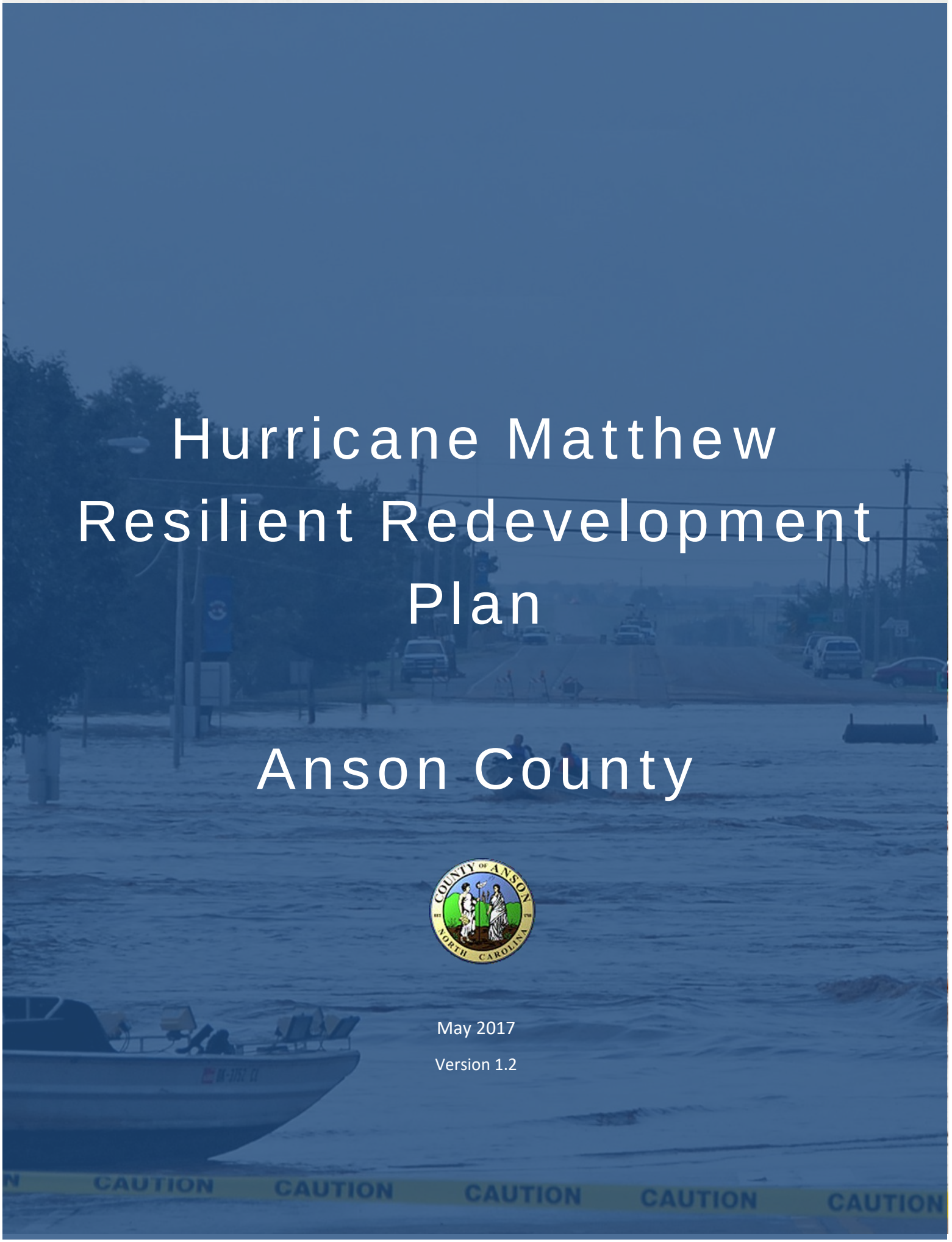

Hurricane Matthew Resilient Redevelopment Plan

Anson 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 assist the communities that were damaged by the hurricane by providing a roadmap for community rebuilding and revitalization. The program empowers communities to prepare locally driven recovery plans that identify redevelopment strategies, innovative reconstruction projects, and other necessary 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 with regard to 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, Anson County has identified 11 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	2
Economic Development	3
Infrastructure	3
Environment	3
Grand Total	**11**

Table 1. Anson 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 two 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 above 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 seven 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 residences were completely destroyed. Losses totaled more than $967 million, representing an economic loss as high as 68 percent 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 that 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 agriculture-support workers hit by the storm account for more than half of the state's agricultural and agriculture-support workforce.

Initial economic analysis of the impacts of crop and livestock losses caused by Hurricane Matthew estimated that there was a loss of more than 1,200 jobs and roughly $10 million in state and local income and sales tax revenue.[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 more than 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 five of which are eligible for Public Assistance only.

[2] *Governor 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, 2016: The Hurricane Matthew Recovery Committee was established. Preliminary damage assessments were completed, and the State Emergency Response Task Force continues to administer programs and identify needs unmet by existing federal programs.

November 14, 2016: 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 2016: Congress appropriates supplemental disaster assistance for North Carolina. After the supplemental federal disaster recovery assistance package is received, Governor McCrory submits 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: U.S. Department of Housing and Urban Development's Community Development Block Grant–Disaster Recovery (CDBG-DR) program, U.S. 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 assist the communities that were damaged by Hurricane Matthew by providing a roadmap for community rebuilding and revitalization. The program empowers communities to prepare locally driven resilient redevelopment plans to identify redevelopment strategies, innovative reconstruction projects, and other necessary 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 to achieve 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 these plans and 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 also will 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 affected 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 resilient redevelopment planning process. Each municipality in those counties, as well as the five economic development regions that sustained damage from Hurricane Matthew, also were 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 Anson County and surrounding counties is shown below.

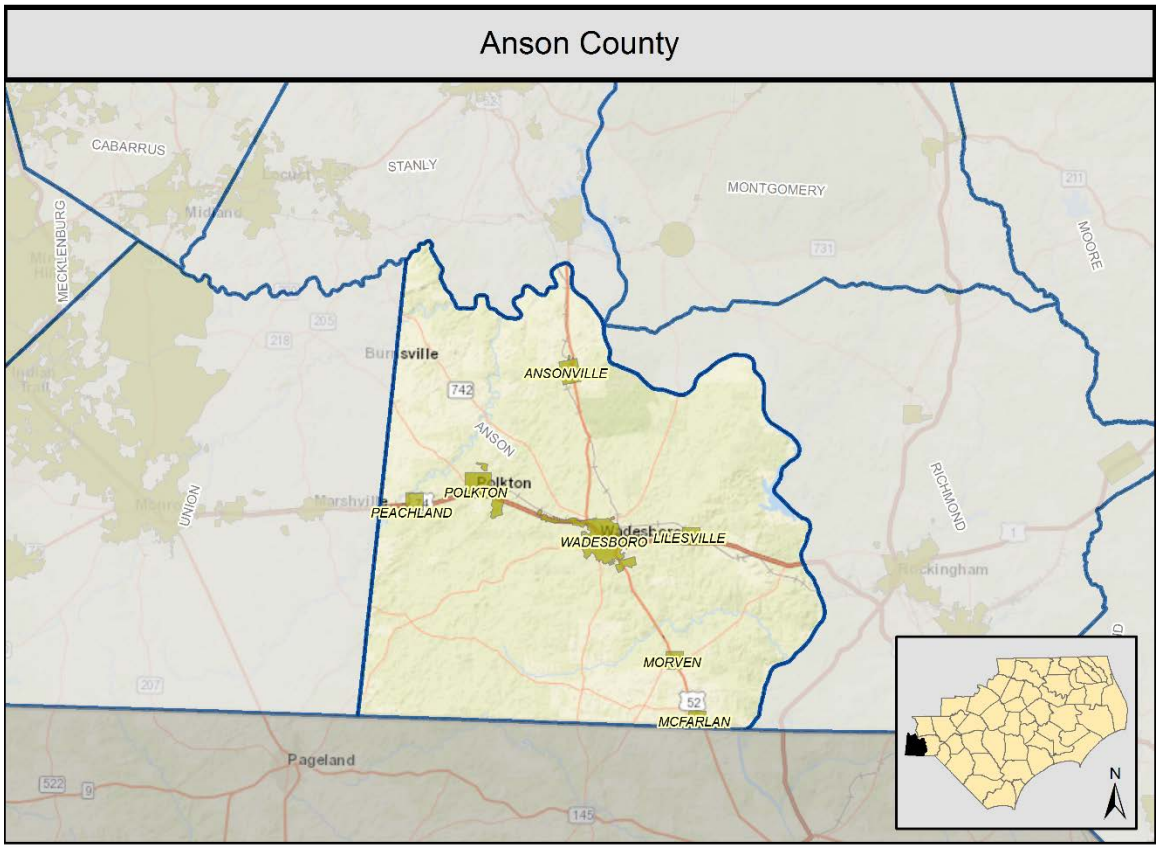

Figure 2. Anson County and Neighboring Counties

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

Anson County is located on the southern border of North Carolina about 50 miles east of the city of Charlotte. Its current population is 26,135, about half of whom (11,288) reside in one of the towns within the county: Ansonville, Lilesville, McFarlan, Morven, Peachland, Polkton, and Wadesboro. This section provides a profile of housing, economics, infrastructure, environment, and administration within Anson County.

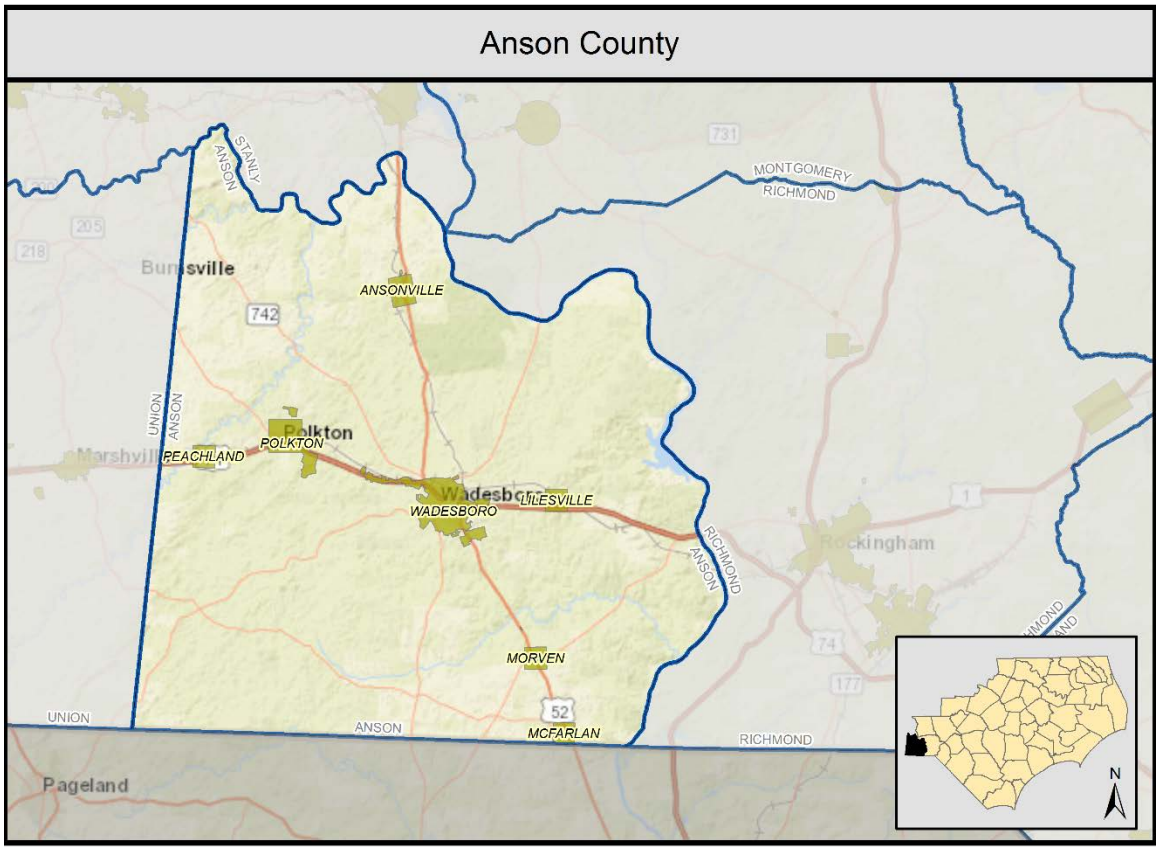

Figure 3: Anson Base Map

Demographic Profile

Demographics for Anson County are summarized and compared to statewide averages in this profile. The demographic data are from the 2000 Census, 2010 Census, and 2011-2015 American Community Survey five-year estimates.

Population

Anson County has a population of 26,135. The town of Wadesboro is the most populous place within Anson County with a population of 5,664. The Town of McFarlan is the least populous place with a population of 162.[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 population of Anson County was 25,275 in 2000; a decade later, in 2010, it was 26,958, increasing by 1,673 people, or about 7 percent during the decade. In same period, 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 Anson County is 40 years old, slightly younger that the median age of 42 years old in North Carolina. Within Anson County, the town of Ansonville's population has the oldest median age at 49 years old, while the population within the town of Polkton has the youngest median age, at 35 years old.[5]

Race and Ethnicity

Anson County population is equally distributed racially between the two largest categories: White, 48 percent, and African American, 49 percent. The Asian population at 1.2 percent, and American Indian and Alaska Native, Other Race, or Two or More Races comprise less than 1 percent each. In comparison, North Carolina is 70 percent White, 22 percent African American, 3 percent Asian,1 percent American Indian and Alaska Native, less than 1 percent Native Hawaiian/Pacific Islander, 3 percent Some Other Race, and 2 percent Two or More Races. Refer to the table below.[6]

Within Anson County, the towns of Ansonville, Lilesville, Morven, Polkton, and Wadesboro are predominantly Black or African American; the remaining towns, McFarlan and Peachland, are largely White at 69 percent.

The Latino population in Anson County is 3 percent compared to 9 percent for North Carolina. McFarlan has the largest Latino population (30 percent); the remaining towns have 5 percent or less; Ansonville and Lilesville report no Latino populations according to the census data.

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
Ansonville town	16.9%	83.1%	0.0%	0.0%	0.0%	0.0%	0.0%	83.1%
Lilesville town	45.9%	54.1%	0.0%	0.0%	0.0%	0.0%	0.0%	54.1%
McFarlan town	92.6%	3.7%	0.0%	0.0%	0.0%	3.7%	0.0%	7.4%
Morven town	20.2%	79.8%	0.0%	0.0%	0.0%	0.0%	0.0%	79.8%
Peachland town	69.7%	29.3%	0.0%	0.3%	0.0%	0.0%	0.8%	30.3%
Polkton town	31.6%	62.5%	3.0%	0.4%	0.0%	0.4%	2.0%	68.4%
Wadesboro town	35.7%	61.0%	0.0%	1.1%	0.0%	0.7%	1.4%	64.3%

Table 2: Anson County Race and Ethnicity

[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."*

Limited English Proficiency

Limited English Proficiency (LEP) is defined as populations 18 years of age or older that speak English less than very well. In Anson County, slightly more than 1 percent of the population identified as LEP; most of these individuals speak Spanish and reside in McFarlan. The primary language group for LEP individuals in North Carolina is Spanish. Most of the communities in Anson County do not have significant LEP populations.[7]

Poverty

In Anson County, 24 percent of the population is Below Poverty Level compared to 17 percent of the North Carolina population. The town of Morven maintains the highest percent of persons below poverty level at 40 percent; while 26 percent of McFarlan's population is considered very poor: under 50 percent of poverty level. Several other communities also have more than 25 percent of residents living below the poverty level, including Wadesboro, Polkton, Peachland and McFarlan.[8]

Low- and Moderate-Income Individuals

In Anson County, 42 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 is $33,228 in Anson County, while it is $53,097 in North Carolina. Median household income statistics were not available for some communities, although—of the towns reported—median household incomes in the municipalities ranged from $33,649 in Polkton to $38,497 in Lilesville.[10]

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[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[11]

In Anson County, 11 percent of households do not have a vehicle available compared to 7 percent of North Carolina households. Within Anson County, the towns of Morven and Wadesboro have the highest percentage of households without access to a vehicle, with both at 25 percent, while the town of Ansonville has the lowest percentage of households without access to a vehicle at 6 percent. Within Anson County overall, 57 percent of households have two or more vehicles available, compared to North Carolina at 61 percent.

