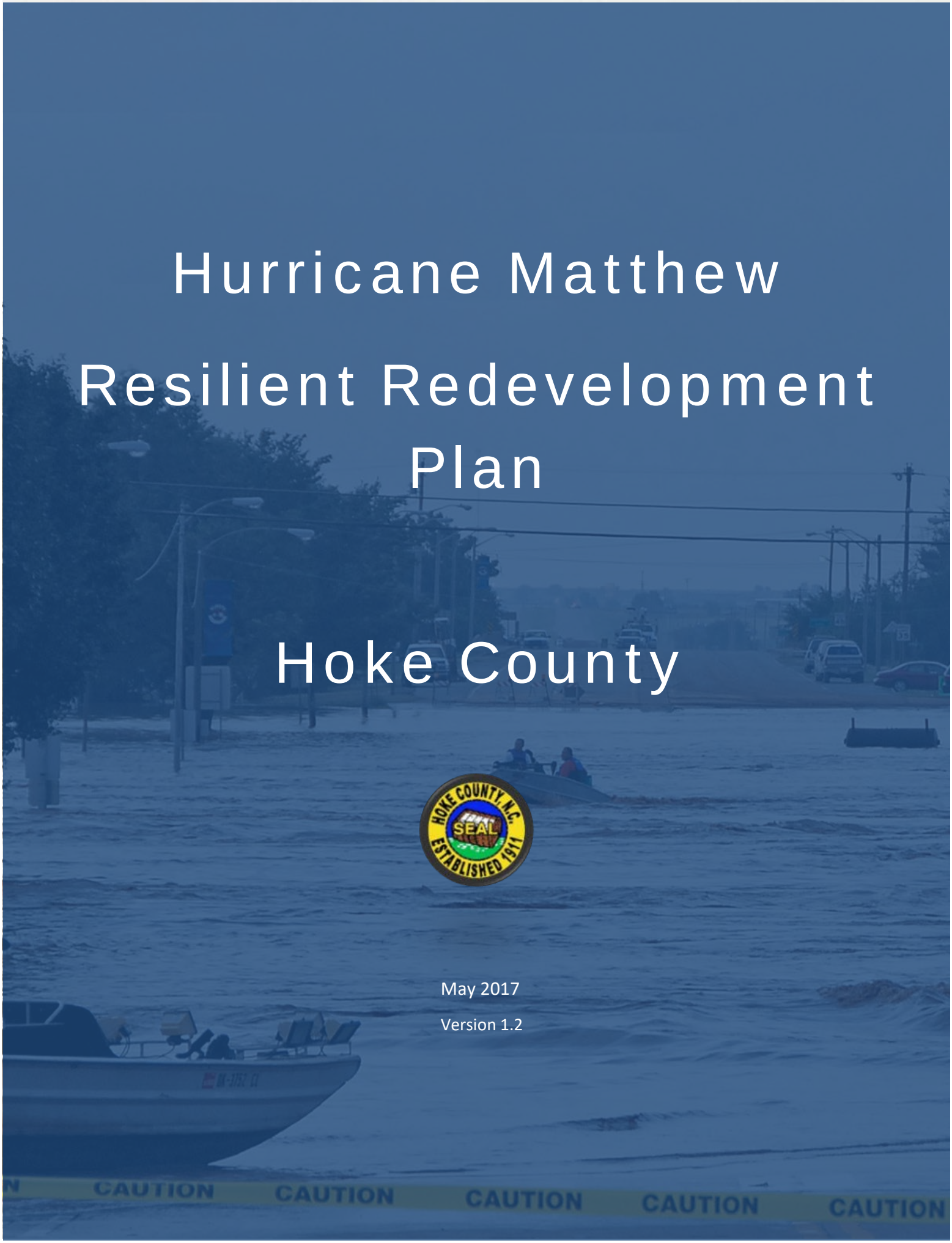
Hurricane Matthew Resilient Redevelopment Plan

Hoke County



May 2017

Version 1.2

Contents

Change Log

Version	Date	Summary of Changes
1.1	6/16/17	Minor Revisions
1.2	8/25/17	Labor and unemployment data updated

Executive Summary

In October 2016, Hurricane Matthew caused widespread destruction in the Caribbean and up the Eastern Seaboard of the United States. In North Carolina, at least 26 people lost their lives, and 100,000 homes, businesses, and government buildings sustained damage estimated at $4.8 billion.[1] At the storm's peak, 3,744 individuals fled to 109 shelters across the region. More than 800,000 households lost power and 635 roads were closed, including the major east-west and north-south corridors.

In December 2016, the North Carolina General Assembly established the North Carolina Resilient Redevelopment Planning (NCRRP) program as part of the 2016 Disaster Recovery Act (*Session Law 2016-124*). The purpose of the program is to provide a roadmap for community rebuilding and revitalization assistance for the communities that were damaged by the hurricane. The program empowers communities to prepare locally driven recovery plans to identify redevelopment strategies, innovative reconstruction projects, and other needed actions to allow each community not only to survive but also to thrive in an era when natural hazards are increasing in severity and frequency.

The NCRRP consists of planning and implementation phases and is managed through North Carolina Emergency Management.

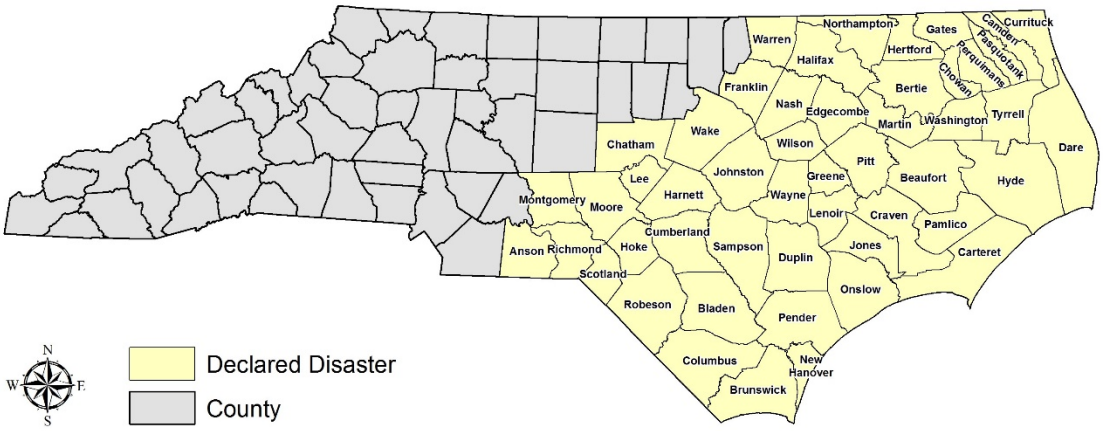


Figure 1. NCRRP Counties

This document is a snapshot of the current needs of the County regarding holistic recovery and redevelopment. The plan will evolve as the county analyzes the risk to its assets, identifies needs and opportunities, determines the potential costs and benefits of projects, and prioritizes projects. As projects are more fully defined, the potential impact on neighboring communities and the region may lead to modifications.

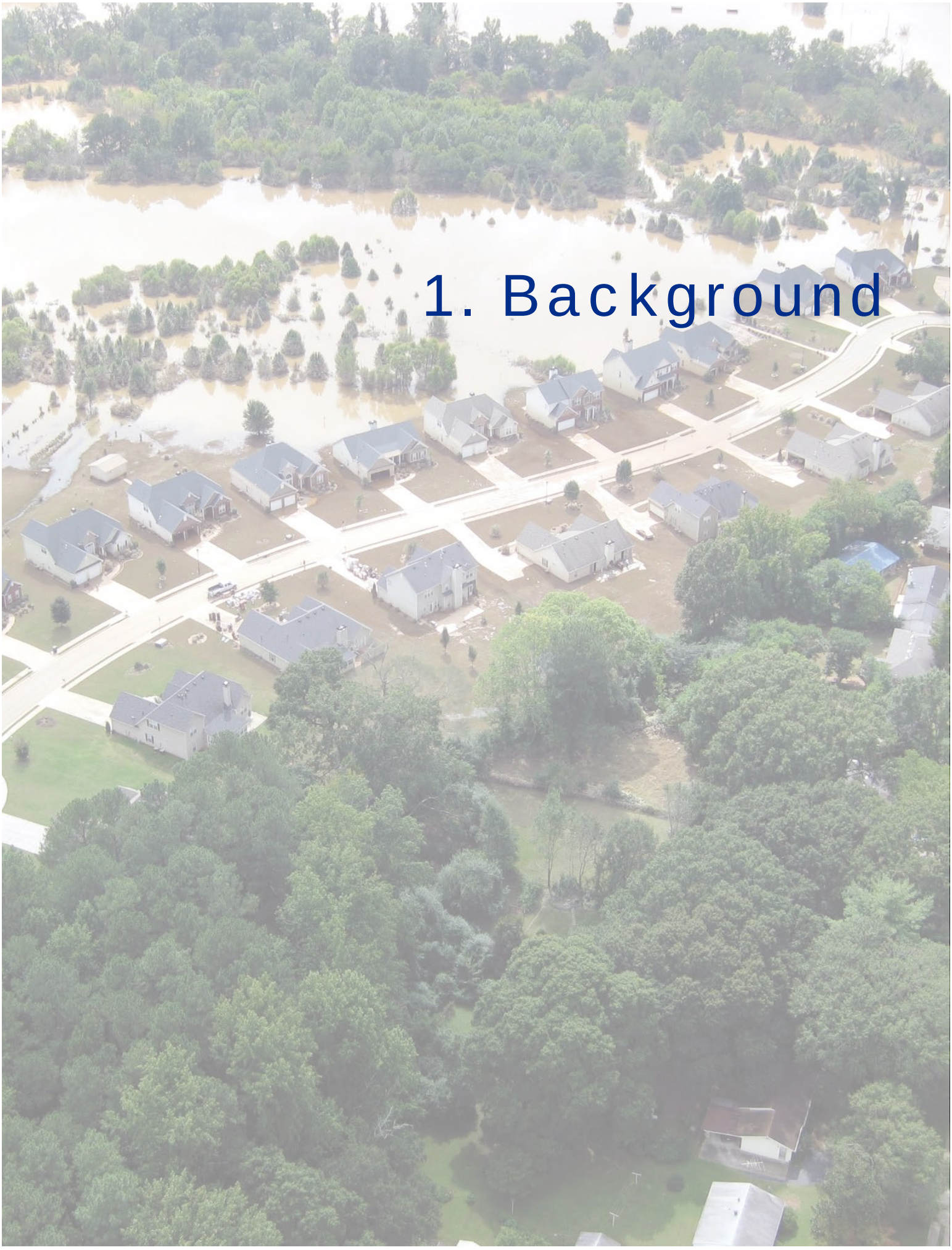
Implementation of the proposed projects and actions described in this plan is subject to applicable federal, state, and local laws and regulations. Proposed projects or actions may be eligible for state or federal funding, or could be accomplished with municipal, nonprofit, or private investments. However, inclusion of a project or action in this plan does not guarantee that it will be eligible for recovery funding.

[1] *State of North Carolina Supplemental Request for Federal Assistance Hurricane Matthew Recovery, https://governor-new.s3.amazonaws.com/s3fs-public/documents/files/Hurricane%20Matthew%20Relief--2017%20Federal%20Request%20%28002%29.pdf.*

After multiple public meetings, Hoke County has identified 16 projects in four pillars: Housing, Infrastructure, Economic Development, and Environmental. Details of these projects can be found in Section IV of this plan.

Pillar	Project/Action Count
Housing	3
Economic Development	4
Infrastructure	4
Environment	5
Grand Total	**16**

Table 1. Hoke County Summary of Projects by Pillar



1. Background

1. Background

Summary of Hurricane Matthew Storm Damage

Hurricane Matthew was an extraordinarily severe and sustained event that brought record-level flooding to many areas in eastern North Carolina's coastal plain, sound, and coastal communities. Hurricane Matthew hit North Carolina on October 8, 2016, as a Category 1 storm. Communities were devastated by this slow-moving storm primarily by widespread rainfall. During a 36-hour period, up to 18 inches of heavy rainfall inundated areas in central and eastern North Carolina.

Riverine flooding began several days after Hurricane Matthew passed and lasted for more than 2 weeks. New rainfall records were set in 17 counties in the Tar, Cape Fear, Cashie, Lumber, and Neuse River watersheds. Entire towns were flooded as water levels throughout eastern North Carolina crested well beyond previously seen stages.

During the peak of the hurricane, 800,000 households lost power and 635 roads were closed, including a section of I-40 West in Johnston County that was closed for 7 days, and sections of I-95 North and South in Robeson and Cumberland Counties that were closed for 10 days.

Approximately 88,000 homes were damaged and 4,424 were completely destroyed. Losses totaled more than $967 million, representing an economic loss as high as 68% of the damages, or $659 million, not expected to be covered by insurance or FEMA assistance.

North Carolina Governor McCrory requested FEMA assistance on October 9, 2016, and FEMA subsequently declared a major disaster (DR-4285) for North Carolina on October 10, 2016, for 48 counties encompassing approximately 325 cities, towns, townships, and villages.

Preliminary estimates indicate more than 30,000 businesses suffered physical or economic damage, and 400,000 employees were affected as a result. Hurricane Matthew also had a significant impact on the agriculture and agribusiness economy in eastern North Carolina. The nearly 33,000 agricultural workers and 5,000 agricultural-support workers hit by the storm account for more than half of the state's agriculture and agriculture-support workforce.

Initial economic analysis of the impacts of crop and livestock losses caused by Hurricane Matthew estimated the loss of more than 1,200 jobs and roughly $10 million in state and local income and sales tax revenue. 2.[2]

State / Legislative Response

North Carolina's response to Hurricane Matthew included 2,300 swift-water rescues using 79 boats and more than 90 air rescues. North Carolina also deployed over 1,000 National Guard and State Highway Patrol to assist with rescue and sheltering missions. There were 3,744 individuals transported to 109 shelters across central and eastern North Carolina during the storm's peak.

FEMA's disaster declaration made 50 counties eligible for FEMA assistance, 45 of which are eligible for Individual Assistance and Public Assistance and 5 of which are eligible for Public Assistance only.

[2] *Governors McCrory's Request for Federal Assistance for Hurricane Matthew Recovery, November 14, 2016*

- There were 81,832 individuals registered for FEMA/state assistance.
- Federal/state financial assistance in the amount of $92.5 million was approved to help flood survivors recover.
- Small Business Administration (SBA) loans approved for individuals after Hurricane Matthew totaled $65.6 million.
- SBA loans approved for businesses after Hurricane Matthew totaled $23.2 million.

After the immediate response period, North Carolina Governor McCrory and the North Carolina General Assembly took the steps summarized below to obtain and allocate long-term funding for Hurricane Matthew.

November 1: The Hurricane Matthew Recovery Committee is established. Preliminary damage assessments are completed, and the State Emergency Response Task Force continues to administer programs and identify needs unmet by existing federal programs.

November 14: Governor McCrory formally submits North Carolina's request for supplemental federal disaster assistance to the delegation as Congress returns to work.

Late November/Early December: Congress appropriates supplemental disaster assistance for North Carolina. After the supplemental federal disaster recovery assistance package is received, Governor McCrory submits a supplemental state disaster assistance package (House Bill 2) recommendations to the General Assembly and calls a special session. Governor McCrory then signs the Hurricane Matthew Recovery Act to fund disaster recovery efforts.

This supplemental federal assistance was to focus on housing, infrastructure, economic development, and the environment. These four pillars were to be funded through the following programs and agencies: The U.S. Department of Housing and Urban Development's Community Development Block Grant–Disaster Recovery (CDBG-DR) program, Army Corps of Engineers Operations and Maintenance, the FEMA National Dam Safety Program, the Federal Highway Administration's Emergency Highway Funding, and the U.S. Department of Agriculture's Emergency Conservation and Watershed Protection programs.

Resilient Redevelopment Planning

The purpose of the NCRRP program is to provide a roadmap for communities in eastern North Carolina to rebuild and revitalize after being damaged by Hurricane Matthew. The program empowers communities to prepare locally driven, resilient redevelopment plans to identify redevelopment strategies, innovative reconstruction projects, and other actions to allow each community not only to survive, but also to thrive in an era when natural hazards are increasing in severity and frequency.

The NCRRP process employs a holistic approach to planning that includes four pillars: housing, infrastructure, economic development, and the environment. Redevelopment strategies and reconstruction projects for each of the four pillars is included in each plan.

The NCRRP process consists of planning and implementation phases and is managed through North Carolina Emergency Management (NCEM).

Scope of the Plan

This document is a snapshot of the County's current needs for achieving holistic recovery and redevelopment. The plan will evolve as the County analyzes the risk to its assets, identifies needs and opportunities, determines the potential costs and benefits of projects, and prioritizes the projects. As projects are more fully defined, the potential impact on neighboring communities and the region may lead to modifications.

Planning objectives are to (1) develop strategic, resilient redevelopment plans and actions, and (2) to define any unmet funding needed to implement such actions after taking into account other funding sources.

The resulting resilient redevelopment plans will be the foundation for any supplemental funding received through Congress, the North Carolina General Assembly, and other funding sources. These plans will also be the basis for the state's Recovery Action Plan, which is required by the U.S. Department of Housing and Urban Development before the state can expend funds received from the CDBG-DR program.

Local Participation and Public Engagement

Stakeholder engagement and public involvement was an essential component of the NCRRP initiative. Three robust rounds of discovery, analysis, collaboration, and interaction were held with each affected county. Each meeting had two components: an in-depth working session with county officials, subject matter experts, and planners from the affective counties and municipalities; and a public open house. The purpose of each meeting was as follows:

Meeting 1 – Initiated the planning process and validated the existing data pertaining to damage and impacts.

Meeting 2 – NCEM presented draft documentation of resilient redevelopment strategies and received feedback from community leaders and the public.

Meeting 3 – NCEM presented refined resilient redevelopment strategies based on feedback from Meeting 2 and received additional feedback for finalization of the plan.

Each of the 50 counties that were declared a major disaster by the President of the United States as a result of Hurricane Matthew under the Stafford Act (P.L. 93-288) participated in the resilience redevelopment planning process. Each municipality in those counties, as well as the five economic development regions that sustained damage from Hurricane Matthew, were also invited to participate.

The counties impacted by the storm cover the eastern half of North Carolina and occupy parts of the piedmont, sand hills, and coastal areas of the state. A map depicting Hoke County and surrounding counties is shown below.

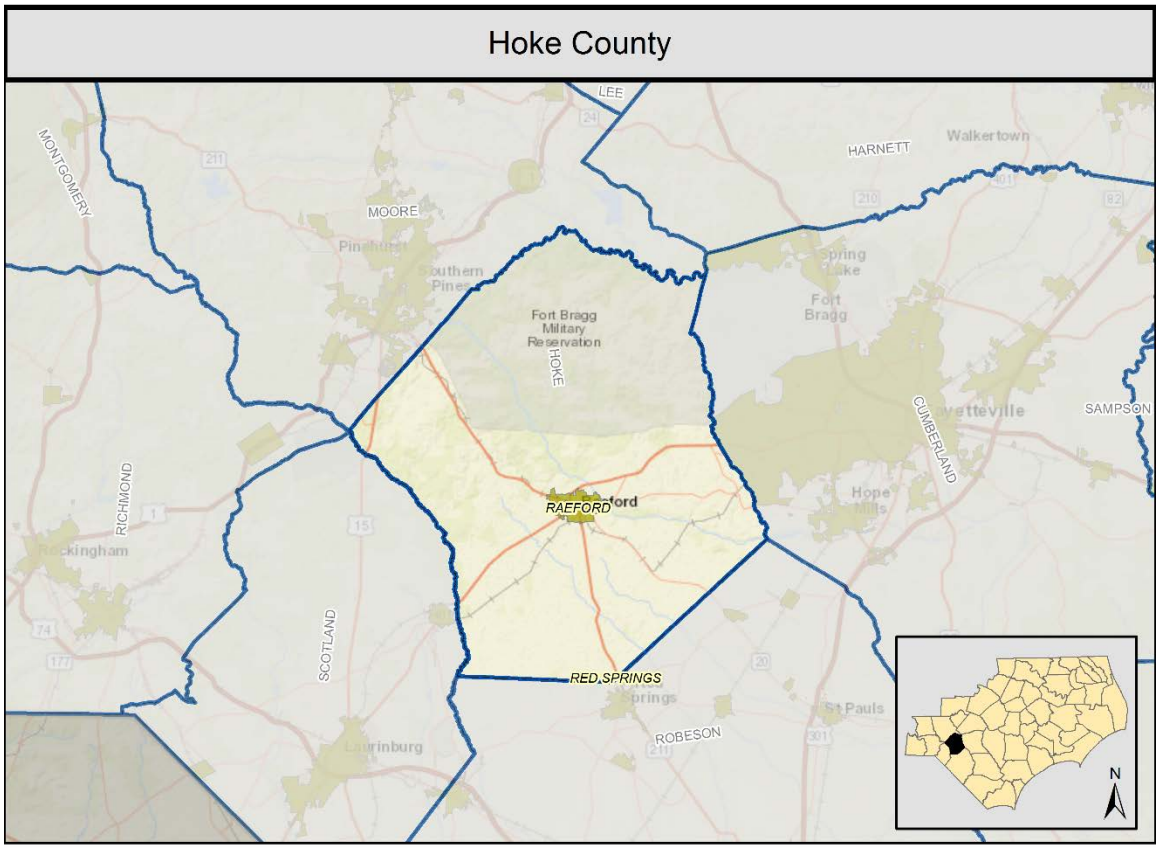
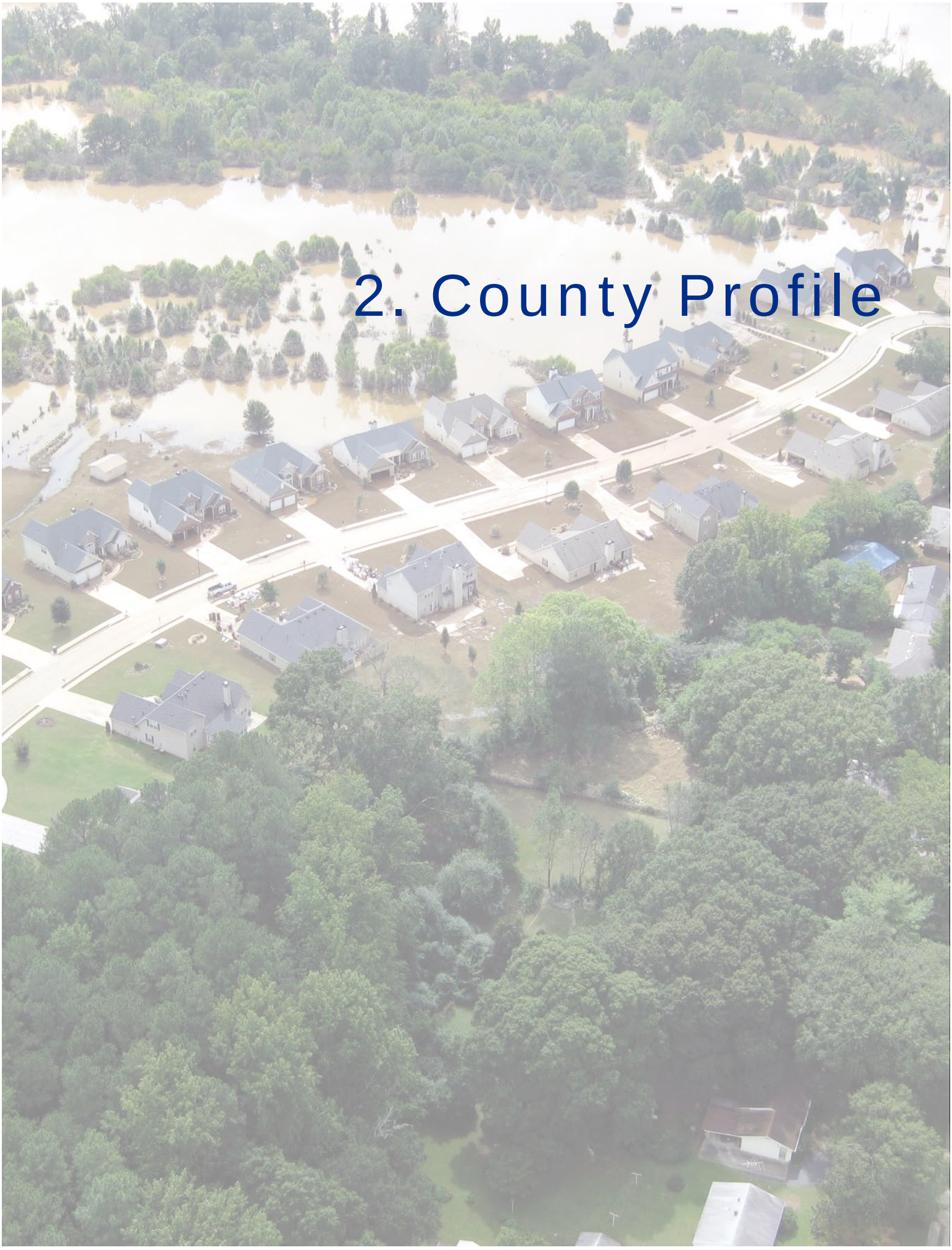


Figure 2. Hoke County and Neighboring Counties

Data, Assumptions, and Methodologies

NCEM has assembled a wealth of data, resources, and technical expertise from state agencies, the private sector, and the University of North Carolina system to support the development of innovative best practice strategies.

