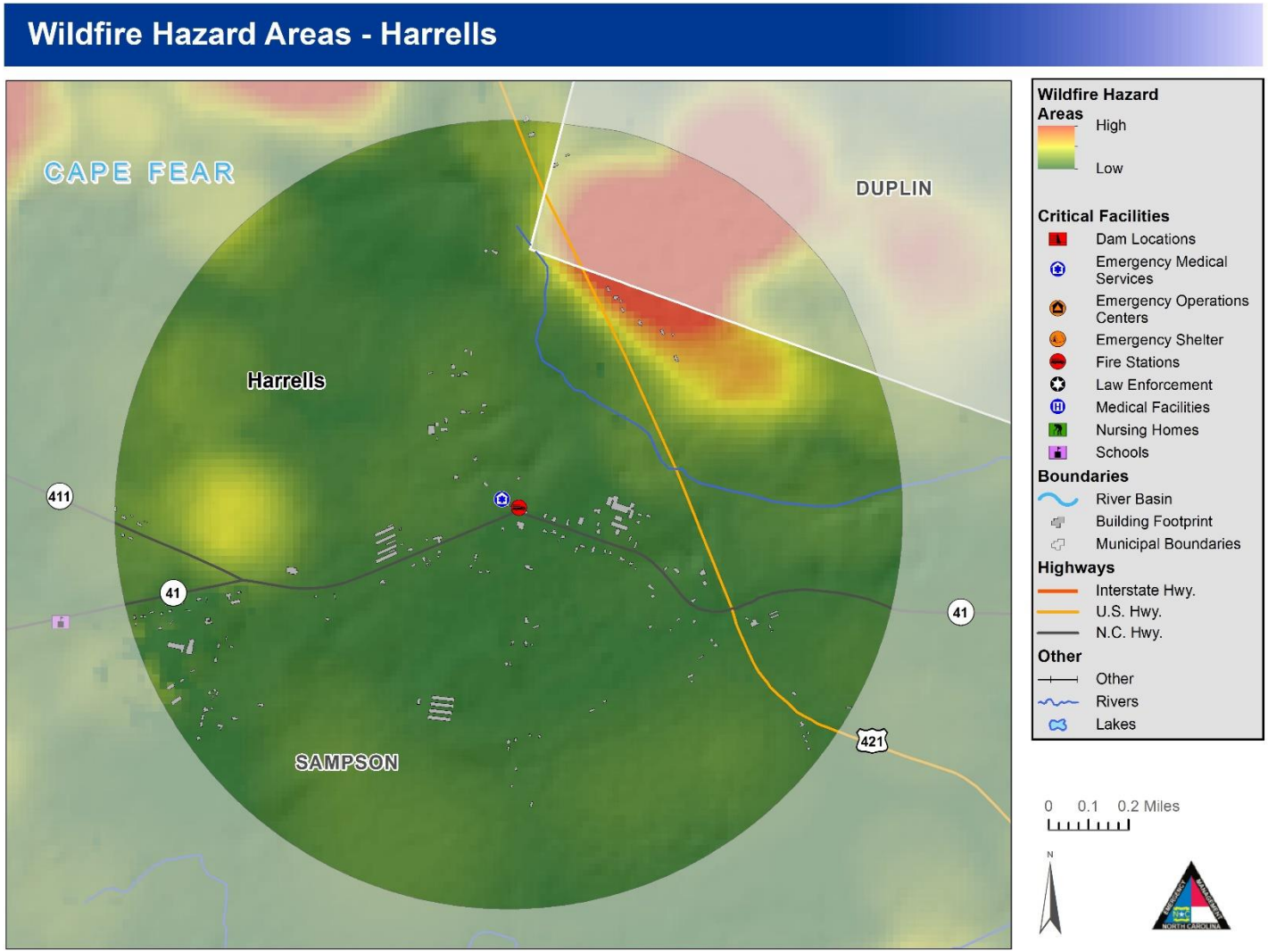


Figure 5-61: Wildfire Hazard Areas – Harrells

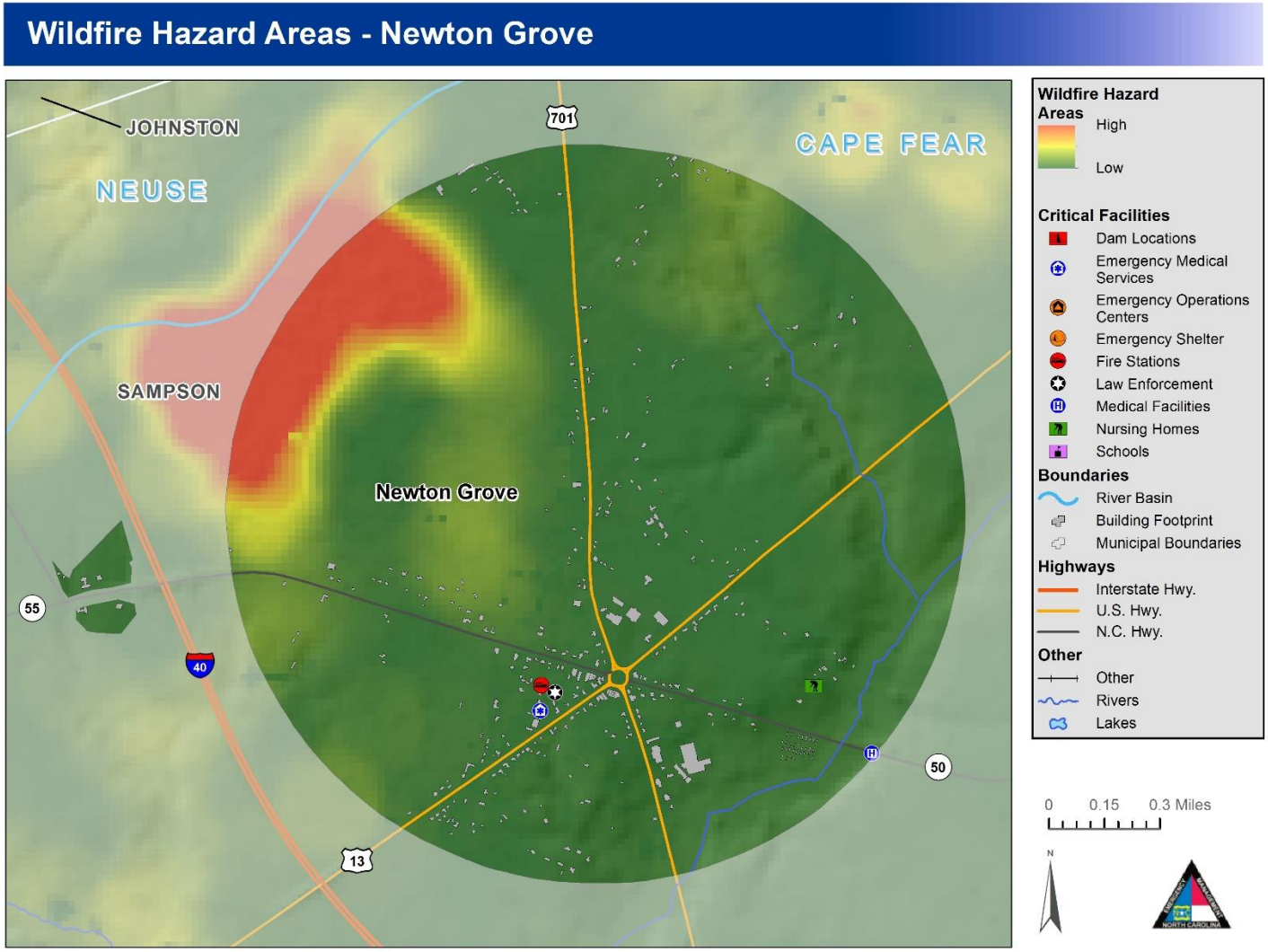


Figure 5-62: Wildfire Hazard Areas – Newton Grove

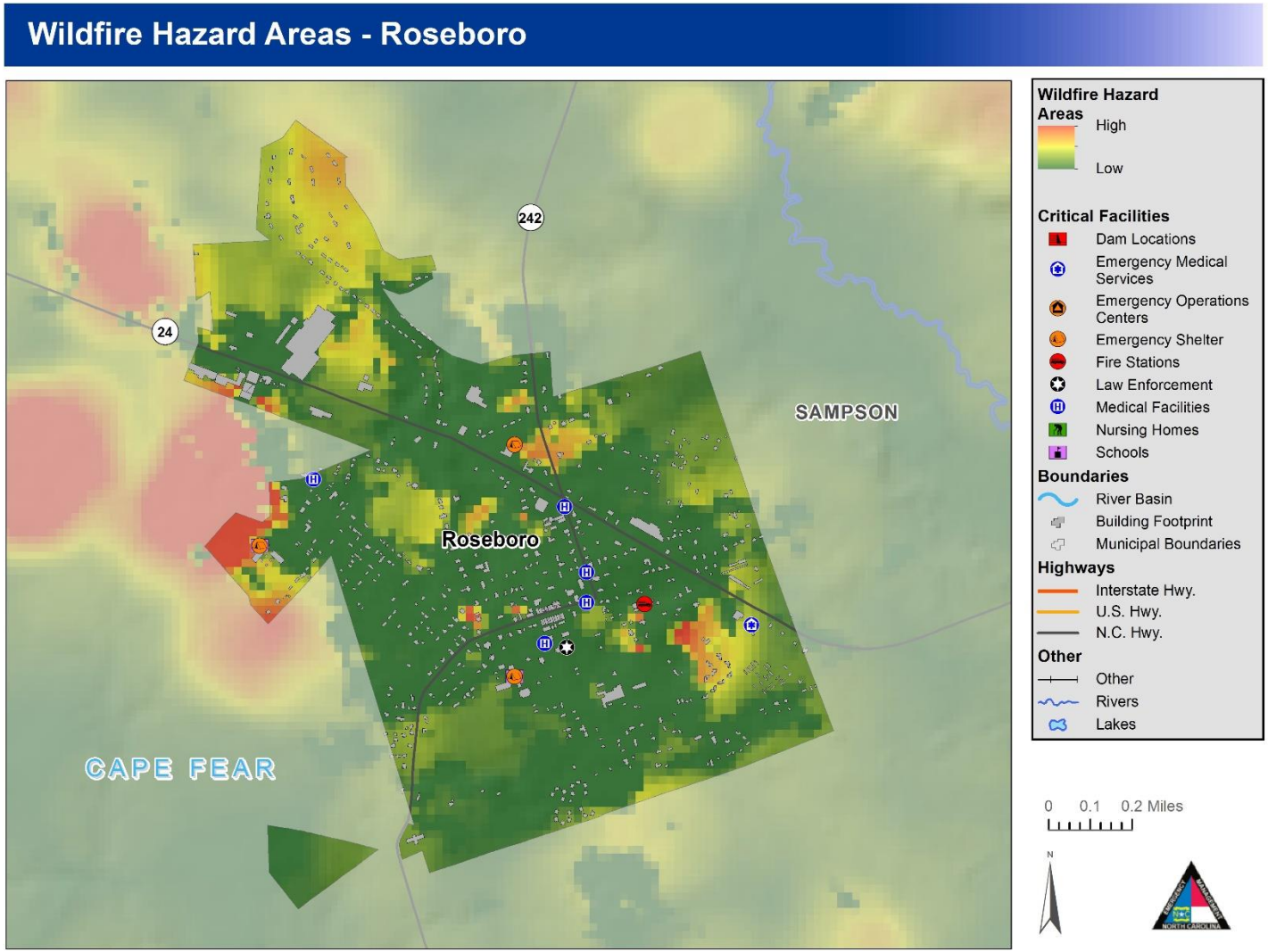
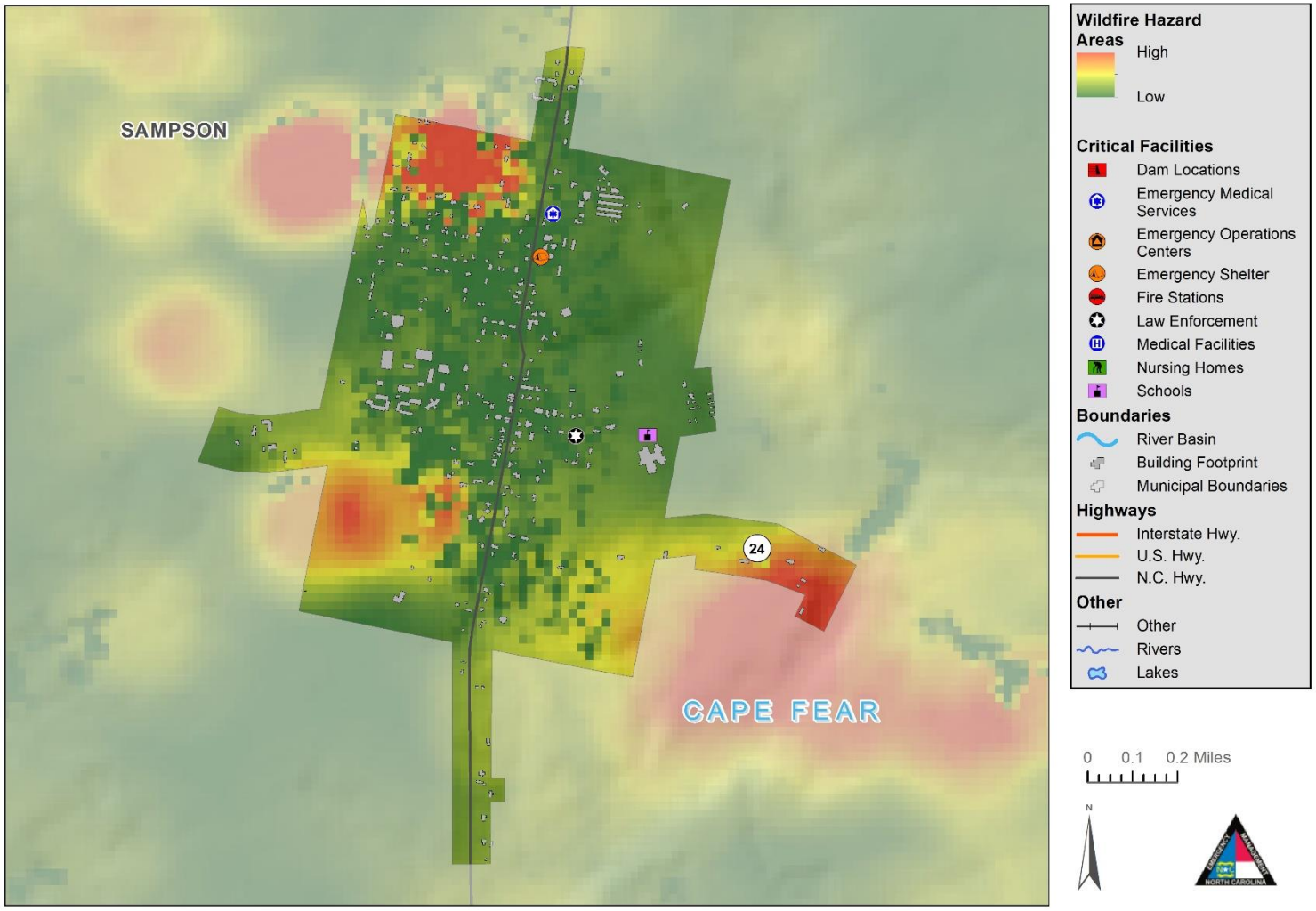


Figure 5-63: Wildfire Hazard Areas – Roseboro

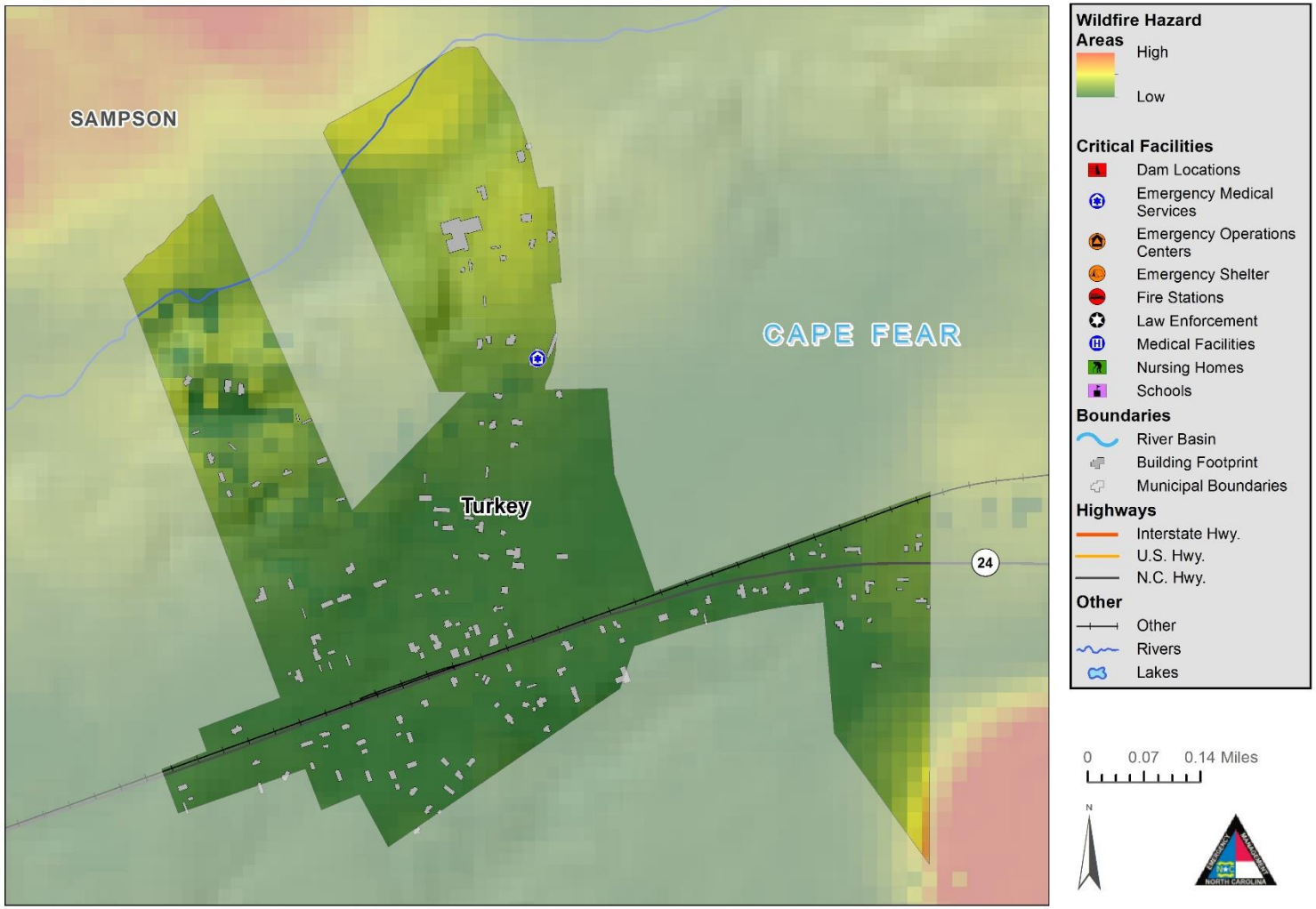
Wildfire Hazard Areas - Salemburg



Figure

5-64: Wildfire Hazard Areas – Salemburg

Wildfire Hazard Areas - Turkey



5-65: Wildfire Hazard Areas – Turkey

5.8.3 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.

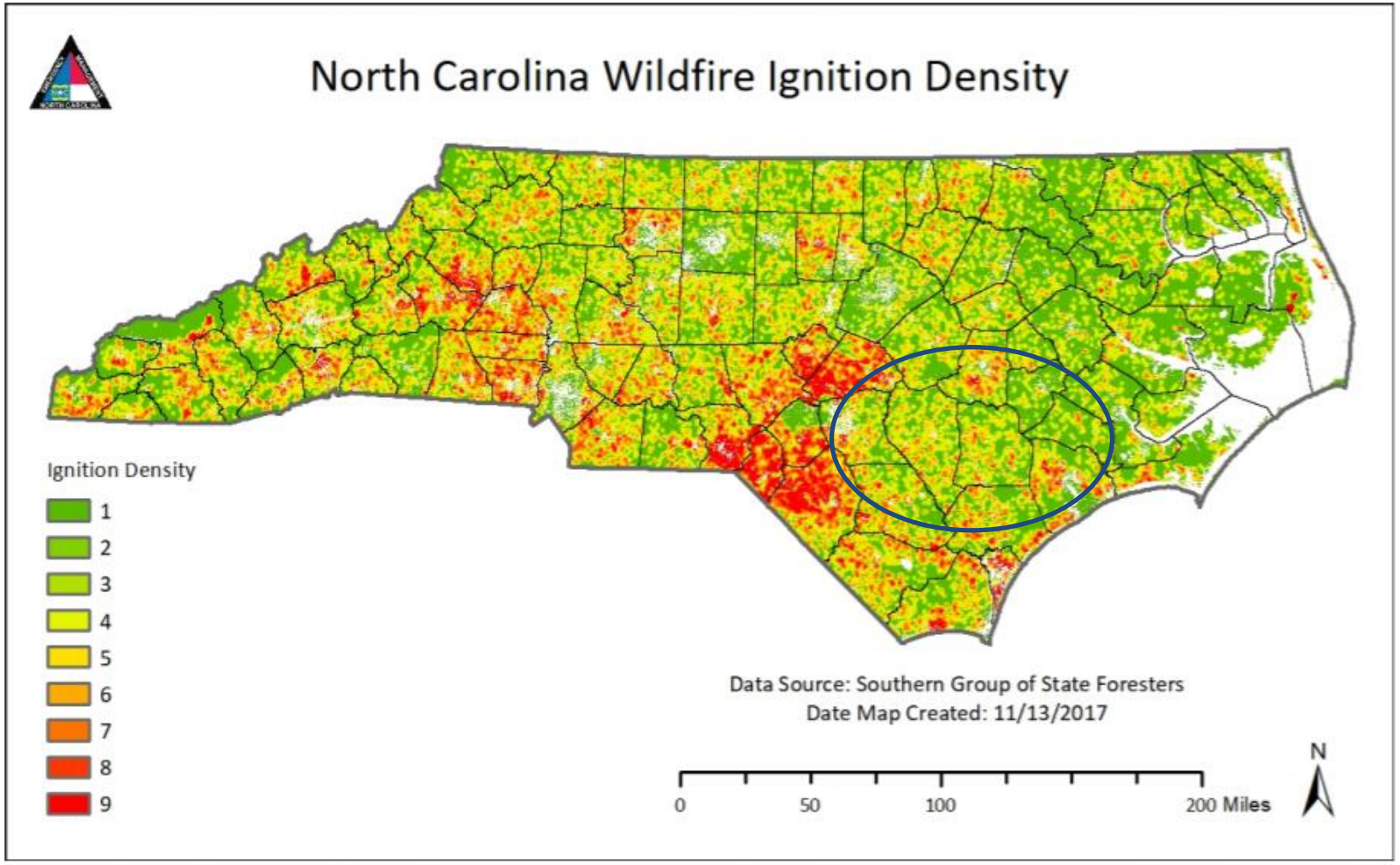
Table 5-29 Total Acres Burned (2015-2020)

Jurisdiction	Total Acres Burned (Last 5 Years)
Sampson County	
Town of Autryville	10
City of Clinton	10
Town of Garland	10
Town of Harrells	10
Town of Newton Grove	10
Town of Roseboro	10
Town of Salemburg	10
Town of Turkey	10
Unincorporated Area	741.33
Duplin County	
Town of Beulaville	0
Town of Calypso	2.5
Town of Faison	2.5
Town of Greenevers	2.5
Town of Kenansville	2.5

Jurisdiction	Total Acres Burned (Last 5 Years)
Town of Magnolia	2.5
Town of Rose Hill	2.5
Town of Teachey	2.5
Town of Wallace	2.5
Town of Warsaw	2.5
Unincorporated Area	481.64

5.8.4 Past Occurrences

Figure 5-66 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 5-66: North Carolina Wildfire Ignition Density

Based on data from the North Carolina Division of Forest Resources from 2015 to 2020, the Region experienced an average of 48 wildfires annually which burn a combined 101 acres, on average per year. The data indicates that most of these fires are small, averaging three acres per fire. Tables 5-30 and 5-31 provides a summary table for wildfire occurrences in the Region.

Table 5-30 Total Acres Burned Duplin County (2015-2020)

Year	UNK	Camping	Children	Debris Burning	Incendiary	Lightning	Machine Use	Misc.	Railroad	Smoking	Undetermined	Total	Acres Burned	Average
2015	0	0	0	13	1	0	2	2	0	0	0	18	28.53	1.59
2016	0	0	1	26	0	0	1	5	0	0	2	35	44.26	1.26
2017	0	1	1	39	1	1	3	6	0	2	1	55	121.47	2.21
2018	0	0	2	28	0	0	5	6	0	0	3	46	81.81	1.78
2019	0	2	2	59	7	0	4	4	0	0	5	83	190.84	2.30
2020	0	0	1	16	1	1	1	2	0	0	2	24	14.73	.61
Total	0	3	7	181	12	2	16	25	0	2	13	261	481.64	
AVG	0	1	1	30	2	0	3	4	0	0	2	44		
% of Total	0	1.15	2.68	69.35	4.60	.77	6.13	9.58	0	.77	4.98	100.00		

Table 5-31 Total Acres Burned Sampson County (2015-2020)

Year	UNK	Camping	Children	Debris Burning	Incendiary	Lightning	Machine Use	Misc.	Railroad	Smoking	Undetermined	Total	Acres Burned	Average
2015	0	3	3	13	5	1	12	21	0	0	0	58	65.68	1.13
2016	0	1	3	20	5	1	20	15	0	0	2	67	73.42	1.10
2017	0	4	2	39	6	2	32	36	2	5	2	130	84.32	.65
2018	0	2	3	16	5	3	18	38	1	0	1	87	417.12	4.79
2019	0	1	5	13	3	2	15	18	0	0	3	60	79.88	1.33
2020	0	0	2	14	0	1	7	7	0	0	0	31	20.91	.67
Total	0	11	18	115	24	10	104	135	3	5	8	433	741.33	
AVG	0	2	3	19	4	2	17	23	1	1	1	72		
% of Total	0	2.54	4.16	26.56	5.54	2.31	24.02	31.18	.69	1.15	1.85	100.00		

5.8.5 Probability of Future Occurrences

Based on the analyses performed in IRISK, the probability of future Wildfire is shown in Table 5-32, 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: More Than 10% Annual Probability

Table 5-32: Wildfire – Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low
Town of Garland	Low
Town of Greenevers	Medium
Town of Harrells	Low
Town of Kenansville	Low
Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Medium
Town of Turkey	Low
Town of Wallace	Medium
Town of Warsaw	Low

5.8.6 Consequence Impact Analysis

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 Greenevers, Teachey and Wallace 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.

5.9 Winter Storm

5.9.1 Hazard Description

North Carolina winter weather consists of storms that produce snow, sleet, freezing rain or a wintry mix of multiple precipitation types. Along with wintry precipitation, North Carolina winter weather also includes outbreaks of bitterly cold temperatures. The occurrence of severe winter weather has a substantial impact on communities, utilities, transportation systems and agriculture, and often results in loss of life due to accidents or hypothermia. In addition, severe winter weather may spawn other hazards such as flooding, severe thunderstorms, tornadoes, and extreme winds that may delay recovery efforts. Winter storm events defined below:

- **Heavy Snow** - Heavy snow can immobilize a community by stranding commuters, closing airports, stopping the flow of commerce, and disrupting emergency and medical services. The weight of snow can cause roofs to collapse and knock down trees and power lines. Residents may be isolated for days and unprotected livestock may be lost. The cost of snow removal, repairing damages, and the loss of business can have severe economic impacts on communities. Snow accumulation meeting or exceedingly locally/regionally defined 12 and/or 24-hour warning criteria, on a widespread or localized basis. For the NWS Office in Raleigh, this means snow accumulation of 3 inches or greater in 12 hours (4 inches or more in 24 hours). In some heavy snow events, structural damage, due to the excessive weight of snow accumulations, may occur in the few days following the meteorological end of the event.
- **Ice Storm** - Ice accretion meeting or exceedingly locally/regionally defined warning criteria. For the NWS Office in Raleigh, this means freezing rain accumulations ¼ inch or greater on a widespread or localized basis.
- **Winter Storm** - A winter weather event which has more than one significant hazard (i.e., heavy snow and blowing snow; snow and ice; snow and sleet; sleet and ice; or snow, sleet and ice) and meets or exceeds locally/regionally defined 12 and/or 24-hour warning criteria for at least one of the precipitation elements, on a widespread or localized basis.
- **Winter Weather** - A winter precipitation event that causes a death, injury, or a significant impact to commerce or transportation but does not meet locally/regionally defined warning criteria. A Winter Weather event could result from one or more winter precipitation types (snow, or blowing/drifting snow, or freezing rain/drizzle), on a widespread or localized basis.

5.9.2 Location and Spatial Extent

The entirety of the Region can be considered at risk to winter storm events. This includes the entire population and all critical facilities, buildings (commercial and residential), and infrastructure