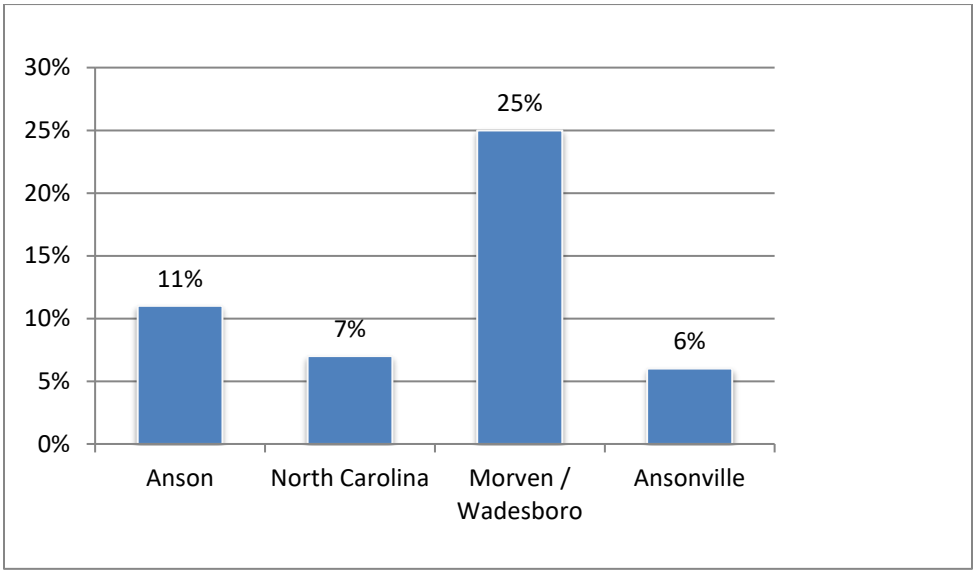


Figure 4. Zero Car Households by Percentage

Commuting: Travel Time to Work, Means of Transportation[12]

The majority of Anson County residents, 84 percent, commute to work by vehicle alone, which is similar to the North Carolina average of 81 percent. Additionally, 13 percent of county residents commute by carpool. Within Anson County, the town of Ansonville has the largest percentage of commuters traveling alone at 94 percent. The town of Morven has the highest percentage of commuters using carpools at 38 percent.

About 1 percent of Anson County residents use public transportation to commute, a bit less than North Carolina commuters. About 5 percent of Peachland and Wadesboro residents commute by bicycle, walking, or motorcycle, higher than both the county's 1 percent and North Carolina's 2 percent that commute by bicycle, walking, or motorcycle.

The mean commute time to work for Anson County residents is 27.4 minutes. In comparison, the North Carolina mean commute time is 24.7 minutes. Within Anson County, the town of Ansonville has the shortest mean commute time at 23.1 minutes, while Polkton has the longest commute time at 31.5 minutes.

[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)."*

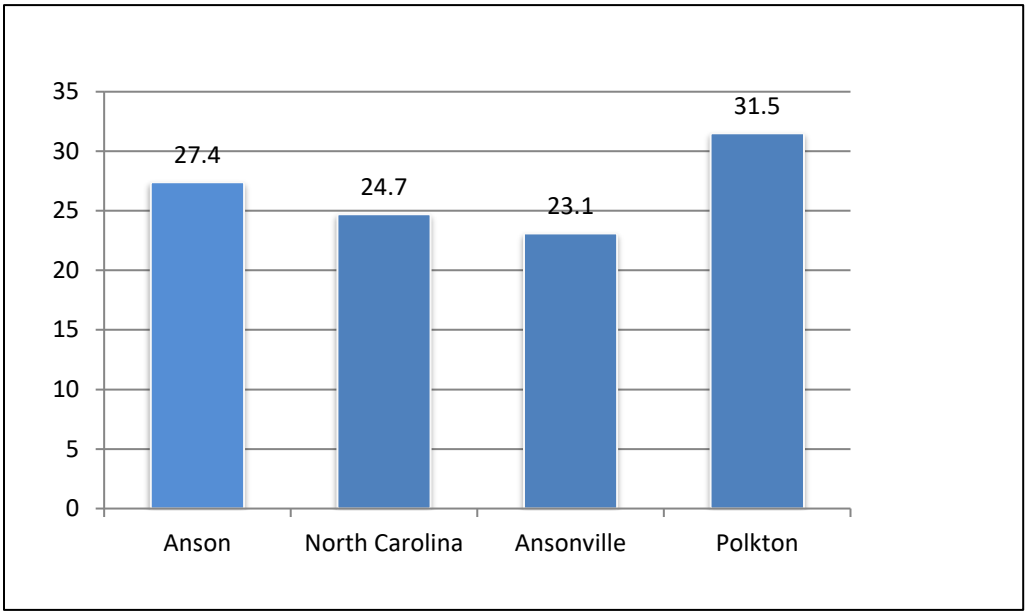


Figure 5. Mean Commute Time to Work in Minutes

Housing Profile[13]

Anson County has more than 11,528 housing units, 64 percent of which are single-family homes, 7 percent of which are multi-family units, and 29 percent of which are manufactured housing.

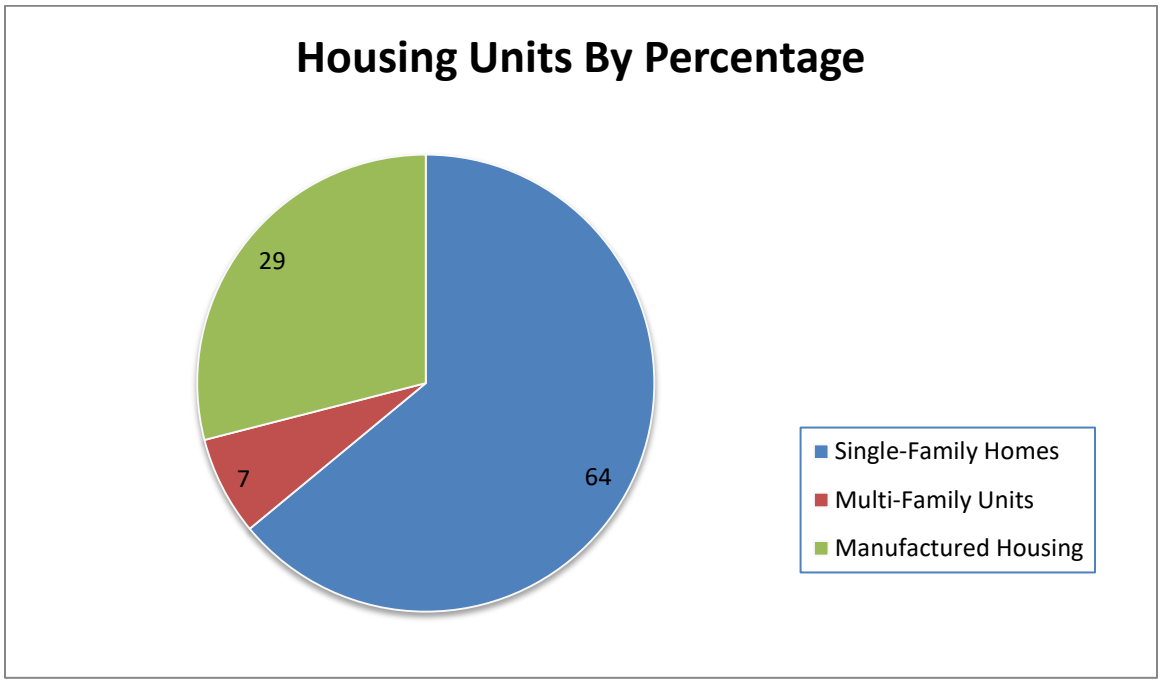


Figure 6. Housing Units By Percentage

[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

In Anson County, approximately 18 percent of housing units are vacant, which is slightly more than the vacancy rate of North Carolina at 15 percent. Within Anson County, the town of Morven has the largest percentage of vacant housing units at 25 percent, and the town of Polkton has the smallest percentage at 8 percent.

Of Anson County's occupied housing units, 66 percent are owner-occupied and 34 percent are renter-occupied. This tracks closely with North Carolina's occupied housing units with 65 percent owner-occupied and 35 percent renter-occupied.

The median housing value in Anson County is $76,900. In comparison, the median housing value in North Carolina is $140,000. Within Anson County, Wadesboro has the highest median housing value at $93,600. The town of Morven has the lowest median housing value at $56,300.

According to the National Housing Preservation Database, of the 549 affordable housing units within Anson County, the majority, 453, are located in the town of Wadesboro; the remaining 96 are located in the town of Polkton.

Economic / Business Profile

The economy of Anson County is based on manufacturing and agriculture. According to the U.S. Census Bureau's Longitudinal-Employer Household Dynamics Program, the largest concentrations of jobs within Anson County are in Wadesboro, along the Interstate 74 (I-74) corridor, and in the northwest quadrant of the 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 of Anson County is 10,776.[15] Within Anson County, the town of Lilesville has the largest percentage of residents in the labor force at 67 percent, while the town of Polkton has the smallest percentage of residents in the labor force at 31 percent.**Error! Bookmark not defined.**

The civilian unemployment rate in Anson County is 5.8 percent. In comparison, the North Carolina civilian unemployment rate is 5.1 percent.[15] Within Anson County, Lilesville has the lowest civilian unemployment rate at 8 percent while Wadesboro has the highest at 29 percent.[16]

[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."*

Major Employers

Employment in Anson County[17] is mainly concentrated in the following industries: Public Administration, Education and Health Services, and Manufacturing.

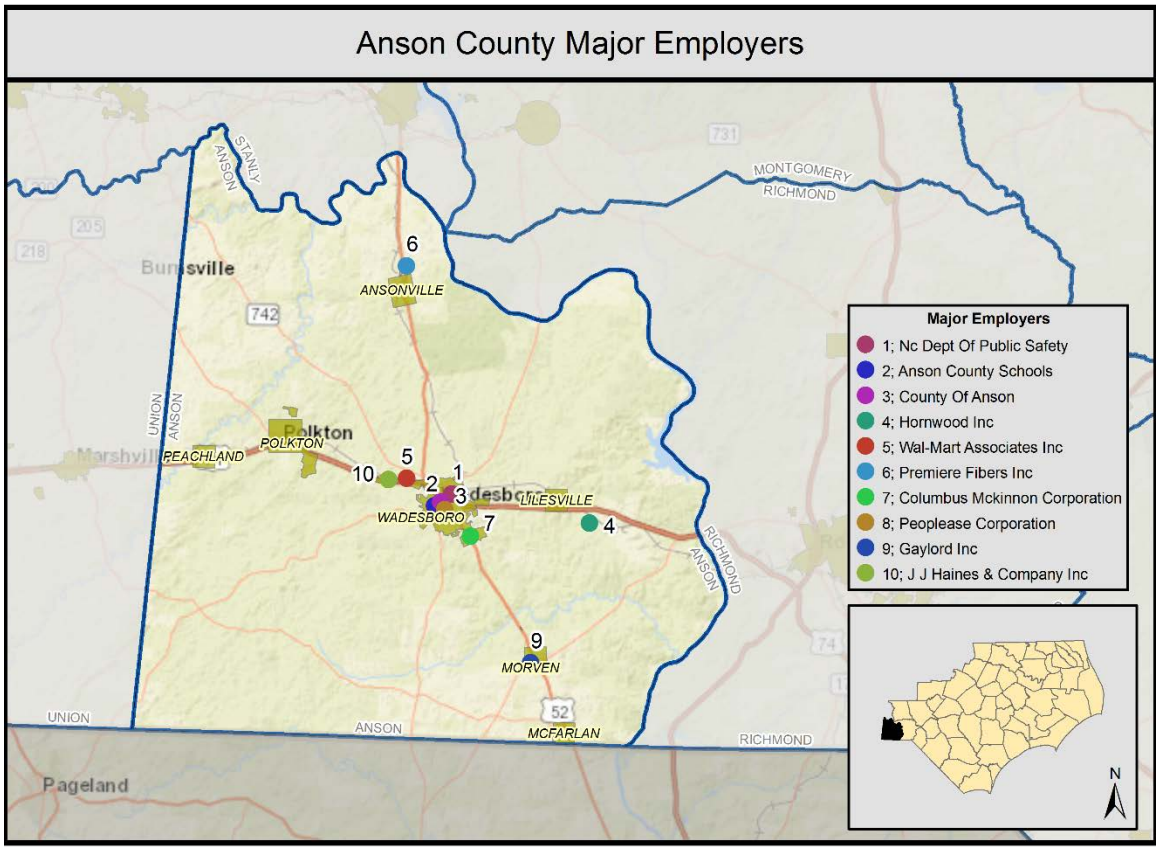


Figure 7: Major Employers by Number of Employees

Economic Development[18]

Anson County's Early College High School and South Piedmont Community College, which replaced Anson Community College and Union Technical Education Center, both have strong partnerships with employers to target students toward future employment.

Urban tourist attractions include the nearby Rockingham Speedway, historic towns and sites, and several family-owned vineyards.

Anson County housed two state prisons, Brown Creek Correctional Facility and Lanesboro Correctional Facility, that merged in 2016. As a result, the Prison Guard Staff will drop from about 880 to 630. According to the state, the number of inmates at the two prisons will drop from about 2,300 to 1,850.

[17] *Sources: NC Department of Commerce*
[18] *Sources: Anson County Economic Development*

Infrastructure Profile

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

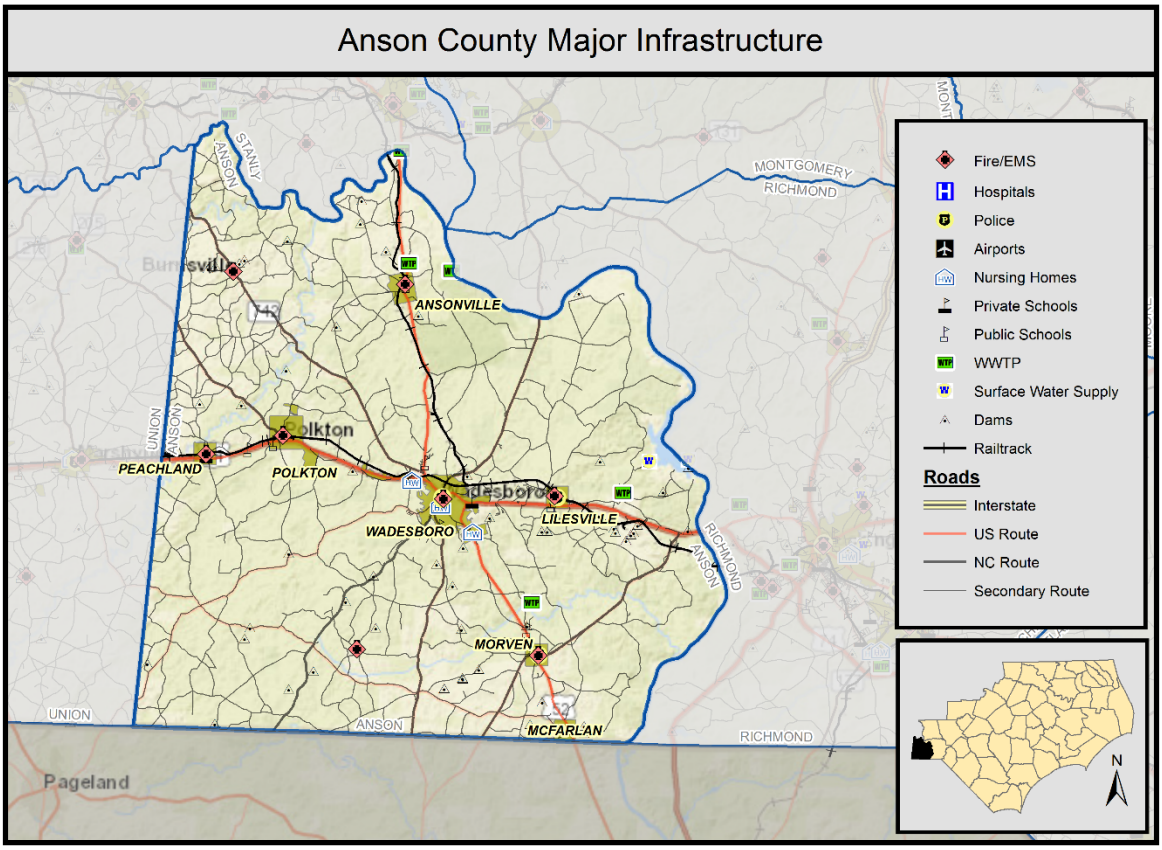


Figure 8: Anson County Major Infrastructure

Transportation

The major vehicular transportation corridors within Anson County are U.S. Route 52 (US 52), which runs north-south, and U.S. Route 74 (US 74), which runs east-west. The routes intersect at Wadesboro in the center of the county.