Implementation of the proposed projects and actions described in this plan is subject to applicable federal, state, and local laws and regulations. Inclusion of a project or action in this plan does not guarantee that it will be eligible for recovery funding. However, proposed projects or actions may be eligible for state or federal funding or could be accomplished with municipal, nonprofit, or private investment.



2. County Profile

2. County Profile

Hoke County is located near the southern state line of North Carolina, due west of the city of Fayetteville. It is comprised of one incorporated municipality and six census-designated places (CDPs): City of Raeford, Bowmore CDP, Dundarrach CDP, Five Points CDP, Rockfish CDP, and Silver City CDP. The current county population is 51,075. This section provides a profile of housing, economics, infrastructure, environment, and administration within Hoke County.

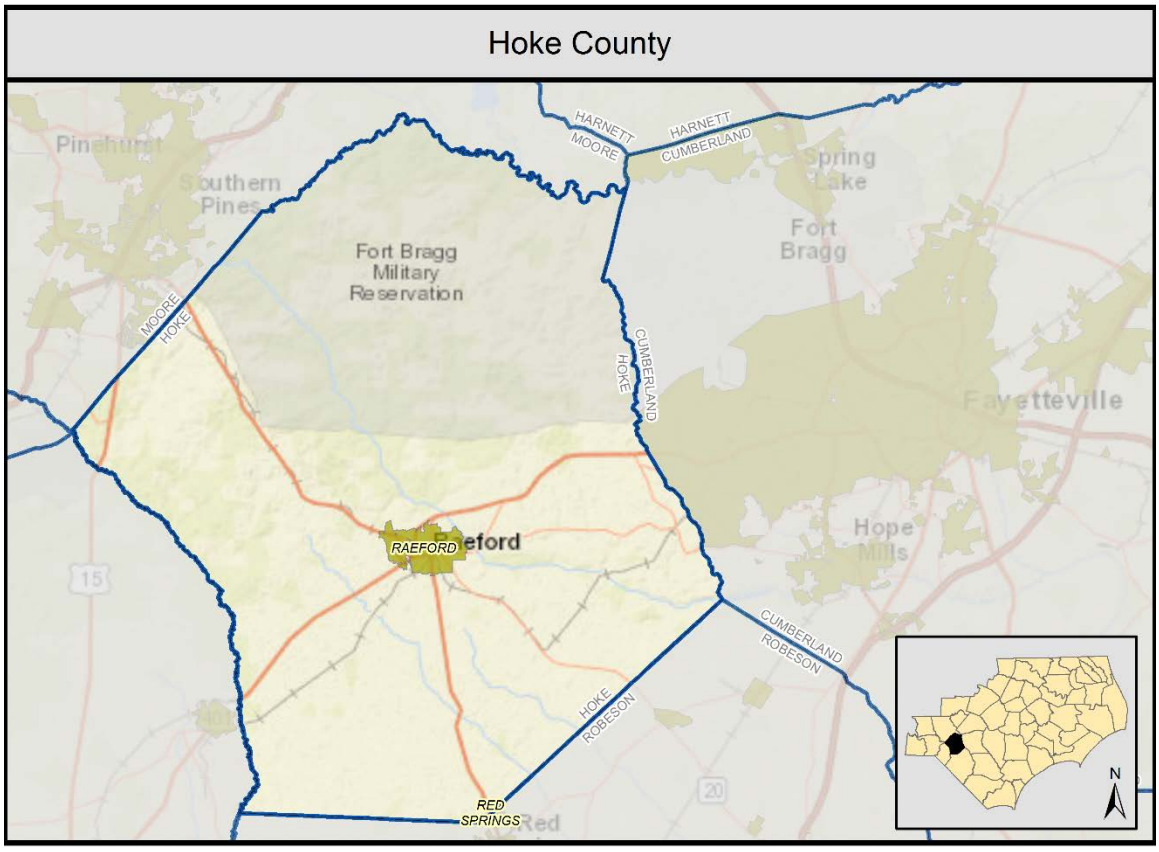


Figure 3. Hoke Base Map

Demographic Profile

In this section of the profile, demographics for Hoke County and the incorporated municipalities and census-designated places are summarized and compared to statewide averages. The demographic data are from the 2000 Census, 2010 Census, and 2011-2015 American Community Survey five-year estimates.

Population

Hoke County has a population of 51,075. The City of Raeford is the most populous place within Hoke County, with a population of 4,830; Bowmore CDP is the least populous place, with a population of 26.[3]

[3] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B01001, "Sex by Age."*

Population Change (2000 to 2010)

The Hoke County population grew rapidly during the decade between the 2000 Census and the 2010 Census. In 2000, the population was 33,646 and in 2010 it was 46,952. The population increased by 13,306 people, or about 40 percent. In comparison, North Carolina grew by 19 percent from 8,049,313 people in 2000 to 9,535,483 in 2010.[4]

Age

The median age in Hoke County is 31 years old, significantly less than the median age of North Carolina at 42 years old. Within Hoke County, the Bowmore CDP has the highest median age at 79 years old, while the Rockfish CDP has the lowest median age at 31 years old.[5]

Race and Ethnicity

The Hoke County population is 47 percent White, 34 percent African American, 8 percent American Indian and Alaska Native, and 1 percent Asian. The remaining 10 percent is comprised of Some Other Race or Two or More Races, and less than 1 percent is Native Hawaiian/Pacific Islander. Refer to the table below.

In comparison, the population of North Carolina is 70 percent White, 22 percent African American, 3 percent Asian, and 1 percent American Indian and Alaska Native. The remaining 5 percent is comprised of Some Other Race or Two or More Races. Less than 1 percent is Native Hawaiian/Pacific Islander.

Within Hoke County, the CDPs of Dundarrach, Five Points, and Rockfish are predominantly White, while the CDPs of Bowmore and Silver City and the City of Raeford are largely African American. The population of Dundarrach CDP and Ashley Heights CDP identify as 43 percent and 14 percent American Indian and Alaska Native, respectively.

The Latino population in Hoke County is 12 percent compared to 9 percent for North Carolina. Five Points CDP has the largest Latino population (27 percent), while Bowmore CDP, Dundarrach CDP, and Silver City CDP do not claim any Latino population. Ashley Heights CDP and the City of Raeford have notable Latino populations of 14 percent each.[6]

Geography	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Some Other Race	Two or More Races	Total Non-White
Ashley Heights CDP	48.5%	21.1%	13.7%	0.0%	0.0%	7.4%	9.4%	51.5%
Bowmore CDP	26.9%	73.1%	0.0%	0.0%	0.0%	0.0%	0.0%	73.1%
Dundarrach CDP	56.7%	0.0%	43.3%	0.0%	0.0%	0.0%	0.0%	43.3%
Five Points CDP	66.1%	25.3%	4.8%	0.0%	0.0%	0.0%	3.8%	33.9%
Raeford city	34.6%	50.5%	3.0%	1.6%	0.0%	8.0%	2.3%	65.4%
Rockfish CDP	61.9%	27.9%	0.6%	4.3%	0.8%	0.0%	4.5%	38.1%
Silver City CDP	14.7%	75.8%	0.0%	0.0%	0.0%	0.0%	9.5%	85.3%

[4] *Source: Minnesota Population Center. National Historical Geographic Information System: Version 11.0 [Database]. Minneapolis: University of Minnesota. 2016. http://doi.org/10.18128/D050.V11.0. Census 2000/Census 2010 Time Series Tables Geographically Standardized*

[5] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B01001, "Sex by Age."*

[6] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B02001, "Race" and Table B03002, "Hispanic or Latino Origin by Race."*

Geography	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Some Other Race	Two or More Races	Total Non-White
Hoke County	46.5%	34.1%	8.0%	1.3%	0.1%	4.4%	5.5%	53.3%
North Carolina	69.5%	21.5%	1.2%	2.5%	0.1%	3.0%	2.4%	30.5%

Table 2. Hoke County Race and Ethnicity

Limited English Proficiency

Limited English Proficiency (LEP) is defined as populations aged 18 years or older that speak English less than very well. In Hoke County, most of the individuals who identified as LEP speak Spanish, while a very few speak primarily other languages. Similarly, the primary language group for LEP individuals in North Carolina is Spanish. Within Hoke County, the City of Raeford and Ashley Heights CDP have the largest LEP populations, with Spanish as their primary language. The remaining communities in Hoke County do not have significant LEP populations according to census data.[7]

Poverty

In Hoke County, 22 percent of the population is living below the poverty level, compared to 17 percent of the North Carolina population. Dundarrach CDP and the City of Raeford have the highest percentage of populations below the poverty level, at about 43 percent each. In addition, the City of Raeford and Silver City CDP have 22 percent and 17 percent of their populations defined as "very poor."[8]

Low- and Moderate-Income Individuals

In Hoke County, 40 percent of the population is classified as low- and moderate-income (LMI) individuals based on the U.S. Department of Housing and Urban Development's definition. In comparison, 39 percent of the North Carolina population is classified as LMI.[9]

Median Household Income

The median household income of the population aged 25 years old to 64 years old is $45,829 in Hoke County, while it is $53,097 in North Carolina. For those communities where household income statistics were available, median income of the population aged 25 years old to 64 years old ranged from a high of $86,697 in the Five Points CDP to a low of $27,266 in the City of Raeford.[10]

[7] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B16004, "Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over."*

[8] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months."*

[9] *Source: U.S. Department of Housing and Urban Development, Estimate of Low and Moderate Income Individuals, https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary-data-block-groups-places/*

[10] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B19094, "Median Household Income in the Past 12 Months."*

Zero Car Households

In Hoke County, 7 percent of households do not have a vehicle available—the same percentage as in North Carolina households. Within Hoke County, the City of Raeford has the highest percentage of households without access to a vehicle at 15 percent, while Bowmore, Dundarrach and Five Points CDPs all have zero households in this category. The majority of the County's households, 66 percent, have two or more vehicles available.[11]

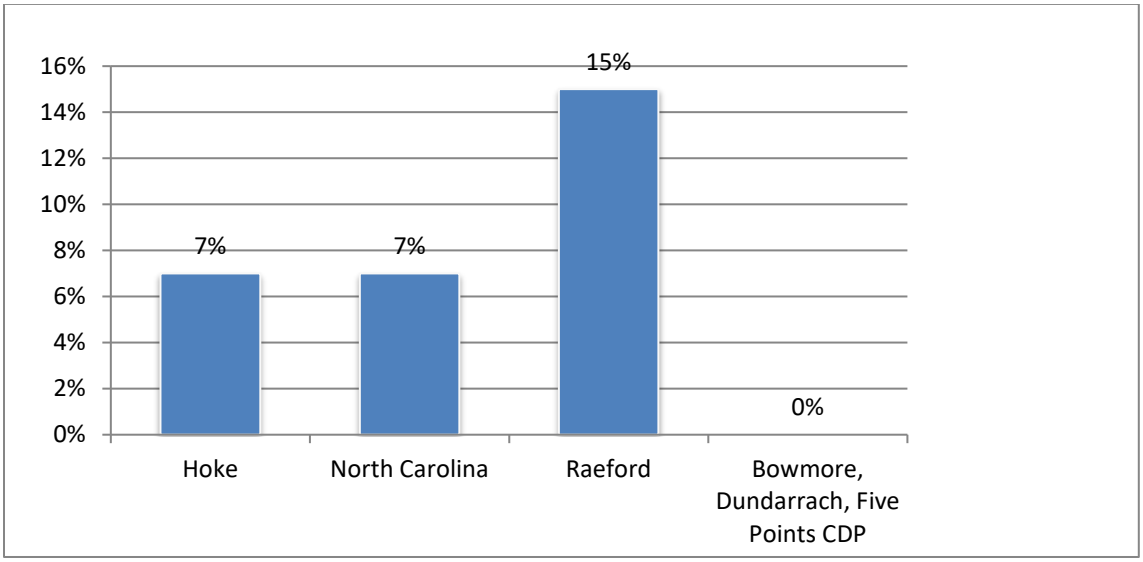


Figure 4. Zero Car Households by Percentage

Commuting: Travel Time to Work, Means of Transportation

The majority of Hoke County residents, 85 percent, commute alone to work by vehicle, which is slightly higher than North Carolina's 81 percent.

Under 1 percent of Hoke County's population uses public transportation to commute to work, which is slightly less than the 1 percent of North Carolina workers who use public transportation to commute. Three percent of the County's population works at home, compared to 5 percent of the North Carolina population.

The mean commute time to work for Hoke County residents is 25.5 minutes. In comparison, the North Carolina mean commute time is 24.7 minutes. Within Hoke County, Silver City CDP residents have the shortest mean commute time at 14.5 minutes, while Five Points CDP residents have the longest commute at 29.8 minutes.[12]

[11] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B25044, "Tenure by Vehicles Available."*

[12] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B08301, "Means of Transportation to Work" and Table GCT0801, "Mean Travel Time to Work of Workers 16 Years and Over Who Did Not Work at Home (Minutes)."*

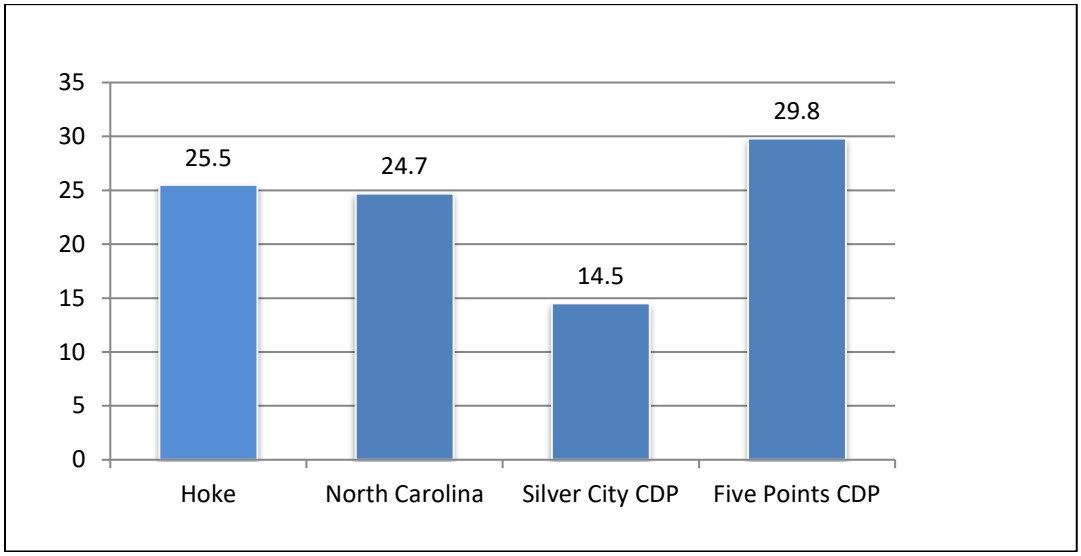


Figure 5. Mean Commute Time to Work in Minutes

Housing Profile

Hoke County has more than 19,000 housing units, 75 percent of which are single-family homes, 6 percent are multi-family units, and 19 percent are classified as manufactured housing.

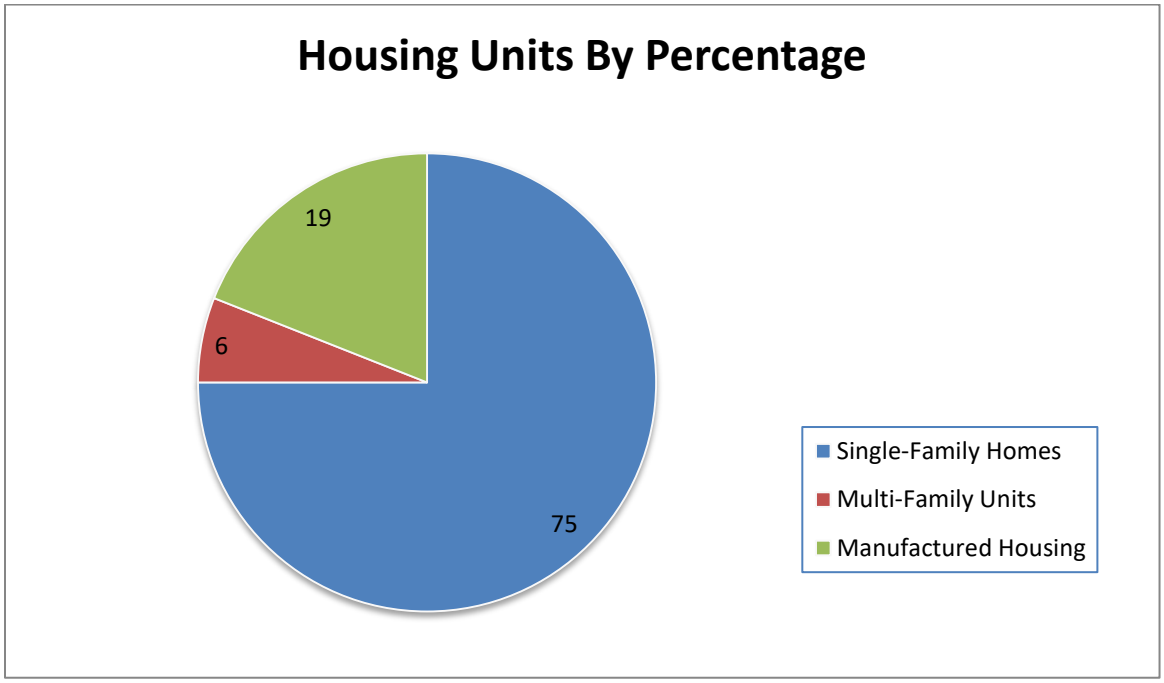


Figure 6. Housing Units by Percentage

In Hoke County, 13 percent of housing units are vacant, which is slightly less than the vacancy rate of North Carolina, at 15 percent. Within Hoke County, Bowmore CDP reports the largest percentage of vacant housing units at 47 percent, while Rockfish CDP reports the smallest vacancy rate at 7 percent.

Of occupied housing units, 66 percent of the Hoke County units are owner-occupied compared to 65 percent in North Carolina, with renter-occupied units at 34 percent in Hoke County and 35 percent in North Carolina, respectively.

The median housing value in Hoke County is $141,500, which is slightly higher than the median housing value in North Carolina at $138,000. Of the communities reported within Hoke County, Five Points CDP has the highest median housing value at $181,900, while Silver City CDP reports the lowest median housing value at $86,700.

According to the National Housing Preservation Database, there are 611 affordable housing units within Hoke County, all of which are located within the City of Raeford.[13]

Economic / Business Profile

Hoke County's economy has benefitted from its proximity to Fort Bragg Military Installation and from recent growth in health services. According to the U.S. Census Bureau's Longitudinal-Employer Household Dynamics Program, the largest concentrations of jobs within Hoke County are within the City of Raeford and at the Fort Bragg Military Installation to the north. Jobs also are focused to the east along U.S. Highway 401 (US 401) between the City of Raeford and Cumberland County.[14]

Labor Force

According to the local area unemployment statistics (LAUS) from the Labor and Economic Analysis Division (LEAD) for the unadjusted data for all periods in 2016, the civilian labor force population in Hoke County is 19,973. [15] Within Hoke County, the vast majority of this workforce resides in the Rockfish CDP, 1,802 persons, and the City of Raeford, 1,767 persons.

The civilian unemployment rate in Hoke County is 6.5 percent. In comparison, the North Carolina civilian unemployment rate is 5.1 percent.[15] Within Hoke County communities with residents in the labor force, the Rockfish CDP has the lowest civilian unemployment rate at 9 percent, while the Dundarrach CDP has the highest at 68 percent.[16]

Major Employers

Employment in Hoke County is concentrated in the sectors of education, health services, manufacturing, and public administration. The county is well-known for turkey meat processing and textile production. The top 10 employers in the county are listed below:

- The Hoke County Board of Education employs more than 1,000 persons.
- Butterball, LLC employs between 500 and 999 persons.
- Hoke County, Conopco Inc., Burlington Industries V LLC, Cape Fear Valley Health Systems, The Staffing Alliance LLC, and the NC Department of Public Safety all employee between 250 and 499 people.
- Wal-Mart and First Health of the Carolinas each employ between 100 and 249 persons.