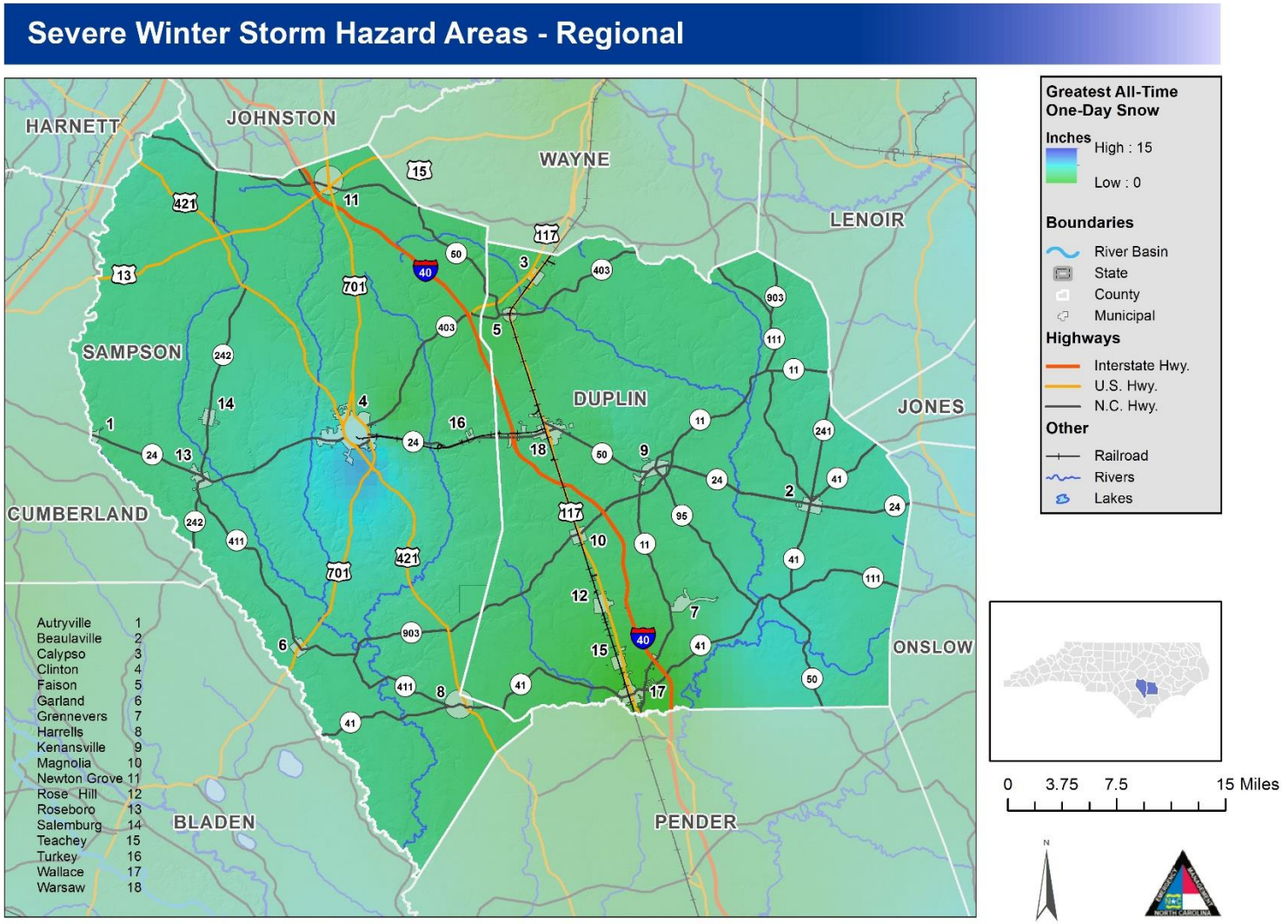


Figure 5-67: Severe Winter Storm Hazard Areas - Regional

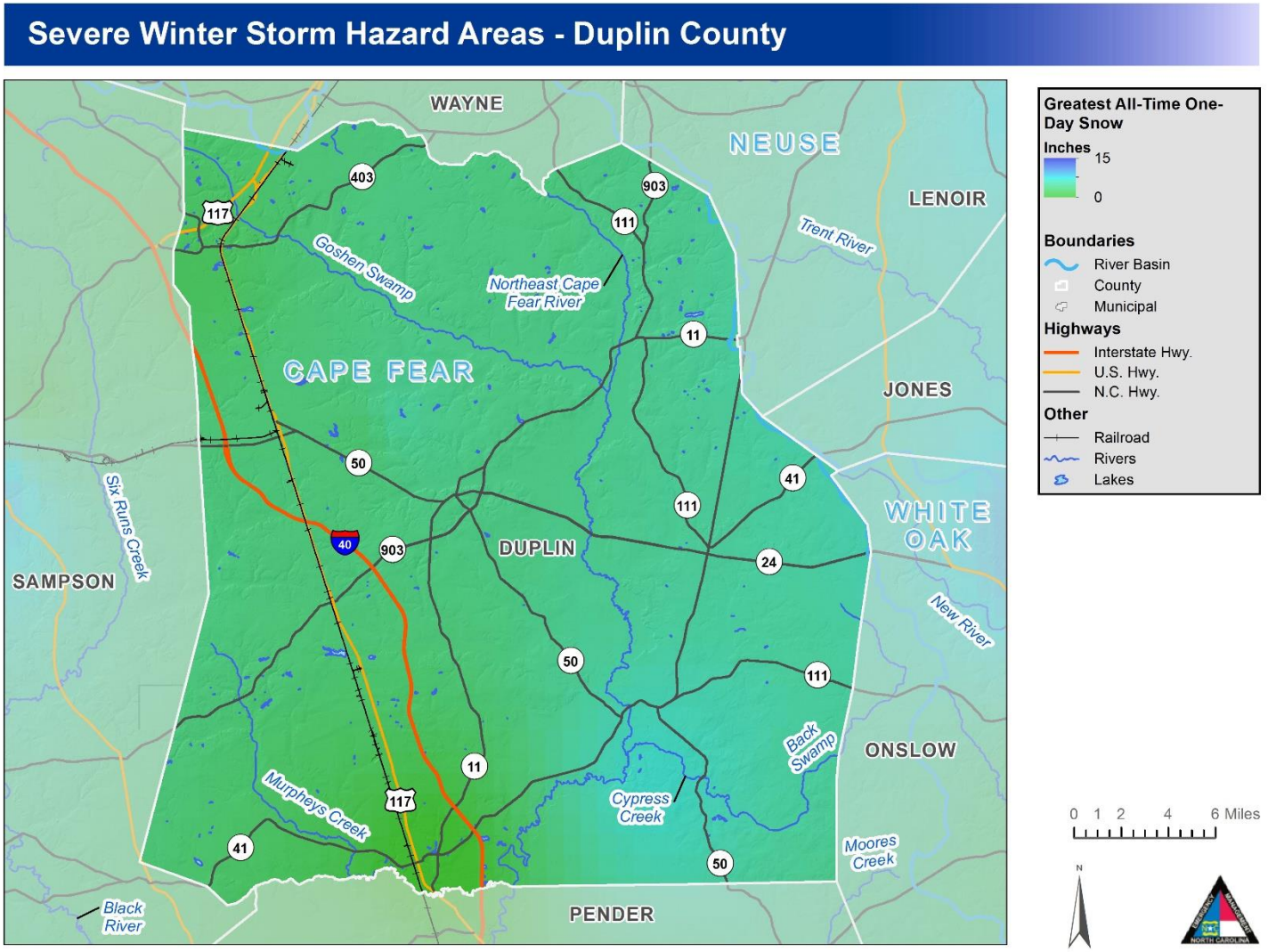


Figure 5-68: Severe Winter Storm Hazard Areas – Duplin County

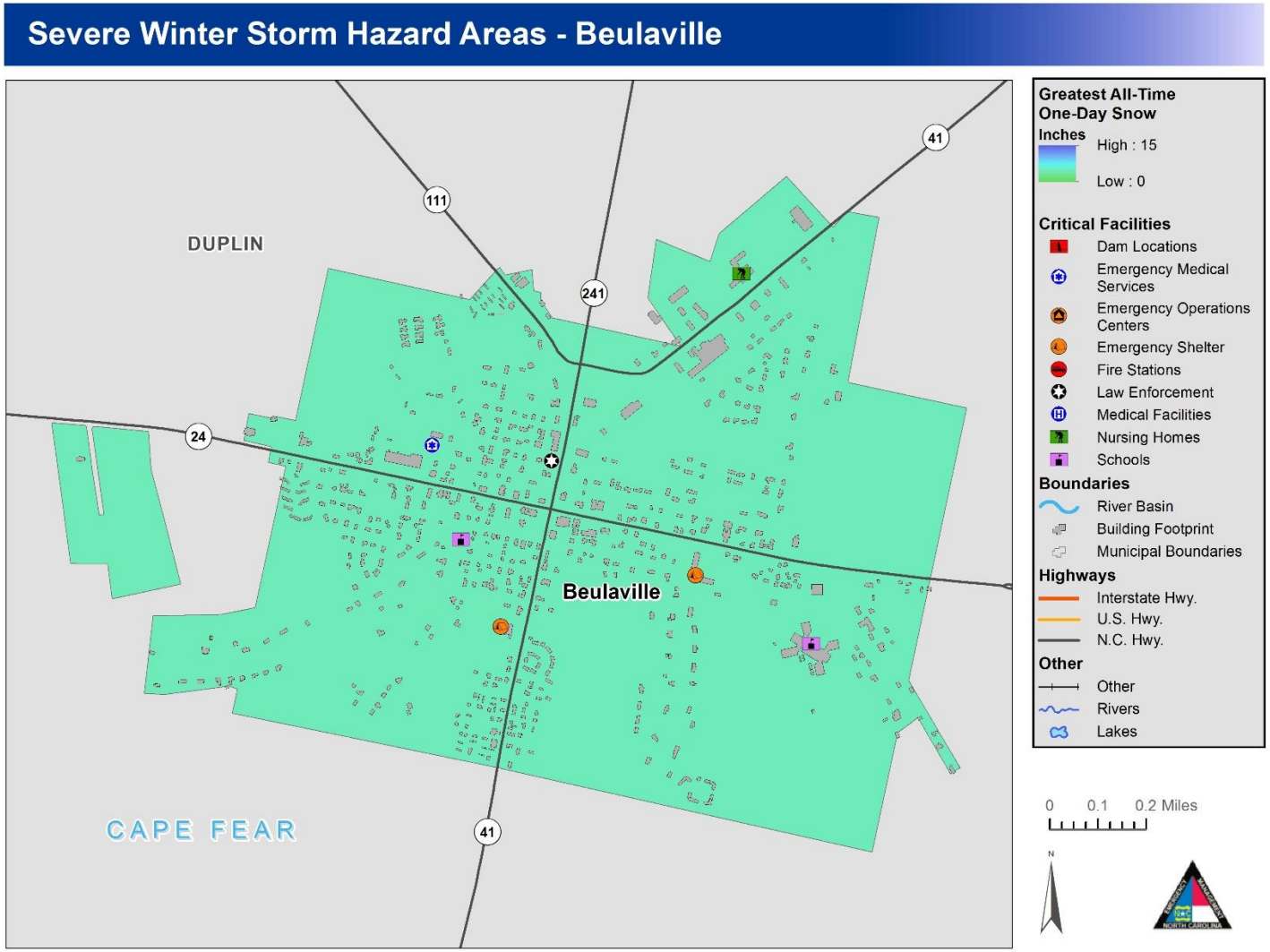


Figure 5-69: Severe Winter Storm Hazard Areas - Beulaville

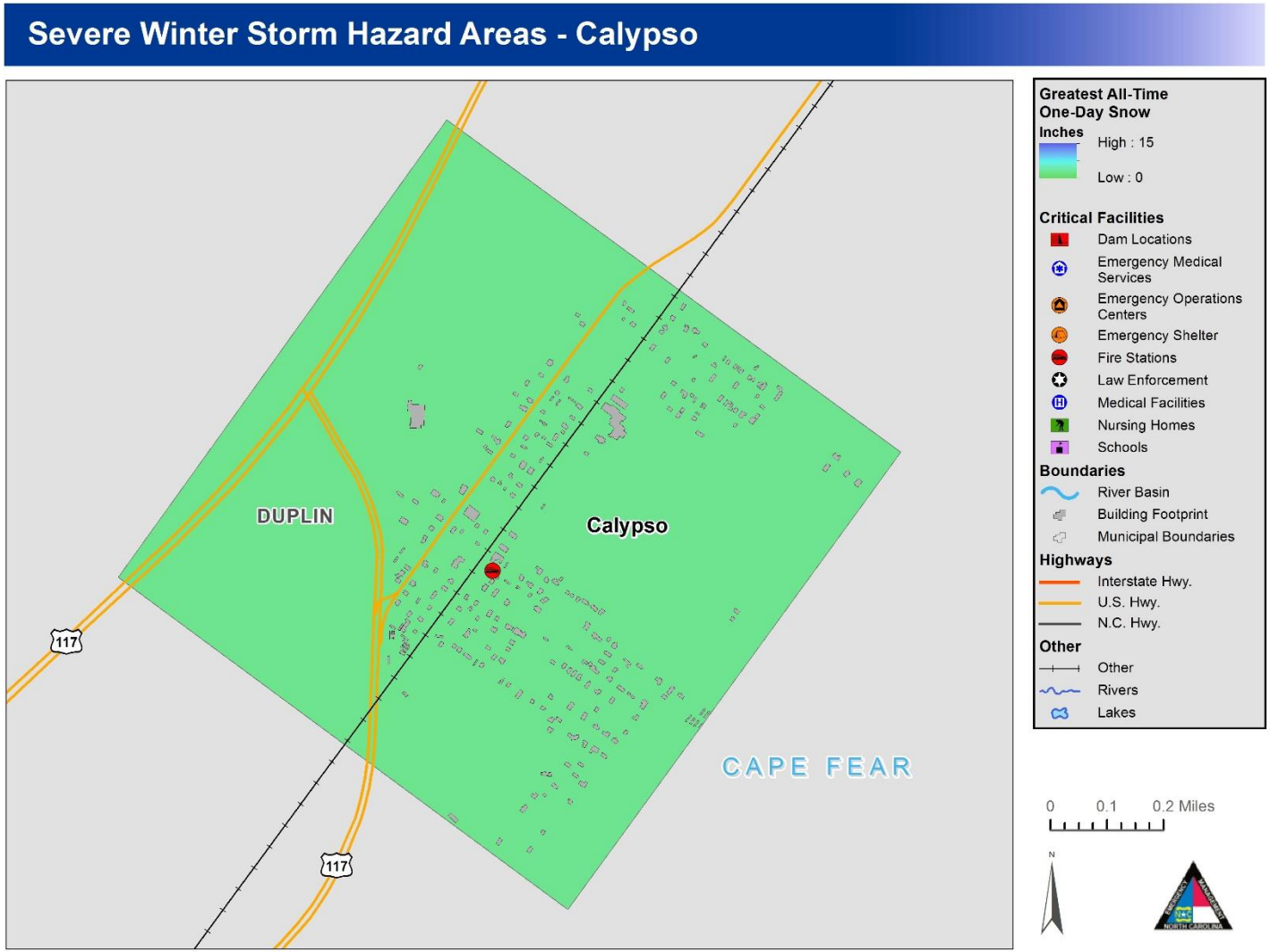


Figure 5-70: Severe Winter Storm Hazard Areas - Calypso

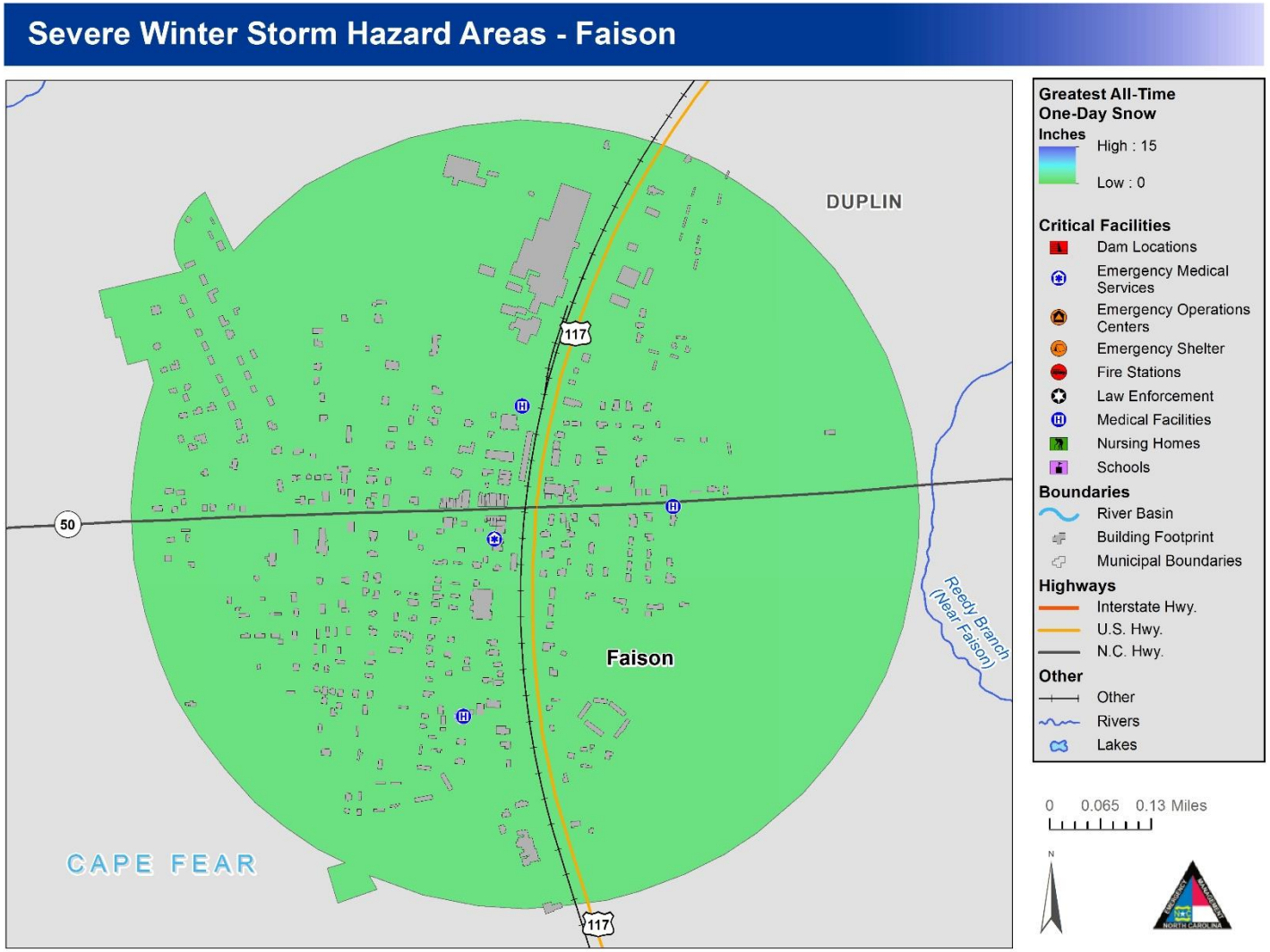


Figure 5-71: Severe Winter Storm Hazard Areas - Faison

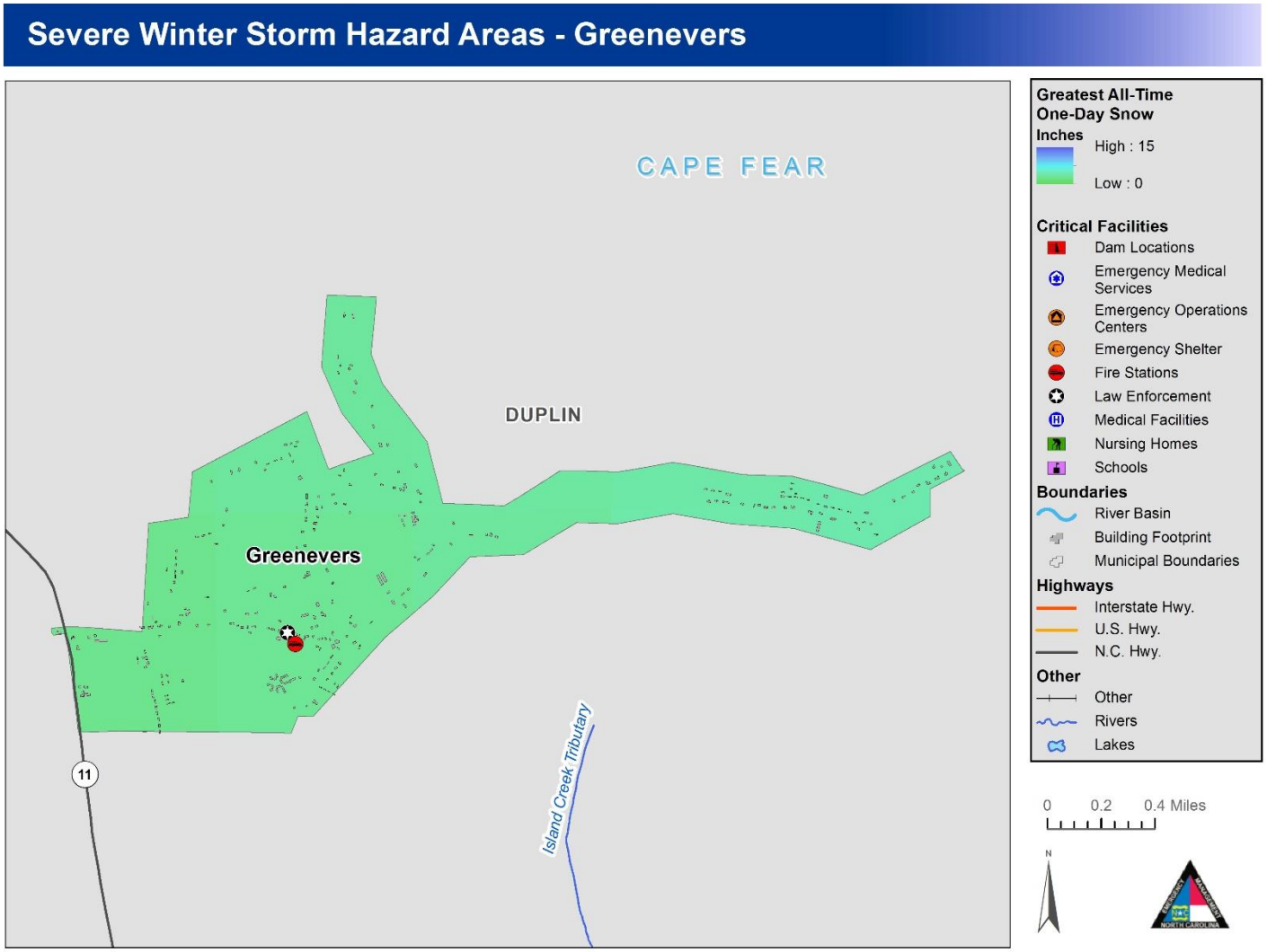


Figure 5-72: Severe Winter Storm Hazard Areas – Greenevers

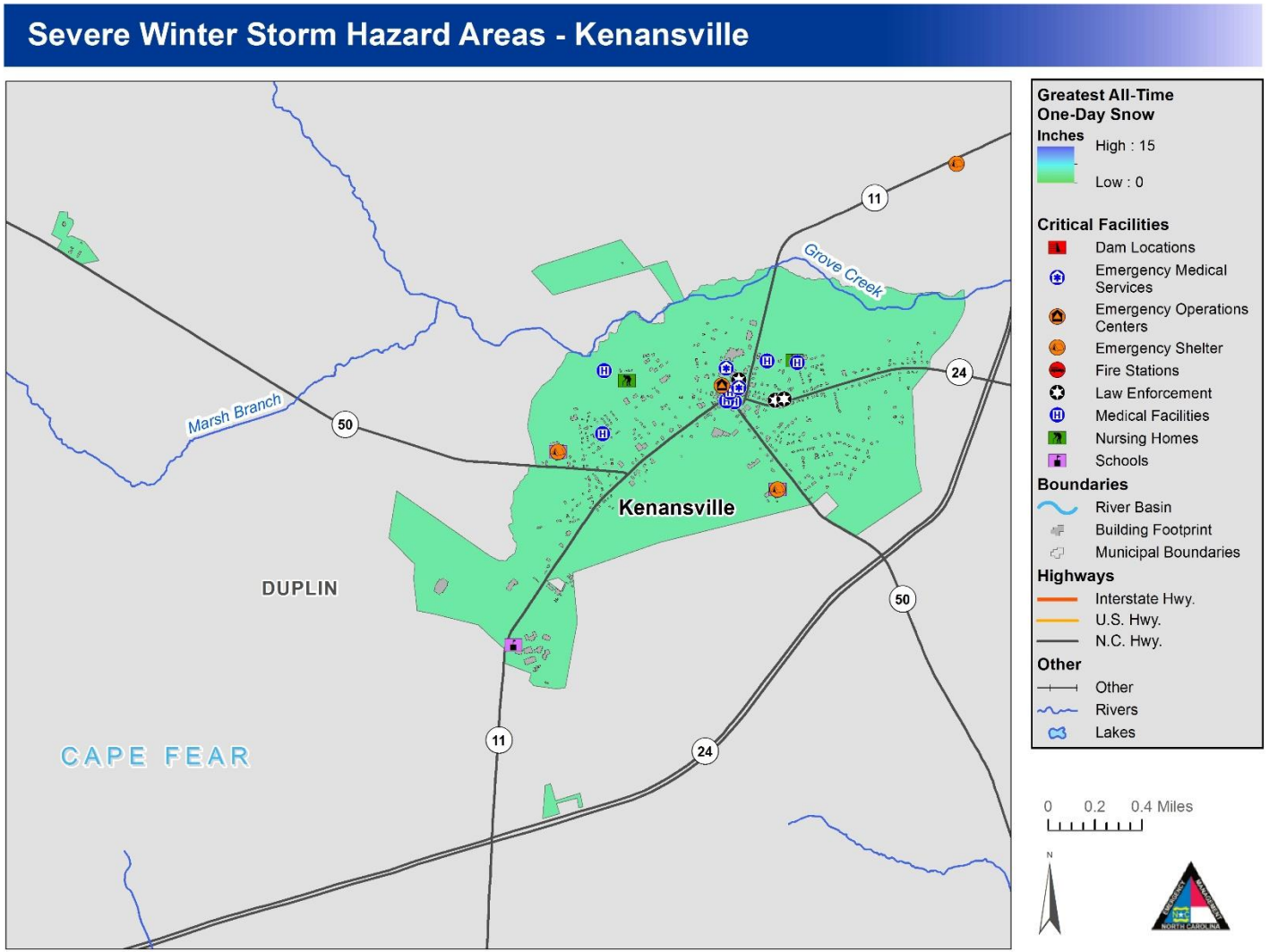


Figure 5-73: Severe Winter Storm Hazard Areas - Kenansville

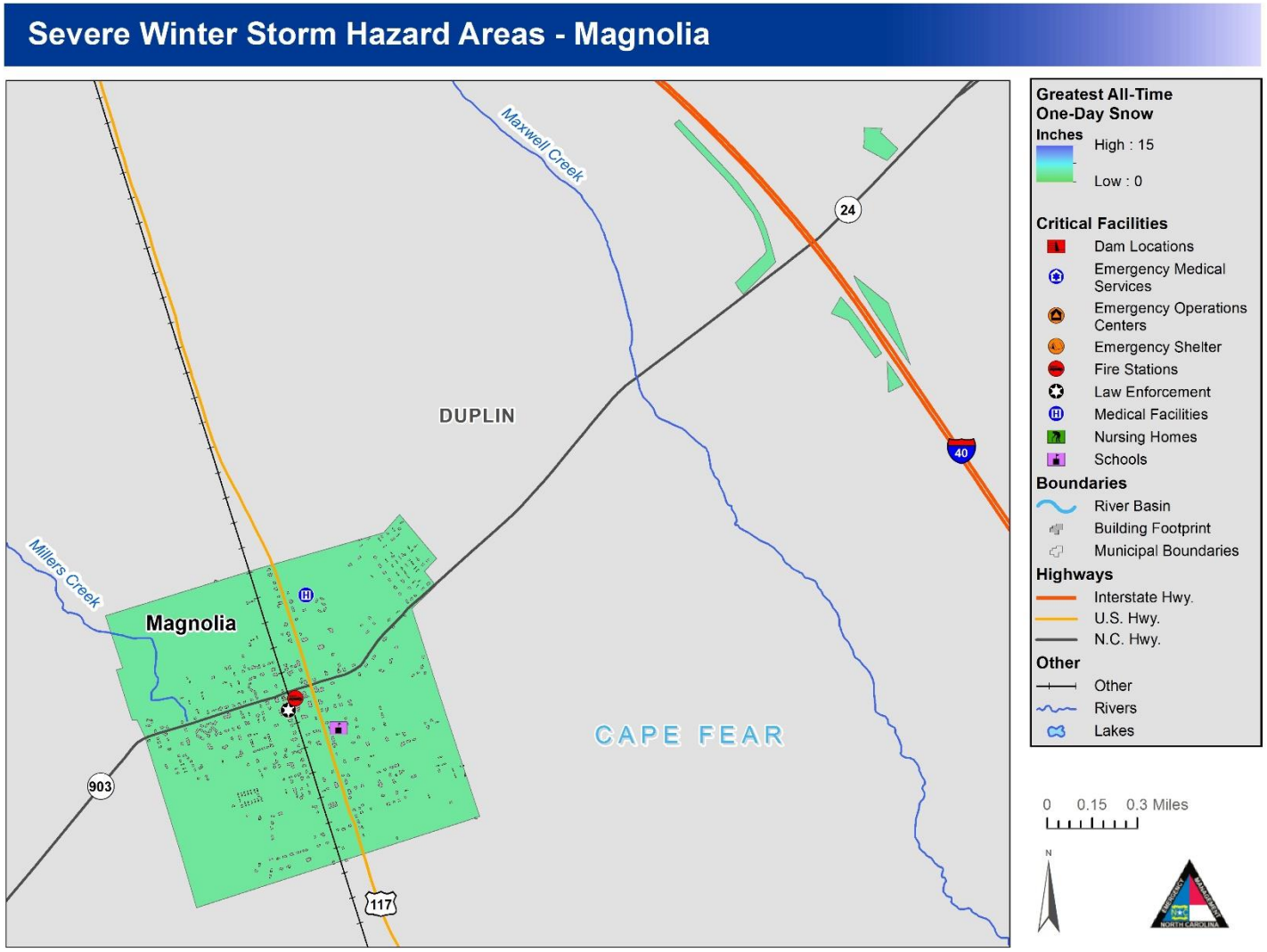


Figure 5-74: Severe Winter Storm Hazard Areas – Magnolia

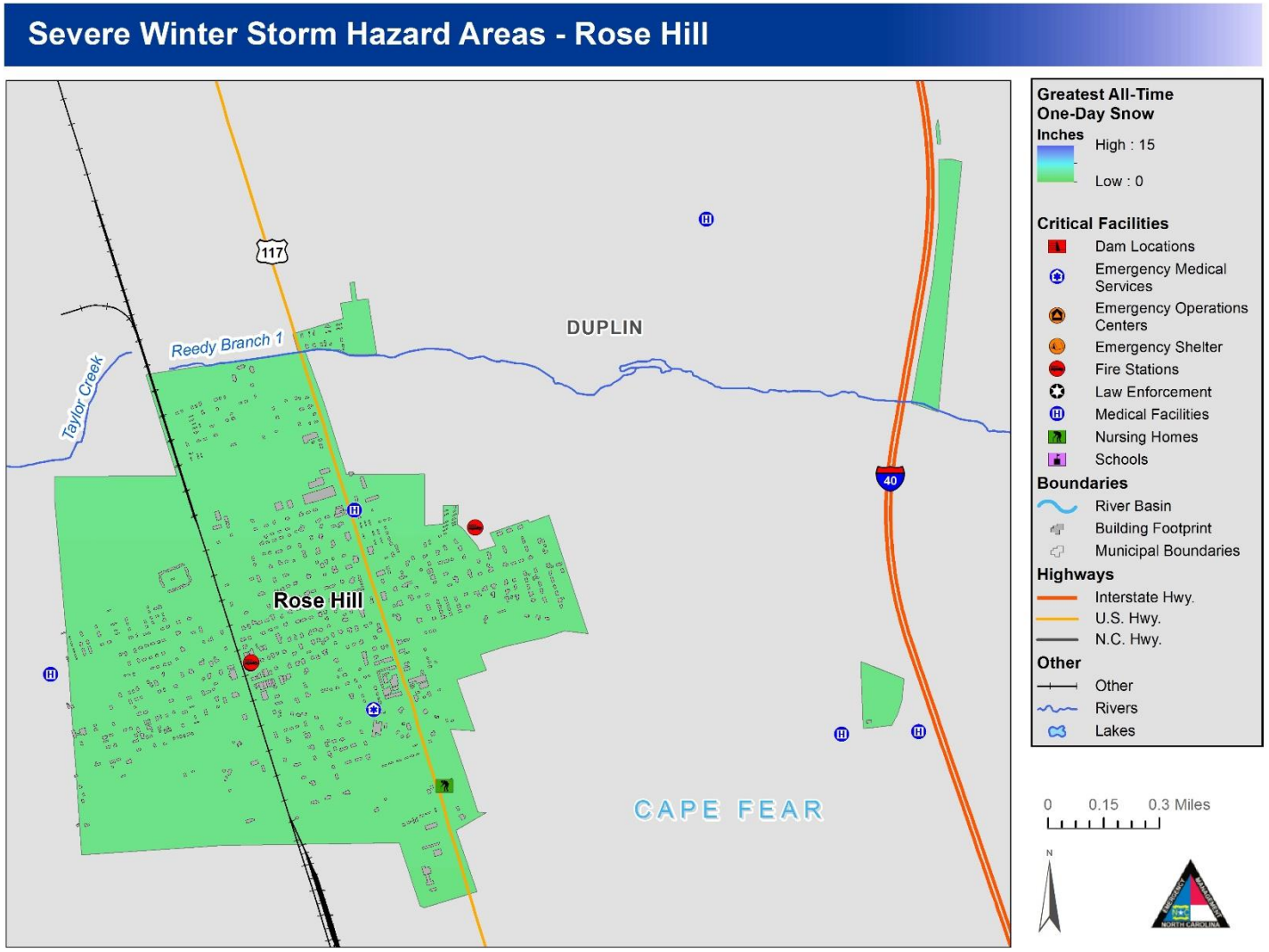


Figure 5-75: Severe Winter Storm Hazard Areas – Rose Hill

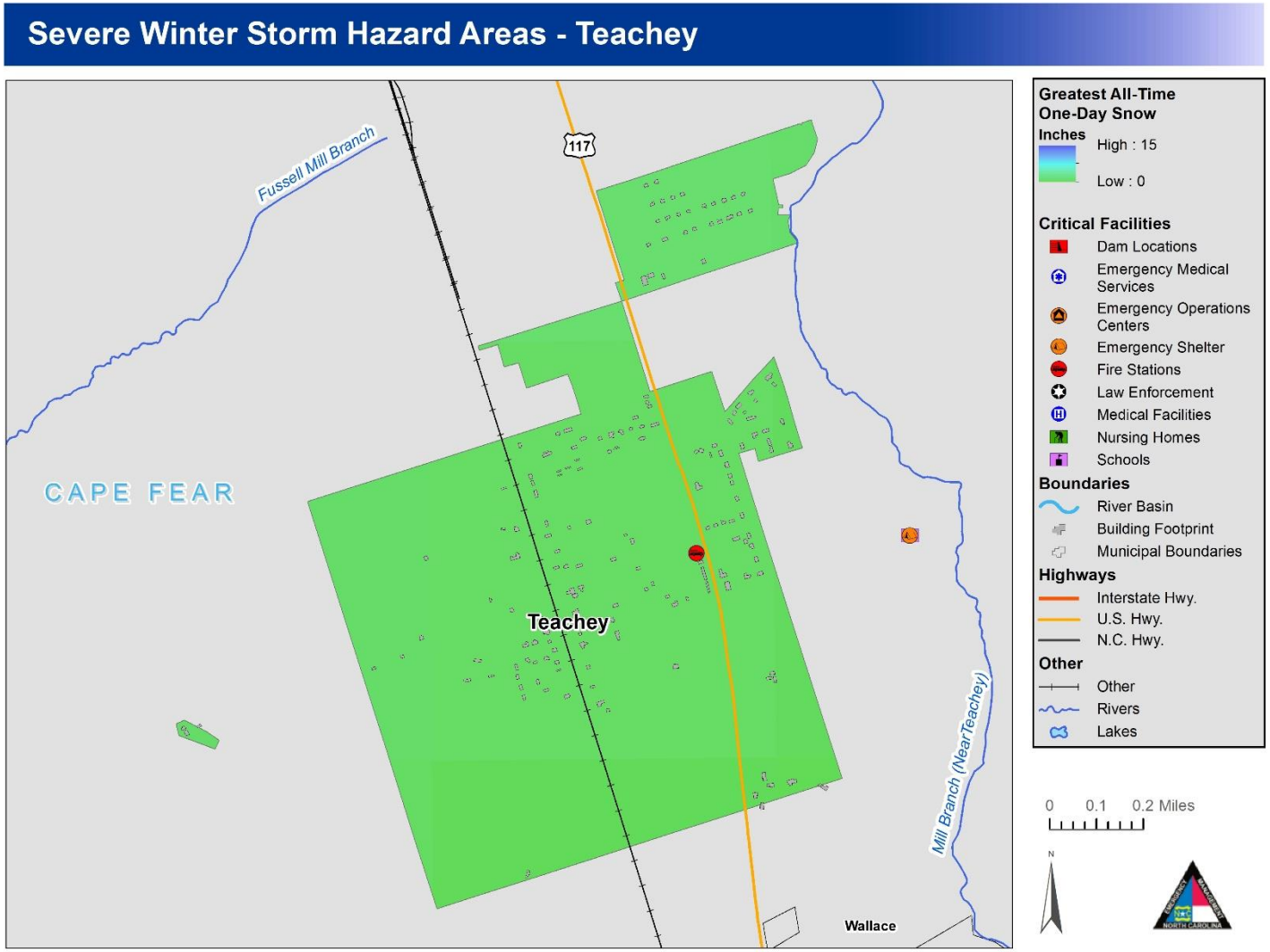


Figure 5-76: Severe Winter Storm Hazard Areas – Teachey

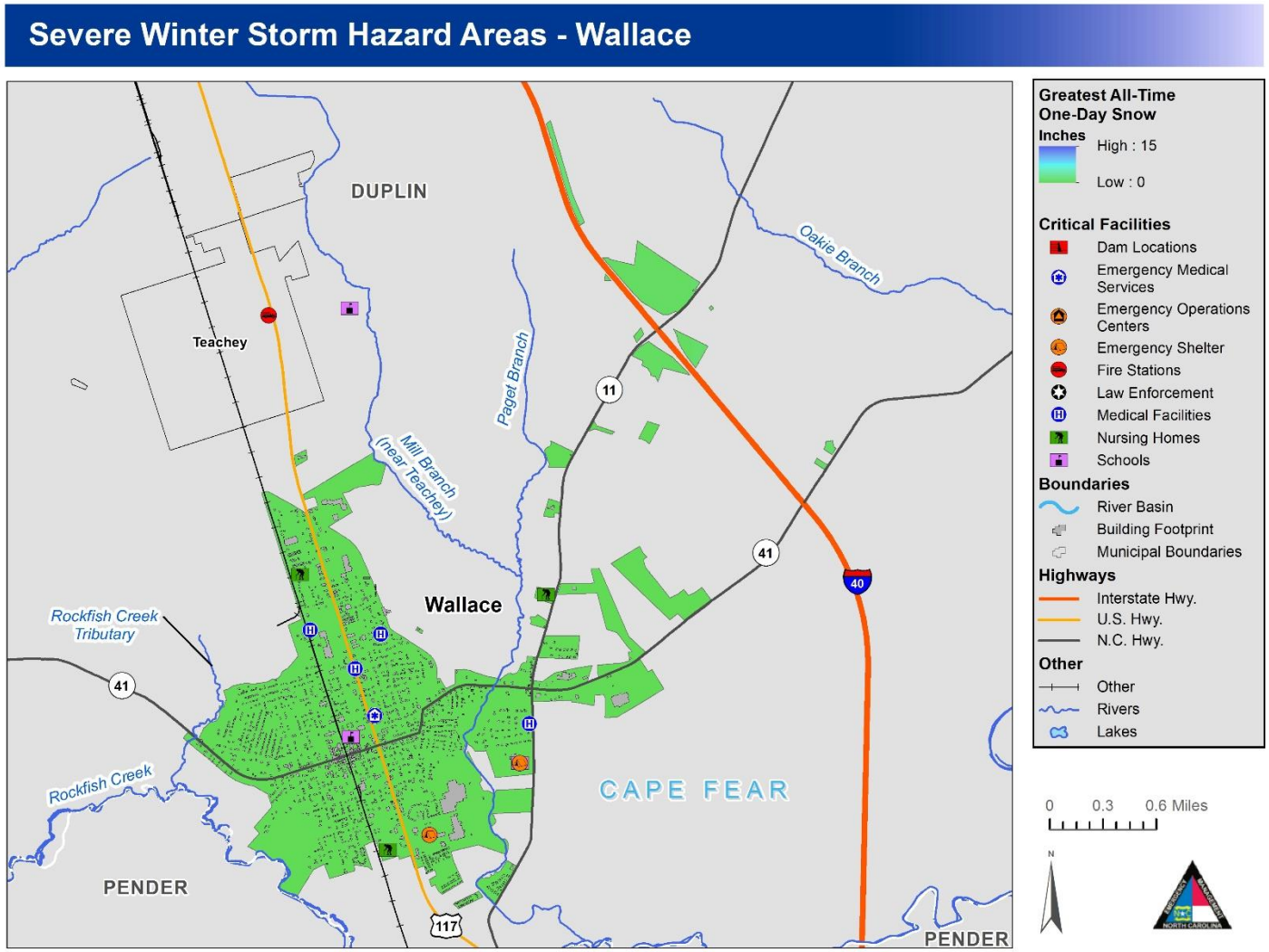


Figure 5-77: Severe Winter Storm Hazard Areas - Wallace

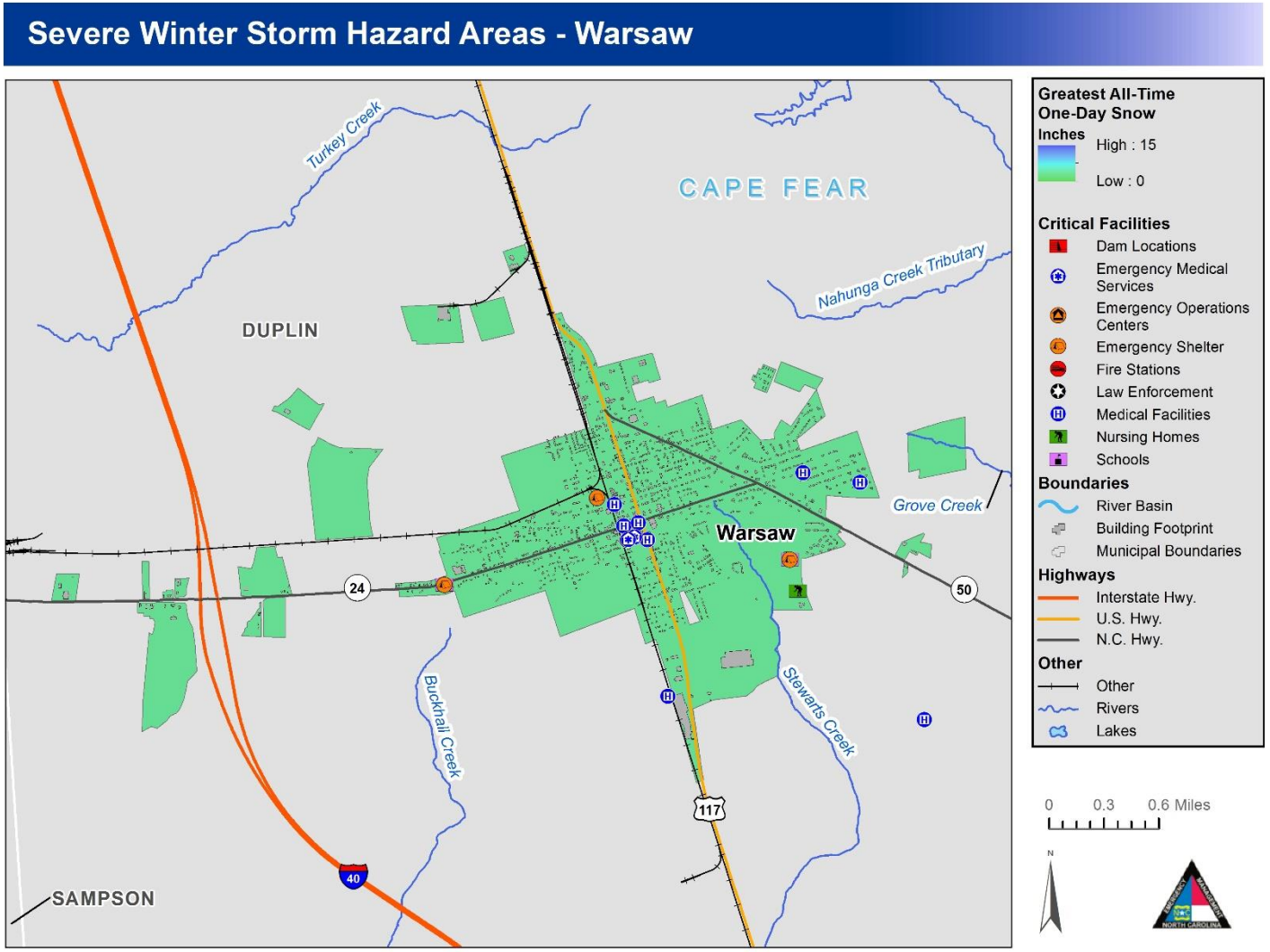


Figure 5-78: Severe Winter Storm Hazard Areas - Warsaw

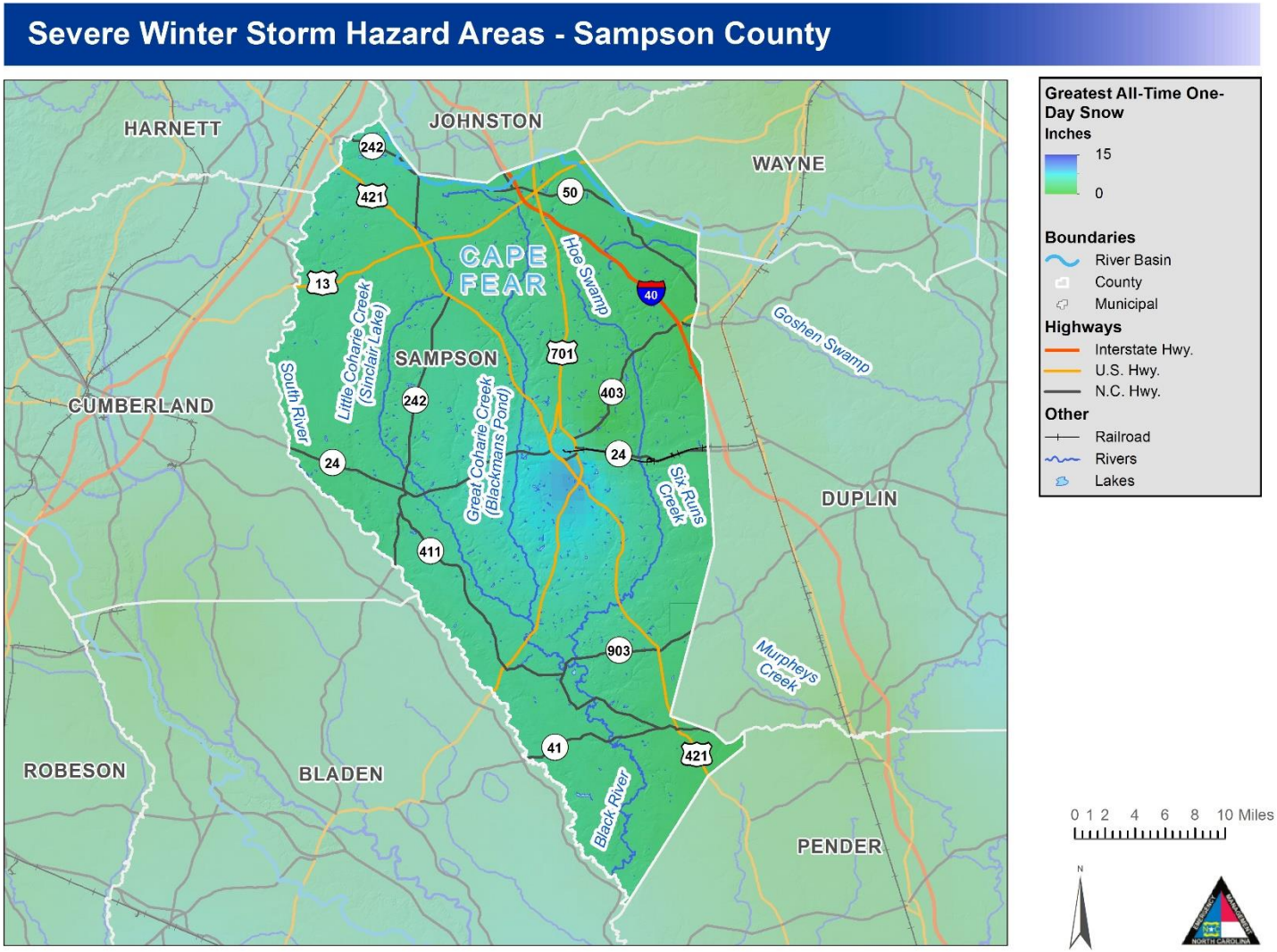


Figure 5-79: Severe Winter Storm Hazard Areas – Sampson County

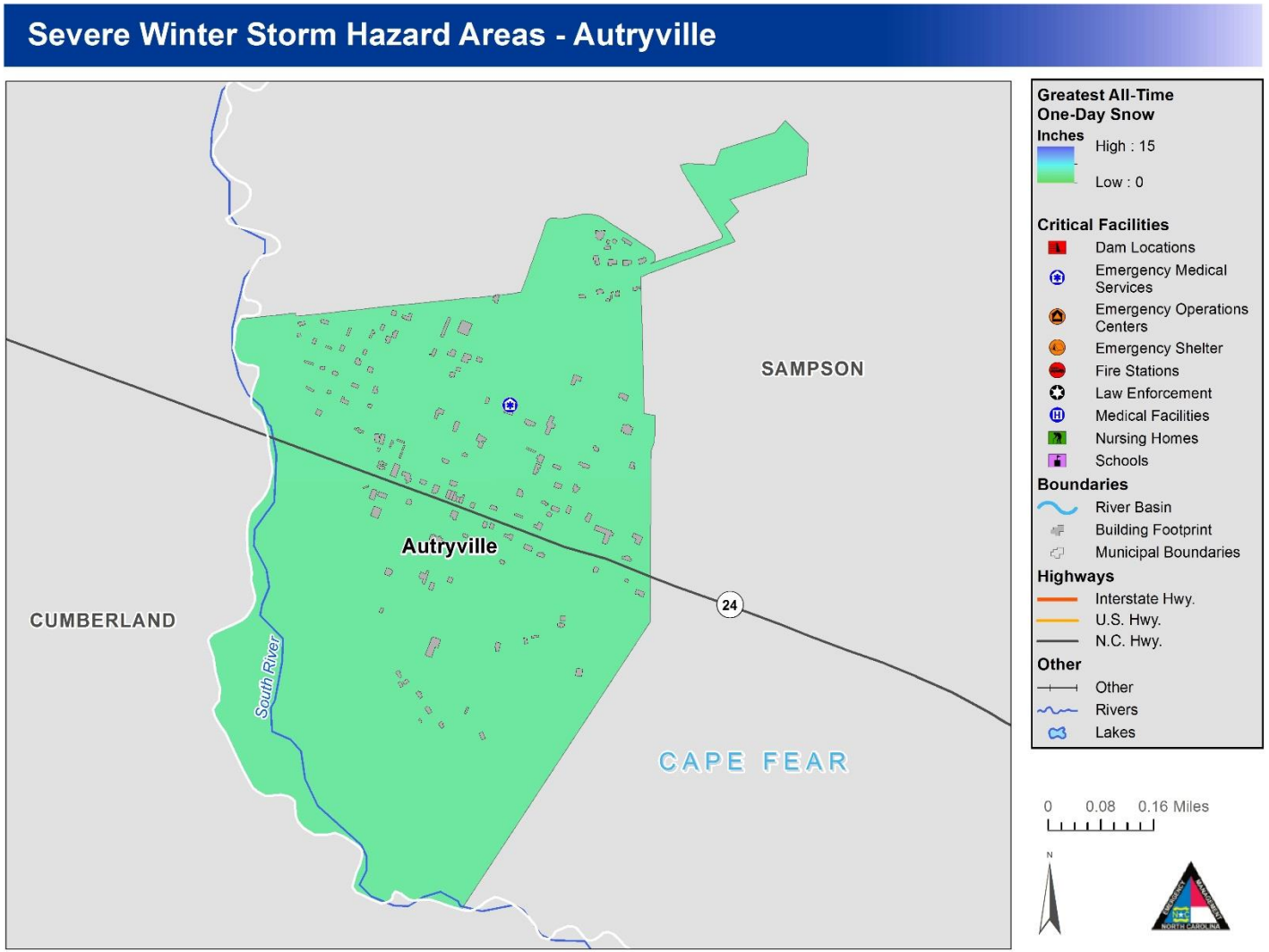


Figure 5-80: Severe Winter Storm Hazard Areas – Autryville

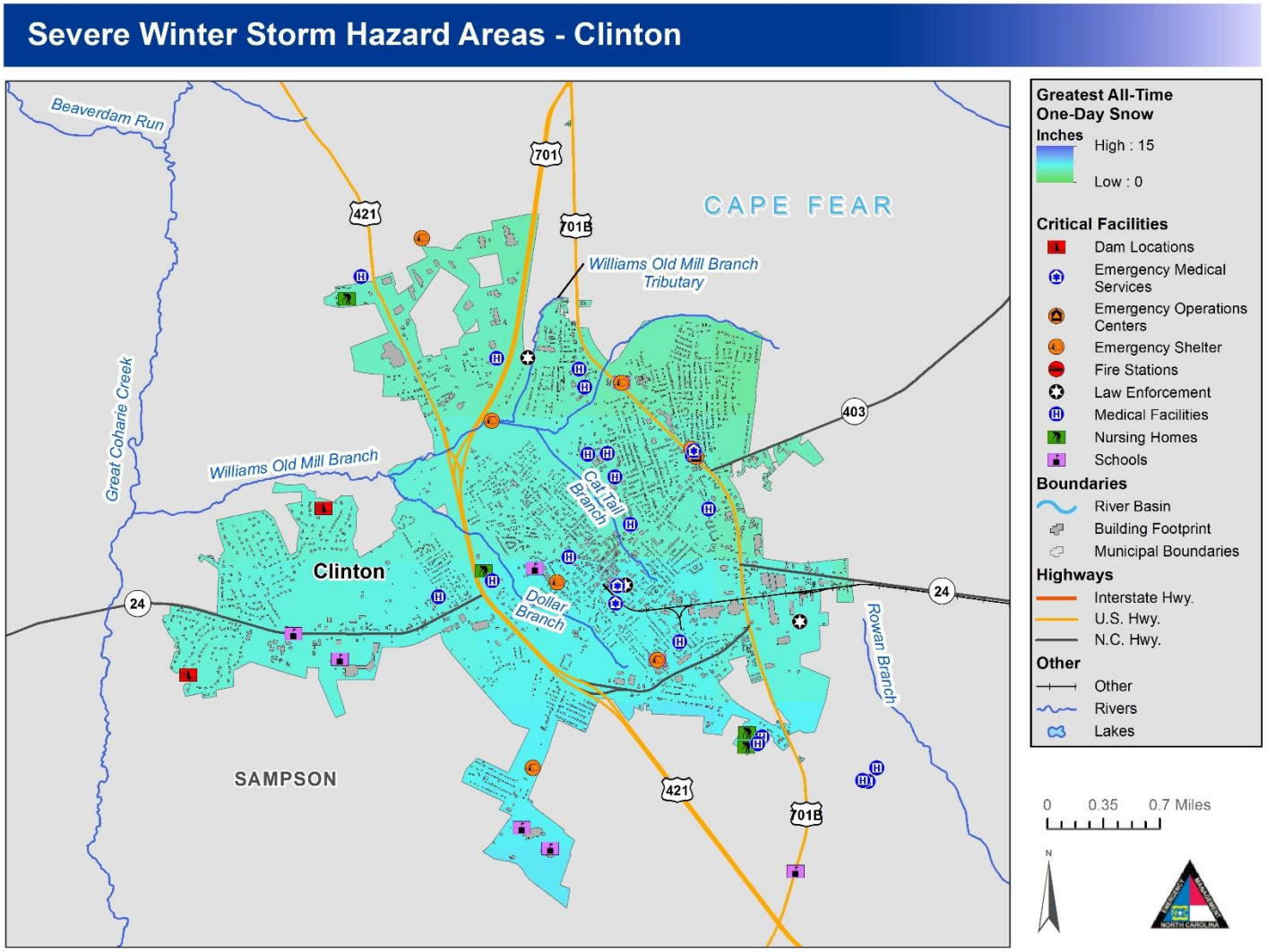


Figure 5-81: Severe Winter Storm Hazard Areas - Clinton

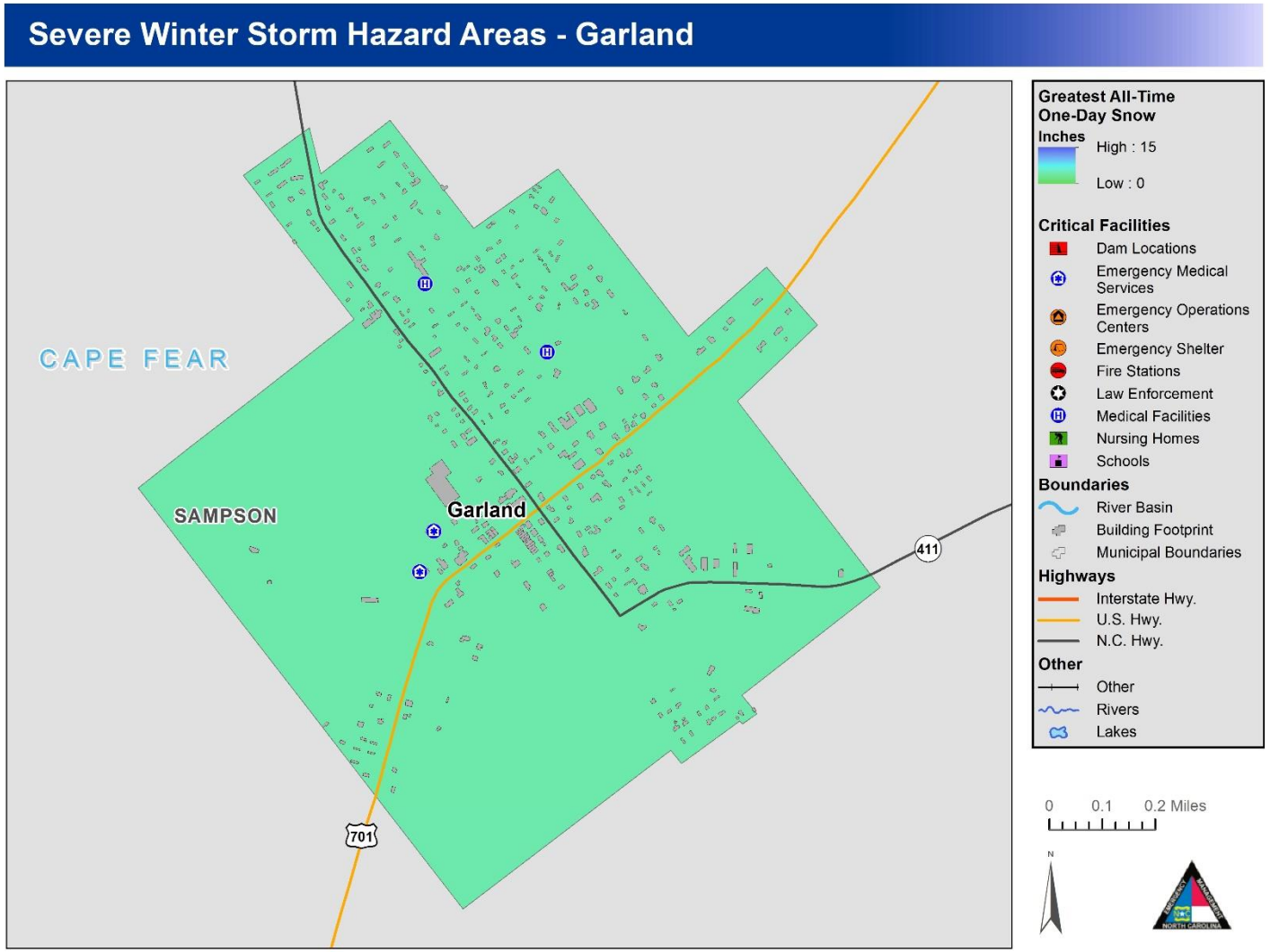


Figure 5-82: Severe Winter Storm Hazard Areas – Garland

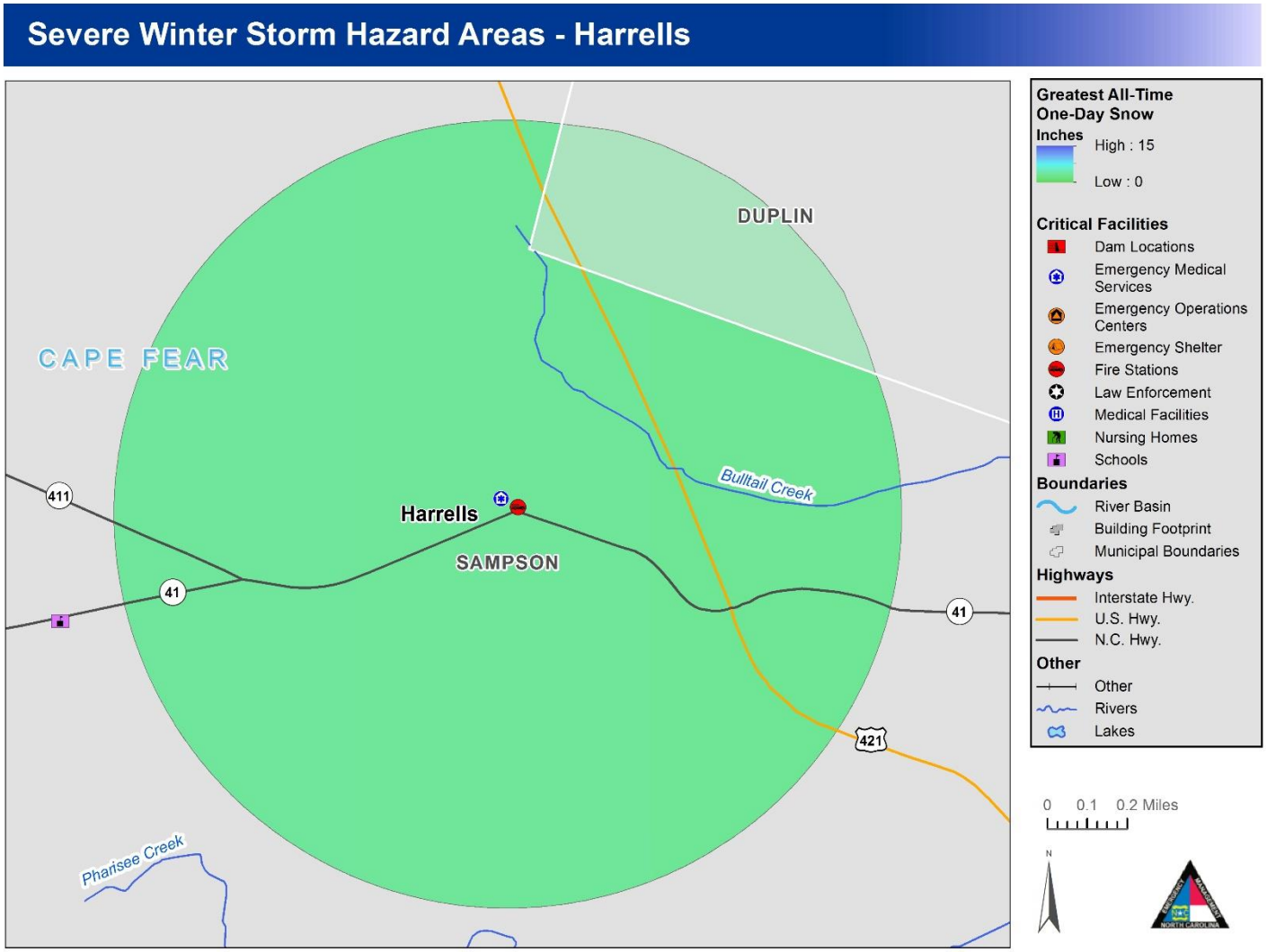


Figure 5-83: Severe Winter Storm Hazard Areas – Harrells

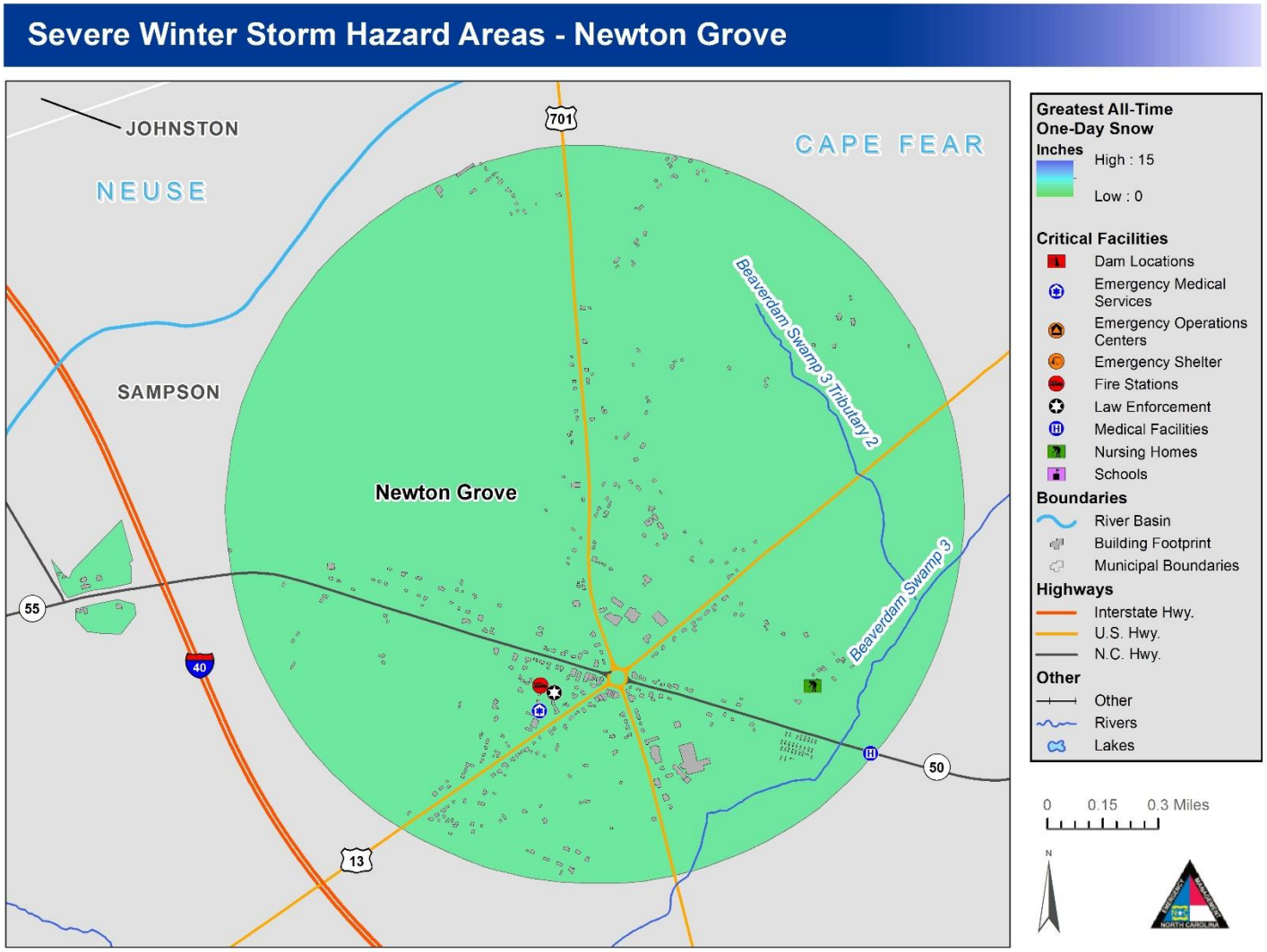


Figure 5-84: Severe Winter Storm Hazard Areas – Newton Grove

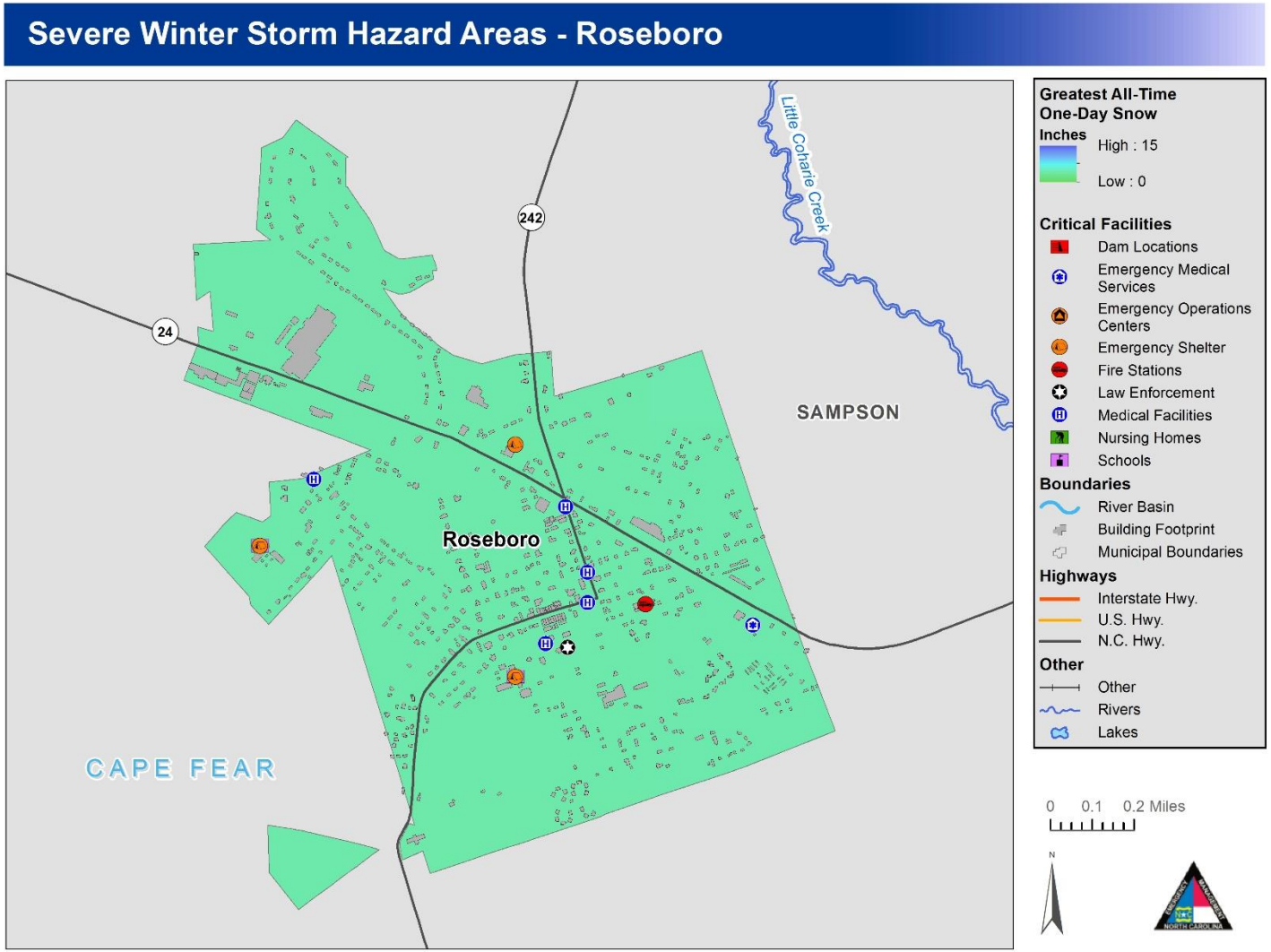


Figure 5-85: Severe Winter Storm Hazard Areas – Roseboro

Severe Winter Storm Hazard Areas - Salemburg

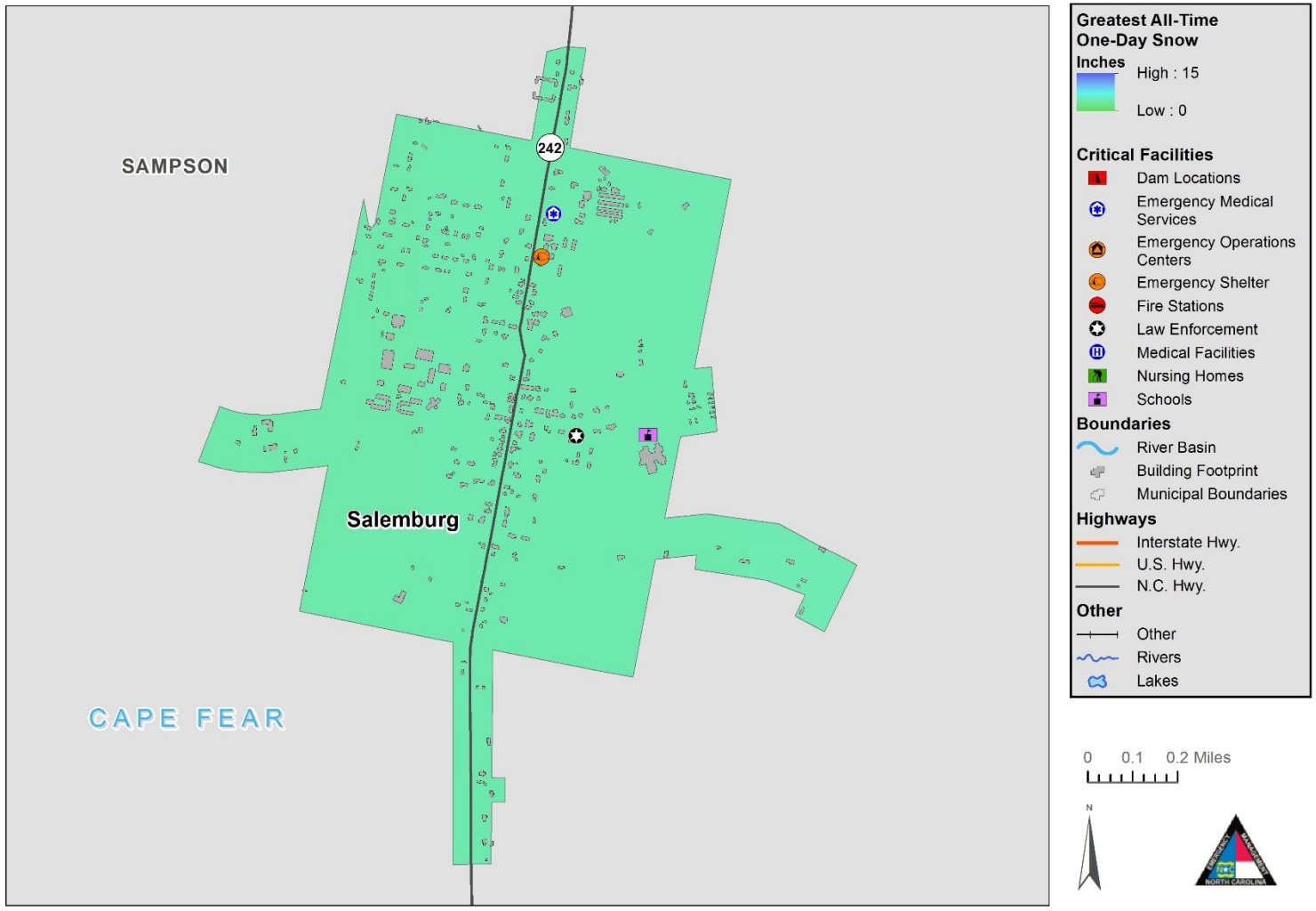


Figure 5-4: Severe Winter Storm Hazard Areas – Salemburg

Severe Winter Storm Hazard Areas - Turkey

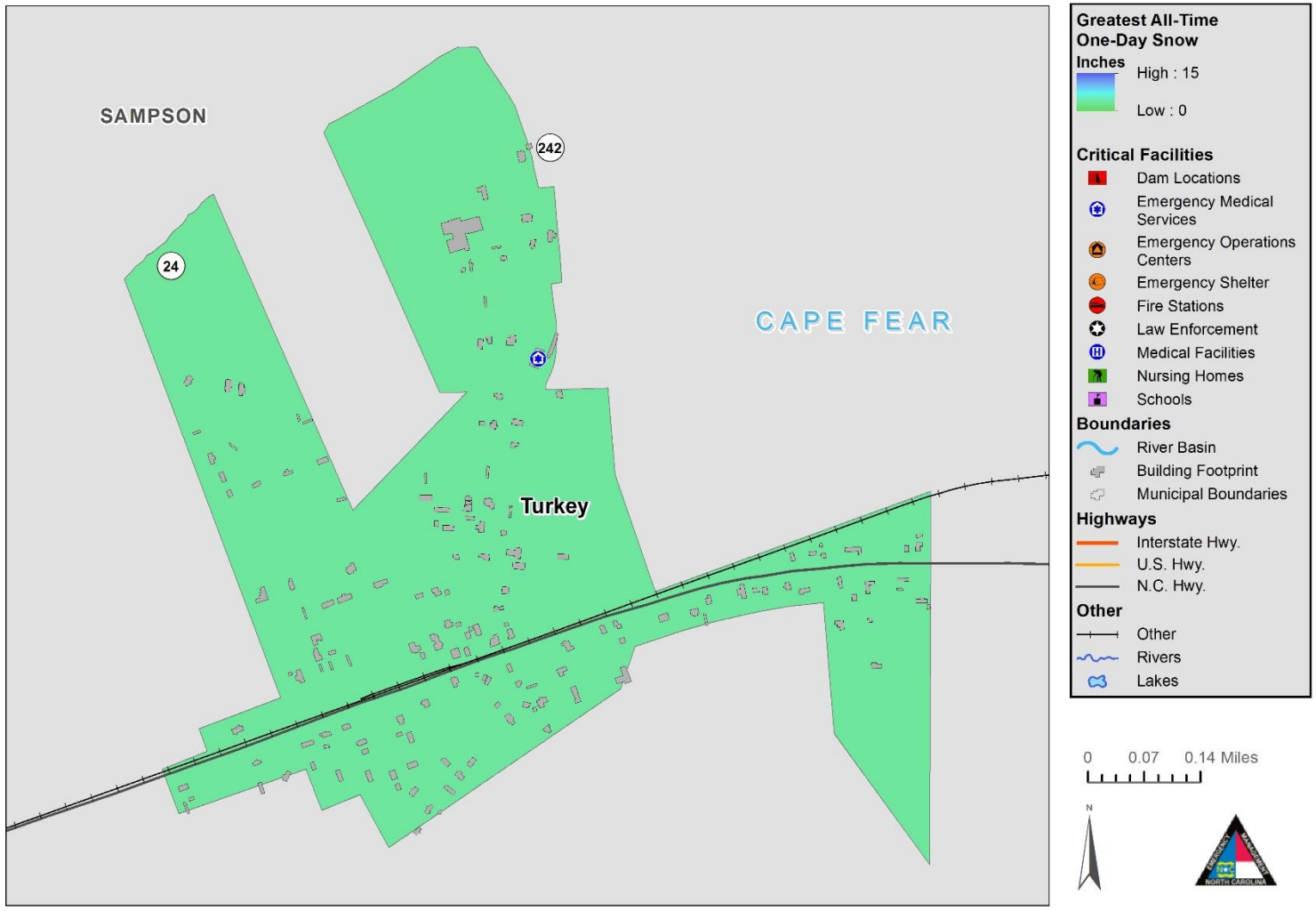


Figure 5-4: Severe Winter Storm Hazard Areas – Turkey

5.9.3 Extent

Table 5-33 shows the worst recorded event for the region.

Table 5-33: Sampson-Duplin Extent

Community	Number of Days with Winter Storm Occurrences July 1950- Present	Source	Maximum Snowfall Data
Sampson County	8	NCDC Storm Events Database	6 inches 2018
Duplin County	8	NCDC Storm Events Database	4 inches 2004
Town of Autryville	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Beulaville	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Calypso	8	NCDC Storm Events (Based on County data)	4 inches 2004
City of Clinton	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Faison	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Garland	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Greenevers	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Harrells	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Kenansville	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Magnolia	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Newton Grove	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Rose Hill	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Roseboro	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Salemburg	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Teachey	8	NCDC Storm Events (Based on County data)	4 inches 2004

Community	Number of Days with Winter Storm Occurrences July 1950- Present	Source	Maximum Snowfall Data
Town of Turkey	8	NCDC Storm Events (Based on County data)	6 inches 2018
Town of Wallace	8	NCDC Storm Events (Based on County data)	4 inches 2004
Town of Warsaw	8	NCDC Storm Events (Based on County data)	4 inches 2004

5.9.4 Past Occurrences

According to NCDC, the Region has experienced 51 winter storm events since 1996, reported in Table 5-34. These events are reported to have caused one death and five injuries.

Table 5-34: Winter Storm Events in the Region (1996-Present)

Location	Date	Type	Deaths	Injuries	Property Damage	Crop Damage
DUPLIN (ZONE)	2/3/1996	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/19/1998	Winter Storm	0	5	0.00K	0.00K
DUPLIN (ZONE)	1/27/1998	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/3/1998	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/18/2000	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/20/2000	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/22/2000	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/24/2000	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/28/2000	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	12/3/2000	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/2/2002	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/3/2002	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/23/2003	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/9/2004	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/25/2004	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/26/2004	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/26/2004	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/16/2004	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/26/2004	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/26/2004	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	12/20/2004	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	12/26/2004	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/1/2007	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/1/2007	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/20/2009	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/30/2010	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/12/2010	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	3/2/2010	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	12/16/2010	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	12/16/2010	Winter Weather	1	0	0.00K	0.00K

Location	Date	Type	Deaths	Injuries	Property Damage	Crop Damage
SAMPSON (ZONE)	12/25/2010	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/10/2011	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/21/2014	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/28/2014	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/28/2014	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/11/2014	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/11/2014	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/12/2014	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/9/2015	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/9/2015	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/13/2015	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/16/2015	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/24/2015	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/24/2015	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/22/2016	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/7/2017	Winter Storm	0	0	0.00K	0.00K
DUPLIN (ZONE)	1/3/2018	Winter Storm	0	0	0.00K	0.00K
SAMPSON (ZONE)	1/3/2018	Winter Weather	0	0	0.00K	0.00K
SAMPSON (ZONE)	2/20/2020	Winter Weather	0	0	0.00K	0.00K
DUPLIN (ZONE)	2/20/2020	Winter Storm	0	0	0.00K	0.00K
Totals:			1	5	0.00K	0.00K
Source: NCDC						

5.9.5 Probability of Future Occurrences

The probability of future Snow (Winter Storm) is shown in Table 5-35, 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

Table 5-35: Snow (Winter Storm) – Probability of Future Occurrence

Jurisdiction	Calculated Probability (IRISK)
City of Clinton	Low
Duplin County (Unincorporated Area)	Low
Sampson County (Unincorporated Area)	Low
Town of Autryville	Low
Town of Beulaville	Low
Town of Calypso	Low
Town of Faison	Low

Jurisdiction	Calculated Probability (IRISK)
Town of Garland	Low
Town of Greenevers	Low
Town of Harrells	Low
Town of Kenansville	Low
Town of Magnolia	Low
Town of Newton Grove	Low
Town of Rose Hill	Low
Town of Roseboro	Low
Town of Salemburg	Low
Town of Teachey	Low
Town of Turkey	Low
Town of Wallace	Low
Town of Warsaw	Low

5.9.6 Consequence and Impact Analysis

People

Winter storms are deceptive killers because most deaths are indirectly related to the storm event. The leading cause of death during winter weather 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. All jurisdictions in the Region are susceptible 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 weather 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 weather events can result in a loss of power which may impact operations. 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 weather 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.

5.10 Hazard Profile Summary

Table 5-36 summarizes the results from the hazard profiles based on input from the MAC. For each hazard profiled in this Section, this table includes the likelihood of future occurrence and whether the hazard is a considered a priority for the Region. A Vulnerability Assessment is provided in Section 6 for the priority hazards.

Table 5-36: Summary of Hazard Profile Results

Hazard	Likelihood of Future Occurrence	Vulnerability Assessment
Dam Failure	Unlikely	Yes
Drought	Likely	Yes
Earthquake	Possible	Yes
Hurricane/Tropical Storm	Highly Likely	Yes
Inland Flooding	Possible	Yes
Severe Weather (thunderstorm wind, lightning & hail)	Highly Likely	Yes
Tornado	Likely	Yes
Wildfire	Likely	Yes
Winter Storm	Possible	Yes

5.11 Final Determinations

The conclusions drawn from the hazard profiling process for the 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 5-37**). 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 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 5-37: Conclusions on Hazard Risk for the Region

HIGH RISK	Severe Weather, Inland Flood, Hurricane/Tropical Storm,
MODERATE RISK	Tornado, Drought, Winter Storm, Wildfire
LOW RISK	Dam Failure, Earthquake

SECTION 6: VULNERABILITY ASSESSMENT

Section 6 quantifies the vulnerability of the Region to the priority hazards identified in Section 5. It consists of the following subsections:

- 6.1 Methodology
- 6.2 Asset Inventory
- 6.3 Priority Risk Index

644 CFR Subsection D §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. This description shall include an overall summary of each hazard and its impact on the community. Plans approved after October 1, 2008 must also address NFIP insured structures that have been repetitively damaged by floods. 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 dollar 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; and

(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.

The MAC conducted a vulnerability assessment of the hazards identified as a priority in order to assess the impact that each hazard would have on the region. The vulnerability assessment quantifies, to the extent feasible using best available data, assets at risk to natural hazards and estimates potential losses.

Vulnerability assessments followed the methodology described in the FEMA publication Understanding Your Risks—Identifying Hazards and Estimating Losses (August 2001). The vulnerability assessment first describes the total vulnerability and values at risk and then discusses vulnerability by hazard. Data used to support this assessment included the following:

- County GIS data (hazards, base layers, and assessor's data)
- Hazard layer GIS datasets from federal agencies
- Integrated Hazard Risk Management (IHRM) and IRISK data provided by NCEM
- Written descriptions of inventory and risks provided by the State Hazard Mitigation Plan
- Other existing plans and studies provided by the County

6.1 Methodology

The data provided by NCEM come from models and methods commonly used by government risk assessors. Another method used is FEMA's Benefit- Cost Analysis software that calculates how much benefit comes from reducing a risk in a particular way. NCEM focused on collecting information on specific buildings and other critical infrastructure such as public utilities so that losses from damages could be calculated for each building or piece of infrastructure. The results factor in overall risk and its components of probability, consequence, and vulnerability.

6.2 Asset Inventory

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).

6.2.1 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).

Table 6-1: Population Counts with Vulnerable Population Breakdown

Jurisdiction	2010 Census Population	Elderly (Age 65 and Over)	Children (Age 5 and Under)
Duplin			
Duplin County (Unincorporated Area)	39,197	5,568	2,876
Town Of Beulaville	1,952	277	143
Town Of Calypso	917	130	67
Town Of Faison	1,462	208	107
Town Of Greenevers	604	86	44
Town Of Harrells	197	28	14
Town Of Kenansville	930	132	68
Town Of Magnolia	1,338	190	98
Town Of Rose Hill	2,297	326	168
Town Of Teachey	381	54	28
Town Of Wallace	5,513	784	403
Town Of Warsaw	3,891	553	285
Subtotal Duplin	**58,679**	**8,336**	**4,301**
Sampson			
City Of Clinton	10,707	1,526	743
Sampson County (Unincorporated Area)	46,721	6,661	3,244

Jurisdiction	2010 Census Population	Elderly (Age 65 and Over)	Children (Age 5 and Under)
Town Of Autryville	193	28	13
Town Of Garland	989	141	69
Town Of Newton Grove	1,146	163	80
Town Of Roseboro	1,790	255	124
Town Of Salemburg	1,158	165	80
Town Of Turkey	463	66	32
Subtotal Sampson	**63,167**	**9,005**	**4,385**
TOTAL PLAN AREA	**121,846**	**17,341**	**8,686**

6.2.2 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: Building Counts and Values by Jurisdiction

Jurisdiction	Number of Developed Parcels	Number of Undeveloped Parcels	Building Count	Building Value	Number of Pre-FIRM Buildings
Duplin					
Duplin County (Unincorporated Area)	0	0	27,381	$3,767,465,160	0
Town Of Beulaville	0	0	1,081	$314,787,470	0
Town Of Calypso	0	0	570	$80,262,508	0
Town Of Faison	0	0	827	$405,075,511	0
Town Of Greenevers	0	0	297	$42,774,285	0
Town Of Harrells	0	0	197	$39,535,089	0
Town Of Kenansville	0	0	548	$254,266,335	0
Town Of Magnolia	0	0	729	$93,147,899	0
Town Of Rose Hill	0	0	1,177	$235,361,600	0
Town Of Teachey	0	0	169	$29,543,227	0
Town Of Wallace	0	0	2,667	$852,188,180	0
Town Of Warsaw	0	0	1,832	$561,032,466	0
Subtotal Duplin	**0**	**0**	**37,475**	**$6,675,439,730**	**0**
Sampson					
City Of Clinton	0	0	5,368	$1,968,498,409	0
Sampson County (Unincorporated Area)	0	0	35,938	$5,029,921,346	0
Town Of Autryville	0	0	144	$25,616,222	0

Jurisdiction	Number of Developed Parcels	Number of Undeveloped Parcels	Building Count	Building Value	Number of Pre-FIRM Buildings
Town Of Garland	0	0	701	$117,323,996	0
Town Of Newton Grove	0	0	819	$175,458,831	0
Town Of Roseboro	0	0	1,085	$447,003,267	0
Town Of Salemburg	0	0	787	$199,035,953	0
Town Of Turkey	0	0	355	$174,481,663	0
Subtotal Sampson	**0**	**0**	**45,197**	**$8,137,339,687**	**0**
TOTAL PLAN	**0**	**0**	**82,672**	**$14,812,779,417**	**0**

6.2.3 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
Duplin									
Duplin County (Unincorporated Area)	9,281	3	1	568	0	212	7	0	109
Town Of Beulaville	39	3	0	89	0	10	10	0	19
Town Of Calypso	116	0	0	38	0	4	0	0	6
Town Of Faison	82	3	0	48	0	7	2	0	14

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Town Of Greenevers	13	0	0	11	0	3	0	0	2
Town Of Harrells	48	1	0	14	0	1	1	0	8
Town Of Kenansville	0	6	0	49	0	2	10	0	67
Town Of Magnolia	40	0	0	28	0	3	6	0	25
Town Of Rose Hill	77	2	0	56	0	20	4	0	16
Town Of Teachey	0	0	0	13	0	1	0	0	4
Town Of Wallace	77	7	0	226	0	41	20	0	37
Town Of Warsaw	22	3	0	155	0	32	9	0	18
Subtotal Duplin	**9,795**	**28**	**1**	**1,295**	**0**	**336**	**69**	**0**	**325**
Sampson									
City Of Clinton	203	16	0	720	0	63	45	0	132
Sampson County (Unincorporated Area)	11,972	0	0	760	1	80	8	0	166
Town Of Autryville	1	0	0	17	0	1	0	0	1
Town Of Garland	51	1	0	70	0	3	4	0	7
Town Of Newton Grove	120	3	0	80	0	6	3	0	6

Jurisdiction	Food and Agriculture	Banking and Finance	Chemical & Hazardous	Commercial	Communications	Critical Manufacturing	Healthcare	EM	Government Facilities
Town Of Roseboro	56	2	0	142	0	15	8	0	24
Town Of Salemburg	80	2	0	41	0	2	1	0	35
Town Of Turkey	127	1	0	23	0	1	0	0	2
Subtotal Sampson	**12,610**	**25**	**0**	**1,853**	**1**	**171**	**69**	**0**	**373**
TOTAL PLAN	**22,405**	**53**	**1**	**3,148**	**1**	**507**	**138**	**0**	**698**

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
Duplin									
Duplin County (Unincorporated Area)	1	0	0	0	145	4	15	0	0
Town Of Beulaville	1	0	0	0	28	1	3	0	0
Town Of Calypso	0	0	0	0	1	2	1	0	0
Town Of Faison	0	0	0	0	8	2	1	1	0
Town Of Greenevers	0	0	0	0	0	0	1	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 Harrells	0	0	0	0	1	0	2	0	0
Town Of Kenansville	0	0	0	0	12	2	4	0	0
Town Of Magnolia	0	0	0	0	1	3	2	0	0
Town Of Rose Hill	0	0	0	0	21	0	1	0	0
Town Of Teachey	0	0	0	0	2	0	1	0	0
Town Of Wallace	0	0	0	0	65	1	1	0	0
Town Of Warsaw	0	0	0	0	33	3	2	0	0
Subtotal Duplin	**2**	**0**	**0**	**0**	**317**	**18**	**34**	**1**	**0**
Sampson									
City Of Clinton	0	0	0	0	40	7	5	0	0
Sampson County (Unincorporated Area)	0	0	1	0	70	1	9	0	0
Town Of Autryville	0	0	0	0	1	0	1	0	0
Town Of Garland	0	0	0	0	5	0	1	0	0
Town Of Newton Grove	0	0	0	0	3	1	1	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 Roseboro	0	0	0	0	7	2	3	0	0
Town Of Salemburg	0	0	0	0	2	0	1	0	0
Town Of Turkey	0	0	0	0	1	0	1	0	0
Subtotal Sampson	**0**	**0**	**1**	**0**	**129**	**11**	**22**	**0**	**0**
TOTAL PLAN	**2**	**0**	**1**	**0**	**446**	**29**	**56**	**1**	**0**

6.2.4 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[1]	Railroad[2]	Energy (Power Plants)	Water (Treatment Facilities)	Water / Wastewater Lines
Duplin					
Duplin County (Unincorporated Area)	0.0	0.0	4	0	0.0
Town Of Beulaville	0.0	0.0	1	0	0.0
Town Of Calypso	0.0	0.0	2	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[1]	Railroad[2]	Energy (Power Plants)	Water (Treatment Facilities)	Water / Wastewater Lines
Town Of Faison	0.0	0.0	2	1	0.0
Town Of Greenevers	0.0	0.0	0	0	0.0
Town Of Harrells	0.0	0.0	0	0	0.0
Town Of Kenansville	0.0	0.0	2	0	0.0
Town Of Magnolia	0.0	0.0	3	0	0.0
Town Of Rose Hill	0.0	0.0	0	0	0.0
Town Of Teachey	0.0	0.0	0	0	0.0
Town Of Wallace	0.0	0.0	1	0	0.0
Town Of Warsaw	0.0	0.0	3	0	0.0
Subtotal Duplin	**0.0**	**0.0**	**18**	**1**	**0.0**
Sampson					
City Of Clinton	0.0	0.0	7	0	0.0
Sampson County (Unincorporated Area)	0.0	0.0	1	0	0.0
Town Of Autryville	0.0	0.0	0	0	0.0
Town Of Garland	0.0	0.0	0	0	0.0
Town Of Newton Grove	0.0	0.0	1	0	0.0
Town Of Roseboro	0.0	0.0	2	0	0.0
Town Of Salemburg	0.0	0.0	0	0	0.0
Town Of Turkey	0.0	0.0	0	0	0.0

Jurisdiction	Major Roads[1]	Railroad[2]	Energy (Power Plants)	Water (Treatment Facilities)	Water / Wastewater Lines
Subtotal Sampson	**0.0**	**0.0**	**11**	**0**	**0.0**
TOTAL PLAN	**0.0**	**0.0**	**29**	**1**	**0.0**

6.2.5 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[3]	Commercial	Industrial	Government	Agricultural	Religious	Utilities	Other
Duplin								
Duplin County (Unincorporated Area)	18	92	16	37	1	85	0	0
Town Of Beulaville	7	16	2	5	0	8	0	0
Town Of Calypso	1	2	0	1	0	4	0	0
Town Of Faison	6	11	3	3	0	6	2	0
Town Of Greenevers	1	0	0	1	0	2	0	0
Town Of Harrells	0	0	1	3	0	0	0	0
Town Of Kenansville	2	12	0	24	0	5	0	0
Town Of Magnolia	0	1	0	2	0	4	0	0

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

Jurisdiction	Residential[3]	Commercial	Industrial	Government	Agricultural	Religious	Utilities	Other
Town Of Rose Hill	5	10	5	3	1	3	0	0
Town Of Wallace	17	48	4	3	0	20	0	0
Town Of Warsaw	8	30	2	7	1	15	0	0
Subtotal Duplin	**65**	**222**	**33**	**89**	**3**	**152**	**2**	**0**
Sampson								
City Of Clinton	9	127	24	30	1	21	6	0
Sampson County (Unincorporated Area)	13	83	14	34	7	107	1	0
Town Of Autryville	0	0	0	1	0	2	0	0
Town Of Garland	0	4	1	2	0	4	0	0
Town Of Newton Grove	0	13	3	0	0	6	0	0
Town Of Roseboro	1	16	8	8	0	3	2	0
Town Of Salemburg	0	5	0	13	0	3	0	0
Town Of Turkey	0	1	1	0	0	1	0	0
Subtotal Sampson	**23**	**249**	**51**	**88**	**8**	**147**	**9**	**0**
TOTAL PLAN	**88**	**471**	**84**	**177**	**11**	**299**	**11**	**0**

6.2.6 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**

6.2.7 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.

6.2.8 Drought

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.

6.2.9 Earthquake

Vulnerability for earthquake for the area is considered, in relative terms, to be limited should a significant earthquake event occur. The following tables provide loss estimates for the 500-, 1,000- and 2,500- year return periods based on probabilistic scenarios. Loss data was provided by NCEM's IHRM Program. These estimates include structural, contents and inventory losses for agricultural, commercial, education, government, industrial, religious and residential building occupancy types. The loss ratio is the loss estimate divided by the total potential exposure (i.e., total of improved and contents value for all buildings located within the 100-year floodplain) and displayed as a percentage of loss. FEMA considers loss ratios greater than 10% to be significant and an indicator a community may have more difficulties recovering from an event. These loss estimates do not include income losses, such as lost wages, rental expenses, relocation costs, etc. that can occur following an earthquake. All future structures and infrastructure built in the Region will be vulnerable to seismic events and may also experience damage not accounted for in these estimated losses. Contents value for all buildings located within the 100-year floodplain) and displayed as a percentage of loss. FEMA considers loss ratios greater

than 10% to be significant and an indicator a community may have more difficulties recovering from an event. These loss estimates do not include income losses, such as lost wages, rental expenses, relocation costs, etc. that can occur following an earthquake. All future structures and infrastructure built in the Region will be vulnerable to seismic events and may also experience damage not accounted for in these estimated losses.

The following tables provide counts and values by jurisdiction relevant to Earthquake hazard vulnerability in the Sampson-Duplin Regional HMP Area.

Table 6-8: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	6,417	16.4%	5,568	912	16.4%	2,876	471	16.4%
Town Of Beulaville	1,952	399	20.4%	277	57	20.6%	143	29	20.3%
Town Of Calypso	917	262	28.6%	130	37	28.5%	67	19	28.4%
Town Of Faison	1,462	317	21.7%	208	45	21.6%	107	23	21.5%
Town Of Greenevers	604	152	25.2%	86	22	25.6%	44	11	25%
Town Of Harrells	197	34	17.3%	28	5	17.9%	14	2	14.3%
Town Of Kenansville	930	80	8.6%	132	11	8.3%	68	6	8.8%
Town Of Magnolia	1,338	283	21.2%	190	40	21.1%	98	21	21.4%
Town Of Rose Hill	2,297	509	22.2%	326	72	22.1%	168	37	22%
Town Of Teachey	381	58	15.2%	54	8	14.8%	28	4	14.3%
Town Of Wallace	5,513	1,026	18.6%	784	146	18.6%	403	75	18.6%
Town Of Warsaw	3,891	673	17.3%	553	96	17.4%	285	49	17.2%
Subtotal Duplin	**58,679**	**10,210**	**17.4%**	**8336**	**1451**	**17.4%**	**4301**	**747**	**17.4%**
Sampson									
City Of Clinton	10,707	1,293	12.1%	1,526	184	12.1%	743	90	12.1%
Sampson County (Unincorporated Area)	46,721	11,568	24.8%	6,661	1,649	24.8%	3,244	803	24.8%

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 Autryville	193	49	25.4%	28	7	25%	13	3	23.1%
Town Of Garland	989	241	24.4%	141	34	24.1%	69	17	24.6%
Town Of Newton Grove	1,146	247	21.6%	163	35	21.5%	80	17	21.2%
Town Of Roseboro	1,790	298	16.6%	255	42	16.5%	124	21	16.9%
Town Of Salemburg	1,158	230	19.9%	165	33	20%	80	16	20%
Town Of Turkey	463	2	0.4%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**13,928**	**22%**	**9005**	**1984**	**22%**	**4385**	**967**	**22.1%**
TOTAL PLAN	**121,846**	**24,138**	**19.8%**	**17341**	**3435**	**19.8%**	**8686**	**1714**	**19.7%**

Source: GIS Analysis

Table 6-9: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	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 Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**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	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-10: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	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 Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-11: 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
Duplin									

Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%

Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-12: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	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 Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-13: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	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
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-14: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	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 Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	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 Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-15: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	3,713	13.6%	2,780	10.2%	$6,783	932	3.4%	$23,629	186	0.7%	$11,352	3,898	14.2%	$41,764
Town Of Beulaville	1,081	261	24.1%	176	16.3%	$268	65	6%	$4,260	21	1.9%	$1,250	262	24.2%	$5,778
Town Of Calypso	570	147	25.8%	115	20.2%	$483	19	3.3%	$462	12	2.1%	$301	146	25.6%	$1,245
Town Of Faison	827	214	25.9%	142	17.2%	$1,416	49	5.9%	$11,969	27	3.3%	$2,374	218	26.4%	$15,758
Town Of Greenevers	297	82	27.6%	67	22.6%	$146	8	2.7%	$311	7	2.4%	$200	82	27.6%	$656
Town Of Harrells	197	90	45.7%	21	10.7%	$2	61	31%	$1,127	8	4.1%	$436	90	45.7%	$1,565
Town Of Kenansville	548	121	22.1%	27	4.9%	$95	53	9.7%	$3,070	63	11.5%	$3,391	143	26.1%	$6,557
Town Of Magnolia	729	165	22.6%	131	18%	$436	17	2.3%	$284	18	2.5%	$515	166	22.8%	$1,235
Town Of Rose Hill	1,177	310	26.3%	217	18.4%	$893	69	5.9%	$3,779	25	2.1%	$666	311	26.4%	$5,338
Town Of Teachey	169	37	21.9%	23	13.6%	$127	6	3.6%	$172	8	4.7%	$197	37	21.9%	$496
Town Of Wallace	2,667	618	23.2%	401	15%	$2,409	220	8.2%	$11,202	63	2.4%	$4,082	684	25.6%	$17,693
Town Of Warsaw	1,832	456	24.9%	265	14.5%	$3,748	143	7.8%	$6,296	48	2.6%	$4,834	456	24.9%	$14,877
Subtotal Duplin	**37,475**	**6,214**	**16.6%**	**4,365**	**11.6%**	**$16,806**	**1,642**	**4.4%**	**$66,561**	**486**	**1.3%**	**$29,598**	**6,493**	**17.3%**	**$112,962**
Sampson															
City Of Clinton	5,368	1,686	31.4%	493	9.2%	$2,347	1,017	18.9%	$69,673	170	3.2%	$14,413	1,680	31.3%	$86,434
Sampson County (Unincorporated Area)	35,938	18,345	51%	5,660	15.7%	$7,913	12,322	34.3%	$74,737	362	1%	$31,287	18,344	51%	$113,938
Town Of Autryville	144	51	35.4%	31	21.5%	$129	18	12.5%	$487	2	1.4%	$130	51	35.4%	$747
Town Of Garland	701	273	38.9%	135	19.3%	$385	114	16.3%	$2,259	24	3.4%	$1,751	273	38.9%	$4,394
Town Of Newton Grove	819	347	42.4%	126	15.4%	$340	207	25.3%	$3,769	14	1.7%	$1,251	347	42.4%	$5,360
Town Of Roseboro	1,085	392	36.1%	137	12.6%	$517	213	19.6%	$19,986	40	3.7%	$3,823	390	35.9%	$24,325
Town Of Salemburg	787	286	36.3%	123	15.6%	$685	122	15.5%	$2,176	41	5.2%	$5,065	286	36.3%	$7,926
Town Of Turkey	355	107	30.1%	1	0.3%	$11	105	29.6%	$29,041	1	0.3%	$81	107	30.1%	$29,133
Subtotal Sampson	**45,197**	**21,487**	**47.5%**	**6,706**	**14.8%**	**$12,327**	**14,118**	**31.2%**	**$202,128**	**654**	**1.4%**	**$57,801**	**21,478**	**47.5%**	**$272,257**
TOTAL PLAN	**82,672**	**27,701**	**33.5%**	**11,071**	**13.4%**	**$29,133**	**15,760**	**19.1%**	**$268,689**	**1,140**	**1.4%**	**$87,399**	**27,971**	**33.8%**	**$385,219**

Source: GIS Analysis

Table 6-16: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$501,629	10,010	36.6%	$1,034,902	331	1.2%	$269,492	27,381	100%	$1,806,023
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$29,245	159	14.7%	$72,999	47	4.3%	$50,318	1,081	100%	$152,562
Town Of Calypso	570	567	99.5%	402	70.5%	$17,456	146	25.6%	$12,754	21	3.7%	$8,175	569	99.8%	$38,385
Town Of Faison	827	747	90.3%	658	79.6%	$39,782	129	15.6%	$141,820	38	4.6%	$28,855	825	99.8%	$210,457
Town Of Greenevers	297	293	98.7%	267	89.9%	$9,988	21	7.1%	$4,393	9	3%	$5,295	297	100%	$19,676
Town Of Harrells	197	197	100%	121	61.4%	$5,629	63	32%	$20,227	13	6.6%	$10,718	197	100%	$36,574
Town Of Kenansville	548	463	84.5%	390	71.2%	$15,406	66	12%	$59,282	92	16.8%	$88,036	548	100%	$162,723
Town Of Magnolia	729	724	99.3%	621	85.2%	$22,752	65	8.9%	$9,076	43	5.9%	$16,870	729	100%	$48,698
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$47,923	167	14.2%	$78,059	30	2.5%	$18,274	1,177	100%	$144,256
Town Of Teachey	169	162	95.9%	148	87.6%	$6,755	8	4.7%	$2,920	13	7.7%	$4,436	169	100%	$14,112
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$161,772	380	14.2%	$289,175	95	3.6%	$87,984	2,667	100%	$538,931
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$108,249	213	11.6%	$153,915	68	3.7%	$91,934	1,832	100%	$354,099
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$966,586**	**11,427**	**30.5%**	**$1,879,522**	**800**	**2.1%**	**$680,387**	**37,472**	**100%**	**$3,526,496**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$240,964	1,034	19.3%	$1,085,494	177	3.3%	$241,569	5,362	99.9%	$1,568,027
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$1,026,665	12,645	35.2%	$1,628,526	415	1.2%	$518,490	35,937	100%	$3,173,680
Town Of Autryville	144	144	100%	122	84.7%	$8,421	18	12.5%	$8,193	4	2.8%	$4,543	144	100%	$21,157
Town Of Garland	701	701	100%	559	79.7%	$31,599	116	16.5%	$41,718	26	3.7%	$27,834	701	100%	$101,151
Town Of Newton Grove	819	819	100%	596	72.8%	$21,915	207	25.3%	$66,569	16	2%	$14,520	819	100%	$103,004
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$54,857	213	19.6%	$269,710	42	3.9%	$52,486	1,083	99.8%	$377,053
Town Of Salemburg	787	787	100%	622	79%	$39,139	122	15.5%	$31,461	43	5.5%	$89,017	787	100%	$159,617
Town Of Turkey	355	355	100%	199	56.1%	$6,943	148	41.7%	$221,453	8	2.3%	$4,017	355	100%	$232,413

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 Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$1,430,503**	**14,503**	**32.1%**	**$3,353,124**	**731**	**1.6%**	**$952,476**	**45,188**	**100%**	**$5,736,102**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$2,397,089**	**25,930**	**31.4%**	**$5,232,646**	**1,531**	**1.9%**	**$1,632,863**	**82,660**	**100%**	**$9,262,598**

Source: GIS Analysis

Table 6-17: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$1,873,264	10,010	36.6%	$3,162,865	331	1.2%	$839,563	27,381	100%	$5,875,692
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$114,408	159	14.7%	$214,490	47	4.3%	$154,668	1,081	100%	$483,566
Town Of Calypso	570	567	99.5%	402	70.5%	$57,047	146	25.6%	$37,236	21	3.7%	$24,546	569	99.8%	$118,830
Town Of Faison	827	747	90.3%	658	79.6%	$132,507	129	15.6%	$341,270	38	4.6%	$83,344	825	99.8%	$557,122
Town Of Greenevers	297	293	98.7%	267	89.9%	$37,991	21	7.1%	$12,665	9	3%	$14,949	297	100%	$65,604
Town Of Harrells	197	197	100%	121	61.4%	$21,558	63	32%	$57,817	13	6.6%	$31,059	197	100%	$110,433
Town Of Kenansville	548	463	84.5%	390	71.2%	$59,542	66	12%	$165,344	92	16.8%	$264,230	548	100%	$489,116
Town Of Magnolia	729	724	99.3%	621	85.2%	$81,547	65	8.9%	$27,242	43	5.9%	$51,512	729	100%	$160,300
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$180,063	167	14.2%	$239,316	30	2.5%	$52,289	1,177	100%	$471,669
Town Of Teachey	169	162	95.9%	148	87.6%	$26,926	8	4.7%	$9,071	13	7.7%	$14,039	169	100%	$50,036
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$620,700	380	14.2%	$887,247	95	3.6%	$252,660	2,667	100%	$1,760,607
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$354,876	213	11.6%	$436,925	68	3.7%	$255,084	1,832	100%	$1,046,885
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$3,560,429**	**11,427**	**30.5%**	**$5,591,488**	**800**	**2.1%**	**$2,037,943**	**37,472**	**100%**	**$11,189,860**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$887,057	1,034	19.3%	$2,873,858	177	3.3%	$672,483	5,362	99.9%	$4,433,397
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$3,675,935	12,645	35.2%	$4,349,055	415	1.2%	$1,376,374	35,937	100%	$9,401,364
Town Of Autryville	144	144	100%	122	84.7%	$26,956	18	12.5%	$18,874	4	2.8%	$13,010	144	100%	$58,840
Town Of Garland	701	701	100%	559	79.7%	$110,447	116	16.5%	$124,256	26	3.7%	$80,579	701	100%	$315,282

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 Newton Grove	819	819	100%	596	72.8%	$82,405	207	25.3%	$179,272	16	2%	$37,673	819	100%	$299,351
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$188,723	213	19.6%	$717,076	42	3.9%	$147,654	1,083	99.8%	$1,053,453
Town Of Salemburg	787	787	100%	622	79%	$133,455	122	15.5%	$87,098	43	5.5%	$260,118	787	100%	$480,671
Town Of Turkey	355	355	100%	199	56.1%	$29,229	148	41.7%	$475,610	8	2.3%	$12,561	355	100%	$517,400
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$5,134,207**	**14,503**	**32.1%**	**$8,825,099**	**731**	**1.6%**	**$2,600,452**	**45,188**	**100%**	**$16,559,758**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$8,694,636**	**25,930**	**31.4%**	**$14,416,587**	**1,531**	**1.9%**	**$4,638,395**	**82,660**	**100%**	**$27,749,618**

Source: GIS Analysis

Table 6-18: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$3,971,157	10,010	36.6%	$5,770,052	331	1.2%	$1,640,615	27,381	100%	$11,381,824
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$248,153	159	14.7%	$399,430	47	4.3%	$285,015	1,081	100%	$932,598
Town Of Calypso	570	567	99.5%	402	70.5%	$119,175	146	25.6%	$70,820	21	3.7%	$49,828	569	99.8%	$239,823
Town Of Faison	827	747	90.3%	658	79.6%	$297,128	129	15.6%	$607,416	38	4.6%	$168,398	825	99.8%	$1,072,942
Town Of Greenevers	297	293	98.7%	267	89.9%	$83,849	21	7.1%	$23,912	9	3%	$32,869	297	100%	$140,631
Town Of Harrells	197	197	100%	121	61.4%	$40,797	63	32%	$94,117	13	6.6%	$54,075	197	100%	$188,990
Town Of Kenansville	548	463	84.5%	390	71.2%	$133,396	66	12%	$316,692	92	16.8%	$513,280	548	100%	$963,369
Town Of Magnolia	729	724	99.3%	621	85.2%	$169,431	65	8.9%	$51,949	43	5.9%	$102,734	729	100%	$324,114
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$373,447	167	14.2%	$450,531	30	2.5%	$103,775	1,177	100%	$927,754
Town Of Teachey	169	162	95.9%	148	87.6%	$55,737	8	4.7%	$18,148	13	7.7%	$27,779	169	100%	$101,663
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$1,268,527	380	14.2%	$1,671,017	95	3.6%	$481,201	2,667	100%	$3,420,744
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$771,579	213	11.6%	$828,419	68	3.7%	$481,852	1,832	100%	$2,081,849
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$7,532,376**	**11,427**	**30.5%**	**$10,302,503**	**800**	**2.1%**	**$3,941,421**	**37,472**	**100%**	**$21,776,301**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$1,738,705	1,034	19.3%	$4,942,610	177	3.3%	$1,194,451	5,362	99.9%	$7,875,766

Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$7,019,316	12,645	35.2%	$7,020,434	415	1.2%	$2,405,136	35,937	100%	$16,444,886
Town Of Autryville	144	144	100%	122	84.7%	$45,973	18	12.5%	$27,984	4	2.8%	$21,061	144	100%	$95,017
Town Of Garland	701	701	100%	559	79.7%	$196,966	116	16.5%	$209,773	26	3.7%	$141,083	701	100%	$547,822
Town Of Newton Grove	819	819	100%	596	72.8%	$176,945	207	25.3%	$341,681	16	2%	$74,982	819	100%	$593,609
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$346,491	213	19.6%	$1,244,957	42	3.9%	$255,732	1,083	99.8%	$1,847,180
Town Of Salemburg	787	787	100%	622	79%	$252,763	122	15.5%	$154,079	43	5.5%	$474,663	787	100%	$881,505
Town Of Turkey	355	355	100%	199	56.1%	$59,910	148	41.7%	$787,458	8	2.3%	$24,458	355	100%	$871,826
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$9,837,069**	**14,503**	**32.1%**	**$14,728,976**	**731**	**1.6%**	**$4,591,566**	**45,188**	**100%**	**$29,157,611**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$17,369,445**	**25,930**	**31.4%**	**$25,031,479**	**1,531**	**1.9%**	**$8,532,987**	**82,660**	**100%**	**$50,933,912**

Source: GIS Analysis

Table 6-19: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$8,536,968	10,010	36.6%	$10,807,173	331	1.2%	$3,291,513	27,381	100%	$22,635,655
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$519,133	159	14.7%	$740,824	47	4.3%	$518,949	1,081	100%	$1,778,906
Town Of Calypso	570	567	99.5%	402	70.5%	$248,931	146	25.6%	$133,613	21	3.7%	$105,866	569	99.8%	$488,409
Town Of Faison	827	747	90.3%	658	79.6%	$701,050	129	15.6%	$1,161,131	38	4.6%	$338,675	825	99.8%	$2,200,855
Town Of Greenevers	297	293	98.7%	267	89.9%	$192,688	21	7.1%	$45,008	9	3%	$82,720	297	100%	$320,416
Town Of Harrells	197	197	100%	121	61.4%	$94,474	63	32%	$169,136	13	6.6%	$110,119	197	100%	$373,730
Town Of Kenansville	548	463	84.5%	390	71.2%	$290,833	66	12%	$626,207	92	16.8%	$1,044,359	548	100%	$1,961,398
Town Of Magnolia	729	724	99.3%	621	85.2%	$378,788	65	8.9%	$106,832	43	5.9%	$233,449	729	100%	$719,068
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$867,226	167	14.2%	$862,910	30	2.5%	$251,702	1,177	100%	$1,981,838
Town Of Teachey	169	162	95.9%	148	87.6%	$130,562	8	4.7%	$40,209	13	7.7%	$62,293	169	100%	$233,064
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$2,929,539	380	14.2%	$3,470,363	95	3.6%	$1,068,919	2,667	100%	$7,468,820
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$1,829,795	213	11.6%	$1,641,844	68	3.7%	$925,341	1,832	100%	$4,396,980

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 Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$16,719,987**	**11,427**	**30.5%**	**$19,805,250**	**800**	**2.1%**	**$8,033,905**	**37,472**	**100%**	**$44,559,139**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$4,004,885	1,034	19.3%	$10,139,628	177	3.3%	$2,519,047	5,362	99.9%	$16,663,561
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$16,061,790	12,645	35.2%	$13,227,997	415	1.2%	$4,817,602	35,937	100%	$34,107,389
Town Of Autryville	144	144	100%	122	84.7%	$110,271	18	12.5%	$53,966	4	2.8%	$45,186	144	100%	$209,424
Town Of Garland	701	701	100%	559	79.7%	$490,016	116	16.5%	$447,895	26	3.7%	$316,087	701	100%	$1,253,998
Town Of Newton Grove	819	819	100%	596	72.8%	$390,096	207	25.3%	$683,307	16	2%	$156,139	819	100%	$1,229,542
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$843,229	213	19.6%	$2,466,961	42	3.9%	$562,370	1,083	99.8%	$3,872,560
Town Of Salemburg	787	787	100%	622	79%	$623,649	122	15.5%	$347,616	43	5.5%	$1,089,812	787	100%	$2,061,077
Town Of Turkey	355	355	100%	199	56.1%	$132,292	148	41.7%	$1,303,868	8	2.3%	$48,534	355	100%	$1,484,694
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$22,656,228**	**14,503**	**32.1%**	**$28,671,238**	**731**	**1.6%**	**$9,554,777**	**45,188**	**100%**	**$60,882,245**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$39,376,215**	**25,930**	**31.4%**	**$48,476,488**	**1,531**	**1.9%**	**$17,588,682**	**82,660**	**100%**	**$105,441,384**