Rail service to Anson County's industrial sites is provided by CSX Railroad and Winston-Salem Southbound.

The Anson County Airport features a 5,500-square-foot runway and a new 2,600-square foot terminal building with a pilot lounge, on-site aircraft maintenance facility, and a new Instrument Landing System.

Health[19]

There is one hospital located within Anson County. Anson Community Hospital is a general medical and surgical hospital in Wadesboro, with 15 beds. Survey data for the latest year available shows that 14,257 patients visited the hospital's emergency room. The hospital had a total of 234 admissions. Its physicians performed 22 inpatient and 109 outpatient surgeries.

[19] *Sources: Anson Community Hospital*

Education[20]

In terms of schools, there are six elementary, one middle, and four high schools within the Anson County School System. South Piedmont Community College also is represented in two locations within Anson County, Wadesboro and Polkton, and serves 2,658 students.

Water[21]

The Anson water treatment plant is permitted for 16 million gallons a day of water distribution. Water is sourced from the Pee Dee River, Blewett Falls Lake. Of the service population, 54 percent is in Anson County, 28 percent in Union County, and 18 percent in Richmond County. The water authority sells water to six of the seven towns in Anson County, (Wadesboro has its own facility), and also has a contract with Union County to supply 5 million gallons of water a day. In addition, the Town of Marshville (Union County) buys 1 million gallons of water a day and Richmond County buys 1.6 million gallons of water a day from the Anson water treatment plant. The system's finished water storage capacity is 5.5 million gallons.

The Anson wastewater treatment plant (WWTP) is permitted to treat 3.5 million gallons of sludge a day. The facility treats wastewater for six towns in Anson County. The town of Ansonville has its own WWTP. The town of McFarlan has no sewer. Anson also receives and treats up to 200,000 gallons of wastewater per day for Marshville in Union County.

Power[22]

There is one natural gas plant and one petroleum power plant within Anson County. Electrical power in the Pee Dee Lumber Region is provided by Duke Energy in collaboration with several electricity cooperatives. Pee Dee Electric Membership Corporation serves Anson County under this umbrella arrangement.

Environmental Profile

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

Water Resources

The Pee Dee River is the most significant water body in the county, separating Anson County from Richmond County to the east. Located along the Pee Dee River, Blewett Falls Lake is the storage reservoir for the Blewett Falls Hydroelectric Dam. Brown Creek and Lanes Creek also are significant water bodies within the county.[23]

Natural and Managed Areas

The Pee Dee Wildlife Refuge is the most significant managed area within Anson County.[24]

[20] *Sources: Anson County Public Schools and South Piedmont Community College*
[21] *Sources: NC Division of Water Resources, Local Water Supply Plans*
[22] *Source: U.S. Department of Energy, U.S. Energy Mapping System, Pee Dee Electric Membership Corporation*
[23] *Source: NC Natural Heritage Program*
[24] *Source: NC Natural Heritage Program, Southeastern Economic Development Commission*

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 with the highest rating for biodiversity and wildlife habitat in Anson County are along the Pee Dee River and its tributaries. These areas rank between a 7 and 10, with 10 being the highest possible score. Other areas of the county rank 5 to 6. Most of the county is unrated.[25]

Parks and Recreation[26]

The Pee Dee Wildlife Refuge and Blewett Falls Lake offer fishing, hunting, camping, hiking, biking, horseback riding, and boating opportunities. The Refuge attracts many bird watchers and will be connected to the Carolina Thread Trail.

The Anson County Parks and Recreation department maintains three ball fields at Little Park, and three picnic areas, as well as Civitan Park Field, Little Cotton Field, and Shelton Ball Field.

The Town of Wadesboro oversees the City Pond facility, which includes picnic facilities, a playground area, bank and boat fishing, and an archery range (private). A new public park named Wadesboro Park is located near the intersection of Center Street and Gatewood Street.

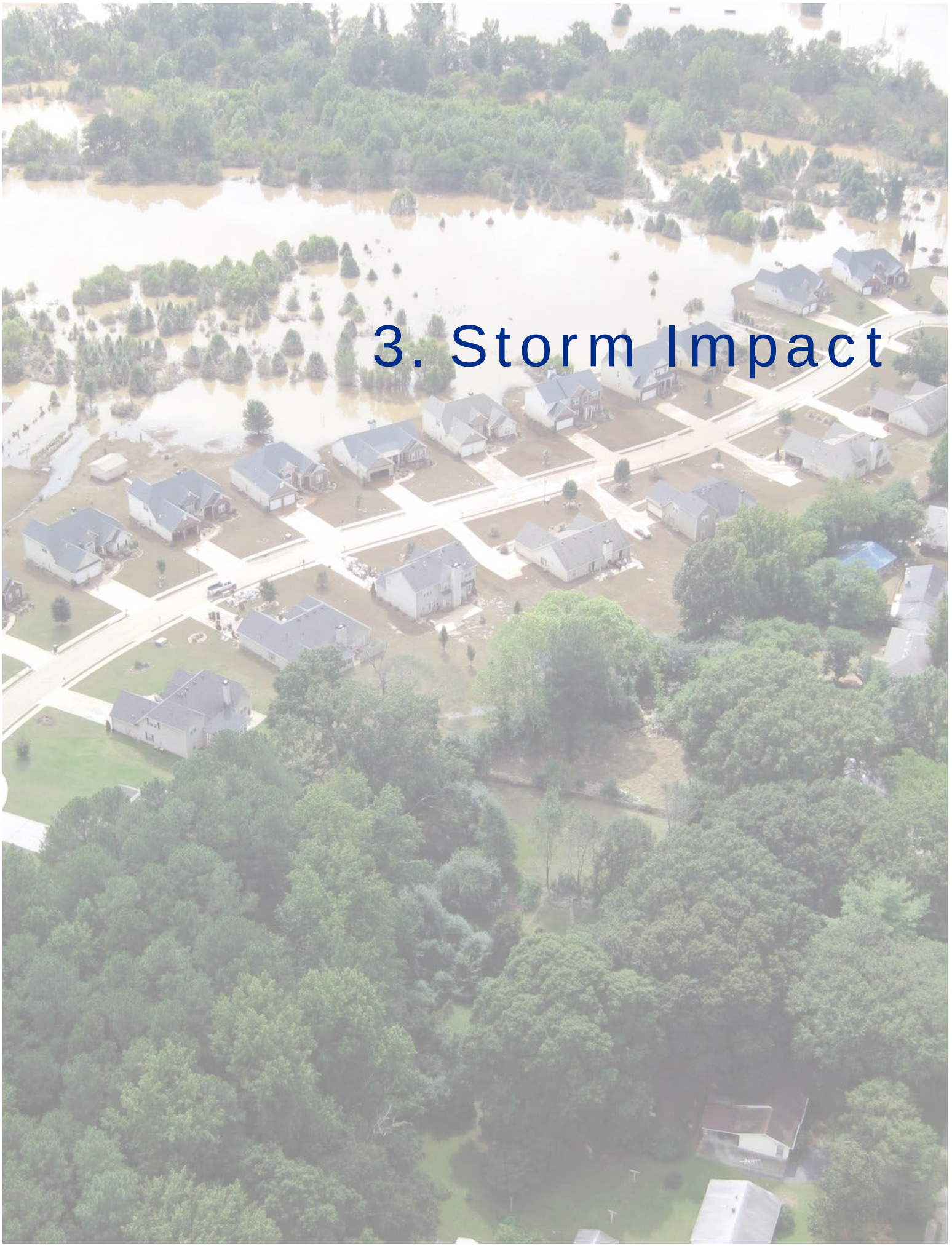
Administrative Profile[27]

The administrative capabilities of Anson County and the municipalities within the County are discussed in great detail within Section 7 of the Pee Dee Lumber Regional Hazard Mitigation Plan (2017). 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 Anson County and the municipalities can be found in that document.

In terms of administrative capabilities, the County has many of the staff and the necessary plans, policies and procedures in place that are found in communities with “high” capabilities. Anson 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 Land Use Plan, Zoning Ordinance, Subdivision Regulations, 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 Town of Wadesboro has a Planning department that would likely be able to assist with implementing the strategies in this plan as well. While their capabilities may not be quite as robust as those at the County level, they would still be considered to have “moderate” to “moderate-high” capabilities. The Towns of Ansonville, Lilesville, McFarlan, Morven, Peachland, and Polkton have what would be considered “limited” capabilities and will likely need additional assistance in the administration and implementation of projects due to their limited staff capacity.

[25] *Source: NC Natural Heritage Program*
[26] *Sources: Anson County Chamber of Commerce*
[27] *Sources: Anson County, Town of Wadesboro*



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. The storm produced widespread rainfall of three inches to eight inches in the central regions of North Carolina and eight inches to more than 15 inches in parts of eastern North Carolina. 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 leading to wet antecedent conditions prior to Hurricane Matthew. Anson County received as much as six inches to seven inches of rain in the eastern part of the county, with lower rainfall of two inches to three inches in the northwest. Total rainfall depth for Anson County is highlighted graphically in the figure below.

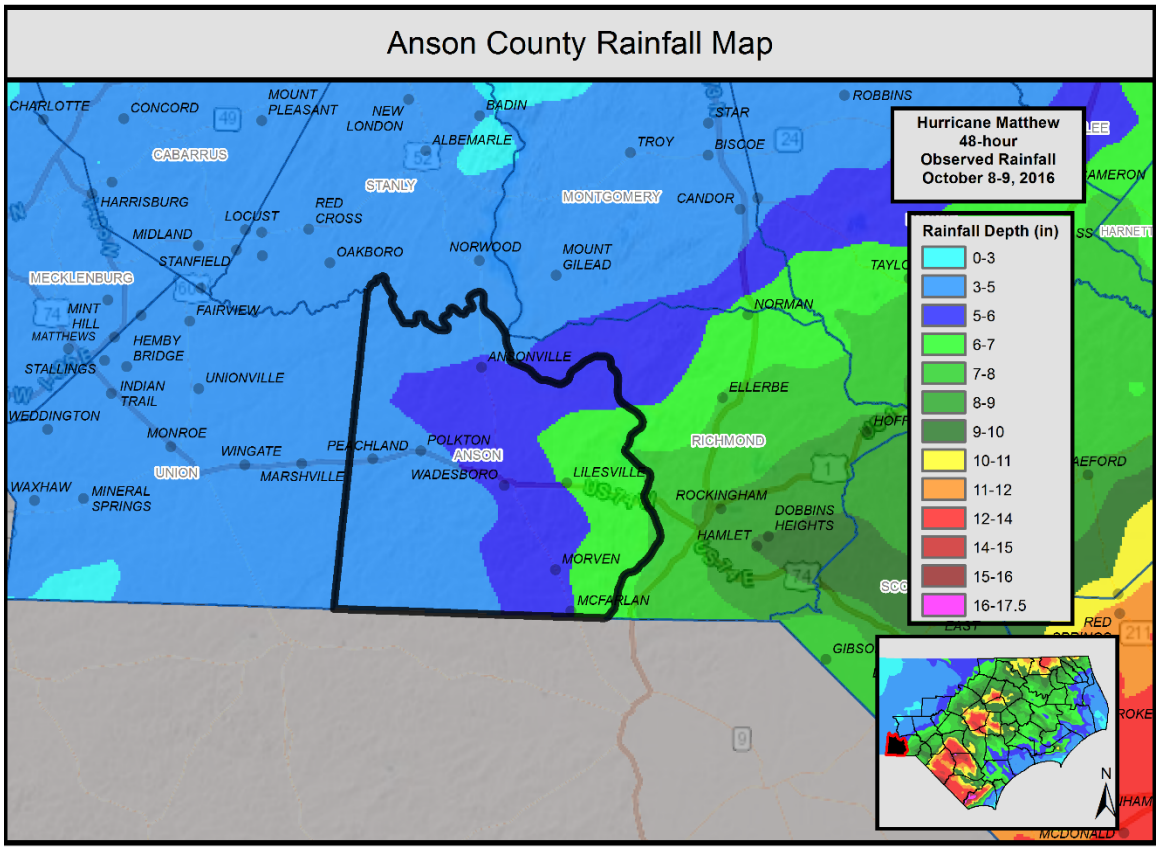


Figure 9: 48-hour Observed Rainfall Depth (October 8-9, 2016)

Riverine Flooding Summary

The effects of Hurricane Matthew on Anson County were relatively minor, with power loss and flooded roads creating the biggest impacts. As no river/stream gauges are located within Anson County, additional riverine flooding data are unavailable at this time.

Although Hurricane Matthew did have impacts within Anson County, these impacts were far fewer in number and degree than those experienced by many neighboring counties in the state. Anson County is located along the western edge of counties that were identified under the federal disaster declaration and because the storm

did not track as far inland as previous storms, most of the major damage from the storm occurred in counties farther east.

As a result, the planning team focused its discussions on power failure, historic flooding events, and recurrent vulnerability. A critical topic was the potential for future flooding within the county if a Hurricane Matthew-level event were to have a more direct impact on the community. Nevertheless, notable Hurricane Matthew impacts are included in this assessment and are significant points of emphasis for the community. These impacts demonstrate clear areas of need given that they occurred despite the relatively minor overall impacts of this storm in Anson County.

Impacts of Hurricane Matthew

From the first meeting with Anson County, it was apparent that most of the damage from Hurricane Matthew occurred in Wadesboro. All of Wadesboro was without power. Power outages impacted several critical facilities. Power utilities are jointly supplied by Duke/Progress Energy and Pee Dee Co-op, so transmission load transfer added to the downtime.

The eight high-hazard dams within the county did not breach during Hurricane Matthew. Dams and related impacts need further analysis to make sure that the inventory is complete and up to date.

The *Charlotte Observer* County-by-County Hurricane Matthew Summary noted:

Weather: Rainfall was about 4 inches and the top wind gust was 45 mph at Anson's airport.

Power outages: 3,200, or about 60 percent of customers.

Roads: Several roads were closed due to flooding:

Ansonville—Dennis Road, George Wright Road, Grassy Island Road, Pinkston River Road

Lilesville—Clark Mountain Road

Wadesboro—Allen Road, Brown Creek Road, Country Club Road, Lockhart Road, Pleasant Grove Road

Historic Vulnerabilities

Even though Anson County was not in the direct path of the storm, the impacts of Hurricane Matthew were not isolated. As past storms—for instance, Hurricane Hugo in 1989—have shown, the County is vulnerable to future storm events like hurricanes. Therefore, the historical storm events noted below must be considered as potential impacts.

Tropical Storms and Hurricanes

These storm events are the most destructive disaster that faces Anson County, inflicting more than three times greater property damage than any other calamity. Hurricane Hugo in September 1989 passed west of the Pee Dee Lumber area moving northwest toward Charlotte. Anson County was included in the presidential disaster declaration. Based on historical evidence, the annual probability level of future occurrence is between 1 percent and 10 percent.

Tornado

The unincorporated area of Anson had two tornado incidents resulting in $5 million of property damage in 2012. In May 1976, a level F2 storm (113–157 mph winds) caused $107,890 in damage in Anson County and 10 years later (in May 1989) a level F1 storm (73–112 mph winds) caused $4,943,806 in damage.

Based on historical occurrences and typical atmospheric conditions, the probability of future tornado occurrences affecting the Pee Dee Lumber Region is likely 10 percent to 100 percent annually. The relatively large number of manufactured homes are particularly vulnerable to tornadoes.

Severe Thunderstorm Wind Vulnerability

The 28 historical thunderstorms that hit Wadesboro have caused $49,265 in damage—three times higher than any other town in the Pee Dee Lumber Region. Winds in Wadesboro reached 75 knots on July 20, 1997, which was the highest wind gust in the Pee Dee Lumber Region, but caused no property damage. Downed trees disrupted transportation flow.

Flood

Anson County has 54.27 square miles within the 100-year floodplain and 0.98 square mile within the 500-year floodplain. On March 20, 2003, the unincorporated area of Anson County had 14 occurrences of flooding causing $9,320 in property damage. Road flooding often occurs in this county, where just two inches of rainfall will spread like a sheet of water sweeping across the terrain rather than as a torrent in a waterway.