Fort Bragg Military Installation, the largest military installation in terms of personnel, is located in Hoke County. Fort Bragg has approximately 53,700 troops and employs another 14,000 civilians on post. Fort Bragg and Pope

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[13] *Sources: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B25002, "Occupancy Status," Table B25003, "Tenure," Table B25024 "Units in Structure," Table B25077, "Median Value (Dollars)."*
National Housing Preservation Database

[14] *Source: U.S. Census Bureau Longitudinal-Employer Household Dynamics Program*

[15] *Source: Civilian Population and Unemployment Rate - Labor and Economic Division (LEAD) of North Carolina Department of Commerce – Local Area Unemployment Statistics http://d4.nccommerce.com/LausSelection.aspx*

[16] *Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2011-2015), Table B23025, "Employment Status for the Population 16 Years and Over."*

Army Airfield represent about 35 percent of the economy of Hoke County. In 2015, Hoke County had 5,071 defense personnel and received $372.20 million in defense spending, the fifth highest county in the state.[17]

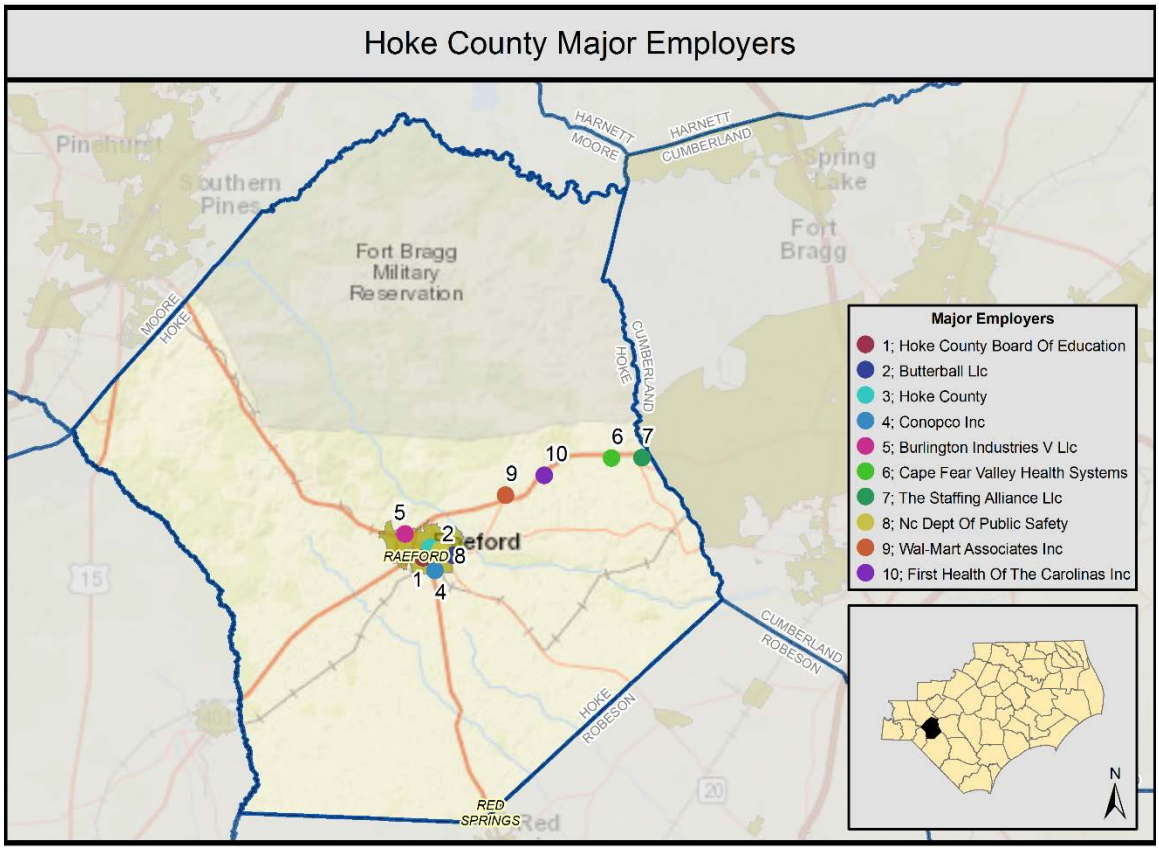


Figure 7. Major Employers by Number of Employees

Economic Development

Agriculture is an economic and cultural aspect of Hoke County that is valued by Raeford residents and the rural communities. Agriculture products—including traditional row crops, livestock, forest products, ornamentals, and specialty crops and products—offer economic diversity, entrepreneurial opportunities, open space, environmental services, and a living link to simpler times. Cotton remains a leading crop, although at lower production levels than in the past; corn and soybean production are on the rise, as are turkeys and broilers.[18]

[17] *Sources: NC Department of Commerce, Office of Economic Adjustment's Defense Spending by State in 2015*
[18] *Sources: Hoke County Economic Development, Hoke County Working Lands Protection Plan 2010*

Infrastructure Profile

Transportation, health, education, water, and power infrastructure are summarized for Hoke County in the sections that follow.

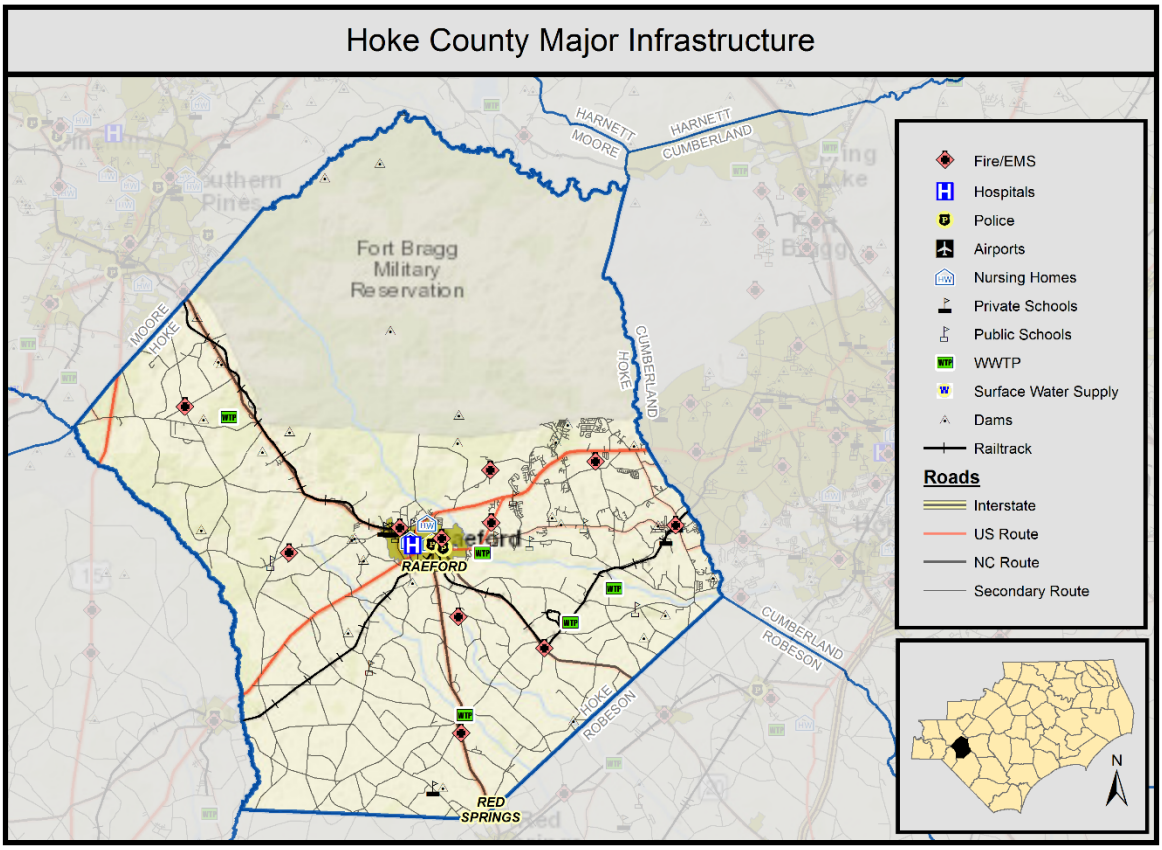


Figure 8. Hoke County Major Infrastructure

Transportation

Three major routes provide vehicular access throughout the county, all of which intersect at Raeford. US 401 traverses east-west and connects Hoke County to Fayetteville to the east. NC Highway 211 (NC 211) offers primarily north-south access, while NC Highway 20 (NC 20) connects the southeast portion of the county.

Rail lines run east-west along the southern portions of the county. Another rail spur connects to the City of Raeford and heads north along the west side of Fort Bragg Military Installation.

Health

As the first hospital in Hoke County, the Hoke Campus of FirstHealth Moore Regional Hospital opened its doors to patients in 2013. In March 2015, the Fayetteville-based Cape Fear Valley's Hoke Hospital opened, just three miles west of the City of Fayetteville on US 401, providing a second hospital for the County.

Education

Within the Hoke County Public School System, there are eight elementary schools, three middle schools, and two high schools, as well as one alternative school.

The Sandhills Community College operates the Sandhills Hoke Center out of the City of Raeford. Programs offered at the Hoke Center include The University Studies Associate in Arts, Criminal Justice, Nursing Assistant, and Basic Law Enforcement Training. The Sandhills Hoke Center also is home to Sandhoke Early College High School.[19]

Water

The Hoke County Department of Public Utilities is a regional water and wastewater utility that provides service to approximately 37,500 people with 12,500 connections in Hoke County.

The water treatment plant, Raeford Water Works, has a permitted capacity of 3.0 million gallons per day (MGD). Supply from wells is 3.5 MGD; demand in 2016 was 25 percent of supply (0.89 MGD). The water system is estimated to have 49 total miles of distribution system lines. The system's finished water storage capacity is 3.6 million gallons.

The County provides public sewer to 1,400 residential and commercial customers. The Hoke County Wastewater Treatment Facility, located at 736 Ellis Road in the southeast portion of the City of Raeford, has a capacity of 1.5 MGD. Hoke County's permitted capacity for wastewater treatment is 3.0 MGD.

The sewer collection system includes 15 miles of force main, 25 miles of gravity sewer, and 10 lift stations, two of which were added in 2015.[20]

Power

Duke Energy/Progress and Lumbee River Electric Coop provide power to Hoke County residents and businesses. There are two solar plants located within Hoke County, just south of the City of Raeford along NC 20.[21]

Environmental Profile

Water resources, natural areas, managed areas, biodiversity, wildlife habitat, and recreation are summarized for Hoke County in the sections that follow.

Water Resources

Two river basins are located within Hoke County: the Cape Fear River Basin to the north and east, and the Lumber River Basin to the south and west.

Tributaries and wetlands are extensive throughout the county. The main water bodies are Drowning Creek and Lumber River on the west side of the county, which are part of the Lumber River Basin. Rockfish Creek and Stewarts Creek on the east side are part of the Cape Fear River Basin. Also significant are Raft Swamp and Little Raft Swamp, which are wetlands to the south.

There are 30 dams forming lakes or ponds within the county, ranging from 1.6 acres to 85 acres in size. Of these, nine are categorized as high-hazard dams, and 21 as low-hazard dams.[22]

[19] *Sources: Hoke County Public Schools; Sandhills Community College*
[20] *Sources: NC Division of Water Resources, Local Water Supply Plans; Hoke County*
[21] *Source: U.S. Department of Energy, U.S. Energy Mapping System; Hoke County Government*
[22] *Source: NC Natural Heritage Program; The Cumberland-Hoke Regional Hazard Mitigation Plan, January 2016*

Natural and Managed Areas

Fort Bragg Military Installation, managed by the Department of Defense, occupies about 35 percent of Hoke County, i.e., the entire northern portion.

The environmental assets located west of Fort Bragg military Installation are considered very high to exceptional and are, therefore, protected. The tracts include:

- State-owned McCain Forest Management Area
- The Nature Conservancy owned Calloway Sandhills and Quewhiffle Creek Sandhills
- Privately owned McFarland Sandhills
- The U.S. Fish and Wildlife Service Safe Harbor managed Rockfish Creek/Raeford Natural Area

Lumber River State Park is located along the Lumber River in Hoke County. This park was established in 1989 as both a North Carolina State Park and as a "Natural and Scenic River" by the North Carolina General Assembly. It also is the only black water river in North Carolina to have been designated as a National Wild and Scenic River by the U.S. Department of the Interior.[23]

Additional managed natural areas include:

- Nicholson Creek Game Land, managed by North Carolina Wildlife Resources Commission, located just south of Fort Bragg
- Hoke County Community Forest, owned by the Conservation Fund, located south of Fort Bragg
- Audubon Environmental Land Trust Preserve, located east of Raeford.
- Lumber River Conservancy Preserve, located south of Raeford in Pembroke.

Biodiversity and Wildlife Habitat

The North Carolina Natural Heritage Program produces a biodiversity and wildlife habitat assessment for the state. According to this assessment, areas in Hoke County with the highest rating for biodiversity and wildlife habitat are the Lumber River, including the tributaries along Rockfish Creek, tributaries to the east, and the preserved areas to the south. These areas have a quality ranking between 8 and 10, with 10 being the highest quality.[24]

Parks and Recreation

Hoke County maintains three soccer fields, three picnic shelters, seven baseball/softball fields, three playgrounds, two multi-use trails, and three basketball courts. The City of Raeford has four public recreational facilities, the 211 Sports Complex, Armory Park, Burlington Park, and Rockfish Park, which include a ball field, two playgrounds, two tennis courts and a walking trail.

Hoke County contains four National Register of Historic Places (NRHP) listings. The Raeford Historic District was most recently listed on the NRHP in 2006.[25]

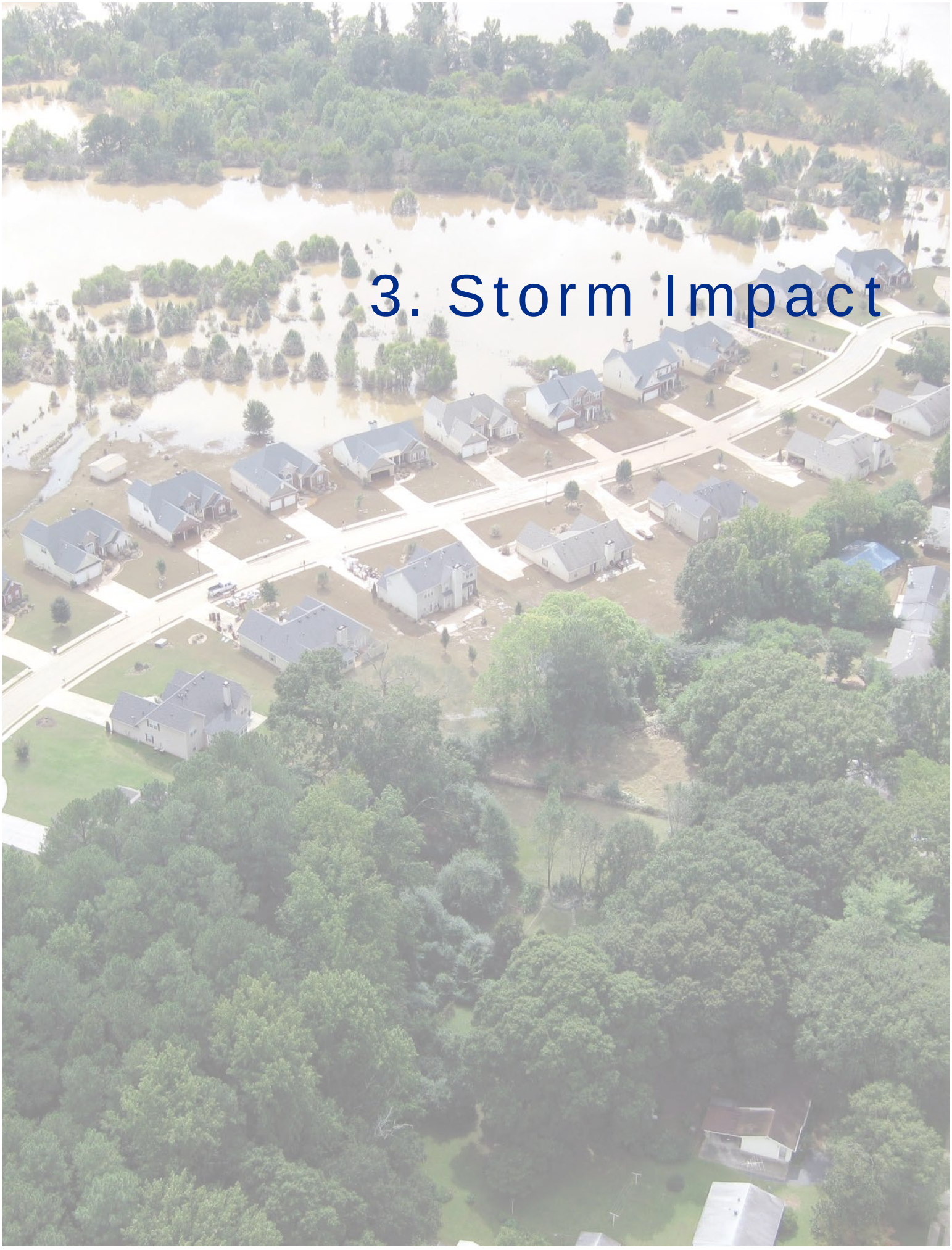
[23] *Source: NC Natural Heritage Program, Southeastern Economic Development Commission; The Cumberland-Hoke Regional Hazard Mitigation Plan, January 2016*
[24] *Source: NC Natural Heritage Program*
[25] *Sources: Hoke County Parks and Recreation Department, County website; Hoke County Land Use Plan*

Administrative Profile

The administrative capabilities of Hoke County and its municipality of Raeford are discussed in great detail within Section 7 of the Cumberland-Hoke Regional Hazard Mitigation Plan (2016). The assessment evaluates the capabilities of the County and municipalities to implement mitigation actions across the areas of planning and regulatory capabilities, administrative and technical capabilities, fiscal capabilities, and political capabilities. Many more details about the capabilities of Hoke County and Raeford can be found in that document.

In terms of administrative capabilities, the County has some of the staff and the necessary plans, policies and procedures in place that are found in communities with “moderate” capabilities. Hoke County has Emergency Management and Planning departments with the capacities to assist in implementing the resilience strategies proposed in this plan. Some of the other indicators of capability for the County include the following: Comprehensive Plan, Zoning Ordinance, Subdivision Ordinance, Building Code, and Floodplain Management Ordinance. These plans, policies and procedures help ensure that new development in the County will be managed in a responsible manner and will take place in non-hazardous areas.

The City of Raeford also has some of the indicators of “moderate” capability with many of the same ordinances as the County. They have some administrative resources, including a Planning Department, that would likely be able to assist with implementing the strategies in this plan. Both Hoke County and Raeford sustained fairly significant damage and engagement in on-going recovery work may limit their capacity to take on additional recovery duties like hazard mitigation and resiliency work.



3. Storm Impact

3. Storm Impact

Rainfall Summary

Hurricane Matthew officially made landfall as a Category 1 storm southeast of McClellanville, South Carolina, early on October 8, 2016. The track and speed of the storm resulted in heavy precipitation over the eastern parts of North Carolina for almost two days. A number of locations across North Carolina received all-time record, one-day rainfall amounts. Many locations in the Coastal Plain of North Carolina already had received above-normal rainfall in the month of September, including Hoke County, leading to wet antecedent conditions prior to Hurricane Matthew. Hoke County received as much as eight to nine inches of rain in the southern part of the county, with lower rainfall of six to seven inches in isolated parts in the north and eastern sections of the county. Total rainfall depth for Hoke County is highlighted graphically in the figure below.

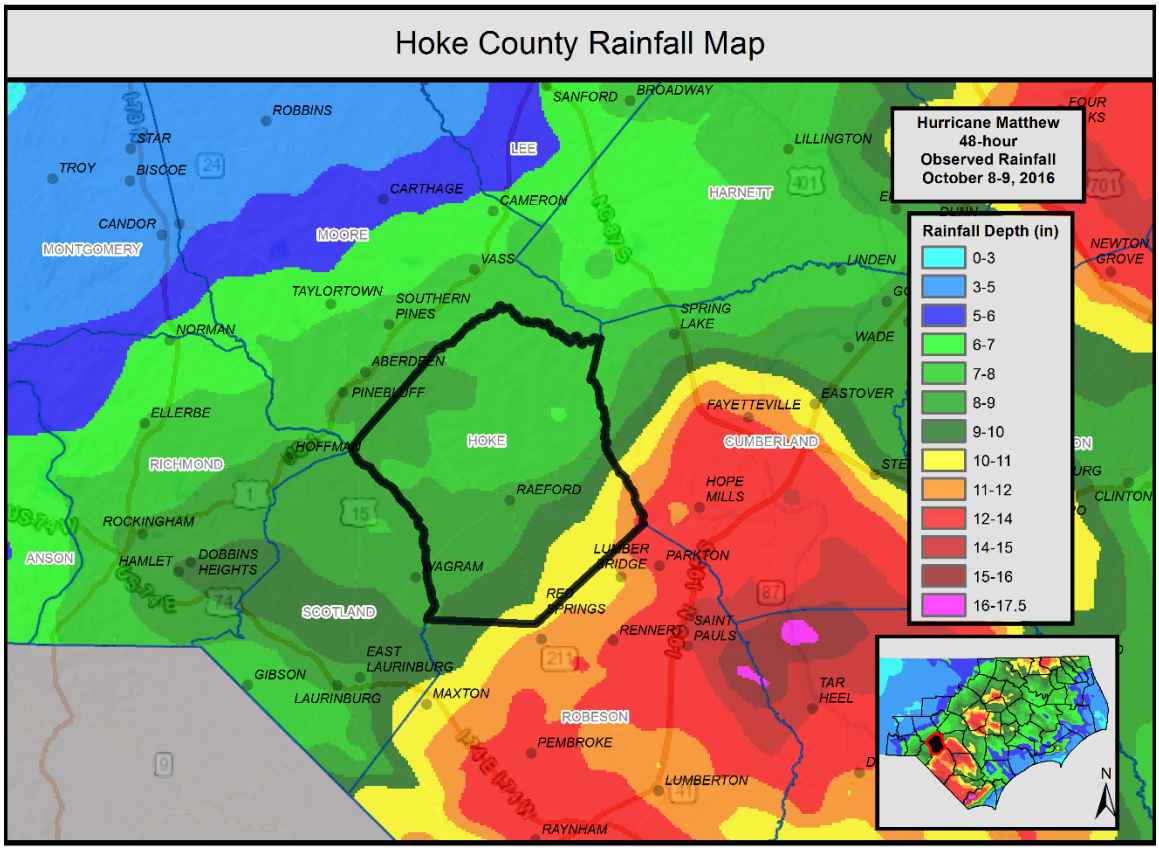


Figure 9. 48-hour Observed Rainfall Depth (October 8-9, 2016)

Riverine Flooding Summary

Hurricane Matthew had several significant impacts on Hoke County. Flooding in this area was reminiscent of some of the flooding that occurred from Hurricane Floyd in 1999.

The U.S. Geological Survey (USGS) documented stream gauge data in the report, *Preliminary Peak Stage and Streamflow Data at Selected Streamgaging Stations in North Carolina and South Carolina for Flooding Following Hurricane Matthew, October 2016*. Stream gauge data from the USGS report for the one gauge located in Hoke County is summarized below.

USGS Gauge	County	River Name and Location	Drainage Area (sq mi)	Peak Matthew Elevation (ft)	Previous Record (ft)
02104220	Hoke	Rockfish Creek at Raeford, NC	93.1	12.94	9.3

Table 3. Hoke County USGS Stream Gage Data

Hoke County is adjacent to counties that experienced the most significant impacts from Hurricane Matthew and is under the federal disaster declaration that resulted from the storm. Several waterways that flooded during the storm pass through the county, including streams such as Rockfish Creek.