Source: GIS Analysis

Table 6-20: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$14,607,319	10,010	36.6%	$17,039,109	331	1.2%	$5,325,684	27,381	100%	$36,972,111
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$945,252	159	14.7%	$1,234,576	47	4.3%	$898,399	1,081	100%	$3,078,226
Town Of Calypso	570	567	99.5%	402	70.5%	$443,292	146	25.6%	$210,559	21	3.7%	$174,264	569	99.8%	$828,115
Town Of Faison	827	747	90.3%	658	79.6%	$1,190,060	129	15.6%	$1,772,723	38	4.6%	$542,343	825	99.8%	$3,505,126
Town Of Greenevers	297	293	98.7%	267	89.9%	$318,156	21	7.1%	$67,971	9	3%	$133,342	297	100%	$519,470
Town Of Harrells	197	197	100%	121	61.4%	$134,383	63	32%	$234,836	13	6.6%	$176,488	197	100%	$545,708
Town Of Kenansville	548	463	84.5%	390	71.2%	$478,010	66	12%	$960,520	92	16.8%	$1,642,927	548	100%	$3,081,458
Town Of Magnolia	729	724	99.3%	621	85.2%	$605,209	65	8.9%	$163,543	43	5.9%	$368,441	729	100%	$1,137,193

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 Rose Hill	1,177	1,172	99.6%	980	83.3%	$1,375,641	167	14.2%	$1,227,757	30	2.5%	$389,804	1,177	100%	$2,993,201
Town Of Teachey	169	162	95.9%	148	87.6%	$202,308	8	4.7%	$58,770	13	7.7%	$92,452	169	100%	$353,531
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$4,531,357	380	14.2%	$5,216,845	95	3.6%	$1,627,238	2,667	100%	$11,375,440
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$3,081,814	213	11.6%	$2,546,457	68	3.7%	$1,407,872	1,832	100%	$7,036,143
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$27,912,801**	**11,427**	**30.5%**	**$30,733,666**	**800**	**2.1%**	**$12,779,254**	**37,472**	**100%**	**$71,425,722**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$6,034,400	1,034	19.3%	$15,090,833	177	3.3%	$3,833,797	5,362	99.9%	$24,959,030
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$24,159,064	12,645	35.2%	$19,467,365	415	1.2%	$7,410,334	35,937	100%	$51,036,764
Town Of Autryville	144	144	100%	122	84.7%	$164,888	18	12.5%	$83,047	4	2.8%	$65,178	144	100%	$313,113
Town Of Garland	701	701	100%	559	79.7%	$744,145	116	16.5%	$651,741	26	3.7%	$487,097	701	100%	$1,882,983
Town Of Newton Grove	819	819	100%	596	72.8%	$649,983	207	25.3%	$1,095,267	16	2%	$249,580	819	100%	$1,994,829
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$1,232,824	213	19.6%	$3,912,558	42	3.9%	$879,331	1,083	99.8%	$6,024,713
Town Of Salemburg	787	787	100%	622	79%	$915,272	122	15.5%	$525,120	43	5.5%	$1,770,137	787	100%	$3,210,529
Town Of Turkey	355	355	100%	199	56.1%	$202,790	148	41.7%	$1,830,969	8	2.3%	$68,087	355	100%	$2,101,846
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$34,103,366**	**14,503**	**32.1%**	**$42,656,900**	**731**	**1.6%**	**$14,763,541**	**45,188**	**100%**	**$91,523,807**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$62,016,167**	**25,930**	**31.4%**	**$73,390,566**	**1,531**	**1.9%**	**$27,542,795**	**82,660**	**100%**	**$162,949,529**

Source: GIS Analysis

Table 6-21: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$19,625,478	10,010	36.6%	$22,967,499	331	1.2%	$7,294,684	27,381	100%	$49,887,661
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$1,284,979	159	14.7%	$1,650,072	47	4.3%	$1,239,051	1,081	100%	$4,174,102
Town Of Calypso	570	567	99.5%	402	70.5%	$591,811	146	25.6%	$280,226	21	3.7%	$235,752	569	99.8%	$1,107,789
Town Of Faison	827	747	90.3%	658	79.6%	$1,579,338	129	15.6%	$2,346,132	38	4.6%	$714,906	825	99.8%	$4,640,375
Town Of Greenevers	297	293	98.7%	267	89.9%	$414,102	21	7.1%	$88,215	9	3%	$180,290	297	100%	$682,607

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 Harrells	197	197	100%	121	61.4%	$193,139	63	32%	$323,068	13	6.6%	$261,367	197	100%	$777,574
Town Of Kenansville	548	463	84.5%	390	71.2%	$613,087	66	12%	$1,306,037	92	16.8%	$2,227,065	548	100%	$4,146,189
Town Of Magnolia	729	724	99.3%	621	85.2%	$787,612	65	8.9%	$218,388	43	5.9%	$501,052	729	100%	$1,507,052
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$1,846,350	167	14.2%	$1,597,616	30	2.5%	$533,368	1,177	100%	$3,977,334
Town Of Teachey	169	162	95.9%	148	87.6%	$273,855	8	4.7%	$79,060	13	7.7%	$126,471	169	100%	$479,387
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$6,208,309	380	14.2%	$7,202,625	95	3.6%	$2,247,618	2,667	100%	$15,658,552
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$4,089,593	213	11.6%	$3,282,317	68	3.7%	$1,833,985	1,832	100%	$9,205,895
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$37,507,653**	**11,427**	**30.5%**	**$41,341,255**	**800**	**2.1%**	**$17,395,609**	**37,472**	**100%**	**$96,244,517**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$8,304,735	1,034	19.3%	$21,155,555	177	3.3%	$5,445,419	5,362	99.9%	$34,905,709
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$32,865,476	12,645	35.2%	$27,411,842	415	1.2%	$10,398,738	35,937	100%	$70,676,057
Town Of Autryville	144	144	100%	122	84.7%	$229,977	18	12.5%	$130,107	4	2.8%	$90,188	144	100%	$450,272
Town Of Garland	701	701	100%	559	79.7%	$1,015,700	116	16.5%	$884,232	26	3.7%	$644,430	701	100%	$2,544,362
Town Of Newton Grove	819	819	100%	596	72.8%	$833,990	207	25.3%	$1,442,887	16	2%	$321,444	819	100%	$2,598,321
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$1,746,864	213	19.6%	$5,352,980	42	3.9%	$1,276,310	1,083	99.8%	$8,376,154
Town Of Salemburg	787	787	100%	622	79%	$1,299,329	122	15.5%	$755,260	43	5.5%	$2,732,967	787	100%	$4,787,556
Town Of Turkey	355	355	100%	199	56.1%	$262,486	148	41.7%	$2,367,104	8	2.3%	$84,351	355	100%	$2,713,941
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$46,558,557**	**14,503**	**32.1%**	**$59,499,967**	**731**	**1.6%**	**$20,993,847**	**45,188**	**100%**	**$127,052,372**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$84,066,210**	**25,930**	**31.4%**	**$100,841,222**	**1,531**	**1.9%**	**$38,389,456**	**82,660**	**100%**	**$223,296,889**

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 6-22: Critical Facilities Exposed to the Earthquake - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$27
	500 Year	3	$984
	750 Year	3	$3,156
	1000 Year	3	$6,138
	1500 Year	3	$12,002
	2000 Year	3	$21,820
	2500 Year	3	$29,242
Chemical	500 Year	1	$63
	750 Year	1	$201
	1000 Year	1	$351
	1500 Year	1	$543
	2000 Year	1	$822
	2500 Year	1	$1,038
Commercial Facilities	250 Year	314	$15,009
	500 Year	568	$336,225
	750 Year	568	$1,040,336
	1000 Year	568	$1,999,832
	1500 Year	568	$3,978,715
	2000 Year	568	$6,193,784
	2500 Year	568	$8,345,602
Critical Manufacturing	250 Year	185	$8,360
	500 Year	212	$113,324
	750 Year	212	$334,312
	1000 Year	212	$575,408

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	212	$1,017,508
	2000 Year	212	$1,456,351
	2500 Year	212	$1,918,130
Defense Industrial Base	500 Year	1	$127
	750 Year	1	$416
	1000 Year	1	$800
	1500 Year	1	$1,427
	2000 Year	1	$2,389
	2500 Year	1	$3,215
Emergency Services	250 Year	14	$695
	500 Year	15	$13,236
	750 Year	15	$39,318
	1000 Year	15	$73,832
	1500 Year	15	$134,534
	2000 Year	15	$201,317
	2500 Year	15	$267,790
Energy	500 Year	4	$42
	750 Year	4	$130
	1000 Year	4	$232
	1500 Year	4	$374
	2000 Year	4	$551
	2500 Year	4	$685
Food and Agriculture	250 Year	444	$984
	500 Year	9,281	$587,909
	750 Year	9,281	$1,823,222
	1000 Year	9,281	$3,259,213
	1500 Year	9,281	$5,822,950

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	9,281	$9,080,274
	2500 Year	9,281	$12,093,133
Government Facilities	250 Year	59	$4,720
	500 Year	109	$107,401
	750 Year	109	$316,760
	1000 Year	109	$616,824
	1500 Year	109	$1,283,568
	2000 Year	109	$2,167,075
	2500 Year	109	$3,093,073
Healthcare and Public Health	250 Year	6	$216
	500 Year	7	$4,730
	750 Year	7	$15,227
	1000 Year	7	$29,577
	1500 Year	7	$61,567
	2000 Year	7	$91,661
	2500 Year	7	$127,487
Transportation Systems	250 Year	92	$5,011
	500 Year	145	$137,506
	750 Year	145	$419,274
	1000 Year	145	$828,266
	1500 Year	145	$1,744,259
	2000 Year	145	$3,081,642
	2500 Year	145	$4,289,594
All Categories	**250 Year**	**1,116**	**$35,022**
	500 Year	**10,346**	**$1,301,547**
	750 Year	**10,346**	**$3,992,352**
	1000 Year	**10,346**	**$7,390,473**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	**10,346**	**$14,057,447**
	2000 Year	**10,346**	**$22,297,686**
	2500 Year	**10,346**	**$30,168,989**

Source: GIS Analysis

Table 6-23: Critical Facilities Exposed to the Earthquake - Town Of Beulaville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$5
	500 Year	3	$793
	750 Year	3	$2,730
	1000 Year	3	$4,888
	1500 Year	3	$8,244
	2000 Year	3	$12,890
	2500 Year	3	$16,555
Commercial Facilities	250 Year	45	$2,141
	500 Year	89	$50,502
	750 Year	89	$147,430
	1000 Year	89	$264,249
	1500 Year	89	$476,858
	2000 Year	89	$783,771
	2500 Year	89	$1,052,424
Critical Manufacturing	250 Year	9	$1,747
	500 Year	10	$15,964
	750 Year	10	$42,876
	1000 Year	10	$77,789
	1500 Year	10	$151,385
	2000 Year	10	$264,627
	2500 Year	10	$353,843

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	250 Year	1	$357
	500 Year	1	$2,871
	750 Year	1	$6,121
	1000 Year	1	$10,398
	1500 Year	1	$18,317
	2000 Year	1	$23,628
	2500 Year	1	$31,805
Emergency Services	250 Year	2	$87
	500 Year	3	$1,139
	750 Year	3	$3,914
	1000 Year	3	$7,683
	1500 Year	3	$13,223
	2000 Year	3	$20,120
	2500 Year	3	$25,624
Energy	250 Year	1	$4
	500 Year	1	$72
	750 Year	1	$207
	1000 Year	1	$414
	1500 Year	1	$843
	2000 Year	1	$1,166
	2500 Year	1	$1,704
Food and Agriculture	500 Year	39	$1,126
	750 Year	39	$3,725
	1000 Year	39	$7,078
	1500 Year	39	$12,367
	2000 Year	39	$20,570
	2500 Year	39	$27,591

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	250 Year	7	$110
	500 Year	19	$22,697
	750 Year	19	$77,273
	1000 Year	19	$147,346
	1500 Year	19	$271,231
	2000 Year	19	$477,135
	2500 Year	19	$662,475
Healthcare and Public Health	250 Year	7	$554
	500 Year	10	$13,412
	750 Year	10	$38,765
	1000 Year	10	$74,437
	1500 Year	10	$143,663
	2000 Year	10	$261,706
	2500 Year	10	$362,523
Transportation Systems	250 Year	10	$353
	500 Year	28	$10,216
	750 Year	28	$35,388
	1000 Year	28	$69,457
	1500 Year	28	$120,676
	2000 Year	28	$186,479
	2500 Year	28	$235,120
All Categories	**250 Year**	**83**	**$5,358**
	500 Year	**203**	**$118,792**
	750 Year	**203**	**$358,429**
	1000 Year	**203**	**$663,739**
	1500 Year	**203**	**$1,216,807**
	2000 Year	**203**	**$2,052,092**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	**203**	**$2,769,664**

Source: GIS Analysis

Table 6-24: Critical Facilities Exposed to the Earthquake - Town Of Calypso

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	24	$544
	500 Year	38	$13,072
	750 Year	38	$38,452
	1000 Year	38	$77,302
	1500 Year	38	$162,903
	2000 Year	38	$267,735
	2500 Year	38	$365,145
Critical Manufacturing	250 Year	3	$119
	500 Year	4	$2,184
	750 Year	4	$6,565
	1000 Year	4	$11,998
	1500 Year	4	$20,791
	2000 Year	4	$29,190
	2500 Year	4	$36,264
Emergency Services	500 Year	1	$834
	750 Year	1	$2,542
	1000 Year	1	$4,168
	1500 Year	1	$6,603
	2000 Year	1	$9,751
	2500 Year	1	$12,260
Energy	250 Year	1	$10
	500 Year	2	$195
	750 Year	2	$546

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	2	$994
	1500 Year	2	$1,768
	2000 Year	2	$2,699
	2500 Year	2	$3,588
Food and Agriculture	500 Year	116	$3,431
	750 Year	116	$9,990
	1000 Year	116	$18,783
	1500 Year	116	$33,862
	2000 Year	116	$53,860
	2500 Year	116	$71,022
Government Facilities	250 Year	3	$19
	500 Year	6	$591
	750 Year	6	$1,736
	1000 Year	6	$3,468
	1500 Year	6	$6,743
	2000 Year	6	$10,998
	2500 Year	6	$14,449
Transportation Systems	250 Year	1	$81
	500 Year	1	$701
	750 Year	1	$2,131
	1000 Year	1	$4,249
	1500 Year	1	$7,377
	2000 Year	1	$11,350
	2500 Year	1	$14,299
All Categories	**250 Year**	**32**	**$773**
	500 Year	**168**	**$21,008**
	750 Year	**168**	**$61,962**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	**168**	**$120,962**
	1500 Year	**168**	**$240,047**
	2000 Year	**168**	**$385,583**
	2500 Year	**168**	**$517,027**

Source: GIS Analysis

Table 6-25: Critical Facilities Exposed to the Earthquake - Town Of Faison

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	500 Year	3	$814
	750 Year	3	$2,491
	1000 Year	3	$4,696
	1500 Year	3	$8,638
	2000 Year	3	$13,366
	2500 Year	3	$17,401
Commercial Facilities	250 Year	35	$3,717
	500 Year	48	$51,733
	750 Year	48	$141,348
	1000 Year	48	$272,085
	1500 Year	48	$508,499
	2000 Year	48	$760,776
	2500 Year	48	$989,786
Critical Manufacturing	250 Year	6	$9,395
	500 Year	7	$95,402
	750 Year	7	$217,995
	1000 Year	7	$375,828
	1500 Year	7	$727,681
	2000 Year	7	$1,128,233
	2500 Year	7	$1,499,206

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	500 Year	1	$550
	750 Year	1	$1,624
	1000 Year	1	$2,914
	1500 Year	1	$4,857
	2000 Year	1	$7,244
	2500 Year	1	$9,058
Energy	250 Year	2	$12,433
	500 Year	2	$100,811
	750 Year	2	$228,033
	1000 Year	2	$395,789
	1500 Year	2	$710,607
	2000 Year	2	$979,884
	2500 Year	2	$1,329,390
Food and Agriculture	250 Year	15	$5
	500 Year	82	$4,324
	750 Year	82	$12,318
	1000 Year	82	$21,569
	1500 Year	82	$36,774
	2000 Year	82	$54,651
	2500 Year	82	$68,522
Government Facilities	250 Year	10	$494
	500 Year	14	$8,838
	750 Year	14	$23,995
	1000 Year	14	$48,485
	1500 Year	14	$111,390
	2000 Year	14	$187,454
	2500 Year	14	$260,581

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	250 Year	2	$372
	500 Year	2	$3,478
	750 Year	2	$9,888
	1000 Year	2	$19,041
	1500 Year	2	$31,344
	2000 Year	2	$43,278
	2500 Year	2	$52,262
Transportation Systems	250 Year	6	$320
	500 Year	8	$4,695
	750 Year	8	$12,913
	1000 Year	8	$27,348
	1500 Year	8	$62,084
	2000 Year	8	$103,262
	2500 Year	8	$138,829
Water	250 Year	1	$12,420
	500 Year	1	$100,680
	750 Year	1	$227,700
	1000 Year	1	$395,100
	1500 Year	1	$708,960
	2000 Year	1	$976,680
	2500 Year	1	$1,324,800
All Categories	**500 Year**	**168**	**$371,325**
	750 Year	**168**	**$878,305**
	1000 Year	**168**	**$1,562,855**
	1500 Year	**168**	**$2,910,834**
	2000 Year	**168**	**$4,254,828**
	2500 Year	**168**	**$5,689,835**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	250 Year	**77**	**$39,156**

Source: GIS Analysis

Table 6-26: Critical Facilities Exposed to the Earthquake - Town Of Greenevers

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	9	$292
	500 Year	11	$5,390
	750 Year	11	$16,075
	1000 Year	11	$34,415
	1500 Year	11	$77,829
	2000 Year	11	$123,448
	2500 Year	11	$164,628
Critical Manufacturing	250 Year	3	$136
	500 Year	3	$1,808
	750 Year	3	$4,774
	1000 Year	3	$7,925
	1500 Year	3	$13,335
	2000 Year	3	$19,471
	2500 Year	3	$24,979
Emergency Services	250 Year	1	$47
	500 Year	1	$1,158
	750 Year	1	$3,042
	1000 Year	1	$6,678
	1500 Year	1	$17,793
	2000 Year	1	$28,322
	2500 Year	1	$38,275
Food and Agriculture	500 Year	13	$478
	750 Year	13	$1,478

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	13	$2,837
	1500 Year	13	$5,477
	2000 Year	13	$8,654
	2500 Year	13	$11,468
Government Facilities	250 Year	2	$35
	500 Year	2	$854
	750 Year	2	$2,244
	1000 Year	2	$4,926
	1500 Year	2	$13,294
	2000 Year	2	$21,419
	2500 Year	2	$29,156
All Categories	**250 Year**	**15**	**$510**
	500 Year	**30**	**$9,688**
	750 Year	**30**	**$27,613**
	1000 Year	**30**	**$56,781**
	1500 Year	**30**	**$127,728**
	2000 Year	**30**	**$201,314**
	2500 Year	**30**	**$268,506**

Source: GIS Analysis

Table 6-27: Critical Facilities Exposed to the Earthquake - Town Of Harrells

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$15
	500 Year	1	$175
	750 Year	1	$529
	1000 Year	1	$864
	1500 Year	1	$1,459
	2000 Year	1	$1,900

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	1	$2,706
Commercial Facilities	250 Year	13	$424
	500 Year	14	$7,509
	750 Year	14	$20,828
	1000 Year	14	$35,787
	1500 Year	14	$74,606
	2000 Year	14	$114,275
	2500 Year	14	$154,772
Critical Manufacturing	250 Year	1	$697
	500 Year	1	$10,636
	750 Year	1	$31,525
	1000 Year	1	$50,743
	1500 Year	1	$80,758
	2000 Year	1	$100,880
	2500 Year	1	$134,940
Emergency Services	250 Year	2	$84
	500 Year	2	$1,342
	750 Year	2	$3,227
	1000 Year	2	$5,889
	1500 Year	2	$15,278
	2000 Year	2	$25,378
	2500 Year	2	$33,344
Food and Agriculture	250 Year	48	$34
	500 Year	48	$2,996
	750 Year	48	$8,323
	1000 Year	48	$12,400
	1500 Year	48	$23,165

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	48	$32,467
	2500 Year	48	$50,283
Government Facilities	250 Year	4	$310
	500 Year	8	$7,713
	750 Year	8	$22,567
	1000 Year	8	$39,354
	1500 Year	8	$77,613
	2000 Year	8	$127,874
	2500 Year	8	$195,718
Healthcare and Public Health	500 Year	1	$303
	750 Year	1	$878
	1000 Year	1	$1,305
	1500 Year	1	$2,413
	2000 Year	1	$3,423
	2500 Year	1	$5,784
Transportation Systems	500 Year	1	$270
	750 Year	1	$999
	1000 Year	1	$1,851
	1500 Year	1	$3,964
	2000 Year	1	$5,128
	2500 Year	1	$6,889
All Categories	**250 Year**	**69**	**$1,564**
	500 Year	**76**	**$30,944**
	750 Year	**76**	**$88,876**
	1000 Year	**76**	**$148,193**
	1500 Year	**76**	**$279,256**
	2000 Year	**76**	**$411,325**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	**76**	**$584,436**

Source: GIS Analysis

Table 6-28: Critical Facilities Exposed to the Earthquake - Town Of Kenansville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$97
	500 Year	6	$4,968
	750 Year	6	$14,444
	1000 Year	6	$26,778
	1500 Year	6	$49,364
	2000 Year	6	$77,566
	2500 Year	6	$100,925
Commercial Facilities	250 Year	37	$1,386
	500 Year	49	$36,224
	750 Year	49	$104,972
	1000 Year	49	$195,055
	1500 Year	49	$380,985
	2000 Year	49	$584,775
	2500 Year	49	$783,401
Critical Manufacturing	250 Year	2	$99
	500 Year	2	$975
	750 Year	2	$2,264
	1000 Year	2	$4,044
	1500 Year	2	$7,695
	2000 Year	2	$11,504
	2500 Year	2	$15,748
Emergency Services	250 Year	3	$418
	500 Year	4	$6,686

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	4	$20,035
	1000 Year	4	$40,445
	1500 Year	4	$80,484
	2000 Year	4	$119,665
	2500 Year	4	$153,713
Energy	250 Year	1	$11
	500 Year	2	$641
	750 Year	2	$1,787
	1000 Year	2	$2,967
	1500 Year	2	$4,836
	2000 Year	2	$7,049
	2500 Year	2	$8,740
Government Facilities	250 Year	44	$2,367
	500 Year	67	$59,531
	750 Year	67	$180,267
	1000 Year	67	$356,614
	1500 Year	67	$733,159
	2000 Year	67	$1,175,524
	2500 Year	67	$1,599,647
Healthcare and Public Health	250 Year	9	$1,857
	500 Year	10	$30,360
	750 Year	10	$84,016
	1000 Year	10	$162,938
	1500 Year	10	$331,099
	2000 Year	10	$489,233
	2500 Year	10	$685,925
Transportation Systems	250 Year	11	$174

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	12	$6,222
	750 Year	12	$17,150
	1000 Year	12	$31,936
	1500 Year	12	$62,187
	2000 Year	12	$101,711
	2500 Year	12	$133,811
All Categories	**250 Year**	**110**	**$6,409**
	500 Year	**152**	**$145,607**
	750 Year	**152**	**$424,935**
	1000 Year	**152**	**$820,777**
	1500 Year	**152**	**$1,649,809**
	2000 Year	**152**	**$2,567,027**
	2500 Year	**152**	**$3,481,910**

Source: GIS Analysis

Table 6-29 Critical Facilities Exposed to the Earthquake - Town Of Magnolia

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	17	$355
	500 Year	28	$9,813
	750 Year	28	$30,412
	1000 Year	28	$62,324
	1500 Year	28	$142,056
	2000 Year	28	$222,605
	2500 Year	28	$297,973
Critical Manufacturing	250 Year	3	$74
	500 Year	3	$1,028
	750 Year	3	$3,058
	1000 Year	3	$5,625

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	3	$9,418
	2000 Year	3	$12,864
	2500 Year	3	$15,961
Emergency Services	250 Year	2	$59
	500 Year	2	$1,467
	750 Year	2	$3,757
	1000 Year	2	$7,591
	1500 Year	2	$19,144
	2000 Year	2	$31,509
	2500 Year	2	$44,632
Energy	250 Year	1	$11
	500 Year	3	$471
	750 Year	3	$1,249
	1000 Year	3	$2,100
	1500 Year	3	$3,831
	2000 Year	3	$5,785
	2500 Year	3	$7,795
Food and Agriculture	500 Year	40	$2,387
	750 Year	40	$7,275
	1000 Year	40	$13,038
	1500 Year	40	$25,174
	2000 Year	40	$39,080
	2500 Year	40	$52,655
Government Facilities	250 Year	9	$225
	500 Year	25	$8,599
	750 Year	25	$26,329
	1000 Year	25	$50,808

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	25	$112,443
	2000 Year	25	$178,190
	2500 Year	25	$245,216
Healthcare and Public Health	250 Year	3	$75
	500 Year	6	$1,696
	750 Year	6	$5,046
	1000 Year	6	$10,010
	1500 Year	6	$21,749
	2000 Year	6	$32,857
	2500 Year	6	$43,308
Transportation Systems	500 Year	1	$485
	750 Year	1	$1,628
	1000 Year	1	$3,187
	1500 Year	1	$6,468
	2000 Year	1	$9,094
	2500 Year	1	$11,900
All Categories	**250 Year**	**35**	**$799**
	500 Year	**108**	**$25,946**
	750 Year	**108**	**$78,754**
	1000 Year	**108**	**$154,683**
	1500 Year	**108**	**$340,283**
	2000 Year	**108**	**$531,984**
	2500 Year	**108**	**$719,440**

Source: GIS Analysis

Table 6-30: Critical Facilities Exposed to the Earthquake - Town Of Rose Hill

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	500 Year	2	$1,273

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	2	$4,217
	1000 Year	2	$7,420
	1500 Year	2	$14,751
	2000 Year	2	$22,482
	2500 Year	2	$32,269
Commercial Facilities	250 Year	38	$908
	500 Year	56	$25,329
	750 Year	56	$76,490
	1000 Year	56	$150,251
	1500 Year	56	$331,859
	2000 Year	56	$499,354
	2500 Year	56	$671,082
Critical Manufacturing	250 Year	20	$1,535
	500 Year	20	$22,526
	750 Year	20	$71,851
	1000 Year	20	$141,884
	1500 Year	20	$284,069
	2000 Year	20	$390,894
	2500 Year	20	$476,274
Emergency Services	250 Year	1	$82
	500 Year	1	$1,727
	750 Year	1	$4,596
	1000 Year	1	$9,933
	1500 Year	1	$27,602
	2000 Year	1	$41,577
	2500 Year	1	$55,260
Food and Agriculture	250 Year	1	$990

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	77	$18,285
	750 Year	77	$54,786
	1000 Year	77	$100,038
	1500 Year	77	$168,322
	2000 Year	77	$229,730
	2500 Year	77	$292,844
Government Facilities	250 Year	14	$299
	500 Year	16	$9,959
	750 Year	16	$28,585
	1000 Year	16	$52,303
	1500 Year	16	$110,320
	2000 Year	16	$170,499
	2500 Year	16	$237,273
Healthcare and Public Health	250 Year	2	$120
	500 Year	4	$3,812
	750 Year	4	$11,775
	1000 Year	4	$21,215
	1500 Year	4	$45,502
	2000 Year	4	$70,224
	2500 Year	4	$102,787
Transportation Systems	250 Year	18	$512
	500 Year	21	$13,423
	750 Year	21	$39,305
	1000 Year	21	$71,262
	1500 Year	21	$132,188
	2000 Year	21	$192,800
	2500 Year	21	$263,194

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**500 Year**	**197**	**$96,334**
	750 Year	**197**	**$291,605**
	1000 Year	**197**	**$554,306**
	1500 Year	**197**	**$1,114,613**
	2000 Year	**197**	**$1,617,560**
	2500 Year	**197**	**$2,130,983**
	250 Year	**94**	**$4,446**

Source: GIS Analysis

Table 6-31: Critical Facilities Exposed to the Earthquake - Town Of Teachey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	7	$158
	500 Year	13	$4,385
	750 Year	13	$14,016
	1000 Year	13	$29,018
	1500 Year	13	$70,086
	2000 Year	13	$104,499
	2500 Year	13	$139,916
Critical Manufacturing	250 Year	1	$13
	500 Year	1	$234
	750 Year	1	$800
	1000 Year	1	$1,568
	1500 Year	1	$3,244
	2000 Year	1	$4,445
	2500 Year	1	$5,581
Emergency Services	250 Year	1	$85
	500 Year	1	$929
	750 Year	1	$2,823

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	1	$5,138
	1500 Year	1	$8,533
	2000 Year	1	$11,380
	2500 Year	1	$14,772
Government Facilities	250 Year	3	$18
	500 Year	4	$653
	750 Year	4	$1,974
	1000 Year	4	$3,629
	1500 Year	4	$8,091
	2000 Year	4	$12,612
	2500 Year	4	$19,394
Transportation Systems	250 Year	2	$94
	500 Year	2	$1,154
	750 Year	2	$3,498
	1000 Year	2	$6,572
	1500 Year	2	$12,549
	2000 Year	2	$18,287
	2500 Year	2	$25,869
All Categories	**250 Year**	**14**	**$368**
	500 Year	**21**	**$7,355**
	750 Year	**21**	**$23,111**
	1000 Year	**21**	**$45,925**
	1500 Year	**21**	**$102,503**
	2000 Year	**21**	**$151,223**
	2500 Year	**21**	**$205,532**

Source: GIS Analysis

Table 6-32: Critical Facilities Exposed to the Earthquake - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	4	$283
	500 Year	7	$5,525
	750 Year	7	$17,004
	1000 Year	7	$29,934
	1500 Year	7	$53,945
	2000 Year	7	$76,015
	2500 Year	7	$101,881
Commercial Facilities	250 Year	151	$6,311
	500 Year	226	$180,619
	750 Year	226	$570,797
	1000 Year	226	$1,110,419
	1500 Year	226	$2,446,569
	2000 Year	226	$3,746,203
	2500 Year	226	$5,187,805
Critical Manufacturing	250 Year	38	$2,427
	500 Year	41	$34,632
	750 Year	41	$105,930
	1000 Year	41	$191,706
	1500 Year	41	$347,009
	2000 Year	41	$473,562
	2500 Year	41	$607,402
Emergency Services	250 Year	1	$20
	500 Year	1	$875
	750 Year	1	$2,279
	1000 Year	1	$3,894
	1500 Year	1	$9,215

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	1	$17,020
	2500 Year	1	$28,089
Energy	500 Year	1	$180
	750 Year	1	$929
	1000 Year	1	$2,045
	1500 Year	1	$5,044
	2000 Year	1	$8,827
	2500 Year	1	$12,893
Food and Agriculture	500 Year	77	$2,537
	750 Year	77	$7,897
	1000 Year	77	$13,612
	1500 Year	77	$26,255
	2000 Year	77	$39,574
	2500 Year	77	$56,286
Government Facilities	250 Year	24	$1,771
	500 Year	37	$38,160
	750 Year	37	$99,341
	1000 Year	37	$172,402
	1500 Year	37	$337,782
	2000 Year	37	$516,831
	2500 Year	37	$725,859
Healthcare and Public Health	250 Year	13	$383
	500 Year	20	$13,484
	750 Year	20	$40,538
	1000 Year	20	$74,442
	1500 Year	20	$156,584
	2000 Year	20	$234,360

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	20	$324,777
Transportation Systems	250 Year	51	$4,079
	500 Year	65	$100,994
	750 Year	65	$294,805
	1000 Year	65	$552,829
	1500 Year	65	$1,153,880
	2000 Year	65	$1,727,013
	2500 Year	65	$2,398,937
All Categories	**250 Year**	**282**	**$15,274**
	500 Year	**475**	**$377,006**
	750 Year	**475**	**$1,139,520**
	1000 Year	**475**	**$2,151,283**
	1500 Year	**475**	**$4,536,283**
	2000 Year	**475**	**$6,839,405**
	2500 Year	**475**	**$9,443,929**

Source: GIS Analysis

Table 6-33: Critical Facilities Exposed to the Earthquake - Town Of Warsaw

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$71
	500 Year	3	$2,551
	750 Year	3	$6,817
	1000 Year	3	$12,728
	1500 Year	3	$25,794
	2000 Year	3	$42,127
	2500 Year	3	$55,853
Commercial Facilities	250 Year	106	$4,388
	500 Year	155	$122,432

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	155	$354,361
	1000 Year	155	$679,858
	1500 Year	155	$1,342,618
	2000 Year	155	$2,068,795
	2500 Year	155	$2,644,373
Critical Manufacturing	250 Year	31	$1,430
	500 Year	32	$16,402
	750 Year	32	$44,818
	1000 Year	32	$80,931
	1500 Year	32	$147,551
	2000 Year	32	$212,682
	2500 Year	32	$260,696
Emergency Services	250 Year	2	$192
	500 Year	2	$3,945
	750 Year	2	$12,068
	1000 Year	2	$22,814
	1500 Year	2	$41,681
	2000 Year	2	$60,332
	2500 Year	2	$74,229
Energy	250 Year	2	$94
	500 Year	3	$1,708
	750 Year	3	$4,974
	1000 Year	3	$9,683
	1500 Year	3	$18,081
	2000 Year	3	$27,772
	2500 Year	3	$35,765
Food and Agriculture	250 Year	1	$98

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	22	$6,119
	750 Year	22	$17,952
	1000 Year	22	$33,762
	1500 Year	22	$62,152
	2000 Year	22	$93,949
	2500 Year	22	$119,083
Government Facilities	250 Year	13	$2,773
	500 Year	18	$50,182
	750 Year	18	$131,740
	1000 Year	18	$240,379
	1500 Year	18	$461,611
	2000 Year	18	$708,536
	2500 Year	18	$957,225
Healthcare and Public Health	250 Year	7	$994
	500 Year	9	$13,688
	750 Year	9	$40,821
	1000 Year	9	$78,352
	1500 Year	9	$142,803
	2000 Year	9	$208,442
	2500 Year	9	$257,181
Transportation Systems	250 Year	26	$1,054
	500 Year	33	$27,091
	750 Year	33	$73,231
	1000 Year	33	$141,583
	1500 Year	33	$305,715
	2000 Year	33	$502,184
	2500 Year	33	$673,857

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**250 Year**	**189**	**$11,094**
	500 Year	**277**	**$244,118**
	750 Year	**277**	**$686,782**
	1000 Year	**277**	**$1,300,090**
	1500 Year	**277**	**$2,548,006**
	2000 Year	**277**	**$3,924,819**
	2500 Year	**277**	**$5,078,262**

Source: GIS Analysis

Table 6-34: Critical Facilities Exposed to the Earthquake - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	16	$1,474
	500 Year	16	$19,832
	750 Year	16	$51,998
	1000 Year	16	$94,973
	1500 Year	16	$219,766
	2000 Year	16	$345,128
	2500 Year	16	$458,127
Commercial Facilities	250 Year	700	$39,407
	500 Year	720	$719,456
	750 Year	720	$1,968,274
	1000 Year	720	$3,477,174
	1500 Year	720	$7,270,463
	2000 Year	720	$10,917,698
	2500 Year	720	$15,476,639
Critical Manufacturing	250 Year	62	$25,633
	500 Year	63	$284,136
	750 Year	63	$682,083

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	63	$1,074,902
	1500 Year	63	$2,014,693
	2000 Year	63	$2,810,030
	2500 Year	63	$3,744,009
Emergency Services	250 Year	5	$784
	500 Year	5	$15,141
	750 Year	5	$41,261
	1000 Year	5	$68,133
	1500 Year	5	$129,164
	2000 Year	5	$194,902
	2500 Year	5	$275,567
Energy	250 Year	7	$56,423
	500 Year	7	$424,869
	750 Year	7	$1,036,798
	1000 Year	7	$1,605,808
	1500 Year	7	$2,701,026
	2000 Year	7	$4,029,079
	2500 Year	7	$5,175,746
Food and Agriculture	250 Year	203	$833
	500 Year	203	$15,490
	750 Year	203	$38,125
	1000 Year	203	$60,870
	1500 Year	203	$120,694
	2000 Year	203	$174,150
	2500 Year	203	$247,752
Government Facilities	250 Year	119	$7,916
	500 Year	132	$139,587

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	132	$390,492
	1000 Year	132	$695,517
	1500 Year	132	$1,489,328
	2000 Year	132	$2,314,464
	2500 Year	132	$3,351,373
Healthcare and Public Health	250 Year	44	$5,319
	500 Year	45	$90,280
	750 Year	45	$257,821
	1000 Year	45	$462,706
	1500 Year	45	$996,178
	2000 Year	45	$1,557,466
	2500 Year	45	$2,204,930
Transportation Systems	250 Year	40	$2,488
	500 Year	40	$46,640
	750 Year	40	$131,359
	1000 Year	40	$233,513
	1500 Year	40	$491,537
	2000 Year	40	$719,453
	2500 Year	40	$996,815
All Categories	**250 Year**	**1,196**	**$140,277**
	500 Year	**1,231**	**$1,755,431**
	750 Year	**1,231**	**$4,598,211**
	1000 Year	**1,231**	**$7,773,596**
	1500 Year	**1,231**	**$15,432,849**
	2000 Year	**1,231**	**$23,062,370**
	2500 Year	**1,231**	**$31,930,958**

Source: GIS Analysis

Table 6-35: Critical Facilities Exposed to the Earthquake - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	686	$41,536
	500 Year	760	$641,056
	750 Year	760	$1,706,524
	1000 Year	760	$2,995,472
	1500 Year	760	$5,904,633
	2000 Year	760	$8,938,742
	2500 Year	760	$12,247,540
Communications	250 Year	1	$139
	500 Year	1	$2,979
	750 Year	1	$8,610
	1000 Year	1	$15,356
	1500 Year	1	$26,574
	2000 Year	1	$36,377
	2500 Year	1	$48,763
Critical Manufacturing	250 Year	76	$18,320
	500 Year	80	$197,683
	750 Year	80	$532,667
	1000 Year	80	$843,186
	1500 Year	80	$1,439,087
	2000 Year	80	$1,979,820
	2500 Year	80	$2,510,128
Emergency Services	250 Year	6	$1,315
	500 Year	9	$21,315
	750 Year	9	$57,823
	1000 Year	9	$96,134
	1500 Year	9	$178,007

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	9	$272,601
	2500 Year	9	$388,510
Energy	250 Year	1	$2,630
	500 Year	1	$17,270
	750 Year	1	$36,000
	1000 Year	1	$59,910
	1500 Year	1	$95,950
	2000 Year	1	$135,810
	2500 Year	1	$174,160
Food and Agriculture	250 Year	11,694	$28,937
	500 Year	11,972	$1,041,939
	750 Year	11,972	$2,791,261
	1000 Year	11,972	$4,360,978
	1500 Year	11,972	$8,168,558
	2000 Year	11,972	$11,907,007
	2500 Year	11,972	$17,214,143
Government Facilities	250 Year	155	$11,973
	500 Year	166	$175,501
	750 Year	166	$449,323
	1000 Year	166	$785,562
	1500 Year	166	$1,642,096
	2000 Year	166	$2,664,202
	2500 Year	166	$3,919,628
Healthcare and Public Health	250 Year	7	$887
	500 Year	8	$11,139
	750 Year	8	$25,632
	1000 Year	8	$45,332

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	8	$94,115
	2000 Year	8	$157,161
	2500 Year	8	$211,912
Nuclear Reactors, Materials and Waste	500 Year	1	$133
	750 Year	1	$502
	1000 Year	1	$934
	1500 Year	1	$2,322
	2000 Year	1	$3,448
	2500 Year	1	$4,810
Transportation Systems	250 Year	64	$2,867
	500 Year	70	$56,950
	750 Year	70	$159,659
	1000 Year	70	$293,555
	1500 Year	70	$609,295
	2000 Year	70	$944,266
	2500 Year	70	$1,297,397
All Categories	**250 Year**	**12,690**	**$108,604**
	500 Year	**13,068**	**$2,165,965**
	750 Year	**13,068**	**$5,768,001**
	1000 Year	**13,068**	**$9,496,419**
	1500 Year	**13,068**	**$18,160,637**
	2000 Year	**13,068**	**$27,039,434**
	2500 Year	**13,068**	**$38,016,991**

Source: GIS Analysis

Table 6-36: Critical Facilities Exposed to the Earthquake - Town Of Autryville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	15	$341

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	17	$7,719
	750 Year	17	$20,169
	1000 Year	17	$31,763
	1500 Year	17	$66,111
	2000 Year	17	$100,757
	2500 Year	17	$151,229
Critical Manufacturing	250 Year	1	$138
	500 Year	1	$1,944
	750 Year	1	$3,671
	1000 Year	1	$4,963
	1500 Year	1	$8,947
	2000 Year	1	$13,274
	2500 Year	1	$20,369
Emergency Services	250 Year	1	$87
	500 Year	1	$2,289
	750 Year	1	$5,676
	1000 Year	1	$8,234
	1500 Year	1	$15,581
	2000 Year	1	$22,867
	2500 Year	1	$33,946
Food and Agriculture	250 Year	1	$1
	500 Year	1	$32
	750 Year	1	$77
	1000 Year	1	$109
	1500 Year	1	$206
	2000 Year	1	$301
	2500 Year	1	$452

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	250 Year	1	$44
	500 Year	1	$470
	750 Year	1	$1,402
	1000 Year	1	$2,445
	1500 Year	1	$5,081
	2000 Year	1	$6,741
	2500 Year	1	$8,707
Transportation Systems	250 Year	1	$7
	500 Year	1	$283
	750 Year	1	$888
	1000 Year	1	$1,531
	1500 Year	1	$3,226
	2000 Year	1	$4,285
	2500 Year	1	$5,591
All Categories	**250 Year**	**20**	**$618**
	500 Year	**22**	**$12,737**
	750 Year	**22**	**$31,883**
	1000 Year	**22**	**$49,045**
	1500 Year	**22**	**$99,152**
	2000 Year	**22**	**$148,225**
	2500 Year	**22**	**$220,294**

Source: GIS Analysis

Table 6-37: Critical Facilities Exposed to the Earthquake - Town Of Garland

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	1	$70
	500 Year	1	$947
	750 Year	1	$2,943

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	1	$5,129
	1500 Year	1	$10,822
	2000 Year	1	$15,015
	2500 Year	1	$20,042
Commercial Facilities	250 Year	68	$2,090
	500 Year	70	$38,374
	750 Year	70	$110,369
	1000 Year	70	$187,072
	1500 Year	70	$417,780
	2000 Year	70	$636,234
	2500 Year	70	$874,759
Critical Manufacturing	250 Year	3	$824
	500 Year	3	$11,662
	750 Year	3	$37,485
	1000 Year	3	$65,299
	1500 Year	3	$134,993
	2000 Year	3	$177,459
	2500 Year	3	$219,631
Emergency Services	250 Year	1	$110
	500 Year	1	$1,509
	750 Year	1	$3,720
	1000 Year	1	$6,434
	1500 Year	1	$17,346
	2000 Year	1	$27,711
	2500 Year	1	$34,516
Food and Agriculture	250 Year	51	$128
	500 Year	51	$4,290

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	51	$11,350
	1000 Year	51	$16,911
	1500 Year	51	$33,736
	2000 Year	51	$52,464
	2500 Year	51	$77,600
Government Facilities	250 Year	7	$603
	500 Year	7	$6,869
	750 Year	7	$19,729
	1000 Year	7	$35,081
	1500 Year	7	$67,604
	2000 Year	7	$109,839
	2500 Year	7	$145,932
Healthcare and Public Health	250 Year	2	$6
	500 Year	4	$1,658
	750 Year	4	$6,026
	1000 Year	4	$10,694
	1500 Year	4	$24,960
	2000 Year	4	$36,511
	2500 Year	4	$48,938
Transportation Systems	250 Year	5	$178
	500 Year	5	$4,242
	750 Year	5	$13,214
	1000 Year	5	$24,236
	1500 Year	5	$56,742
	2000 Year	5	$83,604
	2500 Year	5	$107,246
All Categories	**250 Year**	**138**	**$4,009**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	**142**	**$69,551**
	750 Year	**142**	**$204,836**
	1000 Year	**142**	**$350,856**
	1500 Year	**142**	**$763,983**
	2000 Year	**142**	**$1,138,837**
	2500 Year	**142**	**$1,528,664**

Source: GIS Analysis

Table 6-38: Critical Facilities Exposed to the Earthquake - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	3	$127
	500 Year	3	$2,320
	750 Year	3	$5,407
	1000 Year	3	$10,152
	1500 Year	3	$21,309
	2000 Year	3	$34,961
	2500 Year	3	$46,262
Commercial Facilities	250 Year	78	$3,040
	500 Year	80	$56,318
	750 Year	80	$154,608
	1000 Year	80	$299,936
	1500 Year	80	$600,363
	2000 Year	80	$958,089
	2500 Year	80	$1,255,014
Critical Manufacturing	250 Year	6	$985
	500 Year	6	$8,642
	750 Year	6	$22,874
	1000 Year	6	$40,983

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	6	$75,517
	2000 Year	6	$113,237
	2500 Year	6	$142,287
Emergency Services	250 Year	1	$91
	500 Year	1	$1,118
	750 Year	1	$2,186
	1000 Year	1	$3,585
	1500 Year	1	$7,352
	2000 Year	1	$12,464
	2500 Year	1	$16,590
Energy	250 Year	1	$32
	500 Year	1	$328
	750 Year	1	$905
	1000 Year	1	$1,846
	1500 Year	1	$3,679
	2000 Year	1	$5,461
	2500 Year	1	$6,655
Food and Agriculture	250 Year	120	$72
	500 Year	120	$2,975
	750 Year	120	$8,292
	1000 Year	120	$15,142
	1500 Year	120	$28,562
	2000 Year	120	$44,695
	2500 Year	120	$58,848
Government Facilities	250 Year	6	$241
	500 Year	6	$3,148
	750 Year	6	$6,890

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	6	$12,308
	1500 Year	6	$26,133
	2000 Year	6	$44,676
	2500 Year	6	$60,182
Healthcare and Public Health	250 Year	3	$356
	500 Year	3	$4,190
	750 Year	3	$10,194
	1000 Year	3	$22,561
	1500 Year	3	$58,840
	2000 Year	3	$104,816
	2500 Year	3	$144,588
Transportation Systems	250 Year	3	$74
	500 Year	3	$2,051
	750 Year	3	$5,588
	1000 Year	3	$10,151
	1500 Year	3	$17,692
	2000 Year	3	$26,446
	2500 Year	3	$33,906
All Categories	**250 Year**	**221**	**$5,018**
	500 Year	**223**	**$81,090**
	750 Year	**223**	**$216,944**
	1000 Year	**223**	**$416,664**
	1500 Year	**223**	**$839,447**
	2000 Year	**223**	**$1,344,845**
	2500 Year	**223**	**$1,764,332**

Source: GIS Analysis

Table 6-39: Critical Facilities Exposed to the Earthquake - Town Of Roseboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$242
	500 Year	2	$2,860
	750 Year	2	$7,780
	1000 Year	2	$13,457
	1500 Year	2	$31,610
	2000 Year	2	$51,114
	2500 Year	2	$75,842
Commercial Facilities	250 Year	140	$14,823
	500 Year	142	$207,513
	750 Year	142	$572,792
	1000 Year	142	$1,020,676
	1500 Year	142	$2,004,517
	2000 Year	142	$3,212,450
	2500 Year	142	$4,396,930
Critical Manufacturing	250 Year	15	$5,338
	500 Year	15	$61,943
	750 Year	15	$145,328
	1000 Year	15	$226,795
	1500 Year	15	$447,317
	2000 Year	15	$671,737
	2500 Year	15	$908,391
Emergency Services	250 Year	3	$71
	500 Year	3	$1,303
	750 Year	3	$3,551
	1000 Year	3	$6,146
	1500 Year	3	$14,107

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	3	$22,282
	2500 Year	3	$32,569
Energy	250 Year	2	$32,916
	500 Year	2	$242,158
	750 Year	2	$566,757
	1000 Year	2	$906,245
	1500 Year	2	$1,458,722
	2000 Year	2	$2,259,838
	2500 Year	2	$2,846,548
Food and Agriculture	250 Year	56	$90
	500 Year	56	$2,512
	750 Year	56	$6,981
	1000 Year	56	$11,291
	1500 Year	56	$24,517
	2000 Year	56	$38,598
	2500 Year	56	$61,766
Government Facilities	250 Year	24	$1,837
	500 Year	24	$25,887
	750 Year	24	$71,512
	1000 Year	24	$125,498
	1500 Year	24	$287,224
	2000 Year	24	$461,399
	2500 Year	24	$677,568
Healthcare and Public Health	250 Year	8	$889
	500 Year	8	$13,524
	750 Year	8	$37,437
	1000 Year	8	$65,173

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	8	$155,378
	2000 Year	8	$238,192
	2500 Year	8	$328,670
Transportation Systems	250 Year	7	$524
	500 Year	7	$6,709
	750 Year	7	$19,530
	1000 Year	7	$32,032
	1500 Year	7	$66,023
	2000 Year	7	$98,342
	2500 Year	7	$150,444
All Categories	**250 Year**	**257**	**$56,730**
	500 Year	**259**	**$564,409**
	750 Year	**259**	**$1,431,668**
	1000 Year	**259**	**$2,407,313**
	1500 Year	**259**	**$4,489,415**
	2000 Year	**259**	**$7,053,952**
	2500 Year	**259**	**$9,478,728**

Source: GIS Analysis

Table 6-40: Critical Facilities Exposed to the Earthquake - Town Of Salemburg

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	2	$56
	500 Year	2	$1,057
	750 Year	2	$2,282
	1000 Year	2	$3,630
	1500 Year	2	$8,911
	2000 Year	2	$15,062
	2500 Year	2	$21,481

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	250 Year	40	$2,061
	500 Year	41	$28,320
	750 Year	41	$75,920
	1000 Year	41	$132,963
	1500 Year	41	$298,163
	2000 Year	41	$456,729
	2500 Year	41	$663,406
Critical Manufacturing	250 Year	2	$44
	500 Year	2	$569
	750 Year	2	$1,632
	1000 Year	2	$2,868
	1500 Year	2	$6,032
	2000 Year	2	$8,050
	2500 Year	2	$10,512
Emergency Services	250 Year	1	$310
	500 Year	1	$3,682
	750 Year	1	$9,541
	1000 Year	1	$15,165
	1500 Year	1	$32,905
	2000 Year	1	$52,937
	2500 Year	1	$100,455
Food and Agriculture	250 Year	80	$229
	500 Year	80	$6,448
	750 Year	80	$17,805
	1000 Year	80	$29,211
	1500 Year	80	$62,079
	2000 Year	80	$92,619

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	80	$156,567
Government Facilities	250 Year	34	$4,199
	500 Year	35	$76,098
	750 Year	35	$227,763
	1000 Year	35	$423,372
	1500 Year	35	$981,315
	2000 Year	35	$1,598,613
	2500 Year	35	$2,434,597
Healthcare and Public Health	250 Year	1	$210
	500 Year	1	$2,482
	750 Year	1	$7,081
	1000 Year	1	$11,431
	1500 Year	1	$21,432
	2000 Year	1	$29,561
	2500 Year	1	$45,619
Transportation Systems	250 Year	2	$124
	500 Year	2	$1,731
	750 Year	2	$4,916
	1000 Year	2	$9,524
	1500 Year	2	$25,011
	2000 Year	2	$39,123
	2500 Year	2	$52,246
All Categories	**250 Year**	**162**	**$7,233**
	500 Year	**164**	**$120,387**
	750 Year	**164**	**$346,940**
	1000 Year	**164**	**$628,164**
	1500 Year	**164**	**$1,435,848**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	**164**	**$2,292,694**
	2500 Year	**164**	**$3,484,883**

Source: GIS Analysis

Table 6-41: Critical Facilities Exposed to the Earthquake - Town Of Turkey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	500 Year	1	$306
	750 Year	1	$896
	1000 Year	1	$1,405
	1500 Year	1	$2,401
	2000 Year	1	$3,421
	2500 Year	1	$4,598
Commercial Facilities	250 Year	16	$28,968
	500 Year	23	$217,096
	750 Year	23	$464,176
	1000 Year	23	$771,339
	1500 Year	23	$1,281,709
	2000 Year	23	$1,799,811
	2500 Year	23	$2,324,603
Critical Manufacturing	250 Year	1	$52
	500 Year	1	$691
	750 Year	1	$1,954
	1000 Year	1	$3,537
	1500 Year	1	$5,527
	2000 Year	1	$7,040
	2500 Year	1	$8,385
Emergency Services	250 Year	1	$81
	500 Year	1	$857

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	1	$2,016
	1000 Year	1	$3,782
	1500 Year	1	$6,964
	2000 Year	1	$10,341
	2500 Year	1	$13,908
Food and Agriculture	250 Year	88	$21
	500 Year	127	$5,749
	750 Year	127	$16,575
	1000 Year	127	$26,948
	1500 Year	127	$46,645
	2000 Year	127	$65,974
	2500 Year	127	$84,672
Government Facilities	500 Year	2	$456
	750 Year	2	$1,475
	1000 Year	2	$2,739
	1500 Year	2	$4,631
	2000 Year	2	$6,130
	2500 Year	2	$7,608
Transportation Systems	500 Year	1	$315
	750 Year	1	$1,079
	1000 Year	1	$2,167
	1500 Year	1	$4,525
	2000 Year	1	$6,338
	2500 Year	1	$7,682
All Categories	**500 Year**	**156**	**$225,470**
	750 Year	**156**	**$488,171**
	1000 Year	**156**	**$811,917**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	**156**	**$1,352,402**
	2000 Year	**156**	**$1,899,055**
	2500 Year	**156**	**$2,451,456**
	250 Year	**106**	**$29,122**

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 6-42: Critical Facilities Exposed to the Earthquake (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	250 Year	36	$2,467
	500 Year	53	$44,405
	750 Year	53	$122,694
	1000 Year	53	$222,192
	1500 Year	53	$469,016
	2000 Year	53	$732,867
	2500 Year	53	$983,184
Chemical	500 Year	1	$63
	750 Year	1	$201
	1000 Year	1	$351
	1500 Year	1	$543
	2000 Year	1	$822
	2500 Year	1	$1,038
Commercial Facilities	250 Year	2,539	$167,899
	500 Year	3,148	$2,759,085
	750 Year	3,148	$7,628,349
	1000 Year	3,148	$13,826,990

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	3,148	$27,837,322
	2000 Year	3,148	$42,490,530
	2500 Year	3,148	$58,187,027
Communications	250 Year	1	$139
	500 Year	1	$2,979
	750 Year	1	$8,610
	1000 Year	1	$15,356
	1500 Year	1	$26,574
	2000 Year	1	$36,377
	2500 Year	1	$48,763
Critical Manufacturing	250 Year	468	$77,366
	500 Year	507	$882,385
	750 Year	507	$2,294,462
	1000 Year	507	$3,787,982
	1500 Year	507	$6,942,557
	2000 Year	507	$9,885,350
	2500 Year	507	$12,912,736
Defense Industrial Base	250 Year	1	$357
	500 Year	2	$2,998
	750 Year	2	$6,537
	1000 Year	2	$11,198
	1500 Year	2	$19,744
	2000 Year	2	$26,017
	2500 Year	2	$35,020
Emergency Services	250 Year	48	$4,618
	500 Year	56	$81,102
	750 Year	56	$224,999

Sector	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	56	$398,592
	1500 Year	56	$780,373
	2000 Year	56	$1,189,720
	2500 Year	56	$1,653,107
Energy	250 Year	19	$104,564
	500 Year	29	$788,745
	750 Year	29	$1,878,315
	1000 Year	29	$2,988,033
	1500 Year	29	$5,004,761
	2000 Year	29	$7,463,921
	2500 Year	29	$9,603,669
Food and Agriculture	250 Year	12,802	$32,422
	500 Year	22,405	$1,709,027
	750 Year	22,405	$4,837,432
	1000 Year	22,405	$8,003,790
	1500 Year	22,405	$14,701,495
	2000 Year	22,405	$22,028,617
	2500 Year	22,405	$30,744,687
Government Facilities	250 Year	538	$39,954
	500 Year	698	$743,194
	750 Year	698	$2,081,397
	1000 Year	698	$3,819,060
	1500 Year	698	$8,030,657
	2000 Year	698	$12,960,211
	2500 Year	698	$18,645,661
Healthcare and Public Health	250 Year	114	$12,238
	500 Year	138	$208,236

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	138	$591,145
	1000 Year	138	$1,089,214
	1500 Year	138	$2,287,627
	2000 Year	138	$3,558,891
	2500 Year	138	$4,946,691
Nuclear Reactors, Materials and Waste	500 Year	1	$133
	750 Year	1	$502
	1000 Year	1	$934
	1500 Year	1	$2,322
	2000 Year	1	$3,448
	2500 Year	1	$4,810
Transportation Systems	250 Year	339	$17,940
	500 Year	446	$421,678
	750 Year	446	$1,236,555
	1000 Year	446	$2,345,249
	1500 Year	446	$4,885,398
	2000 Year	446	$7,860,807
	2500 Year	446	$10,843,626
Water	250 Year	1	$12,420
	500 Year	1	$100,680
	750 Year	1	$227,700
	1000 Year	1	$395,100
	1500 Year	1	$708,960
	2000 Year	1	$976,680
	2500 Year	1	$1,324,800
All Categories	**250 Year**	**16,906**	**$472,384**
	500 Year	**27,486**	**$7,744,710**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	**27,486**	**$21,138,898**
	1000 Year	**27,486**	**$36,904,041**
	1500 Year	**27,486**	**$71,697,349**
	2000 Year	**27,486**	**$109,214,258**
	2500 Year	**27,486**	**$149,934,819**

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 6-43: High Potential Loss Properties Exposed to the Earthquake - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	500 Year	1	$4,425
	750 Year	1	$14,211
	1000 Year	1	$26,909
	1500 Year	1	$46,384
	2000 Year	1	$78,461
	2500 Year	1	$106,420
Commercial	250 Year	37	$7,354
	500 Year	92	$189,389
	750 Year	92	$577,478
	1000 Year	92	$1,122,152
	1500 Year	92	$2,369,077
	2000 Year	92	$3,990,228
	2500 Year	92	$5,577,970
Government	250 Year	21	$4,601
	500 Year	37	$100,980

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	37	$298,310
	1000 Year	37	$578,864
	1500 Year	37	$1,184,155
	2000 Year	37	$1,969,165
	2500 Year	37	$2,803,168
Industrial	250 Year	7	$4,094
	500 Year	16	$55,803
	750 Year	16	$163,910
	1000 Year	16	$281,070
	1500 Year	16	$525,742
	2000 Year	16	$732,365
	2500 Year	16	$979,251
Religious	250 Year	44	$4,304
	500 Year	85	$105,203
	750 Year	85	$346,448
	1000 Year	85	$675,881
	1500 Year	85	$1,312,345
	2000 Year	85	$2,053,243
	2500 Year	85	$2,739,763
Residential	250 Year	7	$162
	500 Year	18	$11,413
	750 Year	18	$37,232
	1000 Year	18	$73,534
	1500 Year	18	$151,241
	2000 Year	18	$249,388
	2500 Year	18	$334,756
All Categories	**500 Year**	**249**	**$467,213**

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	**249**	**$1,437,589**
	1000 Year	**249**	**$2,758,410**
	1500 Year	**249**	**$5,588,944**
	2000 Year	**249**	**$9,072,850**
	2500 Year	**249**	**$12,541,328**
	250 Year	**116**	**$20,515**

Source: GIS Analysis

Table 6-44: High Potential Loss Properties Exposed to the Earthquake - Town Of Beulaville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	10	$1,469
	500 Year	16	$31,668
	750 Year	16	$92,919
	1000 Year	16	$172,960
	1500 Year	16	$321,636
	2000 Year	16	$536,808
	2500 Year	16	$726,617
Government	250 Year	1	$78
	500 Year	5	$20,070
	750 Year	5	$68,701
	1000 Year	5	$131,013
	1500 Year	5	$241,079
	2000 Year	5	$424,640
	2500 Year	5	$590,760
Industrial	250 Year	2	$1,852
	500 Year	2	$15,834
	750 Year	2	$40,617
	1000 Year	2	$74,072

Category	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	2	$146,055
	2000 Year	2	$252,929
	2500 Year	2	$340,422
Religious	250 Year	2	$761
	500 Year	8	$17,896
	750 Year	8	$49,651
	1000 Year	8	$83,860
	1500 Year	8	$143,566
	2000 Year	8	$239,470
	2500 Year	8	$323,848
Residential	250 Year	3	$154
	500 Year	7	$7,062
	750 Year	7	$22,092
	1000 Year	7	$46,887
	1500 Year	7	$98,046
	2000 Year	7	$179,849
	2500 Year	7	$251,978
All Categories	**250 Year**	**18**	**$4,314**
	500 Year	**38**	**$92,530**
	750 Year	**38**	**$273,980**
	1000 Year	**38**	**$508,792**
	1500 Year	**38**	**$950,382**
	2000 Year	**38**	**$1,633,696**
	2500 Year	**38**	**$2,233,625**

Source: GIS Analysis

Table 6-45: High Potential Loss Properties Exposed to the Earthquake - Town Of Calypso

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	500 Year	2	$1,504
	750 Year	2	$4,609
	1000 Year	2	$7,730
	1500 Year	2	$14,420
	2000 Year	2	$21,277
	2500 Year	2	$29,917
Government	500 Year	1	$834
	750 Year	1	$2,542
	1000 Year	1	$4,168
	1500 Year	1	$6,603
	2000 Year	1	$9,751
	2500 Year	1	$12,260
Religious	250 Year	3	$181
	500 Year	4	$4,092
	750 Year	4	$12,527
	1000 Year	4	$26,232
	1500 Year	4	$57,325
	2000 Year	4	$94,119
	2500 Year	4	$126,920
Residential	250 Year	1	$118
	500 Year	1	$3,331
	750 Year	1	$8,871
	1000 Year	1	$15,667
	1500 Year	1	$28,808
	2000 Year	1	$47,629
	2500 Year	1	$63,178

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**500 Year**	**8**	**$9,761**
	750 Year	**8**	**$28,549**
	1000 Year	**8**	**$53,797**
	1500 Year	**8**	**$107,156**
	2000 Year	**8**	**$172,776**
	2500 Year	**8**	**$232,275**
	250 Year	**4**	**$299**

Source: GIS Analysis

Table 6-46: High Potential Loss Properties Exposed to the Earthquake - Town Of Faison

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	8	$2,045
	500 Year	11	$32,921
	750 Year	11	$86,510
	1000 Year	11	$161,361
	1500 Year	11	$295,687
	2000 Year	11	$426,789
	2500 Year	11	$563,968
Government	250 Year	3	$305
	500 Year	3	$4,148
	750 Year	3	$12,028
	1000 Year	3	$25,535
	1500 Year	3	$62,117
	2000 Year	3	$104,683
	2500 Year	3	$147,066
Industrial	250 Year	3	$9,118
	500 Year	3	$91,958
	750 Year	3	$209,879

Category	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	3	$362,120
	1500 Year	3	$701,686
	2000 Year	3	$1,088,594
	2500 Year	3	$1,447,474
Religious	250 Year	5	$1,364
	500 Year	6	$13,471
	750 Year	6	$40,339
	1000 Year	6	$81,480
	1500 Year	6	$153,190
	2000 Year	6	$238,180
	2500 Year	6	$303,866
Residential	250 Year	2	$512
	500 Year	6	$9,628
	750 Year	6	$28,667
	1000 Year	6	$64,580
	1500 Year	6	$163,498
	2000 Year	6	$279,121
	2500 Year	6	$380,373
Utilities	250 Year	2	$24,840
	500 Year	2	$201,360
	750 Year	2	$455,400
	1000 Year	2	$790,200
	1500 Year	2	$1,417,920
	2000 Year	2	$1,953,360
	2500 Year	2	$2,649,600
All Categories	**250 Year**	**23**	**$38,184**
	500 Year	**31**	**$353,486**

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	**31**	**$832,823**
	1000 Year	**31**	**$1,485,276**
	1500 Year	**31**	**$2,794,098**
	2000 Year	**31**	**$4,090,727**
	2500 Year	**31**	**$5,492,347**

Source: GIS Analysis

Table 6-47: High Potential Loss Properties Exposed to the Earthquake - Town Of Greenevers

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	1	$47
	500 Year	1	$1,158
	750 Year	1	$3,042
	1000 Year	1	$6,678
	1500 Year	1	$17,793
	2000 Year	1	$28,322
	2500 Year	1	$38,275
Religious	250 Year	1	$69
	500 Year	2	$2,362
	750 Year	2	$6,799
	1000 Year	2	$15,013
	1500 Year	2	$36,708
	2000 Year	2	$60,671
	2500 Year	2	$83,034
Residential	500 Year	1	$434
	750 Year	1	$1,889
	1000 Year	1	$4,321
	1500 Year	1	$9,835
	2000 Year	1	$15,200

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	1	$19,329
All Categories	**250 Year**	**2**	**$116**
	500 Year	**4**	**$3,954**
	750 Year	**4**	**$11,730**
	1000 Year	**4**	**$26,012**
	1500 Year	**4**	**$64,336**
	2000 Year	**4**	**$104,193**
	2500 Year	**4**	**$140,638**

Source: GIS Analysis

Table 6-48: High Potential Loss Properties Exposed to the Earthquake - Town Of Harrells

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	1	$37
	500 Year	3	$4,403
	750 Year	3	$12,860
	1000 Year	3	$22,506
	1500 Year	3	$47,244
	2000 Year	3	$81,183
	2500 Year	3	$131,060
Industrial	250 Year	1	$697
	500 Year	1	$10,636
	750 Year	1	$31,525
	1000 Year	1	$50,743
	1500 Year	1	$80,758
	2000 Year	1	$100,880
	2500 Year	1	$134,940
All Categories	**250 Year**	**2**	**$734**
	500 Year	**4**	**$15,039**

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	**4**	**$44,385**
	1000 Year	**4**	**$73,249**
	1500 Year	**4**	**$128,002**
	2000 Year	**4**	**$182,063**
	2500 Year	**4**	**$266,000**

Source: GIS Analysis

Table 6-49: High Potential Loss Properties Exposed to the Earthquake - Town Of Kenansville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	9	$2,022
	500 Year	12	$38,326
	750 Year	12	$106,640
	1000 Year	12	$204,194
	1500 Year	12	$406,978
	2000 Year	12	$610,433
	2500 Year	12	$845,562
Government	250 Year	13	$2,398
	500 Year	24	$57,558
	750 Year	24	$176,292
	1000 Year	24	$349,259
	1500 Year	24	$726,061
	2000 Year	24	$1,149,434
	2500 Year	24	$1,570,190
Religious	250 Year	4	$429
	500 Year	5	$13,405
	750 Year	5	$37,814
	1000 Year	5	$69,228
	1500 Year	5	$132,985

Category	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	5	$194,019
	2500 Year	5	$262,108
Residential	500 Year	2	$793
	750 Year	2	$3,396
	1000 Year	2	$7,888
	1500 Year	2	$17,438
	2000 Year	2	$28,484
	2500 Year	2	$36,377
All Categories	**250 Year**	**26**	**$4,849**
	500 Year	**43**	**$110,082**
	750 Year	**43**	**$324,142**
	1000 Year	**43**	**$630,569**
	1500 Year	**43**	**$1,283,462**
	2000 Year	**43**	**$1,982,370**
	2500 Year	**43**	**$2,714,237**

Source: GIS Analysis

Table 6-50: High Potential Loss Properties Exposed to the Earthquake - Town Of Magnolia

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$2
	500 Year	1	$522
	750 Year	1	$1,611
	1000 Year	1	$2,915
	1500 Year	1	$6,361
	2000 Year	1	$10,817
	2500 Year	1	$15,818
Government	250 Year	1	$81
	500 Year	2	$1,883

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	2	$7,225
	1000 Year	2	$14,652
	1500 Year	2	$32,978
	2000 Year	2	$51,933
	2500 Year	2	$71,526
Religious	250 Year	1	$51
	500 Year	4	$3,143
	750 Year	4	$10,140
	1000 Year	4	$21,131
	1500 Year	4	$51,043
	2000 Year	4	$80,924
	2500 Year	4	$109,462
All Categories	**250 Year**	**3**	**$134**
	500 Year	**7**	**$5,548**
	750 Year	**7**	**$18,976**
	1000 Year	**7**	**$38,698**
	1500 Year	**7**	**$90,382**
	2000 Year	**7**	**$143,674**
	2500 Year	**7**	**$196,806**

Source: GIS Analysis

Table 6-51: High Potential Loss Properties Exposed to the Earthquake - Town Of Rose Hill

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	500 Year	1	$892
	750 Year	1	$2,766
	1000 Year	1	$5,102
	1500 Year	1	$10,137
	2000 Year	1	$16,060

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	1	$21,922
Commercial	250 Year	5	$385
	500 Year	10	$14,779
	750 Year	10	$45,769
	1000 Year	10	$82,725
	1500 Year	10	$153,020
	2000 Year	10	$221,828
	2500 Year	10	$303,352
Government	250 Year	1	$82
	500 Year	3	$4,964
	750 Year	3	$14,077
	1000 Year	3	$26,459
	1500 Year	3	$58,914
	2000 Year	3	$89,444
	2500 Year	3	$122,665
Industrial	250 Year	5	$1,914
	500 Year	5	$27,732
	750 Year	5	$87,439
	1000 Year	5	$169,789
	1500 Year	5	$315,457
	2000 Year	5	$421,562
	2500 Year	5	$506,712
Religious	250 Year	2	$148
	500 Year	3	$3,468
	750 Year	3	$10,094
	1000 Year	3	$22,358
	1500 Year	3	$61,837

Category	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	3	$97,077
	2500 Year	3	$131,292
Residential	250 Year	1	$102
	500 Year	5	$4,722
	750 Year	5	$14,737
	1000 Year	5	$28,091
	1500 Year	5	$61,116
	2000 Year	5	$94,159
	2500 Year	5	$134,117
All Categories	**500 Year**	**27**	**$56,557**
	750 Year	**27**	**$174,882**
	1000 Year	**27**	**$334,524**
	1500 Year	**27**	**$660,481**
	2000 Year	**27**	**$940,130**
	2500 Year	**27**	**$1,220,060**
	250 Year	**14**	**$2,631**

Source: GIS Analysis

Table 6-52: High Potential Loss Properties Exposed to the Earthquake - Town Of Wallace

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	30	$5,061
	500 Year	48	$169,196
	750 Year	48	$523,948
	1000 Year	48	$994,874
	1500 Year	48	$2,114,148
	2000 Year	48	$3,245,602
	2500 Year	48	$4,518,836
Government	250 Year	2	$1,236

Category	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	3	$25,178
	750 Year	3	$58,115
	1000 Year	3	$93,899
	1500 Year	3	$172,197
	2000 Year	3	$271,285
	2500 Year	3	$387,328
Industrial	250 Year	4	$1,324
	500 Year	4	$18,468
	750 Year	4	$57,961
	1000 Year	4	$106,890
	1500 Year	4	$181,561
	2000 Year	4	$238,787
	2500 Year	4	$296,107
Religious	250 Year	13	$1,821
	500 Year	20	$36,109
	750 Year	20	$111,680
	1000 Year	20	$227,849
	1500 Year	20	$545,999
	2000 Year	20	$823,697
	2500 Year	20	$1,121,603
Residential	250 Year	5	$852
	500 Year	17	$65,539
	750 Year	17	$236,436
	1000 Year	17	$474,368
	1500 Year	17	$1,056,961
	2000 Year	17	$1,608,176
	2500 Year	17	$2,231,285

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**250 Year**	**54**	**$10,294**
	500 Year	**92**	**$314,490**
	750 Year	**92**	**$988,140**
	1000 Year	**92**	**$1,897,880**
	1500 Year	**92**	**$4,070,866**
	2000 Year	**92**	**$6,187,547**
	2500 Year	**92**	**$8,555,159**

Source: GIS Analysis

Table 6-53: High Potential Loss Properties Exposed to the Earthquake - Town Of Warsaw

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	500 Year	1	$1,347
	750 Year	1	$3,884
	1000 Year	1	$6,554
	1500 Year	1	$11,061
	2000 Year	1	$15,888
	2500 Year	1	$19,430
Commercial	250 Year	16	$2,275
	500 Year	30	$86,556
	750 Year	30	$250,687
	1000 Year	30	$474,793
	1500 Year	30	$935,285
	2000 Year	30	$1,473,134
	2500 Year	30	$1,913,104
Government	250 Year	6	$2,587
	500 Year	7	$48,145
	750 Year	7	$127,575
	1000 Year	7	$232,470

Category	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	7	$442,401
	2000 Year	7	$673,261
	2500 Year	7	$907,517
Industrial	250 Year	2	$387
	500 Year	2	$3,606
	750 Year	2	$9,620
	1000 Year	2	$16,360
	1500 Year	2	$27,997
	2000 Year	2	$40,735
	2500 Year	2	$50,213
Religious	250 Year	8	$1,149
	500 Year	15	$23,316
	750 Year	15	$70,391
	1000 Year	15	$141,092
	1500 Year	15	$273,792
	2000 Year	15	$413,250
	2500 Year	15	$516,987
Residential	250 Year	2	$2,553
	500 Year	8	$46,439
	750 Year	8	$125,041
	1000 Year	8	$269,480
	1500 Year	8	$689,900
	2000 Year	8	$1,221,634
	2500 Year	8	$1,707,396
All Categories	**500 Year**	**63**	**$209,409**
	750 Year	**63**	**$587,198**
	1000 Year	**63**	**$1,140,749**