There are 10 major dams in the Pee Dee Lumber Region, six of which are classified as high-hazard dams. There have been no reported breaches at this time.

Hazardous Materials

Wadesboro has seen nine hazardous material leak situations in recent decades. One spill on September 23, 2000, caused damage of $154,698, when 269 gallons of hazardous liquid spilled onto the highway.

The rest of this section is on specific damages from Matthew in the four pillars.

Housing Impacts of Hurricane Matthew

Storm Damage to Homes

According to FEMA Individual Assistance claims filed as of March 17, 2017, there were 74 registrations for Individual Assistance in Anson 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 other areas of concern for flooding that may not have occurred during this storm. Assisted living facilities and nursing homes had multiple requests for evacuation transportation assistance due to rising floodwaters.

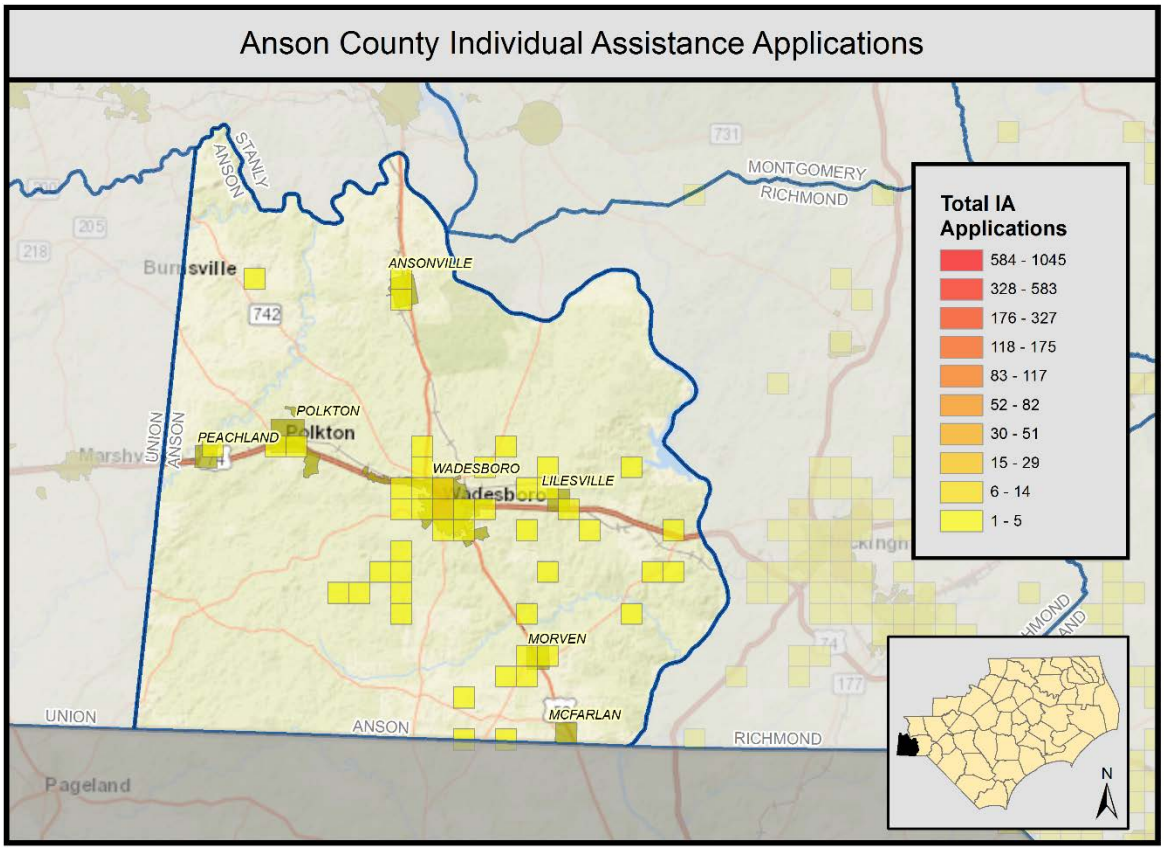


Figure 10: Anson County IA Applications by Area

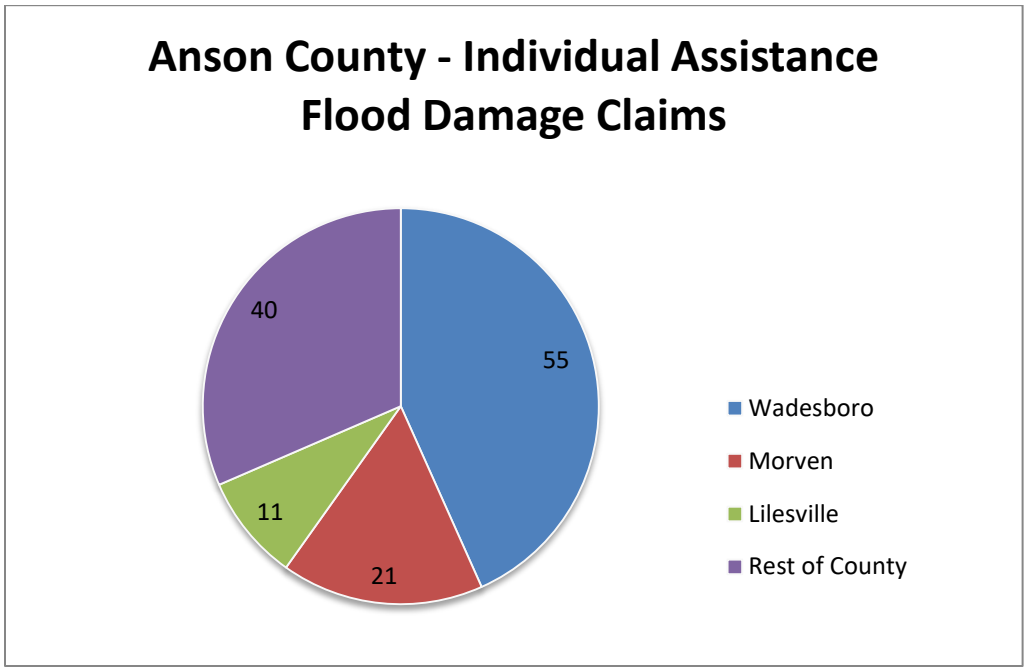


Figure 11: Number of IA Flood Damage Claims by Area

Had the storm path shifted to the west, Anson County could have experienced millions of dollars in housing damage. The table below shows Anson County's exposure to the 100-year flood.[28]

Approximately 19 percent of hazard mitigation survey respondents have taken actions to make their homes more resistant to hazards; 83 percent are interested in making their homes more resistant to hazards.

Location	# of Parcels	Assessed Value
Anson County	370	$15,964,500
Ansonville	8	$0
Lilesville	0	$0
McFarlan	0	$0
Morven	0	$0
Peachland	0	$0
Polkton	0	$0
Wadesboro	3	$90,000
Unincorporated	359	$15,847,500

Table 3: Parcel exposure to the 100-year flood

Social Services Capacity

The county social services facilities were not damaged during Hurricane Matthew. The biggest impact was from the power outage. After the storm, there were 2,500 applications for Food Stamps (disaster and benefit replacement) of which 2,100 were approved. The county staff opened one shelter, but no one came; subsequently, it was closed after five hours. The Call Center worked well and staff was rotated to minimize stress.

Economics / Business / Jobs Impacts

- **Business Disruption:** Disruptions caused by fallen trees taking down power lines and making roadways impassable were a major problem during Hurricane Matthew. The business recovery took several weeks to normalize.
- **Agriculture Impacts:** Power outages shut down electric pumps needed for water supplies on farms, resulting in some mortality of livestock (mostly turkeys and chickens, but some hogs), which then caused an environmental disposal problem. During the flood, it became evident that hazardous material incidents could be more problematic if damages were more widespread.
- **Downtown Impacts:** Old downtown building basements leaked in Wadesboro, which showed structural vulnerabilities.
- **Economic Vulnerability:** Anson County is among the most economically distressed counties in North Carolina. Even the temporary disruption caused by Hurricane Matthew was enough to permanently force small businesses to fold. The economic impacts of Hurricane Matthew went well beyond the limited physical damage that was reported.

[28] *Source: Pee Dee Regional Hazard Mitigation Plan*

- **Major Employers:** Employment in Anson County is mainly concentrated in the following industries: Public Administration, Education and Health Services, and Manufacturing. The impacts from the Hurricane Matthew to the top 10 employers in Anson County include:

Employer	Impacts from Hurricane Matthew (if any)
North Carolina Department of Public Safety	Power outages at facilities.
Anson County Schools	Power outage issues. Power restoration caused a backfeed issue in Ansonville Elementary (alarms, lights, etc.)
Anson County	Power outage issues; had to operate on generators
Hornwood, Inc.	Power outage issues; not on the main line so mostly like out of power for a couple days
Walmart	Power outage issues; on the main line, so back to work quickly
Premiere Fibers Inc.	Power outage issues; not on the main line so mostly like out of power for a couple days
Columbus-McKinnon Corporation	Power outage issues; on the main line, so back to work quickly
Peoplease Corporation	Not known
Gaylord, Inc.	Not known
JJ Haines and Company	Power outage issues; on the main line, so back to work quickly

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 $41,895 of claims in Anson 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.

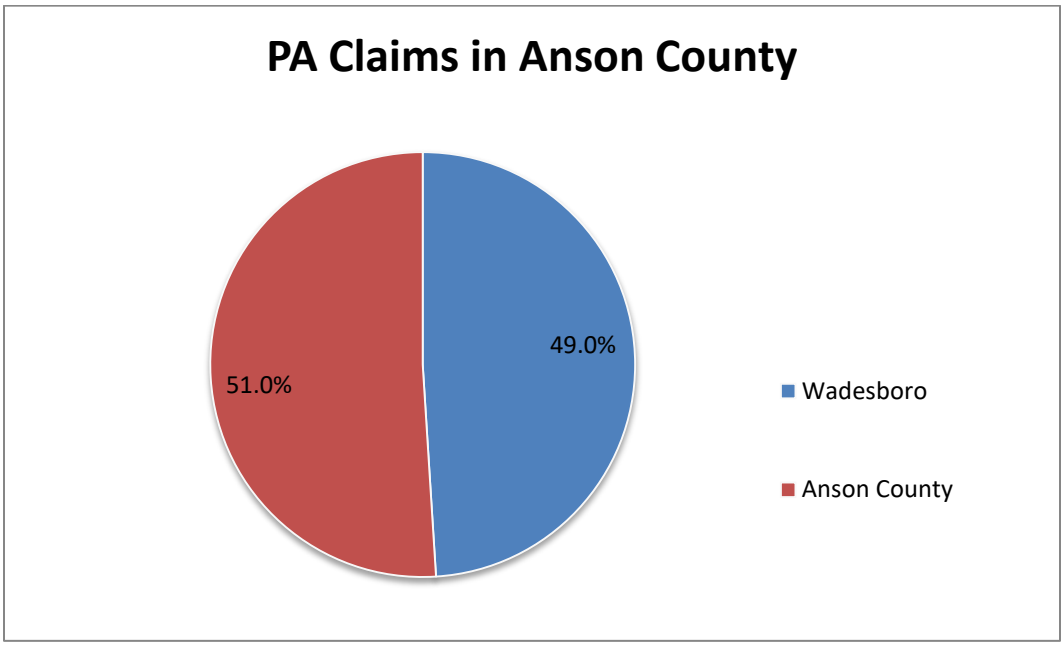


Figure 12. Anson County PA Claims by Area and Percentage

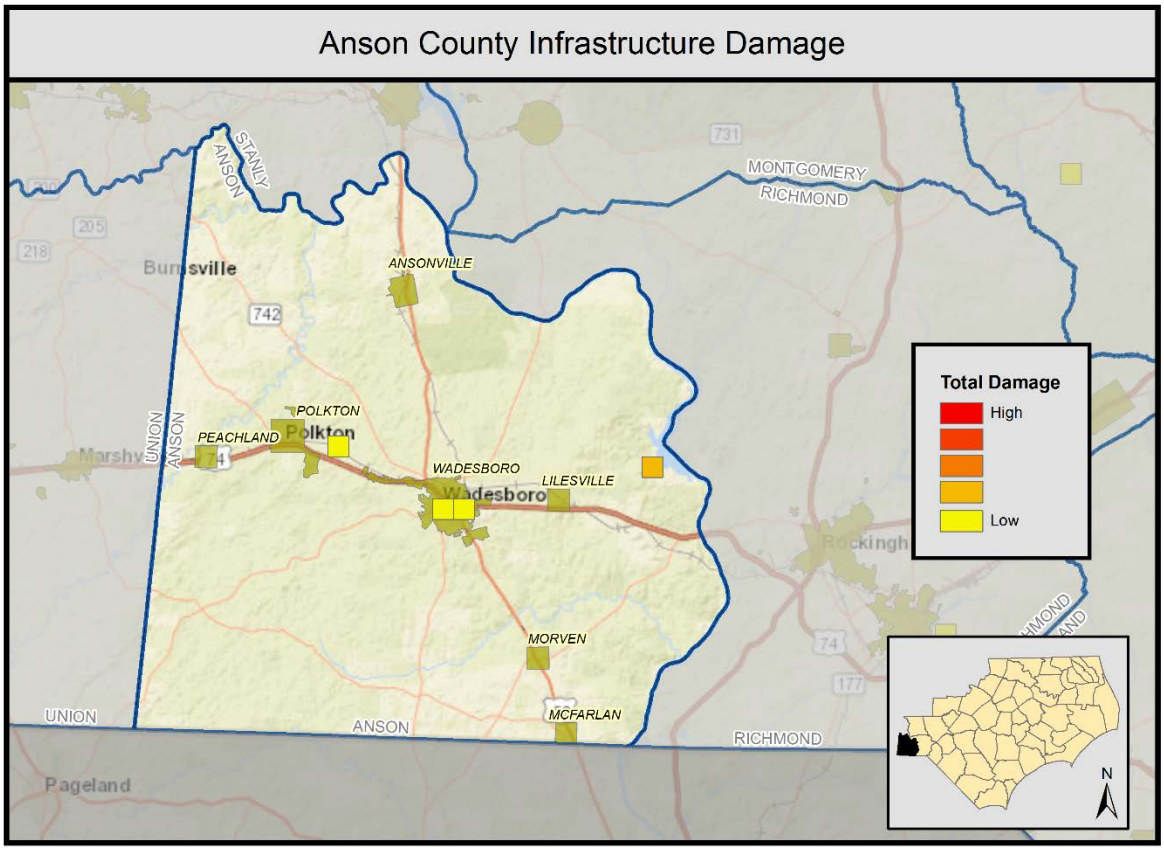


Figure 13: Anson County Infrastructure Damage

Flooded Roads

The Peru Road washout was caused by greenhouse ponds overflowing onto the road. Anson County has compiled a list of 22 roads that historically flood; this list is included in the Appendix.

