

**Pitt County** 



May 2017

Version 1.2

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# **Change Log**

Version	Date	Summary of Changes
1.1	6/15/17	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 25 people lost their lives, and 100,000 homes, businesses, and government buildings sustained damage estimated at \$4.8 billion. 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) initiative as part of the 2016 Disaster Recovery Act (*Session Law 2016-124*). The purpose of the program is to provide a roadmap for community rebuilding and revitalization assistance for the communities that were damaged by the hurricane. The program empowers communities to prepare locally driven recovery plans to identify redevelopment strategies, innovative reconstruction projects, and other needed actions to allow each community not only to survive but also to thrive in an era when natural hazards are increasing in severity and frequency.

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



Figure 1. NCRRP Counties

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

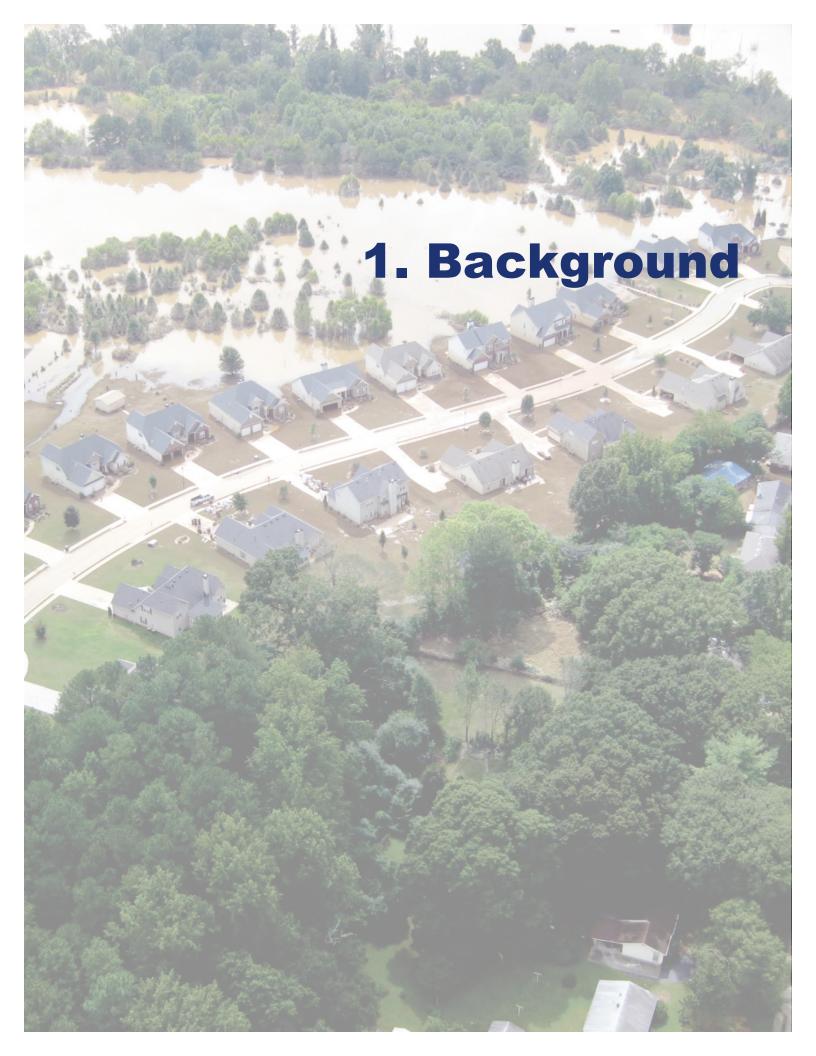
Implementation of the proposed projects and actions described in this plan is subject to applicable federal, state, and local laws and regulations. Proposed projects or actions may be eligible for state or federal funding, or could be accomplished with municipal, nonprofit, or private investments. However,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

State of North Carolina Supplemental Request for Federal Assistance Hurricane Matthew Recovery, <a href="https://governor-new.s3.amazonaws.com/s3fs-public/documents/files/Hurricane%20Matthew%20Relief--2017%20Federal%20Request%20%28002%29.pdf">https://governor-new.s3.amazonaws.com/s3fs-public/documents/files/Hurricane%20Matthew%20Relief--2017%20Federal%20Request%20%28002%29.pdf</a>.