Significant rainfall from both Hurricane Matthew and the tropical storm that hit the area during the prior week resulted in major impacts to Hoke County. Impacts included: major flooding in some areas, multiple dam failures, downed trees, washed out/blocked major roadways, impassable private roads that made some rescues impossible, evacuation of six people, and power outages that lasted up to two weeks in remote areas.

It also should be noted that citizens across the county lost their homes and personal belongings due to the storm and local infrastructure was heavily damaged in several areas. One of the glaring impacts from Hurricane Matthew in Hoke County was that many homes, businesses, and facilities lost power for long periods as a result of the storm. These power outages shut down critical facilities for days at a time and some residents were without power for weeks.

As one of the more heavily impacted counties in the state, Hoke County experienced a wide array of effects from Hurricane Matthew that are detailed below.

Housing Impacts

According to FEMA Individual Assistance claims as of March 17, 2017, there were 1,786 registrations for Individual Assistance in Hoke County as a result of Hurricane Matthew. It should be noted that additional claims from Hurricane Matthew still may be pending, so this number may not reflect the final claims data from the event. This also does not consider other historic impacts to the county or areas of concern for flooding that were not impacted during this particular event. With that in mind, the planning team took a comprehensive look at both Hurricane Matthew impacts and historic impacts to determine areas considered to be a high risk to future flooding.

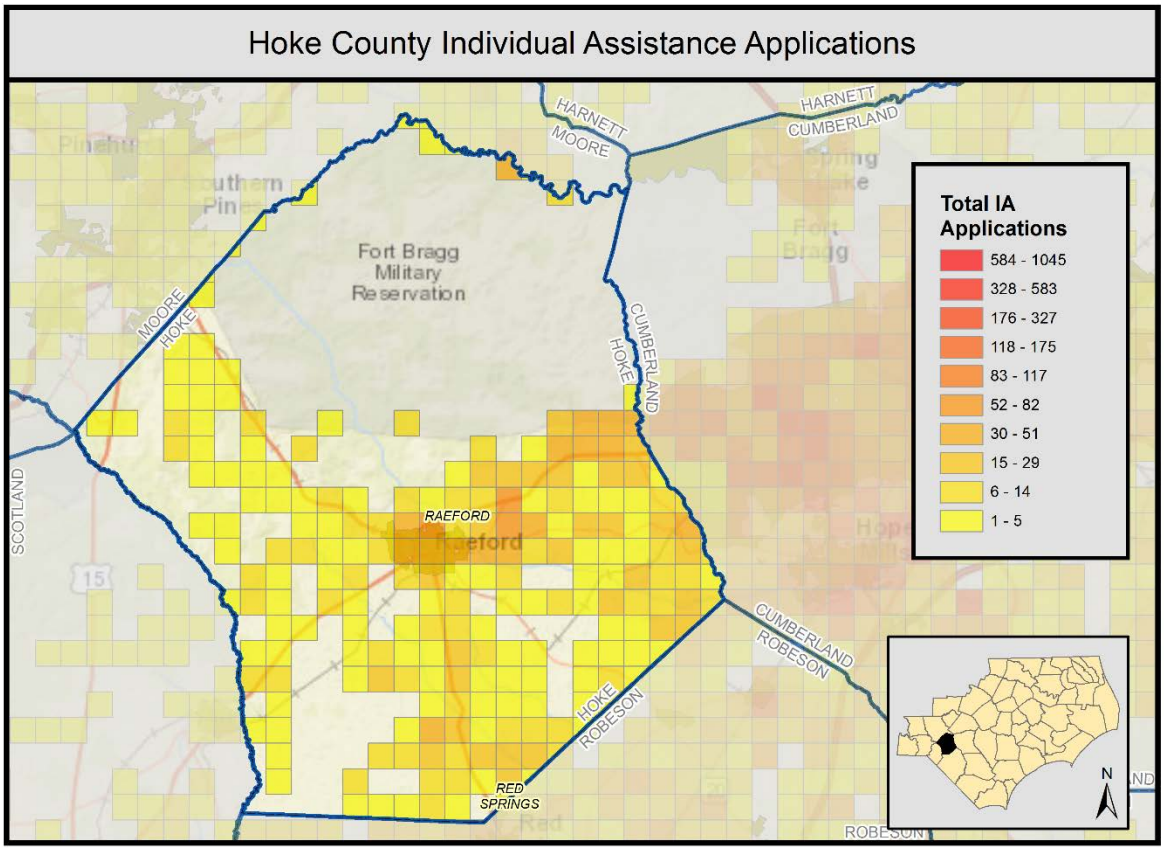


Figure 10. Hoke County IA Applications by Area

Flooded Homes

Houses were not significantly impacted by Hurricane Matthew. Six to seven homes in Raeford, mostly around Prospect Avenue and located in the floodplain, were inundated with two to three feet of water. This area is prone to flooding, primarily due to stream bank erosion. Lantern Lane Apartments, located in a low-lying area with a history of flooding in Raeford, also flooded during Hurricane Matthew. Mobile homes along Oakwood Avenue in south Raeford flooded during this and previous storms.

Many homes adjacent to flood areas had flooding of yards and along fence lines where water was trapped as it flowed into the nearest stream. Many structures that were originally out of the floodplain when constructed are now at risk of a flood event. McLaughlin Township experienced much of the recent housing growth resulting from the influx of military personnel related to Base Realignment and Closure 2005. The increase in impervious surface/roofs has resulted in flooding downstream.

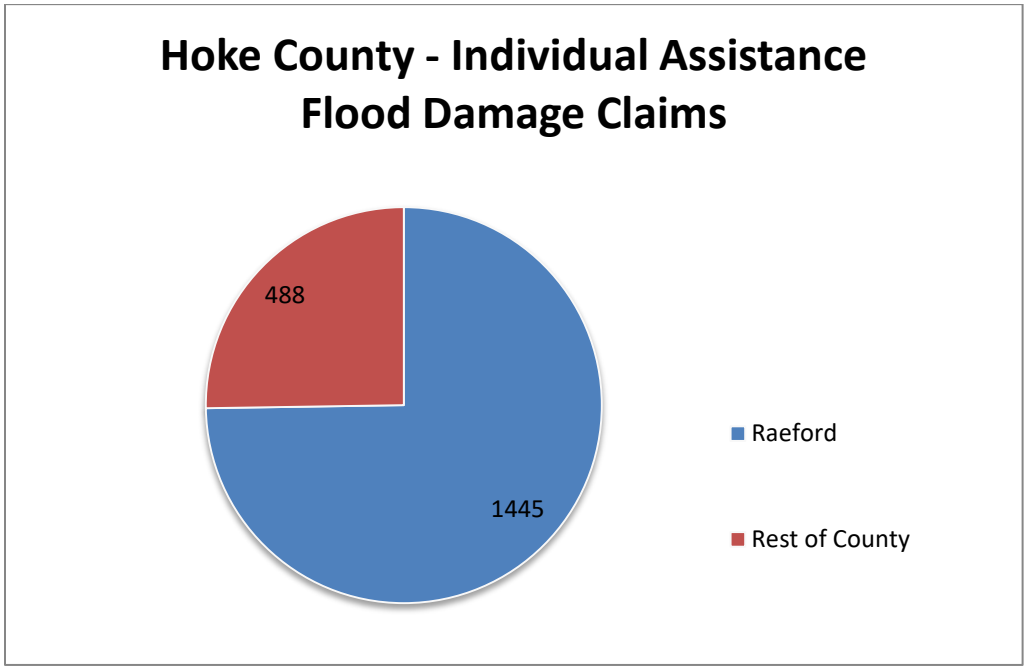


Figure 11: Number of IA Flood Damage Claims by Area

Economics / Businesses / Jobs Impacts

Loss of Power—Agriculture

The biggest economic impacts were due to power losses. The loss of power at poultry farms resulted in significant poultry mortality. In one instance, 1,000 chickens were lost at a single farm in the southern part of the county.

Loss of Power—Residential

Power outages at individual residences resulted in food spoilage due to loss of refrigeration. As an emergency measure, Hoke County provided $100,000 in food vouchers. Two thousand vouchers were distributed to Hoke citizens at $50 per person. The speed of the distribution resulted in massive parking/traffic issues. Demand exceeded supply, as there were still people in line to receive the vouchers when the allotment ran out.

In addition to the voucher program, the Food Stamp Replacement Program received a spike in applications following the storm for the same reason—food loss resulting from power outages. County staff also operated the Disaster Food Nutrition Program, another voucher program, for five days, including over the weekend. Extra staff had to be recruited to take applications for the program.

Major Employers

Employment in Hoke County is mainly concentrated is concentrated in the sectors of education, health services, manufacturing, and public administration. The impacts from the Hurricane Matthew to the top 10 employers in Hoke County include:

Employer	Impacts from Hurricane Matthew (if any)
Hoke County Board of Education	A wall at one of the schools collapsed. Power outages and road closures resulted in school closings.

Employer	Impacts from Hurricane Matthew (if any)
Butterball, LLC	Road closures made employee travel hazardous and stalled import and export of goods.
Hoke County	Extensive road damage. Flooding in some of the County buildings (small damage claims). Had to re-route sanitation pickup because the access road was out at main facility. Smaller county pickup sites could not open due to power loss.
Conopco Inc.	Road closures made employee travel hazardous and stalled import and export of goods.
Burlington Industries V LLC	Road closures made employee travel hazardous and stalled the import and export of goods.
Cape Fear Valley Health Systems	Hospital facility suffered power outages. Road closures made employee travel hazardous.
The Staffing Alliance LLC	Not known.
The NC Department of Public Safety	The Hoke Correctional Institution's water system was down and had to request a water tanker for prisoners for dialysis. The facility also lost power for several days.
Wal-Mart	Experienced a power outage for approximately 24 to 36 hours and suffered some loss of inventory
First Health of the Carolinas	Hospital facility suffered power outages. Road closures made employee travel hazardous.

Table 4. Hurricane Matthew impacts to top 10 employers:

Infrastructure Impacts

According to Public Assistance claims, which often are tied closely to infrastructure damage, as of March 17, 2017, there were $234,242 of claims in Hoke County as a result of Hurricane Matthew. It should be noted that additional claims from Hurricane Matthew still may be pending, so this number probably does not reflect the final claims data from the event.

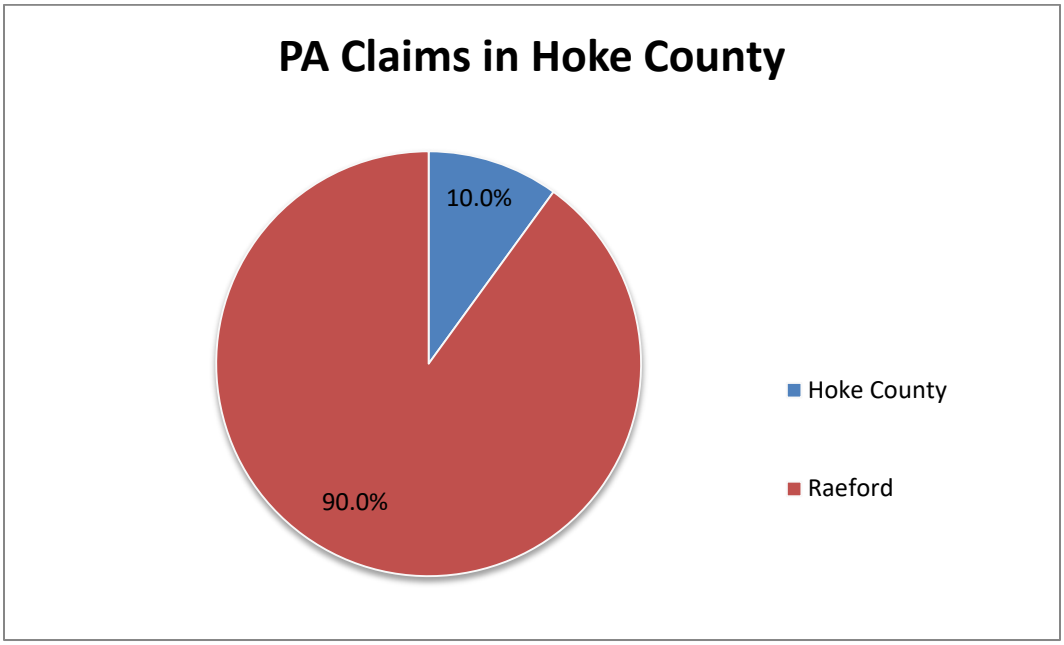


Figure 12. Hoke County PA Claims by Area and Percentage

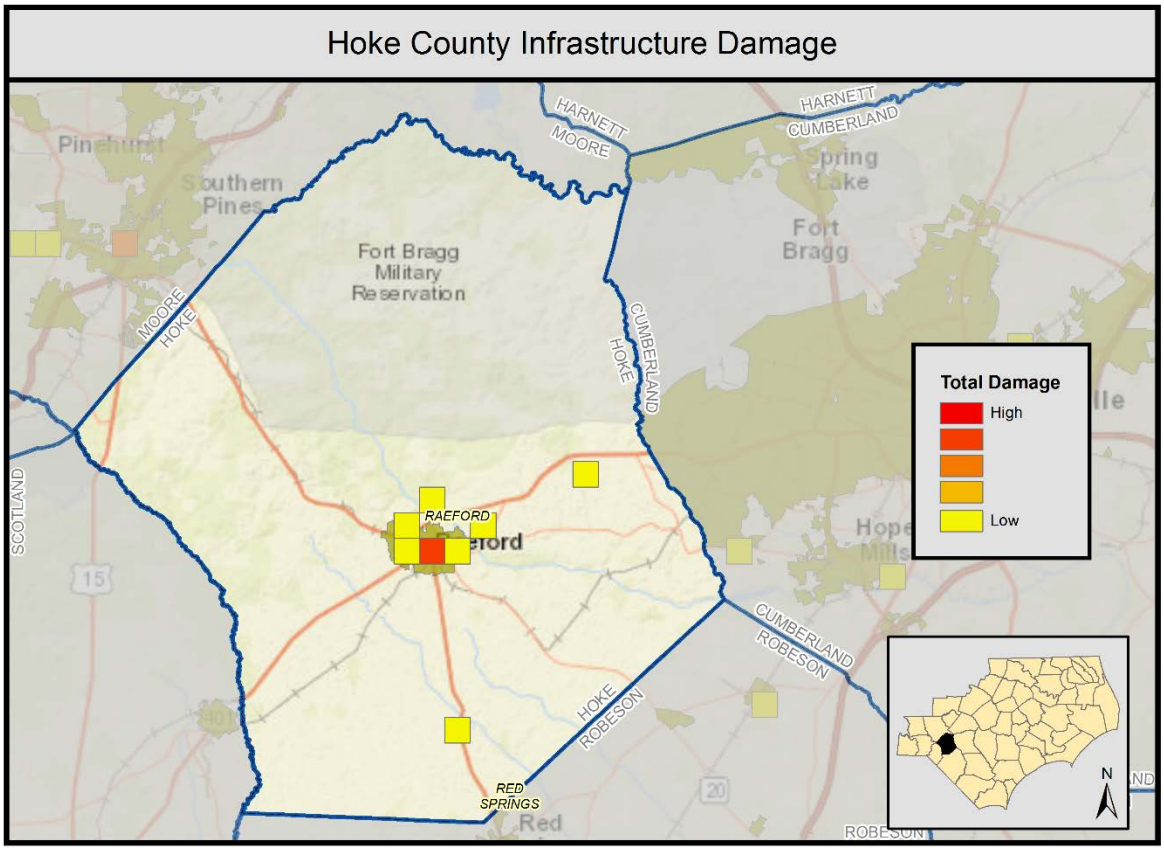


Figure 13. Hoke County Infrastructure Damage

Road Damage

Twenty-two roads scattered across the county were washed out and/or blocked by downed trees and debris. Primary roads used to access the City of Raeford were closed or impassable due to erosion and washouts, including N.C. Highway 211 (NC 211), N.C. Highway 20 (NC 20), Palmer Road, and Johnson Mill Road. High water on both sides of U.S. Highway 401 (US 401), near the City of Raeford, led to state officials closing the road to one lane. As a result, residents could not access emergency shelters.

On numerous private roads, conditions were so poor that emergency workers could not reach residents in need of rescue. In many instances, developers have abandoned their responsibility to maintain roads constructed in association with subdivisions, and these roads have fallen into disrepair. Many private roads remained impassable long after the storm.

The majority of road flooding occurred on the more densely developed east side of the county along Big Marsh Swamp, Little Marsh Swamp, and Black Branch in the Lumber River Basin and along Rockfish Creek, Puppy Creek, and Stewarts Creek in the Cape Fear River Basin. On the west side of the County, US 401 was flooded at crossings with Raft Swamp, Big Middle Swamp, and Little Raft Swamp.

FEMA funded debris removal, emergency measures, and repairs to13 routes damaged by Hurricane Matthew. The unfunded cost to the North Carolina Department of Transportation (NC DOT) to complete repair work is $169,000. The Federal Highway Administration (FHWA) funded repairs to eight FHWA routes that incurred damage from Hurricane Matthew, primarily pipe damage on multiple roads and slope failure on US 401. The unfunded cost to NC DOT to complete this work is $135,600.

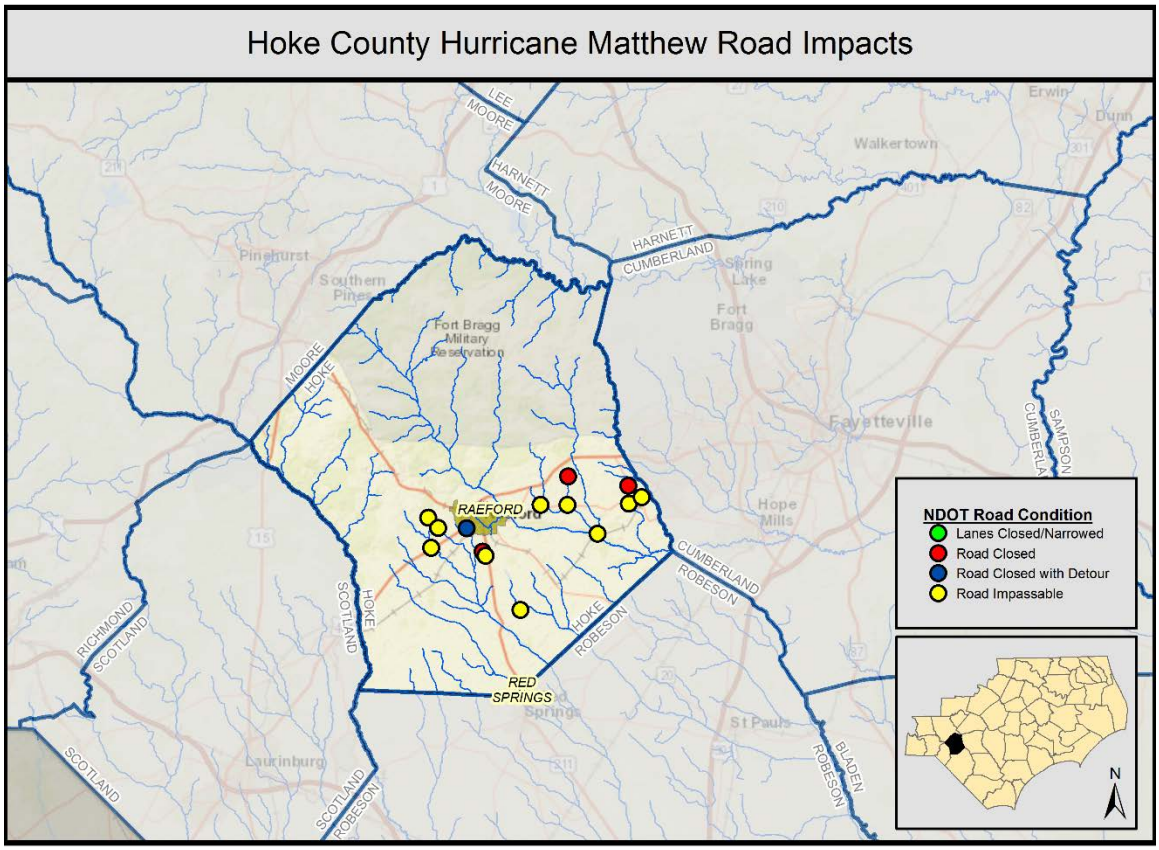


Figure 14. Impacted NCDOT Structures in Hoke County

Bridge Impacts

Bridges crossing Puppy Creek and Black Creek were affected by flooding. Big Rockfish Creek Bridge, a 78-year-old functionally obsolete structure, flooded as it has in previous storm events. In Hoke County, nearly 40 percent of the bridges are considered structurally deficient, meaning they have at least one defect that requires attention. Bridges on Rockfish Creek, Puppy Creek, and Raft Swamp fall into this category.

Critical Facilities Impacts

There were impacts to critical facilities because of Hurricane Matthew. The Solid Waste Center at 700 C.C. Steele Road in unincorporated Hoke County became inaccessible when the road flooded. As a result, power utilities could not gain access to the Waste Transfer Station and the facility's well pumps were inoperable for two to three days.

Offices in the Department of Social Services (DSS) Building in Raeford, located at 314 South Magnolia Street, were flooded. Some staff had to switch to unaffected work spaces within the building to continue working. The building remained functional and did not lose power. This area typically sees pooling of water when storms produce 1.5 inches of rain or more.

Senior Services and IT Services are housed in the J.L. McLaughlin Building located at 423 East Central Avenue in Raeford. The basement of this building flooded with six to eight inches of water.

Ecosystems / Environment Impacts

Environmental impacts were localized in areas that had seen flooding on previous incidences.

Dam Breaches and Failure

Dam breaches occurred from both events, Hurricane Matthew and the storm that occurred the preceding week. In total, seven dams failed.

In east central Hoke County, a dam on a small lake that drains into McLaughlin Lake failed. The water over-topped the McLaughlin Lake dam, at the McLaughlin Lakes subdivision. The floodwaters then cascaded downstream into Rockfish Creek at Upchurches Pond. During these events, check dams, which had usually functioned well, were breached and caused flooding of Oakwood Avenue.

There have been seven dam failures reported since 1999. None resulted in loss of life. Local perception is that all low-hazard dams in the county seem to have failed at various points in time.

Wetland Preserves

Localized flooding occurred in the natural wetland area on Adcox Road in unincorporated Hoke County.

Environmental Hazard

Because of power outages caused by Hurricane Matthew, 1,000 chickens were lost at a single farm. This extreme mortality level created an environmental disposal problem.