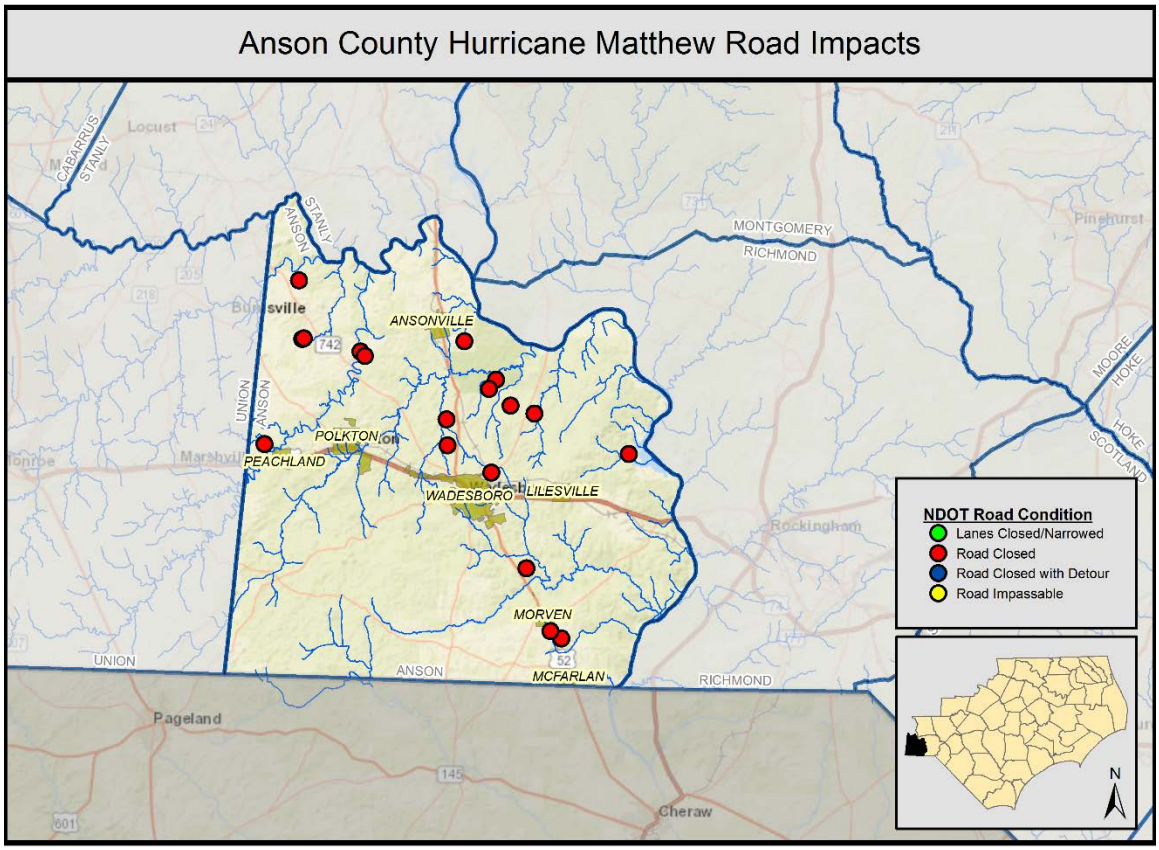


Figure 14: Impacted NCDOT Structure in Anson County

While road crews were clearing roads of debris to allow emergency vehicles and power companies to attend to the immediate needs, the flood waters dissipated naturally, settling into basins and aquifers. The community was forced to wait out the flood conditions by avoiding the remaining flood areas. Stormwater management systems were insufficient. Evacuation would have been very problematic. When doctor's offices became inaccessible, all appointments had to be postponed or served by emergency facilities.

Widespread Power Loss

Examples of critical facility reports involving loss of power:

- Citywide power outage—Both substations operated off generators but distribution was intermittent and, in some places, the response from the power company was slow.
- The main water facility filtration system was without power for 23 hours.
- Ansonville School—A power outage took five days to fix. When power came on, a surge blew out ballasts in lights and the fire alarm system.
- The hospital on U.S. Highway 74 (US 74) was at maximum capacity and had to run off a generator for days.

Ecosystems / Environment Impacts

Anson County has some pristine environmental assets. While Hurricane Matthew had relatively light stormwater impacts, there have been historic storms that have impacted the environment.

Historic Stormwater Events

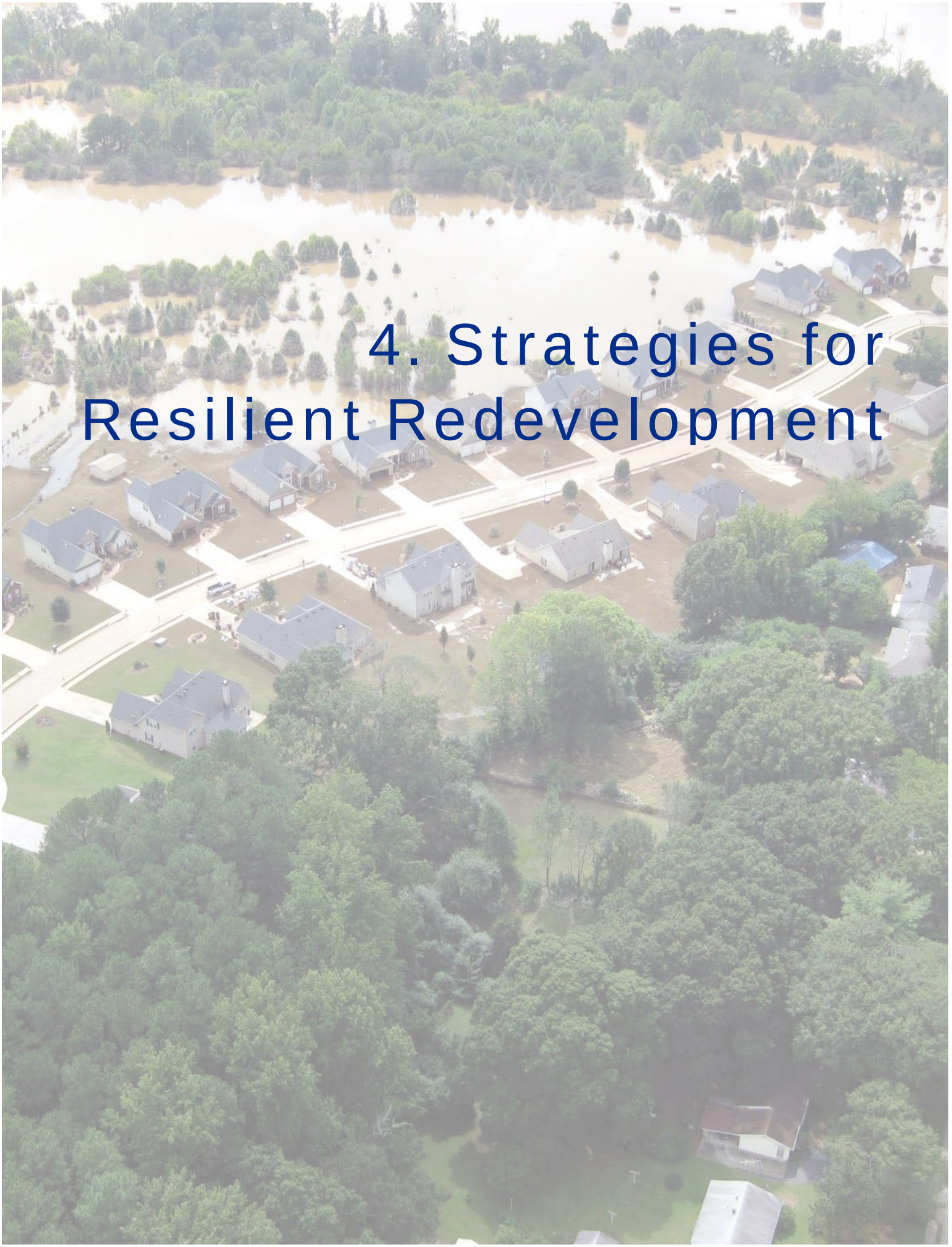
This list of the historic peak stormwater levels helps highlight the damage that might ensue in a future hurricane event that more directly impacts Anson County. The list shows peak discharge in cubic feet per second (cfs) plus the height of the stream gauge at peak.

- Palmetto Branch at Town of Ansonville, July 28, 1965, 556 cfs, 25.0 feet
- South Fork Creek near Town of Morven, February 14, 1960, 2,080 cfs, 18.6 feet
- North Fork Creek near Town of Wadesboro, June 4, 1937, 2,410 cfs, 6.4 feet
- Brown Creek near Town of Polkton, September 18, 1945, 17,300 cfs, 17.7 feet (Note: this creek floods the adjacent roadway with even two inches of rainfall)

There is a need to increase the use of open spaces and green surfaces to manage stormwater in a more resilient fashion.

Summary of Critical Issues and Community Assets

- Downed power lines were the number one issue. Power shortages caused a cascading set of problems.
- The stormwater management system was tested during the hurricane. If the storm had been more intense, the system would have failed, likely resulting in flooding.
- Communications, emergency services, and public awareness were ranked as the most important activities for communities to pursue in life safety and health during an event. Communicating about the road closures and status of shelter accessibility was difficult.
- Anson County's economy is struggling (projected 3 percent annual growth) and can be set back by even minor disruptions, such as impacts from Hurricane Matthew. Economic incentives will help rebuild a positive business climate.



4. Strategies for Resilient Redevelopment

4. Strategies for Resilient Redevelopment

This section provides details about the resilience and revitalization strategies and actions identified in Anson 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	2
Economic Development	3
Infrastructure	3
Environment	3
Grand Total	**11**

Table 5. Anson County Summary of Strategies by Pillar

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

Pillar	Strategy/Action Name	Priority	Overall Ranking
Infrastructure	Microgrid for Back-up Power	**High**	**1**
Infrastructure	Critical Facility Protection / Back-up Power	**High**	**2**
Infrastructure	Roadway / Bridge Improvements	**High**	**3**
Environment	Stormwater System Improvements	**High**	**4**
Housing	Acquisition of At-Risk Homes	**Moderate**	**5**
Environment	Stream Gauges and Early Warning Network	**Moderate**	**6**
Economic Development	Eco-Tourism / Temporary Housing Site	**Moderate**	**7**
Housing	Affordable Housing – Protection / Retention	**Moderate**	**8**
Economic Development	Downtown Wadesboro Revitalization	**Low**	**9**
Environment	Environmental Job Training	**Low**	**10**
Economic Development	Carolina Thread Trail Access	**Low**	**11**

Table 6. Projects by Rank

On the following pages, we have organized the projects and actions by pillar. Within each pillar, the priority of the projects is shown in a table at the front of the section. Please note that maps are provided for all projects that have a specific location within the county. Projects without maps are county-wide projects that will benefit citizens throughout the county.

Housing Strategies

Although Anson County as a whole experienced only relatively minor housing impacts from Hurricane Matthew, several Wadesboro residential communities were hard hit, as were a few housing units along Browns Creek. In addition to the flooding, downed trees from Matthew made roads impassable. There was a total of 23 road closures, which introduced access issues for emergency services and utility companies trying to respond to resident requests for assistance. Thus, in development of Anson County's housing strategies, the planning team put their focus into resiliency and retention of affordable housing:

Pillar	Strategy/Action Name	Priority	Overall Ranking
Housing	Acquisition of At-Risk Homes	**Moderate**	**5**
Housing	Affordable Housing- Protection / Retention	**Moderate**	**8**

Table 7. Anson Housing Priority Summary

Additional detail on the strategies can be found below:

- **Acquisition of At-Risk Homes:** Develop a program to assess and identify best solution for widespread repetitive flooding of about 30 residential units that remain a flood risk in Harlem Heights and along low lying locations of Salisbury and Country Club Roads. The county is initially looking at acquisition but will also consider elevation and mitigation reconstruction if these are suitable.

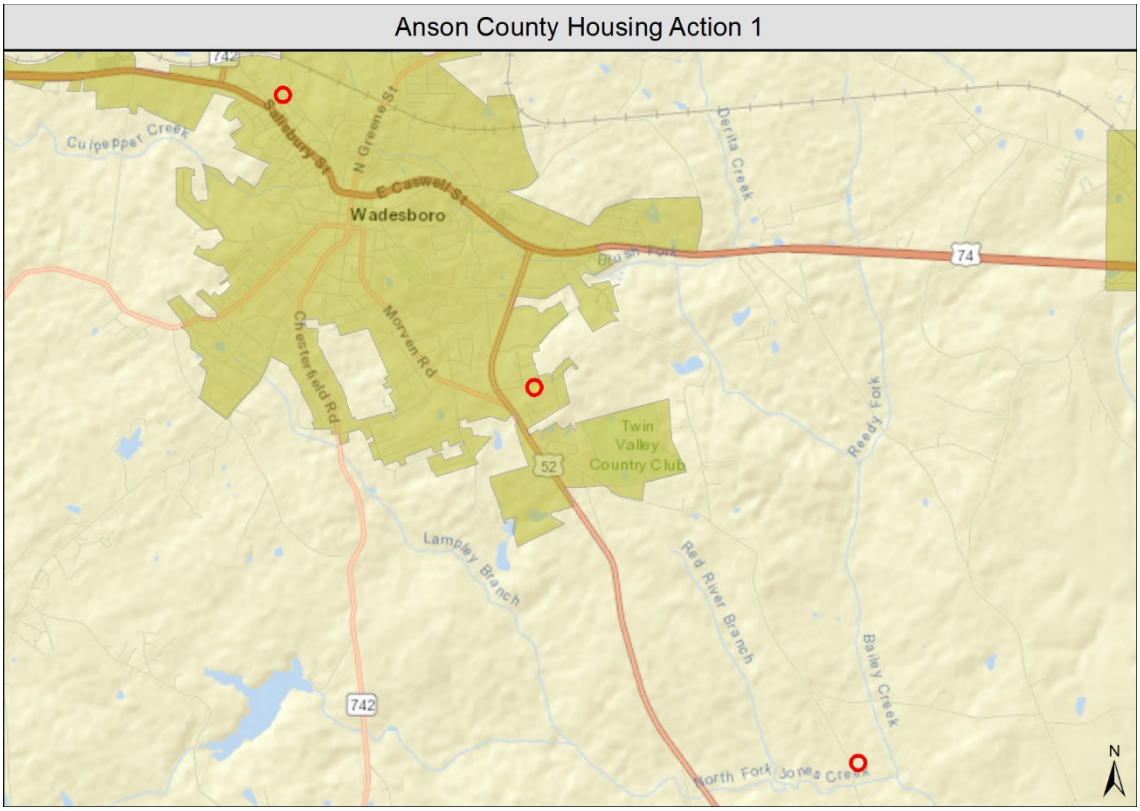


Figure 15. Housing Action 1 - Acquisition of At-Risk Homes

H1. Anson County Housing Acquisition

County: Anson

Priority Grouping: Medium Priority

Priority Ranking: 5

Project Timeframe: 24 -36 months

Location: Scattered residential properties in Anson County; Salisbury (up to 20 units), Harlem Heights (3 units), Orchard St. (TBD), Wentwood Heights (TBD)

Project Summary: A. Voluntary acquisition of homes at Fair Market Value and subsequent demolition
B. Create more relocation housing opportunities for residents selling flood prone properties

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Flooding was the main cause of loss during Hurricane Matthew. Acquiring homes repetitively damaged by floods can provide relief to home owners who might otherwise be stuck with a property in harm's way and it helps restore the natural function of the floodplain.	N/A
Consistent with existing plans (describe points of intersection/departure)	Generally consistent with Goal #4 of the Pee Dee Lumber Regional Hazard Mitigation Plan: Protect the most vulnerable populations buildings and critical facilities through the implementation of cost-effective and technically feasible mitigation projects	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.	For the property owners affected by flooding it will cut down on costly expenses and disruption leaving them to spend more of their income on consumables.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	>200 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	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?	It will help reduce flooding of houses which results in water quality issues and need for debris removal (flooded possessions etc.)	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$251K - $500K	Agree
What is the level of public support for this project?	Medium	Agree

What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	Local	Agree

- **Affordable Housing – Protection / Retention:** A disproportionate number of low income residents have been displaced by Hurricane Matthew and previous major storm events. This project would provide assistance and mitigation measures to low- to moderate-income housing in Anson County which were impacted by Matthew. The entrance to the Myrtlewood Housing Complex was reported to have been flooded and the Orchard Street Apartments require attention.