After multiple public meetings, Pitt County has identified 22 projects in four pillars: Housing, Economic Development, Infrastructure and Environment. Details of these projects can be found in Section 4 of this plan.

Pillar	Project/Action Count
Housing	3
Economic Development	2
Infrastructure	16
Environment	1
Grand Total	22

Table 1. Pitt County Summary of Projects by Pillar



## 1. Background

### **Summary of Hurricane Matthew Storm Damage**

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

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

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

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

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

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

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

#### State/Legislative Response

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

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

• There were 81,832 individuals registered for FEMA/state assistance.

-

<sup>2</sup> Governor McCrory's Request for Federal Assistance for Hurricane Matthew Recovery, November 14, 2016

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

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

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

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

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

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

### **Resilient Redevelopment Planning**

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

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

#### Scope of the Plan

This document is a snapshot of the County's current needs for achieving holistic recovery and redevelopment. The plan will evolve as the County analyzes the risk to its assets, identifies needs and opportunities, determines

the potential costs and benefits of projects, and prioritizes the projects. As projects are more fully defined, the potential impact on neighboring communities and the region may lead to modifications.

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

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

### **Local Participation and Public Engagement**

Stakeholder engagement and public involvement was an essential component of the NCRRP initiative. Four 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.
- **Meeting 4** NCEM presented actions developed during the course of the planning process and allowed the county to rank actions; apply High, Medium, or Low Prioritization; and approve inclusion of the actions in the final 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, were also invited to participate. The counties impacted by the storm cover the eastern half of North Carolina and occupy parts of the piedmont, sand hills, and coastal areas of the state.

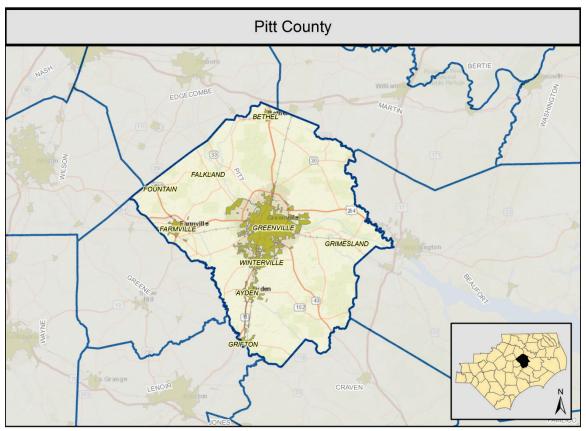
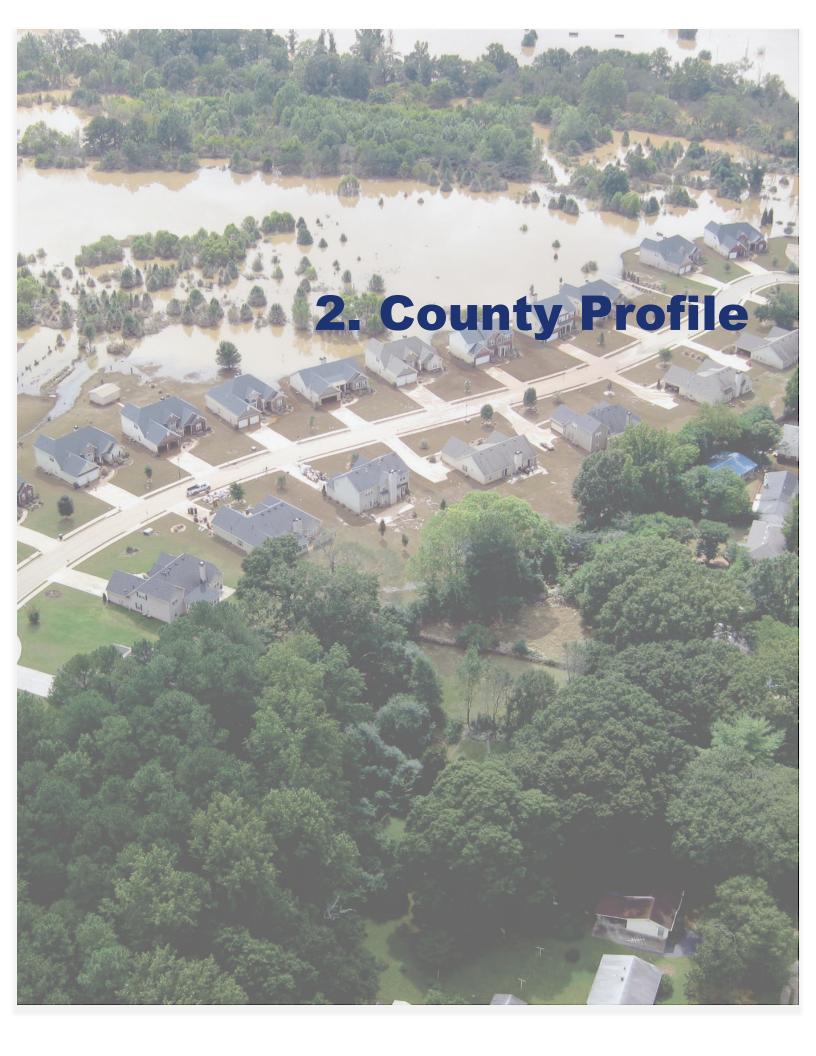