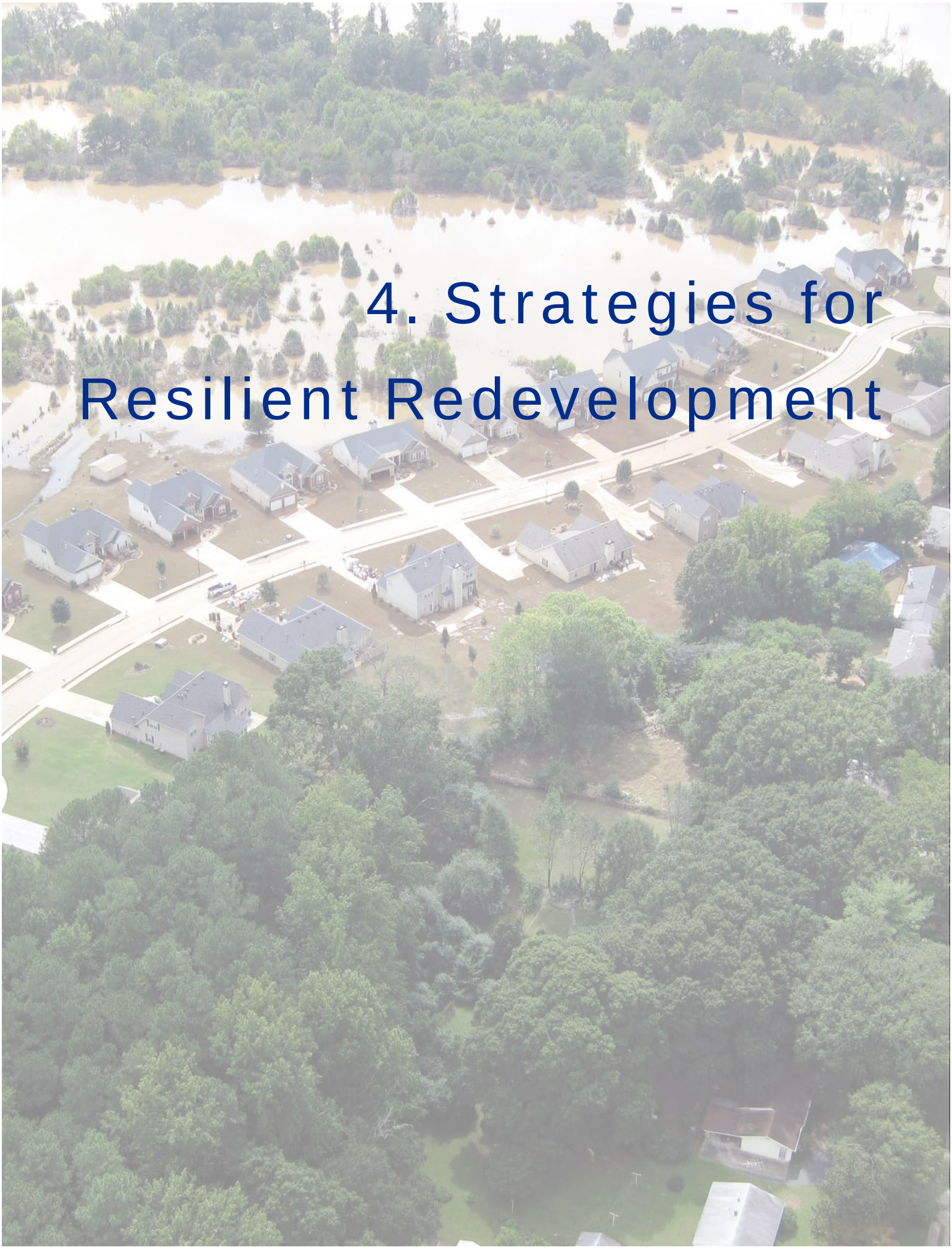
Summary of Critical Issues and Community Assets

Critical issues for Hoke County fall into three primary categories: dam and street infrastructure, protection of power supply, hydrologic issues because of rapid residential development.

Hoke County faces challenges around funding and authority to manage its dam and street infrastructure. Active maintenance and management of these resources is necessary to ensure the county is better equipped to confront the next storm.

Loss of power generated significant issues following Hurricane Matthew. Protection of power supply is necessary to ensure critical facilities, as well as commercial and residential structures, maintain power or regain power as quickly as possible following a storm event.

Dam failures exacerbated all aspects of the flooding impacts. The hydrology of the region has been affected by the influx of residential development in Hoke and Cumberland counties. Hoke County is projected to continue increasing its resident population, which equates to continued suburban development in areas impacted by this and previous storms. Planning with respect to the area's hydrology will go a long way toward contributing to resiliency.



4. Strategies for Resilient Redevelopment

4. Strategies for Resilient Redevelopment

This section provides details about the resilience and revitalization strategies and actions identified in Hoke County. These actions were identified and refined during three public meetings with local officials and county residents held in March and April 2017. The actions are tied to impacts from Hurricane Matthew and organized by the pillars of housing, economic development, infrastructure and environment. In addition to the public meetings, frequent coordination calls with County officials and data gathered from state agencies and organizations were utilized to formulate the actions listed below.

Meeting 1 was designed to introduce the community and County points of contact to the Resilient Redevelopment Planning process and goals. This meeting allowed the planning team to capture areas within the county that were damaged during Hurricane Matthew and to hear what potential mitigation actions had already been considered. Draft resilience actions were then presented at Meeting 2 of the planning process. This was done to garner general buy-in on the draft actions from the County-level planning teams and residents. More details on the actions were collected between Meetings 2 and 3 through research and follow-up phone calls and emails with the primary points of contact. Meeting 3 provided the opportunity to collect and finalize details for the draft actions. Meeting 4, scheduled in early May 2017, allowed the county points of contact to rank the identified actions, group them into High, Medium, and Low Priorities, and to approve their inclusion in the plan.

Pillar	Strategy/Action Count
Housing	3
Economic Development	4
Infrastructure	4
Environment	5
Grand Total	**16**

Table 5. Hoke County Summary of Strategies by Pillar

The following table is ordered by the rankings and priorities provided by Hoke County during Meeting 4:

Pillar	Strategy/Action Name	Priority	Overall Ranking
Infrastructure	Emergency Communication Upgrades at Critical Facilities	**High**	**1**
Environment	Stormwater System Upgrades	**High**	**2**
Infrastructure	Backup Power at Critical Facilities	**High**	**3**
Infrastructure	Protection of Roads and Bridges	**High**	**4**
Infrastructure	Dam Rehabilitation and Replacement	**High**	**5**
Economic Development	Downtown Raeford Historic District Revitalization	**Moderate**	**6**
Housing	Elevation of Damaged Homes	**Moderate**	**7**
Environment	Stream Maintenance	**Moderate**	**8**
Environment	Augmented Flood Mapping	**Moderate**	**9**
Economic Development	Agricultural Alternative Power Supply	**Moderate**	**10**
Housing	Acquisition/Demolition of Abandoned Homes	**Moderate**	**11**
Economic Development	Food Storage Backup	**Moderate**	**12**
Environment	Stream Gauge and Early Warning Network	**Low**	**13**
Economic Development	Increase Eco-Tourism	**Low**	**14**
Environment	Environmental Training	**Low**	**15**

Pillar	Strategy/Action Name	Priority	Overall Ranking
Housing	Housing Rehabilitation Assistance	**Low**	**16**

Table 6. Projects by Rank

On the following pages, we have organized the strategies and actions by pillar. Within each pillar, the projects are grouped by county priority. Please note that maps are provided for all strategies that have a specific location within the county. Strategies without maps are county-wide projects that will benefit citizens throughout the county.

Housing Strategies

Hoke County as a whole suffered moderate impacts with respect to housing from Hurricane Matthew. Scattered residential properties in areas like Woodberry Circle and Scarlet Oak Drive in East Hoke County were hardest hit. As a result, in development of Hoke County's housing strategies, the planning team put their focus into the resiliency and rehabilitation assistance. There are no high priority housing strategies.

Moderate Priority Housing Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Housing	Elevation of Damaged Homes	**Moderate**	**7**
Housing	Acquisition/Demolition of Abandoned Homes	**Moderate**	**11**

Table 7. Hoke Moderate Priority Housing Summary

These projects represent the housing strategies that Hoke County indicated is of a moderate priority to address. Additional detail on the strategies can be found below:

- **Elevation of Damaged Homes:** Despite repetitive flooding of homes, some residents may not want to relocate. In these cases, elevation may be an option. Several homes within Hoke County have been identified for this strategy and two are participating so far.

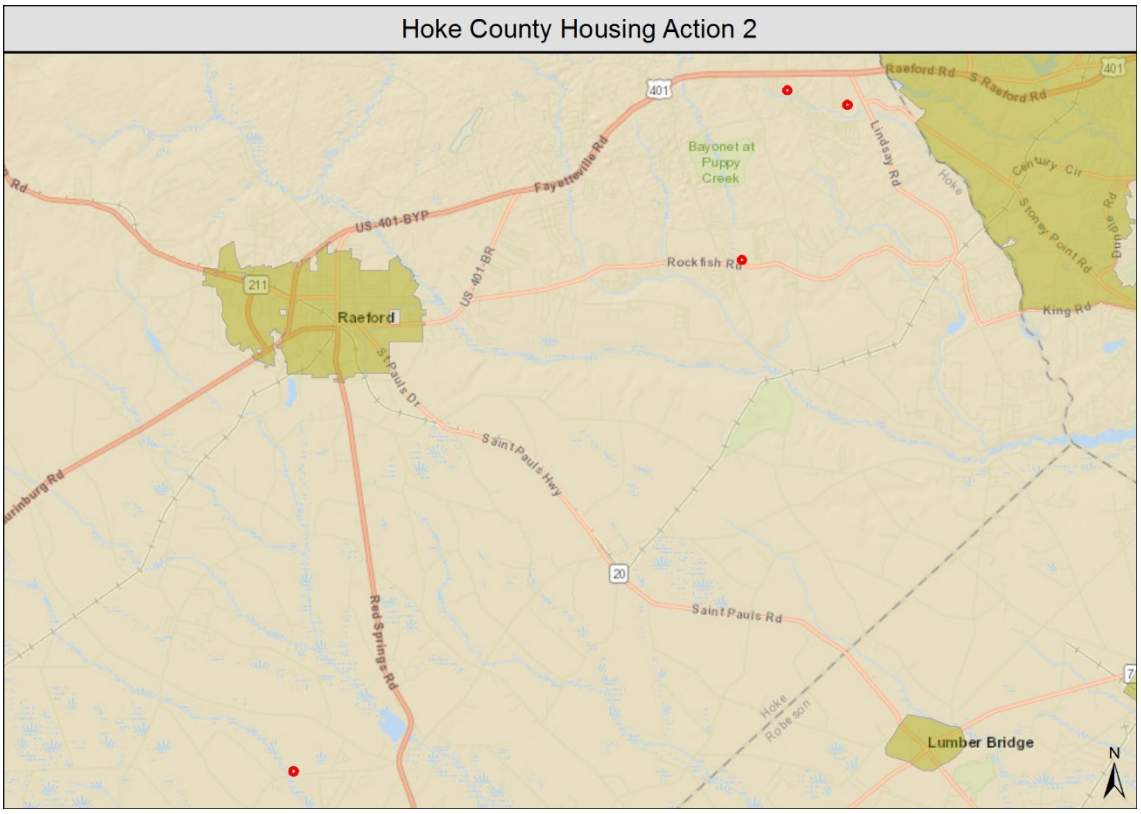


Figure 15. Housing Action 2 - Elevation of Damaged Homes

H2 - Housing Elevation

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 7

Project Timeframe: 12-24 months

Location: Confirmed locations:1157 S Old Wire Road and 310 Oakmont Drive (HMGP). TBD - 41 Units in Woodberry Circle area and 28 units in Scarlet Oak Drive area

Project Summary: Elevation of homes to protect from flooding. Many homes were flooded as a result of Hurricane Matthew and remain at risk from future flooding. It is anticipated that a total of 10-15 units will ultimately participate but several property owners have been unresponsive to the offer to participate so far.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Hundreds of homes were impacted by Hurricane Matthew flooding in Hoke County. Many of the homes proposed in this project are the highest risk from future flooding Flooding from area rivers and tributaries as well as drainage issues near culverts caused damage to residential properties during Hurricane Matthew. Despite flood conditions and after attempts have been made to acquire the flood prone property some residents may not want to relocate. In these cases elevation is an option.	N/A
Consistent with existing plans (describe points of intersection/departure)	Elevation is not specifically mentioned in the Cumberland-Hoke Regional Hazard Mitigation Plan but this type of mitigation is generally supported in it.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Elevation of homes will reduce post-disaster damage cleanup costs to residents and reduce overall impacts of flood events.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	100-200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	None	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$1M+	N/A

What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Acquisition/Demolition of Abandoned Homes:** This strategy focuses on permanently removing people and property from hazard areas with a focus on residences that are already abandoned. Eleven homes and an assisted living facility in downtown Raeford were identified for this strategy within the city. Numerous homes throughout Hoke County also may be eligible this information will be known once homeowners respond to inquiries from Emergency Management.

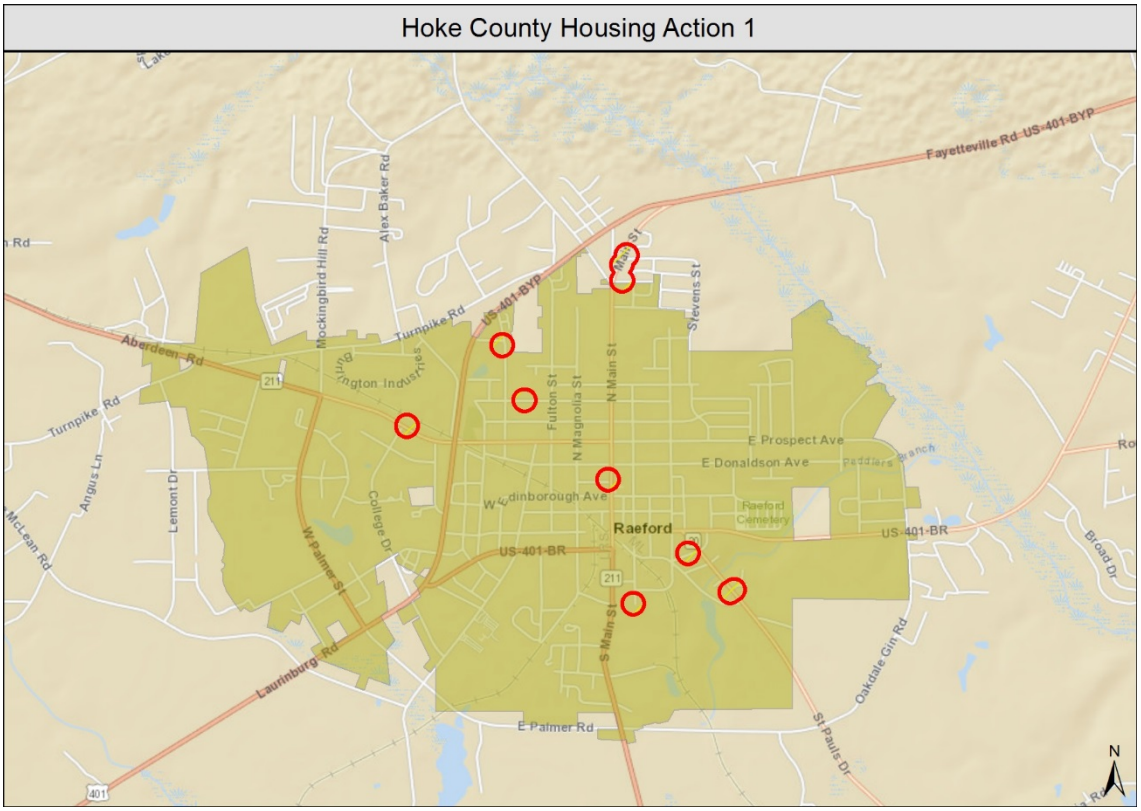


Figure 16. Housing Action 1 - Acquisition/Demolition of Abandoned Homes

H1 - Housing Acquisition/Demolition

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 11

Project Timeframe: 12-24 months

Location: Scattered abandoned residential properties in Hoke County; sites TBD. Several abandoned residences within Raeford, near flood area. See attached maps for specific locations.

Project Summary: Acquire and demolish abandoned structures in the flood zone. Includes Raeford Manor in downtown Raeford (formerly an assisted living facility), 10 Single family homes within Raeford, Abandoned homes within the county (addresses not identified). Some of these sites will need further inspection to validate keeping them in the project.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Hundreds of homes were impacted by Hurricane Matthew flooding in Hoke County. Abandoned structures in or near flood zones are unsightly and create hazards during flood events. Removal of these structures will assist the County and the City of Raeford in managing its resources. Permanently removing people and property from hazard areas will save the local government and Emergency Management maintenance and monitoring responsibilities.	N/A
Consistent with existing plans (describe points of intersection/departure)	From the 2016 Cumberland-Hoke Regional Hazard Mitigation Plan: Hoke Action #19: Pursue funding to relocate or demolish hazardous buildings	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Removal of abandoned properties will increase values of surrounding homes improve the appeal of Raeford for commercial development and revitalization.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	>200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	Creates more open space for water storage/filtration wildlife habitat and recreational use. Removes hazards form the environment.	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$1M+	N/A

What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Low Priority Housing Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Housing	Housing Rehabilitation Assistance	**Low**	**16**

Table 8. Hoke Low Priority Housing Summary

This project represents the housing strategy that Hoke County indicated is of a low priority to address. Additional detail on the strategy can be found below:

- **Housing Rehabilitation Assistance:** Several homes in Hoke County located outside the Special Flood Hazard Area (SFHA) were flooded and did not have flood insurance. This strategy would provide a loan or possibly a grant program for homeowners meeting income requirements who need help with post-Matthew flood repairs and interim mortgage payments. Locations to be determined.

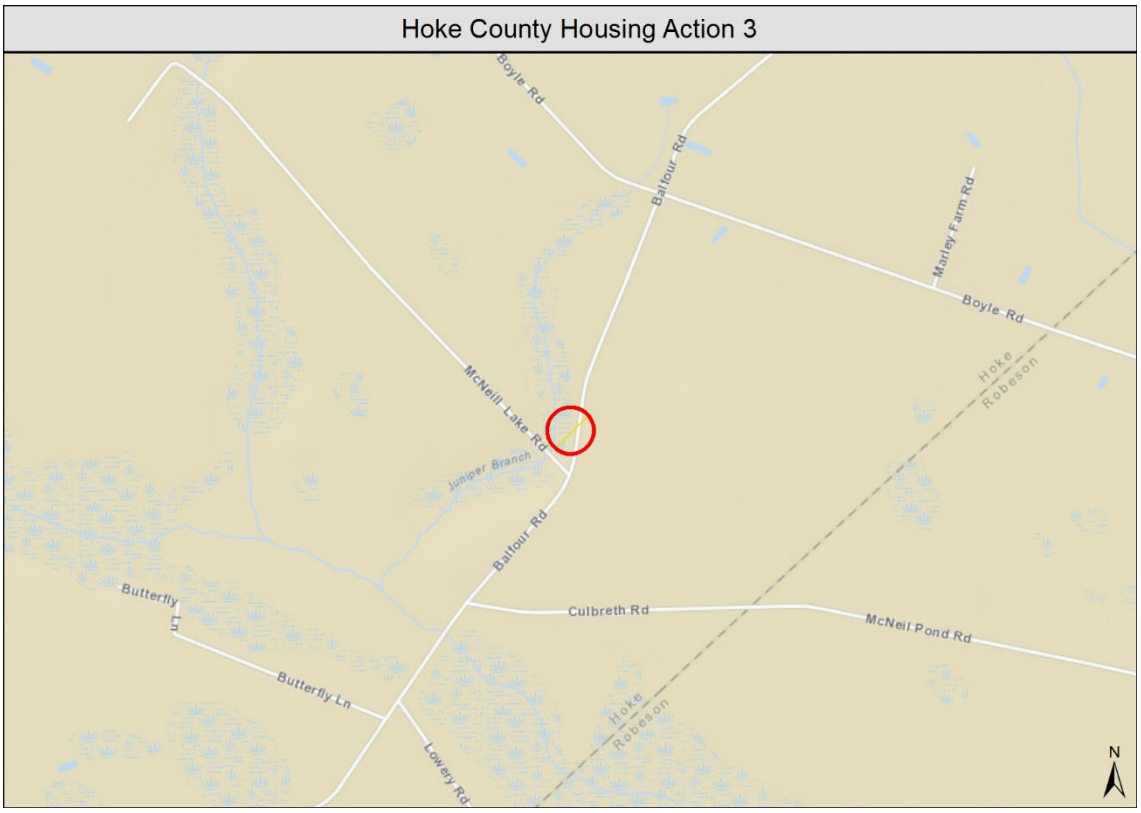


Figure 17. Housing Action 3 - Housing Rehabilitation Assistance

H3 - Housing Rehab Loan Assistance

County: Hoke

Priority Grouping: Low Priority

Priority Ranking: 16

Project Timeframe: 24 months

Location: Homeowners in need of this assistance have not been determined yet but the County knows where most of the damaged properties are located.

Project Summary: Many homeowners outside the 100-year floodplain had their homes severely damaged by Matthew. Most do not carry flood insurance and do not have financial resources to repair their homes and may be facing bankruptcy. Grants or 0%loans can help repair home and restore some financial equilibrium.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Flooding outside the SFHA from excessive rainfall and swollen creeks and rivers caused flooding of residential properties. A lack of flood insurance because it was not mandatory has led to financial distress and inability to repair homes. Having to still pay mortgages on uninhabitable homes creates mounting debt which is the leading cause of foreclosure and loss of homes.	N/A
Consistent with existing plans (describe points of intersection/departure)	Supports Action #2 from the Hoke part of the Cumberland-Hoke Regional Hazard Mitigation Plan about removing barriers to recovery for socially vulnerable populations. These loans are primarily intended for low and mod income families who are on the verge of foreclosure. The stabilization of these families are central to the County affordable housing strategy. Reduction of vacancies reduces vandalism and fire.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	These loans are primarily intended to stabilize low and mod income families thereby preserving their disposable income for spending on consumables that drive the local economy. The stabilization of the housing stock maintains the tax base. Neighborhoods filled with homes in foreclosure cannot support the local business centers. Rehab loans encourage reinvestment in the community and eliminate liability risk and health hazards.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	<50 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A

What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	The positive impact will be higher occupancy in the existing environment and less sprawl.	N/A
What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$501K - $1M	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Economic Development Strategies

In terms of economic development strategies in Hoke County, the planning team worked with local county officials to examine multiple ways to increase resiliency for future storm events and encourage economic growth. There are no high priority economic development strategies.

Moderate Priority Economic Development Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Economic Development	Downtown Raeford Historic District Revitalization	**Moderate**	**6**
Economic Development	Agricultural Alternative Power Supply	**Moderate**	**10**
Economic Development	Food Storage Backup	**Moderate**	**12**

Table 9. Hoke Moderate Priority Economic Development Summary

These projects represent the economic development strategies that Hoke County indicated is of a moderate priority to address. Additional detail on the strategies can be found below:

- **Downtown Raeford Historic District Revitalization:** With the end goal of providing positive features and layouts to attract more visitors and help retain tax paying residents, this strategy addresses physical components like improvement and resiliency of infrastructure and buildings to make structures 'move-in ready'. The strategy includes façade and basement foundation improvements, addressing sewage problems caused by flooding, installation of modern utilities, and rehab of leaking roofs and windows. All 33 buildings within the Downtown Raeford Historic district are part of this strategy.