Category	Event	Number of Buildings At Risk	Estimated Damages
	1500 Year	**63**	**$2,380,436**
	2000 Year	**63**	**$3,837,902**
	2500 Year	**63**	**$5,114,647**
	250 Year	**34**	**$8,951**

Source: GIS Analysis

Table 6-54: High Potential Loss Properties Exposed to the Earthquake - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	250 Year	1	$29
	500 Year	1	$1,374
	750 Year	1	$3,760
	1000 Year	1	$5,802
	1500 Year	1	$10,301
	2000 Year	1	$14,287
	2500 Year	1	$19,762
Commercial	250 Year	117	$23,420
	500 Year	127	$456,081
	750 Year	127	$1,237,594
	1000 Year	127	$2,184,958
	1500 Year	127	$4,698,495
	2000 Year	127	$7,237,302
	2500 Year	127	$10,345,763
Government	250 Year	29	$6,354
	500 Year	30	$108,416
	750 Year	30	$299,326
	1000 Year	30	$532,243
	1500 Year	30	$1,123,209
	2000 Year	30	$1,767,169

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	30	$2,564,447
Industrial	250 Year	23	$30,378
	500 Year	24	$349,860
	750 Year	24	$861,358
	1000 Year	24	$1,375,443
	1500 Year	24	$2,466,157
	2000 Year	24	$3,366,951
	2500 Year	24	$4,426,564
Religious	250 Year	20	$4,076
	500 Year	21	$66,630
	750 Year	21	$189,260
	1000 Year	21	$340,704
	1500 Year	21	$715,481
	2000 Year	21	$1,060,108
	2500 Year	21	$1,456,307
Residential	250 Year	2	$304
	500 Year	9	$14,506
	750 Year	9	$49,431
	1000 Year	9	$95,701
	1500 Year	9	$222,710
	2000 Year	9	$335,272
	2500 Year	9	$469,992
Utilities	250 Year	6	$56,200
	500 Year	6	$422,400
	750 Year	6	$1,030,000
	1000 Year	6	$1,595,600
	1500 Year	6	$2,683,800

Category	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	6	$4,006,400
	2500 Year	6	$5,145,800
All Categories	**250 Year**	**198**	**$120,761**
	500 Year	**218**	**$1,419,267**
	750 Year	**218**	**$3,670,729**
	1000 Year	**218**	**$6,130,451**
	1500 Year	**218**	**$11,920,153**
	2000 Year	**218**	**$17,787,489**
	2500 Year	**218**	**$24,428,635**

Source: GIS Analysis

Table 6-55: High Potential Loss Properties Exposed to the Earthquake - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	250 Year	7	$189
	500 Year	7	$8,361
	750 Year	7	$22,685
	1000 Year	7	$35,365
	1500 Year	7	$64,819
	2000 Year	7	$91,938
	2500 Year	7	$133,520
Commercial	250 Year	69	$15,535
	500 Year	83	$212,869
	750 Year	83	$560,317
	1000 Year	83	$1,006,862
	1500 Year	83	$2,004,424
	2000 Year	83	$3,114,113
	2500 Year	83	$4,282,822

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	25	$9,772
	500 Year	34	$151,761
	750 Year	34	$395,122
	1000 Year	34	$686,384
	1500 Year	34	$1,432,175
	2000 Year	34	$2,322,947
	2500 Year	34	$3,434,271
Industrial	250 Year	14	$18,968
	500 Year	14	$203,307
	750 Year	14	$528,060
	1000 Year	14	$818,039
	1500 Year	14	$1,378,638
	2000 Year	14	$1,875,355
	2500 Year	14	$2,382,058
Religious	250 Year	91	$13,854
	500 Year	107	$238,950
	750 Year	107	$640,569
	1000 Year	107	$1,121,224
	1500 Year	107	$2,194,264
	2000 Year	107	$3,303,099
	2500 Year	107	$4,504,477
Residential	250 Year	3	$176
	500 Year	13	$9,974
	750 Year	13	$31,604
	1000 Year	13	$56,566
	1500 Year	13	$115,168
	2000 Year	13	$169,590

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	13	$226,148
Utilities	250 Year	1	$2,630
	500 Year	1	$17,270
	750 Year	1	$36,000
	1000 Year	1	$59,910
	1500 Year	1	$95,950
	2000 Year	1	$135,810
	2500 Year	1	$174,160
All Categories	**250 Year**	**210**	**$61,124**
	500 Year	**259**	**$842,492**
	750 Year	**259**	**$2,214,357**
	1000 Year	**259**	**$3,784,350**
	1500 Year	**259**	**$7,285,438**
	2000 Year	**259**	**$11,012,852**
	2500 Year	**259**	**$15,137,456**

Source: GIS Analysis

Table 6-56: High Potential Loss Properties Exposed to the Earthquake - Town Of Autryville

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	250 Year	1	$87
	500 Year	1	$2,289
	750 Year	1	$5,676
	1000 Year	1	$8,234
	1500 Year	1	$15,581
	2000 Year	1	$22,867
	2500 Year	1	$33,946
Religious	500 Year	2	$1,784
	750 Year	2	$5,931

Category	Event	Number of Buildings At Risk	Estimated Damages
	1000 Year	2	$10,383
	1500 Year	2	$24,524
	2000 Year	2	$35,570
	2500 Year	2	$47,535
All Categories	**250 Year**	**1**	**$87**
	500 Year	**3**	**$4,073**
	750 Year	**3**	**$11,607**
	1000 Year	**3**	**$18,617**
	1500 Year	**3**	**$40,105**
	2000 Year	**3**	**$58,437**
	2500 Year	**3**	**$81,481**

Source: GIS Analysis

Table 6-57: High Potential Loss Properties Exposed to the Earthquake - Town Of Garland

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	3	$91
	500 Year	4	$5,353
	750 Year	4	$16,785
	1000 Year	4	$28,267
	1500 Year	4	$61,427
	2000 Year	4	$88,785
	2500 Year	4	$122,493
Government	250 Year	2	$327
	500 Year	2	$3,685
	750 Year	2	$10,646
	1000 Year	2	$19,932
	1500 Year	2	$43,169
	2000 Year	2	$71,043

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	2	$91,345
Industrial	250 Year	1	$739
	500 Year	1	$10,974
	750 Year	1	$35,884
	1000 Year	1	$62,729
	1500 Year	1	$130,057
	2000 Year	1	$170,080
	2500 Year	1	$210,571
Religious	250 Year	4	$466
	500 Year	4	$9,335
	750 Year	4	$26,595
	1000 Year	4	$47,285
	1500 Year	4	$116,968
	2000 Year	4	$175,881
	2500 Year	4	$223,910
All Categories	**250 Year**	**10**	**$1,623**
	500 Year	**11**	**$29,347**
	750 Year	**11**	**$89,910**
	1000 Year	**11**	**$158,213**
	1500 Year	**11**	**$351,621**
	2000 Year	**11**	**$505,789**
	2500 Year	**11**	**$648,319**

Source: GIS Analysis

Table 6-58: High Potential Loss Properties Exposed to the Earthquake - Town Of Newton Grove

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	13	$1,468
	500 Year	13	$33,159

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	13	$90,975
	1000 Year	13	$175,707
	1500 Year	13	$355,686
	2000 Year	13	$576,320
	2500 Year	13	$763,375
Industrial	250 Year	3	$735
	500 Year	3	$6,340
	750 Year	3	$16,183
	1000 Year	3	$29,296
	1500 Year	3	$55,589
	2000 Year	3	$84,347
	2500 Year	3	$106,744
Religious	250 Year	4	$626
	500 Year	6	$7,379
	750 Year	6	$20,798
	1000 Year	6	$43,325
	1500 Year	6	$90,299
	2000 Year	6	$141,566
	2500 Year	6	$179,457
All Categories	**250 Year**	**20**	**$2,829**
	500 Year	**22**	**$46,878**
	750 Year	**22**	**$127,956**
	1000 Year	**22**	**$248,328**
	1500 Year	**22**	**$501,574**
	2000 Year	**22**	**$802,233**
	2500 Year	**22**	**$1,049,576**

Source: GIS Analysis

Table 6-59: High Potential Loss Properties Exposed to the Earthquake - Town Of Roseboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	16	$2,931
	500 Year	16	$43,467
	750 Year	16	$124,792
	1000 Year	16	$215,075
	1500 Year	16	$451,162
	2000 Year	16	$725,015
	2500 Year	16	$1,078,432
Government	250 Year	8	$1,523
	500 Year	8	$19,865
	750 Year	8	$54,388
	1000 Year	8	$96,426
	1500 Year	8	$220,763
	2000 Year	8	$357,469
	2500 Year	8	$515,552
Industrial	250 Year	8	$13,249
	500 Year	8	$168,904
	750 Year	8	$430,675
	1000 Year	8	$745,590
	1500 Year	8	$1,359,372
	2000 Year	8	$2,157,521
	2500 Year	8	$2,793,332
Religious	250 Year	3	$1,396
	500 Year	3	$17,492
	750 Year	3	$50,070
	1000 Year	3	$84,470
	1500 Year	3	$171,850

Category	Event	Number of Buildings At Risk	Estimated Damages
	2000 Year	3	$261,542
	2500 Year	3	$372,146
Residential	500 Year	1	$504
	750 Year	1	$1,802
	1000 Year	1	$3,340
	1500 Year	1	$8,169
	2000 Year	1	$11,891
	2500 Year	1	$16,870
Utilities	250 Year	2	$32,916
	500 Year	2	$242,158
	750 Year	2	$566,757
	1000 Year	2	$906,245
	1500 Year	2	$1,458,722
	2000 Year	2	$2,259,838
	2500 Year	2	$2,846,548
All Categories	**250 Year**	**37**	**$52,015**
	500 Year	**38**	**$492,390**
	750 Year	**38**	**$1,228,484**
	1000 Year	**38**	**$2,051,146**
	1500 Year	**38**	**$3,670,038**
	2000 Year	**38**	**$5,773,276**
	2500 Year	**38**	**$7,622,880**

Source: GIS Analysis

Table 6-60: High Potential Loss Properties Exposed to the Earthquake - Town Of Salemburg

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	5	$1,036
	500 Year	5	$13,320

Category	Event	Number of Buildings At Risk	Estimated Damages
	750 Year	5	$37,096
	1000 Year	5	$65,483
	1500 Year	5	$139,492
	2000 Year	5	$200,643
	2500 Year	5	$276,184
Government	250 Year	12	$3,050
	500 Year	13	$61,089
	750 Year	13	$183,084
	1000 Year	13	$340,740
	1500 Year	13	$792,366
	2000 Year	13	$1,300,864
	2500 Year	13	$2,012,934
Religious	250 Year	3	$686
	500 Year	3	$10,656
	750 Year	3	$27,307
	1000 Year	3	$44,169
	1500 Year	3	$90,356
	2000 Year	3	$132,679
	2500 Year	3	$217,332
All Categories	**250 Year**	**20**	**$4,772**
	500 Year	**21**	**$85,065**
	750 Year	**21**	**$247,487**
	1000 Year	**21**	**$450,392**
	1500 Year	**21**	**$1,022,214**
	2000 Year	**21**	**$1,634,186**
	2500 Year	**21**	**$2,506,450**

Source: GIS Analysis

Table 6-61: High Potential Loss Properties Exposed to the Earthquake - Town Of Turkey

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	250 Year	1	$144
	500 Year	1	$3,543
	750 Year	1	$8,411
	1000 Year	1	$13,154
	1500 Year	1	$23,519
	2000 Year	1	$34,002
	2500 Year	1	$45,778
Industrial	250 Year	1	$28,674
	500 Year	1	$207,536
	750 Year	1	$436,925
	1000 Year	1	$722,397
	1500 Year	1	$1,187,743
	2000 Year	1	$1,666,352
	2500 Year	1	$2,154,561
Religious	500 Year	1	$911
	750 Year	1	$3,090
	1000 Year	1	$6,158
	1500 Year	1	$12,917
	2000 Year	1	$18,114
	2500 Year	1	$22,001
All Categories	**250 Year**	**2**	**$28,818**
	500 Year	**3**	**$211,990**
	750 Year	**3**	**$448,426**
	1000 Year	**3**	**$741,709**
	1500 Year	**3**	**$1,224,179**
	2000 Year	**3**	**$1,718,468**

Category	Event	Number of Buildings At Risk	Estimated Damages
	2500 Year	**3**	**$2,222,340**

Source: GIS Analysis

6.2.10 Hurricane/Tropical Storm

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

Table 6-62: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	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 Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-63: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	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 Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	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 Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-64: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	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 Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-65: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	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 Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-66: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	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 Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	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 Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-67: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$14,271,533	10,010	36.6%	$2,504,180	331	1.2%	$1,121,405	27,381	100%	$17,897,118
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$957,190	159	14.7%	$248,878	47	4.3%	$408,837	1,081	100%	$1,614,905
Town Of Calypso	570	567	99.5%	402	70.5%	$153,052	146	25.6%	$19,068	21	3.7%	$12,925	569	99.8%	$185,045
Town Of Faison	827	747	90.3%	658	79.6%	$267,492	129	15.6%	$97,549	38	4.6%	$39,381	825	99.8%	$404,421
Town Of Greenevers	297	293	98.7%	267	89.9%	$242,648	21	7.1%	$6,942	9	3%	$8,872	297	100%	$258,463
Town Of Harrells	197	197	100%	121	61.4%	$105,189	63	32%	$19,363	13	6.6%	$15,936	197	100%	$140,489
Town Of Kenansville	548	463	84.5%	390	71.2%	$404,280	66	12%	$84,330	92	16.8%	$302,091	548	100%	$790,700
Town Of Magnolia	729	724	99.3%	621	85.2%	$307,307	65	8.9%	$17,055	43	5.9%	$113,882	729	100%	$438,244
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$889,329	167	14.2%	$152,842	30	2.5%	$56,867	1,177	100%	$1,099,038
Town Of Teachey	169	162	95.9%	148	87.6%	$149,564	8	4.7%	$6,465	13	7.7%	$12,631	169	100%	$168,661
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$2,467,830	380	14.2%	$777,741	95	3.6%	$209,376	2,667	100%	$3,454,947
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$1,485,401	213	11.6%	$544,710	68	3.7%	$282,262	1,832	100%	$2,312,373
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$21,700,815**	**11,427**	**30.5%**	**$4,479,123**	**800**	**2.1%**	**$2,584,465**	**37,472**	**100%**	**$28,764,404**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$2,055,595	1,034	19.3%	$719,320	177	3.3%	$188,198	5,362	99.9%	$2,963,112
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$12,167,588	12,645	35.2%	$2,353,348	415	1.2%	$636,051	35,937	100%	$15,156,987
Town Of Autryville	144	144	100%	122	84.7%	$40,221	18	12.5%	$2,202	4	2.8%	$4,371	144	100%	$46,794
Town Of Garland	701	701	100%	559	79.7%	$358,444	116	16.5%	$50,880	26	3.7%	$21,522	701	100%	$430,845
Town Of Newton Grove	819	819	100%	596	72.8%	$286,983	207	25.3%	$66,933	16	2%	$7,814	819	100%	$361,730
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$390,199	213	19.6%	$167,530	42	3.9%	$13,604	1,083	99.8%	$571,333
Town Of Salemburg	787	787	100%	622	79%	$300,544	122	15.5%	$10,162	43	5.5%	$62,987	787	100%	$373,693
Town Of Turkey	355	355	100%	199	56.1%	$313,097	148	41.7%	$594,508	8	2.3%	$7,466	355	100%	$915,071
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$15,912,671**	**14,503**	**32.1%**	**$3,964,883**	**731**	**1.6%**	**$942,013**	**45,188**	**100%**	**$20,819,565**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$37,613,486**	**25,930**	**31.4%**	**$8,444,006**	**1,531**	**1.9%**	**$3,526,478**	**82,660**	**100%**	**$49,583,969**

Source: GIS Analysis

Table 6-68: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$47,906,926	10,010	36.6%	$9,025,862	331	1.2%	$3,733,988	27,381	100%	$60,666,776
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$2,964,364	159	14.7%	$786,023	47	4.3%	$1,386,686	1,081	100%	$5,137,073
Town Of Calypso	570	567	99.5%	402	70.5%	$1,005,036	146	25.6%	$95,927	21	3.7%	$118,304	569	99.8%	$1,219,266
Town Of Faison	827	747	90.3%	658	79.6%	$2,920,726	129	15.6%	$896,225	38	4.6%	$372,690	825	99.8%	$4,189,642
Town Of Greenevers	297	293	98.7%	267	89.9%	$799,267	21	7.1%	$31,642	9	3%	$32,291	297	100%	$863,200
Town Of Harrells	197	197	100%	121	61.4%	$259,162	63	32%	$72,471	13	6.6%	$67,919	197	100%	$399,551
Town Of Kenansville	548	463	84.5%	390	71.2%	$1,076,507	66	12%	$279,095	92	16.8%	$960,769	548	100%	$2,316,371
Town Of Magnolia	729	724	99.3%	621	85.2%	$840,165	65	8.9%	$66,619	43	5.9%	$328,936	729	100%	$1,235,720
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$2,772,771	167	14.2%	$630,235	30	2.5%	$197,213	1,177	100%	$3,600,220
Town Of Teachey	169	162	95.9%	148	87.6%	$435,439	8	4.7%	$23,733	13	7.7%	$44,750	169	100%	$503,922
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$7,477,391	380	14.2%	$2,595,018	95	3.6%	$772,424	2,667	100%	$10,844,834
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$4,452,903	213	11.6%	$1,934,887	68	3.7%	$862,128	1,832	100%	$7,249,918
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$72,910,657**	**11,427**	**30.5%**	**$16,437,737**	**800**	**2.1%**	**$8,878,098**	**37,472**	**100%**	**$98,226,493**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$14,816,121	1,034	19.3%	$7,369,779	177	3.3%	$2,100,074	5,362	99.9%	$24,285,974
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$37,775,074	12,645	35.2%	$9,570,858	415	1.2%	$2,319,558	35,937	100%	$49,665,490
Town Of Autryville	144	144	100%	122	84.7%	$100,080	18	12.5%	$9,668	4	2.8%	$19,720	144	100%	$129,469
Town Of Garland	701	701	100%	559	79.7%	$972,697	116	16.5%	$184,490	26	3.7%	$77,885	701	100%	$1,235,073
Town Of Newton Grove	819	819	100%	596	72.8%	$759,363	207	25.3%	$284,201	16	2%	$35,204	819	100%	$1,078,769
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$1,006,199	213	19.6%	$475,338	42	3.9%	$47,059	1,083	99.8%	$1,528,596
Town Of Salemburg	787	787	100%	622	79%	$784,385	122	15.5%	$46,816	43	5.5%	$233,960	787	100%	$1,065,161
Town Of Turkey	355	355	100%	199	56.1%	$1,208,788	148	41.7%	$2,296,449	8	2.3%	$32,648	355	100%	$3,537,885
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$57,422,707**	**14,503**	**32.1%**	**$20,237,599**	**731**	**1.6%**	**$4,866,108**	**45,188**	**100%**	**$82,526,417**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$130,333,364**	**25,930**	**31.4%**	**$36,675,336**	**1,531**	**1.9%**	**$13,744,206**	**82,660**	**100%**	**$180,752,910**

Source: GIS Analysis

Table 6-69: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$161,514,991	10,010	36.6%	$27,640,520	331	1.2%	$12,074,469	27,381	100%	$201,229,980
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$9,162,609	159	14.7%	$2,361,328	47	4.3%	$4,216,697	1,081	100%	$15,740,634
Town Of Calypso	570	567	99.5%	402	70.5%	$4,305,567	146	25.6%	$610,445	21	3.7%	$707,705	569	99.8%	$5,623,717
Town Of Faison	827	747	90.3%	658	79.6%	$9,777,499	129	15.6%	$2,788,720	38	4.6%	$971,439	825	99.8%	$13,537,658
Town Of Greenevers	297	293	98.7%	267	89.9%	$2,593,549	21	7.1%	$112,623	9	3%	$107,368	297	100%	$2,813,540
Town Of Harrells	197	197	100%	121	61.4%	$761,171	63	32%	$235,685	13	6.6%	$248,854	197	100%	$1,245,710
Town Of Kenansville	548	463	84.5%	390	71.2%	$3,486,676	66	12%	$866,105	92	16.8%	$2,854,540	548	100%	$7,207,322
Town Of Magnolia	729	724	99.3%	621	85.2%	$2,444,597	65	8.9%	$216,100	43	5.9%	$874,695	729	100%	$3,535,392
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$9,081,434	167	14.2%	$2,161,874	30	2.5%	$608,730	1,177	100%	$11,852,038
Town Of Teachey	169	162	95.9%	148	87.6%	$1,322,783	8	4.7%	$80,612	13	7.7%	$132,616	169	100%	$1,536,011
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$23,539,821	380	14.2%	$7,971,245	95	3.6%	$2,721,287	2,667	100%	$34,232,354
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$14,776,351	213	11.6%	$6,110,474	68	3.7%	$2,613,871	1,832	100%	$23,500,697
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$242,767,048**	**11,427**	**30.5%**	**$51,155,731**	**800**	**2.1%**	**$28,132,271**	**37,472**	**100%**	**$322,055,053**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$51,454,512	1,034	19.3%	$22,393,007	177	3.3%	$6,547,394	5,362	99.9%	$80,394,912
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$131,918,121	12,645	35.2%	$31,023,286	415	1.2%	$7,474,285	35,937	100%	$170,415,692
Town Of Autryville	144	144	100%	122	84.7%	$290,696	18	12.5%	$36,976	4	2.8%	$67,882	144	100%	$395,554
Town Of Garland	701	701	100%	559	79.7%	$3,140,045	116	16.5%	$604,767	26	3.7%	$270,394	701	100%	$4,015,206
Town Of Newton Grove	819	819	100%	596	72.8%	$2,644,543	207	25.3%	$977,831	16	2%	$137,147	819	100%	$3,759,520
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$7,760,623	213	19.6%	$2,201,916	42	3.9%	$541,313	1,083	99.8%	$10,503,851
Town Of Salemburg	787	787	100%	622	79%	$2,682,435	122	15.5%	$182,706	43	5.5%	$855,397	787	100%	$3,720,538
Town Of Turkey	355	355	100%	199	56.1%	$3,905,718	148	41.7%	$6,868,469	8	2.3%	$120,382	355	100%	$10,894,569
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$203,796,693**	**14,503**	**32.1%**	**$64,288,958**	**731**	**1.6%**	**$16,014,194**	**45,188**	**100%**	**$284,099,842**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$446,563,741**	**25,930**	**31.4%**	**$115,444,689**	**1,531**	**1.9%**	**$44,146,465**	**82,660**	**100%**	**$606,154,895**

Source: GIS Analysis

Table 6-70: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$563,729,875	10,010	36.6%	$101,985,498	331	1.2%	$51,370,598	27,381	100%	$717,085,971
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$42,107,940	159	14.7%	$13,405,924	47	4.3%	$23,121,349	1,081	100%	$78,635,213
Town Of Calypso	570	567	99.5%	402	70.5%	$10,966,407	146	25.6%	$1,560,500	21	3.7%	$1,802,377	569	99.8%	$14,329,284
Town Of Faison	827	747	90.3%	658	79.6%	$23,507,317	129	15.6%	$7,193,181	38	4.6%	$2,435,996	825	99.8%	$33,136,494
Town Of Greenevers	297	293	98.7%	267	89.9%	$13,011,744	21	7.1%	$564,615	9	3%	$767,268	297	100%	$14,343,626
Town Of Harrells	197	197	100%	121	61.4%	$4,093,538	63	32%	$1,467,634	13	6.6%	$1,505,262	197	100%	$7,066,434
Town Of Kenansville	548	463	84.5%	390	71.2%	$21,131,060	66	12%	$5,937,248	92	16.8%	$16,914,638	548	100%	$43,982,947
Town Of Magnolia	729	724	99.3%	621	85.2%	$13,636,207	65	8.9%	$1,116,885	43	5.9%	$4,218,098	729	100%	$18,971,191
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$46,474,007	167	14.2%	$12,407,764	30	2.5%	$3,860,907	1,177	100%	$62,742,677
Town Of Teachey	169	162	95.9%	148	87.6%	$6,630,212	8	4.7%	$533,452	13	7.7%	$925,213	169	100%	$8,088,877
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$127,937,124	380	14.2%	$42,213,222	95	3.6%	$17,217,158	2,667	100%	$187,367,504
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$40,155,060	213	11.6%	$16,211,876	68	3.7%	$7,192,926	1,832	100%	$63,559,861
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$913,380,491**	**11,427**	**30.5%**	**$204,597,799**	**800**	**2.1%**	**$131,331,790**	**37,472**	**100%**	**$1,249,310,079**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$131,386,976	1,034	19.3%	$58,152,932	177	3.3%	$17,273,880	5,362	99.9%	$206,813,788
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$636,662,555	12,645	35.2%	$109,911,977	415	1.2%	$38,768,800	35,937	100%	$785,343,332
Town Of Autryville	144	144	100%	122	84.7%	$2,481,884	18	12.5%	$310,165	4	2.8%	$542,486	144	100%	$3,334,535
Town Of Garland	701	701	100%	559	79.7%	$18,589,220	116	16.5%	$3,880,246	26	3.7%	$1,967,397	701	100%	$24,436,863
Town Of Newton Grove	819	819	100%	596	72.8%	$22,112,609	207	25.3%	$7,942,956	16	2%	$1,172,235	819	100%	$31,227,801
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$25,568,035	213	19.6%	$6,248,443	42	3.9%	$1,549,570	1,083	99.8%	$33,366,048
Town Of Salemburg	787	787	100%	622	79%	$21,489,712	122	15.5%	$1,428,848	43	5.5%	$8,085,247	787	100%	$31,003,806
Town Of Turkey	355	355	100%	199	56.1%	$8,663,572	148	41.7%	$16,439,090	8	2.3%	$327,012	355	100%	$25,429,675
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$866,954,563**	**14,503**	**32.1%**	**$204,314,657**	**731**	**1.6%**	**$69,686,627**	**45,188**	**100%**	**$1,140,955,848**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$1,780,335,054**	**25,930**	**31.4%**	**$408,912,456**	**1,531**	**1.9%**	**$201,018,417**	**82,660**	**100%**	**$2,390,265,927**

Source: GIS Analysis

Table 6-71: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$906,942,969	10,010	36.6%	$188,682,813	331	1.2%	$94,040,820	27,381	100%	$1,189,666,602
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$63,652,628	159	14.7%	$23,070,079	47	4.3%	$37,703,629	1,081	100%	$124,426,337
Town Of Calypso	570	567	99.5%	402	70.5%	$20,160,765	146	25.6%	$2,883,911	21	3.7%	$3,432,193	569	99.8%	$26,476,869
Town Of Faison	827	747	90.3%	658	79.6%	$43,629,184	129	15.6%	$16,310,783	38	4.6%	$5,474,972	825	99.8%	$65,414,940
Town Of Greenevers	297	293	98.7%	267	89.9%	$19,928,229	21	7.1%	$864,160	9	3%	$1,454,050	297	100%	$22,246,439
Town Of Harrells	197	197	100%	121	61.4%	$6,632,962	63	32%	$2,633,574	13	6.6%	$2,588,135	197	100%	$11,854,671
Town Of Kenansville	548	463	84.5%	390	71.2%	$34,110,706	66	12%	$11,404,317	92	16.8%	$30,527,646	548	100%	$76,042,669
Town Of Magnolia	729	724	99.3%	621	85.2%	$23,143,516	65	8.9%	$1,854,804	43	5.9%	$6,939,446	729	100%	$31,937,766
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$72,662,986	167	14.2%	$20,726,650	30	2.5%	$6,994,197	1,177	100%	$100,383,834
Town Of Teachey	169	162	95.9%	148	87.6%	$10,564,721	8	4.7%	$942,265	13	7.7%	$1,799,257	169	100%	$13,306,243
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$212,303,686	380	14.2%	$70,875,795	95	3.6%	$28,907,161	2,667	100%	$312,086,641
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$85,104,836	213	11.6%	$35,601,515	68	3.7%	$16,944,533	1,832	100%	$137,650,883
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$1,498,837,188**	**11,427**	**30.5%**	**$375,850,666**	**800**	**2.1%**	**$236,806,039**	**37,472**	**100%**	**$2,111,493,894**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$259,363,485	1,034	19.3%	$128,234,327	177	3.3%	$38,505,437	5,362	99.9%	$426,103,248
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$1,197,829,450	12,645	35.2%	$211,775,539	415	1.2%	$77,558,311	35,937	100%	$1,487,163,299
Town Of Autryville	144	144	100%	122	84.7%	$5,184,348	18	12.5%	$699,082	4	2.8%	$1,210,500	144	100%	$7,093,930
Town Of Garland	701	701	100%	559	79.7%	$30,308,196	116	16.5%	$6,953,996	26	3.7%	$3,652,592	701	100%	$40,914,784
Town Of Newton Grove	819	819	100%	596	72.8%	$41,776,827	207	25.3%	$17,554,391	16	2%	$2,649,072	819	100%	$61,980,290
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$48,576,182	213	19.6%	$13,190,517	42	3.9%	$3,626,906	1,083	99.8%	$65,393,605
Town Of Salemburg	787	787	100%	622	79%	$39,985,710	122	15.5%	$2,997,103	43	5.5%	$17,333,912	787	100%	$60,316,725
Town Of Turkey	355	355	100%	199	56.1%	$14,811,689	148	41.7%	$32,729,273	8	2.3%	$720,214	355	100%	$48,261,176
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$1,637,835,887**	**14,503**	**32.1%**	**$414,134,228**	**731**	**1.6%**	**$145,256,944**	**45,188**	**100%**	**$2,197,227,057**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$3,136,673,075**	**25,930**	**31.4%**	**$789,984,894**	**1,531**	**1.9%**	**$382,062,983**	**82,660**	**100%**	**$4,308,720,951**

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 6-72: Critical Facilities Exposed to the Hurricane Winds - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$2,776
	50 Year	3	$10,513
	100 Year	3	$35,936
	300 Year	3	$126,580
	700 Year	3	$272,480
Chemical	25 Year	1	$234
	50 Year	1	$867
	100 Year	1	$2,357
	300 Year	1	$5,259
	700 Year	1	$10,310
Commercial Facilities	25 Year	568	$1,191,460
	50 Year	568	$3,771,745
	100 Year	568	$11,639,405
	300 Year	568	$48,197,185
	700 Year	568	$91,915,403
Critical Manufacturing	25 Year	212	$265,346
	50 Year	212	$774,003
	100 Year	212	$2,167,639
	300 Year	212	$9,909,726
	700 Year	212	$18,871,597
Defense Industrial Base	25 Year	1	$231
	50 Year	1	$947
	100 Year	1	$2,824
	300 Year	1	$6,636

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	1	$13,779
Emergency Services	25 Year	15	$34,071
	50 Year	15	$104,501
	100 Year	15	$388,304
	300 Year	15	$1,556,064
	700 Year	15	$2,776,815
Energy	25 Year	4	$274
	50 Year	4	$799
	100 Year	4	$2,114
	300 Year	4	$5,215
	700 Year	4	$11,044
Food and Agriculture	25 Year	9,281	$1,331,807
	50 Year	9,281	$5,354,083
	100 Year	9,281	$16,233,131
	300 Year	9,281	$54,082,758
	700 Year	9,281	$96,717,801
Government Facilities	25 Year	109	$488,647
	50 Year	109	$1,743,019
	100 Year	109	$5,540,355
	300 Year	109	$24,448,996
	700 Year	109	$42,577,227
Healthcare and Public Health	25 Year	7	$17,940
	50 Year	7	$46,758
	100 Year	7	$204,995
	300 Year	7	$596,143
	700 Year	7	$1,123,719
Transportation Systems	25 Year	145	$294,365

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	145	$952,290
	100 Year	145	$3,467,115
	300 Year	145	$14,253,112
	700 Year	145	$28,224,065
All Categories	**25 Year**	**10,346**	**$3,627,151**
	50 Year	**10,346**	**$12,759,525**
	100 Year	**10,346**	**$39,684,175**
	300 Year	**10,346**	**$153,187,674**
	700 Year	**10,346**	**$282,514,240**

Source: GIS Analysis

Table 6-73: Critical Facilities Exposed to the Hurricane Winds - Town Of Beulaville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$3,760
	50 Year	3	$12,450
	100 Year	3	$35,811
	300 Year	3	$192,967
	700 Year	3	$341,246
Commercial Facilities	25 Year	89	$197,476
	50 Year	89	$650,523
	100 Year	89	$1,963,150
	300 Year	89	$10,812,057
	700 Year	89	$18,501,208
Critical Manufacturing	25 Year	10	$21,879
	50 Year	10	$85,736
	100 Year	10	$317,566
	300 Year	10	$2,329,059
	700 Year	10	$4,141,159

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	25 Year	1	$4,193
	50 Year	1	$16,630
	100 Year	1	$55,242
	300 Year	1	$311,832
	700 Year	1	$548,531
Emergency Services	25 Year	3	$3,253
	50 Year	3	$14,259
	100 Year	3	$52,934
	300 Year	3	$316,188
	700 Year	3	$522,909
Energy	25 Year	1	$100
	50 Year	1	$396
	100 Year	1	$1,510
	300 Year	1	$11,904
	700 Year	1	$21,508
Food and Agriculture	25 Year	39	$4,730
	50 Year	39	$17,132
	100 Year	39	$45,955
	300 Year	39	$197,738
	700 Year	39	$333,104
Government Facilities	25 Year	19	$333,587
	50 Year	19	$1,116,142
	100 Year	19	$3,369,182
	300 Year	19	$18,211,966
	700 Year	19	$29,007,434
Healthcare and Public Health	25 Year	10	$24,469
	50 Year	10	$86,548

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	10	$288,018
	300 Year	10	$1,836,505
	700 Year	10	$3,312,984
Transportation Systems	25 Year	28	$55,873
	50 Year	28	$144,928
	100 Year	28	$368,301
	300 Year	28	$1,891,533
	700 Year	28	$3,299,125
All Categories	**25 Year**	**203**	**$649,320**
	50 Year	**203**	**$2,144,744**
	100 Year	**203**	**$6,497,669**
	300 Year	**203**	**$36,111,749**
	700 Year	**203**	**$60,029,208**

Source: GIS Analysis

Table 6-74: Critical Facilities Exposed to the Hurricane Winds - Town Of Calypso

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	38	$22,740
	50 Year	38	$158,568
	100 Year	38	$1,055,223
	300 Year	38	$2,680,211
	700 Year	38	$5,017,524
Critical Manufacturing	25 Year	4	$4,267
	50 Year	4	$16,312
	100 Year	4	$65,825
	300 Year	4	$170,889
	700 Year	4	$320,864
Emergency Services	25 Year	1	$1,527

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$7,564
	100 Year	1	$53,236
	300 Year	1	$84,351
	700 Year	1	$112,611
Energy	25 Year	2	$246
	50 Year	2	$4,211
	100 Year	2	$13,076
	300 Year	2	$35,146
	700 Year	2	$79,945
Food and Agriculture	25 Year	116	$2,045
	50 Year	116	$23,088
	100 Year	116	$77,022
	300 Year	116	$236,405
	700 Year	116	$459,320
Government Facilities	25 Year	6	$822
	50 Year	6	$3,909
	100 Year	6	$52,973
	300 Year	6	$130,862
	700 Year	6	$252,551
Transportation Systems	25 Year	1	$368
	50 Year	1	$1,188
	100 Year	1	$3,185
	300 Year	1	$31,210
	700 Year	1	$86,112
All Categories	**25 Year**	**168**	**$32,015**
	50 Year	**168**	**$214,840**
	100 Year	**168**	**$1,320,540**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**168**	**$3,369,074**
	700 Year	**168**	**$6,328,927**

Source: GIS Analysis

Table 6-75: Critical Facilities Exposed to the Hurricane Winds - Town Of Faison

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$1,060
	50 Year	3	$14,630
	100 Year	3	$44,285
	300 Year	3	$126,402
	700 Year	3	$299,964
Commercial Facilities	25 Year	48	$64,133
	50 Year	48	$523,087
	100 Year	48	$1,485,978
	300 Year	48	$3,759,125
	700 Year	48	$8,551,881
Critical Manufacturing	25 Year	7	$59,439
	50 Year	7	$544,566
	100 Year	7	$1,577,540
	300 Year	7	$4,000,848
	700 Year	7	$9,023,717
Emergency Services	25 Year	1	$288
	50 Year	1	$4,051
	100 Year	1	$13,761
	300 Year	1	$38,880
	700 Year	1	$94,504
Energy	25 Year	2	$21,323
	50 Year	2	$565,013

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	2	$2,321,310
	300 Year	2	$6,349,545
	700 Year	2	$13,710,628
Food and Agriculture	25 Year	82	$2,267
	50 Year	82	$37,120
	100 Year	82	$130,952
	300 Year	82	$290,379
	700 Year	82	$565,837
Government Facilities	25 Year	14	$5,941
	50 Year	14	$70,377
	100 Year	14	$230,698
	300 Year	14	$668,204
	700 Year	14	$1,616,622
Healthcare and Public Health	25 Year	2	$946
	50 Year	2	$28,506
	100 Year	2	$114,879
	300 Year	2	$301,764
	700 Year	2	$631,329
Transportation Systems	25 Year	8	$2,580
	50 Year	8	$42,910
	100 Year	8	$150,579
	300 Year	8	$414,654
	700 Year	8	$938,353
Water	25 Year	1	$23,590
	50 Year	1	$679,107
	100 Year	1	$2,748,247
	300 Year	1	$7,296,649

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	1	$15,311,811
All Categories	**25 Year**	**168**	**$181,567**
	50 Year	**168**	**$2,509,367**
	100 Year	**168**	**$8,818,229**
	300 Year	**168**	**$23,246,450**
	700 Year	**168**	**$50,744,646**

Source: GIS Analysis

Table 6-76: Critical Facilities Exposed to the Hurricane Winds - Town Of Greenevers

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	11	$6,881
	50 Year	11	$25,364
	100 Year	11	$86,702
	300 Year	11	$622,615
	700 Year	11	$1,173,722
Critical Manufacturing	25 Year	3	$3,979
	50 Year	3	$20,979
	100 Year	3	$79,758
	300 Year	3	$371,468
	700 Year	3	$527,651
Emergency Services	25 Year	1	$1,847
	50 Year	1	$6,198
	100 Year	1	$19,290
	300 Year	1	$149,671
	700 Year	1	$286,597
Food and Agriculture	25 Year	13	$1,530
	50 Year	13	$5,628
	100 Year	13	$15,199

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	13	$66,000
	700 Year	13	$111,245
Government Facilities	25 Year	2	$1,578
	50 Year	2	$5,764
	100 Year	2	$19,042
	300 Year	2	$122,129
	700 Year	2	$218,996
All Categories	**25 Year**	**30**	**$15,815**
	50 Year	**30**	**$63,933**
	100 Year	**30**	**$219,991**
	300 Year	**30**	**$1,331,883**
	700 Year	**30**	**$2,318,211**

Source: GIS Analysis

Table 6-77: Critical Facilities Exposed to the Hurricane Winds - Town Of Harrells

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$223
	50 Year	1	$1,314
	100 Year	1	$5,255
	300 Year	1	$28,582
	700 Year	1	$43,130
Commercial Facilities	25 Year	14	$8,273
	50 Year	14	$33,405
	100 Year	14	$124,659
	300 Year	14	$837,449
	700 Year	14	$1,463,174
Critical Manufacturing	25 Year	1	$5,590
	50 Year	1	$19,574

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$65,215
	300 Year	1	$479,827
	700 Year	1	$911,888
Emergency Services	25 Year	2	$886
	50 Year	2	$3,258
	100 Year	2	$10,793
	300 Year	2	$54,875
	700 Year	2	$84,632
Food and Agriculture	25 Year	48	$4,804
	50 Year	48	$18,280
	100 Year	48	$50,978
	300 Year	48	$230,034
	700 Year	48	$392,557
Government Facilities	25 Year	8	$13,552
	50 Year	8	$57,340
	100 Year	8	$206,915
	300 Year	8	$1,238,374
	700 Year	8	$2,151,103
Healthcare and Public Health	25 Year	1	$288
	50 Year	1	$1,052
	100 Year	1	$3,848
	300 Year	1	$33,306
	700 Year	1	$66,153
Transportation Systems	25 Year	1	$1,683
	50 Year	1	$6,165
	100 Year	1	$16,876
	300 Year	1	$70,450

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	1	$109,071
All Categories	**25 Year**	**76**	**$35,299**
	50 Year	**76**	**$140,388**
	100 Year	**76**	**$484,539**
	300 Year	**76**	**$2,972,897**
	700 Year	**76**	**$5,221,708**

Source: GIS Analysis

Table 6-78: Critical Facilities Exposed to the Hurricane Winds - Town Of Kenansville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$17,455
	50 Year	6	$61,927
	100 Year	6	$199,651
	300 Year	6	$1,285,747
	700 Year	6	$2,214,958
Commercial Facilities	25 Year	49	$104,375
	50 Year	49	$310,295
	100 Year	49	$871,860
	300 Year	49	$5,245,415
	700 Year	49	$9,794,499
Critical Manufacturing	25 Year	2	$466
	50 Year	2	$1,996
	100 Year	2	$9,250
	300 Year	2	$52,806
	700 Year	2	$110,048
Emergency Services	25 Year	4	$10,127
	50 Year	4	$40,834
	100 Year	4	$146,458

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	4	$969,248
	700 Year	4	$1,731,803
Energy	25 Year	2	$499
	50 Year	2	$1,661
	100 Year	2	$5,037
	300 Year	2	$27,478
	700 Year	2	$61,150
Government Facilities	25 Year	67	$226,651
	50 Year	67	$738,499
	100 Year	67	$2,202,874
	300 Year	67	$12,858,455
	700 Year	67	$23,098,915
Healthcare and Public Health	25 Year	10	$19,358
	50 Year	10	$58,888
	100 Year	10	$190,923
	300 Year	10	$1,568,310
	700 Year	10	$3,318,204
Transportation Systems	25 Year	12	$6,491
	50 Year	12	$22,297
	100 Year	12	$80,698
	300 Year	12	$708,093
	700 Year	12	$1,338,924
All Categories	**25 Year**	**152**	**$385,422**
	50 Year	**152**	**$1,236,397**
	100 Year	**152**	**$3,706,751**
	300 Year	**152**	**$22,715,552**
	700 Year	**152**	**$41,668,501**

Source: GIS Analysis

Table 6-79: Critical Facilities Exposed to the Hurricane Winds - Town Of Magnolia

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	28	$43,419
	50 Year	28	$149,254
	100 Year	28	$463,468
	300 Year	28	$2,617,836
	700 Year	28	$4,484,605
Critical Manufacturing	25 Year	3	$478
	50 Year	3	$1,687
	100 Year	3	$5,338
	300 Year	3	$32,649
	700 Year	3	$64,500
Emergency Services	25 Year	2	$2,528
	50 Year	2	$13,340
	100 Year	2	$48,949
	300 Year	2	$213,461
	700 Year	2	$305,559
Energy	25 Year	3	$1,903
	50 Year	3	$5,989
	100 Year	3	$19,869
	300 Year	3	$131,446
	700 Year	3	$225,201
Food and Agriculture	25 Year	40	$3,204
	50 Year	40	$13,085
	100 Year	40	$38,867
	300 Year	40	$189,220
	700 Year	40	$329,833

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	25 Year	25	$75,134
	50 Year	25	$194,430
	100 Year	25	$453,430
	300 Year	25	$1,822,713
	700 Year	25	$2,842,046
Healthcare and Public Health	25 Year	6	$2,200
	50 Year	6	$8,062
	100 Year	6	$25,422
	300 Year	6	$155,246
	700 Year	6	$281,922
Transportation Systems	25 Year	1	$2,070
	50 Year	1	$9,706
	100 Year	1	$35,451
	300 Year	1	$172,412
	700 Year	1	$260,584
All Categories	**25 Year**	**108**	**$130,936**
	50 Year	**108**	**$395,553**
	100 Year	**108**	**$1,090,794**
	300 Year	**108**	**$5,334,983**
	700 Year	**108**	**$8,794,250**

Source: GIS Analysis

Table 6-80: Critical Facilities Exposed to the Hurricane Winds - Town Of Rose Hill

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$6,099
	50 Year	2	$21,190
	100 Year	2	$57,584
	300 Year	2	$373,924

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	2	$721,980
Commercial Facilities	25 Year	56	$64,598
	50 Year	56	$239,627
	100 Year	56	$776,697
	300 Year	56	$4,856,568
	700 Year	56	$8,740,524
Critical Manufacturing	25 Year	20	$42,326
	50 Year	20	$225,837
	100 Year	20	$889,113
	300 Year	20	$4,770,476
	700 Year	20	$7,266,467
Emergency Services	25 Year	1	$1,339
	50 Year	1	$5,387
	100 Year	1	$22,139
	300 Year	1	$197,622
	700 Year	1	$373,326
Food and Agriculture	25 Year	77	$17,408
	50 Year	77	$58,779
	100 Year	77	$152,195
	300 Year	77	$609,406
	700 Year	77	$996,921
Government Facilities	25 Year	16	$40,467
	50 Year	16	$134,350
	100 Year	16	$396,894
	300 Year	16	$2,384,179
	700 Year	16	$4,278,262
	25 Year	4	$14,783

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	50 Year	4	$53,683
	100 Year	4	$158,108
	300 Year	4	$1,001,960
	700 Year	4	$1,855,968
Transportation Systems	25 Year	21	$22,689
	50 Year	21	$88,596
	100 Year	21	$317,874
	300 Year	21	$2,074,535
	700 Year	21	$3,487,398
All Categories	**25 Year**	**197**	**$209,709**
	50 Year	**197**	**$827,449**
	100 Year	**197**	**$2,770,604**
	300 Year	**197**	**$16,268,670**
	700 Year	**197**	**$27,720,846**

Source: GIS Analysis

Table 6-81: Critical Facilities Exposed to the Hurricane Winds - Town Of Teachey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	13	$15,673
	50 Year	13	$52,441
	100 Year	13	$148,224
	300 Year	13	$1,024,693
	700 Year	13	$2,011,243
Critical Manufacturing	25 Year	1	$191
	50 Year	1	$721
	100 Year	1	$2,676
	300 Year	1	$22,409
	700 Year	1	$43,137

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	25 Year	1	$576
	50 Year	1	$2,120
	100 Year	1	$7,588
	300 Year	1	$62,560
	700 Year	1	$122,034
Government Facilities	25 Year	4	$1,389
	50 Year	4	$5,864
	100 Year	4	$20,941
	300 Year	4	$134,067
	700 Year	4	$234,870
Transportation Systems	25 Year	2	$1,267
	50 Year	2	$7,337
	100 Year	2	$33,798
	300 Year	2	$214,935
	700 Year	2	$330,239
All Categories	**25 Year**	**21**	**$19,096**
	50 Year	**21**	**$68,483**
	100 Year	**21**	**$213,227**
	300 Year	**21**	**$1,458,664**
	700 Year	**21**	**$2,741,523**

Source: GIS Analysis

Table 6-82: Critical Facilities Exposed to the Hurricane Winds - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$9,521
	50 Year	7	$28,846
	100 Year	7	$77,736
	300 Year	7	$431,867

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	7	$834,500
Commercial Facilities	25 Year	226	$640,105
	50 Year	226	$2,124,588
	100 Year	226	$6,431,887
	300 Year	226	$32,813,261
	700 Year	226	$54,190,510
Critical Manufacturing	25 Year	41	$86,125
	50 Year	41	$247,025
	100 Year	41	$675,690
	300 Year	41	$3,353,040
	700 Year	41	$5,624,476
Emergency Services	25 Year	1	$469
	50 Year	1	$1,628
	100 Year	1	$5,624
	300 Year	1	$48,980
	700 Year	1	$101,745
Energy	25 Year	1	$2,346
	50 Year	1	$4,566
	100 Year	1	$8,457
	300 Year	1	$44,822
	700 Year	1	$88,118
Food and Agriculture	25 Year	77	$4,578
	50 Year	77	$17,848
	100 Year	77	$50,973
	300 Year	77	$236,491
	700 Year	77	$407,128
Government Facilities	25 Year	37	$52,401

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	37	$207,883
	100 Year	37	$871,676
	300 Year	37	$6,748,247
	700 Year	37	$11,791,261
Healthcare and Public Health	25 Year	20	$28,758
	50 Year	20	$99,529
	100 Year	20	$313,524
	300 Year	20	$1,747,226
	700 Year	20	$2,984,857
Transportation Systems	25 Year	65	$163,151
	50 Year	65	$636,209
	100 Year	65	$2,260,499
	300 Year	65	$14,030,697
	700 Year	65	$23,793,712
All Categories	**25 Year**	**475**	**$987,454**
	50 Year	**475**	**$3,368,122**
	100 Year	**475**	**$10,696,066**
	300 Year	**475**	**$59,454,631**
	700 Year	**475**	**$99,816,307**

Source: GIS Analysis

Table 6-83: Critical Facilities Exposed to the Hurricane Winds - Town Of Warsaw

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$10,990
	50 Year	3	$37,825
	100 Year	3	$126,142
	300 Year	3	$371,959
	700 Year	3	$875,347

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	155	$454,671
	50 Year	155	$1,619,654
	100 Year	155	$5,060,399
	300 Year	155	$13,314,699
	700 Year	155	$29,613,886
Critical Manufacturing	25 Year	32	$29,375
	50 Year	32	$101,696
	100 Year	32	$308,508
	300 Year	32	$785,808
	700 Year	32	$1,758,390
Emergency Services	25 Year	2	$6,801
	50 Year	2	$29,867
	100 Year	2	$108,340
	300 Year	2	$290,055
	700 Year	2	$642,017
Energy	25 Year	3	$6,684
	50 Year	3	$21,533
	100 Year	3	$70,328
	300 Year	3	$219,685
	700 Year	3	$556,991
Food and Agriculture	25 Year	22	$16,109
	50 Year	22	$59,277
	100 Year	22	$182,515
	300 Year	22	$443,462
	700 Year	22	$912,512
Government Facilities	25 Year	18	$141,945
	50 Year	18	$358,957

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	18	$943,399
	300 Year	18	$2,449,691
	700 Year	18	$5,919,272
Healthcare and Public Health	25 Year	9	$36,196
	50 Year	9	$128,967
	100 Year	9	$404,656
	300 Year	9	$1,070,936
	700 Year	9	$2,418,622
Transportation Systems	25 Year	33	$122,141
	50 Year	33	$429,877
	100 Year	33	$1,480,625
	300 Year	33	$4,333,727
	700 Year	33	$9,557,681
All Categories	**25 Year**	**277**	**$824,912**
	50 Year	**277**	**$2,787,653**
	100 Year	**277**	**$8,684,912**
	300 Year	**277**	**$23,280,022**
	700 Year	**277**	**$52,254,718**

Source: GIS Analysis

Table 6-84: Critical Facilities Exposed to the Hurricane Winds - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	16	$12,075
	50 Year	16	$134,736
	100 Year	16	$351,565
	300 Year	16	$837,226
	700 Year	16	$1,849,561
Commercial Facilities	25 Year	720	$434,836

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	720	$5,133,340
	100 Year	720	$16,636,575
	300 Year	720	$44,411,960
	700 Year	720	$98,011,345
Critical Manufacturing	25 Year	63	$105,704
	50 Year	63	$1,193,873
	100 Year	63	$3,653,044
	300 Year	63	$9,748,208
	700 Year	63	$22,420,176
Emergency Services	25 Year	5	$8,269
	50 Year	5	$117,960
	100 Year	5	$370,278
	300 Year	5	$1,035,441
	700 Year	5	$2,392,370
Energy	25 Year	7	$46,422
	50 Year	7	$637,944
	100 Year	7	$2,912,652
	300 Year	7	$9,956,844
	700 Year	7	$25,968,477
Food and Agriculture	25 Year	203	$5,711
	50 Year	203	$66,902
	100 Year	203	$242,810
	300 Year	203	$631,895
	700 Year	203	$1,349,795
Government Facilities	25 Year	132	$179,201
	50 Year	132	$1,846,594
	100 Year	132	$5,816,706

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	132	$15,200,846
	700 Year	132	$32,942,853
Healthcare and Public Health	25 Year	45	$135,062
	50 Year	45	$902,481
	100 Year	45	$2,117,847
	300 Year	45	$4,673,649
	700 Year	45	$9,573,745
Transportation Systems	25 Year	40	$70,906
	50 Year	40	$396,493
	100 Year	40	$1,049,058
	300 Year	40	$2,524,298
	700 Year	40	$5,533,579
All Categories	**25 Year**	**1,231**	**$998,186**
	50 Year	**1,231**	**$10,430,323**
	100 Year	**1,231**	**$33,150,535**
	300 Year	**1,231**	**$89,020,367**
	700 Year	**1,231**	**$200,041,901**

Source: GIS Analysis

Table 6-85: Critical Facilities Exposed to the Hurricane Winds - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	760	$648,148
	50 Year	760	$2,532,321
	100 Year	760	$8,190,537
	300 Year	760	$39,649,411
	700 Year	760	$82,033,910
Communications	25 Year	1	$413
	50 Year	1	$1,292

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$5,752
	300 Year	1	$117,661
	700 Year	1	$332,989
Critical Manufacturing	25 Year	80	$1,198,871
	50 Year	80	$4,386,250
	100 Year	80	$14,285,441
	300 Year	80	$37,853,449
	700 Year	80	$70,061,119
Emergency Services	25 Year	9	$30,287
	50 Year	9	$83,384
	100 Year	9	$211,637
	300 Year	9	$1,247,063
	700 Year	9	$2,785,770
Energy	25 Year	1	$3,046
	50 Year	1	$68,874
	100 Year	1	$292,122
	300 Year	1	$847,406
	700 Year	1	$1,927,069
Food and Agriculture	25 Year	11,972	$734,499
	50 Year	11,972	$3,615,307
	100 Year	11,972	$11,428,969
	300 Year	11,972	$45,782,025
	700 Year	11,972	$87,041,512
Government Facilities	25 Year	166	$277,422
	50 Year	166	$910,460
	100 Year	166	$2,959,000
	300 Year	166	$17,264,337

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	166	$34,099,625
Healthcare and Public Health	25 Year	8	$7,102
	50 Year	8	$26,271
	100 Year	8	$117,485
	300 Year	8	$1,055,504
	700 Year	8	$2,213,072
Nuclear Reactors, Materials and Waste	25 Year	1	$1,325
	50 Year	1	$2,496
	100 Year	1	$7,482
	300 Year	1	$85,697
	700 Year	1	$171,884
Transportation Systems	25 Year	70	$114,073
	50 Year	70	$377,847
	100 Year	70	$1,389,831
	300 Year	70	$6,317,024
	700 Year	70	$12,021,492
All Categories	**25 Year**	**13,068**	**$3,015,186**
	50 Year	**13,068**	**$12,004,502**
	100 Year	**13,068**	**$38,888,256**
	300 Year	**13,068**	**$150,219,577**
	700 Year	**13,068**	**$292,688,442**

Source: GIS Analysis

Table 6-86: Critical Facilities Exposed to the Hurricane Winds - Town Of Autryville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	17	$4,041
	50 Year	17	$18,441
	100 Year	17	$64,620

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	17	$461,132
	700 Year	17	$1,017,460
Critical Manufacturing	25 Year	1	$136
	50 Year	1	$419
	100 Year	1	$1,839
	300 Year	1	$29,772
	700 Year	1	$77,540
Emergency Services	25 Year	1	$2,236
	50 Year	1	$9,884
	100 Year	1	$35,080
	300 Year	1	$309,447
	700 Year	1	$693,261
Food and Agriculture	25 Year	1	$3
	50 Year	1	$20
	100 Year	1	$84
	300 Year	1	$606
	700 Year	1	$1,279
Government Facilities	25 Year	1	$86
	50 Year	1	$299
	100 Year	1	$1,307
	300 Year	1	$18,167
	700 Year	1	$45,327
Transportation Systems	25 Year	1	$70
	50 Year	1	$326
	100 Year	1	$1,929
	300 Year	1	$33,528
	700 Year	1	$74,714

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**22**	**$6,572**
	50 Year	**22**	**$29,389**
	100 Year	**22**	**$104,859**
	300 Year	**22**	**$852,652**
	700 Year	**22**	**$1,909,581**

Source: GIS Analysis

Table 6-87: Critical Facilities Exposed to the Hurricane Winds - Town Of Garland

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$1,039
	50 Year	1	$4,377
	100 Year	1	$16,613
	300 Year	1	$104,935
	700 Year	1	$174,969
Commercial Facilities	25 Year	70	$44,933
	50 Year	70	$160,534
	100 Year	70	$528,524
	300 Year	70	$3,461,367
	700 Year	70	$6,223,684
Critical Manufacturing	25 Year	3	$5,079
	50 Year	3	$23,190
	100 Year	3	$107,168
	300 Year	3	$935,299
	700 Year	3	$1,674,009
Emergency Services	25 Year	1	$590
	50 Year	1	$1,891
	100 Year	1	$6,155
	300 Year	1	$54,513

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	1	$119,490
Food and Agriculture	25 Year	51	$4,549
	50 Year	51	$17,967
	100 Year	51	$51,942
	300 Year	51	$243,998
	700 Year	51	$421,818
Government Facilities	25 Year	7	$3,719
	50 Year	7	$13,715
	100 Year	7	$50,423
	300 Year	7	$425,817
	700 Year	7	$843,886
Healthcare and Public Health	25 Year	4	$8,388
	50 Year	4	$25,259
	100 Year	4	$63,393
	300 Year	4	$320,363
	700 Year	4	$605,251
Transportation Systems	25 Year	5	$4,104
	50 Year	5	$15,442
	100 Year	5	$50,942
	300 Year	5	$301,351
	700 Year	5	$543,481
All Categories	**25 Year**	**142**	**$72,401**
	50 Year	**142**	**$262,375**
	100 Year	**142**	**$875,160**
	300 Year	**142**	**$5,847,643**
	700 Year	**142**	**$10,606,588**

Source: GIS Analysis

Table 6-88: Critical Facilities Exposed to the Hurricane Winds - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$579
	50 Year	3	$2,164
	100 Year	3	$7,773
	300 Year	3	$79,976
	700 Year	3	$209,326
Commercial Facilities	25 Year	80	$60,375
	50 Year	80	$255,781
	100 Year	80	$885,029
	300 Year	80	$7,242,267
	700 Year	80	$16,126,584
Critical Manufacturing	25 Year	6	$8,144
	50 Year	6	$35,011
	100 Year	6	$120,426
	300 Year	6	$1,004,793
	700 Year	6	$2,208,739
Emergency Services	25 Year	1	$223
	50 Year	1	$1,398
	100 Year	1	$8,326
	300 Year	1	$100,776
	700 Year	1	$202,328
Energy	25 Year	1	$163
	50 Year	1	$721
	100 Year	1	$3,037
	300 Year	1	$25,311
	700 Year	1	$53,842
Food and Agriculture	25 Year	120	$1,395

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	120	$8,157
	100 Year	120	$29,900
	300 Year	120	$178,437
	700 Year	120	$347,946
Government Facilities	25 Year	6	$1,188
	50 Year	6	$5,524
	100 Year	6	$23,313
	300 Year	6	$211,974
	700 Year	6	$446,373
Healthcare and Public Health	25 Year	3	$1,485
	50 Year	3	$5,347
	100 Year	3	$17,767
	300 Year	3	$132,161
	700 Year	3	$302,265
Transportation Systems	25 Year	3	$1,196
	50 Year	3	$5,302
	100 Year	3	$19,408
	300 Year	3	$139,497
	700 Year	3	$306,058
All Categories	**25 Year**	**223**	**$74,748**
	50 Year	**223**	**$319,405**
	100 Year	**223**	**$1,114,979**
	300 Year	**223**	**$9,115,192**
	700 Year	**223**	**$20,203,461**

Source: GIS Analysis

Table 6-89: Critical Facilities Exposed to the Hurricane Winds - Town Of Roseboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$903
	50 Year	2	$3,358
	100 Year	2	$40,686
	300 Year	2	$114,505
	700 Year	2	$274,554
Commercial Facilities	25 Year	142	$158,394
	50 Year	142	$436,619
	100 Year	142	$1,793,679
	300 Year	142	$4,689,303
	700 Year	142	$9,569,402
Critical Manufacturing	25 Year	15	$9,346
	50 Year	15	$31,368
	100 Year	15	$242,534
	300 Year	15	$1,149,425
	700 Year	15	$2,740,781
Emergency Services	25 Year	3	$521
	50 Year	3	$2,394
	100 Year	3	$31,332
	300 Year	3	$83,458
	700 Year	3	$185,051
Energy	25 Year	2	$19,017
	50 Year	2	$53,662
	100 Year	2	$777,796
	300 Year	2	$2,849,575
	700 Year	2	$8,365,557
Food and Agriculture	25 Year	56	$551

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	56	$3,258
	100 Year	56	$31,605
	300 Year	56	$77,668
	700 Year	56	$155,496
Government Facilities	25 Year	24	$5,378
	50 Year	24	$20,670
	100 Year	24	$325,351
	300 Year	24	$968,348
	700 Year	24	$2,315,342
Healthcare and Public Health	25 Year	8	$5,155
	50 Year	8	$19,281
	100 Year	8	$174,174
	300 Year	8	$450,313
	700 Year	8	$1,053,325
Transportation Systems	25 Year	7	$1,088
	50 Year	7	$5,872
	100 Year	7	$106,261
	300 Year	7	$271,308
	700 Year	7	$537,302
All Categories	**25 Year**	**259**	**$200,353**
	50 Year	**259**	**$576,482**
	100 Year	**259**	**$3,523,418**
	300 Year	**259**	**$10,653,903**
	700 Year	**259**	**$25,196,810**

Source: GIS Analysis

Table 6-90: Critical Facilities Exposed to the Hurricane Winds - Town Of Salemburg

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$304
	50 Year	2	$2,745
	100 Year	2	$16,373
	300 Year	2	$142,616
	700 Year	2	$247,093
Commercial Facilities	25 Year	41	$9,114
	50 Year	41	$36,521
	100 Year	41	$131,714
	300 Year	41	$1,077,178
	700 Year	41	$2,436,255
Critical Manufacturing	25 Year	2	$141
	50 Year	2	$592
	100 Year	2	$2,421
	300 Year	2	$19,246
	700 Year	2	$40,106
Emergency Services	25 Year	1	$1,801
	50 Year	1	$8,806
	100 Year	1	$40,885
	300 Year	1	$379,169
	700 Year	1	$751,659
Food and Agriculture	25 Year	80	$1,650
	50 Year	80	$9,957
	100 Year	80	$37,662
	300 Year	80	$235,803
	700 Year	80	$468,185
Government Facilities	25 Year	35	$59,338

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	35	$218,832
	100 Year	35	$794,558
	300 Year	35	$7,494,145
	700 Year	35	$15,997,871
Healthcare and Public Health	25 Year	1	$308
	50 Year	1	$1,580
	100 Year	1	$8,837
	300 Year	1	$117,844
	700 Year	1	$263,334
Transportation Systems	25 Year	2	$473
	50 Year	2	$1,690
	100 Year	2	$5,502
	300 Year	2	$47,326
	700 Year	2	$125,122
All Categories	**25 Year**	**164**	**$73,129**
	50 Year	**164**	**$280,723**
	100 Year	**164**	**$1,037,952**
	300 Year	**164**	**$9,513,327**
	700 Year	**164**	**$20,329,625**

Source: GIS Analysis

Table 6-91: Critical Facilities Exposed to the Hurricane Winds - Town Of Turkey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$969
	50 Year	1	$3,687
	100 Year	1	$11,410
	300 Year	1	$28,957
	700 Year	1	$63,363

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	23	$581,966
	50 Year	23	$2,254,445
	100 Year	23	$6,774,781
	300 Year	23	$16,259,939
	700 Year	23	$32,404,337
Critical Manufacturing	25 Year	1	$338
	50 Year	1	$1,264
	100 Year	1	$4,562
	300 Year	1	$14,084
	700 Year	1	$37,104
Emergency Services	25 Year	1	$737
	50 Year	1	$2,830
	100 Year	1	$10,613
	300 Year	1	$33,541
	700 Year	1	$86,920
Food and Agriculture	25 Year	127	$15,767
	50 Year	127	$57,483
	100 Year	127	$154,579
	300 Year	127	$343,148
	700 Year	127	$670,377
Government Facilities	25 Year	2	$1,453
	50 Year	2	$5,531
	100 Year	2	$17,112
	300 Year	2	$43,513
	700 Year	2	$95,283
Transportation Systems	25 Year	1	$743
	50 Year	1	$3,858

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$15,795
	300 Year	1	$42,920
	700 Year	1	$92,102
All Categories	**25 Year**	**156**	**$601,973**
	50 Year	**156**	**$2,329,098**
	100 Year	**156**	**$6,988,852**
	300 Year	**156**	**$16,766,102**
	700 Year	**156**	**$33,449,486**

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 6-92: Critical Facilities Exposed to the Hurricane Winds (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	53	$67,753
	50 Year	53	$339,762
	100 Year	53	$1,026,820
	300 Year	53	$4,246,243
	700 Year	53	$8,422,471
Chemical	25 Year	1	$234
	50 Year	1	$867
	100 Year	1	$2,357
	300 Year	1	$5,259
	700 Year	1	$10,310
Commercial Facilities	25 Year	3,148	$4,755,611
	50 Year	3,148	$20,486,553
	100 Year	3,148	$65,113,111

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	3,148	$244,033,671
	700 Year	3,148	$483,281,156
Communications	25 Year	1	$413
	50 Year	1	$1,292
	100 Year	1	$5,752
	300 Year	1	$117,661
	700 Year	1	$332,989
Critical Manufacturing	25 Year	507	$1,847,220
	50 Year	507	$7,712,099
	100 Year	507	$24,581,553
	300 Year	507	$77,033,281
	700 Year	507	$147,923,468
Defense Industrial Base	25 Year	2	$4,424
	50 Year	2	$17,577
	100 Year	2	$58,066
	300 Year	2	$318,468
	700 Year	2	$562,310
Emergency Services	25 Year	56	$108,376
	50 Year	56	$461,554
	100 Year	56	$1,591,722
	300 Year	56	$7,225,363
	700 Year	56	$14,371,401
Energy	25 Year	29	$102,023
	50 Year	29	$1,365,369
	100 Year	29	$6,427,308
	300 Year	29	$20,504,377
	700 Year	29	$51,069,530

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	25 Year	22,405	$2,152,607
	50 Year	22,405	$9,383,371
	100 Year	22,405	$28,955,338
	300 Year	22,405	$104,075,473
	700 Year	22,405	$191,682,666
Government Facilities	25 Year	698	$1,909,899
	50 Year	698	$7,658,159
	100 Year	698	$24,296,149
	300 Year	698	$112,845,030
	700 Year	698	$210,775,119
Healthcare and Public Health	25 Year	138	$302,438
	50 Year	138	$1,492,212
	100 Year	138	$4,203,876
	300 Year	138	$15,061,230
	700 Year	138	$30,004,750
Nuclear Reactors, Materials and Waste	25 Year	1	$1,325
	50 Year	1	$2,496
	100 Year	1	$7,482
	300 Year	1	$85,697
	700 Year	1	$171,884
Transportation Systems	25 Year	446	$865,331
	50 Year	446	$3,148,333
	100 Year	446	$10,853,727
	300 Year	446	$47,872,610
	700 Year	446	$90,659,114
Water	25 Year	1	$23,590
	50 Year	1	$679,107

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$2,748,247
	300 Year	1	$7,296,649
	700 Year	1	$15,311,811
All Categories	**25 Year**	**27,486**	**$12,141,244**
	50 Year	**27,486**	**$52,748,751**
	100 Year	**27,486**	**$169,871,508**
	300 Year	**27,486**	**$640,721,012**
	700 Year	**27,486**	**$1,244,578,979**

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 6-93: High Potential Loss Properties Exposed to the Hurricane Winds - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$23,179
	50 Year	1	$83,276
	100 Year	1	$217,999
	300 Year	1	$476,063
	700 Year	1	$912,032
Commercial	25 Year	92	$530,973
	50 Year	92	$1,519,425
	100 Year	92	$4,897,625
	300 Year	92	$20,189,840
	700 Year	92	$39,349,976
Government	25 Year	37	$472,211
	50 Year	37	$1,633,287
	100 Year	37	$5,122,463

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	37	$22,708,309
	700 Year	37	$39,189,786
Industrial	25 Year	16	$146,171
	50 Year	16	$371,651
	100 Year	16	$862,658
	300 Year	16	$3,756,209
	700 Year	16	$6,994,654
Religious	25 Year	85	$464,321
	50 Year	85	$1,385,796
	100 Year	85	$4,498,420
	300 Year	85	$18,882,544
	700 Year	85	$36,234,756
Residential	25 Year	18	$91,639
	50 Year	18	$357,620
	100 Year	18	$1,235,148
	300 Year	18	$4,134,777
	700 Year	18	$6,956,777
All Categories	**25 Year**	**249**	**$1,728,494**
	50 Year	**249**	**$5,351,055**
	100 Year	**249**	**$16,834,313**
	300 Year	**249**	**$70,147,742**
	700 Year	**249**	**$129,637,981**

Source: GIS Analysis

Table 6-94: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Beulaville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$146,164
	50 Year	16	$397,973

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	16	$1,063,379
	300 Year	16	$5,506,331
	700 Year	16	$9,360,490
Government	25 Year	5	$316,476
	50 Year	5	$1,060,601
	100 Year	5	$3,202,294
	300 Year	5	$17,266,084
	700 Year	5	$27,367,038
Industrial	25 Year	2	$20,764
	50 Year	2	$81,767
	100 Year	2	$296,729
	300 Year	2	$2,194,597
	700 Year	2	$3,965,007
Religious	25 Year	8	$46,495
	50 Year	8	$170,760
	100 Year	8	$542,998
	300 Year	8	$3,141,503
	700 Year	8	$5,554,484
Residential	25 Year	7	$36,323
	50 Year	7	$119,726
	100 Year	7	$340,795
	300 Year	7	$1,778,082
	700 Year	7	$3,222,981
All Categories	**25 Year**	**38**	**$566,222**
	50 Year	**38**	**$1,830,827**
	100 Year	**38**	**$5,446,195**
	300 Year	**38**	**$29,886,597**

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	**38**	**$49,470,000**

Source: GIS Analysis

Table 6-95: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Calypso

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	2	$5,633
	50 Year	2	$22,661
	100 Year	2	$201,372
	300 Year	2	$441,407
	700 Year	2	$770,184
Government	25 Year	1	$1,527
	50 Year	1	$7,564
	100 Year	1	$53,236
	300 Year	1	$84,351
	700 Year	1	$112,611
Religious	25 Year	4	$6,919
	50 Year	4	$59,663
	100 Year	4	$366,763
	300 Year	4	$1,026,091
	700 Year	4	$2,017,470
Residential	25 Year	1	$1,231
	50 Year	1	$3,485
	100 Year	1	$23,592
	300 Year	1	$46,303
	700 Year	1	$84,563
All Categories	**25 Year**	**8**	**$15,310**
	50 Year	**8**	**$93,373**
	100 Year	**8**	**$644,963**

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**8**	**$1,598,152**
	700 Year	**8**	**$2,984,828**

Source: GIS Analysis

Table 6-96: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Faison

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	11	$28,202
	50 Year	11	$203,176
	100 Year	11	$716,742
	300 Year	11	$1,936,813
	700 Year	11	$4,616,680
Government	25 Year	3	$2,665
	50 Year	3	$24,046
	100 Year	3	$84,050
	300 Year	3	$252,851
	700 Year	3	$625,590
Industrial	25 Year	3	$57,888
	50 Year	3	$515,838
	100 Year	3	$1,480,855
	300 Year	3	$3,765,346
	700 Year	3	$8,559,484
Religious	25 Year	6	$29,746
	50 Year	6	$238,485
	100 Year	6	$522,654
	300 Year	6	$1,193,356
	700 Year	6	$2,581,689
Residential	25 Year	6	$20,446
	50 Year	6	$282,006

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	6	$1,008,879
	300 Year	6	$2,553,142
	700 Year	6	$4,929,676
Utilities	25 Year	2	$44,881
	50 Year	2	$1,243,192
	100 Year	2	$5,065,798
	300 Year	2	$13,636,214
	700 Year	2	$29,001,495
All Categories	**25 Year**	**31**	**$183,828**
	50 Year	**31**	**$2,506,743**
	100 Year	**31**	**$8,878,978**
	300 Year	**31**	**$23,337,722**
	700 Year	**31**	**$50,314,614**

Source: GIS Analysis

Table 6-97: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Greenevers

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$1,847
	50 Year	1	$6,198
	100 Year	1	$19,290
	300 Year	1	$149,671
	700 Year	1	$286,597
Religious	25 Year	2	$3,729
	50 Year	2	$13,879
	100 Year	2	$45,731
	300 Year	2	$306,586
	700 Year	2	$587,930
Residential	25 Year	1	$6,917

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$23,635
	100 Year	1	$63,144
	300 Year	1	$418,500
	700 Year	1	$817,994
All Categories	**25 Year**	**4**	**$12,493**
	50 Year	**4**	**$43,712**
	100 Year	**4**	**$128,165**
	300 Year	**4**	**$874,757**
	700 Year	**4**	**$1,692,521**

Source: GIS Analysis

Table 6-98: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Harrells

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	3	$9,314
	50 Year	3	$36,851
	100 Year	3	$129,951
	300 Year	3	$838,722
	700 Year	3	$1,520,904
Industrial	25 Year	1	$5,590
	50 Year	1	$19,574
	100 Year	1	$65,215
	300 Year	1	$479,827
	700 Year	1	$911,888
All Categories	**25 Year**	**4**	**$14,904**
	50 Year	**4**	**$56,425**
	100 Year	**4**	**$195,166**
	300 Year	**4**	**$1,318,549**
	700 Year	**4**	**$2,432,792**