Figure 2. Pitt County and Neighboring Counties

## **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

Pitt County is located just east of I-95. It is comprised of twelve census-designated places: Ayden town, Bell Arthur CDP, Belvoir CDP, Bethel town, Falkland town, Farmville town, Fountain town, Greenville city, Grimesland town, Simpson village, Stokes CDP, and Winterville town. Its current population is 168, 148. This section provides a profile of housing, economics, infrastructure, environment, and administration within Pitt County.

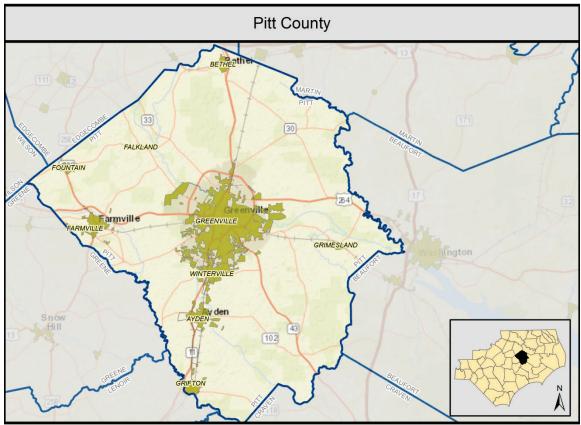


Figure 3. Pitt Base Map

### **Demographic Profile**

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

#### **Population**

Pitt County has a population of 168,148. Greenville is the most populous place within Pitt County with a population of 88,598 and Falkland is the least populous place with a population of 59.<sup>3</sup>

### Population Change (2000 to 2010)

The Pitt County population increased significantly between the 2000 and 2010 Census. In 2000, the population was 133,798 and in 2010 it was 168,148, an increase of 25.7 percent. In comparison, North Carolina grew by 19 percent from 8,049,313 people in 2000 to 9,535,483 in 2010.<sup>4</sup>

<sup>3</sup> Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B01001 Sex by Age.

#### Age

The median age in Pitt County is 31, which is well below the North Carolina median age of 42. Within Pitt County, the Stokes population has the oldest median age, 61, and the Greenville population has the youngest median age, 26.<sup>3</sup>

## **Race and Ethnicity**

Pitt County is mostly White (59 percent) and African American (34 percent) with other races constituting the remaining 7 percent. In comparison, North Carolina is 70 percent White, 22 percent African American, 1 percent American Indian and Alaska Native, 3 percent Asian, less than 1 percent Native Hawaiian/Pacific Islander, 3 percent Some Other Race, and 2 percent Two or More Races.<sup>5</sup>

Within Pitt County, Ayden, Belvoir, Falkland, Farmville, Fountain, Greenville, Grimesland, Simpson, Stokes and Winterville are predominantly white. Bethel is predominantly African American, and the population of Bell Arthur primarily identifies as Some Other Race.

The Latino population in Pitt County is 6 percent compared to 9 percent for North Carolina. Bell Arthur has the largest Latino population (66 percent) while Belvoir, Bethel and Stokes do not have Latino population.