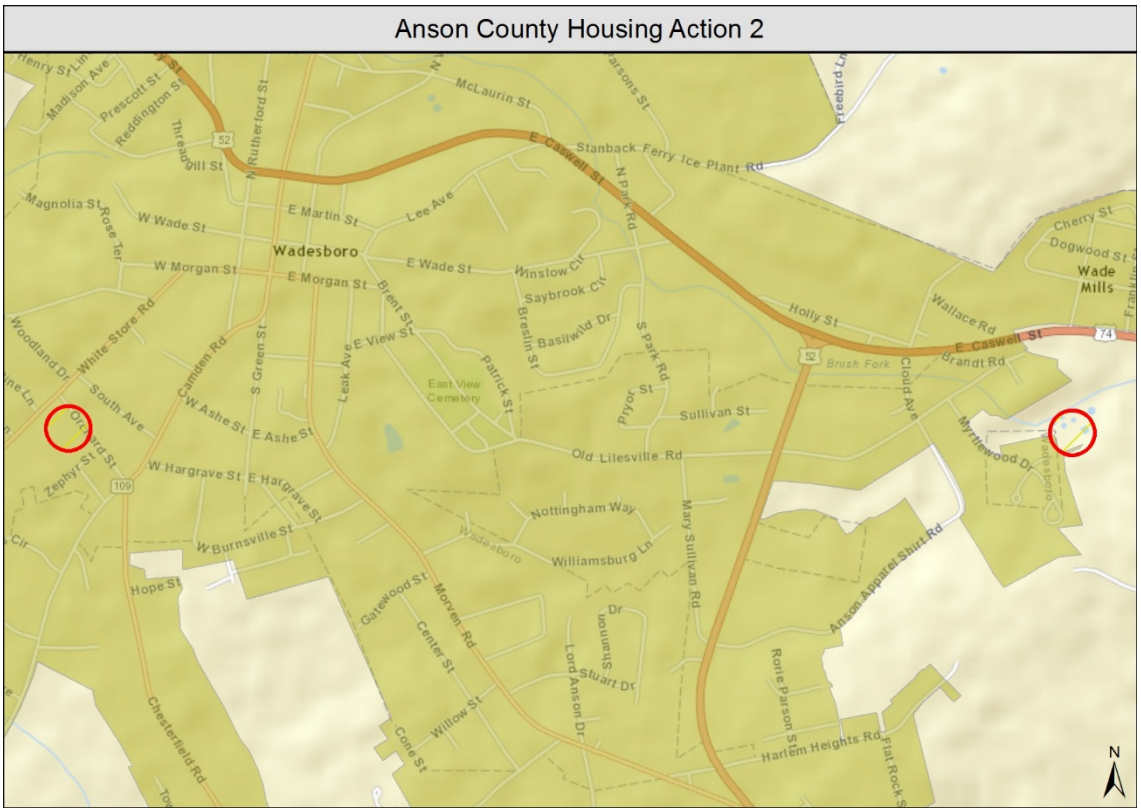


Figure 16. Housing Action 2 - Affordable Housing – Protection / Retention

H2 Affordable Housing- Protection/Retention

County: Anson

Priority Grouping: Medium Priority

Priority Ranking: 8

Project Timeframe: 24 months

Location: H2.5 Myrtlewood Affordable Housing, H2.1 Country Club Road near gateway, H2.2 Assisted Living, adjacent to Twin Valley Country Club, H2.3 assisted Living, South Greene/WHargrave, H2.4 Assisted Living US74@Anson H.S.

Project Summary: Provide assistance and possibly mitigation measures to low to moderate income housing in Anson County. These structures and properties were impacted by Matthew. The entrance to the Myrtlewood Housing area was reported to have been flooded. Exact details of the project will be further developed.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Public housing and areas that provide access to public housing were flooded in Hurricane Matthew. Generally affordable housing supply diminishes after a storm and this project will help maintain supply. This project will help provide resiliency to public housing in Anson County which may be more severely affected by a more direct hit from a hurricane in the future.	N/A
Consistent with existing plans (describe points of intersection/departure)	Generally consistent with Pee Dee-Lumber Regional Hazard Mitigation Plan of which Anson is a part	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.	Keeps affordable housing stock protected and in adequate supply	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	<50 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	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?	Low to moderate 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?	Will help reduce flooded buildings and entrance to housing. Will reduce contaminants getting into adjacent water bodies and need for debris removal due to flooding.	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$251K - $500K	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree

Who will administer this project?	County	Agree

Economic Development Strategies

The Hurricane Matthew impacts to Anson County in terms of economic development were serious because the community has been working to establish a positive business atmosphere and the storm slowed down some of the progress that was being made. The planning team encouraged local county officials to examine several economic growth strategies that would make the community more resilient to future storm events. In terms of economic development strategies in Anson County, the planning team worked with local county officials to examine the following ways to increase resiliency for future storm events and encourage economic growth:

Pillar	Strategy/Action Name	Priority	Overall Ranking
Economic Development	Eco-Tourism / Temporary Housing Site	**Moderate**	**7**
Economic Development	Downtown Wadesboro Revitalization	**Low**	**9**
Economic Development	Carolina Thread Trail Access	**Low**	**11**

Table 8. Anson Economic Development Priority Summary

Additional detail on the strategies can be found below:

- **Eco-Tourism/Temporary Housing Site:** Overnight visitation to the Pee Dee National Wildlife Refuge in northern Anson County is an untapped tourism draw. A campground to provide overnight accommodations has been identified as a potential project. This site could bring overnight visitors to Anson County who would also possibly visit Wadesboro. The site would also serve as a temporary housing site after future disasters.

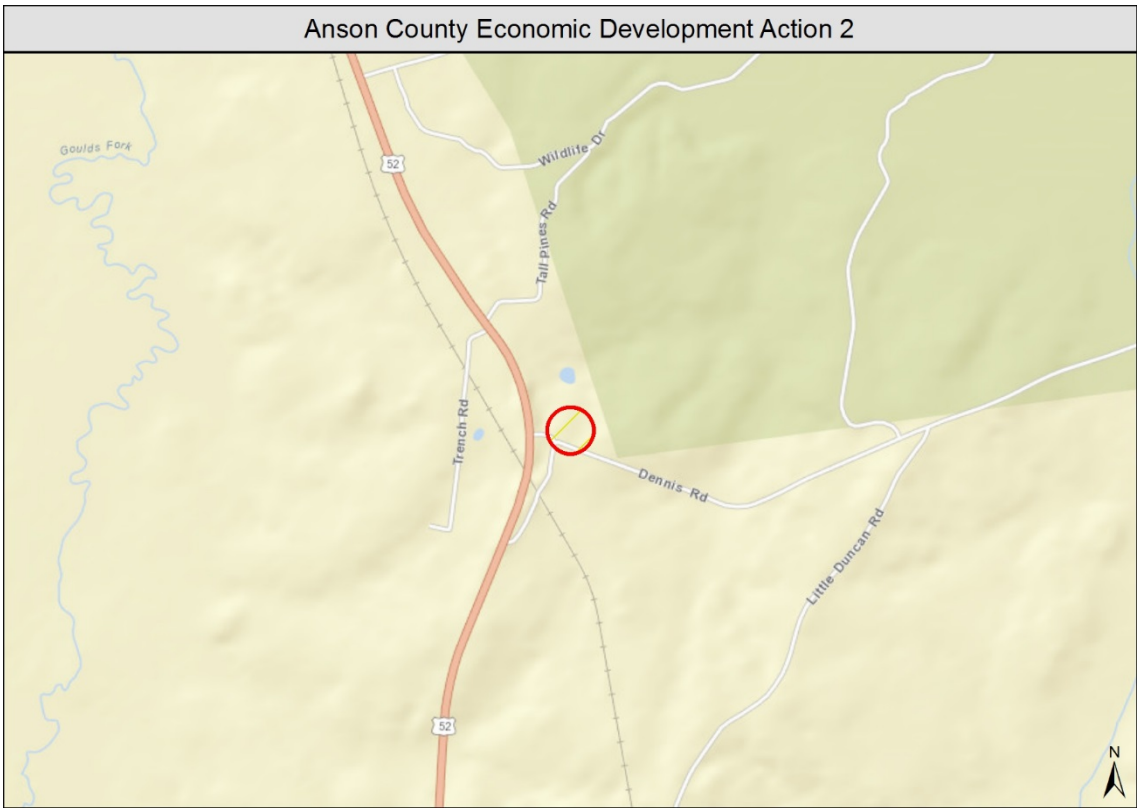


Figure 17. Economic Development Action 2 - Eco-Tourism/Temporary Housing Site

EC 2 Anson County Eco Tourism / Temporary Housing Site

County: Anson

Priority Grouping: Medium Priority

Priority Ranking: 7

Project Timeframe: 24-36 months

Location: 5770 US 52 North Wadesboro, NC 28170 35°03'31.95" N, 80°05'36.50" W

Project Summary: Campsite development. The primary need is a modest amount of capital to purchase the site and supply infrastructure, water and sewer for RV/camping visitors to the nearby Pee Dee National Wildlife Refuge and Pee Dee River. These two areas provide a myriad of recreational opportunities for paddlers, birder, hikers, and eco-tourists. A site is available and a plan has already been formulated.
A bonus will be an information kiosk at the camp site that will portray the benefits of controlled flooding of croplands. Most of the Refuge cooperative farming shares (approximately 200 acres) are left standing in the field, and then flooded with mobile pumps and captured rain water. Flooded corn and millet crops provide an extra food source for the waterfowl that stop over and winter on the refuge.

Marketing materials. Funds will be allocated to professionally promote this eco-tourism strategy, including creating an information kiosk in Downtown Wadesboro and using effective advertising techniques in nearby Charlotte.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The strategy for getting the economic community back-on-their-feet after the storm requires some public involvement in staging the projects to instill private sector investment. This project will contribute to the visitor attraction to Anson County. The campground site can also be used as a site for temporary housing (e.g. travel trailer setup) after a storm.	N/A
Consistent with existing plans (describe points of intersection/departure)	Key to downtown revitalization and a regional goal of eco-tourism to the region. More visitors to the campground and the National Wildlife Refuge will likely spend more time and funds in Wadesboro which is close by and the largest municipality. Supported at the second meeting by the Centralina Council of Governments.	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.	This is a core strategy proposed by the new Economic Development Director. Attracting the out-of-towner to stay overnight will help bring more visitors to Wadesboro which is the other key economic development strategy for Anson County.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	<50 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	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?	Between 26 and 50%	Agree
What impacts to the environment of the county will result from this project?	Helps preserves essential wetlands and protects wildlife habitats from human development. Provide a great opportunity for residents and visitors to learn more about local natural areas and appreciate them which can help support future conservation.	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$51K - $100K	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	Unknown	Agree

- **Wadesboro Downtown Revitalization:** Small city downtowns like Wadesboro have positive features but lack amenities like a coffee shop, outdoor outfitter, open air restaurants, and arts spaces to accommodate visitors and attract new residents. Downtown buildings need to be 'move-in' ready (e.g. sound, dry basements with modern utilities) to attract entrepreneurs to locate in these spaces.

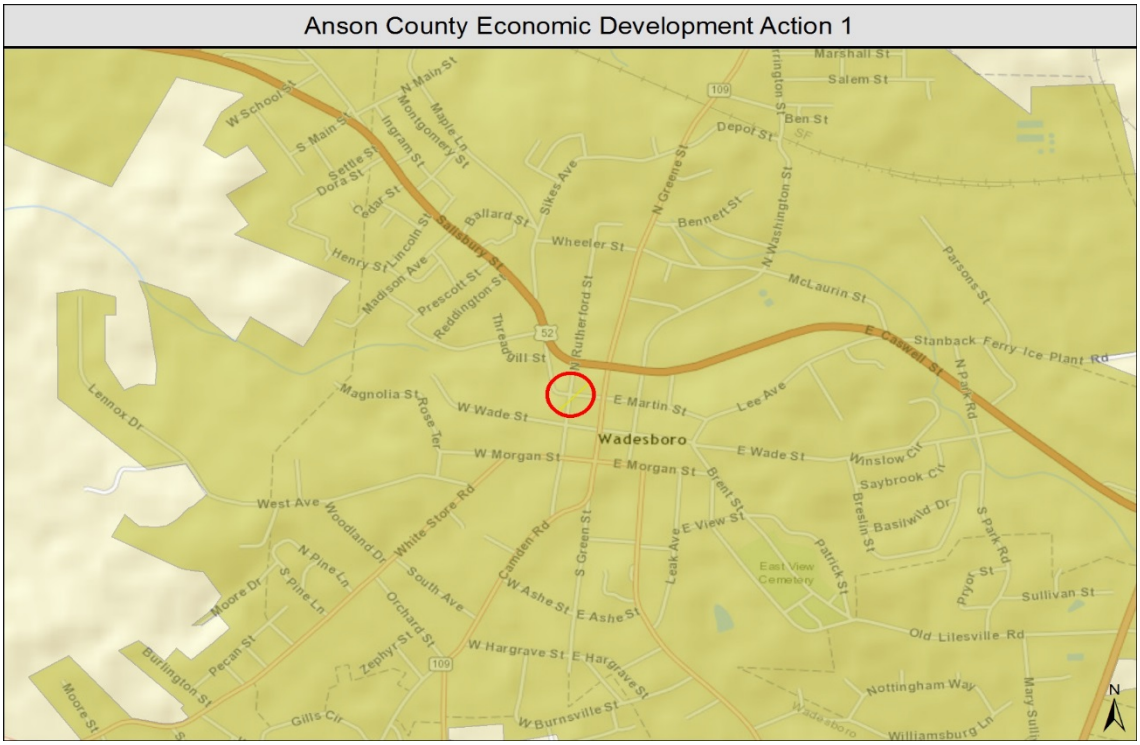


Figure 18. Economic Development Action 1 - Wadesboro Downtown Revitalization

EC-1 City of Wadesboro Downtown District Revitalization

County: Anson

Priority Grouping: Low Priority

Priority Ranking: 9

Project Timeframe: 12-24 months

Location: Downtown Wadeboro is roughly bounded by Martin, Rutherford, Morgan and Washington Streets. Buildings proposed for hazard protection/improvement: 1) 113 E Wade Street; 2) 140 E Morgan Street; 3) 100 S Rutherford Street

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

• Address physical components like infrastructure, and buildings to make downtown structures 'move-in ready', with façade and basement foundation improvements, upgrades to mechanical systems to modernize utilities, and other necessary repairs.

• Make improvements to downtown buildings that create second story residential opportunities, which should be at market rate in downtown Wadesboro, to balance out the overall housing stock mix. Include sprinkler system installation in second stories to ensure safety protection of all units.

• Use for identified buildings include: 113 E Wade St - Outdoor outfitter/Loft; 140 E Morgan St - Coffee/sandwich shop; 100 S Rutherford St - Fiber Arts Shop/Loft.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Downtown Wadesboro received some damage during Hurricane Matthew when heavy rainfall caused interior damage from leaky roofs windows and basements. 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)	Addresses Objective #2 under Quality of Life in 2012-2017 Centralina CEDS Plan: Continue to enhance downtowns in the region and invest in arts non-profits and entertainment venues	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.	Provides a revitalized economic center for the county and could be a model for other nearby successfully funded downtown revitalization efforts like Kannapolis NC or Huntersville NC 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.	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)?	1-3	Agree
Is coordination with other communities/counties needed to complete this project?	Yes	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?	Between 26 and 50%	Agree
What impacts to the environment of the county will result from this project?	Reduced damage to building stock which can mean less need for debris removal.	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$251K - $500K	Agree
What is the level of public support for this project?	High	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	Unknown	Agree

- **Carolina Thread Trail Access:** To complement the Eco-Tourism strategy, developing additional access to the Pee Dee River near the National Wildlife Refuge will contribute toward greater visitation to the multi-county Carolina Thread Trail. A total of four small craft boat launches and parking areas in Anson County would connect to other NC parks through the Carolina Thread Trail.