Source: GIS Analysis

Table 6-99: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Kenansville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	12	$46,339
	50 Year	12	$156,818
	100 Year	12	$504,874
	300 Year	12	$3,676,917
	700 Year	12	$7,162,116
Government	25 Year	24	$210,122
	50 Year	24	$728,200
	100 Year	24	$2,260,126
	300 Year	24	$13,284,252
	700 Year	24	$23,746,217
Religious	25 Year	5	$39,725
	50 Year	5	$83,385
	100 Year	5	$179,470
	300 Year	5	$1,119,801
	700 Year	5	$2,187,063
Residential	25 Year	2	$24,490
	50 Year	2	$84,514
	100 Year	2	$306,470
	300 Year	2	$1,566,386
	700 Year	2	$2,279,795
All Categories	**25 Year**	**43**	**$320,676**
	50 Year	**43**	**$1,052,917**
	100 Year	**43**	**$3,250,940**
	300 Year	**43**	**$19,647,356**
	700 Year	**43**	**$35,375,191**

Source: GIS Analysis

Table 6-100: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Magnolia

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$1,155
	50 Year	1	$3,140
	100 Year	1	$6,376
	300 Year	1	$13,134
	700 Year	1	$15,285
Government	25 Year	2	$48,835
	50 Year	2	$97,350
	100 Year	2	$149,573
	300 Year	2	$235,789
	700 Year	2	$281,724
Religious	25 Year	4	$17,750
	50 Year	4	$56,047
	100 Year	4	$173,194
	300 Year	4	$1,127,258
	700 Year	4	$2,048,778
All Categories	**25 Year**	**7**	**$67,740**
	50 Year	**7**	**$156,537**
	100 Year	**7**	**$329,143**
	300 Year	**7**	**$1,376,181**
	700 Year	**7**	**$2,345,787**

Source: GIS Analysis

Table 6-101: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Rose Hill

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$3,149
	50 Year	1	$11,395

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$30,084
	300 Year	1	$127,198
	700 Year	1	$211,995
Commercial	25 Year	10	$52,868
	50 Year	10	$190,589
	100 Year	10	$591,358
	300 Year	10	$3,446,963
	700 Year	10	$6,074,967
Government	25 Year	3	$30,206
	50 Year	3	$91,270
	100 Year	3	$245,613
	300 Year	3	$1,522,330
	700 Year	3	$2,849,538
Industrial	25 Year	5	$39,348
	50 Year	5	$206,734
	100 Year	5	$801,680
	300 Year	5	$4,101,510
	700 Year	5	$6,054,971
Religious	25 Year	3	$8,230
	50 Year	3	$28,141
	100 Year	3	$82,414
	300 Year	3	$601,929
	700 Year	3	$1,190,156
Residential	25 Year	5	$18,827
	50 Year	5	$67,542
	100 Year	5	$241,924
	300 Year	5	$1,572,300

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	5	$2,683,492
All Categories	**25 Year**	**27**	**$152,628**
	50 Year	**27**	**$595,671**
	100 Year	**27**	**$1,993,073**
	300 Year	**27**	**$11,372,230**
	700 Year	**27**	**$19,065,119**

Source: GIS Analysis

Table 6-102: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Wallace

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	48	$535,021
	50 Year	48	$1,779,184
	100 Year	48	$5,479,901
	300 Year	48	$28,066,625
	700 Year	48	$46,256,319
Government	25 Year	3	$33,967
	50 Year	3	$139,245
	100 Year	3	$628,487
	300 Year	3	$5,130,341
	700 Year	3	$8,884,561
Industrial	25 Year	4	$48,279
	50 Year	4	$127,348
	100 Year	4	$331,749
	300 Year	4	$1,490,811
	700 Year	4	$2,404,558
Religious	25 Year	20	$123,865
	50 Year	20	$449,372
	100 Year	20	$1,486,626

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	20	$8,288,051
	700 Year	20	$13,271,076
Residential	25 Year	17	$506,625
	50 Year	17	$1,576,102
	100 Year	17	$4,503,067
	300 Year	17	$28,524,907
	700 Year	17	$55,644,298
All Categories	**25 Year**	**92**	**$1,247,757**
	50 Year	**92**	**$4,071,251**
	100 Year	**92**	**$12,429,830**
	300 Year	**92**	**$71,500,735**
	700 Year	**92**	**$126,460,812**

Source: GIS Analysis

Table 6-103: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Warsaw

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$7,911
	50 Year	1	$24,562
	100 Year	1	$60,235
	300 Year	1	$123,702
	700 Year	1	$227,016
Commercial	25 Year	30	$419,982
	50 Year	30	$1,449,493
	100 Year	30	$4,477,181
	300 Year	30	$11,860,465
	700 Year	30	$25,847,869
Government	25 Year	7	$133,405
	50 Year	7	$333,781

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	7	$866,182
	300 Year	7	$2,203,578
	700 Year	7	$5,277,292
Industrial	25 Year	2	$14,865
	50 Year	2	$43,049
	100 Year	2	$107,564
	300 Year	2	$250,639
	700 Year	2	$549,292
Religious	25 Year	15	$109,414
	50 Year	15	$372,687
	100 Year	15	$1,190,352
	300 Year	15	$3,399,209
	700 Year	15	$7,965,602
Residential	25 Year	8	$120,209
	50 Year	8	$443,222
	100 Year	8	$1,617,887
	300 Year	8	$4,580,925
	700 Year	8	$10,235,030
All Categories	**25 Year**	**63**	**$805,786**
	50 Year	**63**	**$2,666,794**
	100 Year	**63**	**$8,319,401**
	300 Year	**63**	**$22,418,518**
	700 Year	**63**	**$50,102,101**

Source: GIS Analysis

Table 6-104: High Potential Loss Properties Exposed to the Hurricane Winds - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$340

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$8,240
	100 Year	1	$23,585
	300 Year	1	$54,146
	700 Year	1	$109,222
Commercial	25 Year	127	$452,172
	50 Year	127	$4,047,339
	100 Year	127	$11,733,999
	300 Year	127	$29,424,461
	700 Year	127	$62,982,791
Government	25 Year	30	$116,743
	50 Year	30	$1,323,830
	100 Year	30	$3,903,431
	300 Year	30	$9,975,237
	700 Year	30	$21,983,173
Industrial	25 Year	24	$118,223
	50 Year	24	$1,350,037
	100 Year	24	$4,130,805
	300 Year	24	$11,163,089
	700 Year	24	$26,147,290
Religious	25 Year	21	$37,157
	50 Year	21	$384,489
	100 Year	21	$1,318,264
	300 Year	21	$3,581,002
	700 Year	21	$7,834,839
Residential	25 Year	9	$61,035
	50 Year	9	$612,858
	100 Year	9	$2,374,122

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	9	$6,532,255
	700 Year	9	$13,163,018
Utilities	25 Year	6	$44,924
	50 Year	6	$618,402
	100 Year	6	$2,865,421
	300 Year	6	$9,853,382
	700 Year	6	$25,741,121
All Categories	**25 Year**	**218**	**$830,594**
	50 Year	**218**	**$8,345,195**
	100 Year	**218**	**$26,349,627**
	300 Year	**218**	**$70,583,572**
	700 Year	**218**	**$157,961,454**

Source: GIS Analysis

Table 6-105: High Potential Loss Properties Exposed to the Hurricane Winds - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	7	$6,358
	50 Year	7	$29,200
	100 Year	7	$93,833
	300 Year	7	$461,225
	700 Year	7	$866,229
Commercial	25 Year	83	$269,617
	50 Year	83	$935,793
	100 Year	83	$3,059,437
	300 Year	83	$15,343,250
	700 Year	83	$31,830,710
Government	25 Year	34	$255,843

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	34	$811,329
	100 Year	34	$2,593,559
	300 Year	34	$14,940,528
	700 Year	34	$29,275,769
Industrial	25 Year	14	$1,185,910
	50 Year	14	$4,338,756
	100 Year	14	$14,127,024
	300 Year	14	$37,102,011
	700 Year	14	$68,557,927
Religious	25 Year	107	$277,732
	50 Year	107	$1,030,091
	100 Year	107	$3,134,824
	300 Year	107	$15,146,508
	700 Year	107	$29,985,690
Residential	25 Year	13	$81,439
	50 Year	13	$196,470
	100 Year	13	$560,230
	300 Year	13	$3,834,475
	700 Year	13	$7,583,877
Utilities	25 Year	1	$3,046
	50 Year	1	$68,874
	100 Year	1	$292,122
	300 Year	1	$847,406
	700 Year	1	$1,927,069
All Categories	**25 Year**	**259**	**$2,079,945**
	50 Year	**259**	**$7,410,513**
	100 Year	**259**	**$23,861,029**

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**259**	**$87,675,403**
	700 Year	**259**	**$170,027,271**

Source: GIS Analysis

Table 6-106: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Autryville

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$2,236
	50 Year	1	$9,884
	100 Year	1	$35,080
	300 Year	1	$309,447
	700 Year	1	$693,261
Religious	25 Year	2	$2,048
	50 Year	2	$9,537
	100 Year	2	$31,496
	300 Year	2	$214,873
	700 Year	2	$471,912
All Categories	**25 Year**	**3**	**$4,284**
	50 Year	**3**	**$19,421**
	100 Year	**3**	**$66,576**
	300 Year	**3**	**$524,320**
	700 Year	**3**	**$1,165,173**

Source: GIS Analysis

Table 6-107: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Garland

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	4	$18,709
	50 Year	4	$57,847
	100 Year	4	$151,279
	300 Year	4	$822,196

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	4	$1,592,494
Government	25 Year	2	$1,286
	50 Year	2	$4,083
	100 Year	2	$13,622
	300 Year	2	$122,424
	700 Year	2	$270,014
Industrial	25 Year	1	$4,789
	50 Year	1	$22,275
	100 Year	1	$104,391
	300 Year	1	$912,521
	700 Year	1	$1,623,623
Religious	25 Year	4	$9,338
	50 Year	4	$34,257
	100 Year	4	$111,504
	300 Year	4	$663,584
	700 Year	4	$1,192,327
All Categories	**25 Year**	**11**	**$34,122**
	50 Year	**11**	**$118,462**
	100 Year	**11**	**$380,796**
	300 Year	**11**	**$2,520,725**
	700 Year	**11**	**$4,678,458**

Source: GIS Analysis

Table 6-108: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Newton Grove

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	13	$43,638
	50 Year	13	$179,906
	100 Year	13	$598,820

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	13	$4,862,168
	700 Year	13	$10,644,689
Industrial	25 Year	3	$5,005
	50 Year	3	$22,352
	100 Year	3	$80,608
	300 Year	3	$716,539
	700 Year	3	$1,591,777
Religious	25 Year	6	$5,564
	50 Year	6	$24,140
	100 Year	6	$85,258
	300 Year	6	$636,625
	700 Year	6	$1,506,858
All Categories	**25 Year**	**22**	**$54,207**
	50 Year	**22**	**$226,398**
	100 Year	**22**	**$764,686**
	300 Year	**22**	**$6,215,332**
	700 Year	**22**	**$13,743,324**

Source: GIS Analysis

Table 6-109: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Roseboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$22,045
	50 Year	16	$82,769
	100 Year	16	$615,675
	300 Year	16	$1,910,010
	700 Year	16	$4,209,104
Government	25 Year	8	$3,717
	50 Year	8	$13,773

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	8	$242,831
	300 Year	8	$749,286
	700 Year	8	$1,808,314
Industrial	25 Year	8	$122,466
	50 Year	8	$301,901
	100 Year	8	$712,406
	300 Year	8	$1,813,859
	700 Year	8	$3,395,504
Religious	25 Year	3	$5,845
	50 Year	3	$16,309
	100 Year	3	$95,028
	300 Year	3	$226,648
	700 Year	3	$514,800
Residential	25 Year	1	$2,696
	50 Year	1	$6,642
	100 Year	1	$24,630
	300 Year	1	$337,322
	700 Year	1	$705,028
Utilities	25 Year	2	$19,017
	50 Year	2	$53,662
	100 Year	2	$777,796
	300 Year	2	$2,849,575
	700 Year	2	$8,365,557
All Categories	**25 Year**	**38**	**$175,786**
	50 Year	**38**	**$475,056**
	100 Year	**38**	**$2,468,366**
	300 Year	**38**	**$7,886,700**

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	**38**	**$18,998,307**

Source: GIS Analysis

Table 6-110: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Salemburg

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	5	$4,702
	50 Year	5	$17,042
	100 Year	5	$57,202
	300 Year	5	$444,017
	700 Year	5	$988,499
Government	25 Year	13	$53,065
	50 Year	13	$189,527
	100 Year	13	$683,695
	300 Year	13	$6,630,247
	700 Year	13	$14,147,669
Religious	25 Year	3	$2,243
	50 Year	3	$8,687
	100 Year	3	$32,265
	300 Year	3	$305,522
	700 Year	3	$754,871
All Categories	**25 Year**	**21**	**$60,010**
	50 Year	**21**	**$215,256**
	100 Year	**21**	**$773,162**
	300 Year	**21**	**$7,379,786**
	700 Year	**21**	**$15,891,039**

Source: GIS Analysis

Table 6-111: High Potential Loss Properties Exposed to the Hurricane Winds - Town Of Turkey

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$1,572
	50 Year	1	$5,981
	100 Year	1	$25,908
	300 Year	1	$92,294
	700 Year	1	$255,251
Industrial	25 Year	1	$565,857
	50 Year	1	$2,188,121
	100 Year	1	$6,537,006
	300 Year	1	$15,599,482
	700 Year	1	$30,908,278
Religious	25 Year	1	$805
	50 Year	1	$2,525
	100 Year	1	$7,379
	300 Year	1	$19,721
	700 Year	1	$43,184
All Categories	**25 Year**	**3**	**$568,234**
	50 Year	**3**	**$2,196,627**
	100 Year	**3**	**$6,570,293**
	300 Year	**3**	**$15,711,497**
	700 Year	**3**	**$31,206,713**

Source: GIS Analysis

6.2.11 Inland Flooding: 100-/500-year

The following tables provide counts and values by jurisdiction relevant to River Flooding hazard vulnerability in the Sampson-Duplin Regional HMP Area.

Table 6-112: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	179	0.5%	5,568	25	0.4%	2,876	13	0.5%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	0	0%
Town Of Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	0	0%
Town Of Wallace	5,513	10	0.2%	784	1	0.1%	403	1	0.2%
Town Of Warsaw	3,891	5	0.1%	553	1	0.2%	285	0	0%
Subtotal Duplin	**58,679**	**194**	**0.3%**	**8336**	**27**	**0.3%**	**4301**	**14**	**0.3%**
Sampson									
City Of Clinton	10,707	15	0.1%	1,526	2	0.1%	743	1	0.1%
Sampson County (Unincorporated Area)	46,721	106	0.2%	6,661	15	0.2%	3,244	7	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
Town Of Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	2	0.2%	163	0	0%	80	0	0%
Town Of Roseboro	1,790	2	0.1%	255	0	0%	124	0	0%
Town Of Salemburg	1,158	2	0.2%	165	0	0%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**127**	**0.2%**	**9005**	**17**	**0.2%**	**4385**	**8**	**0.2%**
TOTAL PLAN	**121,846**	**321**	**0.3%**	**17341**	**44**	**0.3%**	**8686**	**22**	**0.3%**

Source: GIS Analysis

Table 6-113: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	375	1%	5,568	53	1%	2,876	27	0.9%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	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 Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	0	0%
Town Of Wallace	5,513	18	0.3%	784	2	0.3%	403	1	0.2%
Town Of Warsaw	3,891	5	0.1%	553	1	0.2%	285	0	0%
Subtotal Duplin	**58,679**	**398**	**0.7%**	**8336**	**56**	**0.7%**	**4301**	**28**	**0.7%**
Sampson									
City Of Clinton	10,707	36	0.3%	1,526	5	0.3%	743	2	0.3%
Sampson County (Unincorporated Area)	46,721	174	0.4%	6,661	25	0.4%	3,244	12	0.4%
Town Of Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	4	0.3%	163	1	0.6%	80	0	0%
Town Of Roseboro	1,790	4	0.2%	255	1	0.4%	124	0	0%
Town Of Salemburg	1,158	4	0.3%	165	1	0.6%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	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 Sampson	**63,167**	**222**	**0.4%**	**9005**	**33**	**0.4%**	**4385**	**14**	**0.3%**
TOTAL PLAN	**121,846**	**620**	**0.5%**	**17341**	**89**	**0.5%**	**8686**	**42**	**0.5%**

Source: GIS Analysis

Table 6-114: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	584	1.5%	5,568	83	1.5%	2,876	43	1.5%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	0	0%
Town Of Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	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 Wallace	5,513	20	0.4%	784	3	0.4%	403	1	0.2%
Town Of Warsaw	3,891	5	0.1%	553	1	0.2%	285	0	0%
Subtotal Duplin	**58,679**	**609**	**1%**	**8336**	**87**	**1%**	**4301**	**44**	**1%**
Sampson									
City Of Clinton	10,707	49	0.5%	1,526	7	0.5%	743	3	0.4%
Sampson County (Unincorporated Area)	46,721	229	0.5%	6,661	33	0.5%	3,244	16	0.5%
Town Of Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	6	0.5%	163	1	0.6%	80	0	0%
Town Of Roseboro	1,790	4	0.2%	255	1	0.4%	124	0	0%
Town Of Salemburg	1,158	4	0.3%	165	1	0.6%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**292**	**0.5%**	**9005**	**43**	**0.5%**	**4385**	**19**	**0.4%**
TOTAL PLAN	**121,846**	**901**	**0.7%**	**17341**	**130**	**0.7%**	**8686**	**63**	**0.7%**

Source: GIS Analysis

Table 6-115: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	910	2.3%	5,568	129	2.3%	2,876	67	2.3%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	0	0%
Town Of Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	0	0%
Town Of Wallace	5,513	50	0.9%	784	7	0.9%	403	4	1%
Town Of Warsaw	3,891	5	0.1%	553	1	0.2%	285	0	0%
Subtotal Duplin	**58,679**	**965**	**1.6%**	**8336**	**137**	**1.6%**	**4301**	**71**	**1.7%**
Sampson									
City Of Clinton	10,707	72	0.7%	1,526	10	0.7%	743	5	0.7%
Sampson County (Unincorporated Area)	46,721	263	0.6%	6,661	38	0.6%	3,244	18	0.6%

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 Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	8	0.7%	163	1	0.6%	80	1	1.2%
Town Of Roseboro	1,790	4	0.2%	255	1	0.4%	124	0	0%
Town Of Salemburg	1,158	4	0.3%	165	1	0.6%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**351**	**0.6%**	**9005**	**51**	**0.6%**	**4385**	**24**	**0.5%**
TOTAL PLAN	**121,846**	**1,316**	**1.1%**	**17341**	**188**	**1.1%**	**8686**	**95**	**1.1%**

Source: GIS Analysis

Table 6-116: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	0	0%	5,568	0	0%	2,876	0	0%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	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 Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	0	0%
Town Of Wallace	5,513	3	0.1%	784	0	0%	403	0	0%
Town Of Warsaw	3,891	0	0%	553	0	0%	285	0	0%
Subtotal Duplin	**58,679**	**3**	**0%**	**8336**	**0**	**0%**	**4301**	**0**	**0%**
Sampson									
City Of Clinton	10,707	0	0%	1,526	0	0%	743	0	0%
Sampson County (Unincorporated Area)	46,721	0	0%	6,661	0	0%	3,244	0	0%
Town Of Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	0	0%	163	0	0%	80	0	0%
Town Of Roseboro	1,790	0	0%	255	0	0%	124	0	0%
Town Of Salemburg	1,158	0	0%	165	0	0%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	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 Sampson	**63,167**	**0**	**0%**	**9005**	**0**	**0%**	**4385**	**0**	**0%**
TOTAL PLAN	**121,846**	**3**	**0%**	**17341**	**0**	**0%**	**8686**	**0**	**0%**

Source: GIS Analysis

Table 6-117: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	1,570	4%	5,568	223	4%	2,876	115	4%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	0	0%
Town Of Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	0	0%
Town Of Teachey	381	0	0%	54	0	0%	28	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 Wallace	5,513	78	1.4%	784	11	1.4%	403	6	1.5%
Town Of Warsaw	3,891	5	0.1%	553	1	0.2%	285	0	0%
Subtotal Duplin	**58,679**	**1,653**	**2.8%**	**8336**	**235**	**2.8%**	**4301**	**121**	**2.8%**
Sampson									
City Of Clinton	10,707	77	0.7%	1,526	11	0.7%	743	5	0.7%
Sampson County (Unincorporated Area)	46,721	349	0.7%	6,661	50	0.8%	3,244	24	0.7%
Town Of Autryville	193	3	1.6%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	15	1.3%	163	2	1.2%	80	1	1.2%
Town Of Roseboro	1,790	4	0.2%	255	1	0.4%	124	0	0%
Town Of Salemburg	1,158	4	0.3%	165	1	0.6%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**452**	**0.7%**	**9005**	**65**	**0.7%**	**4385**	**30**	**0.7%**
TOTAL PLAN	**121,846**	**2,105**	**1.7%**	**17341**	**300**	**1.7%**	**8686**	**151**	**1.7%**

Source: GIS Analysis

Table 6-118: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	72	0.3%	78	0.3%	$152,164	4	0%	$9,049	0	0%	$0	82	0.3%	$161,213
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	4	0.1%	4	0.1%	$5,478	0	0%	$0	0	0%	$0	4	0.1%	$5,478
Town Of Warsaw	1,832	2	0.1%	2	0.1%	$4,266	0	0%	$0	0	0%	$0	2	0.1%	$4,266
Subtotal Duplin	**37,475**	**78**	**0.2%**	**84**	**0.2%**	**$161,908**	**4**	**0%**	**$9,049**	**0**	**0%**	**$0**	**88**	**0.2%**	**$170,957**
Sampson															

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 Clinton	5,368	6	0.1%	6	0.1%	$10,431	0	0%	$0	0	0%	$0	6	0.1%	$10,431
Sampson County (Unincorporated Area)	35,938	52	0.1%	52	0.1%	$93,040	0	0%	$0	0	0%	$0	52	0.1%	$93,040
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	1	0.1%	1	0.1%	$1,307	0	0%	$0	0	0%	$0	1	0.1%	$1,307
Town Of Roseboro	1,085	1	0.1%	1	0.1%	$588	0	0%	$0	0	0%	$0	1	0.1%	$588
Town Of Salemburg	787	1	0.1%	1	0.1%	$444	0	0%	$0	0	0%	$0	1	0.1%	$444
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**61**	**0.1%**	**61**	**0.1%**	**$105,810**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**61**	**0.1%**	**$105,810**
TOTAL PLAN	**82,672**	**139**	**0.2%**	**145**	**0.2%**	**$267,718**	**4**	**0%**	**$9,049**	**0**	**0%**	**$0**	**149**	**0.2%**	**$276,767**

Source: GIS Analysis

Table 6-119: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	146	0.5%	163	0.6%	$347,544	7	0%	$18,062	0	0%	$0	170	0.6%	$365,606
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	7	0.3%	7	0.3%	$29,471	0	0%	$0	0	0%	$0	7	0.3%	$29,471
Town Of Warsaw	1,832	2	0.1%	2	0.1%	$6,926	0	0%	$0	0	0%	$0	2	0.1%	$6,926
Subtotal Duplin	**37,475**	**155**	**0.4%**	**172**	**0.5%**	**$383,941**	**7**	**0%**	**$18,062**	**0**	**0%**	**$0**	**179**	**0.5%**	**$402,003**
Sampson															

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 Clinton	5,368	14	0.3%	14	0.3%	$72,464	0	0%	$0	0	0%	$0	14	0.3%	$72,464
Sampson County (Unincorporated Area)	35,938	88	0.2%	85	0.2%	$240,908	3	0%	$6,524	0	0%	$0	88	0.2%	$247,432
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	2	0.2%	2	0.2%	$1,469	0	0%	$0	0	0%	$0	2	0.2%	$1,469
Town Of Roseboro	1,085	2	0.2%	2	0.2%	$946	0	0%	$0	0	0%	$0	2	0.2%	$946
Town Of Salemburg	787	2	0.3%	2	0.3%	$2,676	0	0%	$0	0	0%	$0	2	0.3%	$2,676
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**108**	**0.2%**	**105**	**0.2%**	**$318,463**	**3**	**0%**	**$6,524**	**0**	**0%**	**$0**	**108**	**0.2%**	**$324,987**
TOTAL PLAN	**82,672**	**263**	**0.3%**	**277**	**0.3%**	**$702,404**	**10**	**0%**	**$24,586**	**0**	**0%**	**$0**	**287**	**0.3%**	**$726,990**

Source: GIS Analysis

Table 6-120: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	238	0.9%	254	0.9%	$690,284	23	0.1%	$40,176	0	0%	$0	277	1%	$730,460
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	8	0.3%	8	0.3%	$43,630	0	0%	$0	0	0%	$0	8	0.3%	$43,630
Town Of Warsaw	1,832	2	0.1%	2	0.1%	$7,159	0	0%	$0	0	0%	$0	2	0.1%	$7,159
Subtotal Duplin	**37,475**	**248**	**0.7%**	**264**	**0.7%**	**$741,073**	**23**	**0.1%**	**$40,176**	**0**	**0%**	**$0**	**287**	**0.8%**	**$781,249**
Sampson															

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 Clinton	5,368	21	0.4%	19	0.4%	$154,173	1	0%	$28,309	1	0%	$916	21	0.4%	$183,398
Sampson County (Unincorporated Area)	35,938	117	0.3%	112	0.3%	$382,849	5	0%	$17,347	0	0%	$0	117	0.3%	$400,196
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	3	0.4%	3	0.4%	$7,786	0	0%	$0	0	0%	$0	3	0.4%	$7,786
Town Of Roseboro	1,085	2	0.2%	2	0.2%	$2,263	0	0%	$0	0	0%	$0	2	0.2%	$2,263
Town Of Salemburg	787	2	0.3%	2	0.3%	$7,035	0	0%	$0	0	0%	$0	2	0.3%	$7,035
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**145**	**0.3%**	**138**	**0.3%**	**$554,106**	**6**	**0%**	**$45,656**	**1**	**0%**	**$916**	**145**	**0.3%**	**$600,678**
TOTAL PLAN	**82,672**	**393**	**0.5%**	**402**	**0.5%**	**$1,295,179**	**29**	**0%**	**$85,832**	**1**	**0%**	**$916**	**432**	**0.5%**	**$1,381,927**

Source: GIS Analysis

Table 6-121: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	356	1.3%	396	1.4%	$1,241,339	35	0.1%	$147,059	1	0%	$1,787	432	1.6%	$1,390,185
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	16	0.6%	20	0.7%	$78,850	1	0%	$590	0	0%	$0	21	0.8%	$79,441
Town Of Warsaw	1,832	2	0.1%	2	0.1%	$7,797	0	0%	$0	0	0%	$0	2	0.1%	$7,797
Subtotal Duplin	**37,475**	**374**	**1%**	**418**	**1.1%**	**$1,327,986**	**36**	**0.1%**	**$147,649**	**1**	**0%**	**$1,787**	**455**	**1.2%**	**$1,477,423**
Sampson															

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 Clinton	5,368	36	0.7%	28	0.5%	$279,821	7	0.1%	$72,419	1	0%	$28,655	36	0.7%	$380,895
Sampson County (Unincorporated Area)	35,938	140	0.4%	129	0.4%	$517,313	11	0%	$121,146	0	0%	$0	140	0.4%	$638,459
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	4	0.5%	4	0.5%	$10,011	0	0%	$0	0	0%	$0	4	0.5%	$10,011
Town Of Roseboro	1,085	2	0.2%	2	0.2%	$4,803	0	0%	$0	0	0%	$0	2	0.2%	$4,803
Town Of Salemburg	787	2	0.3%	2	0.3%	$7,946	0	0%	$0	0	0%	$0	2	0.3%	$7,946
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**184**	**0.4%**	**165**	**0.4%**	**$819,894**	**18**	**0%**	**$193,565**	**1**	**0%**	**$28,655**	**184**	**0.4%**	**$1,042,114**
TOTAL PLAN	**82,672**	**558**	**0.7%**	**583**	**0.7%**	**$2,147,880**	**54**	**0.1%**	**$341,214**	**2**	**0%**	**$30,442**	**639**	**0.8%**	**$2,519,537**

Source: GIS Analysis

Table 6-122: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	1	0%	0	0%	$0	1	0%	$13,887	0	0%	$0	1	0%	$13,887
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	0	0%	1	0%	$3,852	0	0%	$0	0	0%	$0	1	0%	$3,852
Town Of Warsaw	1,832	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Duplin	**37,475**	**1**	**0%**	**1**	**0%**	**$3,852**	**1**	**0%**	**$13,887**	**0**	**0%**	**$0**	**2**	**0%**	**$17,739**
Sampson															

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 Clinton	5,368	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Sampson County (Unincorporated Area)	35,938	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Roseboro	1,085	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Salemburg	787	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**0**	**0%**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**
TOTAL PLAN	**82,672**	**1**	**0%**	**1**	**0%**	**$3,852**	**1**	**0%**	**$13,887**	**0**	**0%**	**$0**	**2**	**0%**	**$17,739**

Source: GIS Analysis

Table 6-123: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	575	2.1%	683	2.5%	$4,894,424	88	0.3%	$1,281,970	4	0%	$83,044	775	2.8%	$6,259,438
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	29	1.1%	31	1.2%	$139,662	4	0.1%	$24,500	0	0%	$0	35	1.3%	$164,162
Town Of Warsaw	1,832	2	0.1%	2	0.1%	$26,616	0	0%	$0	0	0%	$0	2	0.1%	$26,616
Subtotal Duplin	**37,475**	**606**	**1.6%**	**716**	**1.9%**	**$5,060,702**	**92**	**0.2%**	**$1,306,470**	**4**	**0%**	**$83,044**	**812**	**2.2%**	**$6,450,216**
Sampson															

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 Clinton	5,368	42	0.8%	30	0.6%	$919,344	8	0.1%	$471,377	3	0.1%	$132,677	41	0.8%	$1,523,397
Sampson County (Unincorporated Area)	35,938	195	0.5%	171	0.5%	$1,081,269	23	0.1%	$284,475	1	0%	$50,485	195	0.5%	$1,416,229
Town Of Autryville	144	2	1.4%	2	1.4%	$1,050	0	0%	$0	0	0%	$0	2	1.4%	$1,050
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	10	1.2%	8	1%	$23,156	2	0.2%	$4,310	0	0%	$0	10	1.2%	$27,466
Town Of Roseboro	1,085	2	0.2%	2	0.2%	$9,815	0	0%	$0	0	0%	$0	2	0.2%	$9,815
Town Of Salemburg	787	2	0.3%	2	0.3%	$18,160	0	0%	$0	0	0%	$0	2	0.3%	$18,160
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**253**	**0.6%**	**215**	**0.5%**	**$2,052,794**	**33**	**0.1%**	**$760,162**	**4**	**0%**	**$183,162**	**252**	**0.6%**	**$2,996,117**
TOTAL PLAN	**82,672**	**859**	**1%**	**931**	**1.1%**	**$7,113,496**	**125**	**0.2%**	**$2,066,632**	**8**	**0%**	**$266,206**	**1,064**	**1.3%**	**$9,446,333**

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 6-124: Critical Facilities Exposed to the River Flooding - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	1	$535
	50 Year	5	$6,271
	100 Year	7	$52,800
	Floodway	1	$13,887
	500 Year	11	$475,212
Critical Manufacturing	50 Year	1	$800
	100 Year	2	$8,160
	500 Year	2	$21,175
Emergency Services	100 Year	1	$1,787
	500 Year	1	$8,095
Food and Agriculture	10 Year	4	$9,049
	25 Year	6	$17,527
	50 Year	17	$33,106
	100 Year	26	$86,099
	500 Year	75	$835,859
Government Facilities	500 Year	2	$5,961
Transportation Systems	500 Year	1	$18,711
All Categories	**25 Year**	**7**	**$18,062**
	50 Year	**23**	**$40,177**
	100 Year	**36**	**$148,846**
	Floodway	**1**	**$13,887**
	500 Year	**92**	**$1,365,013**
	10 Year	**4**	**$9,049**

Source: GIS Analysis

Table 6-125: Critical Facilities Exposed to the River Flooding - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	500 Year	1	$329
Food and Agriculture	100 Year	1	$590
	500 Year	3	$24,171
All Categories	**500 Year**	**4**	**$24,500**
	100 Year	**1**	**$590**

Source: GIS Analysis

Table 6-126: Critical Facilities Exposed to the River Flooding - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	50 Year	1	$28,309
	100 Year	6	$70,094
	500 Year	8	$460,962
Emergency Services	50 Year	1	$916
	100 Year	1	$28,655
	500 Year	1	$78,508
Energy	500 Year	1	$127,500
Government Facilities	500 Year	1	$14,606
Healthcare and Public Health	100 Year	1	$2,325
	500 Year	1	$49,978
All Categories	**50 Year**	**2**	**$29,225**
	100 Year	**8**	**$101,074**
	500 Year	**12**	**$731,554**

Source: GIS Analysis

Table 6-127: Critical Facilities Exposed to the River Flooding - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	2	$1,092
	50 Year	3	$7,602

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	6	$105,962
	500 Year	10	$284,449
Food and Agriculture	25 Year	1	$5,432
	50 Year	2	$9,745
	100 Year	5	$15,184
	500 Year	14	$50,510
Nuclear Reactors, Materials and Waste	500 Year	1	$1,720
All Categories	**25 Year**	**3**	**$6,524**
	50 Year	**5**	**$17,347**
	100 Year	**11**	**$121,146**
	500 Year	**25**	**$336,679**

Source: GIS Analysis

Table 6-128: Critical Facilities Exposed to the River Flooding - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	500 Year	1	$1,046
Food and Agriculture	500 Year	1	$3,265
All Categories	**500 Year**	**2**	**$4,311**

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 6-129: Critical Facilities Exposed to the River Flooding (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	3	$1,627
	50 Year	9	$42,182
	100 Year	19	$228,856
	Floodway	1	$13,887

Sector	Event	Number of Buildings At Risk	Estimated Damages
	500 Year	31	$1,221,998
Critical Manufacturing	50 Year	1	$800
	100 Year	2	$8,160
	500 Year	2	$21,175
Emergency Services	50 Year	1	$916
	100 Year	2	$30,442
	500 Year	2	$86,603
Energy	500 Year	1	$127,500
Food and Agriculture	10 Year	4	$9,049
	25 Year	7	$22,959
	50 Year	19	$42,851
	100 Year	32	$101,873
	500 Year	93	$913,805
Government Facilities	500 Year	3	$20,567
Healthcare and Public Health	100 Year	1	$2,325
	500 Year	1	$49,978
Nuclear Reactors, Materials and Waste	500 Year	1	$1,720
Transportation Systems	500 Year	1	$18,711
All Categories	**25 Year**	**10**	**$24,586**
	50 Year	**30**	**$86,749**
	100 Year	**56**	**$371,656**
	Floodway	**1**	**$13,887**
	500 Year	**135**	**$2,462,057**
	10 Year	**4**	**$9,049**

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 6-130: High Potential Loss Properties Exposed to the River Flooding - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	100 Year	1	$2,827
	500 Year	1	$207,539
All Categories	**100 Year**	**1**	**$2,827**
	500 Year	**1**	**$207,539**

Source: GIS Analysis

Table 6-131: High Potential Loss Properties Exposed to the River Flooding - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Utilities	500 Year	1	$127,500
All Categories	**500 Year**	**1**	**$127,500**

Source: GIS Analysis

Table 6-132: High Potential Loss Properties Exposed to the River Flooding - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	50 Year	1	$4,854
	100 Year	1	$76,340
	500 Year	1	$140,104
All Categories	**50 Year**	**1**	**$4,854**
	100 Year	**1**	**$76,340**
	500 Year	**1**	**$140,104**

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 6-133 provides a summary count by jurisdiction of Repetitive Loss (RL) properties identified by FEMA through the NFIP.

Table 6-133: Numbers of Repetitive Loss (RL) Properties by Jurisdiction

Jurisdiction	Total Number of Properties	Total Number of Losses	Total Amount of Claims Payments
Duplin			
Duplin County (Unincorporated Area)	0	0	0
Town Of Beulaville	0	0	0
Town Of Calypso	0	0	0
Town Of Faison	0	0	0
Town Of Greenevers	0	0	0
Town Of Harrells	0	0	0
Town Of Kenansville	0	0	0
Town Of Magnolia	0	0	0
Town Of Rose Hill	0	0	0
Town Of Teachey	0	0	0
Town Of Wallace	0	0	0
Town Of Warsaw	0	0	0
Subtotal Duplin	**0**	**0**	**$0**
Sampson			
City Of Clinton	0	0	0
Sampson County (Unincorporated Area)	0	0	0
Town Of Autryville	0	0	0
Town Of Garland	0	0	0
Town Of Newton Grove	0	0	0
Town Of Roseboro	0	0	0
Town Of Salemburg	0	0	0
Town Of Turkey	0	0	0
Subtotal Sampson	**0**	**0**	**$0**
PLAN TOTAL	**0**	**0**	**$0**

Source: North Carolina Emergency Management and or potential user entered data.

6.2.12 Severe Weather (Thunderstorm, Lightning, & Hail)

The following tables provide counts and values by jurisdiction relevant to Thunderstorm Winds hazard vulnerability in the Sampson-Duplin Regional HMP Area.

Table 6-134: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	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 Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-135: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**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
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-136: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	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 Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-137: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	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 Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-138: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	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 Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-139: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$5,566,245	10,010	36.6%	$583,058	331	1.2%	$334,465	27,381	100%	$6,483,769
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$356,785	159	14.7%	$68,857	47	4.3%	$97,246	1,081	100%	$522,888
Town Of Calypso	570	567	99.5%	402	70.5%	$153,052	146	25.6%	$19,068	21	3.7%	$12,925	569	99.8%	$185,045
Town Of Faison	827	747	90.3%	658	79.6%	$267,492	129	15.6%	$97,549	38	4.6%	$39,381	825	99.8%	$404,421
Town Of Greenevers	297	293	98.7%	267	89.9%	$91,620	21	7.1%	$1,342	9	3%	$2,263	297	100%	$95,224
Town Of Harrells	197	197	100%	121	61.4%	$48,136	63	32%	$4,640	13	6.6%	$4,061	197	100%	$56,837
Town Of Kenansville	548	463	84.5%	390	71.2%	$176,993	66	12%	$23,342	92	16.8%	$82,711	548	100%	$283,046
Town Of Magnolia	729	724	99.3%	621	85.2%	$115,191	65	8.9%	$3,807	43	5.9%	$31,559	729	100%	$150,557
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$352,004	167	14.2%	$32,454	30	2.5%	$13,580	1,177	100%	$398,038
Town Of Teachey	169	162	95.9%	148	87.6%	$58,478	8	4.7%	$1,565	13	7.7%	$2,873	169	100%	$62,917
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$915,658	380	14.2%	$220,834	95	3.6%	$51,881	2,667	100%	$1,188,373
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$588,514	213	11.6%	$127,807	68	3.7%	$82,341	1,832	100%	$798,663
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$8,690,168**	**11,427**	**30.5%**	**$1,184,323**	**800**	**2.1%**	**$755,286**	**37,472**	**100%**	**$10,629,778**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$1,894,667	1,034	19.3%	$631,688	177	3.3%	$177,418	5,362	99.9%	$2,703,773
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$9,061,083	12,645	35.2%	$874,473	415	1.2%	$372,485	35,937	100%	$10,308,041
Town Of Autryville	144	144	100%	122	84.7%	$40,221	18	12.5%	$2,202	4	2.8%	$4,371	144	100%	$46,794
Town Of Garland	701	701	100%	559	79.7%	$149,530	116	16.5%	$12,441	26	3.7%	$6,152	701	100%	$168,123
Town Of Newton Grove	819	819	100%	596	72.8%	$286,983	207	25.3%	$66,933	16	2%	$7,814	819	100%	$361,730
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$390,199	213	19.6%	$167,530	42	3.9%	$13,604	1,083	99.8%	$571,333
Town Of Salemburg	787	787	100%	622	79%	$300,544	122	15.5%	$10,162	43	5.5%	$62,987	787	100%	$373,693
Town Of Turkey	355	355	100%	199	56.1%	$108,288	148	41.7%	$115,437	8	2.3%	$1,722	355	100%	$225,447
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$12,231,515**	**14,503**	**32.1%**	**$1,880,866**	**731**	**1.6%**	**$646,553**	**45,188**	**100%**	**$14,758,934**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$20,921,683**	**25,930**	**31.4%**	**$3,065,189**	**1,531**	**1.9%**	**$1,401,839**	**82,660**	**100%**	**$25,388,712**

Source: GIS Analysis

Table 6-140: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$8,931,116	10,010	36.6%	$1,256,592	331	1.2%	$646,243	27,381	100%	$10,833,952
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$579,196	159	14.7%	$133,647	47	4.3%	$206,234	1,081	100%	$919,078
Town Of Calypso	570	567	99.5%	402	70.5%	$253,450	146	25.6%	$39,944	21	3.7%	$29,502	569	99.8%	$322,895
Town Of Faison	827	747	90.3%	658	79.6%	$442,177	129	15.6%	$177,031	38	4.6%	$76,627	825	99.8%	$695,834
Town Of Greenevers	297	293	98.7%	267	89.9%	$145,245	21	7.1%	$3,069	9	3%	$4,499	297	100%	$152,813
Town Of Harrells	197	197	100%	121	61.4%	$71,823	63	32%	$9,426	13	6.6%	$7,871	197	100%	$89,121
Town Of Kenansville	548	463	84.5%	390	71.2%	$268,928	66	12%	$44,470	92	16.8%	$161,227	548	100%	$474,625
Town Of Magnolia	729	724	99.3%	621	85.2%	$189,876	65	8.9%	$8,148	43	5.9%	$62,290	729	100%	$260,314
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$549,741	167	14.2%	$71,401	30	2.5%	$28,546	1,177	100%	$649,688
Town Of Teachey	169	162	95.9%	148	87.6%	$92,966	8	4.7%	$3,244	13	7.7%	$6,148	169	100%	$102,358
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$1,497,616	380	14.2%	$417,684	95	3.6%	$106,081	2,667	100%	$2,021,381
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$934,217	213	11.6%	$271,606	68	3.7%	$155,605	1,832	100%	$1,361,428
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$13,956,351**	**11,427**	**30.5%**	**$2,436,262**	**800**	**2.1%**	**$1,490,873**	**37,472**	**100%**	**$17,883,487**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$3,021,802	1,034	19.3%	$1,232,722	177	3.3%	$346,264	5,362	99.9%	$4,600,788
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$14,335,806	12,645	35.2%	$1,927,498	415	1.2%	$683,572	35,937	100%	$16,946,876
Town Of Autryville	144	144	100%	122	84.7%	$63,715	18	12.5%	$4,587	4	2.8%	$9,748	144	100%	$78,050
Town Of Garland	701	701	100%	559	79.7%	$234,041	116	16.5%	$25,233	26	3.7%	$11,220	701	100%	$270,494
Town Of Newton Grove	819	819	100%	596	72.8%	$454,856	207	25.3%	$142,347	16	2%	$16,752	819	100%	$613,955
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$610,925	213	19.6%	$289,818	42	3.9%	$25,169	1,083	99.8%	$925,912
Town Of Salemburg	787	787	100%	622	79%	$473,260	122	15.5%	$21,980	43	5.5%	$122,793	787	100%	$618,033
Town Of Turkey	355	355	100%	199	56.1%	$176,855	148	41.7%	$259,600	8	2.3%	$3,541	355	100%	$439,997
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$19,371,260**	**14,503**	**32.1%**	**$3,903,785**	**731**	**1.6%**	**$1,219,059**	**45,188**	**100%**	**$24,494,105**

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	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$33,327,611**	**25,930**	**31.4%**	**$6,340,047**	**1,531**	**1.9%**	**$2,709,932**	**82,660**	**100%**	**$42,377,592**

Source: GIS Analysis

Table 6-141: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$14,682,809	10,010	36.6%	$2,574,295	331	1.2%	$1,189,126	27,381	100%	$18,446,230
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$957,190	159	14.7%	$248,878	47	4.3%	$408,837	1,081	100%	$1,614,905
Town Of Calypso	570	567	99.5%	402	70.5%	$444,890	146	25.6%	$78,149	21	3.7%	$64,681	569	99.8%	$587,719
Town Of Faison	827	747	90.3%	658	79.6%	$784,230	129	15.6%	$313,968	38	4.6%	$137,675	825	99.8%	$1,235,873
Town Of Greenevers	297	293	98.7%	267	89.9%	$242,648	21	7.1%	$6,942	9	3%	$8,872	297	100%	$258,463
Town Of Harrells	197	197	100%	121	61.4%	$105,189	63	32%	$19,363	13	6.6%	$15,936	197	100%	$140,489
Town Of Kenansville	548	463	84.5%	390	71.2%	$404,280	66	12%	$84,330	92	16.8%	$302,091	548	100%	$790,700
Town Of Magnolia	729	724	99.3%	621	85.2%	$307,307	65	8.9%	$17,055	43	5.9%	$113,882	729	100%	$438,244
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$889,329	167	14.2%	$152,842	30	2.5%	$56,867	1,177	100%	$1,099,038
Town Of Teachey	169	162	95.9%	148	87.6%	$149,564	8	4.7%	$6,465	13	7.7%	$12,631	169	100%	$168,661
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$2,467,830	380	14.2%	$777,741	95	3.6%	$209,376	2,667	100%	$3,454,947
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$1,485,401	213	11.6%	$544,710	68	3.7%	$282,262	1,832	100%	$2,312,373
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$22,920,667**	**11,427**	**30.5%**	**$4,824,738**	**800**	**2.1%**	**$2,802,236**	**37,472**	**100%**	**$30,547,642**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$4,893,195	1,034	19.3%	$2,310,985	177	3.3%	$648,872	5,362	99.9%	$7,853,052
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$23,175,550	12,645	35.2%	$3,996,182	415	1.2%	$1,222,548	35,937	100%	$28,394,280
Town Of Autryville	144	144	100%	122	84.7%	$100,080	18	12.5%	$9,668	4	2.8%	$19,720	144	100%	$129,469
Town Of Garland	701	701	100%	559	79.7%	$358,444	116	16.5%	$50,880	26	3.7%	$21,522	701	100%	$430,845
Town Of Newton Grove	819	819	100%	596	72.8%	$759,363	207	25.3%	$284,201	16	2%	$35,204	819	100%	$1,078,769
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$989,527	213	19.6%	$475,338	42	3.9%	$47,059	1,083	99.8%	$1,511,924

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 Salemburg	787	787	100%	622	79%	$784,385	122	15.5%	$46,816	43	5.5%	$233,960	787	100%	$1,065,161
Town Of Turkey	355	355	100%	199	56.1%	$313,097	148	41.7%	$594,508	8	2.3%	$7,466	355	100%	$915,071
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$31,373,641**	**14,503**	**32.1%**	**$7,768,578**	**731**	**1.6%**	**$2,236,351**	**45,188**	**100%**	**$41,378,571**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$54,294,308**	**25,930**	**31.4%**	**$12,593,316**	**1,531**	**1.9%**	**$5,038,587**	**82,660**	**100%**	**$71,926,213**

Source: GIS Analysis

Table 6-142: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$46,989,702	10,010	36.6%	$8,888,649	331	1.2%	$3,729,874	27,381	100%	$59,608,225
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$2,964,364	159	14.7%	$786,023	47	4.3%	$1,386,686	1,081	100%	$5,137,073
Town Of Calypso	570	567	99.5%	402	70.5%	$1,554,236	146	25.6%	$252,020	21	3.7%	$258,198	569	99.8%	$2,064,454
Town Of Faison	827	747	90.3%	658	79.6%	$2,941,765	129	15.6%	$947,521	38	4.6%	$372,690	825	99.8%	$4,261,976
Town Of Greenevers	297	293	98.7%	267	89.9%	$799,267	21	7.1%	$31,642	9	3%	$32,291	297	100%	$863,200
Town Of Harrells	197	197	100%	121	61.4%	$259,162	63	32%	$72,471	13	6.6%	$67,919	197	100%	$399,551
Town Of Kenansville	548	463	84.5%	390	71.2%	$1,076,507	66	12%	$279,095	92	16.8%	$960,769	548	100%	$2,316,371
Town Of Magnolia	729	724	99.3%	621	85.2%	$840,165	65	8.9%	$66,619	43	5.9%	$328,936	729	100%	$1,235,720
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$2,772,771	167	14.2%	$630,235	30	2.5%	$197,213	1,177	100%	$3,600,220
Town Of Teachey	169	162	95.9%	148	87.6%	$435,439	8	4.7%	$23,733	13	7.7%	$44,750	169	100%	$503,922
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$7,477,391	380	14.2%	$2,595,018	95	3.6%	$772,424	2,667	100%	$10,844,834
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$4,452,903	213	11.6%	$1,934,887	68	3.7%	$862,128	1,832	100%	$7,249,918
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$72,563,672**	**11,427**	**30.5%**	**$16,507,913**	**800**	**2.1%**	**$9,013,878**	**37,472**	**100%**	**$98,085,464**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$15,457,865	1,034	19.3%	$7,388,115	177	3.3%	$2,102,746	5,362	99.9%	$24,948,726
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$72,923,346	12,645	35.2%	$14,122,316	415	1.2%	$3,788,399	35,937	100%	$90,834,061
Town Of Autryville	144	144	100%	122	84.7%	$290,696	18	12.5%	$36,976	4	2.8%	$67,882	144	100%	$395,554

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 Garland	701	701	100%	559	79.7%	$972,697	116	16.5%	$184,490	26	3.7%	$77,885	701	100%	$1,235,073
Town Of Newton Grove	819	819	100%	596	72.8%	$2,644,543	207	25.3%	$977,831	16	2%	$137,147	819	100%	$3,759,520
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$3,193,124	213	19.6%	$1,162,312	42	3.9%	$162,551	1,083	99.8%	$4,517,987
Town Of Salemburg	787	787	100%	622	79%	$2,682,435	122	15.5%	$182,706	43	5.5%	$855,397	787	100%	$3,720,538
Town Of Turkey	355	355	100%	199	56.1%	$1,208,788	148	41.7%	$2,296,449	8	2.3%	$32,648	355	100%	$3,537,885
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$99,373,494**	**14,503**	**32.1%**	**$26,351,195**	**731**	**1.6%**	**$7,224,655**	**45,188**	**100%**	**$132,949,344**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$171,937,166**	**25,930**	**31.4%**	**$42,859,108**	**1,531**	**1.9%**	**$16,238,533**	**82,660**	**100%**	**$231,034,808**

Source: GIS Analysis

Table 6-143: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$87,527,613	10,010	36.6%	$15,795,845	331	1.2%	$6,789,673	27,381	100%	$110,113,130
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$5,436,614	159	14.7%	$1,429,569	47	4.3%	$2,513,248	1,081	100%	$9,379,431
Town Of Calypso	570	567	99.5%	402	70.5%	$2,857,812	146	25.6%	$438,787	21	3.7%	$478,266	569	99.8%	$3,774,865
Town Of Faison	827	747	90.3%	658	79.6%	$5,642,957	129	15.6%	$1,701,880	38	4.6%	$618,519	825	99.8%	$7,963,357
Town Of Greenevers	297	293	98.7%	267	89.9%	$1,502,212	21	7.1%	$64,414	9	3%	$62,327	297	100%	$1,628,953
Town Of Harrells	197	197	100%	121	61.4%	$452,315	63	32%	$138,750	13	6.6%	$140,243	197	100%	$731,308
Town Of Kenansville	548	463	84.5%	390	71.2%	$1,973,733	66	12%	$507,653	92	16.8%	$1,716,641	548	100%	$4,198,027
Town Of Magnolia	729	724	99.3%	621	85.2%	$1,464,877	65	8.9%	$127,113	43	5.9%	$551,567	729	100%	$2,143,557
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$5,204,982	167	14.2%	$1,242,284	30	2.5%	$362,388	1,177	100%	$6,809,654
Town Of Teachey	169	162	95.9%	148	87.6%	$786,210	8	4.7%	$46,095	13	7.7%	$80,328	169	100%	$912,633
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$13,700,641	380	14.2%	$4,766,465	95	3.6%	$1,530,725	2,667	100%	$19,997,831
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$8,357,891	213	11.6%	$3,597,068	68	3.7%	$1,554,464	1,832	100%	$13,509,423
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$134,907,857**	**11,427**	**30.5%**	**$29,855,923**	**800**	**2.1%**	**$16,398,389**	**37,472**	**100%**	**$181,162,169**
Sampson															

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 Clinton	5,368	5,368	100%	4,151	77.3%	$29,331,435	1,034	19.3%	$13,418,022	177	3.3%	$3,867,996	5,362	99.9%	$46,617,453
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$136,389,740	12,645	35.2%	$25,491,134	415	1.2%	$6,947,565	35,937	100%	$168,828,439
Town Of Autryville	144	144	100%	122	84.7%	$536,428	18	12.5%	$69,329	4	2.8%	$122,638	144	100%	$728,395
Town Of Garland	701	701	100%	559	79.7%	$1,784,608	116	16.5%	$350,135	26	3.7%	$152,287	701	100%	$2,287,029
Town Of Newton Grove	819	819	100%	596	72.8%	$5,067,851	207	25.3%	$1,780,285	16	2%	$261,008	819	100%	$7,109,144
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$6,035,160	213	19.6%	$1,823,141	42	3.9%	$314,739	1,083	99.8%	$8,173,040
Town Of Salemburg	787	787	100%	622	79%	$5,132,010	122	15.5%	$345,573	43	5.5%	$1,689,733	787	100%	$7,167,317
Town Of Turkey	355	355	100%	199	56.1%	$2,315,153	148	41.7%	$4,146,395	8	2.3%	$68,034	355	100%	$6,529,582
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$186,592,385**	**14,503**	**32.1%**	**$47,424,014**	**731**	**1.6%**	**$13,424,000**	**45,188**	**100%**	**$247,440,399**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$321,500,242**	**25,930**	**31.4%**	**$77,279,937**	**1,531**	**1.9%**	**$29,822,389**	**82,660**	**100%**	**$428,602,568**

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 6-144: Critical Facilities Exposed to the Thunderstorm Winds - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$630
	50 Year	3	$1,338
	100 Year	3	$2,776
	300 Year	3	$10,513
	700 Year	3	$20,671
Chemical	25 Year	1	$39
	50 Year	1	$102
	100 Year	1	$234
	300 Year	1	$867
	700 Year	1	$1,501
Commercial Facilities	25 Year	568	$354,892
	50 Year	568	$676,509
	100 Year	568	$1,234,308
	300 Year	568	$3,752,992
	700 Year	568	$6,653,447
Critical Manufacturing	25 Year	212	$77,255
	50 Year	212	$147,292
	100 Year	212	$267,230
	300 Year	212	$774,563
	700 Year	212	$1,339,391
Defense Industrial Base	25 Year	1	$36
	50 Year	1	$96
	100 Year	1	$231

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	1	$947
	700 Year	1	$1,725
Emergency Services	25 Year	15	$11,248
	50 Year	15	$19,782
	100 Year	15	$34,071
	300 Year	15	$104,501
	700 Year	15	$196,552
Energy	25 Year	4	$140
	50 Year	4	$217
	100 Year	4	$329
	300 Year	4	$799
	700 Year	4	$1,331
Food and Agriculture	25 Year	9,281	$235,139
	50 Year	9,281	$598,715
	100 Year	9,281	$1,375,977
	300 Year	9,281	$5,230,156
	700 Year	9,281	$9,243,433
Government Facilities	25 Year	109	$142,673
	50 Year	109	$284,293
	100 Year	109	$534,547
	300 Year	109	$1,743,019
	700 Year	109	$3,236,035
Healthcare and Public Health	25 Year	7	$6,399
	50 Year	7	$10,981
	100 Year	7	$17,969
	300 Year	7	$46,840
	700 Year	7	$82,026

Sector	Event	Number of Buildings At Risk	Estimated Damages
Transportation Systems	25 Year	145	$91,483
	50 Year	145	$165,858
	100 Year	145	$297,141
	300 Year	145	$952,290
	700 Year	145	$1,808,721
All Categories	**25 Year**	**10,346**	**$919,934**
	50 Year	**10,346**	**$1,905,183**
	100 Year	**10,346**	**$3,764,813**
	300 Year	**10,346**	**$12,617,487**
	700 Year	**10,346**	**$22,584,833**

Source: GIS Analysis

Table 6-145: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Beulaville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$845
	50 Year	3	$1,848
	100 Year	3	$3,760
	300 Year	3	$12,450
	700 Year	3	$22,081
Commercial Facilities	25 Year	89	$51,828
	50 Year	89	$103,195
	100 Year	89	$197,476
	300 Year	89	$650,523
	700 Year	89	$1,183,629
Critical Manufacturing	25 Year	10	$5,532
	50 Year	10	$11,035
	100 Year	10	$21,879
	300 Year	10	$85,736

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	10	$179,834
Defense Industrial Base	25 Year	1	$1,042
	50 Year	1	$2,009
	100 Year	1	$4,193
	300 Year	1	$16,630
	700 Year	1	$32,014
Emergency Services	25 Year	3	$686
	50 Year	3	$1,508
	100 Year	3	$3,253
	300 Year	3	$14,259
	700 Year	3	$29,815
Energy	25 Year	1	$24
	50 Year	1	$49
	100 Year	1	$100
	300 Year	1	$396
	700 Year	1	$844
Food and Agriculture	25 Year	39	$825
	50 Year	39	$2,095
	100 Year	39	$4,730
	300 Year	39	$17,132
	700 Year	39	$29,410
Government Facilities	25 Year	19	$78,726
	50 Year	19	$168,578
	100 Year	19	$333,587
	300 Year	19	$1,116,142
	700 Year	19	$2,008,261
	25 Year	10	$6,820

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	50 Year	10	$12,749
	100 Year	10	$24,469
	300 Year	10	$86,548
	700 Year	10	$167,206
Transportation Systems	25 Year	28	$17,369
	50 Year	28	$32,460
	100 Year	28	$55,873
	300 Year	28	$144,928
	700 Year	28	$239,025
All Categories	**25 Year**	**203**	**$163,697**
	50 Year	**203**	**$335,526**
	100 Year	**203**	**$649,320**
	300 Year	**203**	**$2,144,744**
	700 Year	**203**	**$3,892,119**

Source: GIS Analysis

Table 6-146: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Calypso

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	38	$22,740
	50 Year	38	$49,795
	100 Year	38	$103,498
	300 Year	38	$386,983
	700 Year	38	$711,367
Critical Manufacturing	25 Year	4	$4,267
	50 Year	4	$8,080
	100 Year	4	$14,282
	300 Year	4	$35,808
	700 Year	4	$55,829

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	25 Year	1	$1,527
	50 Year	1	$3,457
	100 Year	1	$7,564
	300 Year	1	$24,426
	700 Year	1	$38,193
Energy	25 Year	2	$246
	50 Year	2	$551
	100 Year	2	$1,151
	300 Year	2	$4,211
	700 Year	2	$7,939
Food and Agriculture	25 Year	116	$2,045
	50 Year	116	$5,103
	100 Year	116	$11,357
	300 Year	116	$40,329
	700 Year	116	$68,900
Government Facilities	25 Year	6	$822
	50 Year	6	$1,835
	100 Year	6	$3,909
	300 Year	6	$15,885
	700 Year	6	$30,790
Transportation Systems	25 Year	1	$368
	50 Year	1	$676
	100 Year	1	$1,188
	300 Year	1	$3,185
	700 Year	1	$5,380
All Categories	**25 Year**	**168**	**$32,015**
	50 Year	**168**	**$69,497**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	**168**	**$142,949**
	300 Year	**168**	**$510,827**
	700 Year	**168**	**$918,398**

Source: GIS Analysis

Table 6-147: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Faison

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$1,060
	50 Year	3	$2,305
	100 Year	3	$4,527
	300 Year	3	$14,630
	700 Year	3	$25,984
Commercial Facilities	25 Year	48	$64,133
	50 Year	48	$119,799
	100 Year	48	$210,314
	300 Year	48	$562,800
	700 Year	48	$944,564
Critical Manufacturing	25 Year	7	$59,439
	50 Year	7	$105,737
	100 Year	7	$183,997
	300 Year	7	$544,566
	700 Year	7	$968,915
Emergency Services	25 Year	1	$288
	50 Year	1	$551
	100 Year	1	$1,087
	300 Year	1	$4,051
	700 Year	1	$7,939
Energy	25 Year	2	$21,323

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	2	$47,555
	100 Year	2	$109,076
	300 Year	2	$565,013
	700 Year	2	$1,274,282
Food and Agriculture	25 Year	82	$2,267
	50 Year	82	$5,831
	100 Year	82	$13,281
	300 Year	82	$48,702
	700 Year	82	$83,811
Government Facilities	25 Year	14	$5,941
	50 Year	14	$11,340
	100 Year	14	$21,198
	300 Year	14	$70,377
	700 Year	14	$132,345
Healthcare and Public Health	25 Year	2	$946
	50 Year	2	$2,260
	100 Year	2	$5,382
	300 Year	2	$28,506
	700 Year	2	$64,123
Transportation Systems	25 Year	8	$2,580
	50 Year	8	$5,309
	100 Year	8	$10,817
	300 Year	8	$42,910
	700 Year	8	$85,777
Water	25 Year	1	$23,590
	50 Year	1	$55,335
	100 Year	1	$129,744

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	1	$679,107
	700 Year	1	$1,524,076
All Categories	**25 Year**	**168**	**$181,567**
	50 Year	**168**	**$356,022**
	100 Year	**168**	**$689,423**
	300 Year	**168**	**$2,560,662**
	700 Year	**168**	**$5,111,816**

Source: GIS Analysis

Table 6-148: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Greenevers

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	11	$1,841
	50 Year	11	$3,516
	100 Year	11	$6,881
	300 Year	11	$25,364
	700 Year	11	$49,761
Critical Manufacturing	25 Year	3	$633
	50 Year	3	$1,615
	100 Year	3	$3,979
	300 Year	3	$20,979
	700 Year	3	$44,523
Emergency Services	25 Year	1	$480
	50 Year	1	$968
	100 Year	1	$1,847
	300 Year	1	$6,198
	700 Year	1	$11,592
Food and Agriculture	25 Year	13	$261
	50 Year	13	$671

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	13	$1,530
	300 Year	13	$5,628
	700 Year	13	$9,706
Government Facilities	25 Year	2	$391
	50 Year	2	$798
	100 Year	2	$1,578
	300 Year	2	$5,764
	700 Year	2	$11,158
All Categories	**25 Year**	**30**	**$3,606**
	50 Year	**30**	**$7,568**
	100 Year	**30**	**$15,815**
	300 Year	**30**	**$63,933**
	700 Year	**30**	**$126,740**

Source: GIS Analysis

Table 6-149: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Harrells

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$34
	50 Year	1	$85
	100 Year	1	$223
	300 Year	1	$1,314
	700 Year	1	$2,953
Commercial Facilities	25 Year	14	$2,193
	50 Year	14	$4,169
	100 Year	14	$8,273
	300 Year	14	$33,405
	700 Year	14	$69,719
Critical Manufacturing	25 Year	1	$1,595

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$2,908
	100 Year	1	$5,590
	300 Year	1	$19,574
	700 Year	1	$37,718
Emergency Services	25 Year	2	$287
	50 Year	2	$487
	100 Year	2	$886
	300 Year	2	$3,258
	700 Year	2	$6,377
Food and Agriculture	25 Year	48	$792
	50 Year	48	$2,068
	100 Year	48	$4,804
	300 Year	48	$18,280
	700 Year	48	$32,081
Government Facilities	25 Year	8	$3,406
	50 Year	8	$6,673
	100 Year	8	$13,552
	300 Year	8	$57,340
	700 Year	8	$117,214
Healthcare and Public Health	25 Year	1	$86
	50 Year	1	$152
	100 Year	1	$288
	300 Year	1	$1,052
	700 Year	1	$2,129
Transportation Systems	25 Year	1	$308
	50 Year	1	$756
	100 Year	1	$1,683

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	1	$6,165
	700 Year	1	$10,803
All Categories	**25 Year**	**76**	**$8,701**
	50 Year	**76**	**$17,298**
	100 Year	**76**	**$35,299**
	300 Year	**76**	**$140,388**
	700 Year	**76**	**$278,994**

Source: GIS Analysis

Table 6-150: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Kenansville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	6	$4,087
	50 Year	6	$8,708
	100 Year	6	$17,455
	300 Year	6	$61,927
	700 Year	6	$115,353
Commercial Facilities	25 Year	49	$31,521
	50 Year	49	$57,876
	100 Year	49	$104,375
	300 Year	49	$310,295
	700 Year	49	$537,397
Critical Manufacturing	25 Year	2	$152
	50 Year	2	$251
	100 Year	2	$466
	300 Year	2	$1,996
	700 Year	2	$4,668
Emergency Services	25 Year	4	$2,703
	50 Year	4	$5,005

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	4	$10,127
	300 Year	4	$40,834
	700 Year	4	$81,813
Energy	25 Year	2	$148
	50 Year	2	$271
	100 Year	2	$499
	300 Year	2	$1,661
	700 Year	2	$3,004
Government Facilities	25 Year	67	$58,298
	50 Year	67	$118,412
	100 Year	67	$226,651
	300 Year	67	$738,499
	700 Year	67	$1,323,109
Healthcare and Public Health	25 Year	10	$6,827
	50 Year	10	$11,076
	100 Year	10	$19,358
	300 Year	10	$58,888
	700 Year	10	$107,672
Transportation Systems	25 Year	12	$1,962
	50 Year	12	$3,530
	100 Year	12	$6,491
	300 Year	12	$22,297
	700 Year	12	$44,029
All Categories	**25 Year**	**152**	**$105,698**
	50 Year	**152**	**$205,129**
	100 Year	**152**	**$385,422**
	300 Year	**152**	**$1,236,397**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	**152**	**$2,217,045**

Source: GIS Analysis

Table 6-151: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Magnolia

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	28	$10,720
	50 Year	28	$22,206
	100 Year	28	$43,419
	300 Year	28	$149,254
	700 Year	28	$274,244
Critical Manufacturing	25 Year	3	$161
	50 Year	3	$272
	100 Year	3	$478
	300 Year	3	$1,687
	700 Year	3	$3,213
Emergency Services	25 Year	2	$442
	50 Year	2	$1,049
	100 Year	2	$2,528
	300 Year	2	$13,340
	700 Year	2	$27,703
Energy	25 Year	3	$547
	50 Year	3	$1,055
	100 Year	3	$1,903
	300 Year	3	$5,989
	700 Year	3	$11,213
Food and Agriculture	25 Year	40	$495
	50 Year	40	$1,329
	100 Year	40	$3,204

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	40	$13,085
	700 Year	40	$23,780
Government Facilities	25 Year	25	$22,055
	50 Year	25	$42,514
	100 Year	25	$75,134
	300 Year	25	$194,430
	700 Year	25	$303,378
Healthcare and Public Health	25 Year	6	$533
	50 Year	6	$1,086
	100 Year	6	$2,200
	300 Year	6	$8,062
	700 Year	6	$15,039
Transportation Systems	25 Year	1	$413
	50 Year	1	$926
	100 Year	1	$2,070
	300 Year	1	$9,706
	700 Year	1	$20,110
All Categories	**25 Year**	**108**	**$35,366**
	50 Year	**108**	**$70,437**
	100 Year	**108**	**$130,936**
	300 Year	**108**	**$395,553**
	700 Year	**108**	**$678,680**

Source: GIS Analysis

Table 6-152: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Rose Hill

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$1,258
	50 Year	2	$2,890

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	2	$6,099
	300 Year	2	$21,190
	700 Year	2	$36,068
Commercial Facilities	25 Year	56	$14,790
	50 Year	56	$31,621
	100 Year	56	$64,598
	300 Year	56	$239,627
	700 Year	56	$454,138
Critical Manufacturing	25 Year	20	$7,261
	50 Year	20	$17,525
	100 Year	20	$42,326
	300 Year	20	$225,837
	700 Year	20	$489,145
Emergency Services	25 Year	1	$378
	50 Year	1	$694
	100 Year	1	$1,339
	300 Year	1	$5,387
	700 Year	1	$11,782
Food and Agriculture	25 Year	77	$3,955
	50 Year	77	$8,400
	100 Year	77	$17,408
	300 Year	77	$58,779
	700 Year	77	$98,803
Government Facilities	25 Year	16	$9,785
	50 Year	16	$20,563
	100 Year	16	$40,467
	300 Year	16	$134,350

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	16	$240,314
Healthcare and Public Health	25 Year	4	$3,194
	50 Year	4	$7,064
	100 Year	4	$14,783
	300 Year	4	$53,683
	700 Year	4	$96,093
Transportation Systems	25 Year	21	$5,414
	50 Year	21	$11,192
	100 Year	21	$22,689
	300 Year	21	$88,596
	700 Year	21	$178,330
All Categories	**25 Year**	**197**	**$46,035**
	50 Year	**197**	**$99,949**
	100 Year	**197**	**$209,709**
	300 Year	**197**	**$827,449**
	700 Year	**197**	**$1,604,673**

Source: GIS Analysis

Table 6-153: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Teachey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	13	$3,675
	50 Year	13	$7,802
	100 Year	13	$15,673
	300 Year	13	$52,441
	700 Year	13	$91,307
Critical Manufacturing	25 Year	1	$54
	50 Year	1	$99
	100 Year	1	$191

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	1	$721
	700 Year	1	$1,485
Emergency Services	25 Year	1	$163
	50 Year	1	$301
	100 Year	1	$576
	300 Year	1	$2,120
	700 Year	1	$4,309
Government Facilities	25 Year	4	$315
	50 Year	4	$652
	100 Year	4	$1,389
	300 Year	4	$5,864
	700 Year	4	$11,883
Transportation Systems	25 Year	2	$232
	50 Year	2	$539
	100 Year	2	$1,267
	300 Year	2	$7,337
	700 Year	2	$17,438
All Categories	**25 Year**	**21**	**$4,439**
	50 Year	**21**	**$9,393**
	100 Year	**21**	**$19,096**
	300 Year	**21**	**$68,483**
	700 Year	**21**	**$126,422**

Source: GIS Analysis

Table 6-154: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	7	$2,754
	50 Year	7	$5,146

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	7	$9,521
	300 Year	7	$28,846
	700 Year	7	$49,405
Commercial Facilities	25 Year	226	$179,913
	50 Year	226	$343,466
	100 Year	226	$640,105
	300 Year	226	$2,124,588
	700 Year	226	$3,871,247
Critical Manufacturing	25 Year	41	$25,990
	50 Year	41	$48,437
	100 Year	41	$86,125
	300 Year	41	$247,025
	700 Year	41	$420,964
Emergency Services	25 Year	1	$148
	50 Year	1	$255
	100 Year	1	$469
	300 Year	1	$1,628
	700 Year	1	$3,191
Energy	25 Year	1	$922
	50 Year	1	$1,519
	100 Year	1	$2,346
	300 Year	1	$4,566
	700 Year	1	$6,296
Food and Agriculture	25 Year	77	$738
	50 Year	77	$1,945
	100 Year	77	$4,578
	300 Year	77	$17,848

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	77	$31,728
Government Facilities	25 Year	37	$14,455
	50 Year	37	$27,221
	100 Year	37	$52,401
	300 Year	37	$207,883
	700 Year	37	$456,789
Healthcare and Public Health	25 Year	20	$7,768
	50 Year	20	$14,997
	100 Year	20	$28,758
	300 Year	20	$99,529
	700 Year	20	$185,759
Transportation Systems	25 Year	65	$40,224
	50 Year	65	$81,059
	100 Year	65	$163,151
	300 Year	65	$636,209
	700 Year	65	$1,273,282
All Categories	**25 Year**	**475**	**$272,912**
	50 Year	**475**	**$524,045**
	100 Year	**475**	**$987,454**
	300 Year	**475**	**$3,368,122**
	700 Year	**475**	**$6,298,661**

Source: GIS Analysis

Table 6-155: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Warsaw

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$2,677
	50 Year	3	$5,638
	100 Year	3	$10,990

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	3	$37,825
	700 Year	3	$71,600
Commercial Facilities	25 Year	155	$105,131
	50 Year	155	$224,911
	100 Year	155	$454,671
	300 Year	155	$1,619,654
	700 Year	155	$2,989,450
Critical Manufacturing	25 Year	32	$7,352
	50 Year	32	$14,865
	100 Year	32	$29,375
	300 Year	32	$101,696
	700 Year	32	$186,321
Emergency Services	25 Year	2	$1,581
	50 Year	2	$3,193
	100 Year	2	$6,801
	300 Year	2	$29,867
	700 Year	2	$61,227
Energy	25 Year	3	$1,701
	50 Year	3	$3,509
	100 Year	3	$6,684
	300 Year	3	$21,533
	700 Year	3	$39,575
Food and Agriculture	25 Year	22	$3,284
	50 Year	22	$7,542
	100 Year	22	$16,109
	300 Year	22	$59,277
	700 Year	22	$110,283

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	25 Year	18	$48,760
	50 Year	18	$85,169
	100 Year	18	$141,945
	300 Year	18	$358,957
	700 Year	18	$597,806
Healthcare and Public Health	25 Year	9	$8,462
	50 Year	9	$17,972
	100 Year	9	$36,196
	300 Year	9	$128,967
	700 Year	9	$239,205
Transportation Systems	25 Year	33	$30,700
	50 Year	33	$63,430
	100 Year	33	$122,141
	300 Year	33	$429,877
	700 Year	33	$835,280
All Categories	**25 Year**	**277**	**$209,648**
	50 Year	**277**	**$426,229**
	100 Year	**277**	**$824,912**
	300 Year	**277**	**$2,787,653**
	700 Year	**277**	**$5,130,747**