Geography	White	Black or African American	American Indian and Alaska Native Alone	Asian	Native Hawaiian/ Pacific Islander	Some Other Race	Two or More Races	Total Non- White
Ayden town	50.9%	44.7%	0.0%	0.1%	0.0%	2.8%	1.5%	49.1%
Bell Arthur CDP	22.8%	11.4%	0.0%	0.0%	0.0%	65.9%	0.0%	77.2%
Belvoir CDP	83.4%	16.6%	0.0%	0.0%	0.0%	0.0%	0.0%	16.6%
Bethel town	40.2%	59.6%	0.1%	0.0%	0.0%	0.0%	0.2%	59.8%
Falkland town	44.1%	25.4%	0.0%	0.0%	0.0%	30.5%	0.0%	55.9%
Farmville town	57.4%	40.0%	0.3%	0.0%	0.0%	0.4%	2.0%	42.6%
Fountain town	64.7%	30.4%	0.0%	0.0%	0.0%	1.1%	3.8%	35.3%
Greenville city	54.8%	37.8%	0.4%	2.9%	0.0%	1.7%	2.4%	45.2%
Grimesland town	53.2%	40.1%	0.0%	1.2%	0.0%	3.6%	1.9%	46.8%
Simpson village	70.0%	30.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%
Stokes CDP	67.0%	33.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.0%
Winterville town	59.2%	37.0%	0.3%	1.4%	0.0%	0.8%	1.2%	40.8%
Pitt County	58.7%	34.1%	0.3%	1.7%	0.0%	2.9%	2.3%	41.3%
North Carolina	69.5%	21.5%	1.2%	2.5%	0.1%	3.0%	2.4%	30.5%

Table 2. Pitt County Race and Ethnicity

#### **Limited English Proficiency**

Limited English Proficiency (LEP) is defined as populations 18 years or older that speak English less than very well. In Pitt County, most of the individuals identified as LEP speak Spanish while others speak Indo-Euro, Asian/Pacific, or other languages. Similarly, the primary language group for LEP individuals in North Carolina is

<sup>4</sup> 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

<sup>5</sup> Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B02001, "Race" and Table B03002 Hispanic or Latino Origin by Race.

Spanish. Within Pitt County, Bell Arthur has the largest LEP population. The primary language group for LEP populations in the majority of places within Pitt County is Spanish. Belvoir, Farmville, Fountain, Simpson and Stokes do not have a LEP population according to census data.<sup>6</sup>

#### **Poverty**

In Pitt County, 25 percent of the population is below the poverty level compared to 17 percent of the North Carolina population. The highest level of poverty within Pitt County occurs in Grimesland, where 36 percent of the population is below the poverty level. The lowest level of poverty occurs in Bell Arthur, where 0 percent of the population is below the poverty level.<sup>7</sup>

#### Low and Moderate Income Individuals

In Pitt County, 46 percent of the population is classified as low and moderate income (LMI) individuals based on the US Department of Housing and Urban Development's definition. In comparison, 39 percent of the North Carolina population is classified as LMI.<sup>8</sup>

#### **Median Household Income**

The median household income of the population 25 to 64 years old is \$50,000 in Pitt County and \$53,000 in North Carolina. Winterville has the highest reported median income, \$75,000, and Ayden has the lowest, \$33,000. Median household income was not available for a number of locations in Pitt County (Bell Arthur, Falkland, Farmville, Fountain, Grimesland, and Stokes). 9

## Zero Car Households 10

In Pitt County, 8 percent of households do not have a vehicle available compared to 7 percent of North Carolina households. Within Pitt County, Faulkland has the highest percentage of households without access to a vehicle, 41 percent, while Bell Arthur has the lowest percentage: 0 percent. Not having a car available directly impacts the ability to evacuate in an emergency. The residents of Falkland would have the greatest need for assistance in the event of an evacuation.

<sup>6</sup> Source: US 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.

<sup>7</sup> Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table C17002 Ratio of Income to Poverty Level in the Past 12 Months.

<sup>8</sup> Source: US 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/

<sup>9</sup> Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B19094 Median Household Income in the Past 12 Months. 10 Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B25044 Tenure by Vehicles Available.