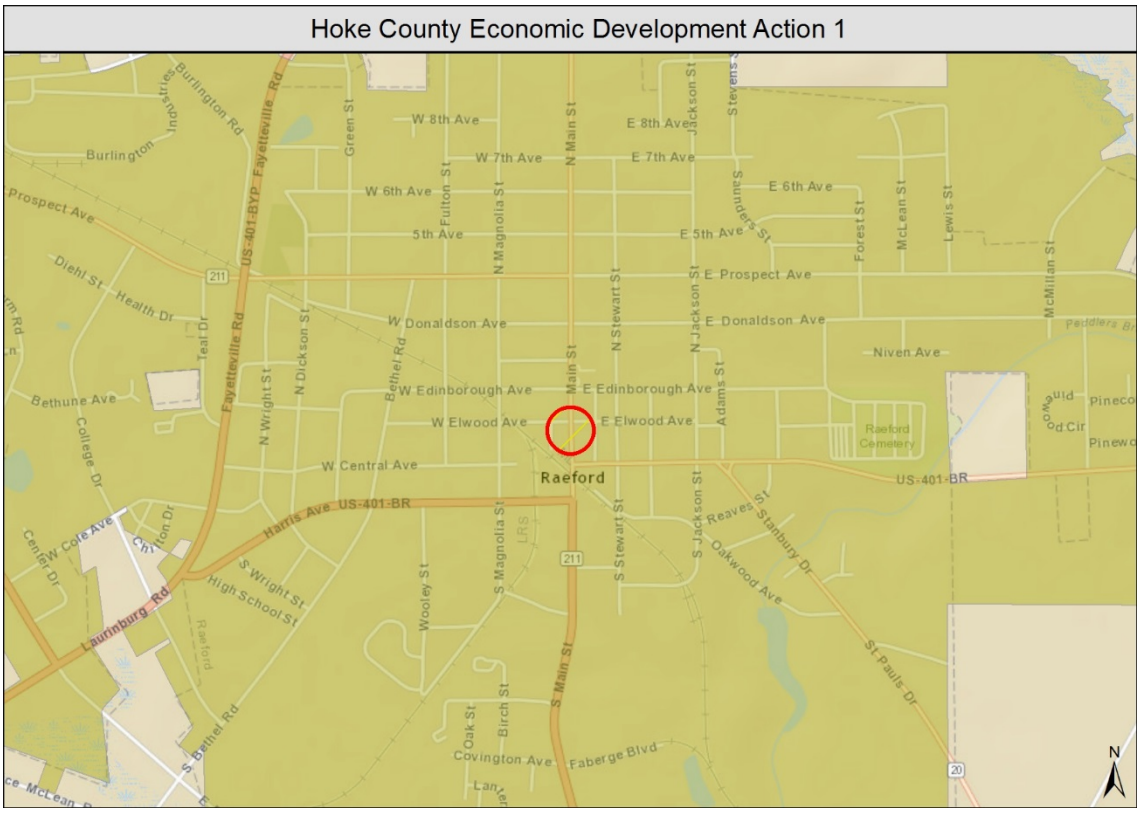


Figure 18. Economic Development Action 1 - Downtown Raeford Historic District Revitalization

ED1 - City of Raeford Downtown Historic District Revitalization

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 6

Project Timeframe: 12-24 months

Location: The Historic District in Downtown Raeford which includes parts of Main, Central, Lundy, Elwood and Highland Streets as well as Racket Alley

Project Summary: Downtown revitalization in the historic district by providing positive features and layouts that can attract more visitors and help retain tax paying residents.
• Address physical components like infrastructure and buildings to make structures 'move-in ready', with façade and basement foundation improvements as well as modern utilities.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The Historic District of Downtown Raeford received some damage during Matthew with inadequate stormwater infrastructure leading to flooding and sewage contamination. Heavy rainfall caused interior damage from leaky roofs and windows. Building a more robust downtown not only helps prevent damage from future storms it also helps create a more diverse and resilient economy that can better withstand future events like storms.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Southeastern NC CEDS' Goal #3: Create Revitalized and Vibrant Communities	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Provides a revitalized economic center for the County and can model other nearby successful downtowns like Southern Pines to bring more tourism and create a higher quality of life for residents. Overall a revitalized downtown can bring many important positive spinoff effects for county-based businesses.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	<50 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	Part of the project includes addressing a stormwater issue downtown that has caused sewage to be released downtown. In general a refocus on the downtown reduces	N/A

	urban sprawl and the entire cycle of long commutes that degrades the environment.	
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$501K - $1M	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	Local	N/A

- **Agricultural Alternative Energy Supply:** Supplemental and redundant power is needed to ensure livestock have sufficient water and food supply when central systems are shut down. Installation of power generators with cogeneration capacity (using animal waste) at large scale hog and poultry farms includes options like waste digesters, biogas collectors, solar, and battery power.

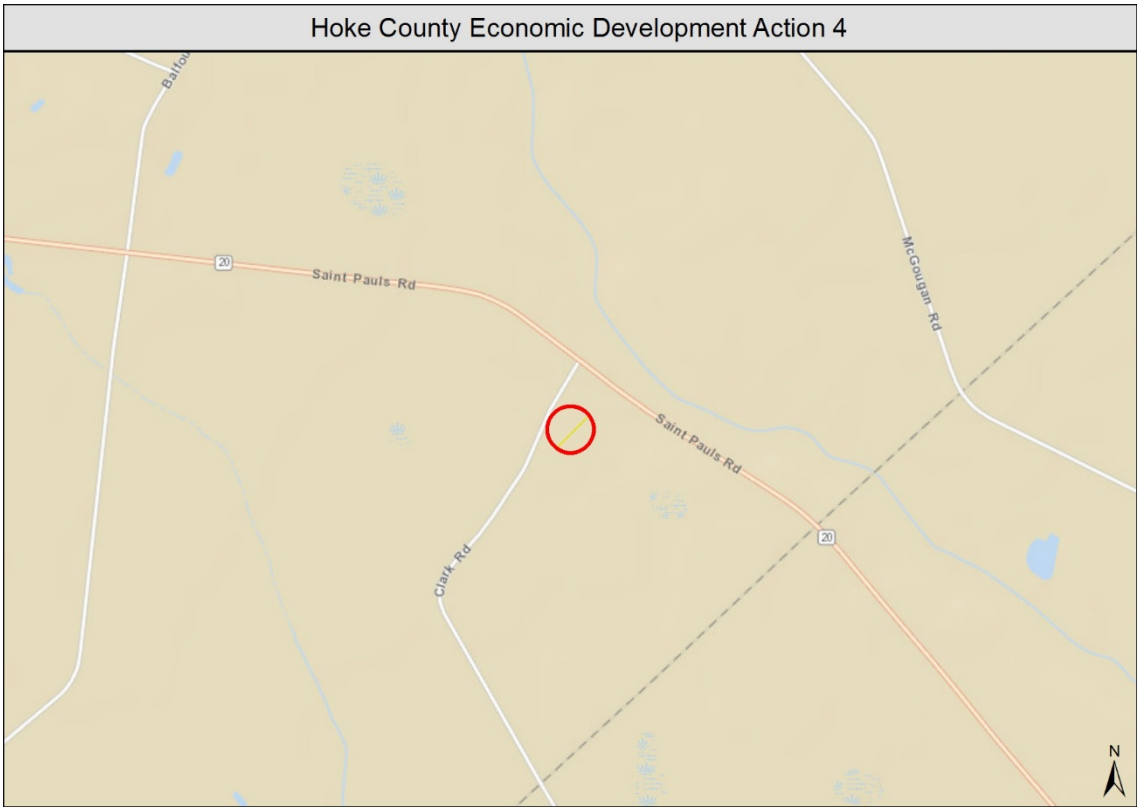


Figure 19. Economic Development Action 4 - Agricultural Alternative Energy Supply

ED 4 - Hoke County Agricultural Alternative Energy Supply (hog and poultry farms)

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 10

Project Timeframe: 12 - 24 months

Location: S Hoke County near Robeson line (poultry); other locations TBD

Project Summary: Overall, back-up, supplemental and redundant power is needed to ensure livestock have sufficient water and food supply when the main grid and distribution lines are shut down. Install Power Generator with cogeneration capacity at large scale locations. Power supply for cogeneration can include bio materials like animal waste.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Agricultural operations in Hoke County were hit hard by Hurricane Matthew. A poultry operation in southern Hoke County near the Robeson County line lost thousands of birds post-Matthew. In addition widespread flooding generally spreads animal waste into nearby streams and rivers causing severe water quality issues in the eastern NC river systems. This project would help reduce the post-storm impact on agriculture and contribute toward better water quality in the area.	N/A
Consistent with existing plans (describe points of intersection/departure)	By making use of animal waste (power generation) it will help reduce the amount of waste that is stored on-site which will help improve local quality. As streams and swamps in southern Hoke County drain toward the Lumber River it is consistent with efforts by the Lumber River Conservancy to protect the Lumber River the state's only wild and scenic blackwater river	Agree
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	Agree
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	Agree
Explain any benefits or impacts to the economy of the county from this project.	Agriculture is an important source of revenue for Hoke County and helping shave off costs like energy use and waste disposal reduces the overhead toward agricultural operations and makes it more likely that agriculture will continue strong in the area. This project can also greatly help agriculture after a storm where thousands of animals have been lost when the power goes for several days.	Agree
For how long will this solution be effective?	Between 11 and 30 years	Agree
How effective is the risk reduction?	<50 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	Agree

What impacts to the environment of the county will result from this project?	Helps make use of animal waste that could potentially contaminate nearby protected bodies of water like the Lumber River if flooded again. It will have a positive impact on water quality by providing another use for animal waste that would otherwise remain in large concentrations vulnerable to future storms.	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$501K - $1M	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Between 51 and 75%	Agree
Who will administer this project?	Unknown	Agree

- **Food Storage Back-up:** This strategy involves local restaurants and markets partnering with the Butterball turkey processing plant to avoid food spoilage during extended power outages. Local businesses would enter into a partnership to utilize the blast furnace/cold storage capacity of the Butterball plant after a storm to help preserve food inventory.

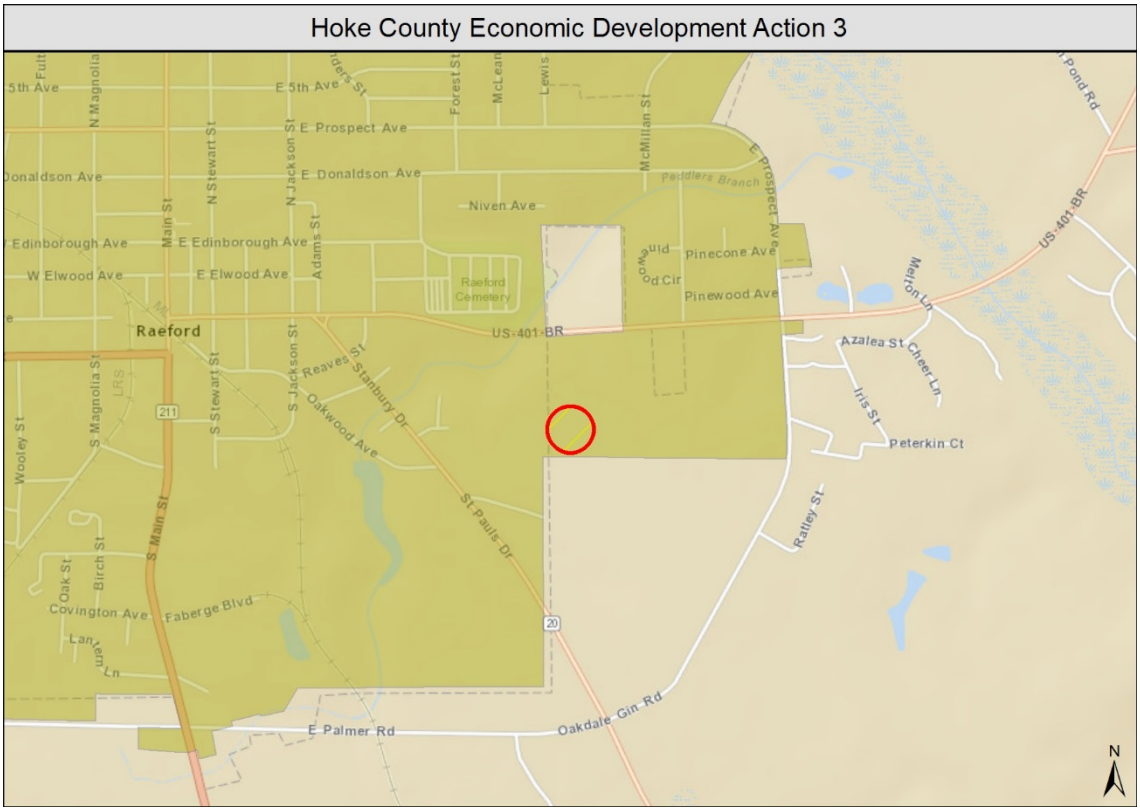


Figure 20. Economic Development Action 3 - Food Storage Back-up

ED3 - Food Storage During Power Outages for Local Businesses

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 12

Project Timeframe: 12-24 months

Location: Butterball Plant at 1000 E Central Ave, Raeford, NC 28376

Project Summary: Site within close proximity of businesses that can provide refrigeration / food storage capacity during major power outages;
• Partner with Butterball turkey processing plant who would have the space/capacity and existing infrastructure.
• County businesses utilize Blast Furnace/ cold storage capacity in exchange for power cogeneration/sharing with Butterball plant
• Identify co-generation opportunities that incorporate renewable/onsite power generation that would provide the back-up power needed during outages.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Raeford is a relatively small town and its businesses are generally locally owned. A loss of food inventory due to power outages after a storm is a big hit to the businesses. and even if power is restored they have to wait for the next delivery of food which could take a long time depending on condition of roads and supply chain. This project will help local businesses like restaurants protect their inventory restore operations quicker and reduce the chance of going out of business.	N/A
Consistent with existing plans (describe points of intersection/departure)	Newer idea that emerged from experience with Hurricane Matthew. Would require public-private cooperation.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Raeford is a relatively small town and its businesses are generally locally owned. A loss of food inventory due to power outages after a storm is a big hit to these businesses; and even if power is restored they have to wait for the next delivery of food which could take a long time depending on condition of roads and supply chain. This project will help local businesses like restaurants protect their inventory restore operations quicker and reduce the chance of going out of business.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Low to moderate confidence	N/A

What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	Reduces food spoilage and resulting disposal of spoiled food.	N/A
What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$51K - $100K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	Local	N/A

Low Priority Economic Development Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Economic Development	Increase Eco-Tourism	**Low**	**14**

Table 10. Hoke Low Priority Economic Development Summary

This project represents the economic development strategy that Hoke County indicated is of a low priority to address. Additional detail on the strategy can be found below:

- **Increase Eco-Tourism:** Creating a pleasant walkable urban environment in the City of Raeford is needed to engage existing and prospective residents and to expand tourism by providing an amenity. Developing the nature trail around Upchurches Pond to include parking, bathroom facilities, and site furnishings is the focus of this strategy.

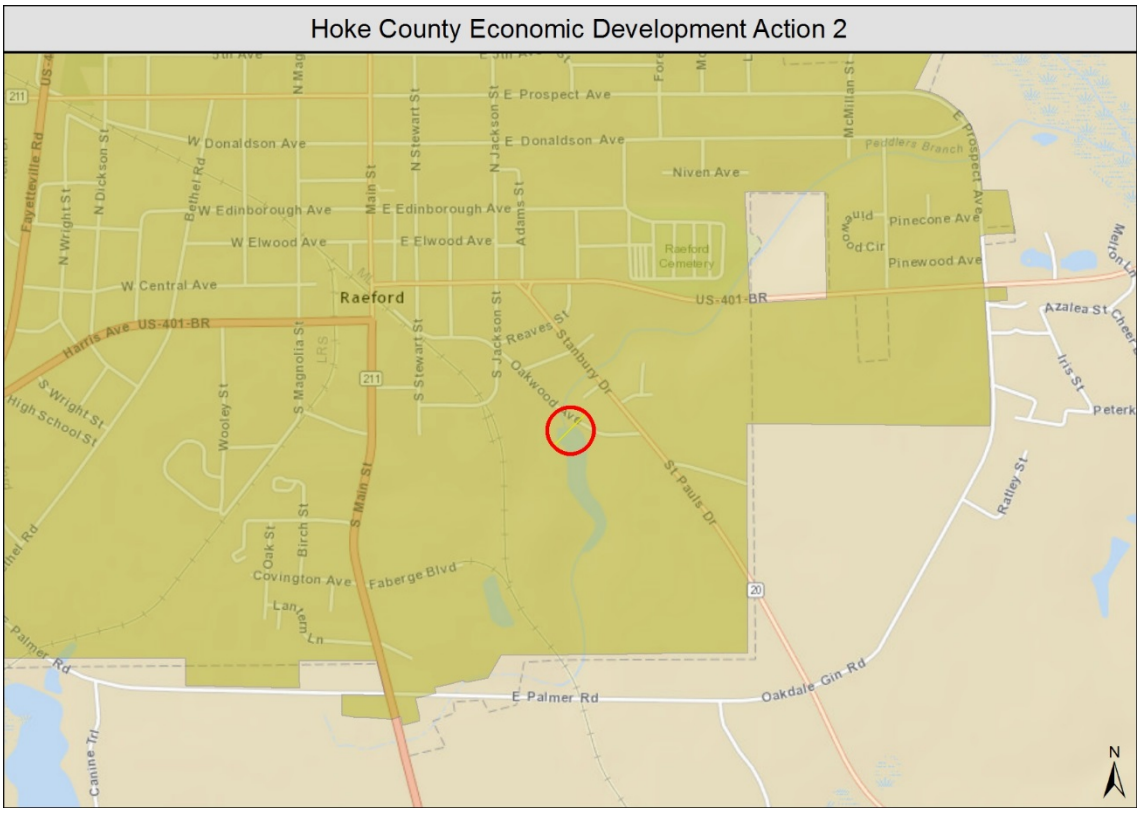


Figure 21. Economic Development Action 2 - Increase Eco-Tourism

ED2 - City of Raeford Eco Tourism

County: Hoke

Priority Grouping: Low Priority

Priority Ranking: 14

Project Timeframe: 12-24 months

Location: Upchurches Pond off Oakwood Avenue

Project Summary: Downtown revitalization by providing positive features and layouts that can attract more visitors and help retain tax paying residents.

- Existing Pond in SE Raeford. Clean Water Management Trust owns Conservation Easement
- City can work with owner to develop nature trail around pond
- Five-acre tract next to park is for sale – ideal location for parking and bathroom facilities
- Include amenities - wayfinding, sidewalks, bicycle, transit stops and street furniture.
- Units: 19-acre pond, x LF of trails

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Rural downtowns are particularly vulnerable to downturns in the economy and the economic disruption caused by storms. A few days out of business can often mean bankruptcy for local businesses that depend on consistent cash flow and do not have deep pockets. Additional economic development can help build up a strong local economy that can withstand future storms by building up economic resiliency.	N/A
Consistent with existing plans (describe points of intersection/departure)	Generally supports the Tourism economic cluster in the 2012-2017 Southeastern NC CEDS.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	This project along with the Historic District Revitalization (another Economic Development project) will help improve the tourist draw to Raeford and Hoke County. This project complements the Historic District and provides another recreational outlet for tourists. It will also help improve the quality of life to the residents.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	Unknown	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Low to moderate confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	Refocus residents and visitors on ecology and wildlife of the area. Provide another attraction to the area.	N/A

What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$251K - $500K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	Local	N/A

Infrastructure Strategies

The purpose of the strategies related to Hoke County's infrastructure is to protect critical facilities and key routes needed to foster community resiliency, sustainability, and safety before, during, and after disasters. These strategies are essential in protecting citizen and community well-being, while augmenting an effective recovery from a future storm like Hurricane Matthew. In working with local officials, the planning team developed the following infrastructure strategies.

High Priority Infrastructure Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Infrastructure	Emergency Communication Upgrades at Critical Facilities	**High**	**1**
Infrastructure	Backup Power at Critical Facilities	**High**	**3**
Infrastructure	Protection of Roads and Bridges	**High**	**4**
Infrastructure	Dam Rehabilitation and Replacement	**High**	**5**

Table 11. Hoke High Priority Infrastructure Summary

These projects represent the infrastructure strategies that Hoke County indicated is of a high priority to address. Additional detail on the strategies can be found below:

- **Emergency Communication Upgrades at Critical Facilities:** To upgrade emergency critical communication post-storm, 800 MHz Bi-Directional Amplifier (BDA) Systems are to be installed at 18 facilities to ensure effective communications during periods of natural and man-made disaster. The highest priority locations are the Hoke County EOC, the JL McLaughlin Building, East Hoke Middle School and the three additional schools that serve as shelters, the Detention Center, and the Courthouse. Next priorities are the First Health Moore Regional Hospital and the ten other Hoke County schools that are not shelters.

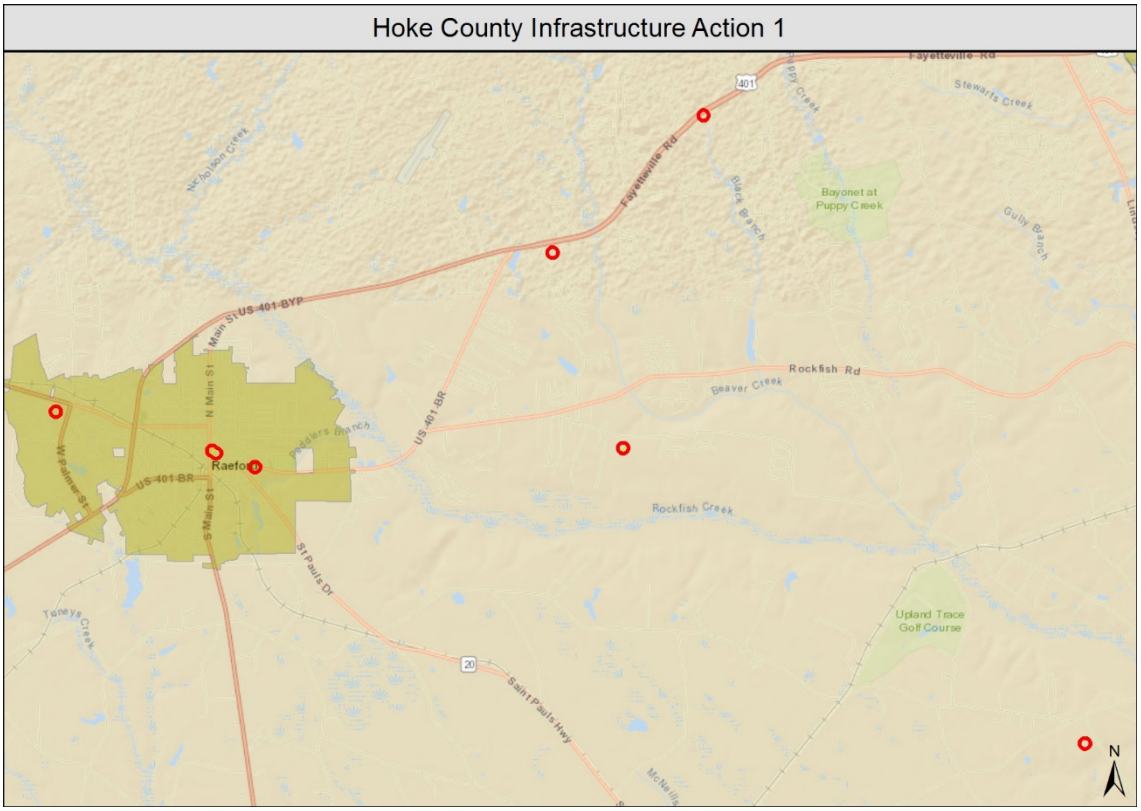


Figure 22. Infrastructure Action 1 - Emergency Communication Upgrades at Critical Facilities

I1 - Emergency Communication Upgrades at Critical Facilities

County: Hoke

Priority Grouping: High Priority

Priority Ranking: 1

Project Timeframe: 12-24 months

Location: Hoke County EOC / Raeford JL McLaughlin Building; County Courthouse; Detention Center; First Health Moore Regional Hospital; 4 schools serving as shelters; Lower priority the 10 other Hoke Co. schools

Project Summary: To mitigate this critical communications issue, 800 MHz Motorola Bi-Directional Amplifier (BDA) Systems are to be installed at 18 facilities to ensure effective communications during periods of natural and man-made disaster. Highest priority is the Hoke County EOC and the City of Raeford JL McLaughlin Building (IT), Courthouse, and Detention center. Next priorities are schools that serve as shelters (4) and First Health Moore Regional Hospital. And then remaining schools (10).