Source: GIS Analysis

Table 6-156: Critical Facilities Exposed to the Thunderstorm Winds - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	16	$11,665
	50 Year	16	$23,905
	100 Year	16	$45,590
	300 Year	16	$134,736

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	16	$225,158
Commercial Facilities	25 Year	720	$386,806
	50 Year	720	$774,306
	100 Year	720	$1,491,155
	300 Year	720	$5,144,672
	700 Year	720	$9,716,232
Critical Manufacturing	25 Year	63	$105,704
	50 Year	63	$205,005
	100 Year	63	$381,496
	300 Year	63	$1,195,956
	700 Year	63	$2,178,895
Emergency Services	25 Year	5	$8,269
	50 Year	5	$17,541
	100 Year	5	$34,767
	300 Year	5	$117,960
	700 Year	5	$217,928
Energy	25 Year	7	$46,422
	50 Year	7	$77,392
	100 Year	7	$146,045
	300 Year	7	$637,944
	700 Year	7	$1,476,022
Food and Agriculture	25 Year	203	$3,224
	50 Year	203	$8,072
	100 Year	203	$18,437
	300 Year	203	$74,495
	700 Year	203	$142,134
Government Facilities	25 Year	132	$174,596

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	132	$325,295
	100 Year	132	$586,427
	300 Year	132	$1,846,594
	700 Year	132	$3,386,370
Healthcare and Public Health	25 Year	45	$128,018
	50 Year	45	$219,688
	100 Year	45	$365,988
	300 Year	45	$902,481
	700 Year	45	$1,421,866
Transportation Systems	25 Year	40	$35,071
	50 Year	40	$71,604
	100 Year	40	$135,544
	300 Year	40	$396,493
	700 Year	40	$667,510
All Categories	**25 Year**	**1,231**	**$899,775**
	50 Year	**1,231**	**$1,722,808**
	100 Year	**1,231**	**$3,205,449**
	300 Year	**1,231**	**$10,451,331**
	700 Year	**1,231**	**$19,432,115**

Source: GIS Analysis

Table 6-157: Critical Facilities Exposed to the Thunderstorm Winds - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	760	$440,912
	50 Year	760	$828,805
	100 Year	760	$1,504,985
	300 Year	760	$4,672,432

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	760	$8,466,785
Communications	25 Year	1	$413
	50 Year	1	$705
	100 Year	1	$1,292
	300 Year	1	$5,752
	700 Year	1	$14,646
Critical Manufacturing	25 Year	80	$271,810
	50 Year	80	$601,292
	100 Year	80	$1,254,703
	300 Year	80	$4,571,541
	700 Year	80	$8,594,995
Emergency Services	25 Year	9	$25,531
	50 Year	9	$43,500
	100 Year	9	$70,885
	300 Year	9	$177,207
	700 Year	9	$298,718
Energy	25 Year	1	$3,046
	50 Year	1	$6,196
	100 Year	1	$13,593
	300 Year	1	$68,874
	700 Year	1	$156,980
Food and Agriculture	25 Year	11,972	$265,114
	50 Year	11,972	$687,369
	100 Year	11,972	$1,591,712
	300 Year	11,972	$6,056,157
	700 Year	11,972	$10,646,594
Government Facilities	25 Year	166	$157,538

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	166	$282,026
	100 Year	166	$493,234
	300 Year	166	$1,489,077
	700 Year	166	$2,712,994
Healthcare and Public Health	25 Year	8	$6,930
	50 Year	8	$13,022
	100 Year	8	$25,603
	300 Year	8	$104,865
	700 Year	8	$218,837
Nuclear Reactors, Materials and Waste	25 Year	1	$545
	50 Year	1	$919
	100 Year	1	$1,325
	300 Year	1	$2,496
	700 Year	1	$4,105
Transportation Systems	25 Year	70	$100,125
	50 Year	70	$185,302
	100 Year	70	$319,033
	300 Year	70	$924,766
	700 Year	70	$1,635,870
All Categories	**25 Year**	**13,068**	**$1,271,964**
	50 Year	**13,068**	**$2,649,136**
	100 Year	**13,068**	**$5,276,365**
	300 Year	**13,068**	**$18,073,167**
	700 Year	**13,068**	**$32,750,524**

Source: GIS Analysis

Table 6-158: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Autryville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	17	$4,041
	50 Year	17	$8,912
	100 Year	17	$18,441
	300 Year	17	$64,620
	700 Year	17	$114,540
Critical Manufacturing	25 Year	1	$136
	50 Year	1	$223
	100 Year	1	$419
	300 Year	1	$1,839
	700 Year	1	$4,322
Emergency Services	25 Year	1	$2,236
	50 Year	1	$4,893
	100 Year	1	$9,884
	300 Year	1	$35,080
	700 Year	1	$65,060
Food and Agriculture	25 Year	1	$3
	50 Year	1	$8
	100 Year	1	$20
	300 Year	1	$84
	700 Year	1	$155
Government Facilities	25 Year	1	$86
	50 Year	1	$155
	100 Year	1	$299
	300 Year	1	$1,307
	700 Year	1	$2,964
Transportation Systems	25 Year	1	$70

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$143
	100 Year	1	$326
	300 Year	1	$1,929
	700 Year	1	$4,925
All Categories	**25 Year**	**22**	**$6,572**
	50 Year	**22**	**$14,334**
	100 Year	**22**	**$29,389**
	300 Year	**22**	**$104,859**
	700 Year	**22**	**$191,966**

Source: GIS Analysis

Table 6-159: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Garland

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$262
	50 Year	1	$513
	100 Year	1	$1,039
	300 Year	1	$4,377
	700 Year	1	$9,179
Commercial Facilities	25 Year	70	$11,676
	50 Year	70	$22,862
	100 Year	70	$44,933
	300 Year	70	$160,534
	700 Year	70	$305,238
Critical Manufacturing	25 Year	3	$1,606
	50 Year	3	$2,656
	100 Year	3	$5,079
	300 Year	3	$23,190
	700 Year	3	$54,144

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	25 Year	1	$214
	50 Year	1	$344
	100 Year	1	$590
	300 Year	1	$1,891
	700 Year	1	$3,541
Food and Agriculture	25 Year	51	$724
	50 Year	51	$1,919
	100 Year	51	$4,549
	300 Year	51	$17,967
	700 Year	51	$32,151
Government Facilities	25 Year	7	$1,098
	50 Year	7	$1,957
	100 Year	7	$3,719
	300 Year	7	$13,715
	700 Year	7	$27,558
Healthcare and Public Health	25 Year	4	$1,881
	50 Year	4	$4,134
	100 Year	4	$8,388
	300 Year	4	$25,259
	700 Year	4	$41,036
Transportation Systems	25 Year	5	$1,132
	50 Year	5	$2,067
	100 Year	5	$4,104
	300 Year	5	$15,442
	700 Year	5	$29,575
All Categories	**25 Year**	**142**	**$18,593**
	50 Year	**142**	**$36,452**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	**142**	**$72,401**
	300 Year	**142**	**$262,375**
	700 Year	**142**	**$502,422**

Source: GIS Analysis

Table 6-160: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	3	$579
	50 Year	3	$1,123
	100 Year	3	$2,164
	300 Year	3	$7,773
	700 Year	3	$15,429
Commercial Facilities	25 Year	80	$60,375
	50 Year	80	$128,069
	100 Year	80	$255,781
	300 Year	80	$885,029
	700 Year	80	$1,614,822
Critical Manufacturing	25 Year	6	$8,144
	50 Year	6	$17,527
	100 Year	6	$35,011
	300 Year	6	$120,426
	700 Year	6	$220,736
Emergency Services	25 Year	1	$223
	50 Year	1	$565
	100 Year	1	$1,398
	300 Year	1	$8,326
	700 Year	1	$19,259
Energy	25 Year	1	$163

Sector	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	1	$338
	100 Year	1	$721
	300 Year	1	$3,037
	700 Year	1	$5,922
Food and Agriculture	25 Year	120	$1,395
	50 Year	120	$3,584
	100 Year	120	$8,157
	300 Year	120	$29,900
	700 Year	120	$51,466
Government Facilities	25 Year	6	$1,188
	50 Year	6	$2,593
	100 Year	6	$5,524
	300 Year	6	$23,313
	700 Year	6	$46,562
Healthcare and Public Health	25 Year	3	$1,485
	50 Year	3	$2,754
	100 Year	3	$5,347
	300 Year	3	$17,767
	700 Year	3	$32,372
Transportation Systems	25 Year	3	$1,196
	50 Year	3	$2,546
	100 Year	3	$5,302
	300 Year	3	$19,408
	700 Year	3	$34,725
All Categories	**25 Year**	**223**	**$74,748**
	50 Year	**223**	**$159,099**
	100 Year	**223**	**$319,405**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**223**	**$1,114,979**
	700 Year	**223**	**$2,041,293**

Source: GIS Analysis

Table 6-161: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Roseboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$903
	50 Year	2	$1,701
	100 Year	2	$3,358
	300 Year	2	$12,475
	700 Year	2	$23,045
Commercial Facilities	25 Year	142	$158,394
	50 Year	142	$270,717
	100 Year	142	$436,619
	300 Year	142	$1,008,523
	700 Year	142	$1,515,657
Critical Manufacturing	25 Year	15	$9,346
	50 Year	15	$17,192
	100 Year	15	$31,368
	300 Year	15	$109,179
	700 Year	15	$216,607
Emergency Services	25 Year	3	$521
	50 Year	3	$1,147
	100 Year	3	$2,394
	300 Year	3	$9,319
	700 Year	3	$18,148
Energy	25 Year	2	$19,017
	50 Year	2	$31,228

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	2	$53,662
	300 Year	2	$181,707
	700 Year	2	$400,011
Food and Agriculture	25 Year	56	$551
	50 Year	56	$1,417
	100 Year	56	$3,258
	300 Year	56	$12,271
	700 Year	56	$21,532
Government Facilities	25 Year	24	$5,378
	50 Year	24	$10,370
	100 Year	24	$20,670
	300 Year	24	$84,505
	700 Year	24	$177,011
Healthcare and Public Health	25 Year	8	$5,155
	50 Year	8	$10,218
	100 Year	8	$19,281
	300 Year	8	$60,343
	700 Year	8	$106,630
Transportation Systems	25 Year	7	$1,088
	50 Year	7	$2,523
	100 Year	7	$5,872
	300 Year	7	$29,143
	700 Year	7	$60,713
All Categories	**25 Year**	**259**	**$200,353**
	50 Year	**259**	**$346,513**
	100 Year	**259**	**$576,482**
	300 Year	**259**	**$1,507,465**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	**259**	**$2,539,354**

Source: GIS Analysis

Table 6-162: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Salemburg

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	2	$304
	50 Year	2	$967
	100 Year	2	$2,745
	300 Year	2	$16,373
	700 Year	2	$34,386
Commercial Facilities	25 Year	41	$9,114
	50 Year	41	$18,365
	100 Year	41	$36,521
	300 Year	41	$131,714
	700 Year	41	$248,621
Critical Manufacturing	25 Year	2	$141
	50 Year	2	$285
	100 Year	2	$592
	300 Year	2	$2,421
	700 Year	2	$4,651
Emergency Services	25 Year	1	$1,801
	50 Year	1	$3,981
	100 Year	1	$8,806
	300 Year	1	$40,885
	700 Year	1	$84,849
Food and Agriculture	25 Year	80	$1,650
	50 Year	80	$4,299
	100 Year	80	$9,957

Sector	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	80	$37,662
	700 Year	80	$65,895
Government Facilities	25 Year	35	$59,338
	50 Year	35	$115,286
	100 Year	35	$218,832
	300 Year	35	$794,558
	700 Year	35	$1,565,833
Healthcare and Public Health	25 Year	1	$308
	50 Year	1	$651
	100 Year	1	$1,580
	300 Year	1	$8,837
	700 Year	1	$20,728
Transportation Systems	25 Year	2	$473
	50 Year	2	$908
	100 Year	2	$1,690
	300 Year	2	$5,502
	700 Year	2	$10,089
All Categories	**25 Year**	**164**	**$73,129**
	50 Year	**164**	**$144,742**
	100 Year	**164**	**$280,723**
	300 Year	**164**	**$1,037,952**
	700 Year	**164**	**$2,035,052**

Source: GIS Analysis

Table 6-163: Critical Facilities Exposed to the Thunderstorm Winds - Town Of Turkey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	1	$215
	50 Year	1	$464

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	1	$969
	300 Year	1	$3,687
	700 Year	1	$6,835
Commercial Facilities	25 Year	23	$113,463
	50 Year	23	$254,148
	100 Year	23	$581,966
	300 Year	23	$2,254,445
	700 Year	23	$4,081,281
Critical Manufacturing	25 Year	1	$92
	50 Year	1	$174
	100 Year	1	$338
	300 Year	1	$1,264
	700 Year	1	$2,591
Emergency Services	25 Year	1	$197
	50 Year	1	$376
	100 Year	1	$737
	300 Year	1	$2,830
	700 Year	1	$5,906
Food and Agriculture	25 Year	127	$2,727
	50 Year	127	$6,960
	100 Year	127	$15,767
	300 Year	127	$57,483
	700 Year	127	$98,872
Government Facilities	25 Year	2	$321
	50 Year	2	$696
	100 Year	2	$1,453
	300 Year	2	$5,531

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	2	$10,252
Transportation Systems	25 Year	1	$143
	50 Year	1	$322
	100 Year	1	$743
	300 Year	1	$3,858
	700 Year	1	$8,691
All Categories	**25 Year**	**156**	**$117,158**
	50 Year	**156**	**$263,140**
	100 Year	**156**	**$601,973**
	300 Year	**156**	**$2,329,098**
	700 Year	**156**	**$4,214,428**

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 6-164: Critical Facilities Exposed to the Thunderstorm Winds (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	25 Year	53	$27,273
	50 Year	53	$56,631
	100 Year	53	$111,216
	300 Year	53	$368,116
	700 Year	53	$658,147
Chemical	25 Year	1	$39
	50 Year	1	$102
	100 Year	1	$234
	300 Year	1	$867
	700 Year	1	$1,501

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	25 Year	3,148	$2,028,158
	50 Year	3,148	$3,951,049
	100 Year	3,148	$7,453,992
	300 Year	3,148	$24,229,895
	700 Year	3,148	$43,893,446
Communications	25 Year	1	$413
	50 Year	1	$705
	100 Year	1	$1,292
	300 Year	1	$5,752
	700 Year	1	$14,646
Critical Manufacturing	25 Year	507	$586,670
	50 Year	507	$1,202,470
	100 Year	507	$2,364,924
	300 Year	507	$8,086,004
	700 Year	507	$15,008,947
Defense Industrial Base	25 Year	2	$1,078
	50 Year	2	$2,105
	100 Year	2	$4,424
	300 Year	2	$17,577
	700 Year	2	$33,739
Emergency Services	25 Year	56	$58,923
	50 Year	56	$109,597
	100 Year	56	$200,009
	300 Year	56	$643,367
	700 Year	56	$1,193,902
Energy	25 Year	29	$93,699
	50 Year	29	$169,880

Sector	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	29	$336,109
	300 Year	29	$1,495,730
	700 Year	29	$3,383,419
Food and Agriculture	25 Year	22,405	$525,189
	50 Year	22,405	$1,347,327
	100 Year	22,405	$3,104,835
	300 Year	22,405	$11,795,235
	700 Year	22,405	$20,790,734
Government Facilities	25 Year	698	$785,170
	50 Year	698	$1,506,426
	100 Year	698	$2,776,516
	300 Year	698	$8,907,110
	700 Year	698	$16,398,626
Healthcare and Public Health	25 Year	138	$184,812
	50 Year	138	$328,804
	100 Year	138	$575,590
	300 Year	138	$1,631,627
	700 Year	138	$2,800,721
Nuclear Reactors, Materials and Waste	25 Year	1	$545
	50 Year	1	$919
	100 Year	1	$1,325
	300 Year	1	$2,496
	700 Year	1	$4,105
Transportation Systems	25 Year	446	$330,351
	50 Year	446	$631,150
	100 Year	446	$1,157,125
	300 Year	446	$3,740,041

Sector	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	446	$6,970,273
Water	25 Year	1	$23,590
	50 Year	1	$55,335
	100 Year	1	$129,744
	300 Year	1	$679,107
	700 Year	1	$1,524,076
All Categories	**25 Year**	**27,486**	**$4,645,910**
	50 Year	**27,486**	**$9,362,500**
	100 Year	**27,486**	**$18,217,335**
	300 Year	**27,486**	**$61,602,924**
	700 Year	**27,486**	**$112,676,282**

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 6-165: High Potential Loss Properties Exposed to the Thunderstorm Winds - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$4,012
	50 Year	1	$10,275
	100 Year	1	$23,179
	300 Year	1	$83,276
	700 Year	1	$141,383
Commercial	25 Year	92	$170,280
	50 Year	92	$306,190
	100 Year	92	$530,973
	300 Year	92	$1,510,624
	700 Year	92	$2,683,318

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	37	$140,902
	50 Year	37	$276,981
	100 Year	37	$513,576
	300 Year	37	$1,633,287
	700 Year	37	$3,006,215
Industrial	25 Year	16	$43,339
	50 Year	16	$82,523
	100 Year	16	$146,171
	300 Year	16	$371,651
	700 Year	16	$582,025
Religious	25 Year	85	$144,920
	50 Year	85	$270,033
	100 Year	85	$478,929
	300 Year	85	$1,385,796
	700 Year	85	$2,428,461
Residential	25 Year	18	$26,561
	50 Year	18	$48,232
	100 Year	18	$91,639
	300 Year	18	$357,620
	700 Year	18	$682,659
All Categories	**25 Year**	**249**	**$530,014**
	50 Year	**249**	**$994,234**
	100 Year	**249**	**$1,784,467**
	300 Year	**249**	**$5,342,254**
	700 Year	**249**	**$9,524,061**

Source: GIS Analysis

Table 6-166: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Beulaville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$44,392
	50 Year	16	$83,022
	100 Year	16	$146,164
	300 Year	16	$397,973
	700 Year	16	$673,944
Government	25 Year	5	$74,404
	50 Year	5	$159,676
	100 Year	5	$316,476
	300 Year	5	$1,060,601
	700 Year	5	$1,907,774
Industrial	25 Year	2	$5,077
	50 Year	2	$10,238
	100 Year	2	$20,764
	300 Year	2	$81,767
	700 Year	2	$169,263
Religious	25 Year	8	$11,275
	50 Year	8	$23,062
	100 Year	8	$46,495
	300 Year	8	$170,760
	700 Year	8	$320,326
Residential	25 Year	7	$9,528
	50 Year	7	$18,597
	100 Year	7	$36,323
	300 Year	7	$119,726
	700 Year	7	$210,847
All Categories	**25 Year**	**38**	**$144,676**

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	**38**	**$294,595**
	100 Year	**38**	**$566,222**
	300 Year	**38**	**$1,830,827**
	700 Year	**38**	**$3,282,154**

Source: GIS Analysis

Table 6-167: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Calypso

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	2	$5,633
	50 Year	2	$11,841
	100 Year	2	$22,661
	300 Year	2	$71,294
	700 Year	2	$125,514
Government	25 Year	1	$1,527
	50 Year	1	$3,457
	100 Year	1	$7,564
	300 Year	1	$24,426
	700 Year	1	$38,193
Religious	25 Year	4	$6,919
	50 Year	4	$16,345
	100 Year	4	$36,701
	300 Year	4	$148,267
	700 Year	4	$272,184
Residential	25 Year	1	$1,231
	50 Year	1	$2,014
	100 Year	1	$3,485
	300 Year	1	$9,867
	700 Year	1	$16,023

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**8**	**$15,310**
	50 Year	**8**	**$33,657**
	100 Year	**8**	**$70,411**
	300 Year	**8**	**$253,854**
	700 Year	**8**	**$451,914**

Source: GIS Analysis

Table 6-168: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Faison

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	11	$28,202
	50 Year	11	$49,480
	100 Year	11	$85,004
	300 Year	11	$242,890
	700 Year	11	$437,096
Government	25 Year	3	$2,665
	50 Year	3	$4,509
	100 Year	3	$7,746
	300 Year	3	$24,046
	700 Year	3	$47,491
Industrial	25 Year	3	$57,888
	50 Year	3	$102,522
	100 Year	3	$177,273
	300 Year	3	$515,838
	700 Year	3	$911,688
Religious	25 Year	6	$29,746
	50 Year	6	$57,455
	100 Year	6	$100,246
	300 Year	6	$238,485

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	6	$359,785
Residential	25 Year	6	$20,446
	50 Year	6	$36,259
	100 Year	6	$67,502
	300 Year	6	$282,006
	700 Year	6	$567,058
Utilities	25 Year	2	$44,881
	50 Year	2	$102,814
	100 Year	2	$238,642
	300 Year	2	$1,243,192
	700 Year	2	$2,796,273
All Categories	**25 Year**	**31**	**$183,828**
	50 Year	**31**	**$353,039**
	100 Year	**31**	**$676,413**
	300 Year	**31**	**$2,546,457**
	700 Year	**31**	**$5,119,391**

Source: GIS Analysis

Table 6-169: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Greenevers

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$480
	50 Year	1	$968
	100 Year	1	$1,847
	300 Year	1	$6,198
	700 Year	1	$11,592
Religious	25 Year	2	$969
	50 Year	2	$1,873
	100 Year	2	$3,729

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	2	$13,879
	700 Year	2	$26,698
Residential	25 Year	1	$1,461
	50 Year	1	$3,311
	100 Year	1	$6,917
	300 Year	1	$23,635
	700 Year	1	$39,864
All Categories	**25 Year**	**4**	**$2,910**
	50 Year	**4**	**$6,152**
	100 Year	**4**	**$12,493**
	300 Year	**4**	**$43,712**
	700 Year	**4**	**$78,154**

Source: GIS Analysis

Table 6-170: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Harrells

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	3	$2,515
	50 Year	3	$4,763
	100 Year	3	$9,314
	300 Year	3	$36,851
	700 Year	3	$73,988
Industrial	25 Year	1	$1,595
	50 Year	1	$2,908
	100 Year	1	$5,590
	300 Year	1	$19,574
	700 Year	1	$37,718
All Categories	**25 Year**	**4**	**$4,110**
	50 Year	**4**	**$7,671**

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	**4**	**$14,904**
	300 Year	**4**	**$56,425**
	700 Year	**4**	**$111,706**

Source: GIS Analysis

Table 6-171: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Kenansville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	12	$13,080
	50 Year	12	$24,357
	100 Year	12	$46,339
	300 Year	12	$156,818
	700 Year	12	$290,409
Government	25 Year	24	$52,411
	50 Year	24	$107,054
	100 Year	24	$210,122
	300 Year	24	$728,200
	700 Year	24	$1,337,045
Religious	25 Year	5	$15,309
	50 Year	5	$25,310
	100 Year	5	$39,725
	300 Year	5	$83,385
	700 Year	5	$123,829
Residential	25 Year	2	$10,280
	50 Year	2	$15,260
	100 Year	2	$24,490
	300 Year	2	$84,514
	700 Year	2	$169,007
All Categories	**25 Year**	**43**	**$91,080**

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	**43**	**$171,981**
	100 Year	**43**	**$320,676**
	300 Year	**43**	**$1,052,917**
	700 Year	**43**	**$1,920,290**

Source: GIS Analysis

Table 6-172: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Magnolia

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$356
	50 Year	1	$639
	100 Year	1	$1,155
	300 Year	1	$3,140
	700 Year	1	$4,644
Government	25 Year	2	$16,173
	50 Year	2	$29,723
	100 Year	2	$48,835
	300 Year	2	$97,350
	700 Year	2	$123,437
Religious	25 Year	4	$4,656
	50 Year	4	$9,459
	100 Year	4	$17,750
	300 Year	4	$56,047
	700 Year	4	$101,660
All Categories	**25 Year**	**7**	**$21,185**
	50 Year	**7**	**$39,821**
	100 Year	**7**	**$67,740**
	300 Year	**7**	**$156,537**
	700 Year	**7**	**$229,741**

Source: GIS Analysis

Table 6-173: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Rose Hill

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$542
	50 Year	1	$1,391
	100 Year	1	$3,149
	300 Year	1	$11,395
	700 Year	1	$19,430
Commercial	25 Year	10	$12,027
	50 Year	10	$25,961
	100 Year	10	$52,868
	300 Year	10	$190,589
	700 Year	10	$351,290
Government	25 Year	3	$7,575
	50 Year	3	$15,771
	100 Year	3	$30,206
	300 Year	3	$91,270
	700 Year	3	$153,989
Industrial	25 Year	5	$7,102
	50 Year	5	$16,553
	100 Year	5	$39,348
	300 Year	5	$206,734
	700 Year	5	$443,557
Religious	25 Year	3	$1,980
	50 Year	3	$4,123
	100 Year	3	$8,230
	300 Year	3	$28,141
	700 Year	3	$50,333

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	25 Year	5	$4,266
	50 Year	5	$9,395
	100 Year	5	$18,827
	300 Year	5	$67,542
	700 Year	5	$132,405
All Categories	**25 Year**	**27**	**$33,492**
	50 Year	**27**	**$73,194**
	100 Year	**27**	**$152,628**
	300 Year	**27**	**$595,671**
	700 Year	**27**	**$1,151,004**

Source: GIS Analysis

Table 6-174: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Wallace

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	48	$156,977
	50 Year	48	$291,493
	100 Year	48	$535,021
	300 Year	48	$1,779,184
	700 Year	48	$3,278,937
Government	25 Year	3	$9,387
	50 Year	3	$17,573
	100 Year	3	$33,967
	300 Year	3	$139,245
	700 Year	3	$320,057
Industrial	25 Year	4	$16,248
	50 Year	4	$28,763
	100 Year	4	$48,279
	300 Year	4	$127,348

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	4	$211,165
Religious	25 Year	20	$29,142
	50 Year	20	$62,058
	100 Year	20	$123,865
	300 Year	20	$449,372
	700 Year	20	$860,007
Residential	25 Year	17	$141,533
	50 Year	17	$273,996
	100 Year	17	$506,625
	300 Year	17	$1,576,102
	700 Year	17	$2,731,988
All Categories	**25 Year**	**92**	**$353,287**
	50 Year	**92**	**$673,883**
	100 Year	**92**	**$1,247,757**
	300 Year	**92**	**$4,071,251**
	700 Year	**92**	**$7,402,154**

Source: GIS Analysis

Table 6-175: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Warsaw

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$1,657
	50 Year	1	$3,830
	100 Year	1	$7,911
	300 Year	1	$24,562
	700 Year	1	$39,819
Commercial	25 Year	30	$98,842
	50 Year	30	$211,256
	100 Year	30	$419,982

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	30	$1,449,493
	700 Year	30	$2,650,288
Government	25 Year	7	$46,534
	50 Year	7	$80,583
	100 Year	7	$133,405
	300 Year	7	$333,781
	700 Year	7	$553,431
Industrial	25 Year	2	$3,895
	50 Year	2	$7,939
	100 Year	2	$14,865
	300 Year	2	$43,049
	700 Year	2	$70,635
Religious	25 Year	15	$26,393
	50 Year	15	$55,662
	100 Year	15	$109,414
	300 Year	15	$372,687
	700 Year	15	$687,684
Residential	25 Year	8	$39,083
	50 Year	8	$67,432
	100 Year	8	$120,209
	300 Year	8	$443,222
	700 Year	8	$898,747
All Categories	**25 Year**	**63**	**$216,404**
	50 Year	**63**	**$426,702**
	100 Year	**63**	**$805,786**
	300 Year	**63**	**$2,666,794**
	700 Year	**63**	**$4,900,604**

Source: GIS Analysis

Table 6-176: High Potential Loss Properties Exposed to the Thunderstorm Winds - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	1	$340
	50 Year	1	$896
	100 Year	1	$2,112
	300 Year	1	$8,240
	700 Year	1	$14,661
Commercial	25 Year	127	$378,042
	50 Year	127	$723,845
	100 Year	127	$1,328,454
	300 Year	127	$4,050,389
	700 Year	127	$7,164,915
Government	25 Year	30	$115,882
	50 Year	30	$229,533
	100 Year	30	$428,975
	300 Year	30	$1,323,830
	700 Year	30	$2,350,683
Industrial	25 Year	24	$118,223
	50 Year	24	$230,292
	100 Year	24	$428,759
	300 Year	24	$1,350,037
	700 Year	24	$2,466,211
Religious	25 Year	21	$34,228
	50 Year	21	$61,670
	100 Year	21	$110,979
	300 Year	21	$384,489
	700 Year	21	$756,974

Category	Event	Number of Buildings At Risk	Estimated Damages
Residential	25 Year	9	$61,035
	50 Year	9	$99,902
	100 Year	9	$166,473
	300 Year	9	$612,858
	700 Year	9	$1,261,486
Utilities	25 Year	6	$44,924
	50 Year	6	$74,081
	100 Year	6	$139,421
	300 Year	6	$618,402
	700 Year	6	$1,444,799
All Categories	**25 Year**	**218**	**$752,674**
	50 Year	**218**	**$1,420,219**
	100 Year	**218**	**$2,605,173**
	300 Year	**218**	**$8,348,245**
	700 Year	**218**	**$15,459,729**

Source: GIS Analysis

Table 6-177: High Potential Loss Properties Exposed to the Thunderstorm Winds - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	25 Year	7	$2,935
	50 Year	7	$7,597
	100 Year	7	$17,414
	300 Year	7	$64,600
	700 Year	7	$111,754
Commercial	25 Year	83	$226,172
	50 Year	83	$426,545
	100 Year	83	$757,593

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	83	$2,221,610
	700 Year	83	$3,896,262
Government	25 Year	34	$143,295
	50 Year	34	$257,013
	100 Year	34	$445,433
	300 Year	34	$1,289,061
	700 Year	34	$2,307,252
Industrial	25 Year	14	$261,841
	50 Year	14	$582,481
	100 Year	14	$1,221,445
	300 Year	14	$4,476,162
	700 Year	14	$8,423,202
Religious	25 Year	107	$176,238
	50 Year	107	$319,200
	100 Year	107	$561,605
	300 Year	107	$1,681,129
	700 Year	107	$3,044,094
Residential	25 Year	13	$65,470
	50 Year	13	$98,455
	100 Year	13	$145,935
	300 Year	13	$383,520
	700 Year	13	$700,529
Utilities	25 Year	1	$3,046
	50 Year	1	$6,196
	100 Year	1	$13,593
	300 Year	1	$68,874
	700 Year	1	$156,980

Category	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**25 Year**	**259**	**$878,997**
	50 Year	**259**	**$1,697,487**
	100 Year	**259**	**$3,163,018**
	300 Year	**259**	**$10,184,956**
	700 Year	**259**	**$18,640,073**

Source: GIS Analysis

Table 6-178: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Autryville

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	25 Year	1	$2,236
	50 Year	1	$4,893
	100 Year	1	$9,884
	300 Year	1	$35,080
	700 Year	1	$65,060
Religious	25 Year	2	$2,048
	50 Year	2	$4,700
	100 Year	2	$9,537
	300 Year	2	$31,496
	700 Year	2	$54,614
All Categories	**25 Year**	**3**	**$4,284**
	50 Year	**3**	**$9,593**
	100 Year	**3**	**$19,421**
	300 Year	**3**	**$66,576**
	700 Year	**3**	**$119,674**

Source: GIS Analysis

Table 6-179: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Garland

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	4	$4,408

Category	Event	Number of Buildings At Risk	Estimated Damages
	50 Year	4	$9,417
	100 Year	4	$18,709
	300 Year	4	$57,847
	700 Year	4	$96,547
Government	25 Year	2	$464
	50 Year	2	$738
	100 Year	2	$1,286
	300 Year	2	$4,083
	700 Year	2	$7,615
Industrial	25 Year	1	$1,512
	50 Year	1	$2,495
	100 Year	1	$4,789
	300 Year	1	$22,275
	700 Year	1	$52,492
Religious	25 Year	4	$2,639
	50 Year	4	$4,779
	100 Year	4	$9,338
	300 Year	4	$34,257
	700 Year	4	$65,185
All Categories	**25 Year**	**11**	**$9,023**
	50 Year	**11**	**$17,429**
	100 Year	**11**	**$34,122**
	300 Year	**11**	**$118,462**
	700 Year	**11**	**$221,839**

Source: GIS Analysis

Table 6-180: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Newton Grove

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	13	$43,638
	50 Year	13	$91,749
	100 Year	13	$179,906
	300 Year	13	$598,820
	700 Year	13	$1,081,395
Industrial	25 Year	3	$5,005
	50 Year	3	$10,942
	100 Year	3	$22,352
	300 Year	3	$80,608
	700 Year	3	$150,991
Religious	25 Year	6	$5,564
	50 Year	6	$11,741
	100 Year	6	$24,140
	300 Year	6	$85,258
	700 Year	6	$150,230
All Categories	**25 Year**	**22**	**$54,207**
	50 Year	**22**	**$114,432**
	100 Year	**22**	**$226,398**
	300 Year	**22**	**$764,686**
	700 Year	**22**	**$1,382,616**

Source: GIS Analysis

Table 6-181: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Roseboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	16	$22,045
	50 Year	16	$43,344

Category	Event	Number of Buildings At Risk	Estimated Damages
	100 Year	16	$82,769
	300 Year	16	$265,863
	700 Year	16	$467,210
Government	25 Year	8	$3,717
	50 Year	8	$6,982
	100 Year	8	$13,773
	300 Year	8	$58,823
	700 Year	8	$128,587
Industrial	25 Year	8	$122,466
	50 Year	8	$199,911
	100 Year	8	$301,901
	300 Year	8	$585,531
	700 Year	8	$780,409
Religious	25 Year	3	$5,845
	50 Year	3	$9,862
	100 Year	3	$16,309
	300 Year	3	$39,714
	700 Year	3	$63,072
Residential	25 Year	1	$2,696
	50 Year	1	$4,297
	100 Year	1	$6,642
	300 Year	1	$24,630
	700 Year	1	$54,592
Utilities	25 Year	2	$19,017
	50 Year	2	$31,228
	100 Year	2	$53,662
	300 Year	2	$181,707

Category	Event	Number of Buildings At Risk	Estimated Damages
	700 Year	2	$400,011
All Categories	**25 Year**	**38**	**$175,786**
	50 Year	**38**	**$295,624**
	100 Year	**38**	**$475,056**
	300 Year	**38**	**$1,156,268**
	700 Year	**38**	**$1,893,881**

Source: GIS Analysis

Table 6-182: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Salemburg

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	5	$4,702
	50 Year	5	$8,931
	100 Year	5	$17,042
	300 Year	5	$57,202
	700 Year	5	$104,724
Government	25 Year	13	$53,065
	50 Year	13	$101,326
	100 Year	13	$189,527
	300 Year	13	$683,695
	700 Year	13	$1,358,707
Religious	25 Year	3	$2,243
	50 Year	3	$4,430
	100 Year	3	$8,687
	300 Year	3	$32,265
	700 Year	3	$63,022
All Categories	**25 Year**	**21**	**$60,010**
	50 Year	**21**	**$114,687**
	100 Year	**21**	**$215,256**

Category	Event	Number of Buildings At Risk	Estimated Damages
	300 Year	**21**	**$773,162**
	700 Year	**21**	**$1,526,453**

Source: GIS Analysis

Table 6-183: High Potential Loss Properties Exposed to the Thunderstorm Winds - Town Of Turkey

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	25 Year	1	$541
	50 Year	1	$882
	100 Year	1	$1,572
	300 Year	1	$5,981
	700 Year	1	$13,257
Industrial	25 Year	1	$109,668
	50 Year	1	$246,369
	100 Year	1	$565,857
	300 Year	1	$2,188,121
	700 Year	1	$3,946,521
Religious	25 Year	1	$309
	50 Year	1	$486
	100 Year	1	$805
	300 Year	1	$2,525
	700 Year	1	$4,483
All Categories	**25 Year**	**3**	**$110,518**
	50 Year	**3**	**$247,737**
	100 Year	**3**	**$568,234**
	300 Year	**3**	**$2,196,627**
	700 Year	**3**	**$3,964,261**

Source: GIS Analysis

6.2.13 Tornado

The following tables provide counts and values by jurisdiction relevant to Tornado hazard vulnerability in the Sampson-Duplin Regional HMP Area.

The following tables provide counts and values by jurisdiction relevant to Tornado hazard vulnerability in the Sampson-Duplin Regional HMP Area.

Table 6-184: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	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 Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-185: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	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 Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-186: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	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 Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-187: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County (Unincorporated Area)	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	100%
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	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 Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-188: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	39,197	100%	5,568	5,568	100%	2,876	2,876	100%
Town Of Beulaville	1,952	1,952	100%	277	277	100%	143	143	100%
Town Of Calypso	917	917	100%	130	130	100%	67	67	100%
Town Of Faison	1,462	1,462	100%	208	208	100%	107	107	100%
Town Of Greenevers	604	604	100%	86	86	100%	44	44	100%
Town Of Harrells	197	197	100%	28	28	100%	14	14	100%
Town Of Kenansville	930	930	100%	132	132	100%	68	68	100%
Town Of Magnolia	1,338	1,338	100%	190	190	100%	98	98	100%
Town Of Rose Hill	2,297	2,297	100%	326	326	100%	168	168	100%
Town Of Teachey	381	381	100%	54	54	100%	28	28	100%
Town Of Wallace	5,513	5,513	100%	784	784	100%	403	403	100%
Town Of Warsaw	3,891	3,891	100%	553	553	100%	285	285	100%
Subtotal Duplin	**58,679**	**58,679**	**100%**	**8336**	**8336**	**100%**	**4301**	**4301**	**100%**
Sampson									
City Of Clinton	10,707	10,707	100%	1,526	1,526	100%	743	743	100%
Sampson County	46,721	46,721	100%	6,661	6,661	100%	3,244	3,244	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
(Unincorporated Area)									
Town Of Autryville	193	193	100%	28	28	100%	13	13	100%
Town Of Garland	989	989	100%	141	141	100%	69	69	100%
Town Of Newton Grove	1,146	1,146	100%	163	163	100%	80	80	100%
Town Of Roseboro	1,790	1,790	100%	255	255	100%	124	124	100%
Town Of Salemburg	1,158	1,158	100%	165	165	100%	80	80	100%
Town Of Turkey	463	463	100%	66	66	100%	32	32	100%
Subtotal Sampson	**63,167**	**63,167**	**100%**	**9005**	**9005**	**100%**	**4385**	**4385**	**100%**
TOTAL PLAN	**121,846**	**121,846**	**100%**	**17341**	**17341**	**100%**	**8686**	**8686**	**100%**

Source: GIS Analysis

Table 6-189: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	0	0%	5,568	0	0%	2,876	0	0%
Town Of Beulaville	1,952	0	0%	277	0	0%	143	0	0%
Town Of Calypso	917	0	0%	130	0	0%	67	0	0%
Town Of Faison	1,462	0	0%	208	0	0%	107	0	0%
Town Of Greenevers	604	0	0%	86	0	0%	44	0	0%
Town Of Harrells	197	0	0%	28	0	0%	14	0	0%
Town Of Kenansville	930	0	0%	132	0	0%	68	0	0%
Town Of Magnolia	1,338	0	0%	190	0	0%	98	0	0%
Town Of Rose Hill	2,297	0	0%	326	0	0%	168	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 Teachey	381	0	0%	54	0	0%	28	0	0%
Town Of Wallace	5,513	0	0%	784	0	0%	403	0	0%
Town Of Warsaw	3,891	0	0%	553	0	0%	285	0	0%
Subtotal Duplin	**58,679**	**0**	**0%**	**8336**	**0**	**0%**	**4301**	**0**	**0%**
Sampson									
City Of Clinton	10,707	0	0%	1,526	0	0%	743	0	0%
Sampson County (Unincorporated Area)	46,721	0	0%	6,661	0	0%	3,244	0	0%
Town Of Autryville	193	0	0%	28	0	0%	13	0	0%
Town Of Garland	989	0	0%	141	0	0%	69	0	0%
Town Of Newton Grove	1,146	0	0%	163	0	0%	80	0	0%
Town Of Roseboro	1,790	0	0%	255	0	0%	124	0	0%
Town Of Salemburg	1,158	0	0%	165	0	0%	80	0	0%
Town Of Turkey	463	0	0%	66	0	0%	32	0	0%
Subtotal Sampson	**63,167**	**0**	**0%**	**9005**	**0**	**0%**	**4385**	**0**	**0%**
TOTAL PLAN	**121,846**	**0**	**0%**	**17341**	**0**	**0%**	**8686**	**0**	**0%**

Source: GIS Analysis

Table 6-190: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$119,446,687	10,010	36.6%	$141,904,256	331	1.2%	$12,102,781	27,381	100%	$273,453,724
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$6,845,626	159	14.7%	$5,078,547	47	4.3%	$3,504,611	1,081	100%	$15,428,783
Town Of Calypso	570	567	99.5%	402	70.5%	$2,967,398	146	25.6%	$1,023,176	21	3.7%	$282,890	569	99.8%	$4,273,463
Town Of Faison	827	747	90.3%	658	79.6%	$5,836,222	129	15.6%	$8,432,433	38	4.6%	$850,129	825	99.8%	$15,118,783
Town Of Greenevers	297	293	98.7%	267	89.9%	$1,878,561	21	7.1%	$246,754	9	3%	$130,348	297	100%	$2,255,663
Town Of Harrells	197	197	100%	121	61.4%	$859,495	63	32%	$864,403	13	6.6%	$533,823	197	100%	$2,257,722
Town Of Kenansville	548	463	84.5%	390	71.2%	$3,792,475	66	12%	$2,553,016	92	16.8%	$3,386,771	548	100%	$9,732,262
Town Of Magnolia	729	724	99.3%	621	85.2%	$3,300,659	65	8.9%	$839,744	43	5.9%	$531,335	729	100%	$4,671,738
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$8,041,049	167	14.2%	$4,351,175	30	2.5%	$637,015	1,177	100%	$13,029,239
Town Of Teachey	169	162	95.9%	148	87.6%	$1,198,525	8	4.7%	$169,238	13	7.7%	$127,146	169	100%	$1,494,910
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$23,104,484	380	14.2%	$15,082,404	95	3.6%	$3,088,096	2,667	100%	$41,274,984
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$13,567,380	213	11.6%	$10,238,276	68	3.7%	$3,562,562	1,832	100%	$27,368,218
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$190,838,561**	**11,427**	**30.5%**	**$190,783,422**	**800**	**2.1%**	**$28,737,507**	**37,472**	**100%**	**$410,359,489**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$40,971,982	1,034	19.3%	$42,495,228	177	3.3%	$7,477,379	5,362	99.9%	$90,944,590
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$183,334,390	12,645	35.2%	$150,077,459	415	1.2%	$16,295,616	35,937	100%	$349,707,465
Town Of Autryville	144	144	100%	122	84.7%	$995,394	18	12.5%	$242,923	4	2.8%	$97,577	144	100%	$1,335,893
Town Of Garland	701	701	100%	559	79.7%	$4,059,430	116	16.5%	$1,658,825	26	3.7%	$506,273	701	100%	$6,224,528
Town Of Newton Grove	819	819	100%	596	72.8%	$5,367,822	207	25.3%	$3,471,429	16	2%	$296,788	819	100%	$9,136,038
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$7,167,528	213	19.6%	$10,862,641	42	3.9%	$1,111,706	1,083	99.8%	$19,141,875
Town Of Salemburg	787	787	100%	622	79%	$5,445,569	122	15.5%	$1,491,786	43	5.5%	$3,978,436	787	100%	$10,915,791
Town Of Turkey	355	355	100%	199	56.1%	$1,751,421	148	41.7%	$8,404,784	8	2.3%	$95,491	355	100%	$10,251,697
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$249,093,536**	**14,503**	**32.1%**	**$218,705,075**	**731**	**1.6%**	**$29,859,266**	**45,188**	**100%**	**$497,657,877**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$439,932,097**	**25,930**	**31.4%**	**$409,488,497**	**1,531**	**1.9%**	**$58,596,773**	**82,660**	**100%**	**$908,017,366**

Source: GIS Analysis

Table 6-191: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$849,372,237	10,010	36.6%	$935,488,432	331	1.2%	$73,035,083	27,381	100%	$1,857,895,752
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$48,202,275	159	14.7%	$29,717,501	47	4.3%	$18,026,706	1,081	100%	$95,946,482
Town Of Calypso	570	567	99.5%	402	70.5%	$20,983,722	146	25.6%	$6,802,425	21	3.7%	$2,280,801	569	99.8%	$30,066,948
Town Of Faison	827	747	90.3%	658	79.6%	$41,019,249	129	15.6%	$58,610,688	38	4.6%	$5,597,333	825	99.8%	$105,227,269
Town Of Greenevers	297	293	98.7%	267	89.9%	$13,159,573	21	7.1%	$1,875,501	9	3%	$1,050,934	297	100%	$16,086,008
Town Of Harrells	197	197	100%	121	61.4%	$6,291,766	63	32%	$5,673,514	13	6.6%	$2,527,781	197	100%	$14,493,062
Town Of Kenansville	548	463	84.5%	390	71.2%	$27,466,891	66	12%	$15,677,750	92	16.8%	$22,690,987	548	100%	$65,835,628
Town Of Magnolia	729	724	99.3%	621	85.2%	$22,680,045	65	8.9%	$5,211,007	43	5.9%	$3,928,044	729	100%	$31,819,097
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$57,528,634	167	14.2%	$27,280,447	30	2.5%	$3,903,748	1,177	100%	$88,712,829
Town Of Teachey	169	162	95.9%	148	87.6%	$8,570,386	8	4.7%	$1,099,150	13	7.7%	$947,141	169	100%	$10,616,677
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$162,421,364	380	14.2%	$87,734,725	95	3.6%	$18,302,592	2,667	100%	$268,458,680
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$95,002,216	213	11.6%	$63,358,018	68	3.7%	$19,729,633	1,832	100%	$178,089,867
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$1,352,698,358**	**11,427**	**30.5%**	**$1,238,529,158**	**800**	**2.1%**	**$172,020,783**	**37,472**	**100%**	**$2,763,248,299**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$299,654,424	1,034	19.3%	$260,580,558	177	3.3%	$42,889,579	5,362	99.9%	$603,124,562
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$1,337,130,519	12,645	35.2%	$984,698,924	415	1.2%	$95,211,109	35,937	100%	$2,417,040,552
Town Of Autryville	144	144	100%	122	84.7%	$7,249,302	18	12.5%	$1,438,443	4	2.8%	$786,712	144	100%	$9,474,457
Town Of Garland	701	701	100%	559	79.7%	$29,525,211	116	16.5%	$10,381,623	26	3.7%	$3,521,227	701	100%	$43,428,060
Town Of Newton Grove	819	819	100%	596	72.8%	$39,335,055	207	25.3%	$20,956,621	16	2%	$2,392,851	819	100%	$62,684,526
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$52,685,988	213	19.6%	$72,182,863	42	3.9%	$6,367,418	1,083	99.8%	$131,236,269
Town Of Salemburg	787	787	100%	622	79%	$39,803,715	122	15.5%	$8,949,076	43	5.5%	$17,764,527	787	100%	$66,517,319
Town Of Turkey	355	355	100%	199	56.1%	$12,817,867	148	41.7%	$60,117,030	8	2.3%	$769,896	355	100%	$73,704,793
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$1,818,202,081**	**14,503**	**32.1%**	**$1,419,305,138**	**731**	**1.6%**	**$169,703,319**	**45,188**	**100%**	**$3,407,210,538**

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	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$3,170,900,439**	**25,930**	**31.4%**	**$2,657,834,296**	**1,531**	**1.9%**	**$341,724,102**	**82,660**	**100%**	**$6,170,458,837**

Source: GIS Analysis

Table 6-192: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$1,507,758,945	10,010	36.6%	$1,454,716,791	331	1.2%	$238,956,529	27,381	100%	$3,201,432,265
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$94,544,948	159	14.7%	$69,401,179	47	4.3%	$54,670,702	1,081	100%	$218,616,828
Town Of Calypso	570	567	99.5%	402	70.5%	$39,005,447	146	25.6%	$14,491,467	21	3.7%	$8,254,133	569	99.8%	$61,751,047
Town Of Faison	827	747	90.3%	658	79.6%	$80,967,575	129	15.6%	$128,654,509	38	4.6%	$18,958,170	825	99.8%	$228,580,254
Town Of Greenevers	297	293	98.7%	267	89.9%	$24,693,514	21	7.1%	$3,594,189	9	3%	$3,803,290	297	100%	$32,090,993
Town Of Harrells	197	197	100%	121	61.4%	$11,647,287	63	32%	$11,425,723	13	6.6%	$7,313,076	197	100%	$30,386,086
Town Of Kenansville	548	463	84.5%	390	71.2%	$52,670,363	66	12%	$42,495,575	92	16.8%	$77,350,463	548	100%	$172,516,401
Town Of Magnolia	729	724	99.3%	621	85.2%	$42,473,959	65	8.9%	$9,459,456	43	5.9%	$13,847,839	729	100%	$65,781,254
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$110,796,965	167	14.2%	$58,503,831	30	2.5%	$12,854,612	1,177	100%	$182,155,408
Town Of Teachey	169	162	95.9%	148	87.6%	$16,387,840	8	4.7%	$2,269,120	13	7.7%	$3,347,114	169	100%	$22,004,074
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$325,837,327	380	14.2%	$211,446,725	95	3.6%	$59,423,469	2,667	100%	$596,707,522
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$193,404,806	213	11.6%	$136,911,476	68	3.7%	$62,110,063	1,832	100%	$392,426,344
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$2,500,188,976**	**11,427**	**30.5%**	**$2,143,370,041**	**800**	**2.1%**	**$560,889,460**	**37,472**	**100%**	**$5,204,448,476**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$573,023,426	1,034	19.3%	$645,341,625	177	3.3%	$137,244,068	5,362	99.9%	$1,355,609,119
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$2,459,204,163	12,645	35.2%	$1,557,592,840	415	1.2%	$307,197,729	35,937	100%	$4,323,994,732
Town Of Autryville	144	144	100%	122	84.7%	$13,459,929	18	12.5%	$3,858,876	4	2.8%	$2,847,082	144	100%	$20,165,888
Town Of Garland	701	701	100%	559	79.7%	$55,223,053	116	16.5%	$23,806,484	26	3.7%	$12,164,064	701	100%	$91,193,601
Town Of Newton Grove	819	819	100%	596	72.8%	$73,497,669	207	25.3%	$54,972,524	16	2%	$8,659,637	819	100%	$137,129,830
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$99,107,651	213	19.6%	$168,322,443	42	3.9%	$20,361,956	1,083	99.8%	$287,792,049

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 Salemburg	787	787	100%	622	79%	$75,178,617	122	15.5%	$18,071,829	43	5.5%	$49,504,577	787	100%	$142,755,024
Town Of Turkey	355	355	100%	199	56.1%	$23,713,679	148	41.7%	$132,559,383	8	2.3%	$2,786,225	355	100%	$159,059,287
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$3,372,408,187**	**14,503**	**32.1%**	**$2,604,526,004**	**731**	**1.6%**	**$540,765,338**	**45,188**	**100%**	**$6,517,699,530**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$5,872,597,163**	**25,930**	**31.4%**	**$4,747,896,045**	**1,531**	**1.9%**	**$1,101,654,798**	**82,660**	**100%**	**$11,722,148,006**

Source: GIS Analysis

Table 6-193: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$1,786,187,205	10,010	36.6%	$1,575,356,264	331	1.2%	$374,428,392	27,381	100%	$3,735,971,861
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$125,951,609	159	14.7%	$88,978,082	47	4.3%	$84,597,180	1,081	100%	$299,526,871
Town Of Calypso	570	567	99.5%	402	70.5%	$49,055,170	146	25.6%	$16,514,935	21	3.7%	$13,129,906	569	99.8%	$78,700,010
Town Of Faison	827	747	90.3%	658	79.6%	$108,826,258	129	15.6%	$140,960,804	38	4.6%	$29,865,957	825	99.8%	$279,653,020
Town Of Greenevers	297	293	98.7%	267	89.9%	$31,958,155	21	7.1%	$3,859,930	9	3%	$6,049,919	297	100%	$41,868,004
Town Of Harrells	197	197	100%	121	61.4%	$13,524,676	63	32%	$13,123,138	13	6.6%	$11,221,809	197	100%	$37,869,623
Town Of Kenansville	548	463	84.5%	390	71.2%	$64,976,617	66	12%	$59,338,493	92	16.8%	$121,973,656	548	100%	$246,288,765
Town Of Magnolia	729	724	99.3%	621	85.2%	$57,088,579	65	8.9%	$11,096,744	43	5.9%	$21,945,481	729	100%	$90,130,805
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$140,724,392	167	14.2%	$69,558,031	30	2.5%	$20,162,691	1,177	100%	$230,445,114
Town Of Teachey	169	162	95.9%	148	87.6%	$20,693,027	8	4.7%	$2,927,687	13	7.7%	$5,306,227	169	100%	$28,926,942
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$443,698,729	380	14.2%	$285,160,599	95	3.6%	$92,998,652	2,667	100%	$821,857,981
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$268,379,740	213	11.6%	$172,683,965	68	3.7%	$96,717,064	1,832	100%	$537,780,770
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$3,111,064,157**	**11,427**	**30.5%**	**$2,439,558,672**	**800**	**2.1%**	**$878,396,934**	**37,472**	**100%**	**$6,429,019,766**
Sampson															
City Of Clinton	5,368	5,368	100%	4,151	77.3%	$690,757,149	1,034	19.3%	$817,957,408	177	3.3%	$214,288,036	5,362	99.9%	$1,723,002,594
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$2,858,176,726	12,645	35.2%	$1,671,104,713	415	1.2%	$480,288,300	35,937	100%	$5,009,569,738
Town Of Autryville	144	144	100%	122	84.7%	$15,861,419	18	12.5%	$5,134,483	4	2.8%	$4,528,873	144	100%	$25,524,775

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 Garland	701	701	100%	559	79.7%	$65,787,104	116	16.5%	$30,082,192	26	3.7%	$19,219,692	701	100%	$115,088,987
Town Of Newton Grove	819	819	100%	596	72.8%	$86,042,262	207	25.3%	$72,173,618	16	2%	$13,774,944	819	100%	$171,990,823
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$116,107,247	213	19.6%	$192,823,678	42	3.9%	$31,789,043	1,083	99.8%	$340,719,967
Town Of Salemburg	787	787	100%	622	79%	$89,546,317	122	15.5%	$22,463,762	43	5.5%	$75,434,388	787	100%	$187,444,467
Town Of Turkey	355	355	100%	199	56.1%	$27,531,447	148	41.7%	$142,482,178	8	2.3%	$4,432,067	355	100%	$174,445,692
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$3,949,809,671**	**14,503**	**32.1%**	**$2,954,222,032**	**731**	**1.6%**	**$843,755,343**	**45,188**	**100%**	**$7,747,787,043**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$7,060,873,828**	**25,930**	**31.4%**	**$5,393,780,704**	**1,531**	**1.9%**	**$1,722,152,277**	**82,660**	**100%**	**$14,176,806,809**

Source: GIS Analysis

Table 6-194: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	22,410	81.8%	17,040	62.2%	$1,801,000,360	10,010	36.6%	$1,588,617,951	331	1.2%	$398,184,917	27,381	100%	$3,787,803,228
Town Of Beulaville	1,081	1,065	98.5%	875	80.9%	$129,829,493	159	14.7%	$92,630,817	47	4.3%	$91,937,373	1,081	100%	$314,397,683
Town Of Calypso	570	567	99.5%	402	70.5%	$50,046,910	146	25.6%	$16,876,620	21	3.7%	$13,600,482	569	99.8%	$80,524,012
Town Of Faison	827	747	90.3%	658	79.6%	$112,364,238	129	15.6%	$141,774,846	38	4.6%	$31,465,693	825	99.8%	$285,604,777
Town Of Greenevers	297	293	98.7%	267	89.9%	$32,807,887	21	7.1%	$3,863,969	9	3%	$6,266,749	297	100%	$42,938,605
Town Of Harrells	197	197	100%	121	61.4%	$13,524,676	63	32%	$13,459,569	13	6.6%	$12,372,066	197	100%	$39,356,311
Town Of Kenansville	548	463	84.5%	390	71.2%	$65,844,798	66	12%	$61,688,643	92	16.8%	$128,288,832	548	100%	$255,822,274
Town Of Magnolia	729	724	99.3%	621	85.2%	$59,123,119	65	8.9%	$11,383,108	43	5.9%	$22,881,879	729	100%	$93,388,107
Town Of Rose Hill	1,177	1,172	99.6%	980	83.3%	$143,591,412	167	14.2%	$71,400,731	30	2.5%	$21,404,281	1,177	100%	$236,396,424
Town Of Teachey	169	162	95.9%	148	87.6%	$21,094,100	8	4.7%	$3,003,876	13	7.7%	$5,529,244	169	100%	$29,627,220
Town Of Wallace	2,667	2,225	83.4%	2,192	82.2%	$459,065,261	380	14.2%	$299,966,074	95	3.6%	$99,109,346	2,667	100%	$858,140,681
Town Of Warsaw	1,832	1,826	99.7%	1,551	84.7%	$278,625,096	213	11.6%	$178,552,256	68	3.7%	$103,971,199	1,832	100%	$561,148,551
Subtotal Duplin	**37,475**	**31,851**	**85%**	**25,245**	**67.4%**	**$3,166,917,350**	**11,427**	**30.5%**	**$2,483,218,460**	**800**	**2.1%**	**$935,012,061**	**37,472**	**100%**	**$6,585,147,873**
Sampson															

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 Clinton	5,368	5,368	100%	4,151	77.3%	$696,015,659	1,034	19.3%	$853,833,932	177	3.3%	$229,295,113	5,362	99.9%	$1,779,144,704
Sampson County (Unincorporated Area)	35,938	35,938	100%	22,877	63.7%	$2,860,200,471	12,645	35.2%	$1,688,101,454	415	1.2%	$512,736,496	35,937	100%	$5,061,038,421
Town Of Autryville	144	144	100%	122	84.7%	$15,920,049	18	12.5%	$5,481,768	4	2.8%	$4,691,189	144	100%	$26,093,005
Town Of Garland	701	701	100%	559	79.7%	$66,184,318	116	16.5%	$31,371,035	26	3.7%	$20,144,633	701	100%	$117,699,986
Town Of Newton Grove	819	819	100%	596	72.8%	$86,172,172	207	25.3%	$76,374,471	16	2%	$14,268,639	819	100%	$176,815,281
Town Of Roseboro	1,085	1,085	100%	828	76.3%	$116,250,290	213	19.6%	$196,862,310	42	3.9%	$34,021,595	1,083	99.8%	$347,134,195
Town Of Salemburg	787	787	100%	622	79%	$90,023,374	122	15.5%	$23,577,452	43	5.5%	$84,165,564	787	100%	$197,766,389
Town Of Turkey	355	355	100%	199	56.1%	$27,531,447	148	41.7%	$142,673,826	8	2.3%	$4,590,913	355	100%	$174,796,186
Subtotal Sampson	**45,197**	**45,197**	**100%**	**29,954**	**66.3%**	**$3,958,297,780**	**14,503**	**32.1%**	**$3,018,276,248**	**731**	**1.6%**	**$903,914,142**	**45,188**	**100%**	**$7,880,488,167**
TOTAL PLAN	**82,672**	**77,048**	**93.2%**	**55,199**	**66.8%**	**$7,125,215,130**	**25,930**	**31.4%**	**$5,501,494,708**	**1,531**	**1.9%**	**$1,838,926,203**	**82,660**	**100%**	**$14,465,636,040**

Source: GIS Analysis

Table 6-195: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Beulaville	1,081	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Calypso	570	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Faison	827	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Greenevers	297	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Harrells	197	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Kenansville	548	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Magnolia	729	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Rose Hill	1,177	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Teachey	169	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Wallace	2,667	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 Warsaw	1,832	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Duplin	**37,475**	**0**	**0%**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**
Sampson															
City Of Clinton	5,368	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Sampson County (Unincorporated Area)	35,938	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Autryville	144	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Garland	701	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Newton Grove	819	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Roseboro	1,085	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Salemburg	787	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Town Of Turkey	355	0	0%	0	0%	$0	0	0%	$0	0	0%	$0	0	0%	$0
Subtotal Sampson	**45,197**	**0**	**0%**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**	**0**	**0%**	**$0**
TOTAL PLAN	**82,672**	**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 6-196: Critical Facilities Exposed to the Tornado - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$68,149
	EF1	3	$423,544
	EF2	3	$1,201,402
	EF3	3	$1,526,885
	EF4	3	$1,541,841
Chemical	EF0	1	$7,642
	EF1	1	$55,149
	EF2	1	$124,620
	EF3	1	$133,598
	EF4	1	$133,598
Commercial Facilities	EF0	568	$17,511,717
	EF1	568	$131,052,094
	EF2	568	$339,299,684
	EF3	568	$451,088,611
	EF4	568	$464,137,418
Critical Manufacturing	EF0	212	$5,781,889
	EF1	212	$41,625,592
	EF2	212	$93,755,220
	EF3	212	$100,608,215
	EF4	212	$100,639,058
Defense Industrial Base	EF0	1	$35,317
	EF1	1	$227,460
	EF2	1	$269,598
	EF3	1	$269,598

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	1	$269,598
Emergency Services	EF0	15	$308,468
	EF1	15	$2,487,023
	EF2	15	$9,000,444
	EF3	15	$14,317,068
	EF4	15	$14,830,193
Energy	EF0	4	$5,870
	EF1	4	$40,037
	EF2	4	$69,631
	EF3	4	$72,890
	EF4	4	$72,890
Food and Agriculture	EF0	9,281	$113,031,140
	EF1	9,281	$742,938,988
	EF2	9,281	$1,034,831,430
	EF3	9,281	$1,061,449,162
	EF4	9,281	$1,062,056,164
Government Facilities	EF0	109	$6,935,980
	EF1	109	$31,377,752
	EF2	109	$88,200,214
	EF3	109	$134,619,284
	EF4	109	$149,781,035
Healthcare and Public Health	EF0	7	$644,694
	EF1	7	$2,681,428
	EF2	7	$5,235,086
	EF3	7	$6,762,314
	EF4	7	$7,001,719
Transportation Systems	EF0	145	$9,715,750

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	145	$55,561,618
	EF2	145	$119,549,318
	EF3	145	$175,902,989
	EF4	145	$183,418,198
All Categories	**EF0**	**10,346**	**$154,046,616**
	EF1	**10,346**	**$1,008,470,685**
	EF2	**10,346**	**$1,691,536,647**
	EF3	**10,346**	**$1,946,750,614**
	EF4	**10,346**	**$1,983,881,712**

Source: GIS Analysis

Table 6-197: Critical Facilities Exposed to the Tornado - Town Of Beulaville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$58,807
	EF1	3	$365,484
	EF2	3	$1,036,712
	EF3	3	$1,317,577
	EF4	3	$1,330,482
Commercial Facilities	EF0	89	$2,352,189
	EF1	89	$15,105,740
	EF2	89	$44,318,787
	EF3	89	$63,189,580
	EF4	89	$66,593,844
Critical Manufacturing	EF0	10	$903,127
	EF1	10	$6,497,439
	EF2	10	$14,620,993
	EF3	10	$15,694,078
	EF4	10	$15,700,253

Sector	Event	Number of Buildings At Risk	Estimated Damages
Defense Industrial Base	EF0	1	$131,676
	EF1	1	$950,280
	EF2	1	$2,147,339
	EF3	1	$2,302,035
	EF4	1	$2,302,035
Emergency Services	EF0	3	$33,474
	EF1	3	$269,887
	EF2	3	$976,711
	EF3	3	$1,553,661
	EF4	3	$1,609,344
Energy	EF0	1	$1,425
	EF1	1	$11,488
	EF2	1	$41,573
	EF3	1	$66,130
	EF4	1	$68,500
Food and Agriculture	EF0	39	$244,422
	EF1	39	$1,622,993
	EF2	39	$2,411,102
	EF3	39	$2,484,956
	EF4	39	$2,484,956
Government Facilities	EF0	19	$2,738,032
	EF1	19	$11,846,167
	EF2	19	$32,303,566
	EF3	19	$49,017,623
	EF4	19	$55,082,642
Healthcare and Public Health	EF0	10	$1,227,493
	EF1	10	$5,631,452

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	10	$12,805,426
	EF3	10	$17,716,783
	EF4	10	$18,346,742
Transportation Systems	EF0	28	$748,371
	EF1	28	$4,281,145
	EF2	28	$9,203,956
	EF3	28	$13,542,779
	EF4	28	$14,119,559
All Categories	**EF0**	**203**	**$8,439,016**
	EF1	**203**	**$46,582,075**
	EF2	**203**	**$119,866,165**
	EF3	**203**	**$166,885,202**
	EF4	**203**	**$177,638,357**

Source: GIS Analysis

Table 6-198: Critical Facilities Exposed to the Tornado - Town Of Calypso

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	38	$671,914
	EF1	38	$4,671,932
	EF2	38	$13,682,681
	EF3	38	$19,171,401
	EF4	38	$19,900,763
Critical Manufacturing	EF0	4	$101,823
	EF1	4	$734,833
	EF2	4	$1,660,494
	EF3	4	$1,780,118
	EF4	4	$1,780,118
Emergency Services	EF0	1	$26,714

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	1	$215,380
	EF2	1	$779,451
	EF3	1	$1,239,878
	EF4	1	$1,284,315
Energy	EF0	2	$6,692
	EF1	2	$51,537
	EF2	2	$158,455
	EF3	2	$227,865
	EF4	2	$234,240
Food and Agriculture	EF0	116	$453,291
	EF1	116	$3,114,181
	EF2	116	$5,636,577
	EF3	116	$5,931,342
	EF4	116	$5,931,342
Government Facilities	EF0	6	$16,481
	EF1	6	$132,880
	EF2	6	$480,889
	EF3	6	$764,954
	EF4	6	$792,370
Transportation Systems	EF0	1	$32,011
	EF1	1	$183,123
	EF2	1	$393,693
	EF3	1	$579,283
	EF4	1	$603,954
All Categories	**EF0**	**168**	**$1,308,926**
	EF1	**168**	**$9,103,866**
	EF2	**168**	**$22,792,240**

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	**168**	**$29,694,841**
	EF4	**168**	**$30,527,102**

Source: GIS Analysis

Table 6-199: Critical Facilities Exposed to the Tornado - Town Of Faison

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$51,476
	EF1	3	$319,920
	EF2	3	$907,468
	EF3	3	$1,153,318
	EF4	3	$1,164,615
Commercial Facilities	EF0	48	$2,429,649
	EF1	48	$17,369,845
	EF2	48	$44,024,302
	EF3	48	$54,805,602
	EF4	48	$55,986,624
Critical Manufacturing	EF0	7	$5,114,956
	EF1	7	$36,913,531
	EF2	7	$83,413,135
	EF3	7	$89,422,314
	EF4	7	$89,422,314
Emergency Services	EF0	1	$16,127
	EF1	1	$130,021
	EF2	1	$470,540
	EF3	1	$748,490
	EF4	1	$775,316
Energy	EF0	2	$3,433,707
	EF1	2	$24,781,763

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	2	$56,017,807
	EF3	2	$60,079,229
	EF4	2	$60,082,068
Food and Agriculture	EF0	82	$699,247
	EF1	82	$4,636,752
	EF2	82	$6,826,947
	EF3	82	$7,028,643
	EF4	82	$7,028,643
Government Facilities	EF0	14	$408,814
	EF1	14	$2,039,233
	EF2	14	$6,081,540
	EF3	14	$9,383,013
	EF4	14	$10,248,639
Healthcare and Public Health	EF0	2	$272,890
	EF1	2	$1,104,761
	EF2	2	$2,052,738
	EF3	2	$2,583,971
	EF4	2	$2,675,294
Transportation Systems	EF0	8	$273,007
	EF1	8	$1,561,768
	EF2	8	$3,357,617
	EF3	8	$4,940,426
	EF4	8	$5,150,836
Water	EF0	1	$3,432,000
	EF1	1	$24,768,000
	EF2	1	$55,968,000
	EF3	1	$60,000,000

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	1	$60,000,000
All Categories	**EF0**	**168**	**$16,131,873**
	EF1	**168**	**$113,625,594**
	EF2	**168**	**$259,120,094**
	EF3	**168**	**$290,145,006**
	EF4	**168**	**$292,534,349**

Source: GIS Analysis

Table 6-200: Critical Facilities Exposed to the Tornado - Town Of Greenevers

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	11	$187,462
	EF1	11	$1,570,406
	EF2	11	$4,302,338
	EF3	11	$5,993,462
	EF4	11	$6,144,840
Critical Manufacturing	EF0	3	$65,195
	EF1	3	$470,498
	EF2	3	$1,063,180
	EF3	3	$1,139,772
	EF4	3	$1,139,772
Emergency Services	EF0	1	$24,042
	EF1	1	$193,835
	EF2	1	$701,482
	EF3	1	$1,115,853
	EF4	1	$1,155,845
Food and Agriculture	EF0	13	$82,671
	EF1	13	$548,726
	EF2	13	$813,077

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	13	$837,728
	EF4	13	$837,728
Government Facilities	EF0	2	$17,733
	EF1	2	$142,970
	EF2	2	$517,402
	EF3	2	$823,035
	EF4	2	$852,533
All Categories	**EF0**	**30**	**$377,103**
	EF1	**30**	**$2,926,435**
	EF2	**30**	**$7,397,479**
	EF3	**30**	**$9,909,850**
	EF4	**30**	**$10,130,718**

Source: GIS Analysis

Table 6-201: Critical Facilities Exposed to the Tornado - Town Of Harrells

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$4,413
	EF1	1	$27,427
	EF2	1	$77,799
	EF3	1	$98,877
	EF4	1	$99,845
Commercial Facilities	EF0	14	$232,489
	EF1	14	$1,489,947
	EF2	14	$4,123,989
	EF3	14	$5,737,588
	EF4	14	$6,085,941
Critical Manufacturing	EF0	1	$264,053
	EF1	1	$1,905,615

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	1	$4,306,100
	EF3	1	$4,616,316
	EF4	1	$4,616,316
Emergency Services	EF0	2	$28,485
	EF1	2	$202,484
	EF2	2	$717,332
	EF3	2	$1,124,760
	EF4	2	$1,176,417
Food and Agriculture	EF0	48	$340,202
	EF1	48	$2,253,744
	EF2	48	$3,297,397
	EF3	48	$3,392,264
	EF4	48	$3,392,264
Government Facilities	EF0	8	$481,762
	EF1	8	$2,108,033
	EF2	8	$5,794,024
	EF3	8	$8,805,442
	EF4	8	$9,869,096
Healthcare and Public Health	EF0	1	$32,179
	EF1	1	$130,274
	EF2	1	$242,060
	EF3	1	$304,704
	EF4	1	$315,473
Transportation Systems	EF0	1	$14,644
	EF1	1	$83,771
	EF2	1	$180,098
	EF3	1	$264,997

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	1	$276,283
All Categories	**EF0**	**76**	**$1,398,227**
	EF1	**76**	**$8,201,295**
	EF2	**76**	**$18,738,799**
	EF3	**76**	**$24,344,948**
	EF4	**76**	**$25,831,635**

Source: GIS Analysis

Table 6-202: Critical Facilities Exposed to the Tornado - Town Of Kenansville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	6	$290,100
	EF1	6	$1,802,951
	EF2	6	$5,114,159
	EF3	6	$6,499,681
	EF4	6	$6,563,346
Commercial Facilities	EF0	49	$1,561,182
	EF1	49	$11,009,859
	EF2	49	$33,707,190
	EF3	49	$48,948,122
	EF4	49	$51,070,798
Critical Manufacturing	EF0	2	$32,307
	EF1	2	$237,760
	EF2	2	$596,932
	EF3	2	$722,331
	EF4	2	$731,388
Emergency Services	EF0	4	$164,013
	EF1	4	$1,322,359
	EF2	4	$4,785,567

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	4	$7,612,434
	EF4	4	$7,885,264
Energy	EF0	2	$14,415
	EF1	2	$116,221
	EF2	2	$420,600
	EF3	2	$669,051
	EF4	2	$693,030
Government Facilities	EF0	67	$2,534,997
	EF1	67	$15,823,560
	EF2	67	$52,497,502
	EF3	67	$82,439,881
	EF4	67	$87,338,164
Healthcare and Public Health	EF0	10	$945,181
	EF1	10	$5,684,015
	EF2	10	$17,131,199
	EF3	10	$26,046,239
	EF4	10	$26,977,462
Transportation Systems	EF0	12	$355,940
	EF1	12	$2,036,195
	EF2	12	$4,377,579
	EF3	12	$6,441,206
	EF4	12	$6,715,533
All Categories	**EF0**	**152**	**$5,898,135**
	EF1	**152**	**$38,032,920**
	EF2	**152**	**$118,630,728**
	EF3	**152**	**$179,378,945**
	EF4	**152**	**$187,974,985**

Source: GIS Analysis

Table 6-203: Critical Facilities Exposed to the Tornado - Town Of Magnolia

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	28	$450,343
	EF1	28	$3,230,351
	EF2	28	$9,815,416
	EF3	28	$14,386,500
	EF4	28	$14,931,784
Critical Manufacturing	EF0	3	$38,015
	EF1	3	$274,345
	EF2	3	$619,934
	EF3	3	$664,594
	EF4	3	$664,594
Emergency Services	EF0	2	$27,633
	EF1	2	$222,791
	EF2	2	$806,272
	EF3	2	$1,282,543
	EF4	2	$1,328,509
Energy	EF0	3	$15,918
	EF1	3	$98,830
	EF2	3	$340,883
	EF3	3	$524,539
	EF4	3	$555,658
Food and Agriculture	EF0	40	$413,689
	EF1	40	$2,708,735
	EF2	40	$3,653,899
	EF3	40	$3,721,074
	EF4	40	$3,721,074