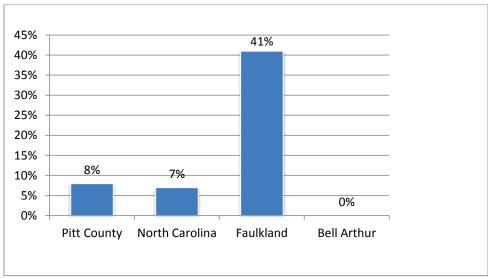


Figure 4. Zero Car Households by Percentage

## Commuting: Travel Time to Work, Means of Transportation 11

The majority of Pitt County residents commute alone to work by vehicle, 84 percent, which is similar to North Carolina average of 81 percent. Within Pitt County, Bell Arthur has the largest percentage of commuters commuting alone, 100 percent, and Fountain has the least: 77 percent.

Fountain and Greenville have the largest percentage of residents commuting by public transportation: at 3 and 2 percent respectively. In comparison, 1 percent of North Carolina commuters use public transportation. Stokes has the highest percentage of residents commuting by walking, bike, or motorcycle, 19 percent. The percentage of residents commuting by these methods in Ayden, Bethel, Farmville, Greenville and Simpson also exceeds the North Carolina average of 2 percent.

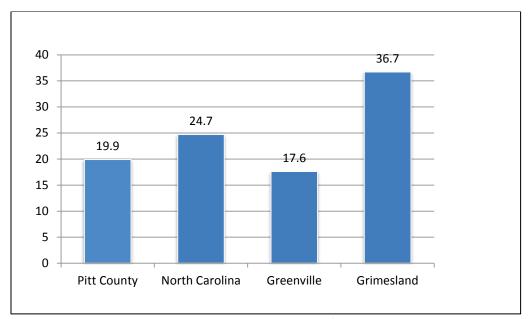


Figure 5. Mean Commute Time to Work in Minutes

<sup>11</sup> Source: US 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).

## **Housing Profile**<sup>12</sup>

Pitt County has approximately 76,000 housing units, 49 percent of which are single-family homes, 38 percent multi-family units, and 13 percent manufactured housing.

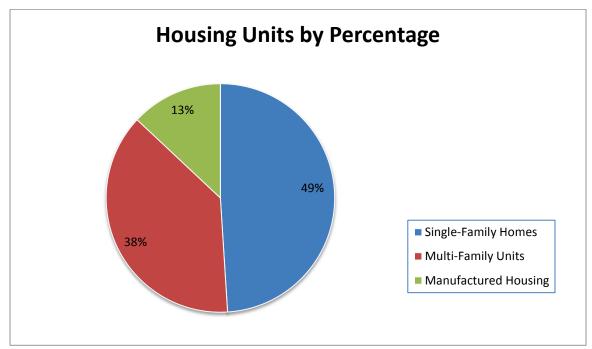


Figure 6. Housing Units by Percentage

In Pitt County 11 percent of housing units are vacant, which is the same percentage for North Carolina. Within Pitt County, Belvoir has the largest percentage of vacant housing units, 25 percent, while Bell Arthur has the least at 0 percent.

Of the occupied housing units, 53 percent are owner-occupied compared to 65 percent in North Carolina; 47 percent are renter-occupied compared to 35 percent in North Carolina.

The median housing value in Pitt County is \$135,000. In comparison, the median housing value in North Carolina is \$140,000. Within Pitt County, Winterville has the highest median housing value: \$160,000. Grimesville has the lowest median housing value: \$64,000.

According to the National Housing Preservation Database, Pitt County has 4,138 affordable housing units.