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Critical communications glitches due to subpar equipment during Matthew hampered response and command and control efforts. Assigned EOC staff utilize portable and hand held 800 MHz radios to communicate during periods of EOC activations. Heavy commercial building designs and construction such as the EOC and public shelters blocked 800 MHz radio signals and eliminated a critical portable radio communications link due to signal block. This project will mitigate this critical communications issue.	N/A
Consistent with existing plans (describe points of intersection/departure)	Project is consistent with Cumberland-Hoke Hazard Mitigation Plan like Action #3 upgrade the County EOC.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Having more effective emergency communication can help reduce impacts to local infrastructure such as clearing roads that may be needed by local businesses for worker and customer access as well as keeping the supply chain flowing.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	>200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	N/A
What impacts to the environment of the county will result from this project?	More effective emergency communication can help triage more critical response issues and can help deploy resources to intervene with cascading impacts that could affect valuable natural resources (e.g. a damaged wastewater treatment plant that leaks into a nearby river or creek).	N/A

What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$251K - $500K	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Backup Power at Critical Facilities:** Local county officials provided six locations in need of some form of backup power to maintain critical county functions during system outages. Focused in downtown Raeford, locations include: City Hall, County Offices, JL McLaughlin Building, Public Utilities Building, County Courthouse, and HATS Transportation Building.

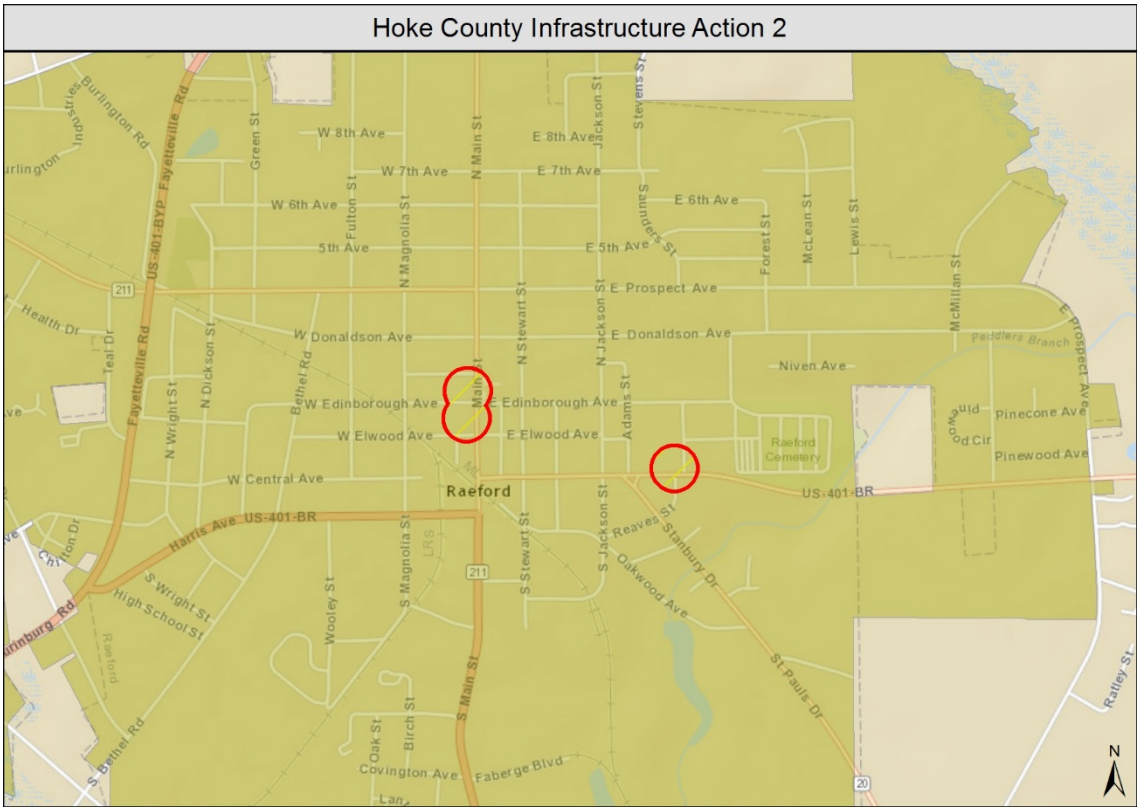


Figure 23. Infrastructure Action 2 - Backup Power at Critical Facilities

I2 - Back-up Power at Critical Facilities

County: Hoke

Priority Grouping: High Priority

Priority Ranking: 3

Project Timeframe: 12-24 months

Location: Raeford Town Hall - 315 N. Main St, Pratt Building/County Offices - 227 N. Main St, JL McLaughlin Building - 423 E. Central Ave, Public Utilities/Building and Facilities, Hoke County Courthouse Annex - 304 N. Main St., HATS Transportation Building

Project Summary: As one of the main impacts from Matthew was power loss, critical facilities in Hoke County and Raeford need reliable and adequate back up power systems. Adequate auxiliary generators are needed for shelters, public utilities, law enforcement and care facilities in order to maintain minimal continuity of operations for core community functions. Install 120 KW back-up generators in three buildings Raeford Town Hall, Pratt Building / County Offices, JL McLaughlin Building (serves Hoke County functions). Install 120 KW back-up generators in 6 other buildings (see maps)

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Power outages created by Hurricane Matthew were prolonged because back-up supplemental and/or redundant power was not available to ensure that critical facilities had sufficient power to maintain operations. The resulting emergency operations were hindered leading to secondary negative impacts like inefficient emergency response. Auxiliary generators will mitigate this issue.	N/A
Consistent with existing plans (describe points of intersection/departure)	Project is consistent with Cumberland Action #1 of the Cumberland-Hoke Regional Hazard Mitigation Plan: Conduct a countywide infrastructure vulnerability assessment to identify priority needs for updating ill-designed or outdated critical structures.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Having quality utility services to keep some commercial businesses open during disasters will promote a healthy economic climate and reduce periods of business closures due to flood events.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	100-200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	The generators will supply power to public buildings vital to emergency services which may help avert environmental disasters. A new efficiently monitored generator minimizes	N/A

	fuel consumption which in-turn saves natural resources and reduces air pollution.	
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$251K - $500K	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Protection of Roads and Bridges:** This strategy involves improvements to the road network to prevent future storm-related impacts and closures. Strategies include elevation, enlarged stormwater drainage intakes, culvert upgrades/extensions and swales to channel away flood waters. Locations identified by local county officials and residents include Lindsay Road, Galatia Church Road, Rockfish Road, and Balfour Road; bridge repairs are needed at Johnson Mill Road and Golf Course Road.

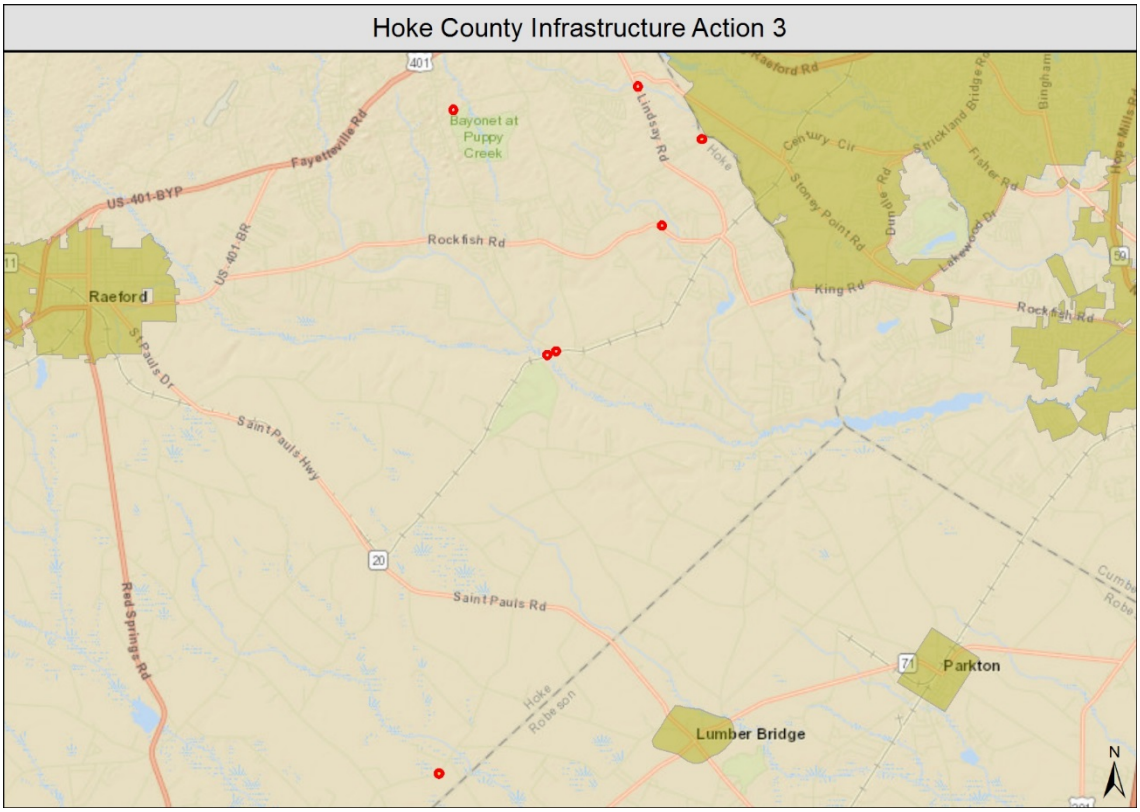


Figure 24. Infrastructure Action 3 - Protection of Roads and Bridges

I3 - Protection of Roads and Bridges

County: Hoke

Priority Grouping: High Priority

Priority Ranking: 4

Project Timeframe: 12-36 months

Location: BRIDGE REPAIR/PROTECTION: (3 total): Johnson Mill Road at Citadel Ct,, 2 Bridges at Golf Course Rd; ROAD PROTECTION/REPAIR (4 total): Lindsay Road, Galatia Church Road, Rockfish Road, parts of Balfour Road

Project Summary: Protect selected roads via elevation, enlarged stormwater drainage intakes or swales to channel away the flood waters. Protect bridge abutments to resist scour and erosion; consider elevation of bridge span.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Flooding caused by Hurricane Matthew damaged several roads and bridges to the point that Hoke County had to send many services like trash removal to neighboring counties like Cumberland while the roads and bridges were repaired. These damages also caused issues with emergency access and roads and bridges in key locations need to be made resilient to resist damage so the road network remains functional in the aftermath of future storms.	N/A
Consistent with existing plans (describe points of intersection/departure)	Supports Action 1 from the Hoke part of the Cumberland-Hoke Regional Hazard Mitigation Plan which states: Conduct a countywide infrastructure vulnerability assessment to identify priority needs for updating ill-designed or outdated critical structures	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Maintaining functionality of roads and bridges after a storm helps avoid costly repairs and even more costly disruption of economic and government services post-disaster. Without access to commercial areas small businesses can go bankrupt without the normal flow of customers and access to supply chains.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	50-100 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A

What impacts to the environment of the county will result from this project?	The improvements should be designed to respect the natural watercourse and preserve useable open space for low income neighborhoods.	N/A
What is the capability of the local government to administer this project?	Medium	N/A
What is the financial range of this project?	$501K - $1M	N/A
What is the level of public support for this project?	High	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Dam Rehabilitation and Replacement:** Dam failures and overtopping were significant issues in Hoke County, and contributed to unpredicted and damaging flood levels downstream. This strategy addresses small dams generally owned by neighborhood associations, farmers, utilities, or other private owners and would include a comprehensive dam safety program, technical assistance to re-engineer dams in need of retrofit, repair and/or rebuild to minimum standards for construction and maintenance. Additional funds in the form of micro loans would be made available to dam owners for the actual repair and construction. County officials identified Townsend Dam, Hodgins Pond Dam, Sunset Lake Dam, McLaughlin Lake Dam, Kako English Dam, and Beaver Lake Dam as the hardest hit.

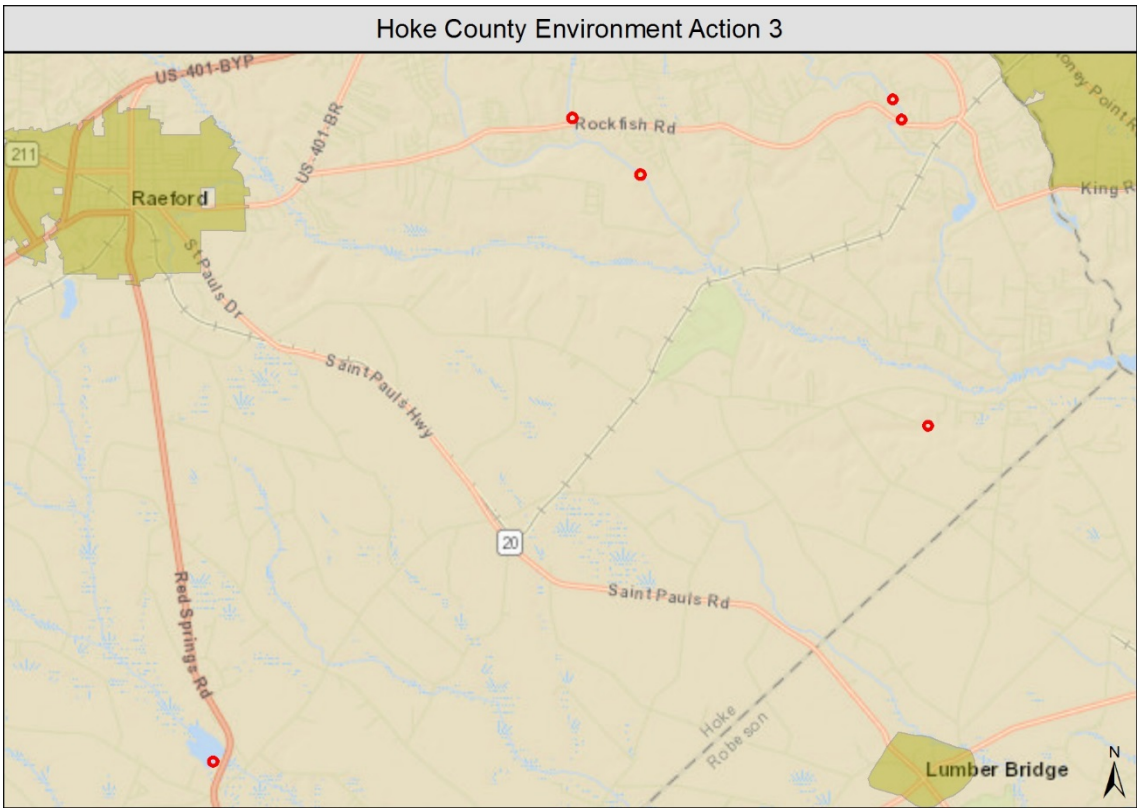


Figure 25. Infrastructure Action 4 - Dam Rehabilitation and Replacement

I.4 - Dams Rehabilitation / Replacement

County: Hoke

Priority Grouping: High Priority

Priority Ranking: 5

Project Timeframe: 12-24 months

Location: Repair/Rehab: Townsend Dam, Beaver Lake Dam, McLaughlin Lake Dam, Kako English Dam; Replace: Hodgins Pond Dam, Sunset Lake Dam

Project Summary: Comprehensive dam safety program, including dam replacement and/or retrofit, which help address small dams generally owned by neighborhood associations, farmers, utilities, or other private owners.
Technical assistance should be made available to re-engineer dams in need of retrofit, repair and/or rebuild. The State should establish minimum standards for construction and maintenance including hardening to avoid damage from future storms and prevent dam failure.
Additional funds in the form of micro loans should be made available to dam owners for the actual repair and construction.
In exchange for loans and design work, dam owners will agree to comply with annual maintenance agreement and set aside funds for future maintenance.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	One of the most noticeable impacts of Hurricane Matthew in Hoke County was the destruction of dams due to high water levels. These dam failures led to additional damages to infrastructure downstream homes and posed danger to residents. The dry lake beds have caused rapid drops in property values. The loss of dams has changed the water flow in previously dammed streams. The replacement of the breached dams will help restore habitat property values and pre-storm flow.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Cumberland - Hoke Regional Hazard Mitigation Plan Hoke Actions 1-4: Implement dam overspill and protection controls in the Puppy Creek Rockfish Johnson Mill Rd areas of unincorporated Hoke County and along Fort Bragg Military Reservation.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	The dam breaches cause immediate flood damage but also left behind dried up lake beds that have become breeding grounds for vermin (some ponds/lakes filtered storm water). The property values of homes around the dry lake beds have plummeted which reduce the level of tax revenue for the county.	N/A
For how long will this solution be effective?	Between 31 and 50 years	N/A
How effective is the risk reduction?	50-100 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A

To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	Sedimentation caused by drainage of empty lake beds creates downstream water quality issues. The drained lake itself with mud and sediment is an environmental hazard to people and wildlife.	N/A
What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$1M+	N/A
What is the level of public support for this project?	Unknown	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

There are no moderate or low priority infrastructure strategies.

Environmental, Ecosystem and Agricultural Strategies

There are a number of opportunities for enhancing environmental resources for both resiliency and recreational purposes within Hoke County. These strategies, paired with the natural beauty already present in many areas, provide opportunities for the county to become more resilient and attractive for locals and visitors.

High Priority Environmental Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Environment	Stormwater System Upgrades	**High**	**2**

Table 12. Hoke High Priority Environmental Summary

This project represents the environmental strategy that Hoke County indicated is of a high priority to address. Additional detail on the strategy can be found below:

- **Stormwater System Upgrades:** To better manage stormwater, installation of retention ponds, culvert upgrades and extensions, and drainage improvements are needed at five locations in the county and six locations in the City of Raeford.

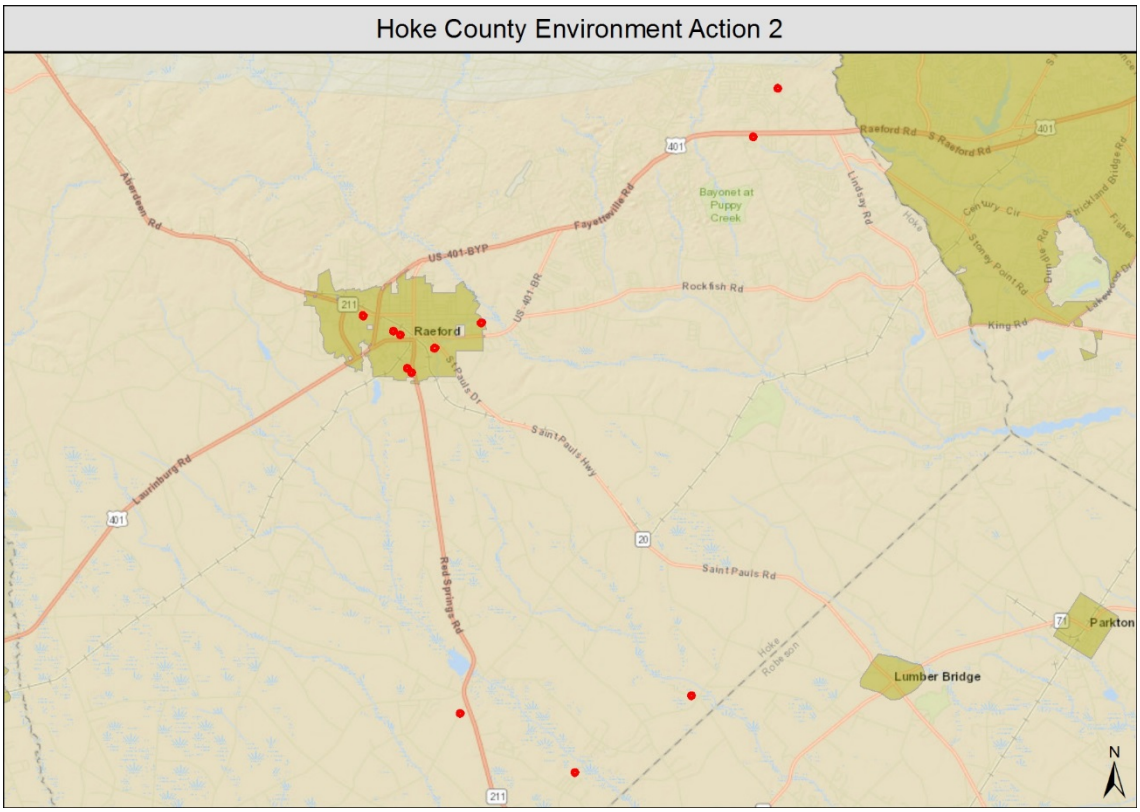


Figure 26. Environment Action 2 - Stormwater System Upgrades

EN2 - Stormwater System Upgrades

County: Hoke

Priority Grouping: High Priority

Priority Ranking: 2

Project Timeframe: 24-36 months

Location: Five various locations in county; six different locations in town of Raeford. See attached maps for locations.