Sector	Event	Number of Buildings At Risk	Estimated Damages
Government Facilities	EF0	25	$274,130
	EF1	25	$1,854,326
	EF2	25	$6,343,132
	EF3	25	$10,007,691
	EF4	25	$10,516,238
Healthcare and Public Health	EF0	6	$116,119
	EF1	6	$548,129
	EF2	6	$1,294,462
	EF3	6	$1,817,727
	EF4	6	$1,882,418
Transportation Systems	EF0	1	$35,231
	EF1	1	$201,545
	EF2	1	$433,298
	EF3	1	$637,558
	EF4	1	$664,712
All Categories	**EF0**	**108**	**$1,371,078**
	EF1	**108**	**$9,139,052**
	EF2	**108**	**$23,307,296**
	EF3	**108**	**$33,042,226**
	EF4	**108**	**$34,264,987**

Source: GIS Analysis

Table 6-204: Critical Facilities Exposed to the Tornado - Town Of Rose Hill

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	2	$73,228
	EF1	2	$455,110
	EF2	2	$1,290,940
	EF3	2	$1,640,681

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	2	$1,656,751
Commercial Facilities	EF0	56	$1,135,736
	EF1	56	$7,099,321
	EF2	56	$19,852,923
	EF3	56	$27,183,123
	EF4	56	$28,679,053
Critical Manufacturing	EF0	20	$1,065,190
	EF1	20	$7,687,249
	EF2	20	$17,370,799
	EF3	20	$18,622,211
	EF4	20	$18,622,211
Emergency Services	EF0	1	$32,686
	EF1	1	$263,531
	EF2	1	$953,710
	EF3	1	$1,517,073
	EF4	1	$1,571,445
Food and Agriculture	EF0	77	$1,197,074
	EF1	77	$8,158,259
	EF2	77	$14,149,781
	EF3	77	$14,828,583
	EF4	77	$14,828,583
Government Facilities	EF0	16	$438,627
	EF1	16	$2,304,249
	EF2	16	$7,066,085
	EF3	16	$10,954,841
	EF4	16	$11,866,421
	EF0	4	$457,630

Sector	Event	Number of Buildings At Risk	Estimated Damages
Healthcare and Public Health	EF1	4	$1,852,656
	EF2	4	$3,442,389
	EF3	4	$4,333,254
	EF4	4	$4,486,400
Transportation Systems	EF0	21	$588,017
	EF1	21	$3,363,820
	EF2	21	$7,231,816
	EF3	21	$10,640,956
	EF4	21	$11,094,148
All Categories	**EF0**	**197**	**$4,988,188**
	EF1	**197**	**$31,184,195**
	EF2	**197**	**$71,358,443**
	EF3	**197**	**$89,720,722**
	EF4	**197**	**$92,805,012**

Source: GIS Analysis

Table 6-205: Critical Facilities Exposed to the Tornado - Town Of Teachey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	13	$200,407
	EF1	13	$1,461,205
	EF2	13	$4,048,452
	EF3	13	$5,911,275
	EF4	13	$6,095,709
Critical Manufacturing	EF0	1	$10,570
	EF1	1	$76,281
	EF2	1	$172,371
	EF3	1	$184,788
	EF4	1	$184,788

Sector	Event	Number of Buildings At Risk	Estimated Damages
Emergency Services	EF0	1	$13,759
	EF1	1	$110,932
	EF2	1	$401,460
	EF3	1	$638,604
	EF4	1	$661,492
Government Facilities	EF0	4	$28,171
	EF1	4	$149,157
	EF2	4	$459,242
	EF3	4	$712,470
	EF4	4	$770,846
Transportation Systems	EF0	2	$43,477
	EF1	2	$248,716
	EF2	2	$534,710
	EF3	2	$786,777
	EF4	2	$820,285
All Categories	**EF0**	**21**	**$296,384**
	EF1	**21**	**$2,046,291**
	EF2	**21**	**$5,616,235**
	EF3	**21**	**$8,233,914**
	EF4	**21**	**$8,533,120**

Source: GIS Analysis

Table 6-206: Critical Facilities Exposed to the Tornado - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	7	$243,253
	EF1	7	$1,511,798
	EF2	7	$4,288,289
	EF3	7	$5,450,067

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	7	$5,503,451
Commercial Facilities	EF0	226	$8,400,740
	EF1	226	$50,619,774
	EF2	226	$143,665,294
	EF3	226	$202,378,798
	EF4	226	$214,844,837
Critical Manufacturing	EF0	41	$1,459,115
	EF1	41	$10,519,141
	EF2	41	$23,714,692
	EF3	41	$25,444,401
	EF4	41	$25,448,135
Emergency Services	EF0	1	$14,250
	EF1	1	$114,889
	EF2	1	$415,779
	EF3	1	$661,383
	EF4	1	$685,087
Energy	EF0	1	$18,436
	EF1	1	$148,644
	EF2	1	$537,937
	EF3	1	$855,701
	EF4	1	$886,369
Food and Agriculture	EF0	77	$348,131
	EF1	77	$2,338,372
	EF2	77	$3,732,863
	EF3	77	$3,878,516
	EF4	77	$3,878,516
Government Facilities	EF0	37	$1,900,686

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	37	$8,729,380
	EF2	37	$24,778,449
	EF3	37	$37,888,647
	EF4	37	$42,024,145
Healthcare and Public Health	EF0	20	$1,004,370
	EF1	20	$4,658,988
	EF2	20	$10,753,837
	EF3	20	$14,967,355
	EF4	20	$15,499,746
Transportation Systems	EF0	65	$4,784,349
	EF1	65	$27,414,560
	EF2	65	$58,962,003
	EF3	65	$86,560,424
	EF4	65	$90,224,507
All Categories	**EF0**	**475**	**$18,173,330**
	EF1	**475**	**$106,055,546**
	EF2	**475**	**$270,849,143**
	EF3	**475**	**$378,085,292**
	EF4	**475**	**$398,994,793**

Source: GIS Analysis

Table 6-207: Critical Facilities Exposed to the Tornado - Town Of Warsaw

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$138,505
	EF1	3	$860,801
	EF2	3	$2,441,704
	EF3	3	$3,103,208
	EF4	3	$3,133,604

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	155	$6,753,891
	EF1	155	$45,505,786
	EF2	155	$109,865,568
	EF3	155	$144,316,934
	EF4	155	$149,408,197
Critical Manufacturing	EF0	32	$739,995
	EF1	32	$5,316,186
	EF2	32	$11,797,212
	EF3	32	$12,629,953
	EF4	32	$12,629,953
Emergency Services	EF0	2	$78,666
	EF1	2	$634,246
	EF2	2	$2,295,313
	EF3	2	$3,651,170
	EF4	2	$3,782,028
Energy	EF0	3	$63,719
	EF1	3	$351,457
	EF2	3	$1,179,642
	EF3	3	$1,779,091
	EF4	3	$1,910,605
Food and Agriculture	EF0	22	$576,596
	EF1	22	$3,549,798
	EF2	22	$5,653,267
	EF3	22	$6,525,589
	EF4	22	$6,779,507
Government Facilities	EF0	18	$2,524,214
	EF1	18	$11,357,951

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	18	$31,813,260
	EF3	18	$48,523,732
	EF4	18	$54,050,615
Healthcare and Public Health	EF0	9	$1,059,744
	EF1	9	$4,723,280
	EF2	9	$10,307,824
	EF3	9	$14,020,180
	EF4	9	$14,518,175
Transportation Systems	EF0	33	$1,826,568
	EF1	33	$10,474,203
	EF2	33	$22,531,600
	EF3	33	$33,043,895
	EF4	33	$34,438,721
All Categories	**EF0**	**277**	**$13,761,898**
	EF1	**277**	**$82,773,708**
	EF2	**277**	**$197,885,390**
	EF3	**277**	**$267,593,752**
	EF4	**277**	**$280,651,405**

Source: GIS Analysis

Table 6-208: Critical Facilities Exposed to the Tornado - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	16	$606,966
	EF1	16	$3,772,253
	EF2	16	$10,700,179
	EF3	16	$13,599,060
	EF4	16	$13,732,263
Commercial Facilities	EF0	720	$26,696,187

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	720	$161,277,531
	EF2	720	$433,198,846
	EF3	720	$581,728,866
	EF4	720	$615,027,957
Critical Manufacturing	EF0	63	$9,235,583
	EF1	63	$66,626,824
	EF2	63	$150,601,552
	EF3	63	$161,510,422
	EF4	63	$161,532,086
Emergency Services	EF0	5	$465,184
	EF1	5	$2,590,027
	EF2	5	$8,286,279
	EF3	5	$12,823,579
	EF4	5	$13,771,066
Energy	EF0	7	$11,544,778
	EF1	7	$83,316,158
	EF2	7	$188,268,682
	EF3	7	$201,831,777
	EF4	7	$201,831,777
Food and Agriculture	EF0	203	$1,139,827
	EF1	203	$7,720,026
	EF2	203	$12,935,879
	EF3	203	$13,509,458
	EF4	203	$13,509,458
Government Facilities	EF0	132	$6,635,583
	EF1	132	$35,677,544
	EF2	132	$97,228,459

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	132	$144,289,971
	EF4	132	$155,986,069
Healthcare and Public Health	EF0	45	$4,166,679
	EF1	45	$21,672,993
	EF2	45	$56,423,129
	EF3	45	$81,535,671
	EF4	45	$84,380,627
Transportation Systems	EF0	40	$1,998,020
	EF1	40	$11,165,443
	EF2	40	$25,413,617
	EF3	40	$37,352,496
	EF4	40	$39,281,331
All Categories	**EF0**	**1,231**	**$62,488,807**
	EF1	**1,231**	**$393,818,799**
	EF2	**1,231**	**$983,056,622**
	EF3	**1,231**	**$1,248,181,300**
	EF4	**1,231**	**$1,299,052,634**

Source: GIS Analysis

Table 6-209: Critical Facilities Exposed to the Tornado - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	760	$19,783,481
	EF1	760	$134,364,091
	EF2	760	$391,863,001
	EF3	760	$552,087,520
	EF4	760	$576,407,629
Communications	EF0	1	$89,642
	EF1	1	$426,739

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	1	$1,376,057
	EF3	1	$2,011,297
	EF4	1	$2,206,959
Critical Manufacturing	EF0	80	$8,339,069
	EF1	80	$60,141,546
	EF2	80	$135,547,321
	EF3	80	$145,284,182
	EF4	80	$145,284,182
Emergency Services	EF0	9	$546,968
	EF1	9	$4,409,927
	EF2	9	$15,959,361
	EF3	9	$25,386,665
	EF4	9	$26,296,525
Energy	EF0	1	$572,000
	EF1	1	$4,128,000
	EF2	1	$9,328,000
	EF3	1	$10,000,000
	EF4	1	$10,000,000
Food and Agriculture	EF0	11,972	$124,015,391
	EF1	11,972	$818,064,706
	EF2	11,972	$1,162,871,883
	EF3	11,972	$1,192,152,700
	EF4	11,972	$1,192,152,700
Government Facilities	EF0	166	$10,166,727
	EF1	166	$44,902,873
	EF2	166	$116,510,623
	EF3	166	$174,313,411

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	166	$195,643,355
Healthcare and Public Health	EF0	8	$1,078,225
	EF1	8	$4,441,466
	EF2	8	$8,522,867
	EF3	8	$10,912,876
	EF4	8	$11,298,999
Nuclear Reactors, Materials and Waste	EF0	1	$22,803
	EF1	1	$168,555
	EF2	1	$319,840
	EF3	1	$373,819
	EF4	1	$373,819
Transportation Systems	EF0	70	$2,805,397
	EF1	70	$15,995,570
	EF2	70	$34,671,159
	EF3	70	$51,007,152
	EF4	70	$53,247,294
All Categories	**EF0**	**13,068**	**$167,419,703**
	EF1	**13,068**	**$1,087,043,473**
	EF2	**13,068**	**$1,876,970,112**
	EF3	**13,068**	**$2,163,529,622**
	EF4	**13,068**	**$2,212,911,462**

Source: GIS Analysis

Table 6-210: Critical Facilities Exposed to the Tornado - Town Of Autryville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	17	$244,708
	EF1	17	$1,514,209
	EF2	17	$4,636,862

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	17	$6,742,316
	EF4	17	$7,172,096
Critical Manufacturing	EF0	1	$40,239
	EF1	1	$290,398
	EF2	1	$656,210
	EF3	1	$703,484
	EF4	1	$703,484
Emergency Services	EF0	1	$35,986
	EF1	1	$290,139
	EF2	1	$1,050,001
	EF3	1	$1,670,244
	EF4	1	$1,730,105
Food and Agriculture	EF0	1	$1,615
	EF1	1	$11,654
	EF2	1	$26,334
	EF3	1	$28,231
	EF4	1	$28,231
Government Facilities	EF0	1	$6,859
	EF1	1	$55,301
	EF2	1	$200,133
	EF3	1	$318,352
	EF4	1	$329,762
Transportation Systems	EF0	1	$11,092
	EF1	1	$63,454
	EF2	1	$136,420
	EF3	1	$200,729
	EF4	1	$209,278

Sector	Event	Number of Buildings At Risk	Estimated Damages
All Categories	**EF0**	**22**	**$340,499**
	EF1	**22**	**$2,225,155**
	EF2	**22**	**$6,705,960**
	EF3	**22**	**$9,663,356**
	EF4	**22**	**$10,172,956**

Source: GIS Analysis

Table 6-211: Critical Facilities Exposed to the Tornado - Town Of Garland

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$26,884
	EF1	1	$167,081
	EF2	1	$473,932
	EF3	1	$602,329
	EF4	1	$608,229
Commercial Facilities	EF0	70	$905,763
	EF1	70	$5,686,352
	EF2	70	$18,098,865
	EF3	70	$26,942,562
	EF4	70	$28,504,384
Critical Manufacturing	EF0	3	$387,079
	EF1	3	$2,793,467
	EF2	3	$6,312,369
	EF3	3	$6,767,119
	EF4	3	$6,767,119
Emergency Services	EF0	1	$23,764
	EF1	1	$191,595
	EF2	1	$693,374
	EF3	1	$1,102,954

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF4	1	$1,142,484
Food and Agriculture	EF0	51	$413,840
	EF1	51	$2,742,745
	EF2	51	$4,024,202
	EF3	51	$4,141,375
	EF4	51	$4,141,375
Government Facilities	EF0	7	$176,774
	EF1	7	$864,642
	EF2	7	$2,549,983
	EF3	7	$3,926,507
	EF4	7	$4,303,339
Healthcare and Public Health	EF0	4	$57,876
	EF1	4	$466,627
	EF2	4	$1,688,705
	EF3	4	$2,686,235
	EF4	4	$2,782,510
Transportation Systems	EF0	5	$173,118
	EF1	5	$990,342
	EF2	5	$2,129,118
	EF3	5	$3,132,803
	EF4	5	$3,266,227
All Categories	**EF0**	**142**	**$2,165,098**
	EF1	**142**	**$13,902,851**
	EF2	**142**	**$35,970,548**
	EF3	**142**	**$49,301,884**
	EF4	**142**	**$51,515,667**

Source: GIS Analysis

Table 6-212: Critical Facilities Exposed to the Tornado - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	3	$82,113
	EF1	3	$510,330
	EF2	3	$1,447,575
	EF3	3	$1,839,751
	EF4	3	$1,857,771
Commercial Facilities	EF0	80	$2,665,018
	EF1	80	$15,802,138
	EF2	80	$45,418,087
	EF3	80	$63,493,585
	EF4	80	$67,820,977
Critical Manufacturing	EF0	6	$419,600
	EF1	6	$3,028,160
	EF2	6	$6,842,703
	EF3	6	$7,335,659
	EF4	6	$7,335,659
Emergency Services	EF0	1	$12,570
	EF1	1	$101,345
	EF2	1	$366,764
	EF3	1	$583,413
	EF4	1	$604,323
Energy	EF0	1	$12,885
	EF1	1	$61,340
	EF2	1	$197,796
	EF3	1	$289,107
	EF4	1	$317,231
Food and Agriculture	EF0	120	$289,286

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	120	$2,033,170
	EF2	120	$4,108,153
	EF3	120	$4,365,472
	EF4	120	$4,365,472
Government Facilities	EF0	6	$45,205
	EF1	6	$364,469
	EF2	6	$1,318,999
	EF3	6	$2,098,142
	EF4	6	$2,173,339
Healthcare and Public Health	EF0	3	$141,639
	EF1	3	$877,033
	EF2	3	$2,703,453
	EF3	3	$4,135,616
	EF4	3	$4,283,526
Transportation Systems	EF0	3	$99,900
	EF1	3	$571,487
	EF2	3	$1,228,630
	EF3	3	$1,807,817
	EF4	3	$1,884,811
All Categories	**EF0**	**223**	**$3,768,216**
	EF1	**223**	**$23,349,472**
	EF2	**223**	**$63,632,160**
	EF3	**223**	**$85,948,562**
	EF4	**223**	**$90,643,109**

Source: GIS Analysis

Table 6-213: Critical Facilities Exposed to the Tornado - Town Of Roseboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	2	$94,713
	EF1	2	$588,636
	EF2	2	$1,669,695
	EF3	2	$2,122,047
	EF4	2	$2,142,832
Commercial Facilities	EF0	142	$8,454,567
	EF1	142	$57,695,569
	EF2	142	$140,531,528
	EF3	142	$165,673,076
	EF4	142	$169,846,589
Critical Manufacturing	EF0	15	$1,521,890
	EF1	15	$10,983,147
	EF2	15	$24,818,506
	EF3	15	$26,606,461
	EF4	15	$26,606,461
Emergency Services	EF0	3	$20,898
	EF1	3	$168,491
	EF2	3	$609,763
	EF3	3	$969,954
	EF4	3	$1,004,717
Energy	EF0	2	$5,793,159
	EF1	2	$41,807,973
	EF2	2	$94,473,056
	EF3	2	$101,279,005
	EF4	2	$101,279,005
Food and Agriculture	EF0	56	$188,757

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	56	$1,296,502
	EF2	56	$2,343,910
	EF3	56	$2,466,214
	EF4	56	$2,466,214
Government Facilities	EF0	24	$768,541
	EF1	24	$3,592,055
	EF2	24	$10,234,413
	EF3	24	$15,654,018
	EF4	24	$17,306,769
Healthcare and Public Health	EF0	8	$723,664
	EF1	8	$3,014,987
	EF2	8	$5,903,887
	EF3	8	$7,637,635
	EF4	8	$7,908,055
Transportation Systems	EF0	7	$206,704
	EF1	7	$1,245,725
	EF2	7	$2,615,143
	EF3	7	$3,525,762
	EF4	7	$3,644,714
All Categories	**EF0**	**259**	**$17,772,893**
	EF1	**259**	**$120,393,085**
	EF2	**259**	**$283,199,901**
	EF3	**259**	**$325,934,172**
	EF4	**259**	**$332,205,356**

Source: GIS Analysis

Table 6-214: Critical Facilities Exposed to the Tornado - Town Of Salemburg

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	2	$23,561
	EF1	2	$146,429
	EF2	2	$415,352
	EF3	2	$527,879
	EF4	2	$533,049
Commercial Facilities	EF0	41	$607,593
	EF1	41	$4,016,131
	EF2	41	$12,180,730
	EF3	41	$17,767,430
	EF4	41	$18,760,309
Critical Manufacturing	EF0	2	$17,803
	EF1	2	$128,480
	EF2	2	$290,326
	EF3	2	$311,241
	EF4	2	$311,241
Emergency Services	EF0	1	$64,520
	EF1	1	$520,190
	EF2	1	$1,882,548
	EF3	1	$2,994,582
	EF4	1	$3,101,908
Food and Agriculture	EF0	80	$694,576
	EF1	80	$4,585,706
	EF2	80	$6,557,043
	EF3	80	$6,727,012
	EF4	80	$6,727,012
Government Facilities	EF0	35	$3,876,896

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF1	35	$16,457,092
	EF2	35	$44,495,118
	EF3	35	$67,172,533
	EF4	35	$75,811,661
Healthcare and Public Health	EF0	1	$118,778
	EF1	1	$480,857
	EF2	1	$893,472
	EF3	1	$1,124,696
	EF4	1	$1,164,445
Transportation Systems	EF0	2	$64,906
	EF1	2	$365,898
	EF2	2	$815,420
	EF3	2	$1,198,972
	EF4	2	$1,256,940
All Categories	**EF0**	**164**	**$5,468,633**
	EF1	**164**	**$26,700,783**
	EF2	**164**	**$67,530,009**
	EF3	**164**	**$97,824,345**
	EF4	**164**	**$107,666,565**

Source: GIS Analysis

Table 6-215: Critical Facilities Exposed to the Tornado - Town Of Turkey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	1	$16,928
	EF1	1	$105,206
	EF2	1	$298,423
	EF3	1	$379,271
	EF4	1	$382,986

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	EF0	23	$7,648,402
	EF1	23	$55,160,471
	EF2	23	$125,603,397
	EF3	23	$136,210,457
	EF4	23	$136,499,732
Critical Manufacturing	EF0	1	$20,604
	EF1	1	$148,693
	EF2	1	$336,000
	EF3	1	$360,206
	EF4	1	$360,206
Emergency Services	EF0	1	$13,275
	EF1	1	$107,033
	EF2	1	$387,347
	EF3	1	$616,156
	EF4	1	$638,239
Food and Agriculture	EF0	127	$768,787
	EF1	127	$5,153,205
	EF2	127	$8,124,102
	EF3	127	$8,429,588
	EF4	127	$8,429,588
Government Facilities	EF0	2	$11,810
	EF1	2	$95,216
	EF2	2	$344,583
	EF3	2	$548,131
	EF4	2	$567,776
Transportation Systems	EF0	1	$20,470
	EF1	1	$117,102

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	1	$251,756
	EF3	1	$370,436
	EF4	1	$386,212
All Categories	**EF0**	**156**	**$8,500,276**
	EF1	**156**	**$60,886,926**
	EF2	**156**	**$135,345,608**
	EF3	**156**	**$146,914,245**
	EF4	**156**	**$147,264,739**

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 Tornado (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	EF0	53	$1,779,096
	EF1	53	$11,056,970
	EF2	53	$31,363,629
	EF3	53	$39,860,631
	EF4	53	$40,251,065
Chemical	EF0	1	$7,642
	EF1	1	$55,149
	EF2	1	$124,620
	EF3	1	$133,598
	EF4	1	$133,598
Commercial Facilities	EF0	3,148	$108,893,438
	EF1	3,148	$725,702,752
	EF2	3,148	$1,942,237,940

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF3	3,148	$2,593,756,808
	EF4	3,148	$2,703,919,481
Communications	EF0	1	$89,642
	EF1	1	$426,739
	EF2	1	$1,376,057
	EF3	1	$2,011,297
	EF4	1	$2,206,959
Critical Manufacturing	EF0	507	$35,558,102
	EF1	507	$256,399,185
	EF2	507	$578,496,049
	EF3	507	$620,407,865
	EF4	507	$620,479,338
Defense Industrial Base	EF0	2	$166,993
	EF1	2	$1,177,740
	EF2	2	$2,416,937
	EF3	2	$2,571,633
	EF4	2	$2,571,633
Emergency Services	EF0	56	$1,951,482
	EF1	56	$14,546,125
	EF2	56	$51,539,498
	EF3	56	$81,610,464
	EF4	56	$85,034,622
Energy	EF0	29	$21,483,004
	EF1	29	$154,913,448
	EF2	29	$351,034,062
	EF3	29	$377,674,385
	EF4	29	$377,931,373

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	EF0	22,405	$244,898,542
	EF1	22,405	$1,613,478,262
	EF2	22,405	$2,281,997,846
	EF3	22,405	$2,341,897,907
	EF4	22,405	$2,342,758,827
Government Facilities	EF0	698	$39,988,022
	EF1	698	$189,874,850
	EF2	698	$529,217,616
	EF3	698	$802,261,678
	EF4	698	$885,314,814
Healthcare and Public Health	EF0	138	$12,047,161
	EF1	138	$57,968,946
	EF2	138	$139,400,534
	EF3	138	$196,585,256
	EF4	138	$203,521,591
Nuclear Reactors, Materials and Waste	EF0	1	$22,803
	EF1	1	$168,555
	EF2	1	$319,840
	EF3	1	$373,819
	EF4	1	$373,819
Transportation Systems	EF0	446	$23,796,972
	EF1	446	$135,925,485
	EF2	446	$294,016,951
	EF3	446	$431,937,457
	EF4	446	$450,703,543
Water	EF0	1	$3,432,000
	EF1	1	$24,768,000

Sector	Event	Number of Buildings At Risk	Estimated Damages
	EF2	1	$55,968,000
	EF3	1	$60,000,000
	EF4	1	$60,000,000
All Categories	**EF0**	**27,486**	**$494,114,899**
	EF1	**27,486**	**$3,186,462,206**
	EF2	**27,486**	**$6,259,509,579**
	EF3	**27,486**	**$7,551,082,798**
	EF4	**27,486**	**$7,775,200,663**

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 Tornado - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$1,263,006
	EF1	1	$8,134,336
	EF2	1	$9,641,266
	EF3	1	$9,641,266
	EF4	1	$9,641,266
Commercial	EF0	92	$13,781,718
	EF1	92	$88,417,605
	EF2	92	$188,941,235
	EF3	92	$246,168,630
	EF4	92	$254,044,586
Government	EF0	37	$6,170,070
	EF1	37	$28,575,011
	EF2	37	$81,541,059

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	37	$124,807,173
	EF4	37	$138,196,904
Industrial	EF0	16	$2,544,316
	EF1	16	$18,361,779
	EF2	16	$41,491,926
	EF3	16	$44,481,053
	EF4	16	$44,481,053
Religious	EF0	85	$3,520,476
	EF1	85	$28,383,836
	EF2	85	$102,720,034
	EF3	85	$163,397,465
	EF4	85	$169,253,641
Residential	EF0	18	$828,521
	EF1	18	$5,667,737
	EF2	18	$14,103,300
	EF3	18	$22,788,034
	EF4	18	$24,154,312
All Categories	**EF0**	**249**	**$28,108,107**
	EF1	**249**	**$177,540,304**
	EF2	**249**	**$438,438,820**
	EF3	**249**	**$611,283,621**
	EF4	**249**	**$639,771,762**

Source: GIS Analysis

Table 6-218: High Potential Loss Properties Exposed to the Tornado - Town Of Beulaville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	16	$2,238,705
	EF1	16	$11,427,897

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF2	16	$27,995,788
	EF3	16	$38,956,654
	EF4	16	$41,057,712
Government	EF0	5	$2,500,657
	EF1	5	$10,769,674
	EF2	5	$29,272,793
	EF3	5	$44,390,382
	EF4	5	$49,936,897
Industrial	EF0	2	$875,425
	EF1	2	$6,317,753
	EF2	2	$14,276,163
	EF3	2	$15,304,634
	EF4	2	$15,304,634
Religious	EF0	8	$449,276
	EF1	8	$3,622,291
	EF2	8	$13,108,935
	EF3	8	$20,852,472
	EF4	8	$21,599,826
Residential	EF0	7	$527,602
	EF1	7	$3,464,311
	EF2	7	$10,680,855
	EF3	7	$19,545,885
	EF4	7	$21,027,677
All Categories	**EF0**	**38**	**$6,591,665**
	EF1	**38**	**$35,601,926**
	EF2	**38**	**$95,334,534**
	EF3	**38**	**$139,050,027**

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF4	**38**	**$148,926,746**

Source: GIS Analysis

Table 6-219: High Potential Loss Properties Exposed to the Tornado - Town Of Calypso

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	2	$118,795
	EF1	2	$751,294
	EF2	2	$1,895,961
	EF3	2	$2,290,693
	EF4	2	$2,384,908
Government	EF0	1	$26,714
	EF1	1	$215,380
	EF2	1	$779,451
	EF3	1	$1,239,878
	EF4	1	$1,284,315
Religious	EF0	4	$155,348
	EF1	4	$1,252,494
	EF2	4	$4,532,729
	EF3	4	$7,210,244
	EF4	4	$7,468,660
Residential	EF0	1	$100,458
	EF1	1	$603,115
	EF2	1	$1,696,331
	EF3	1	$3,367,917
	EF4	1	$3,693,296
All Categories	**EF0**	**8**	**$401,315**
	EF1	**8**	**$2,822,283**
	EF2	**8**	**$8,904,472**

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	**8**	**$14,108,732**
	EF4	**8**	**$14,831,179**

Source: GIS Analysis

Table 6-220: High Potential Loss Properties Exposed to the Tornado - Town Of Faison

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	11	$2,086,246
	EF1	11	$13,707,108
	EF2	11	$30,957,742
	EF3	11	$35,095,389
	EF4	11	$35,617,757
Government	EF0	3	$231,093
	EF1	3	$1,056,960
	EF2	3	$2,992,231
	EF3	3	$4,573,135
	EF4	3	$5,076,593
Industrial	EF0	3	$4,981,892
	EF1	3	$35,953,237
	EF2	3	$81,243,167
	EF3	3	$87,096,019
	EF4	3	$87,096,019
Religious	EF0	6	$287,900
	EF1	6	$2,321,197
	EF2	6	$8,400,323
	EF3	6	$13,362,452
	EF4	6	$13,841,363
Residential	EF0	6	$729,219
	EF1	6	$4,934,063

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF2	6	$11,168,014
	EF3	6	$17,584,617
	EF4	6	$18,649,043
Utilities	EF0	2	$6,864,000
	EF1	2	$49,536,000
	EF2	2	$111,936,000
	EF3	2	$120,000,000
	EF4	2	$120,000,000
All Categories	**EF0**	**31**	**$15,180,350**
	EF1	**31**	**$107,508,565**
	EF2	**31**	**$246,697,477**
	EF3	**31**	**$277,711,612**
	EF4	**31**	**$280,280,775**

Source: GIS Analysis

Table 6-221: High Potential Loss Properties Exposed to the Tornado - Town Of Greenevers

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	1	$24,042
	EF1	1	$193,835
	EF2	1	$701,482
	EF3	1	$1,115,853
	EF4	1	$1,155,845
Religious	EF0	2	$63,215
	EF1	2	$509,675
	EF2	2	$1,844,494
	EF3	2	$2,934,049
	EF4	2	$3,039,205
Residential	EF0	1	$44,518

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF1	1	$267,272
	EF2	1	$751,733
	EF3	1	$1,492,500
	EF4	1	$1,636,693
All Categories	**EF0**	**4**	**$131,775**
	EF1	**4**	**$970,782**
	EF2	**4**	**$3,297,709**
	EF3	**4**	**$5,542,402**
	EF4	**4**	**$5,831,743**

Source: GIS Analysis

Table 6-222: High Potential Loss Properties Exposed to the Tornado - Town Of Harrells

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	3	$383,843
	EF1	3	$1,607,014
	EF2	3	$4,278,836
	EF3	3	$6,461,992
	EF4	3	$7,320,173
Industrial	EF0	1	$264,053
	EF1	1	$1,905,615
	EF2	1	$4,306,100
	EF3	1	$4,616,316
	EF4	1	$4,616,316
All Categories	**EF0**	**4**	**$647,896**
	EF1	**4**	**$3,512,629**
	EF2	**4**	**$8,584,936**
	EF3	**4**	**$11,078,308**
	EF4	**4**	**$11,936,489**

Source: GIS Analysis

Table 6-223: High Potential Loss Properties Exposed to the Tornado - Town Of Kenansville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	12	$1,291,796
	EF1	12	$8,567,642
	EF2	12	$25,566,603
	EF3	12	$37,246,289
	EF4	12	$38,621,115
Government	EF0	24	$2,461,325
	EF1	24	$15,836,378
	EF2	24	$53,170,749
	EF3	24	$83,651,284
	EF4	24	$88,337,417
Religious	EF0	5	$371,360
	EF1	5	$2,994,090
	EF2	5	$10,835,500
	EF3	5	$17,236,105
	EF4	5	$17,853,848
Residential	EF0	2	$206,466
	EF1	2	$1,472,487
	EF2	2	$3,006,505
	EF3	2	$4,047,065
	EF4	2	$4,172,292
All Categories	**EF0**	**43**	**$4,330,947**
	EF1	**43**	**$28,870,597**
	EF2	**43**	**$92,579,357**
	EF3	**43**	**$142,180,743**
	EF4	**43**	**$148,984,672**

Source: GIS Analysis

Table 6-224: High Potential Loss Properties Exposed to the Tornado - Town Of Magnolia

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$45,525
	EF1	1	$216,724
	EF2	1	$698,844
	EF3	1	$1,021,456
	EF4	1	$1,120,825
Government	EF0	2	$115,437
	EF1	2	$574,865
	EF2	2	$1,712,811
	EF3	2	$2,642,208
	EF4	2	$2,886,776
Religious	EF0	4	$122,303
	EF1	4	$986,071
	EF2	4	$3,568,555
	EF3	4	$5,676,525
	EF4	4	$5,879,972
All Categories	**EF0**	**7**	**$283,265**
	EF1	**7**	**$1,777,660**
	EF2	**7**	**$5,980,210**
	EF3	**7**	**$9,340,189**
	EF4	**7**	**$9,887,573**

Source: GIS Analysis

Table 6-225: High Potential Loss Properties Exposed to the Tornado - Town Of Rose Hill

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$185,709
	EF1	1	$1,196,053

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF2	1	$1,417,628
	EF3	1	$1,417,628
	EF4	1	$1,417,628
Commercial	EF0	10	$908,242
	EF1	10	$4,726,942
	EF2	10	$10,983,798
	EF3	10	$14,971,794
	EF4	10	$15,766,426
Government	EF0	3	$332,775
	EF1	3	$1,519,897
	EF2	3	$4,298,909
	EF3	3	$6,569,066
	EF4	3	$7,294,365
Industrial	EF0	5	$1,163,117
	EF1	5	$8,393,962
	EF2	5	$18,967,752
	EF3	5	$20,334,211
	EF4	5	$20,334,211
Religious	EF0	3	$90,908
	EF1	3	$732,945
	EF2	3	$2,652,502
	EF3	3	$4,219,352
	EF4	3	$4,370,574
Residential	EF0	5	$303,937
	EF1	5	$2,029,262
	EF2	5	$4,710,928
	EF3	5	$7,665,468

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF4	5	$8,172,687
All Categories	**EF0**	**27**	**$2,984,688**
	EF1	**27**	**$18,599,061**
	EF2	**27**	**$43,031,517**
	EF3	**27**	**$55,177,519**
	EF4	**27**	**$57,355,891**

Source: GIS Analysis

Table 6-226: High Potential Loss Properties Exposed to the Tornado - Town Of Wallace

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	48	$8,939,939
	EF1	48	$49,761,175
	EF2	48	$126,363,039
	EF3	48	$179,799,622
	EF4	48	$191,273,556
Government	EF0	3	$1,453,340
	EF1	3	$6,211,641
	EF2	3	$16,791,824
	EF3	3	$25,436,349
	EF4	3	$28,666,908
Industrial	EF0	4	$716,578
	EF1	4	$5,171,390
	EF2	4	$11,685,737
	EF3	4	$12,527,592
	EF4	4	$12,527,592
Religious	EF0	20	$842,554
	EF1	20	$6,793,095
	EF2	20	$24,583,955

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	20	$39,105,866
	EF4	20	$40,507,423
Residential	EF0	17	$5,267,402
	EF1	17	$34,394,692
	EF2	17	$83,236,895
	EF3	17	$142,394,802
	EF4	17	$152,990,274
All Categories	**EF0**	**92**	**$17,219,813**
	EF1	**92**	**$102,331,993**
	EF2	**92**	**$262,661,450**
	EF3	**92**	**$399,264,231**
	EF4	**92**	**$425,965,753**

Source: GIS Analysis

Table 6-227: High Potential Loss Properties Exposed to the Tornado - Town Of Warsaw

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$280,045
	EF1	1	$1,803,617
	EF2	1	$2,137,746
	EF3	1	$2,137,746
	EF4	1	$2,137,746
Commercial	EF0	30	$6,404,394
	EF1	30	$38,898,575
	EF2	30	$84,649,029
	EF3	30	$109,304,197
	EF4	30	$113,077,042
Government	EF0	7	$2,411,822
	EF1	7	$10,850,510

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF2	7	$30,388,745
	EF3	7	$46,350,042
	EF4	7	$51,631,092
Industrial	EF0	2	$195,558
	EF1	2	$1,411,301
	EF2	2	$3,189,102
	EF3	2	$3,418,848
	EF4	2	$3,418,848
Religious	EF0	15	$647,058
	EF1	15	$5,216,904
	EF2	15	$18,879,780
	EF3	15	$30,032,195
	EF4	15	$31,108,551
Residential	EF0	8	$1,936,579
	EF1	8	$11,977,828
	EF2	8	$31,977,519
	EF3	8	$60,590,281
	EF4	8	$66,043,253
All Categories	**EF0**	**63**	**$11,875,456**
	EF1	**63**	**$70,158,735**
	EF2	**63**	**$171,221,921**
	EF3	**63**	**$251,833,309**
	EF4	**63**	**$267,416,532**

Source: GIS Analysis

Table 6-228: High Potential Loss Properties Exposed to the Tornado - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	1	$226,674

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF1	1	$1,459,883
	EF2	1	$1,730,334
	EF3	1	$1,730,334
	EF4	1	$1,730,334
Commercial	EF0	127	$19,399,231
	EF1	127	$113,859,414
	EF2	127	$293,960,876
	EF3	127	$396,072,596
	EF4	127	$416,908,638
Government	EF0	30	$4,899,609
	EF1	30	$23,647,163
	EF2	30	$69,198,268
	EF3	30	$106,403,796
	EF4	30	$116,895,333
Industrial	EF0	24	$11,001,044
	EF1	24	$79,392,148
	EF2	24	$179,401,637
	EF3	24	$192,325,940
	EF4	24	$192,325,940
Religious	EF0	21	$1,149,236
	EF1	21	$9,265,719
	EF2	21	$33,532,288
	EF3	21	$53,340,041
	EF4	21	$55,251,752
Residential	EF0	9	$1,640,608
	EF1	9	$11,664,074
	EF2	9	$23,965,359

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	9	$32,609,271
	EF4	9	$33,689,551
Utilities	EF0	6	$11,440,000
	EF1	6	$82,560,000
	EF2	6	$186,560,000
	EF3	6	$200,000,000
	EF4	6	$200,000,000
All Categories	**EF0**	**218**	**$49,756,402**
	EF1	**218**	**$321,848,401**
	EF2	**218**	**$788,348,762**
	EF3	**218**	**$982,481,978**
	EF4	**218**	**$1,016,801,548**

Source: GIS Analysis

Table 6-229: High Potential Loss Properties Exposed to the Tornado - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	EF0	7	$1,324,126
	EF1	7	$8,527,981
	EF2	7	$10,107,835
	EF3	7	$10,107,835
	EF4	7	$10,107,835
Commercial	EF0	83	$10,406,128
	EF1	83	$64,091,823
	EF2	83	$152,393,684
	EF3	83	$191,653,325
	EF4	83	$199,864,622
Government	EF0	34	$8,473,726

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF1	34	$38,066,735
	EF2	34	$106,509,632
	EF3	34	$162,422,650
	EF4	34	$180,985,364
Industrial	EF0	14	$8,001,663
	EF1	14	$57,746,268
	EF2	14	$130,488,659
	EF3	14	$139,889,215
	EF4	14	$139,889,215
Religious	EF0	107	$4,595,581
	EF1	107	$37,051,873
	EF2	107	$134,089,335
	EF3	107	$213,296,827
	EF4	107	$220,941,399
Residential	EF0	13	$1,372,488
	EF1	13	$9,673,384
	EF2	13	$16,756,844
	EF3	13	$19,678,497
	EF4	13	$19,820,622
Utilities	EF0	1	$572,000
	EF1	1	$4,128,000
	EF2	1	$9,328,000
	EF3	1	$10,000,000
	EF4	1	$10,000,000
All Categories	**EF0**	**259**	**$34,745,712**
	EF1	**259**	**$219,286,064**
	EF2	**259**	**$559,673,989**

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	**259**	**$747,048,349**
	EF4	**259**	**$781,609,057**

Source: GIS Analysis

Table 6-230: High Potential Loss Properties Exposed to the Tornado - Town Of Autryville

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	EF0	1	$35,986
	EF1	1	$290,139
	EF2	1	$1,050,001
	EF3	1	$1,670,244
	EF4	1	$1,730,105
Religious	EF0	2	$54,731
	EF1	2	$441,273
	EF2	2	$1,596,949
	EF3	2	$2,540,277
	EF4	2	$2,631,321
All Categories	**EF0**	**3**	**$90,717**
	EF1	**3**	**$731,412**
	EF2	**3**	**$2,646,950**
	EF3	**3**	**$4,210,521**
	EF4	**3**	**$4,361,426**

Source: GIS Analysis

Table 6-231: High Potential Loss Properties Exposed to the Tornado - Town Of Garland

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	4	$217,410
	EF1	4	$1,271,174
	EF2	4	$3,738,591
	EF3	4	$5,652,821

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF4	4	$5,985,406
Government	EF0	2	$87,667
	EF1	2	$459,133
	EF2	2	$1,405,722
	EF3	2	$2,178,759
	EF4	2	$2,361,160
Industrial	EF0	1	$367,517
	EF1	1	$2,652,293
	EF2	1	$5,993,360
	EF3	1	$6,425,129
	EF4	1	$6,425,129
Religious	EF0	4	$159,878
	EF1	4	$1,289,016
	EF2	4	$4,664,901
	EF3	4	$7,420,490
	EF4	4	$7,686,440
All Categories	**EF0**	**11**	**$832,472**
	EF1	**11**	**$5,671,616**
	EF2	**11**	**$15,802,574**
	EF3	**11**	**$21,677,199**
	EF4	**11**	**$22,458,135**

Source: GIS Analysis

Table 6-232: High Potential Loss Properties Exposed to the Tornado - Town Of Newton Grove

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	13	$1,779,103
	EF1	13	$10,662,331
	EF2	13	$29,092,414

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF3	13	$39,718,971
	EF4	13	$42,357,561
Industrial	EF0	3	$296,222
	EF1	3	$2,137,768
	EF2	3	$4,830,692
	EF3	3	$5,178,701
	EF4	3	$5,178,701
Religious	EF0	6	$186,295
	EF1	6	$1,502,000
	EF2	6	$5,435,682
	EF3	6	$8,646,577
	EF4	6	$8,956,471
All Categories	**EF0**	**22**	**$2,261,620**
	EF1	**22**	**$14,302,099**
	EF2	**22**	**$39,358,788**
	EF3	**22**	**$53,544,249**
	EF4	**22**	**$56,492,733**

Source: GIS Analysis

Table 6-233: High Potential Loss Properties Exposed to the Tornado - Town Of Roseboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	16	$1,513,302
	EF1	16	$8,185,924
	EF2	16	$21,619,237
	EF3	16	$29,160,476
	EF4	16	$31,118,946
Government	EF0	8	$579,982
	EF1	8	$2,655,922

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF2	8	$7,524,738
	EF3	8	$11,502,016
	EF4	8	$12,765,087
Industrial	EF0	8	$7,180,517
	EF1	8	$51,820,238
	EF2	8	$117,097,669
	EF3	8	$125,533,521
	EF4	8	$125,533,521
Religious	EF0	3	$211,166
	EF1	3	$1,702,530
	EF2	3	$6,161,391
	EF3	3	$9,800,967
	EF4	3	$10,152,234
Residential	EF0	1	$82,831
	EF1	1	$612,272
	EF2	1	$1,161,809
	EF3	1	$1,357,888
	EF4	1	$1,357,888
Utilities	EF0	2	$5,793,159
	EF1	2	$41,807,973
	EF2	2	$94,473,056
	EF3	2	$101,279,005
	EF4	2	$101,279,005
All Categories	**EF0**	**38**	**$15,360,957**
	EF1	**38**	**$106,784,859**
	EF2	**38**	**$248,037,900**
	EF3	**38**	**$278,633,873**

Category	Event	Number of Buildings At Risk	Estimated Damages
	EF4	**38**	**$282,206,681**

Source: GIS Analysis

Table 6-234: High Potential Loss Properties Exposed to the Tornado - Town Of Salemburg

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	5	$446,513
	EF1	5	$2,457,630
	EF2	5	$6,030,675
	EF3	5	$8,204,181
	EF4	5	$8,743,263
Government	EF0	13	$3,296,855
	EF1	13	$14,052,816
	EF2	13	$37,914,515
	EF3	13	$57,410,853
	EF4	13	$64,744,894
Religious	EF0	3	$127,389
	EF1	3	$1,027,073
	EF2	3	$3,716,939
	EF3	3	$5,912,561
	EF4	3	$6,124,467
All Categories	**EF0**	**21**	**$3,870,757**
	EF1	**21**	**$17,537,519**
	EF2	**21**	**$47,662,129**
	EF3	**21**	**$71,527,595**
	EF4	**21**	**$79,612,624**

Source: GIS Analysis

Table 6-235: High Potential Loss Properties Exposed to the Tornado - Town Of Turkey

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	EF0	1	$182,931
	EF1	1	$1,320,175
	EF2	1	$2,983,186
	EF3	1	$3,198,098
	EF4	1	$3,198,098
Industrial	EF0	1	$7,225,237
	EF1	1	$52,142,967
	EF2	1	$117,826,936
	EF3	1	$126,315,326
	EF4	1	$126,315,326
Religious	EF0	1	$23,741
	EF1	1	$191,408
	EF2	1	$692,699
	EF3	1	$1,101,881
	EF4	1	$1,141,372
All Categories	**EF0**	**3**	**$7,431,909**
	EF1	**3**	**$53,654,550**
	EF2	**3**	**$121,502,821**
	EF3	**3**	**$130,615,305**
	EF4	**3**	**$130,654,796**

Source: GIS Analysis

6.2.14 Wildfire

Wildfires can cause significant damage to property and threatens the lives of people who are unable to evacuate wildfire-prone areas. Many individual homes and cabins, subdivisions, resorts, recreational areas, organizational camps, businesses, and industries are located within high wildfire hazard areas. Further, 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.

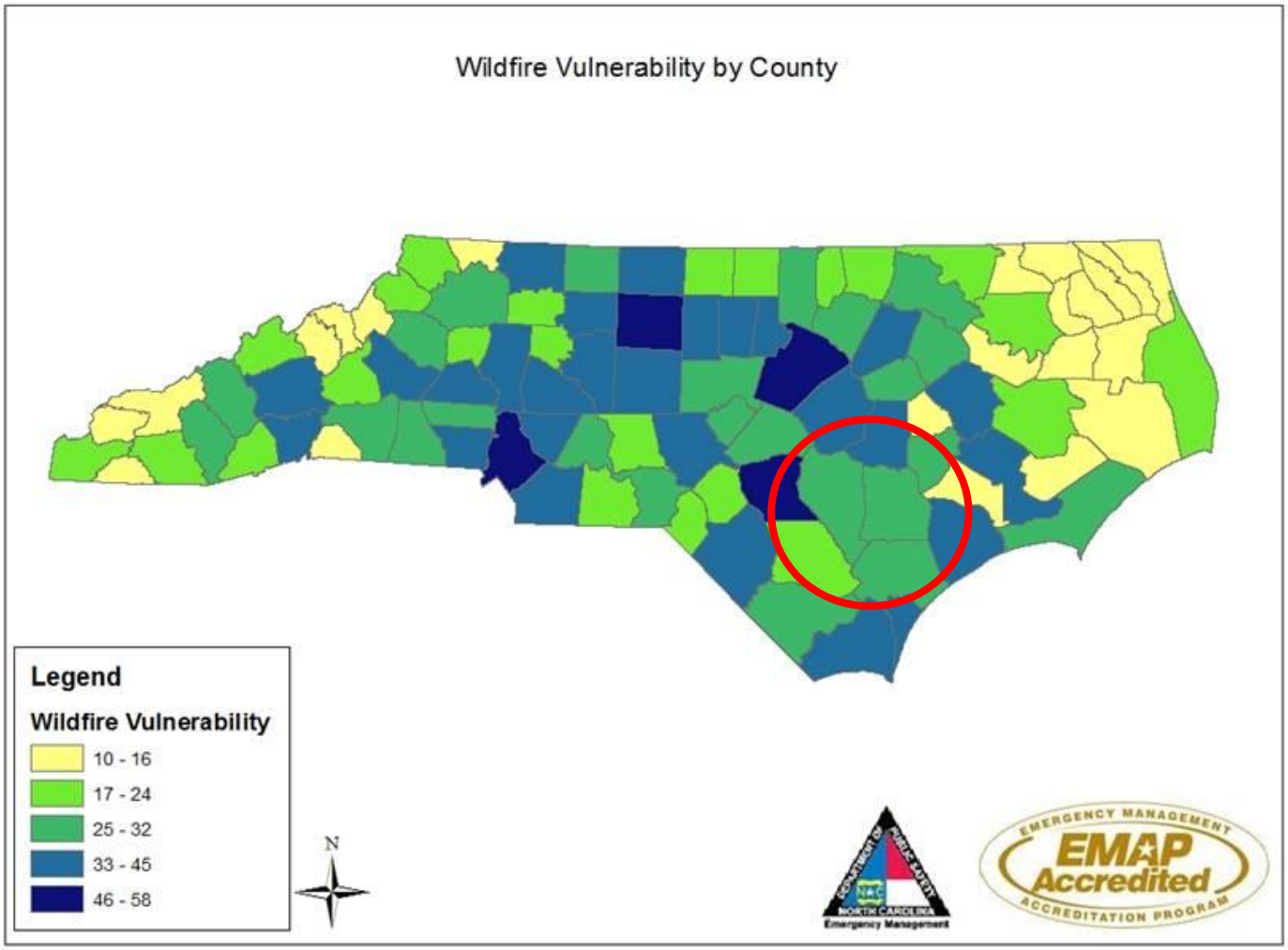
Wildfires can result in severe economic losses. Businesses that depend on timber, such as paper mills and lumber companies, experience losses that are often passed along to consumers through higher prices, and sometimes jobs are lost. The high cost of responding to and recovering from wildfires can deplete state and local 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, such as reduced air quality by means of wildfire smoke and ash.

No damage assessments from previous fires were available.

The areas of the state with the largest wildfire hazard occurrence are also within the most exposed regions. Many areas in the eastern and western part of the state have high risk for wildfire since there are large forested areas in these regions. However, some counties in the central part of the state also have higher risk. Still, a county's exposure score plays a major role and counties with high exposure and high wildfire risk score highest. Figure 6-1 shows wildfire hazard vulnerability scores by county for the state of North Carolina.

Source: North Carolina State Hazard Mitigation Plan

Figure 6-1: Wildfire Vulnerability



A vulnerability score was determined for each of the hazard categories on a county by county basis by adding a county's score for a particular hazard risk category to its total exposure score as depicted in the table below. Each county was assigned a quantitative hazard risk score for each hazard category based on a 1-5 scale. This score was determined by using natural (Jenks) breaks in the overall data for the state. Therefore, the exposure score for each county is relative to each of the other counties in the state. Similarly, the exposure of each county was determined for each hazard by utilizing natural breaks and assigning a score based on a 1-10 scale. The scores for each exposure category were added together to give us a total exposure score. This total exposure score was then added to each respective risk score to produce a score for vulnerability based on each of the hazard risk categories.

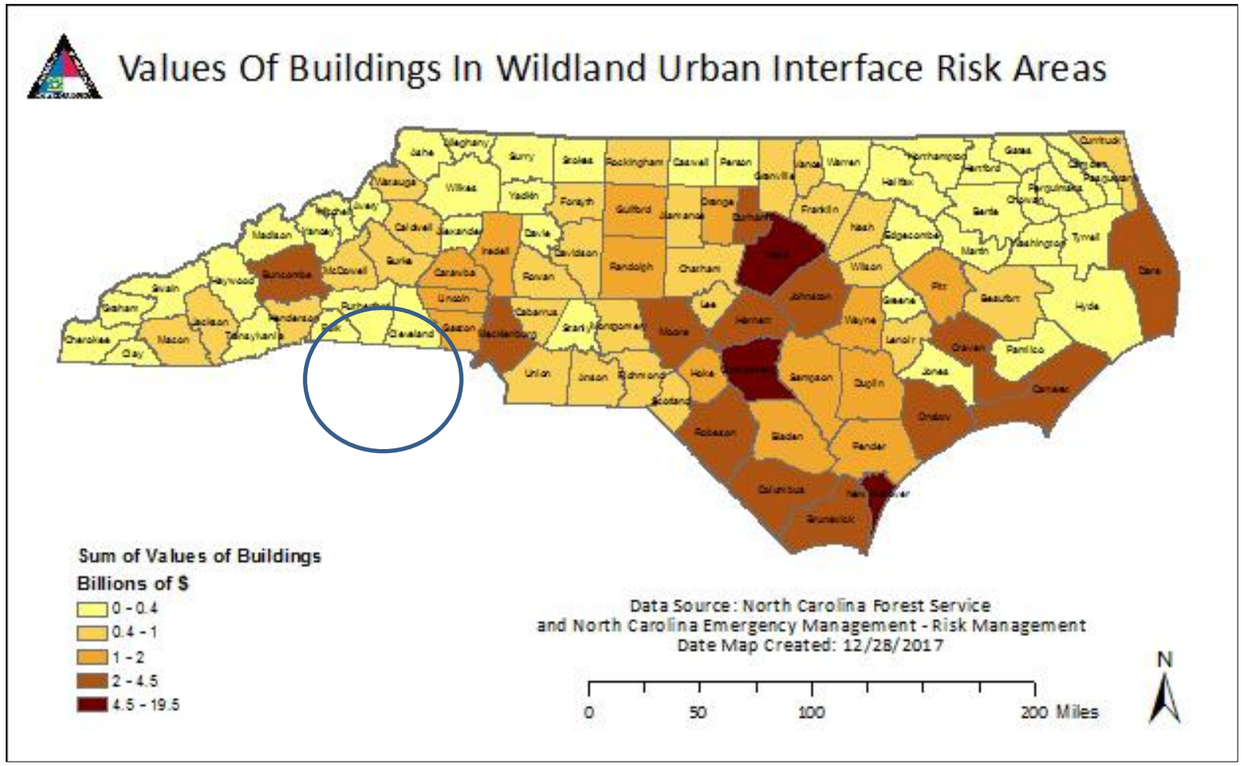
The Wildland Urban Interface (WUI) Risk Index Layer is a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the Wildland Urban Interface and rural areas is key information for defining potential wildfire impacts to people and homes. The WUI Risk Index for the Region is displayed in the table below, respectively. The WUI Risk Rating is derived using a Response Function modeling approach which involves assigning a net change in the value to a resource or asset based on susceptibility to fire at different intensity levels, such as flame length. The range of values is from -1 to -9, with -1 representing the least negative impact and -9 representing the most negative impact. For example, areas with high housing density and high flame lengths are rated -9 while areas with low housing density and low flame lengths are rated -1. To calculate the WUI Risk Rating, the WUI housing density data was combined with Flame Length data and response functions were defined to represent potential impacts. The response functions were defined by a team of experts based on values defined by the SWRA Update Project technical team. By combining flame length with the WUI housing density data, you can determine where the greatest potential impact to homes and people is likely to occur.

Table 6-236: WUI Risk Index Assessment

Community	WUI Risk Index Assessment (-9 Major to -1 Minor)	Vulnerability (Wildfire Risk Low to High)
Sampson County	Major to Minor; -9 to -1	Minimal to Very High
Town of Autryville	Major to Minor; -9 to -1	Minimal to High
City of Clinton	Major to Minor; -9 to -1	Minimal to High
Town of Garland	Major to Minor; -9 to -1	Minimal to High
Town of Harrells	Major to Minor; -9 to -2	Minimal to Very High
Town of Newton Grove	Major to Minor; -9 to -1	Minimal to High
Town of Roseboro	Major to Moderate; -8 to -4	Minimal to High
Town of Salemburg	Major to Minor; -9 to -2	Minimal to High

Town of Turkey	Major to Minor; -9 to -1	Minimal to Very High
Duplin County	Major to Minor; -8 to -1	Minimal to Very High
Town of Beulaville	Major to Minor; -9 to -1	Minimal to Very High
Town of Calypso	Major to Minor; -8 to -2	Minimal to Moderate
Town of Faison	Major to Minor; -8 to -1	Minimal to High
Town of Greenevers	Major to Minor; -9 to -2	Minimal to Very High
Town of Kenansville	Major to Minor; -9 to -2	Low to Very High
Town of Magnolia	Major to Minor; -9 to -2	Minimal to Very High
Town of Rose Hill	Major to Minor; -9 to -2	Minimal to High
Town of Teachey	Major to Minor; -9 to -2	Minimal to High
Town of Wallace	Major to Minor; -9 to -1	Minimal to High
Town of Warsaw	Major to Minor; -9 to -1	Minimal to Very High

Map below depicts Value of Buildings in High WUI Risk Areas.



Source: North Carolina Hazard Mitigation Plan

The following tables provide counts and values by jurisdiction relevant to Wildfire hazard vulnerability in the Sampson-Duplin Regional HMP Area.

Table 6-237: 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
Duplin									
Duplin County (Unincorporated Area)	39,197	15,032	38.3%	5,568	2,135	38.3%	2,876	1,103	38.4%
Town Of Beulaville	1,952	244	12.5%	277	35	12.6%	143	18	12.6%
Town Of Calypso	917	43	4.7%	130	6	4.6%	67	3	4.5%
Town Of Faison	1,462	118	8.1%	208	17	8.2%	107	9	8.4%
Town Of Greenevers	604	283	46.9%	86	40	46.5%	44	21	47.7%
Town Of Harrells	197	26	13.2%	28	4	14.3%	14	2	14.3%
Town Of Kenansville	930	134	14.4%	132	19	14.4%	68	10	14.7%
Town Of Magnolia	1,338	392	29.3%	190	56	29.5%	98	29	29.6%
Town Of Rose Hill	2,297	443	19.3%	326	63	19.3%	168	32	19%
Town Of Teachey	381	302	79.3%	54	43	79.6%	28	22	78.6%
Town Of Wallace	5,513	1,973	35.8%	784	281	35.8%	403	144	35.7%
Town Of Warsaw	3,891	1,260	32.4%	553	179	32.4%	285	92	32.3%
Subtotal Duplin	**58,679**	**20,250**	**34.5%**	**8336**	**2878**	**34.5%**	**4301**	**1485**	**34.5%**
Sampson									
City Of Clinton	10,707	4,291	40.1%	1,526	612	40.1%	743	298	40.1%
Sampson County (Unincorporated Area)	46,721	16,303	34.9%	6,661	2,324	34.9%	3,244	1,132	34.9%
Town Of Autryville	193	85	44%	28	12	42.9%	13	6	46.2%
Town Of Garland	989	590	59.7%	141	84	59.6%	69	41	59.4%
Town Of Newton Grove	1,146	117	10.2%	163	17	10.4%	80	8	10%
Town Of Roseboro	1,790	805	45%	255	115	45.1%	124	56	45.2%
Town Of Salemburg	1,158	530	45.8%	165	75	45.5%	80	37	46.2%
Town Of Turkey	463	7	1.5%	66	1	1.5%	32	0	0%
Subtotal Sampson	**63,167**	**22,728**	**36%**	**9005**	**3240**	**36%**	**4385**	**1578**	**36%**
TOTAL PLAN	**121,846**	**42,978**	**35.3%**	**17341**	**6118**	**35.3%**	**8686**	**3063**	**35.3%**

Source: GIS Analysis

Table 6-238: 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
Duplin															
Duplin County (Unincorporated Area)	27,381	7,990	29.2%	6,537	23.9%	$696,367,527	3,363	12.3%	$575,144,778	117	0.4%	$161,966,588	10,017	36.6%	$1,433,478,894
Town Of Beulaville	1,081	135	12.5%	109	10.1%	$10,812,508	22	2%	$9,448,562	5	0.5%	$7,104,086	136	12.6%	$27,365,157
Town Of Calypso	570	37	6.5%	19	3.3%	$2,264,090	18	3.2%	$1,557,378	0	0%	$0	37	6.5%	$3,821,468
Town Of Faison	827	58	7%	53	6.4%	$6,567,161	4	0.5%	$15,717,976	3	0.4%	$4,525,806	60	7.3%	$26,810,943
Town Of Greenevers	297	140	47.1%	125	42.1%	$15,527,587	11	3.7%	$1,894,277	6	2%	$4,258,371	142	47.8%	$21,680,236
Town Of Harrells	197	22	11.2%	16	8.1%	$2,182,698	6	3%	$5,362,491	0	0%	$0	22	11.2%	$7,545,189
Town Of Kenansville	548	59	10.8%	55	10%	$13,916,262	7	1.3%	$4,665,279	26	4.7%	$34,947,185	88	16.1%	$53,528,727
Town Of Magnolia	729	206	28.3%	183	25.1%	$19,557,628	23	3.2%	$3,212,928	1	0.1%	$1,803,742	207	28.4%	$24,574,299
Town Of Rose Hill	1,177	207	17.6%	189	16.1%	$30,333,885	20	1.7%	$8,070,442	0	0%	$0	209	17.8%	$38,404,327
Town Of Teachey	169	124	73.4%	117	69.2%	$16,657,766	5	3%	$1,576,718	8	4.7%	$2,900,420	130	76.9%	$21,134,904
Town Of Wallace	2,667	659	24.7%	781	29.3%	$226,030,808	80	3%	$113,681,885	14	0.5%	$9,000,896	875	32.8%	$348,713,589
Town Of Warsaw	1,832	561	30.6%	500	27.3%	$113,605,020	46	2.5%	$70,415,015	16	0.9%	$54,219,711	562	30.7%	$238,239,746
Subtotal Duplin	**37,475**	**10,198**	**27.2%**	**8,684**	**23.2%**	**$1,153,822,940**	**3,605**	**9.6%**	**$810,747,729**	**196**	**0.5%**	**$280,726,805**	**12,485**	**33.3%**	**$2,245,297,479**
Sampson															
City Of Clinton	5,368	2,026	37.7%	1,664	31%	$300,449,002	299	5.6%	$288,252,734	61	1.1%	$90,007,765	2,024	37.7%	$678,709,501
Sampson County (Unincorporated Area)	35,938	12,477	34.7%	7,981	22.2%	$994,947,411	4,350	12.1%	$603,252,348	146	0.4%	$192,121,813	12,477	34.7%	$1,790,321,573
Town Of Autryville	144	61	42.4%	54	37.5%	$8,128,889	3	2.1%	$1,189,034	4	2.8%	$4,691,189	61	42.4%	$14,009,111
Town Of Garland	701	384	54.8%	333	47.5%	$39,208,104	39	5.6%	$13,017,966	12	1.7%	$6,098,211	384	54.8%	$58,324,281
Town Of Newton Grove	819	81	9.9%	61	7.4%	$7,052,167	20	2.4%	$804,239	0	0%	$0	81	9.9%	$7,856,407
Town Of Roseboro	1,085	477	44%	372	34.3%	$55,467,563	83	7.6%	$145,444,571	21	1.9%	$17,094,644	476	43.9%	$218,006,778
Town Of Salemburg	787	324	41.2%	285	36.2%	$38,754,928	29	3.7%	$10,645,816	10	1.3%	$12,147,579	324	41.2%	$61,548,323
Town Of Turkey	355	24	6.8%	3	0.8%	$358,916	21	5.9%	$1,561,304	0	0%	$0	24	6.8%	$1,920,220
Subtotal Sampson	**45,197**	**15,854**	**35.1%**	**10,753**	**23.8%**	**$1,444,366,980**	**4,844**	**10.7%**	**$1,064,168,012**	**254**	**0.6%**	**$322,161,201**	**15,851**	**35.1%**	**$2,830,696,194**

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	82,672	26,052	31.5%	19,437	23.5%	$2,598,189,920	8,449	10.2%	$1,874,915,741	450	0.5%	$602,888,006	28,336	34.3%	$5,075,993,673

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 6-239: Critical Facilities Exposed to the Wildfire - Duplin County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	200	$191,959,791
Critical Manufacturing	Wildfire Hazard	61	$43,409,501
Emergency Services	Wildfire Hazard	2	$3,862,964
Food and Agriculture	Wildfire Hazard	3,119	$394,585,672
Government Facilities	Wildfire Hazard	46	$59,292,132
Healthcare and Public Health	Wildfire Hazard	1	$670,400
Transportation Systems	Wildfire Hazard	57	$46,141,098
All Categories	**Wildfire Hazard**	**3,486**	**$739,921,558**

Source: GIS Analysis

Table 6-240: Critical Facilities Exposed to the Wildfire - Town Of Beulaville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	6	$8,817,960
Critical Manufacturing	Wildfire Hazard	3	$1,577,176
Food and Agriculture	Wildfire Hazard	9	$1,523,466
Transportation Systems	Wildfire Hazard	8	$2,498,310
All Categories	**Wildfire Hazard**	**26**	**$14,416,912**

Source: GIS Analysis

Table 6-241: Critical Facilities Exposed to the Wildfire - Town Of Calypso

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	Wildfire Hazard	18	$1,557,378
All Categories	**Wildfire Hazard**	**18**	**$1,557,378**

Source: GIS Analysis

Table 6-242: Critical Facilities Exposed to the Wildfire - Town Of Faison

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	2	$14,404,075
Critical Manufacturing	Wildfire Hazard	2	$1,313,901
Government Facilities	Wildfire Hazard	3	$4,525,806
All Categories	**Wildfire Hazard**	**7**	**$20,243,782**

Source: GIS Analysis

Table 6-243: Critical Facilities Exposed to the Wildfire - Town Of Greenevers

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	9	$5,252,310
Critical Manufacturing	Wildfire Hazard	2	$512,546
Food and Agriculture	Wildfire Hazard	6	$387,792
All Categories	**Wildfire Hazard**	**17**	**$6,152,648**

Source: GIS Analysis

Table 6-244: Critical Facilities Exposed to the Wildfire - Town Of Harrells

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	1	$461,524
Critical Manufacturing	Wildfire Hazard	1	$4,616,316
Food and Agriculture	Wildfire Hazard	4	$284,651
All Categories	**Wildfire Hazard**	**6**	**$5,362,491**

Source: GIS Analysis

Table 6-245: Critical Facilities Exposed to the Wildfire - Town Of Kenansville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	1	$1,623,814
Commercial Facilities	Wildfire Hazard	8	$6,539,240
Energy	Wildfire Hazard	2	$693,030
Government Facilities	Wildfire Hazard	19	$28,353,253
Transportation Systems	Wildfire Hazard	1	$1,539,178

All Categories	**Wildfire Hazard**	**31**	**$38,748,515**

Source: GIS Analysis

Table 6-246: Critical Facilities Exposed to the Wildfire - Town Of Magnolia

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	1	$1,124,085
Critical Manufacturing	Wildfire Hazard	2	$425,101
Food and Agriculture	Wildfire Hazard	20	$1,663,742
Government Facilities	Wildfire Hazard	1	$1,803,742
All Categories	**Wildfire Hazard**	**24**	**$5,016,670**

Source: GIS Analysis

Table 6-247: Critical Facilities Exposed to the Wildfire - Town Of Rose Hill

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	5	$3,077,292
Critical Manufacturing	Wildfire Hazard	2	$916,035
Food and Agriculture	Wildfire Hazard	9	$928,863
Healthcare and Public Health	Wildfire Hazard	1	$659,511
Transportation Systems	Wildfire Hazard	3	$2,488,740
All Categories	**Wildfire Hazard**	**20**	**$8,070,441**

Source: GIS Analysis

Table 6-248: Critical Facilities Exposed to the Wildfire - Town Of Teachey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	7	$2,894,922
Emergency Services	Wildfire Hazard	1	$661,492
Government Facilities	Wildfire Hazard	4	$782,426
Transportation Systems	Wildfire Hazard	1	$138,298
All Categories	**Wildfire Hazard**	**13**	**$4,477,138**

Source: GIS Analysis

Table 6-249: Critical Facilities Exposed to the Wildfire - Town Of Wallace

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	35	$63,115,094
Critical Manufacturing	Wildfire Hazard	13	$11,577,336
Food and Agriculture	Wildfire Hazard	25	$1,765,538
Government Facilities	Wildfire Hazard	5	$2,225,116
Healthcare and Public Health	Wildfire Hazard	5	$9,351,576
Transportation Systems	Wildfire Hazard	12	$34,760,237
All Categories	**Wildfire Hazard**	**95**	**$122,794,897**

Source: GIS Analysis

Table 6-250: Critical Facilities Exposed to the Wildfire - Town Of Warsaw

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	26	$58,572,373
Critical Manufacturing	Wildfire Hazard	12	$5,044,668
Energy	Wildfire Hazard	2	$1,405,583
Food and Agriculture	Wildfire Hazard	5	$196,796
Government Facilities	Wildfire Hazard	9	$48,039,353
Healthcare and Public Health	Wildfire Hazard	1	$5,186,522
Transportation Systems	Wildfire Hazard	5	$5,093,756
All Categories	**Wildfire Hazard**	**60**	**$123,539,051**

Source: GIS Analysis

Table 6-251: Critical Facilities Exposed to the Wildfire - City Of Clinton

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	2	$2,208,706
Commercial Facilities	Wildfire Hazard	156	$187,433,898
Critical Manufacturing	Wildfire Hazard	18	$64,453,954
Emergency Services	Wildfire Hazard	2	$4,922,613
Energy	Wildfire Hazard	2	$25,786,082

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	Wildfire Hazard	107	$7,023,905
Government Facilities	Wildfire Hazard	63	$66,246,531
Healthcare and Public Health	Wildfire Hazard	12	$33,451,895
Transportation Systems	Wildfire Hazard	11	$15,665,910
All Categories	**Wildfire Hazard**	**373**	**$407,193,494**

Source: GIS Analysis

Table 6-252: Critical Facilities Exposed to the Wildfire - Sampson County (Unincorporated Area)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	260	$212,511,815
Communications	Wildfire Hazard	1	$2,213,378
Critical Manufacturing	Wildfire Hazard	34	$17,893,886
Emergency Services	Wildfire Hazard	2	$9,946,276
Food and Agriculture	Wildfire Hazard	4,128	$481,802,463
Government Facilities	Wildfire Hazard	52	$59,587,736
Healthcare and Public Health	Wildfire Hazard	2	$915,184
Transportation Systems	Wildfire Hazard	15	$8,392,630
All Categories	**Wildfire Hazard**	**4,494**	**$793,263,368**

Source: GIS Analysis

Table 6-253: Critical Facilities Exposed to the Wildfire - Town Of Autryville

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	3	$3,088,639
Critical Manufacturing	Wildfire Hazard	1	$703,484
Emergency Services	Wildfire Hazard	1	$1,730,105
Food and Agriculture	Wildfire Hazard	1	$28,231
Government Facilities	Wildfire Hazard	1	$329,762
All Categories	**Wildfire Hazard**	**7**	**$5,880,221**

Source: GIS Analysis

Table 6-254: Critical Facilities Exposed to the Wildfire - Town Of Garland

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	16	$5,120,406
Critical Manufacturing	Wildfire Hazard	1	$6,425,129
Emergency Services	Wildfire Hazard	1	$1,142,484
Food and Agriculture	Wildfire Hazard	26	$1,369,721
Government Facilities	Wildfire Hazard	3	$1,556,723
Healthcare and Public Health	Wildfire Hazard	3	$2,641,573
Transportation Systems	Wildfire Hazard	1	$860,141
All Categories	**Wildfire Hazard**	**51**	**$19,116,177**

Source: GIS Analysis

Table 6-255: Critical Facilities Exposed to the Wildfire - Town Of Newton Grove

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	1	$232,769
Food and Agriculture	Wildfire Hazard	19	$571,470
All Categories	**Wildfire Hazard**	**20**	**$804,239**

Source: GIS Analysis

Table 6-256: Critical Facilities Exposed to the Wildfire - Town Of Roseboro

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	47	$127,254,478
Critical Manufacturing	Wildfire Hazard	6	$20,547,542
Emergency Services	Wildfire Hazard	2	$524,800
Energy	Wildfire Hazard	1	$60,000,000
Food and Agriculture	Wildfire Hazard	35	$1,959,639
Government Facilities	Wildfire Hazard	9	$7,987,168
Healthcare and Public Health	Wildfire Hazard	3	$3,496,822
Transportation Systems	Wildfire Hazard	2	$768,766
All Categories	**Wildfire Hazard**	**105**	**$222,539,215**

Source: GIS Analysis

Table 6-257: Critical Facilities Exposed to the Wildfire - Town Of Salemburg

Sector	Event	Number of Buildings At Risk	Estimated Damages
Commercial Facilities	Wildfire Hazard	7	$6,073,487
Food and Agriculture	Wildfire Hazard	21	$1,394,790
Government Facilities	Wildfire Hazard	9	$13,010,393
Healthcare and Public Health	Wildfire Hazard	1	$1,172,535
Transportation Systems	Wildfire Hazard	1	$1,142,190
All Categories	**Wildfire Hazard**	**39**	**$22,793,395**

Source: GIS Analysis

Table 6-258: Critical Facilities Exposed to the Wildfire - Town Of Turkey

Sector	Event	Number of Buildings At Risk	Estimated Damages
Food and Agriculture	Wildfire Hazard	21	$1,561,304
All Categories	**Wildfire Hazard**	**21**	**$1,561,304**

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 6-259: Critical Facilities Exposed to the Wildfire (by Sector)

Sector	Event	Number of Buildings At Risk	Estimated Damages
Banking and Finance	Wildfire Hazard	3	$3,832,520
Commercial Facilities	Wildfire Hazard	790	$897,934,158
Communications	Wildfire Hazard	1	$2,213,378
Critical Manufacturing	Wildfire Hazard	158	$179,416,575
Emergency Services	Wildfire Hazard	11	$22,790,734
Energy	Wildfire Hazard	7	$87,884,695
Food and Agriculture	Wildfire Hazard	7,573	$898,605,421
Government Facilities	Wildfire Hazard	224	$293,740,141

Healthcare and Public Health	Wildfire Hazard	29	$57,546,018
Transportation Systems	Wildfire Hazard	117	$119,489,254
All Categories	**Wildfire Hazard**	**8,913**	**$2,563,452,894**

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 6-260: High Potential Loss Properties Exposed to the Wildfire - Duplin County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	38	$81,505,279
Government	Wildfire Hazard	15	$52,476,513
Industrial	Wildfire Hazard	5	$22,699,806
Religious	Wildfire Hazard	33	$79,513,783
Residential	Wildfire Hazard	3	$3,529,443
All Categories	**Wildfire Hazard**	**94**	**$239,724,824**

Source: GIS Analysis

Table 6-261: High Potential Loss Properties Exposed to the Wildfire - Town Of Beulaville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$3,496,954
Religious	Wildfire Hazard	3	$4,661,234
Residential	Wildfire Hazard	1	$2,135,736
All Categories	**Wildfire Hazard**	**5**	**$10,293,924**

Source: GIS Analysis

Table 6-262: High Potential Loss Properties Exposed to the Wildfire - Town Of Faison

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$13,562,235
Government	Wildfire Hazard	2	$4,086,675
All Categories	**Wildfire Hazard**	**3**	**$17,648,910**

Source: GIS Analysis

Table 6-263: High Potential Loss Properties Exposed to the Wildfire - Town Of Greenevers

Category	Event	Number of Buildings At Risk	Estimated Damages
Religious	Wildfire Hazard	2	$3,039,205
Residential	Wildfire Hazard	1	$1,636,693
All Categories	**Wildfire Hazard**	**3**	**$4,675,898**

Source: GIS Analysis

Table 6-264: High Potential Loss Properties Exposed to the Wildfire - Town Of Harrells

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	Wildfire Hazard	1	$4,616,316
All Categories	**Wildfire Hazard**	**1**	**$4,616,316**

Source: GIS Analysis

Table 6-265: High Potential Loss Properties Exposed to the Wildfire - Town Of Kenansville

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	2	$3,162,992
Government	Wildfire Hazard	5	$24,479,488
Religious	Wildfire Hazard	1	$3,565,170
Residential	Wildfire Hazard	1	$2,750,874
All Categories	**Wildfire Hazard**	**9**	**$33,958,524**

Source: GIS Analysis

Table 6-266: High Potential Loss Properties Exposed to the Wildfire - Town Of Magnolia

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$1,124,085
Government	Wildfire Hazard	1	$1,803,742
All Categories	**Wildfire Hazard**	**2**	**$2,927,827**

Source: GIS Analysis

Table 6-267: High Potential Loss Properties Exposed to the Wildfire - Town Of Rose Hill

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	2	$2,828,160
Residential	Wildfire Hazard	2	$4,129,096
All Categories	**Wildfire Hazard**	**4**	**$6,957,256**

Source: GIS Analysis

Table 6-268: High Potential Loss Properties Exposed to the Wildfire - Town Of Wallace

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	18	$86,848,929
Government	Wildfire Hazard	1	$1,230,030
Industrial	Wildfire Hazard	2	$8,369,180
Religious	Wildfire Hazard	2	$4,307,634
Residential	Wildfire Hazard	6	$123,267,646
All Categories	**Wildfire Hazard**	**29**	**$224,023,419**

Source: GIS Analysis

Table 6-269: High Potential Loss Properties Exposed to the Wildfire - Town Of Warsaw

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	8	$55,237,485
Government	Wildfire Hazard	3	$46,050,316
Religious	Wildfire Hazard	3	$4,231,015
Residential	Wildfire Hazard	2	$38,206,952
All Categories	**Wildfire Hazard**	**16**	**$143,725,768**

Source: GIS Analysis

Table 6-270: High Potential Loss Properties Exposed to the Wildfire - City Of Clinton

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	Wildfire Hazard	1	$1,730,334
Commercial	Wildfire Hazard	42	$171,185,440
Government	Wildfire Hazard	15	$54,157,569

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	Wildfire Hazard	9	$61,759,664
Religious	Wildfire Hazard	6	$19,463,481
Residential	Wildfire Hazard	3	$3,989,660
Utilities	Wildfire Hazard	2	$25,786,082
All Categories	**Wildfire Hazard**	**78**	**$338,072,230**

Source: GIS Analysis

Table 6-271: High Potential Loss Properties Exposed to the Wildfire - Sampson County (Unincorporated Area)

Category	Event	Number of Buildings At Risk	Estimated Damages
Agricultural	Wildfire Hazard	1	$1,051,683
Commercial	Wildfire Hazard	28	$61,254,194
Government	Wildfire Hazard	9	$55,286,051
Industrial	Wildfire Hazard	6	$22,594,119
Religious	Wildfire Hazard	48	$98,200,606
Residential	Wildfire Hazard	2	$2,562,757
All Categories	**Wildfire Hazard**	**94**	**$240,949,410**

Source: GIS Analysis

Table 6-272: High Potential Loss Properties Exposed to the Wildfire - Town Of Autryville

Category	Event	Number of Buildings At Risk	Estimated Damages
Government	Wildfire Hazard	1	$1,730,105
Religious	Wildfire Hazard	2	$2,631,321
All Categories	**Wildfire Hazard**	**3**	**$4,361,426**

Source: GIS Analysis

Table 6-273: High Potential Loss Properties Exposed to the Wildfire - Town Of Garland

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	1	$2,277,061
Government	Wildfire Hazard	1	$1,142,484

Category	Event	Number of Buildings At Risk	Estimated Damages
Industrial	Wildfire Hazard	1	$6,425,129
All Categories	**Wildfire Hazard**	**3**	**$9,844,674**

Source: GIS Analysis

Table 6-274: High Potential Loss Properties Exposed to the Wildfire - Town Of Roseboro

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	7	$11,450,243
Government	Wildfire Hazard	4	$6,954,539
Industrial	Wildfire Hazard	5	$120,455,475
Religious	Wildfire Hazard	1	$4,647,769
Residential	Wildfire Hazard	1	$1,357,888
Utilities	Wildfire Hazard	1	$60,000,000
All Categories	**Wildfire Hazard**	**19**	**$204,865,914**

Source: GIS Analysis

Table 6-275: High Potential Loss Properties Exposed to the Wildfire - Town Of Salemburg

Category	Event	Number of Buildings At Risk	Estimated Damages
Commercial	Wildfire Hazard	5	$8,789,976
Government	Wildfire Hazard	3	$7,972,656
Religious	Wildfire Hazard	1	$2,052,460
All Categories	**Wildfire Hazard**	**9**	**$18,815,092**

Source: GIS Analysis

6.2.15 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.