<sup>12</sup> Sources: US 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

#### **Economic/Business Profile**

Pitt County is home to a diverse array of businesses, including a major university and a medical center. Retail and the hotel industry are the leading employers in the County. <sup>13</sup> According to the US Census Bureau's Longitudinal-Employer Household Dynamics Program, jobs are primarily located in or adjacent to the city of Greenville. <sup>14</sup>

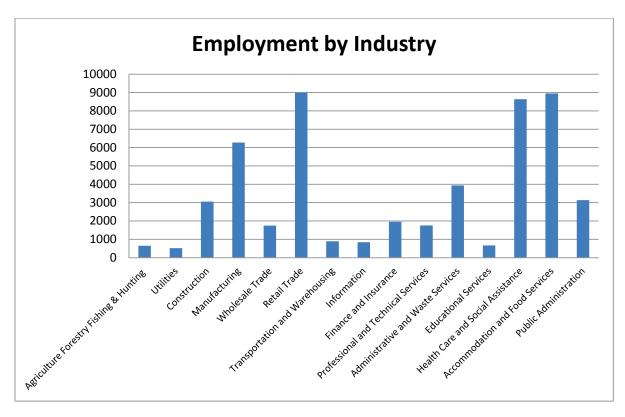


Figure 7. Employment by Industry

#### **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 Pitt County is 88,381. Within Pitt County, Winterville has the largest percentage of residents 16 years or over in the labor force, 72 percent, while Falkland has the smallest at 50 percent.

The civilian unemployment rate in Pitt County is 5.5 percent. In comparison, the North Carolina civilian unemployment rate is 5.1 percent. Within Pitt County, Bell Arthur has the smallest civilian unemployment rate at 0 percent while Stokes has the largest: 31 percent. <sup>16</sup>

<sup>13</sup> AccessNC – North Carolina Department of Commerce, April 2017: http://accessnc.nccommerce.com/DemoGraphicsReports/pdfs/countyProfile/NC/37147.pdf

<sup>14</sup> Source: US Census Bureau Longitudinal-Employer Household Dynamics Program

<sup>15</sup> 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

<sup>16</sup> Source: US Census Bureau, American Community Survey 5-year Estimates (2011-2015), Table B23025 Employment Status For The Population 16 Years And Over

### **Major Employers**

The top ten employers in Pitt County<sup>17</sup> represent the retail, public administration, education and health service industries, and are listed in order of total employees.

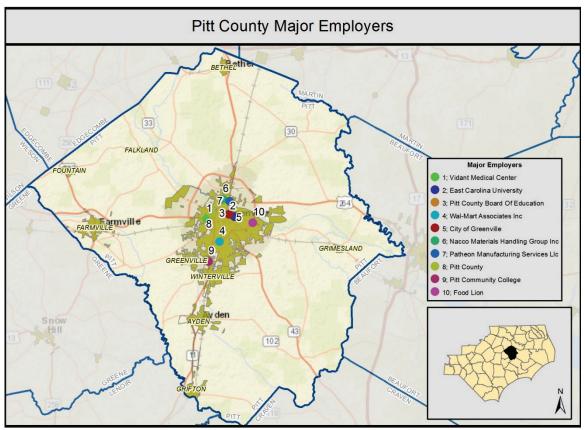


Figure 8. Major Employers by Number of Employees

## **Economic Development** 18

The Pitt County Economic Development Commission is an organization that aims to "promote job growth, diversify the County's economy, and expand the local tax base". In the last 30 years, the Commission has provided over \$10 million in economic development expenditures and incentives in order to recruit new industry and support existing industry. Over the same period, 12,600 new jobs have been reported and over \$2 billion invested in the County.

The Commission also operates a technology incubator, the Technology Enterprise Center, which offers short-term leases to technology-based startups and small businesses. The 35,000 square foot building is currently over 73% leased to 10 tenants, with a total of approximately 70 employees.

In addition, the County runs the PITTworks Project, a joint initiative of the County Department of Social Services, Pitt Community College, and the Pitt County NCWorks Career Center. This program helps Pitt County residents find employment and training opportunities.

<sup>17</sup> Sources: NC Department of Commerce

<sup>18</sup> Sources: Pitt County, Pitt County Development Commission, and Pitt Community College