Project Summary: Conduct a comprehensive assessment of the stormwater systems and develop an immediate implementation plan for correcting deficiencies in the existing network at the locations shown in the attached maps.
• Include inspection of retention basins, channels, culverts and other relevant infrastructure.
• Conduct stormwater upgrades at specific sites including culvert/channel upgrade and addition of retention areas. Exact measures to be determine in engineering design stage of project.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The excess rainfall from Hurricane Matthew overwhelmed stormwater systems and highlighted major vulnerabilities in these systems. Due to the fact that some of the damage in Hoke County occurred outside the 100-year flood zone means that inadequate stormwater drainage played a part in contributing to flooding.	N/A
Consistent with existing plans (describe points of intersection/departure)	Projects are the most obvious solutions to immediate problems and extensive study that considers future storm flows would be needed to 'masterplan' the optimal storm drainage network. This project is consistent with actions from the Cumberland-Hoke HMP including Conduct a countywide infrastructure vulnerability assessment to identify priority needs for updating ill-designed or outdated critical structures(1) and Use natural systems more open space and green surfaces to manage stormwater(7)	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Roads flooded due to overtopping of undersized stormwater facilities interrupts business and industry operations. Improving the network can improve access to these areas. Flooding of residential areas impacts employee ability to work and if severe causing destruction of housing permanent dispersal of workforce from the area. Businesses and residents that do not return impact property tax revenue for the county.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	<50 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	>6	N/A
Is coordination with other communities/counties needed to complete this project?	Yes	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A

To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	The stormwater capacity improvements will help prevent downstream washout that can destroy wildlife habitats. Improved stormwater system can also help improve water quality by reducing the amount of sedimentation and contaminants that get into local water bodies. The stormwater study should also be integrated with the proposed dam assessment. Critical habitat for T/E species need to be examined to see if projects will impact or improve. Also wetlands enhancement and riparian buffers.	N/A
What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$501K - $1M	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	Local	N/A

Moderate Priority Environmental Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Environment	Stream Maintenance	**Moderate**	**8**
Environment	Augmented Flood Mapping	**Moderate**	**9**

Table 13. Hoke Moderate Priority Environmental Summary

These projects represent the environmental strategies that Hoke County indicated is of a moderate priority to address. Additional detail on the strategies can be found below:

- **Stream Restoration and Maintenance:** Restoration of streams is needed to address the impacts of Matthew, including many downed trees in streams, to maintain drainage capacity and avoid future flooding. This project includes but is not limited to debris removal, streambank stabilization, and naturalization of channel depth and path. Specific locations identified by local county officials include water courses at Sunset Lake Road and East Donaldson Avenue.

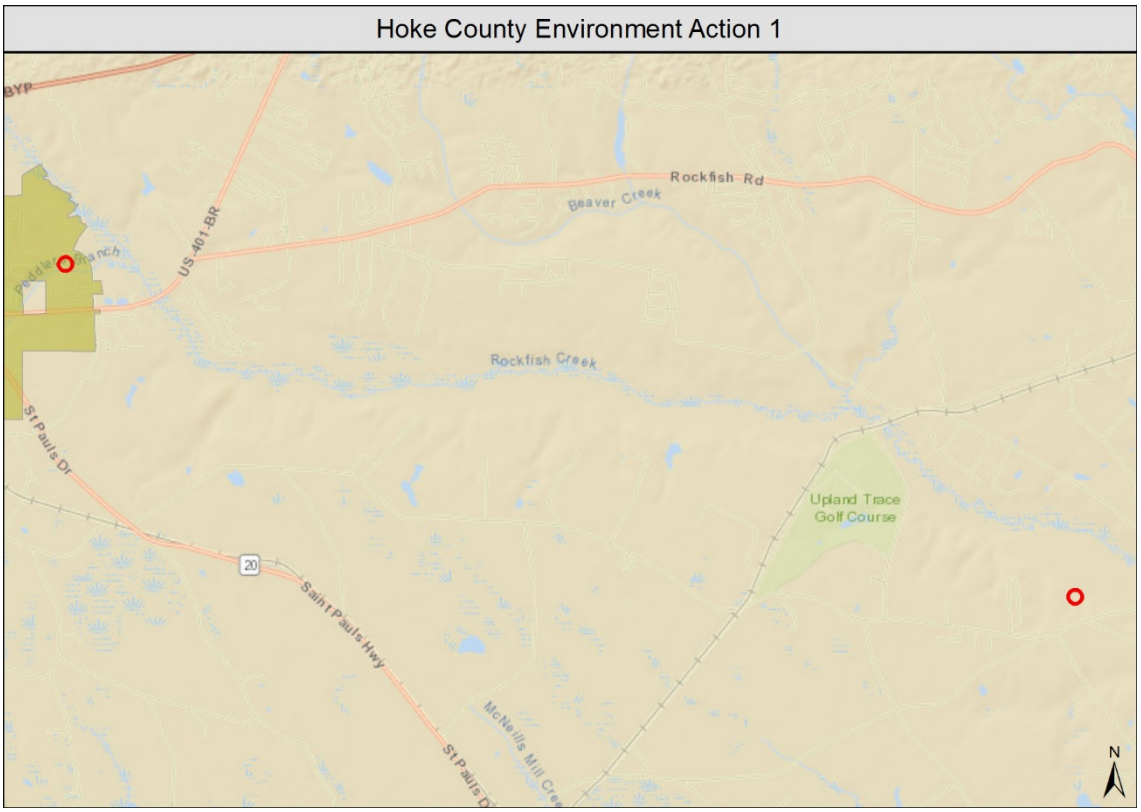


Figure 27. Environment Action 1 - Stream Restoration and Maintenance

EN1 - Stream Restoration and Maintenance

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 8

Project Timeframe: 12-24 months

Location: Two locations: Sunset Lake Road at Arabia Rd, E. Donaldson Avenue

Project Summary: Hurricane Matthew knocked down many trees and resulting debris ended up in stream beds causing water backup and potential flooding. Conduct streambed cleanup and rehabilitation by removing debris and restoring channels to their proper depth and path. For dams built by beavers - explore removal/relocation strategies with NC DNR. Require annual inspection to ensure that restoration work continues to functions properly. Consider use of the Citizen Corps in stream restoration and maintenance. Require annual inspection and maintenance to ensure that restoration work remains effective.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	As a result of Hurricane Matthew many trees and other debris litter waterways across the County. During heavy rains this debris will continue to dam up water and impede natural flows. These unnatural changes in the water flow puts more properties at risk to future flooding. Cleaning and continued maintenance of stream systems will restore natural flow and mitigate this issue.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Cumberland - Hoke Regional Mitigation Plan Action Hoke Action #7 Use natural systems more open spaces and green surfaces to manage stormwater in a more resilient fashion; Hoke Action #8: Survey tributary system to identify areas of blockage or areas prone to blockage	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Roads flooded due to lack of stream maintenance interrupts business and industry operations.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	100-200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Low to moderate confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	Stream restoration will help prevent downstream washout that can destroy wildlife habitats.	N/A
What is the capability of the local government to administer this project?	Low	N/A

What is the financial range of this project?	$101K - $250K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

- **Augmented Floodplain Mapping**: There are stream reaches identified by the State near existing flood zones where concentrations of damage to homes occurred based on Individual Assistance claims filed. Several of these areas need detailed flood mapping to accurately portray risk and guide future development away from high-risk areas, at least to the 100-year storm level. Local officials and property owners will be advised of the flood risk and will need to take appropriate action to mitigate the risk like the purchase of flood insurance. Six locations for additional study have been identified and include areas within proximity of Stewarts Creek, Puppy Creek, Beaver Creek, and Black Branch.

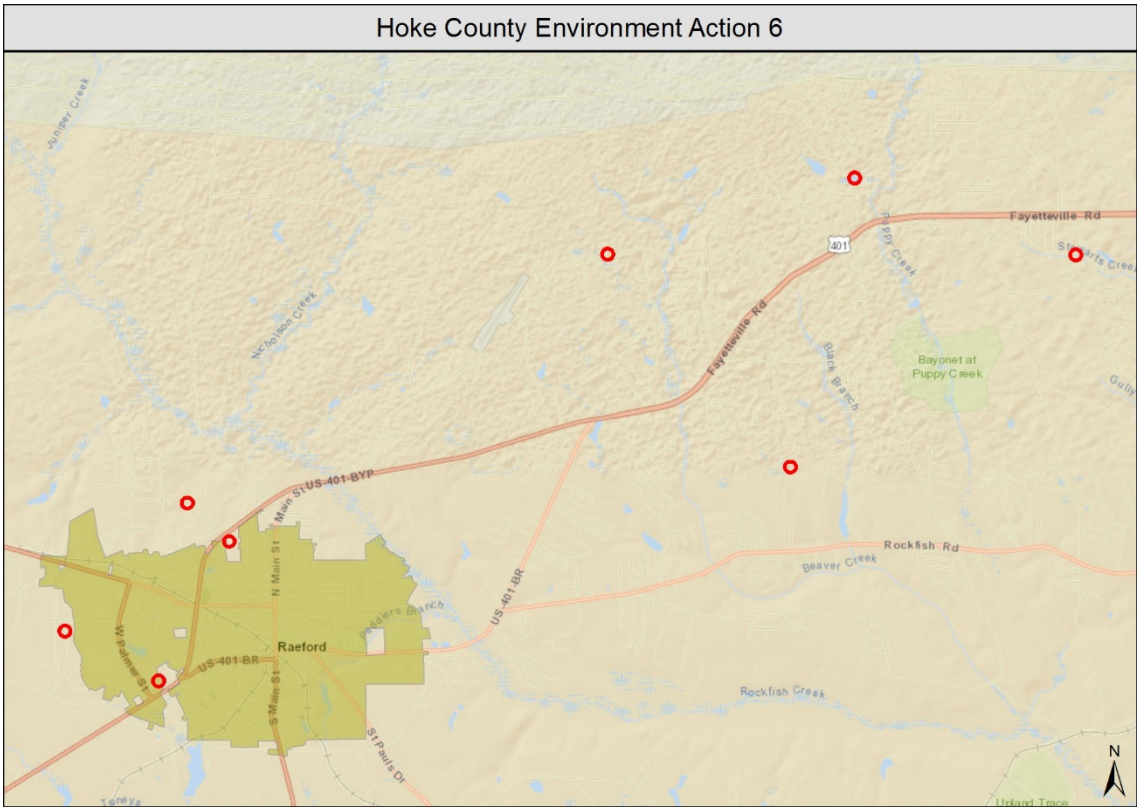


Figure 28. Environment Action 6 - Augmented Floodplain Mapping

EN 6- Augmented Flood Plain Mapping

County: Hoke

Priority Grouping: Medium Priority

Priority Ranking: 9

Project Timeframe: 24-36 months

Location: Countywide - 8 named streams and two unnamed streams (see attached maps)

Project Summary: There are stream reaches near existing flood zones where concentrations of damage and Indvidual Assistance claims were noted. Several of these areas are in need for detailed flood mapping to accurately portray risk and guide future development to avoid risk, at least to the 100-year storm level. Local officials and property owners will be advised of the flood risk and will need to take appropriate action to mitigate the risk.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Clusters of IA claims (flooded homes from Matthew) are in proximity to these unmapped areas indicating some level of risk in these areas. By producing a flood map in these areas future development will be at lower risk from flooding.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with the most recent approved Cumberland Hoke Regional Hazard Mitigation Plan Hoke County Action # 6 which states: Analyze and update local development ordinances to make buildings safer from wind and flooding	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	As Hoke County continues to grow the augmented mapping will help lower the risk to future development in the mapped floodplains and raise risk awareness of the flood hazard.	N/A
For how long will this solution be effective?	More than 50 years	N/A
How effective is the risk reduction?	100-200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	This mapping is complementary to: dam assessment and repair warning system and stormwater upgrades that are proposed for Hoke County.	N/A
What is the capability of the local government to administer this project?	Low	N/A
What is the financial range of this project?	$251K - $500K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A

Who will administer this project?	County	N/A

Low Priority Environmental Strategies

Pillar	Strategy/Action Name	Priority	Overall Ranking
Environment	Stream Gauge and Early Warning Network	**Low**	**13**
Environment	Environmental Training	**Low**	**15**

Table 14. Hoke Low Priority Environmental Summary

These projects represent the environmental strategies that Hoke County indicated is of a low priority to address. Additional detail on the strategies can be found below:

- **Stream Gauges and Early Warning Network:** In this strategy, installing stream gauges is coupled with performing a Hydrologic & Hydraulic study for buildout of an early-warning system to assist with management of flow from the interconnected and interdependent series of waterways and dams throughout the county. For example, McLaughlin Lake Dam and Kako English Dam introduce a significant amount of risk for downstream structures and safety. There is currently one stream gauge located within the county and least six additional gauges are needed to create an effective network. Key sites proposed for stream gauges are located along the Fort Bragg fence line, Rockfish Creek, the Cumberland County border, and the southeast corner of the county.

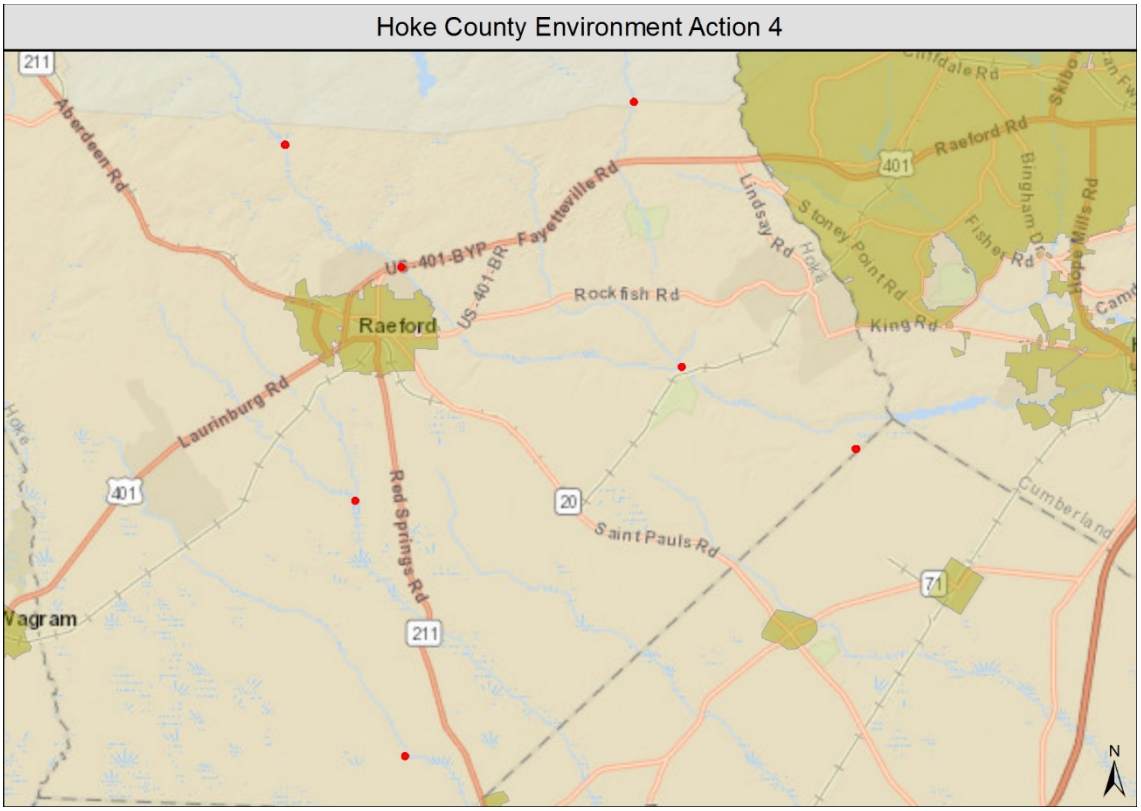


Figure 29. Environment Action 4 - Stream Gauges and Early Warning Network

EN4 - Stream Gauges and Flood Warning System

County: Hoke

Priority Grouping: Low Priority

Priority Ranking: 13

Project Timeframe: 24-36 months

Location: Six locations identified on water bodies throughout the County - see attached maps for detailed locations

Project Summary: Installation of gauges for monitoring of water levels and water flow from high rainfall events or dam release. Build out an early-warning system to assist with management of flow from interconnected and interdependent series of dams and water courses throughout the county.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	There is an insufficient quantity of stream gauge data to build quality inter-related flood information. During Hurricane Matthew dam breaches produced intense water flows resulting in a cascade effect of dam breaches and flooding downstream. There is currently one stream gauge in Hoke County. Adding additional gauges will allow for early detection of rising waters and lead time to adjust dam water levels and/or direct evacuation of residents.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with State efforts to build out stream gauge network and support the FIMAN system	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Advanced warning will allow for reduction of flood impacts and relocation of goods. Numerous roads were closed due to flooding from Hurricane Matthew - this interrupted business and industry operations. Early detection allows for the safe evacuation of humans and farm animals.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	100-200 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	0	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Medium to high confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	N/A
What impacts to the environment of the county will result from this project?	Stream flow and rainfall monitoring will help aid in protecting natural areas needed by wildlife. Provides non-storm event data important to determine overall environmental health of the streams.	N/A
What is the capability of the local government to administer this project?	Low	N/A

What is the financial range of this project?	$101K - $250K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	State	N/A

- **Environmental Training:** This strategy contributes to workforce development via job readiness and technology by establishing programs at the Sandhills Community College Hoke Center Campus to train students in environmental education topics. Courses on progressive conservation farming techniques would help retain the rural economy and preserve open space needed for water retention during storm events. The agricultural extension agents are promoting productive use of open space in the form of both intense uses and conservation strategies. A new course on NC Storm Resiliency and green infrastructure could be a beneficial addition to the program given the amount of reconstruction occurring in Hoke and surrounding counties.

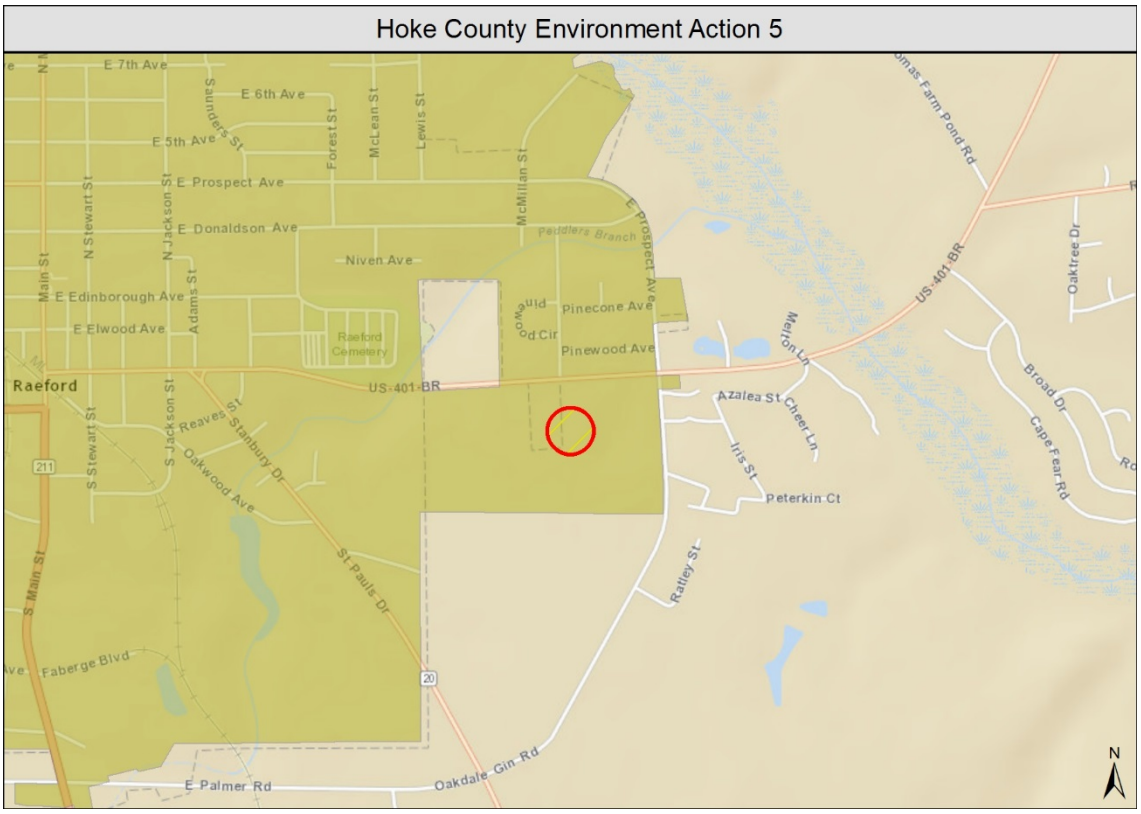


Figure 30. Environment Action 5 - Environmental Training

EN5 - Sandhills Community College Hoke Center Environmental Training

County: Hoke

Priority Grouping: Low Priority

Priority Ranking: 15

Project Timeframe: 6-12 months

Location: 1110 East Central Avenue, Raeford

Project Summary: Beyond advertising a strong focus on job readiness and technology, the local Sandhills CC campus could train students on resilience techniques (how to build and inspect to higher standards), land use conservation in environmentally sensitive and floodprone areas, and progressive conservation farming techniques. Implementation of these techniques would reduce future damage and would help retain the rural economy as well as preserve open space needed for water retention during storm events. Flood relief funds could be used to prepare a NC Resiliency curriculum and then advertise the course and other offering at the Sandhills Hoke Center Campus.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Hurricane Matthew caused significant damage in Hoke County. In the County's Hazard Mitigation Plan (Cumberland Hoke Regional HMP) the County has included an action to analyze and update local development ordinances to make buildings safer from wind and flooding The rebuilding process provides a good opportunity to implement resilience and the County will need trained personnel to help in the process. The Hoke Center of Sandhills CC can assist in this process.	N/A
Consistent with existing plans (describe points of intersection/departure)	Supports Agribusiness – Farming and Food Processing Economic Cluster in 2012-2017 SE NC CEDS and Action # 6 in 2016 Cumberland-Hoke Regional Hazard Mitigation Plan.	N/A
Does this project comply with existing Local and State authority (codes, plan and ordinance)?	Yes	N/A
Does this project meet the intents and goals for the Hurricane Matthew Recovery Act?	Yes	N/A
Explain any benefits or impacts to the economy of the county from this project.	Creating good paying jobs in the environmental sector will help keep educated young people in the area.	N/A
For how long will this solution be effective?	Between 11 and 30 years	N/A
How effective is the risk reduction?	50-100 year event	N/A
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	N/A
Is coordination with other communities/counties needed to complete this project?	No	N/A
Is this project consistent with Federal Laws	Yes	N/A
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	N/A
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Low to moderate confidence	N/A
What impact will this action have on the local economy/tax base?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	Trained individuals on resilience and conservation techniques to be used in the county.	N/A
What is the capability of the local government to administer this project?	Low	N/A

What is the financial range of this project?	$51K - $100K	N/A
What is the level of public support for this project?	Medium	N/A
What is the technical feasibility of this project?	Higher than 75%	N/A
Who will administer this project?	County	N/A

Summary

Grant applications may have already been prepared for some of these actions but for those that have not already been funded, the State of North Carolina will begin a process of prioritizing the actions and seeking to match a funding stream to each action. Those that are not matched with a funding source will be added to the State's Unmet Needs Report. Funding for Unmet Needs will be sought through additional funding from Congress and from the North Carolina General Assembly. Any action that cannot be matched to a funding source should be incorporated into the County's Hazard Mitigation Plan for consideration for future funding. It is important to seek to implement as many of these actions as feasible. Doing so will significantly contribute to helping improve the resiliency of North Carolina's communities.