6.3 Priority Risk Index

The purpose of the PRI is to categorize and prioritize all potential hazards for the Region as high, moderate, or low risk. The summary hazard classifications generated through the use of the PRI allows for the prioritization of those high hazard risks for mitigation planning purposes.

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 weighting factor as summarized below in Table 6.20. The sum of all five categories equals the final PRI value, demonstrated in the equation below (the highest possible PRI value is 4.0).

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

Table 6-276: Priority Risk Index for the Region

Risk Assessment Category	Level	Degree of Risk Criteria	Index	Weight
PROBABILITY **What is the likelihood of a hazard event occurring in a given year?**	Unlikely	Less than 1% Annual probability	1	**30%**
	Possible	Between 1 & 10% Annual probability	2	
	Likely	Between 10 &100% Annual probability	3	
	Highly likely	100% Annual probability	4	
IMPACT **In terms of injuries, damage, or death, would you anticipate impacts to be minor, limited, critical, or catastrophic when a significant hazard event occurs?**	Minor	Very few injuries, if any. Only minor property damage & minimal disruption on quality of life. Temporary shutdown of critical facilities.	1	**30%**
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for > 1 day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for > 1 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 > 30 days.	4	
SPATIAL EXTENT	Negligible	Less than 1% of area affected	1	**20%**
	Small	Between 1 & 10% of area affected	2	

Risk Assessment Category	Level	Degree of Risk Criteria	Index	Weight
How large of an area could be impacted by a hazard event? Are impacts localized or regional?	Moderate	Between 10 & 50% of area affected	3	
	Large	Between 50 & 100% of area affected	4	
WARNING TIME **Is there usually some lead time associated with the hazard event? Have warning measures been implemented?**	More than 24 Hrs	Self-Defined	1	**10%**
	12 to 24 Hrs	Self-Defined	2	
	6 to 12 Hrs	Self-Defined	3	
	Less than 6 Hrs	Self-Defined	4	
DURATION **How long does the hazard event usually last?**	Less than 6 Hrs	Self-Defined	1	**10%**
	Less than 24 Hrs	Self-Defined	2	
	Less than 1 week	Self-Defined	3	
	More than 1 week	**Self-Defined**	**4**	

6.3.1 Priority Risk Index Results

Table 6-277Table 6-277 summarizes the degree of risk assigned to each identified hazard using the PRI method described above.

Table 6-277: Summary of PRI Results

Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	PRI Score
Dam Failure	Unlikely	Limited	Small	Less than 6 hrs	Less than 6 hrs	**1.8**
Drought	Highly Likely	Minor	Large	More than 24 hrs	More than 1 week	**2.8**
Earthquake	Possible	Limited	Moderate	Less than 6 hrs	Less than 6 hrs	**2.3**
Hurricane/Tropical Storm	Likely	Critical	Large	More than 24 hrs	Less than 24 hrs	**2.9**
Inland Flooding: 100-/500-year	Possible	Critical	Moderate	6 to 12 hours	Less than 1 week	**2.7**
Severe Weather (thunderstorm wind, lightning, & hail)	Highly Likely	Critical	Moderate	6 to 12 hours	Less than 6 hrs	**3.1**
Tornado	Likely	Critical	Small	Less than 6 hrs	Less than 6 hrs	**2.7**
Wildfire	Highly Likely	Limited	Small	Less than 6 hrs	Less than 1 week	**2.9**
Winter Storm	**Highly Likely**	**Minor**	**Moderate**	**More than 24 hrs**	**Less than 1 week**	**2.5**

6.3.2 Final Risk Classifications

The results from the PRI have been classified into three categories based on the assigned risk value:

- **Low Risk** – Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.

- **Medium Risk** – Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High Risk** – Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread.

Table 6-278: Summary of Hazard Risk Classification

High Risk (> 2.5)	Severe Weather Hurricane/Tropical Storm Wildfire Drought Inland Flooding: 100-/500-year Tornado
Moderate Risk (2.0 – 2.5)	Winter Storm Earthquake
Low Risk (< 2.0)	Dam Failure

SECTION 7: CAPABILITY ASSESSMENT

This section discusses the capability of the Region to implement hazard mitigation activities. It consists of the following four subsections:

- 7.1 Overview
- 7.2 Conducting the Capability Assessment
- 7.3 Capability Assessment Findings
- 7.4 Conclusions on Local Capability

7.1 Overview

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. As in any planning process, it is important to try to establish which goals, objectives, and 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, and 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. *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 Plan Area serves as a critical planning step and an integral part of the foundation for designing an effective *Mitigation Strategy.* Coupled with the *Risk Assessment, the Capability Assessment* helps identify and target meaningful mitigation actions for incorporation into 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 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 Plan counties, a detailed *Local Capability Assessment Survey* was distributed to members of the MAC at the second planning committee meeting. The survey questionnaire requested information on a variety of "capability indicators" such as existing local plans, studies, reports, technical information, 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 Region's fiscal, administrative, and technical capabilities, such as access to local budgetary and personnel resources for mitigation purposes, as well as any existing education and outreach programs that can be used to promote mitigation. Survey respondents were also asked to comment on the current political climate with respect to hazard mitigation, an important consideration for any local planning or decision-making process.

At a minimum, the survey results provide an extensive and consolidated inventory of existing local plans, ordinances, programs, and resources in place or under development, in addition to their overall effect

on hazard loss reduction. In completing the survey, local officials were also required to conduct a self-assessment of their jurisdiction's specific capabilities. The survey instrument thereby not only helps accurately assess the degree of local capability, but it also serves as a good source of introspection for counties and local jurisdictions that want to improve their capabilities as identified gaps, weaknesses, or conflicts can be recast as opportunities for specific actions to be proposed as part of the hazard mitigation strategy

The information provided in response to 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. According to the scoring system, each capability indicator was assigned a point value based on its relevance to hazard mitigation. Additional points were added based on the jurisdiction's self-assessment of their own planning and regulatory capability, administrative and technical capability, fiscal capability, education and outreach capability, and political capability.

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. In combination with the narrative responses provided by local officials, 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 Plan Area to implement hazard mitigation activities. All information is based upon the input provided by local government officials through the MAC.

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, in addition to 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 or programs in place or under development for the 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 Region. Listed below are existing plans, studies, reports and technical information reviewed for plan development and update. Relevant information such as, hazard analysis, NFIP data, building codes, ordinances, existing plans, studies, reports, technical information and communication procedures, existing data, and shared objectives were reviewed and incorporated into the mitigation plan via coordination with relevant agencies, prioritizing hazards, prioritizing mitigation actions. The jurisdictions of Harrells and Roseboro do not participate in the NFIP because they do not have a designated Special Flood Hazard Area.

A checkmark (✓) 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 incorporating the requirements of the Hazard Mitigation Plan.

Table 7-1: Relevant Plans, Ordinances, and Programs

Jurisdiction	Hazard Mitigation Plan	Comprehensive Land Use Plan	Floodplain Management Plan	Open Space Management Plan	Stormwater Management Plan	Emergency Operations Plan	SARA Title III Plan	Radiological Emergency Plan	Continuity of Operations Plan	Evacuation Plan	Disaster Recovery Plan	Capital Improvements Plan	Economic Development Plan	Historic Preservation Plan	Transportation Plan	Flood Damage Prevention Ordinance	Zoning Ordinance	Subdivision Ordinance	Site Plan Review Requirements	Unified Development Ordinance	Post-Disaster Redevelopment Ordinance	Building Code	Fire Code	Community Wildfire Protection Plan	National Flood Insurance Program	Community Rating System
Sampson County	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Autryville	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Clinton	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Garland	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓			
Harrells	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓			
Newton Grove	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Roseboro	✓	✓				✓						✓	✓				✓	✓				✓	✓	✓		
Salemburg	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Turkey	✓			✓		✓	✓	✓	✓		✓	✓	✓				✓	✓	✓			✓	✓		✓	
Duplin County	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓		✓	
Beulaville	✓	✓			✓							✓			✓	✓	✓	✓	✓			✓	✓		✓	
Calypso	✓	✓			✓											✓	✓	✓				✓	✓		✓	
Faison	✓		✓			✓	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓		✓	
Greenevers	✓								✓								✓					✓				
Kenansville	✓					✓									✓	✓	✓	✓	✓	✓						
Magnolia	✓		✓			✓	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓			✓	✓		✓	
Rose Hill	✓	✓	✓			✓	✓		✓							✓	✓	✓	✓			✓	✓		✓	

Jurisdiction	Hazard Mitigation Plan	Comprehensive Land Use Plan	Floodplain Management Plan	Open Space Management Plan	Stormwater Management Plan	Emergency Operations Plan	SARA Title III Plan	Radiological Emergency Plan	Continuity of Operations Plan	Evacuation Plan	Disaster Recovery Plan	Capital Improvements Plan	Economic Development Plan	Historic Preservation Plan	Transportation Plan	Flood Damage Prevention Ordinance	Zoning Ordinance	Subdivision Ordinance	Site Plan Review Requirements	Unified Development Ordinance	Post-Disaster Redevelopment Ordinance	Building Code	Fire Code	Community Wildfire Protection Plan	National Flood Insurance Program	Community Rating System
Teachey	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓			✓	✓			
Wallace	✓	✓	✓	✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓
Warsaw	✓	✓	✓	✓		✓						✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	

A more detailed discussion on the Region's planning and regulatory capability follows, along with the incorporation of additional information based on the narrative comments provided by local officials in response to the survey questionnaire.

7.3.1.1 Emergency Management

Hazard mitigation is widely recognized as one of the four primary phases of emergency management. The three other phases are 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 a disaster event, such as elevation of flood-prone structures or through the continuous enforcement of policies that prevent and regulate development that is vulnerable to hazards because of its location, design, or other characteristics. Mitigation opportunities can also be identified during immediate preparedness or response activities (such as installing storm shutters in advance of a hurricane), and in many instances during the long-term recovery and redevelopment process following a disaster 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 **Local Capability Assessment Survey** asked several questions across a range of emergency management plans in order to assess the Area'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 in some cases 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.

- 20 of the 20 participating jurisdictions in this regional planning effort have previously been covered by their county's multi-jurisdictional 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 event. 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.

- 11 of the 20 participating jurisdictions have a disaster recovery plan either in place or under development. (5 jurisdictions have one in place; 1 have one under development; 5 covered under a county plan)

Emergency Operations Plan

An emergency operations plan outlines responsibility and the means by which resources are deployed during and following an emergency or disaster.

- 18 of the 20 participating jurisdictions have an emergency operations plan either in place or are covered under a county plan. (18 jurisdictions have one in place; 1 have one under development; 16 covered under a county plan)

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.

- 14 of the 20 participating jurisdictions have a continuity of operations plan in place.

7.3.1.2 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. **Local Capability Assessment Survey** also asked questions regarding general planning capabilities and the degree to which hazard mitigation is integrated into other ongoing planning efforts in the Plan Area.

Comprehensive/General Plan

A comprehensive land use plan, or general 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.

- 17 of the 20 participating jurisdictions have a comprehensive land use plan either in place or under development (15 jurisdictions have one in place; 1 have one under development; 14 covered under a county plan)

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.

- 15 of the 20 participating jurisdictions have a capital improvements plan in place or under development.

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.

- 3 of the 20 participating jurisdictions have an historic preservation plan in place or under development.

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.

- 19 of the 20 participating jurisdictions have a zoning ordinance in place or under development.

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.

- 18 of the 20 participating jurisdictions have a subdivision ordinance in place or under development.

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.

- 20 of the 20 participating jurisdictions have building codes in place.

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). In North Carolina, the North Carolina Department of Insurance assesses the building codes in effect in a 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 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.

7.3.1.3 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 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 *Capability Assessment* as a key indicator for measuring local capability.

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 jurisdiction taking part in the Region's plan update.

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
Sampson							
City of Clinton	12/06/74	6/20/18	22	$6,209,000	$25,330	17	**$250,741**
Sampson County (Unincorporated Area)	12/20/74	12/6/19	78	$16,141,700	$44,420	60	**$1,830,562**
Town of Autryville	07/25/75	6/20/18	0	0	0	1	**$7,236**
Town of Garland*	6/21/74	6/20/18	0	0	0	0	**0**
Town of Newton Grove	01/05/07	6/20/18	3	$735,000	$4,483	2	**$197,215**
Town of Roseboro*	-	-	0	0	0	0	**0**
Town of Salemburg	01/05/07	6/20/18	0	0	0	0	**0**
Town of Turkey	01/05/07	2/16/07	0	0	0	0	**0**
Subtotal Sampson	**-**	**-**	**103**	**$23,085,700**	**$74,233**	**80**	**$2,285,754**
Duplin							
Duplin County (Unincorporated Area)	02/24/78	6/19/20	322	$81,107,700	$170,399	147	**$4,016,725**
Town of Beulaville	02/16/06	6/20/18	3	$595,000	$927	1	**$14,554**
Town of Calypso	02/16/06	6/20/18	2	$455,000	$651	1	**$11,107**
Town of Faison	7/4/89	02/16/07	1	$280,000	$351	0	**$0**
Town of Greenevers	02/16/06	(NSFHA)	1	$350,000	$415	0	**0**
Town of Harrells*	-	-	0	0	0	0	**0**

Town of Kenansville	06/24/77	7/17/86	5	$1,710,000	$5,953	0	**0**
Town of Magnolia	02/16/06	02/16/07	0	0	0	0	**0**
Town of Rose Hill	02/16/06	02/16/07	1	$70,000	$217	0	**0**
Town of Teachey	02/16/06	(NSFHA)	0	0	0	0	**0**
Town of Wallace	06/14/74	6/20/18	21	$5,121,000	$14,593	22	**$462,176**
Town of Warsaw	02/16/06	6/20/18	6	$1,505,000	$2,016	1	**$10,148**
Subtotal Duplin	-	-	**362**	**$91,193,700**	**$195,522**	**172**	**$4,514,710**
TOTAL PLAN	-	-	**465**	**$114,279,400**	**$269,755**	**252**	**$6,800,464**

*(does not participate in NFIP)

Jurisdictions above that participate in the National Flood Insurance Program will continue to comply with required provisions of the program and work to adequately comply in the future utilizing a number of strategies. Floodplain management is managed through zoning ordinances, building code restrictions, and the county building inspection program. The jurisdictions will coordinate with NCEM and FEMA to develop maps and regulations related to Special Flood Hazard Areas within their jurisdictional boundaries and, through a consistent monitoring process, will design and improve their floodplain management program in a way that reduces the risk of flooding to people and property. Adoption of floodplain management requirements, including regulating new construction in th SFHA's; floodplain identification and mapping will continue to be implemented. Each county and its municipalities while participating in the National Flood Insurance Program comply with regulations as demonstrated in regular Community Assessment Visits.

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, adding extra local measures to provide protection from flooding. All of 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. Class ratings, which range from 10 to 1, are tied to flood insurance premium reductions as shown in Table 7-3 As class ratings improve (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%
10	0%

Source: NFIP Community Rating System.

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 intended to make the CRS more user friendly, and extensive technical assistance available for communities who request it.

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.

- 19 of the 20 participating jurisdictions have a floodplain management plan in place.

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.

- 17 of the 20 participating jurisdictions have an open space management plan in place or under development.

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.

- 14 of the 20 participating jurisdictions have a stormwater management plan in place.

7.3.2 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 Local Capability Assessment Survey was used to capture information on administrative and technical capability through the identification of available staff and personnel resources. *Local 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 *Local Capability Assessment Survey* results for the Plan Area with regard to relevant staff and personnel resources. A checkmark indicates the presence of a staff member(s) in that jurisdiction with the specified knowledge or skill.

Table 7-4: Relevant Staff/Personnel Resources

Jurisdiction	Planners with knowledge of land development and 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	Building Official	Emergency manager	Floodplain manager	Land surveyors	Scientist familiar with the hazards of the community	Staff with education or expertise to assess the community's vulnerability to hazards	Personnel skilled in Geographic Information Systems (GIS) and/or HAZUS	Resource development staff or grant writers	Maintenance programs to reduce risk	Warning systems/services	Mutual Aid Agreements
Sampson County	✓	✓		✓	✓				✓		✓	✓	✓	✓
Autryville	✓	✓		✓	✓				✓		✓	✓	✓	✓
Clinton	✓	✓		✓	✓				✓		✓	✓	✓	✓
Garland	✓	✓		✓	✓				✓		✓	✓	✓	✓
Harrells	✓	✓		✓	✓				✓		✓	✓	✓	✓
Newton Grove	✓	✓		✓	✓				✓		✓	✓	✓	✓
Roseboro	✓	✓		✓	✓				✓	✓		✓	✓	✓
Salemburg	✓	✓		✓	✓				✓		✓	✓	✓	✓
Turkey	✓	✓		✓	✓				✓		✓	✓	✓	✓
Duplin County	✓	✓	✓	✓	✓	✓				✓			✓	✓
Beulaville	✓	✓	✓	✓	✓	✓				✓			✓	✓
Calypso	✓	✓	✓	✓	✓	✓				✓			✓	✓
Faison	✓	✓	✓	✓	✓	✓				✓			✓	✓
Greenevers	✓	✓	✓	✓	✓	✓				✓			✓	✓
Kenansville	✓	✓	✓	✓	✓	✓					✓			✓

Jurisdiction	Planners with knowledge of land development and 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	Building Official	Emergency manager	Floodplain manager	Land surveyors	Scientist familiar with the hazards of the community	Staff with education or expertise to assess the community's vulnerability to hazards	Personnel skilled in Geographic Information Systems (GIS) and/or HAZUS	Resource development staff or grant writers	Maintenance programs to reduce risk	Warning systems/services	Mutual Aid Agreements
Magnolia	✓	✓	✓	✓	✓	✓				✓			✓	✓
Rose Hill	✓	✓	✓	✓	✓	✓			✓		✓	✓		✓
Teachey	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
Wallace	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓
Warsaw	✓	✓		✓	✓	✓			✓	✓	✓	✓	✓	✓

7.3.3 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 houses, which can require a substantial commitment from local, state, and federal funding sources.

The *Local 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 Plan Area with regard to relevant fiscal resources. A checkmark indicates that the given fiscal resource is locally available for hazard mitigation purposes (including match funds for state and federal mitigation grant funds).

Table 7-5: Relevant Fiscal Resources

Jurisdiction	Capital Improvement Programming	Community Development Block Grants (CDBG)	Special Purpose Taxes	Gas/Electric Utility Fees	Water/Sewer Fees	Stormwater Utility Fees	Development Impact Fees	General Obligation Bonds	Revenue Bonds	Special Tax Bonds	Other
Sampson County					✓						
Autryville											
Clinton											
Garland											
Harrells											
Newton Grove											
Roseboro	✓	✓			✓						✓
Salemburg											
Turkey											
Duplin County	✓	✓	✓		✓						
Beulaville					✓						
Calypso		✓			✓						
Faison		✓			✓						
Greenevers											

Jurisdiction	Capital Improvement Programming	Community Development Block Grants (CDBG)	Special Purpose Taxes	Gas/Electric Utility Fees	Water/Sewer Fees	Stormwater Utility Fees	Development Impact Fees	General Obligation Bonds	Revenue Bonds	Special Tax Bonds	Other
Kenansville	✓				✓						
Magnolia											
Rose Hill	✓	✓			✓			✓	✓		
Teachey		✓		✓	✓	✓	✓				
Wallace	✓	✓	✓		✓	✓		✓	✓	✓	
Warsaw	✓	✓			✓	✓		✓	✓	✓	

Source: Local Capability Assessment Survey.

7.3.4 Education and Outreach Capability

This type of local capability refers to education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information. Examples include natural disaster or safety related school programs; participation in community programs such as Firewise or StormReady; and activities conducted as part of hazard awareness campaigns such as a Tornado Awareness Month.

Table 7-6 provides a summary of the results for the Plan Area with regard to relevant education and outreach resources. A checkmark indicates that the given resource is locally available for hazard mitigation purposes.

Table 7-6: Education and Outreach Resources

Jurisdiction	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Natural disaster or safety related school programs	Storm Ready certification	Firewise Communities certification	Public-private partnership initiatives addressing disaster-related issues	Other
Sampson County		✓		✓			

Jurisdiction	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Natural disaster or safety related school programs	Storm Ready certification	Firewise Communities certification	Public-private partnership initiatives addressing disaster-related issues	Other
Autryville							
Clinton							
Garland							
Harrells							
Newton Grove							
Roseboro							✓
Salemburg							
Turkey							
Duplin County	✓	✓		✓		✓	
Beulaville							
Calypso							
Faison							
Greenevers							
Kenansville							
Magnolia							
Rose Hill		✓					
Teachey		✓		✓			
Wallace	✓	✓				✓	

7.3.5 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 seen as 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 *Local Capability Assessment Survey* was used to capture information on political capability of the Plan Area. Survey respondents were asked to identify some 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 (e.g., building codes, floodplain management, etc.). Local Self-Assessment

In addition to the inventory and analysis of specific local capabilities, the *Local Capability Assessment Survey* asked counties and local jurisdictions within the Plan Area to conduct a self-assessment of their perceived capability to implement hazard mitigation activities. As part of this process, local officials were encouraged to consider the barriers to implementing proposed mitigation strategies in addition to the mechanisms that could enhance or further such strategies. In response to the survey questionnaire, county officials classified each of the aforementioned capabilities as either "limited," "moderate," or "high."

Table 7-7 summarizes the results of the self-assessment for the Plan Area.

Table 7-7: Self-Assessment of Capability

Jurisdiction	Plans, Ordinances, Codes and Programs	Administrative and Technical Capability	Fiscal Capability	Education and Outreach Capability	Political Capability	Overall Capability
Sampson County	High	High	Moderate	High	High	High
Autryville	Limited	Limited	Limited	Limited	Limited	Limited
Clinton	Limited	Limited	Limited	Limited	Limited	Limited
Garland	Limited	Limited	Limited	Limited	Limited	Limited
Harrells	Limited	Limited	Limited	Limited	Limited	Limited
Newton Grove	Limited	Limited	Limited	Limited	Limited	Limited
Roseboro	Limited	Moderate	Moderate	Limited	Limited	Limited
Salemburg	Limited	Limited	Limited	Limited	Limited	Limited
Turkey	Limited	Limited	Limited	Limited	Limited	Limited
Duplin County	Moderate	Moderate	Limited	Moderate	Moderate	Moderate

Jurisdiction	Plans, Ordinances, Codes and Programs	Administrative and Technical Capability	Fiscal Capability	Education and Outreach Capability	Political Capability	Overall Capability
Beulaville	Limited	Limited	Limited	Limited	Limited	Limited
Calypso	Limited	Limited	Moderate	Moderate	High	Moderate
Faison	Limited	Limited	Limited	Limited	Limited	Limited
Greenevers	Limited	Limited	Limited	Limited	Limited	Limited
Kenansville	Moderate	High	Limited	Moderate	High	Moderate
Magnolia	Limited	Limited	Limited	Limited	Limited	Limited
Rose Hill	Limited	Limited	Limited	Limited	Limited	Limited
Teachey	High	High	High	High	High	High
Wallace	Moderate	Moderate	Limited	Moderate	Moderate	Moderate
Warsaw	Moderate	High	Limited	Moderate	Moderate	Moderate

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 Local Capability Assessment Survey. This methodology attempts to assess the overall level of capability of the Plan Area to implement hazard mitigation actions. *Local Capability Assessment Survey* This methodology attempts to assess the overall level of capability of the Plan Area to implement hazard mitigation actions.

Table 7-8 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 34, which falls into the moderate capability ranking.

Table 7-8: Capability Assessment Results

Jurisdiction	Overall Capability Score	Overall Capability Rating
Sampson County	47	Moderate
Autryville	25	Limited

Clinton	25	Limited
Garland	25	Limited
Harrells	25	Limited
Newton Grove	25	Limited
Roseboro	31	Moderate
Salemburg	25	Limited
Turkey	25	Limited
Duplin County	54	Moderate
Beulaville	27	Limited
Calypso	32	Moderate
Faison	27	Limited
Greenevers	15	Limited
Kenansville	31	Moderate
Magnolia	27	Limited
Rose Hill	40	Moderate
Teachey	65	High
Wallace	59	Moderate
Warsaw	57	Moderate

Source: Local Capability Assessment Survey.

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.

SECTION 8: MITIGATION STRATEGY

Section 8 discusses the mitigation strategy process and mitigation action plan for the Regional Hazard Mitigation Plan and outlines all the goals and strategies that will be implemented at the county and municipal level. This chapter also describes how the MAC met the mitigation strategy requirements from the 10-step planning process. This chapter consists of the following subsections:

- 8.1 Mitigation Strategy Overview
- 8.2 Goals
- 8.3 Identification and Analysis of Mitigation Actions

Requirement §201.6(c)(3)(ii)
[The mitigation strategy section shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

8.1 Mitigation Strategy Overview

The results of the planning process, the risk assessment, the goal setting, and the identification of mitigation actions led to the mitigation strategy and mitigation action plan for this HMP. This plan includes a mitigation strategy that analyzes actions that the jurisdictions consider reducing the impacts of hazards identified in the risk assessment and identifies the actions that the jurisdictions intends to implement. All strategies relating to regional initiatives were developed through this planning process. The modifications of these plan elements were based on the direction and input of the MAC and a range of stakeholders. All actions have been updated and are intended to reflect the current needs and desires of the MAC. The mitigation strategies developed through the planning process will be implemented at the county, and in some cases, municipal level. Sampson and Duplin Counties will take the lead in undertaking all strategies outlined in this plan, with support and assistance from all participating jurisdictions.

The following umbrella mitigation strategy was used during development of this HMP:

- **Communicate** the hazard information collected and analyzed through this planning process as well as MAC success stories so that the community better understands what can happen where and what they themselves can do to be better prepared.
- **Implement** the action plan recommendations of this plan.
- **Use** existing rules, regulations, policies, and procedures already in existence.
- **Monitor** multi-objective management opportunities so that funding opportunities may be shared and packaged, and broader constituent support may be garnered.

As the MAC worked through the development of this action plan, the group focused on six primary mitigation focus areas for the Region, as well as each participating jurisdiction. These focus areas define the various aspects of mitigation and provide guidance toward the development of a truly comprehensive solution to mitigation planning.

1. **Prevention Mechanisms** include regulatory methods such as planning and zoning, building regulations, open space planning, land development regulations, and stormwater management.

2. **Property Protection** actions diminish the risk of structural damage through acquisition of land, relocation of buildings, modifying high-risk structures, and floodproofing high-risk structures.
3. **Natural Resource Protection** can soften hazard impacts through mechanisms such as erosion and sediment control or wetlands protection.
4. **Emergency Services** measures include warning, response capabilities, Town critical infrastructures protection (with emphasis on new and existing buildings and infrastructure), and health and safety maintenance.
5. **Structural Mitigation** controls natural hazards through projects such as reservoirs, diversions, channel modifications and storm sewers.
6. **Public Education** includes providing hazard maps and information, outreach programs, real estate disclosure, technical assistance and education.

8.1.1 Mitigation Plan Progress

Public Participation

All participating jurisdictions work very closely with citizens to provide programs and support that will improve the Region's resiliency to natural disasters. Over the last five years, the Region has taken significant steps to improve upon existing emergency service functions and programs. The public was an integral part in carrying out all these efforts. All issues relating to emergency management policy and programs have been thoroughly discussed with the Counties' Board of Commissioners and Town/City governing bodies. Specifically, the public has been involved in discussions relating to regulatory tools, mitigation, and emergency services through County Planning Board and Board of Commissioners meetings. All meetings are locally advertised and open to the public. Through this Hazard Mitigation Plan update, the MAC intends to expand public outreach efforts, as outlined in the updated strategies.

Monitoring and Evaluation

The Region has and will continue to utilize the information within this document for day-to-day planning efforts. Through monitoring the status of the existing Mitigation Plan, the Region has improved upon the data utilized throughout this document. The Counties' administration maintains a dialogue with its Board of Commissioners and municipal representatives regarding mitigation/ emergency management issues and provides the public with information when deemed necessary.

Incorporation of Mitigation Plan into Other Planning Mechanisms/Changes in Development

Over the last five years, the Region has made several land development policy amendments. The information and strategies outlined within the existing HMPs were factored into discussions during the development of these documents. This coordination ensures that information outlined in the hazard mitigation plan is carrying over into land use policy. Additionally, the Region reviewed their Flood Damage Prevention Ordinances to ensure compliance with current standards, including review and adoption of updated Flood Insurance Rate Maps. All entities also considered the HMP during decisions relating to capital expenditures, such as infrastructure improvements (with emphasis on new and existing buildings and infrastructure). The changes in development that have occurred has not impacted the any of the jurisdictions' overall vulnerability to hazards.

Mitigation Strategy Progress

Over the last five years, each jurisdiction participating in this update process has implemented mitigation strategies at both the County and municipal levels. Through these implementation efforts, each jurisdiction has strengthened its respective mitigation program, as well as improved the resiliency of its respective community. A status report of the existing mitigation actions is provided in Section 9 -

Mitigation Action Plan in order to evaluate and demonstrate progress made in achieving and implementing goals and actions outlined in their mitigation strategy.

8.2 Goals

Requirement §201.6(c)(3)(i)
[The mitigation strategy section shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Sections 4 through 6 document the hazards and associated risks that threaten the Region including the vulnerability to structures, infrastructure, and critical facilities. Section 7 evaluates the capacity of the participating jurisdictions to reduce the impact of those hazards. The intent of Goal Setting is to identify areas where improvements to existing capabilities (policies and programs) can be made so that community vulnerability is reduced. Goals are also necessary to guide the review of possible mitigation measures. This plan ensures that recommended actions are consistent with what is appropriate for the communities and the hazards identified in the plan Mitigation goals reflect community priorities and should be consistent with other plans in the community. Priorities have not changed since the plan was previously approved, though the communities will continually evaluate current conditions due to disaster events and financial as well as political realities.

The overall hazard mitigation planning effort is focused on providing the Region with an action plan that will strive toward the achievement of the goals outlined below. In order to establish this plan, the MAC decided that the best approach would be to define goals to guide the identification of specific strategies. In taking this approach, the goals as defined in the previous plans have been redefined. The overall intent is consistent; however, the language and content of the statements has been slightly modified as outlined in Section 8.2.3.

The following provides definitions of how goals and implementing strategies relate to one another:

- **Goals**: A broad-based statement of intent that establishes the direction for the Hazard Mitigation Plan. Goals state desired outcomes for the overall implementation process.
- **Implementing Strategies**: A project-specific strategy aimed at mitigation and involving a specific entity, interest, and funding mechanism.

8.2.1 Coordination with Other Planning Efforts

The goals of this plan need to be consistent with and complement the goals of other planning efforts. The primary planning document where the goals of this Plan must complement and be consistent with is the Comprehensive Plan. The Comprehensive Plan is important as it is developed and designed to guide future growth within the community. Therefore, there should be some consistency in the overall goals and how they relate to each other.

8.2.2 Compliance with NFIP/CRS

Given the flood hazards in the planning area, an emphasis will be placed on compliance with the NFIP and participation in the CRS. As a function of implementing this plan, all participating NFIP communities will consider joining the CRS Program through actions such as: adoption and enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs); Floodplain identification and mapping, including any local requests for map updates; or; Description of community assistance and monitoring activities.

8.2.3 Resulting Goals

As noted, goals are statements of desirable future conditions that are to be achieved. They are broad in scope and assist in setting community priorities. The following goals will provide the basis for the implementation strategies that will be included in this section, some of which are already being administered and implemented locally. These goals consider the strategic goals outlined in the existing plan. These goals represent what the participating jurisdictions seek to accomplish through the implementation of the mitigation plan. These goals are consistent with the hazards identified in the plan as well as the North Carolina State Hazard Mitigation Plan.

Goal #1

Promote the public health, safety, and general welfare of residents and minimize public and private losses due to natural hazards.

Goal #2

Reduce the risk and impact of future natural disasters by regulating development in known high hazard areas.

Goal #3

Pursue funds to reduce the risk of natural hazards to existing developments where such hazards are clearly identified, and the mitigation efforts are cost-effective.

Goal #4

Effectively expedite post-disaster reconstruction.

Goal #5

Provide education to citizens that will empower them to protect themselves and their families from natural hazards.

Goal #6

Protect the fragile natural and scenic areas of the Region, particularly those areas that protect drinking water supplies.

Goal #7

Improve upon regional emergency service provision and response.

8.3 Identification and Analysis of Mitigation Actions

Requirement §201.6(c)(3)(ii)
[The mitigation strategy section shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

8.3.1 Prioritization Process

The actions will be identified will be prioritized, implemented and administered by each local jurisdiction. The prioritization includes emphasis on the extent to which benefits are maximized according to the cost benefit review of the proposed projects and their associated costs. The actions in

the following table have been ranked based on a cost-benefit review conducted by the MAC through the planning process. Each implementing action has been provided a priority of low, medium, or high based on this review. The following provides a breakdown of the factors utilized to conduct this cost benefit review:

- **High Priority:** Highly cost-effective, administratively feasible and politically feasible strategies that should be implemented in 2 fiscal years and be continued.
- **Medium Priority:** Strategies that have at least two of the following characteristics (but not all three) and should be implemented in 3 fiscal years:
    - Highly cost-effective; or
    - Administratively feasible, given current levels of staffing and resources; or
    - Are politically popular and supportable given the current environment.
- **Low Priority:** Strategies that have one of the following characteristics and should be implemented in the next five years):
    - Highly cost-effective; or
    - Administratively feasible, given current levels of staffing and resources; or
    - Are politically popular and supportable given the current environment.

Strategies will be implemented earlier if resources are available. It should also be noted that projects or initiatives given low priority may be ultimately contingent upon grant funding. In devising the strategies outlined in this section, the MAC took the following factors into consideration:

- The strategy will solve the problem it is intended to solve or begin to develop a solution.
- The strategy meets at least one community mitigation goal.
- The strategy complies with all laws and regulations.
- The strategy is cost-beneficial.
- The community implementing the strategy has (or will have) the capability to do so.
- The strategy is environmentally sound.
- The strategy is technically feasible.
- The strategy will further the jurisdiction's standing in the NFIP.

In accordance with the DMA requirements, an emphasis was placed on the importance of a benefit-cost analysis in determining action priority. The MAC reviewed each potential statement based on the overall benefit in relation to the financial and staff resources required for implementation.

Table 9-1 provides a detailed breakdown of specific mitigation actions that will aid the Region and all participating jurisdictions in furthering the goals discussed throughout this section of the plan. These actions are intended to address activities to be achieved over the next five years. Subsequent to this period, the MAC will revisit these actions as outlined within Section 10, Plan Maintenance.

SECTION 9: MITIGATION ACTION PLAN

Requirement §201.6(c)(3)(ii)
[The mitigation strategy section shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

Section 9 presents the mitigation action plan developed for each participating jurisdiction. The action plan was developed to present the recommendations developed by the MAC for how the communities can reduce the risk and vulnerability of people, property, infrastructure, and natural and cultural resources to future disaster losses. Emphasis was placed on both future and existing development. The action plan summarizes who is responsible for implementing each of the prioritized actions as well as when and how the actions will be implemented and focusing on jurisdictional and county cooperation to achieve mitigation actions together. **Table 9-1 identifies new and/or revised mitigation actions for each participating jurisdiction for this plan update.**

It should be clarified that the actions included in this mitigation strategy are subject to further review and refinement; alternatives analyses; and reprioritization due to funding availability and/or other criteria. The participating jurisdictions are not obligated by this document to implement any or all these projects. Rather this mitigation strategy represents the desires of each community to mitigate the risks and vulnerabilities from identified hazards.

Acronyms provided in the funding source column of Table 9-1 are defined as follows:

- GF - General Fund
- SR - Staff Resources
- HMGP - Hazard Mitigation Grant Program
- PDM - Pre-Disaster Mitigation
- UHMA - Unified Hazard Mitigation Assistance
- PA - Public Assistance
- USACE - US Army Corps of Engineers
- NCDEQ - NC Department of Environmental Quality
- NCDOT - NC Department of Transportation
- NCDPS - NC Department of Public Safety
- NCDPH - NC Division of Public Health
- NCCE - NC Cooperative Extension
- NCFS - NC Forest Service
- ARC - American Red Cross

For some actions, jurisdictions decided to qualify Low, Medium, High statements.

The actions will be identified will be prioritized, implemented and administered by each local jurisdiction. The prioritization includes emphasis on the extent to which benefits are maximized according to the cost benefit review of the proposed projects and their associated costs. The actions in the following table have been ranked based on a cost-benefit review conducted by the MAC through the planning process. Each implementing action has been provided a priority of low, medium, or high based on this review. The following provides a breakdown of the factors utilized to conduct this cost benefit review:

- **High Priority:** Highly cost-effective, administratively feasible and politically feasible strategies that should be implemented in 2 fiscal years and be continued.
- **Medium Priority:** Strategies that have at least two of the following characteristics (but not all three) and should be implemented in 3 fiscal years: Highly cost-effective; or Administratively feasible, given current levels of staffing and resources; or Are politically popular and supportable given the current environment.
- **Low Priority:** Strategies that have one of the following characteristics and should be implemented in the next five years): Highly cost-effective; or Administratively feasible, given current levels of staffing and resources; or Are politically popular and supportable given the current environment.

Mitigation Action Cost Estimate are defined as follows:

- Low: less than $5k
- Medium: $6k to $20k
- High: greater than $20k

Mitigation Action Timeframe Key are defined as follows:

- Low: Less than 2 years
- Medium: 2-5 years
- High: greater than 5 years

Table 9-1: New/Updated Mitigation Action Plan

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
D1	Work with NCDOT to improve ditches along NC 24 and NC 241. (Keith Eason, NCDOT)	Inland Flooding, Dam Failures, Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Administration Municipal Administrations	GF	Medium: Local Staff Time	2 years	In progress: Coordinating with NCDOT to improve these ditches. Approximately 50% complete.
D2	Locate different funding sources that can aid in the improvement of drainage within the county caused by regular Inland Flooding events (such as grants through CDBG, DEQ, etc.).	Inland Flooding, Dam Failures, Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	Medium	Duplin County Administration Municipal Administrations	GF, NCDPS, NCDEQ	Medium	3 years	In progress: Golden Leaf grant…Calypso grant was denied. Powell Fund to create storm water master Plan. East Carolina Council Faison is working on new opportunities.
D3	Encourage owners to annually remove brush or downed limbs promptly.	Inland Flooding, Dam Failures, Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Emergency Services Municipal Administrations	GF	Medium: Local Staff Time	2 years	To be continued: An annual campaign via websites and social media during Hurricane/Tropical Storm season promoting the maintenance of brush and downed limbs.
D4	Develop, implement and update a Continuity of Operations Plan (COOP), or something similar in nature This plan should focus on establishing seamless operations following a disaster event.	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Emergency Services Municipal Administrations	GF	Medium: Local Staff Time	2 years	In progress: COP Disaster Readiness Plan is 75% complete.
D5	Purchase generator(s) to supply auxiliary	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers,	High	Duplin County Emergency Services	GF, NCDPS, UHMA	Medium	2 years	In progress: County applied for hazard mitigation grants for Florence from NC and

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	power to critical facilities (buildings, wells, pump stations) during power outages. Where possible, the transformers should be pad-mounted with appropriate transfer components. Priority should be given to the installation of a generator at the facility located at 195 Fair Ground Dr (CRDP) in Kenansville (for use as a regional building for disasters).		Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw		Municipal Administrations				FEMA. Faison acquired a generator through Golden Leaf thus far.
D6	Support Implementation of the NCDEQ Watershed Protection program.	Inland Flooding, Dam Failures, Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Administration Municipal Administrations	GF, NCDEQ	Medium: Local Staff Time	2 years	To be continued: support the Watershed Protection Program which ensures the minimum statewide water supply watershed protection requirements
D7	Revise Mobile Home Park and Subdivision Ordinances to prohibit development in the 100- year floodplain. (CRS 430)	Inland Flooding, Hurricane/Tropical Storm, Tornado, Severe Weather	Duplin County	Medium	Duplin County Administration	GF	Low: Local Staff Time	3 years	Completed.
D8	Continue to proactively seek out grant funding through NCEM and FEMA for mitigation	Inland Flooding, Hurricane/Tropical Storm, Tornado, Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill,	High	Duplin County Administration Municipal Administrations	GF, PDM, HMGP, SR	Medium: Local Staff Time	2 years	To be continued: Submitted Approximately 300 grant applications.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	of repetitive loss properties (RLPs) from future flooding events. The County will maintain a list of RLPs, and on an annual basis, will apply for funding for all structures that meet cost-benefit thresholds as defined by FEMA. The County will assist all municipal jurisdictions in working through the structural mitigation grant funding process. (CRS 330)		Teachey, Wallace, Warsaw						
D9	Update County Land Use Plan to integrate mitigation resources for all hazards recommended through this plan.	All Hazards	Duplin County	High	Duplin County Administration	GF, SR	Medium: Local Staff Time	2 years	In progress: no measurable progress due to lack of funding.
D10	Increase mass alert reach for all residents of the county and jurisdictions for all hazards, such as Hyper-Reach. Reverse 911 feature.	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Administration	GF, UHMA	Medium: Local Staff Time	2 years	In progress: Approximately 10,000 out of 66,000 residents are registered.
D11	Hire Emergency Management staff planner to update plans such as COOP, EOP, HMP	All Hazards	Duplin County	High	Duplin County Administration	GF, UHMA	Low: Local Staff Time	2 years	In progress: Position is currently advertised (as of August 1, 2020).

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
D12	Maintain and update local GIS Flood Insurance Rate Maps (FIRM). (CRS 440)	Inland Flooding, Dam Failure. Severe Weather, Hurricane/Tropical Storm	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Administration & All Municipal Administrations	GF, NCDPS	Medium: Local Staff Time	2 years	To be continued: The county and all jurisdictions continue to review and formally update FIRMs as revisions become available through the North Carolina Floodplain Mapping Program.
D13	Work with the curriculum directors of schools to provide all hazards preparedness and mitigation information programs.	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Emergency Services Municipal Administrations	GF	Medium: Local Staff Time	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D14	Provide safety warning radio broadcasts, determining the approximate time and area a tornado, Hurricane/Tropical Storm, or winter storm would be likely to hit.	Severe Weather, Hurricane/Tropical Storm, Tornado, Winter Storm	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Emergency Services Municipal Administrations	GF; UHMA	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D15	Improve the wind resistance of structures within the County and Towns by continuing to enforce the North Carolina Building Code through the County's minimum housing code. (CRS 440)	Severe Weather	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Administration Municipal Administrations	GF	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D16	Monitor trees and branches at risk of breaking or falling in storms. Prune or thin trees or	Severe Weather, Hurricane/Tropical Storm, Tornado	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill,	High	Duplin County Administration Municipal Administrations Utility Providers	GF, Utility Providers	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	branches on County or jurisdictions' properties when they would pose an immediate threat to property, utility liens or other significant structures or critical facilities.		Teachey, Wallace, Warsaw						
D17	Preparation of a series of mailings to citizens discussing what the proper safety procedures for each hazard addressed in this Plan. This effort should focus on mitigation preparation and EOP procedures. (CRS 330)	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	Low	Duplin County Administration Municipal Administrations	GF	Medium	5 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D18	Evaluate and assess all critical facilities outlined within this plan on an annual basis. These efforts should focus on the effectiveness and capabilities for use of the facility as a shelter site. The County will coordinate with NCEM, Red Cross, local animal shelters, local care homes, etc., in making determinations relating to need and capacity.	All Hazards	Duplin County, Beulaville, Calypso, Faison, Greenevers, Kenansville, Magnolia, Rose Hill, Teachey, Wallace, Warsaw	High	Duplin County Emergency Services Sampson County Administration	GF, NCDPS, ARC	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
D19	Upgrade generator at WWTP to handle current demands at the plant during power outages cause by hazards.	Severe Weather, Hurricane/Tropical Storm, Tornado, Winter Storm	Beulaville	Medium	Beulaville Administration	GF, HMGP	Medium	3 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D20	Continued review and update (if necessary) of the town's Mobile Home Park Ordinance.	Severe Weather, Tornado, Hurricane/Tropical Storm	Greenevers	High	Greenevers Administration	GF	Medium	2 years	To be continued: updated as necessary.
D21	Create and implement a storm water system maintenance plan to improve and clean out ditches and storm drains.	Flood, Dam Failures	Rose Hill	High	Rose Hill Administration	GF	Medium; Local Staff Time	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D22	Install surge protectors at wells, the WWTP, and lift stations to protect against Dam Failure from lightning.	Severe Weather	Rose Hill	Medium	Rose Hill Administration	GF	Medium	3 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D23	Hire building inspector to oversee and ensure safe development for the Town.	All Hazards	Rose Hill	High	Rose Hill Administration	GF	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D24	Install generators at WTP and WWTP to handle current demands at the plant during power outages.	Severe Weather, Hurricane/Tropical Storm, Tornado, Winter Storm	Wallace	High	Wallace Administration	GF	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
D25	Prepare an update to the Town of Warsaw Zoning Ordinance.	All Hazards	Warsaw	High	Warsaw Administration	GF	Low; Local Staff Time	2 years	In progress: preparing to update the Town of Warsaw Zoning ordinance next year.
D26	Complete stormwater study	Inland Flooding, Dam Failures	Warsaw	Medium	Warsaw Administration	GF	Medium; Local Staff Time	3 years	In progress: Due to lack of funding and available staff,

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	of the Town that can aid in the improvement of drainage within the Town caused by regular flooding events and assess the need for a stormwater ordinance.								no measurable progress has been made.
D27	Hire planning/zoning officer/code enforcement officer to oversee planning and development for the Town to ensure safe development.	All Hazards	Warsaw	High	Warsaw Administration	GF	Medium	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
S1	Maintain a joint planning office with the City of Clinton to coordinate the day-to-day implementation of land use policies and regulatory ordinances. (CRS 320, 440)	All Hazards	Sampson County, Clinton	High	Clinton and Sampson Planning Departments Sampson County Administration	GF	Low; Local Staff Time	2 years	In progress. Currently conducting studies and recommending long-range planning strategies. Some of these strategies may involve coordination with other municipalities throughout the county.
S2	Maintain and regularly update the County's GIS system. These efforts will include: (1) utilizing GIS to catalog protected areas (wildlife, land conservancy, wetlands) that should be protected from development, (2) working toward completion of	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Tax Administration Sampson County Administration	GF	Low; Local Staff Time	2 years	To be continued: updated as needed.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	computer modeling of public infrastructure/utilities, assess potential hazards, and (3) identifying transportation systems to review and/or designate systematic evacuation routes. This map will be available online once complete. (CRS 320, 440)								
S3	Continue to maintain a zoning and other regulatory ordinance (i.e., stormwater) to regulate land development in portions of the county already zoned and within municipal areas where zoning regulations are in place and where land use controls are especially warranted, e.g., fast growth areas, industrial areas, and flood hazard areas. (CRS 430)	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	Medium	Clinton-Sampson Planning Department Sampson County Administration	GF	Low; Local Staff Time	4 years	To be continued: updated as necessary.
S4	Updating and maintaining a Parks & Recreation Master Plan	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove,	Medium	Sampson County Parks & Recreation Clinton-Sampson Planning Department	GF	Low; Local Staff Time	3 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
			Roseboro, Salemburg, Turkey						
S5	Target key properties located in flood hazard areas for open space acquisition; identify appropriate protected properties for passive recreation opportunities. (CRS 420)	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	Medium	Sampson County Parks & Recreation Clinton-Sampson Planning Department	GF	Low; Local Staff Time	4 years	
S6	Revise/update regulatory floodplain maps (Statewide Floodplain Mapping Initiative) as required by the NFIP program. The County will assist all participating jurisdictions through the review process. (CRS 410)	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Clinton-Sampson Planning Department Municipal Administrations	GF	Low	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
S7	Consider applying to the Community Rating System using Hazard Mitigation Plan components to fulfill application requirements.	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Clinton-Sampson Planning Department Municipal Administrations	GF	Low; Local Staff Time	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made in the last 5 years.
S8	Review and update as necessary the Flooding and Dam Failure Prevention Ordinance to ensure maximum protection from flood hazard events as required by the	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	NFIP Participants	High	Clinton-Sampson Planning Department	GF, NCDPS	Low; Local Staff Time	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	NFIP program. (CRS 430)								
S9	Continue to enforce NC state building codes for wind restrictions and ensure that mobile/ manufactured homes are installed and secured properly. (CRS 430)	Tornado, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Clinton-Sampson Planning Department Municipal Inspections Departments	GF	Low; Local Staff Time	2 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
S10	Continue to support and maintain the volunteer Friends of the River program.	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Friends of the River Program	Volunteer	Low; Local Staff Time	2 years	To be continued: maintain support as available.
S11	Expand beaver management program to mitigate stream debris and property loss if funding is available. If funding is not available, alternative approaches will be devised to address stream/drainage clearance.	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	Medium	Sampson County Administration	GF, NCDEQ, HMGP	Low; Local Staff Time	3 years	In progress: Due to lack of funding and available staff, no measurable progress has been made.
S12	Continue to proactively seek out grant funding through NCEM and FEMA for mitigation of repetitive loss properties (RLPs) from future flooding events. The County will maintain a list of RLPs, and on an annual basis, will	Inland Flooding, Dam Failures, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Administration Municipal Administrations	GF, NCDPS, PDM, HMGP	Low; Local Staff Time	2 years	In progress. As of date approximately 12 grants have been submitted to the state for review.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	apply for funding for all structures that meet cost-benefit thresholds as defined by FEMA. The County will assist all municipal jurisdictions in working through the structural mitigation grant funding process. (CRS 330)								
S13	Continue to review and update annually the Continuity of Operations plan to ensure continuity of government services in event of disaster, including identification of succession of leadership, evaluating access problems with critical facilities and recommendations for protection critical facilities and establishing alternate operations sites, implement methods of records preservation.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Administration Municipal Administrations	GF, NCDPS	Low; Local Staff Time	2 years	In progress: No measurable progress in the last 5 years.
S14	Conduct exercises of the County Emergency Operations Plan on a periodic basis.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove,	High	Sampson County Administration Municipal Administrations	GF, NCDPS	Low; Local Staff Time	2 years	In progress. Last exercise completed September 2019

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	These efforts will include participation by all municipalities.		Roseboro, Salemburg, Turkey						
S15	Maintain the County Emergency Operations Plan, including maintenance of the County's web based EOP portal. These efforts shall include an assessment of conditions and issues affecting key evacuation routes.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Administration Municipal Administrations	GF, NCDPS	Low	2 years	In progress: No measurable progress in the last 5 years.
S16	Develop a Community Emergency Response Teams to promote volunteer opportunities for emergency prevention, preparedness, and response to all hazards. These efforts will include training and recruitment of new CERT teams.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Emergency Management NC Department of Public Safety	GF, NCDPS, HMGP	Low	2 years	In progress: No measurable progress in the last 5 years.
S17	Continue to implement Emergency Planning Community Right-to-Know Act, 42 USC 11001, et. seq. and Hazard Materials Incident Preparedness.	Man-made	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Emergency Management	GF	Low	2 years	To be continued: currently developing training programs that promote HazMat Awareness through the County LEPC.
S18	Continue to maintain a library of materials focused	Inland Flooding, Dam Failure, Severe Weather,	Sampson County, Clinton, Autryville, Garland, Harrells,	High	Clinton and Sampson Planning Departments	GF, NCDPS, HMGP	Low	5 years	To be continued: County and jurisdictions maintain staff educated in these

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	on educating citizens, builders, realtors, and developers about the dangers associated with floodplain development. Will also provide techniques for floodproofing of existing structures. (CRS 430/ 450/460)	Hurricane/Tropical Storm	Newton Grove, Roseboro, Salemburg, Turkey		Sampson County Emergency Management				issues to work with prospective builders.
S19	Develop and implement a hazard awareness program including availability/dissemination of educational materials on all-natural disaster and hazards. (CRS 450)	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Emergency Management	GF, NCDPS, HMGP	Low	5 years	In progress: No measurable progress in the last 5 years.
S20	Maintain regulatory ordinances, emergency operations plans, and hazard awareness information on jurisdictions' websites, provide website access to GIS data.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Emergency Management Clinton-Sampson Planning Department Sampson County Administration Municipal Administrations	GF, NCDPS	Low	2 years	In progress: No measurable progress in the last 5 years.
S21	Coordinate with NCDEQ to enforce all NC State Erosion and Sedimentation and Erosion Control Regulations.	Inland Flooding, Dam Failure, Hurricane/Tropical Storm, Severe Weather	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Clinton and Sampson Planning Department Municipal Administrations	GF, NCDEQ	Low	2 years	In progress: No measurable progress in the last 5 years.
S22	Evaluate and assess all critical facilities outlined within this	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells,	High	Sampson County Emergency Management	GF, NCDPS, ARC	Low	2 years	In progress: No measurable progress in the last 5 years.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	plan on an annual basis. These efforts should focus on the effectiveness and capabilities for use of the facility as a shelter site. The County will coordinate with NCEM, Red Cross, local animal shelters, local care homes, etc., in making determinations relating to need and capacity.		Newton Grove, Roseboro, Salemburg, Turkey		Sampson County Administration				
S23	Expand upon the County's Special Medical Needs Registry (SMNR). The SMNR is available to all County residents. Effective participation will require close coordination between County EM and local government staff members. All jurisdictions will work to advertise the availability of this service within their respective communities.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Emergency Management Municipal Administrations	GF, NCDPS	Low	2 years	In progress: No measurable progress in the last 5 years.
S24	Work closely with real estate agents to ensure that prospective buyers are educated about	Inland Flooding, Hurricane/Tropical Storm, Severe Weather	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove,	Medium	Clinton-Sampson Planning Department Municipal Administrations	GF, NCDPS	Low	4 years	In progress: No measurable progress due to lack of funding.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	development within a flood hazard area. The County will prepare materials for dissemination to local real estate agents to assist in this education process. (CRS 450)		Roseboro, Salemburg, Turkey						
S25	Continue to maintain and enforce County/ Municipal Water Shortage Ordinances. These efforts will involve monitoring of regional drought conditions and coordination with NCDEQ.	Drought	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County Public Works Municipal Administrations	GF	Low	2 years	To be continued: Reviewed and enforced as needed.
S26	Provide back up power to critical facilities.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey Administrators	GF, HMGP	High	2 years	New Action
S27	Increase reach of mass warning systems for all hazards and all jurisdictions in the county.	All Hazards	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey Administrators	GF, HMGP, PDM	High	5 years	New Action
S28	Acquire properties in the floodplain.	Inland Flooding, Dam Failures, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey Administrators	GF, HMGP, PDM, FMA	High	5 years	New Action

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
S29	Revise/update regulatory floodplain maps (Statewide Floodplain Mapping Initiative) as required by the NFIP program. The County will assist all participating jurisdictions through the review process. (CRS 410)	Inland Flooding, Dam Failures, Hurricane/Tropical Storm	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey	High	Sampson County, Clinton, Autryville, Garland, Harrells, Newton Grove, Roseboro, Salemburg, Turkey Administrators	GF, NCEM	High	5 years	New Action
S30	Continue to development of a Land Use Plan.	All Hazards	Autryville	Medium	Autryville Administration	GF	Low	1 year	To be continued: Reviewed annually.
S31	Consider developing and adopting a Stormwater Management Ordinance.	Inland Flooding, Dam Failure, Severe Weather, Hurricane/Tropical Storm	Clinton	Medium	Clinton Administration	GF	Low	3 years	In progress: No measurable progress in the last 5 years.
S32	Carry out activities required under the Community Rating System Program (refer to Section 6.IV)	Inland Flooding, Dam Failures, Severe Weather, Hurricane/Tropical Storm	Clinton	High	Clinton Administration	GF, NCDPS	Low	2 years	In progress: Approximately 15% complete.
S33	Include Hazard Mitigation information on the City of Clinton website.	All Hazards	Clinton	Medium	Clinton Administration	GF	Low	3 years	New Action
S34	Continue to update the Town Zoning Ordinance, Code of Ordinances, and Land Use Plan.	All Hazards	Garland	Medium	Garland Administration	GF	Low	4 years	To be continued: update as necessary.
S35	Continue to update Zoning Map as necessary	All Hazards	Harrells	Medium	Harrells Administration	GF	Low	4 years	To be continued: update as necessary.
S36	Training personnel to be prepared to	All Hazards	Harrells	Medium	Harrells Administration	GF	Low	4 years	In progress: No measurable progress in the last 5 years.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
	back up and perform position of Clerk.								
S37	Town Clerk performing online training classes for emergency management and hazard mitigation.	All Hazards	Harrells	Medium	Harrells Administration	GF	Low	3 years	In progress: Approximately 25% complete.
S38	Continue to update the Town Code of Ordinances	All Hazards	Newton Grove	High	Newton Grove Administration	GF	Low	2 years	To be continued: updated as needed.
S39	Revise the Town's Land Use Plan as needed.	All Hazards	Newton Grove	High	Newton Grove Administration	GF	Low	2 years	In progress: No measurable progress in the last 5 years.
S40	Continue to maintain the Town's Water Shortage Response Plan.	Drought	Roseboro	Medium	Roseboro Administration	GF	Low	1 year	To be continued: maintained annually.
S41	Continue to update the Land Use Plan and Code of Ordinances as needed.	All Hazards	Roseboro	Medium	Roseboro Administration	GF	Low	5 years	To be continued: updated as needed.
S42	Work in cooperation with Sampson County to provide one point-of-contact for zoning requirements.	All Hazards	Salemburg, Sampson County	Medium	Salemburg Administration Sampson County Administration	GF	Low; Local Staff Time	5 years	In progress: No measurable progress in the last 5 years.
S43	Complete and adopt a Land Development Plan.	All Hazards	Salemburg	Medium	Salemburg Administration	GF	Low; Local Staff Time	3 years	In progress: Due to a lack of funding and available staff, no measurable progress has been made.
S44	Update the existing Land Use Plan.	All Hazards	Turkey	High	Turkey Administration	GF	Low; Local Staff Time	2 years	In progress: Due to a lack of funding and available staff, no measurable progress has been made.

#	Strategy	Hazard	Applicable Jurisdictions	Priority	Responsible Agency	Funding Sources	Cost Estimate	Timeframe	2020 Status
S45	Update Subdivision and Zoning regulations.	All Hazards	Turkey	High	Turkey Administration	GF	Low; Local Staff Time	2 years	In progress: Due to a lack of funding and available staff, no measurable progress has been made.

SECTION 10: PLAN MAINTENANCE

Requirement §201.6(c)(4)
[The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

This Section provides an overview of the overall strategy for plan implementation, integration and maintenance and outlines the method and schedule for monitoring, evaluating, and updating the plan. The section also discusses incorporating the plan into existing planning mechanisms and how to address continued public involvement. It consists of the following subsections:

- 10.1 Implementation
- 10.2 Plan Integration
- 10.3 Role of the MAC in Implementation and Maintenance
- 10.4 Monitoring, Evaluating, and Updating
- 10.5 Continued Public Involvement

10.1 Implementation and Incorporation

Implementation and maintenance of the plan is critical to the overall success of hazard mitigation planning. This is Planning Step 10 of the 10-step planning process. Implementation of the Hazard Mitigation Plan will commence with adoption of the document by all participating jurisdictions. Resolutions of Adoption are provided in Appendix A of the plan.

Upon adoption, this Hazard Mitigation Plan faces the truest test of its worth – implementation. Implementation implies two closely related concepts: action and priority. While this plan puts forth many worthwhile and high priority recommendations, the first task facing the Mitigation Advisory Committee (MAC) is the decision about which action to undertake first. There are two factors to consider in making that decision: the priority of the item and available funding. Thus, pursuing low or no-cost high-priority recommendations will have the greatest likelihood of success. Central to the success of this plan is the need for regional coordination regarding implementation of some of the mitigation strategies.

Another highly effective and low-cost implementation mechanism is incorporation of the hazard mitigation plan recommendations and their underlying principles into other county and municipal plans and regulatory mechanisms, such as Capital Improvements Plans and Land Use Plans. The Counties and participating municipalities will utilize this plan as a starting point toward implementing policies and programs to reduce losses to life and property from natural hazards. Through the planning process, partnerships are formed, and sustained action can increase the community's resilience to disasters. Sampson and Duplin Counties will be charged with ensuring implementation of strategies specific to its jurisdiction. If these efforts require intergovernmental coordination, the MAC should also be involved. If a strategy has been documented as regional, all participating jurisdictions should assist in carrying out the function and/or strategy.

10.2 Plan Integration

Mitigation is most successful when it is incorporated into the day-to-day functions and priorities of government and development. This integration is accomplished by constant efforts to network, identify, and highlight the multi-objective benefits to each program and its stakeholders. This effort is achieved through the routine actions of monitoring implementation efforts, attending meetings, and

promoting a safe, sustainable community. Additional mitigation strategies could include consistent and ongoing enforcement of existing policies and review of county and municipal programs for coordination and multi- objective opportunities.

Along with these efforts, it is important to maintain a constant monitoring of funding opportunities that can be leveraged to implement some of the more costly recommended actions. This process will include creating and maintaining ideas on how any required local match or participation requirement can be met. When funding does become available, MAC members will be able to capitalize on the opportunity for their respective jurisdictions. Funding opportunities to be monitored include special pre- and post-disaster funds, special district budgeted funds, state or federal earmarked funds, and grant programs, including those that can serve or support multi-objective implementing actions.

The MAC, which will meet at a minimum annually, will provide a mechanism for ensuring that the actions identified in this plan are incorporated into ongoing County and municipal planning activities for each participating jurisdiction. The participating jurisdictions currently utilize comprehensive land use planning and building codes to guide and control development in the communities. After all participating jurisdictions adopt the Hazard Mitigation Plan, these existing mechanisms will have hazard mitigation strategies integrated into them. The communities will utilize the planning tools outlined in Section 7 – Capability Assessments

After the adoption of the HMP, the participating jurisdictions will work with the State Building Code office to make sure the jurisdictions adopt and enforce the minimum standards established in the new State Building Code. This effort will ensure that life/safety criteria are met for new construction. These efforts will be carried out by the Regional MAC, as well as each respective County MAC.

The capital improvements planning that may occur in the future will also contribute to the goals in the HMP. The jurisdictions will work with capital improvements planners to secure high-hazard areas for low risk uses. During the HMP planning/implementation period, each participating jurisdiction will strive for the objective of formal adoption of the HMP policies.

10.3 Role of the MAC in Implementation and Maintenance

With adoption of this plan, the MAC will be tasked with plan implementation and maintenance. The MAC, led by Elizbeth Stalls Planning Department of Duplin County and Ronald Bass Emergency Management Director of Sampson County, agree to:

- Act as a forum for hazard mitigation issues;
- Disseminate hazard mitigation ideas and activities to all participants;
- Pursue the implementation of high-priority, low/no-cost recommended actions;
- Keep the concept of mitigation in the forefront of community decision-making by identifying plan recommendations when other community goals, plans, and activities overlap, influence, or directly affect increased community vulnerability to disasters;
- Continuously monitor multi-objective cost-share opportunities to help the community implement the plan's recommended actions for which no current funding exists;
- Monitor and assist in implementation and update of this plan;
- Report on plan progress and recommended changes to Boards of Commissioners; and
- Inform and solicit input from the public.

The MAC will not have any powers over County or municipal staff personnel; it will be a purely advisory body. Its primary duty is to see the plan successfully carried out and to report to the community governing boards and the public on the status of plan implementation and mitigation opportunities for the county and participating municipal jurisdictions. Other duties include reviewing and promoting

mitigation proposals, considering stakeholder concerns about hazard mitigation, passing concerns on to appropriate entities, and posting relevant information on the County websites.

10.4 Monitoring, Evaluating, and Updating

Since the previous plan was adopted, each jurisdiction has worked to ensure that Plan was integrated into local activities and that the Plan was appropriately implemented. Each of the jurisdictions outlined a process in the previous mitigation plan for monitoring, evaluating and updating the plan throughout the interim period between plan updates. Each jurisdiction was ultimately successful in implementing the monitoring, evaluation and updating processes that were outlined in previous plan as jurisdictions held annual meetings to discuss the mitigation plan and the priorities that were outlined and tracked in it. The specific process is outlined below with an explanation of how the monitoring, evaluating and updating process was and will be carried out as well as any changes that were identified by the jurisdictions that would be useful to implement during the next update.

Plan maintenance implies an ongoing effort to monitor and evaluate plan implementation and to update the plan as progress, roadblocks, or changing circumstances are recognized. In order to track progress and update the mitigation strategies identified in the policy section of the plan, the MAC will revisit this plan on an annual basis and after a hazard event. Elizabeth Stalls Planning Director and Ronald Bass Emergency Management Director, acting as chairs of the MAC, are responsible for initiating this review and will consult with members of the MAC. This monitoring and updating will take place through a formal review by the MAC annually, and a five-year interval written update to be submitted to the NCEM and FEMA Region IV, unless disaster or other circumstances (e.g., changing regulations) require a change to this schedule.

The Plan will be thoroughly reviewed by the MAC every five years to determine whether there have been any significant changes in the region that may, in turn, necessitate changes 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 county and municipal 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. They will be responsible for reconvening the MAC and conducting the five-year review. During the five-year plan review 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?

Evaluation of progress can be achieved by monitoring changes in vulnerabilities identified in the plan. Changes in vulnerability can be identified by noting:

- Decreased vulnerability as a result of implementing recommended actions;
- Increased vulnerability as a result of failed or ineffective mitigation actions; and/or

- Increased vulnerability as a result of new development (and/or annexation).

Updates to this plan will:

- Consider changes in vulnerability due to project implementation;
- Document success stories where mitigation efforts have proven effective;
- Document areas where mitigation actions were not effective;
- Document any new hazards that may arise or were previously overlooked;
- Incorporate new data or studies on hazards and risks;
- Incorporate new capabilities or changes in capabilities;
- Incorporate growth and development-related changes to County inventories; and
- Incorporate new project recommendations or changes in project prioritization.

Evaluation Process

In order to best evaluate any changes in vulnerability as a result of plan implementation, the MAC will use the following process:

- A representative from the responsible office identified in each mitigation strategy will be requested to report on an annual basis to the MAC on project status and provide input on whether the project as implemented meets the defined objectives and is likely to be successful in reducing vulnerabilities.
- If the project does not meet identified objectives, the MAC may recommend additional measures to be implemented, and an assigned individual will be responsible for defining project scope, implementing the project, monitoring success of the project, and making any required modifications to the plan.

Changes will be made to the plan to accommodate for projects that have failed or are not considered feasible after a review for their consistency with established criteria, the time frame, county priorities, and/or funding resources. Priorities that were identified as potential mitigation strategies will be reviewed as well during the monitoring and update of this plan to determine feasibility of future implementation.

Updating of the plan will be accomplished by written changes and submissions as the MAC deems appropriate and necessary, and as approved by the Board of Commissioners or the participating municipalities' governing boards, if applicable. In keeping with the process of adopting the plan, a public involvement process to receive public comment on plan maintenance and updating will be held annually, and the final product will be adopted by the Counties and all participating municipalities. The plan will be updated every 5 years, as required.

10.5 Continued Public Involvement

Public participation is an integral component to the new mitigation planning process and will continue to be essential as the Hazard Mitigation Plan evolves over time. Significant changes or amendments to the Plan shall require the involvement of the general community as deemed appropriate.

Efforts to involve the general community in the plan maintenance, implementation, monitoring, evaluation, and review process will be made as necessary. These efforts may include:

- Advertising meetings of the MAC with invitation for public participation;
- Designating knowledgeable and willing members of the community to serve as official representatives on the MAC;

- Utilizing local media to update the community of any maintenance and/or periodic review activities taking place;
- Utilizing the Sampson and Duplin Counties' government website to advertise any maintenance and/or periodic review activities taking place; and
- Keeping copies of the Plan in local libraries.
- Soliciting public feedback via social media surveys.