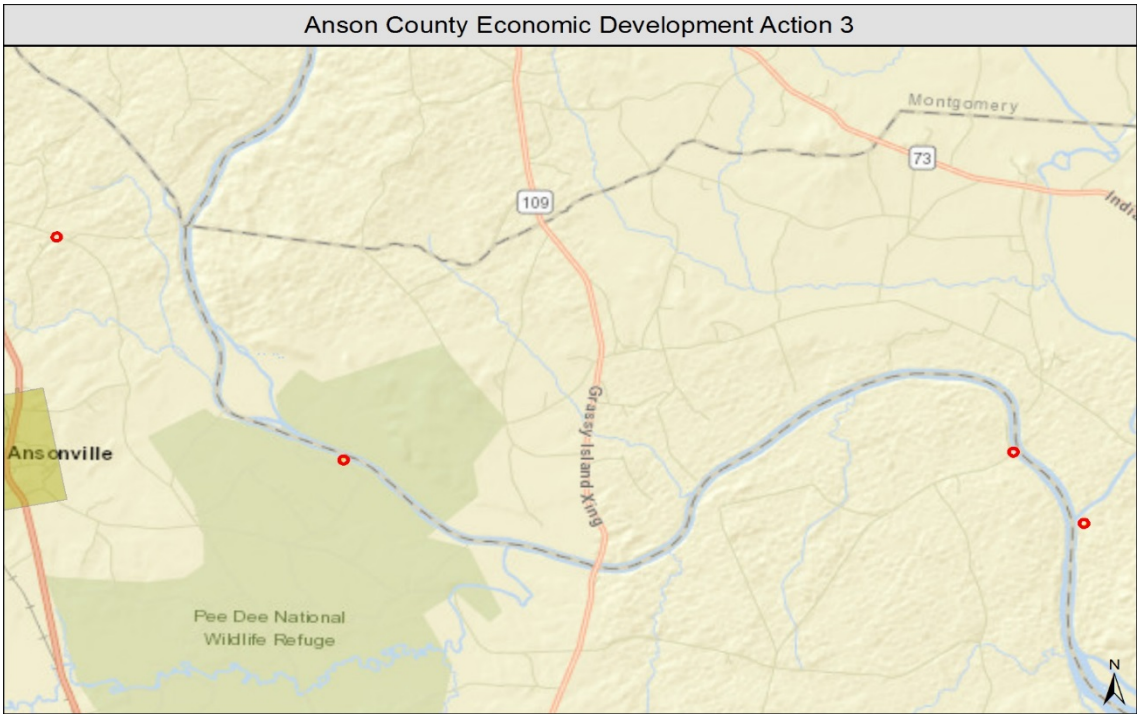


Figure 19. Economic Development Action 3 - Carolina Thread Trail Access

EC 3 - Carolina Thread Trail Access

County: Anson

Priority Grouping: Low Priority

Priority Ranking: 11

Project Timeframe: 12 months

Location: Improved Access Points to the Carolina Thread Trail along Rocky and Pee Dee Rivers in Anson County - Griffin Road/Pee Dee River NWR preserve; Pinkston River Road at Buffalo Creek; Stanback Ferry Road

Project Summary: Expand access to the Carolina Thread Trail, which is a multi-county recreational trail. In Anson and neighboring Stanly, Montgomery, and Richmond Counties, this trail is designed as a 'blue trail' along the Rocky and Pee Dee Rivers. By creating better access to this multi-county trail, it will help bring visitors to Anson County who may also visit commercial areas like downtown Wadesboro.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The strategy for getting the economic community back-on-their-feet after the storm requires some public involvement in staging the projects to instill private sector investment. This project will contribute to the visitor attraction to Anson County. The access site could also be used as a temporary housing site (e.g. travel trailer setup) after a storm.	N/A
Consistent with existing plans (describe points of intersection/departure)	Key to downtown revitalization and a regional goal of eco-tourism to the region. More visitors to the Pee Dee National Wildlife Refuge will likely spend more time and funds in Wadesboro which is close by and the largest municipality. Supported at the second meeting by the Centralina Council of Governments.	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.	This is a core strategy proposed by the new Economic Development Director of the Anson Economic Development Partnership. Attracting the out-of-towner to stay overnight will help bring more visitors to Wadesboro which is the other key economic development strategy for Anson County.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	Agree
Is coordination with other communities/counties needed to complete this project?	Yes	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?	Low to moderate confidence	N/A
What impact will this action have on the local economy/tax base?	Between 26 and 50%	Agree
What impacts to the environment of the county will result from this project?	Helps preserves essential wetlands and protects wildlife habitats from human development. Provide a great opportunity for residents and visitors to learn more about	N/A

	local natural areas and appreciate them which can help support future conservation.	
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	$101K - $250K	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	County	Agree

Infrastructure Strategies

The purpose of the strategies related to Anson 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 potential future storm like Hurricane Matthew. In working with local officials, the planning team developed the following infrastructure strategies:

Pillar	Strategy/Action Name	Priority	Overall Ranking
Infrastructure	Microgrid for Back-up Power	**High**	**1**
Infrastructure	Critical Facility Protection / Back-up Power	**High**	**2**
Infrastructure	Protection of Roads and Bridges	**High**	**3**

Table 9. Anson Infrastructure Priority Summary

Additional detail on the strategies can be found below:

- **Microgrid for Back-Up Power:** The Pee Dee Electric Cooperative recommended a small power generation/distribution system to maintain power to a cluster of key facilities both during and after major storm events. The recommendation was to connect Carolina Healthcare Systems Hospital, Anson High School, Meadowview Assisted Living, and Wal-Mart. This strategy also explores the feasibility of a new substation for a redundant power feed.

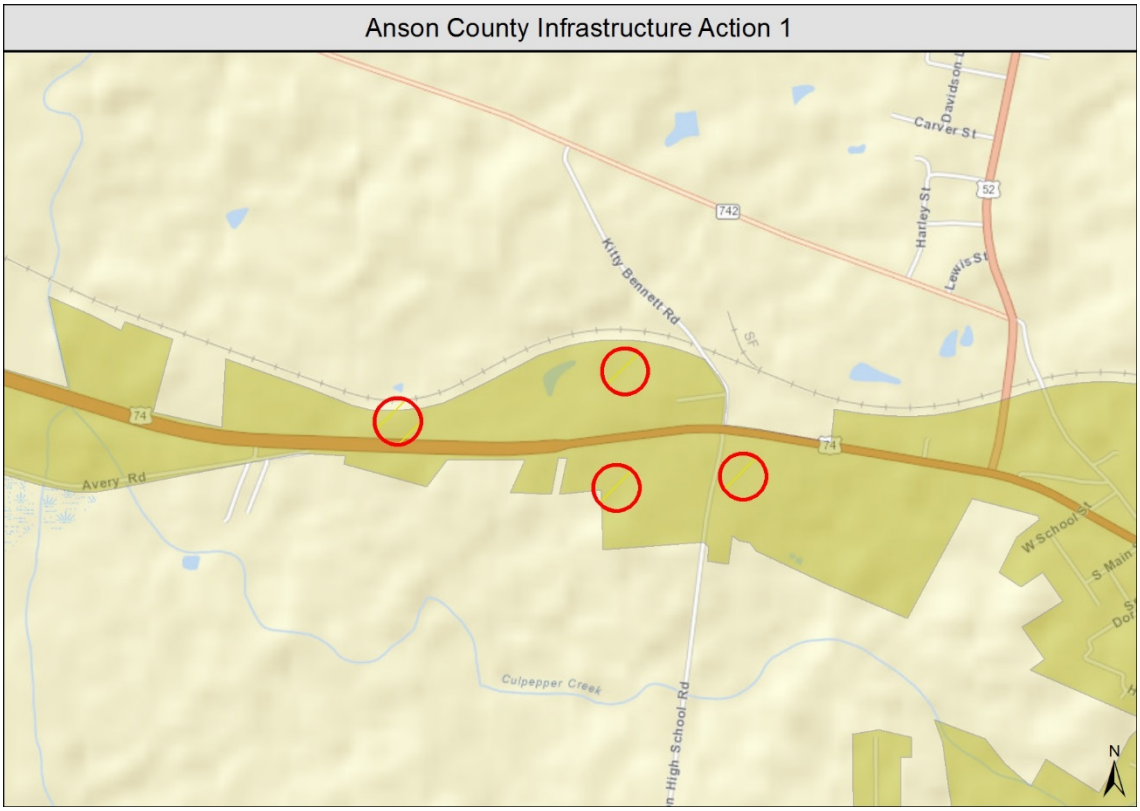


Figure 20. Infrastructure Action 1 - Microgrid for Back-Up Power

I1 - Microgrid for backup power near Wadesboro

County: Anson

Priority Grouping: High Priority

Priority Ranking: 1

Project Timeframe: 12-24 months

Location: The microgrid will be located near Anson High School on US 74 just west of Wadesboro. It would serve the four facilities that are on the map attachments.

Project Summary: Establish a Mico-Grid Electrical System, which is a small power generation/distribution system that can provide emergency backup power after a storm and can help reduce energy costs during blue sky days. The system can operate in isolation of main grid or connected to it. Microgrids are generally powered by sustainable sources like wind and solar. This will provide for quicker restoration of power and a safe work environment for employees. The proposed microgrid would provide backup power to several key facilities in immediate vicinity: Carolina Healthcare Systems Hospital, Anson High School, Meadowview Assisted Living, and Wal-Mart.
One other component to help provide a more robust, redundant power network would be to establish an additional substation – 40 MW; Transfer 230 KV to 64 KV (location) – part of Pee Dee Electric Co-op

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Loss of power was the greatest impact in Anson County from Hurricane Matthew. Many public and critical facilities like the hospital and nursing home almost had to evacuate as a result of power loss. It is critical for better resiliency to have reliable back-up power to keep key operations like the nearby hospital nursing home school and primary commercial businesses like Wal-Mart that supply needed goods going after a storm.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Action ES-3 Anson County from the Pee Dee Regional Hazard Mitigation Plan: Establish program to maintain continuity of government operation .	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.	A microgrid can help reduce energy costs to facilities during blue sky days.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	50-100 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	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?	Between 26 and 50%	Agree
What impacts to the environment of the county will result from this project?	The microgrid will use sustainable sources for power generation helping result in cleaner air.	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?	High	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	County	Agree

- **Critical Facility Protection/Back-up Power:** Generators were recommended to serve several additional critical sites: the Public Services shop and motor pool on Hargrave Street, nine (9) sewer lift locations in Wadesboro, all nine of the County school buildings, and the Water Filtration Plant.

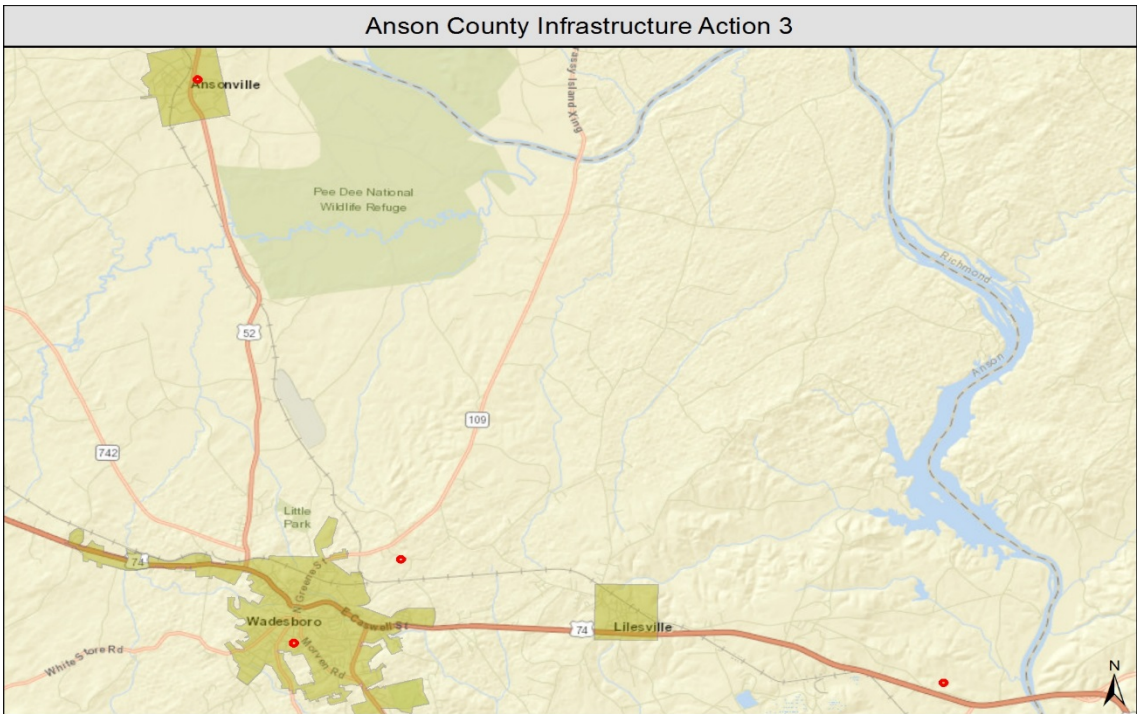


Figure 21. Infrastructure Action 3 - Critical Facility Protection/Back-up Power

I3 - Wadesboro/Anson County Critical Facility Protection/Backup Power

County: Anson

Priority Grouping: High Priority

Priority Ranking: 2

Project Timeframe: 12-24 months

Location: Nine sewer lift stations in Wadesboro; protection of public services shop facility at 110 Hargrave Street in Wadesboro; Ansonville Elementary at 9104 US-52, Wadesboro; Water Filtration Plant at US 74 and Vintage Road

Project Summary: Install 20 Generators:
I3.1 - 110 E. Hargrave Street (Public Services shop and motor pool)
I3.2 – nine (9) sewer lift locations
I3.3 – Ansonville Elementary plus eight other county schools (nine schools total)
I3.4 - Water Filtration Plant, US74/Vintage Road
Diesel driven pumps at sewer lift stations because multiple stations were down during Matthew; need 9 for Town of Wadesboro.
Facility at 110 Hargrave St. – shop and motor pool
I 3.5 Install smart switch for remote access at Power Plant transmission Carpenter Kendall Rd
/ Stanback Ferry Ice Plant Road (needed if access is limited to site by downed trees in road, etc.)

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Loss of power was the greatest impact in Anson County from Hurricane Matthew. Many public facilities were affected alike by power loss. It is critical for better resiliency to have reliable back-up power to keep key operations like the City's Public Works building and sewer lift stations functional after a storm. It is also essential to have the ability of schools to serve as shelters so backup power is needed. The generator at the water filtration plant is vital to all businesses and residents	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Action ES-3 Anson County from the Pee Dee Regional Hazard Mitigation Plan: Establish program to maintain continuity of government operation	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.	Making sure vital public services are up and running after a disaster is critical to businesses getting back up and running also.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	50-100 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	>6	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?	This project will help reduce the chance of environmental contamination after a disaster.	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	$251K - $500K	Agree
What is the level of public support for this project?	High	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	County	Agree

- **Protection of Roads and Bridges:** Improve road conditions with enlarged stormwater drainage intakes or swales to channel away the flood waters at Brown Creek Church Road and Country Club Road. Elevate Old Lilesville Road Bridge and Burns Street Bridge.

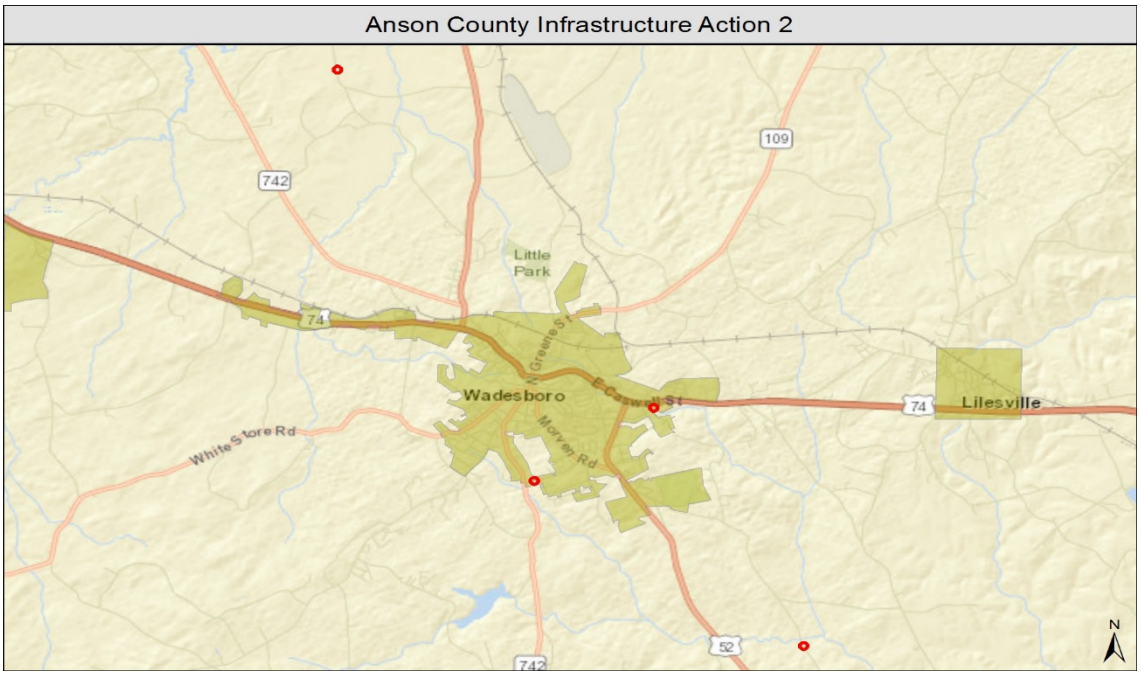


Figure 22. Infrastructure Action 2 - Protection of Roads and Bridges

I2 - Protection of Roads and Bridges

County: Anson

Priority Grouping: High Priority

Priority Ranking: 3

Project Timeframe: 12-36 months

Location: Old Lilesville Road, Brown Creek Road, Country Club Road. Bridge Replacement- Burns Street

Project Summary: Improve road conditions via: elevation, enlarged stormwater drainage intakes or swales to channel away the flood waters at the following locations:
o Old Lilesville Road, bridge repair/replace - Town of Wadesboro
o Brown Creek Church Road, culvert – NCDOT
o Country Club Road, NCDOT
Bridge Replacement on Bern Street. Bridge is on Federal Bridge Replacement List and is critical for emergency response. Units: Bridge length = 25 feet.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Hurricane Matthew flooded several roads in Anson County and blocked access along key corridors. Protecting several key roads will reduce damages and keep these roads functional after the storm which will avoid costly detours and loss of timely emergency access in some areas.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Action ES-3 Anson County from the Pee Dee Regional Hazard Mitigation Plan: Establish program to maintain continuity of government operation	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.	Keeping roads functional after a storm is a benefit to all users in the county including businesses which requires customer access and supply chain delivery.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction?	<50 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	4-6	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?	Between 26 and 50%	Agree
What impacts to the environment of the county will result from this project?	The improvements should be designed to respect the natural watercourse and reduce contamination and debris into waterways.	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?	Higher than 75%	Agree
Who will administer this project?	County	Agree

Environmental, Ecosystem and Agricultural Strategies

There are several opportunities for enhancing environmental resources for both resiliency and recreational purposes in Anson 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:

Pillar	Strategy/Action Name	Priority	Overall Ranking
Environment	Stormwater System Improvements	**High**	**4**
Environment	Stream Gauges and Early Warning Network	**Moderate**	**6**
Environment	Environmental Job Training	**Low**	**10**

Table 10. Anson Environment Priority Summary

Additional detail on the strategies can be found below:

- **Stormwater System Improvements**: Some of the Hurricane Matthew flooding resulted from stormwater system failures. There is no current assessment of the stormwater system's countywide capacity. Inspections are needed to determine if infrastructure is sufficient to properly handle future flood inundation, e.g. ponds, dams, culverts and other manmade watercourse conveyances and constriction. Identified areas for immediate improvement include:
    - The Peru Road Nursery Pond Dam routinely overflows when rainfall is heavy and often washes out the road shoulder. The dam inlet needs to be moved farther from the road and the spillway needs a concrete bottom.
    - The 100-acre City Pond in the Town of Wadesboro was created in the 1930s. The spillway for the dam needs to be rerouted to eliminate routine flooding of 20 housing units along Ingram Street, which occurs during heavy rainfall.
    - The Storm drains along and under South Green Street are small and cracked, which results in flooding of the Health Department parking lot. New drains and culverts are required.
    - It was suggested that Hargrave Street flooding could be reduced by installing multiple interlocking culverts or constructing a small bridge over the dip in the road that collects water during heavy downpours.

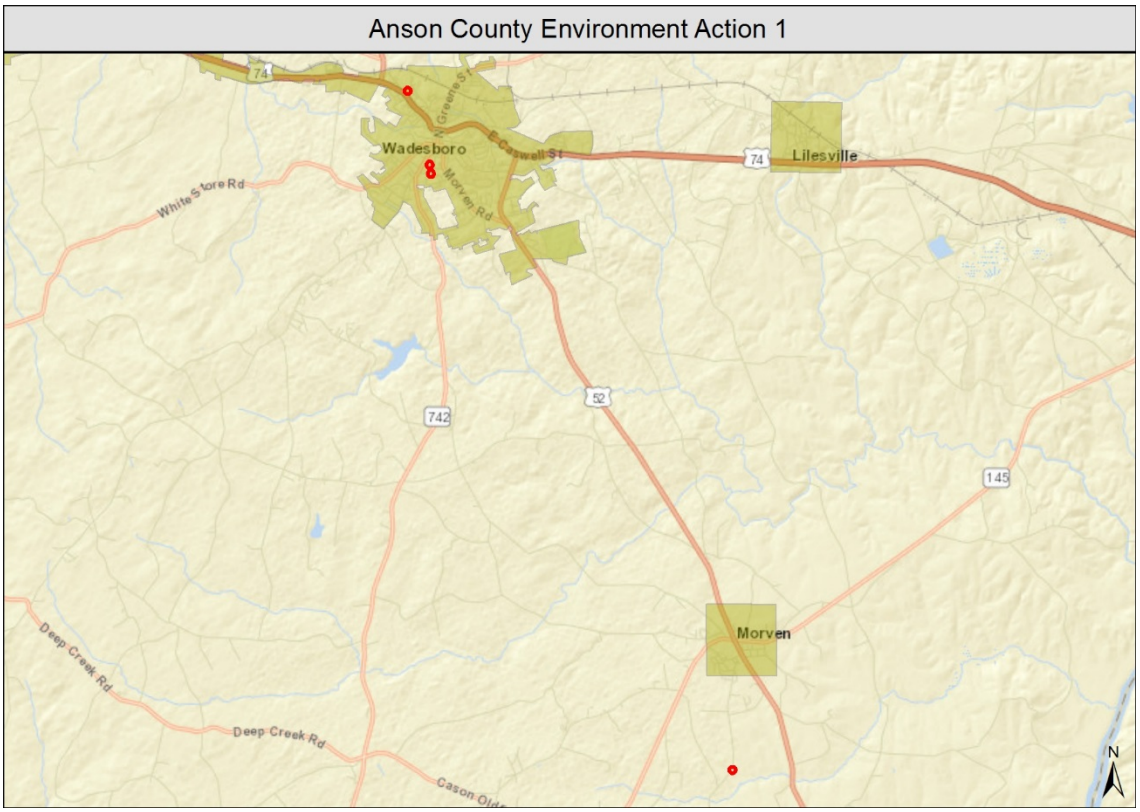


Figure 23. Environment Action 1 - Stormwater System Improvements

EN1 - Stormwater Management System Improvements

County: Anson

Priority Grouping: High Priority

Priority Ranking: 4

Project Timeframe: 24-36 months

Location: Peru Road Nursery, Town of Wadesboro-City Pond, Town of Wadesboro, Storm drains at South Green Street, Anson County

Project Summary: Conduct a comprehensive assessment of the stormwater systems and develop an implementation plan for correcting deficiencies in the existing network.
• Known areas needing improvement:
o En1.1 Peru Road Nursery
o Reroute drainage from City Pond, Town of Wadesboro. Pond is 100 acres, created by 1930's high-hazard dam. Currently drainage is negatively impacting 20 housing units on Ingram Street.
o Storm drains at South Green Street are too small and old; result in flooding of the Health Department parking lot.
• Include inspection of ponds, dams, culverts and other relevant infrastructure.
• Program capital funding to improve the network.
• Make repairs and install upgrades as outlined in the Stormwater Improvement Plan.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The heavy rainfall from Hurricane Matthew exacerbated existing stormwater issues. This project will help provide better stormwater drainage in key areas.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with Anson County Action P-4 of the Lumber River 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.	Reducing negative stormwater impacts will help keep parts of the County like areas near downtown Wadesboro (S. Greene Street) accessible during storm events.	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?	Less than 25%	N/A
What impacts to the environment of the county will result from this project?	This project is expected to improve water quality by providing better drainage	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

- **Stream Gauges and Early Warning Network:** Install gauges and perform a Hydrologic and Hydraulic study for buildout of an early-warning system to assist with management of flow of major waterways throughout the county. There is currently only one stream gauge located on the very eastern border of Anson County on the Pee Dee River. At least two additional gauges are needed in Anson County and National Oceanic and Atmospheric Administration representatives will continue to be consulted to identify the sites.

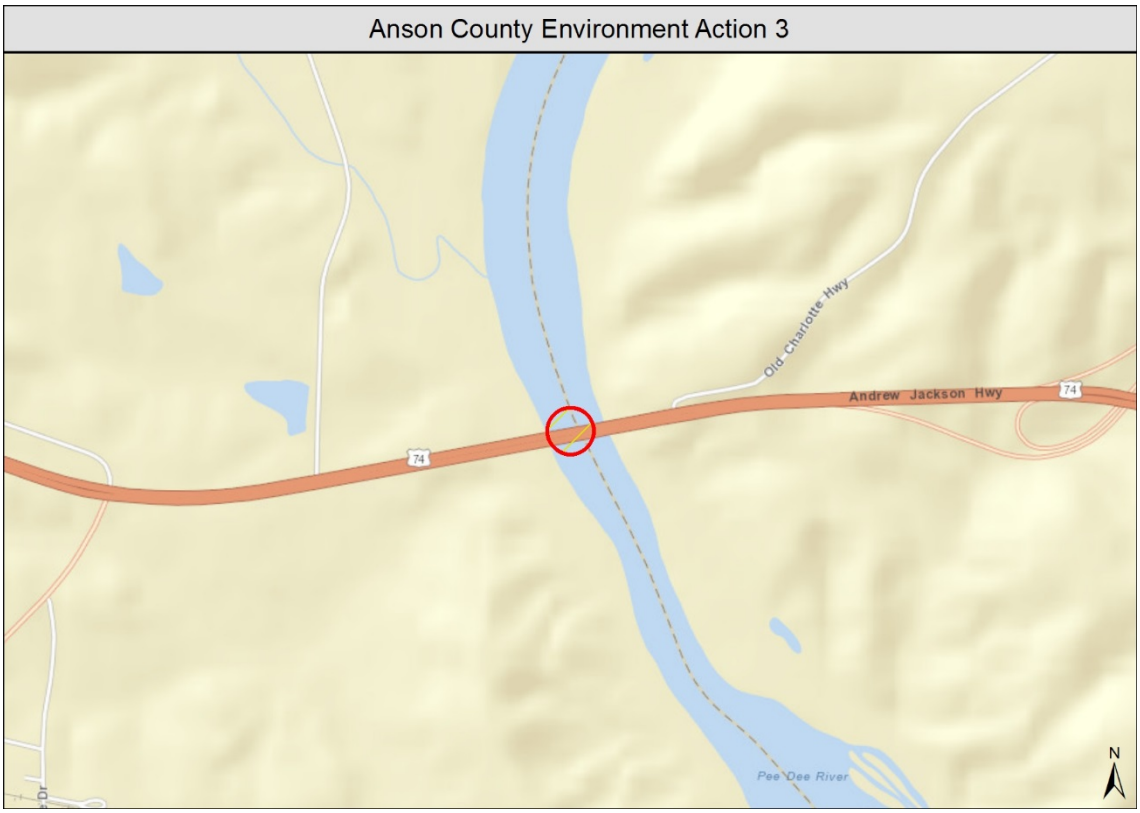


Figure 24. Environment Action 3 - Stream Gauges and Early Warning Network

EN3 - Anson County Stream Gauge / Early Warning Network

County: Anson

Priority Grouping: Medium Priority

Priority Ranking: 6

Project Timeframe: 12-24 months

Location: Stream gauge locations to be determined - looking to install two. Existing gauge on Pee Deer River at US 74 crossing (next to Richmond County)

Project Summary: Installation of gauges for monitoring of water levels and water flow from high rainfall events. Build out an early-warning system to assist with providing warnings. Looking for two locations - will consult with state and NWS.

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 in several areas heavy flooding also resulted in dam breaches. There is currently one stream gauge in Anson County. Adding additional gauges will allow for early detection of rising waters and lead time for people to take appropriate safety measures including evacuation.	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	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.	Advanced warning will allow for reduction of flood impacts and relocation of goods. In many counties numerous roads were closed due to flooding from Hurricane Matthew - this interrupted business and industry operations.	Agree
For how long will this solution be effective?	Between 11 and 30 years	Agree
How effective is the risk reduction?	50-100 year event	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	1-3	Agree
Is coordination with other communities/counties needed to complete this project?	Yes	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?	Low to moderate 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?	Stream flow and rainfall monitoring will help aid in protecting natural areas needed by wildlife.	N/A
What is the capability of the local government to administer this project?	Minimum	Agree
What is the financial range of this project?	$51K - $100K	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree

Who will administer this project?	State	Agree

- **Environmental Job Training:** Beyond advertising a strong focus on job readiness and technology, the South Piedmont Community College campus in Polkton could train students on resilient and green building techniques and progressive conservation farming techniques. The latter would help retain the rural economy and preserve open space needed for water retention during storm events. Anson County adopted a Voluntary Agricultural District Program to encourage the preservation and protection of farmland from non-farm development. Matthew funds could be used to prepare a NC Resiliency curriculum and then advertise the course and other offerings at the Polkton Campus.

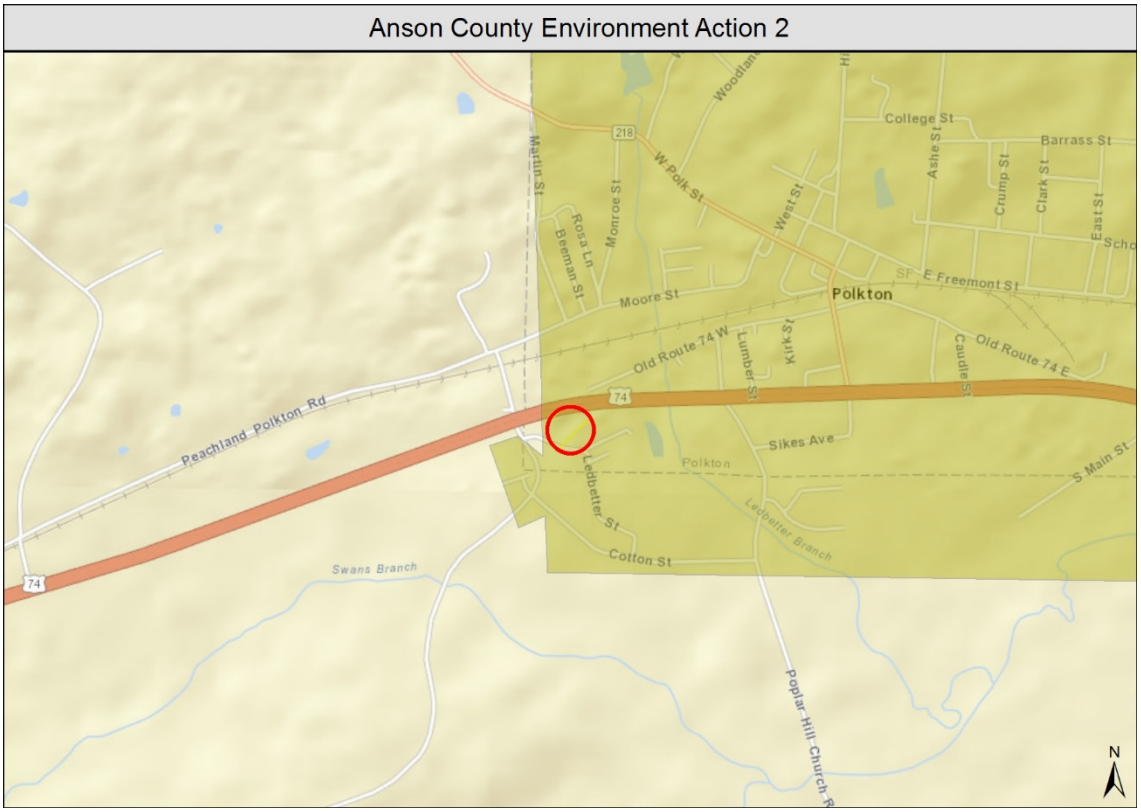


Figure 25. Environment Action 2 - Environmental Job Training

EN 2 - Environmental Job Training

County: Anson

Priority Grouping: Low Priority

Priority Ranking: 10

Project Timeframe: 24 months

Location: South Piedmont Community College in Polkton, NC

Project Summary: Beyond advertising a strong focus on job readiness and technology, this campus could train students on resilient and green building techniques, progressive conservation farming techniques, which would help retain the rural economy and preserve open space needed for water retention during storm events. Matthew funds could be used to prepare a NC Resiliency curriculum and then advertise the course and other offering at the Polkton Campus.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Hurricane Matthew caused severe power outage and widespread flooding in Anson County even while the County was not directly in the storm's path. Future storms may bring greater damage and this project will be a part of a system that will contribute toward better resilience through training individuals to know resilient techniques applied to future buildings constructed to higher standards and preservation of areas prone to flood.	N/A
Consistent with existing plans (describe points of intersection/departure)	Supports Anson Actions P2-P9 in the Pee Dee Regional Hazard Mitigation Plan which call for more resilient and green building codes zoning techniques and inspection practices. This projects can help provide the needed training for code officials builders and inspectors.	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 will help increase the educated workforce 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?	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?	Creating good paying jobs in the environmental sector will help keep educated young people in 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?	$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

The draft resilience strategies and actions introduced in this section are further detailed in the appendix. 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.