#### **Infrastructure Profile**

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

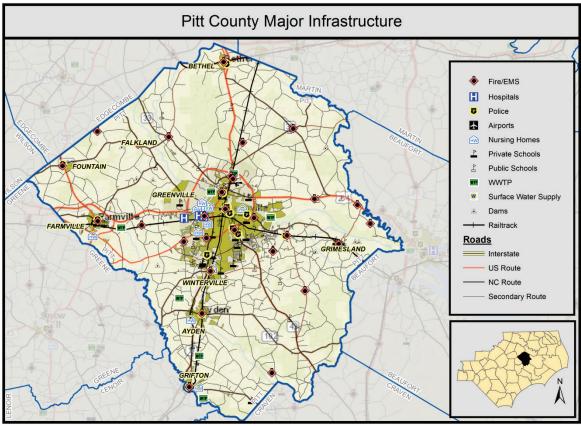


Figure 9. Pitt County Major Infrastructure

#### **Transportation**

Access to Pitt County is provided by US 264, a major east-west highway, and US 13, which runs to the north and south. Pitt County is also served by rail from Norfolk Southern, CSX, and smaller regional operators. Pitt-Greenville Airport is a three-runway public airport located approximately two miles north of the Greenville central business district. Approximately 30 motor freight carriers service the County.

#### Health

Vidant Medical Center is a regional health care center associated with the Brody School of Medicine at Eastern Carolina University. The Center serves 29 counties and is a Level 1 Trauma Center offering air ambulance service and many other medical services.

### Education 19

East Carolina University, located in Greenville, is the third-largest university in North Carolina. Pitt Community College is also located in Greenville. Pitt County Schools administers one pre-kindergarten school, sixteen elementary schools, six K–8 schools, seven middle schools and six high schools.

<sup>19</sup> Sources: Pitt County Development Commission and Pitt County Schools

#### Water

Eight municipal and three rural community water systems serve Pitt County. Part of the County, including the entire City of Greenville and surrounding areas, receives water service from the Greenville Utilities Commission, which is supplied primarily by the Tar River. Other communities in Pitt County receive water service from the Neuse Regional Water and Sewer Authority and local wells.

Municipal wastewater is treated by one of five local wastewater systems. The two largest systems are operated by the Greenville Utilities Commission (17.5 mgd capacity) and the Contentnea Metropolitan Sewerage District (2.85 mgd capacity)<sup>20</sup>.

#### **Power**

Electric service in Pitt County is distributed a number of providers, including Duke Energy Progress, Dominion Power, Pitt-Martin Electric Membership Corporation (EMC), Pitt & Greene EMC, and the Greenville Utilities Commission. There are also a number of solar installations throughout the county<sup>21</sup>.

#### **Environmental Profile**

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

#### **Water Resources**

The Tar River flows to the southeast through the middle of Pitt County. Riverine wetlands are present along the Tar River and its tributaries. The most common wetland type in Pitt County is freshwater forested/shrub wetland.<sup>22</sup>

### **Natural and Managed Areas**

According to the NC Natural Heritage Program, there are several natural areas of high, very high, and exceptional value in Pitt County. A band of very high/exceptional value land is present along the Tar River, widening as the river flows towards Beaufort County. Large additional areas of high and very high value are present near Stokes in the northeast corner of the County and near Ayden to the southeast.

There are several managed areas under state ownership, and one managed area under federal ownership, within Pitt County. Managed areas are properties and easements where natural resource conservation is one of the current primary management goals, or are of conservation interest. The federally managed area is the International Broadcasting Bureau Greenville Transmitting Station, which provides shortwave broadcasts for the US government. State managed areas include college facilities, NC Department of Transportation mitigation sites and conservation easements.<sup>23</sup>

#### **Biodiversity and Wildlife Habitat**

The NC 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 within Pitt

<sup>20</sup> Sources: Pitt County Development Commission and Greenville Utilities Commission

<sup>21</sup> Source: Pitt County Development Commission, US Energy Mapping System

<sup>22</sup> Source: NC Natural Heritage Program

<sup>23</sup> Source: NC Natural Heritage Program

County occur along the Tar River and its tributaries. The areas of high and very high value described above (near Stokes and Ayden) also scored highly for biodiversity and wildlife habitats. These areas rank between a 7 and 10, with 10 being the highest possible score.<sup>24</sup>

#### **Parks and Recreation**

Pitt County's Community Schools and Recreation Department maintains more than 25 parks and recreational facilities in Pitt County The County's facilities include a number of athletic facilities, playgrounds, a greenway, an amphitheater and River Park North, a 324-acre nature park. The City of Greenville's Recreation and Parks Department operates an additional 39 city parks.<sup>25</sup>

#### **Administrative Profile**

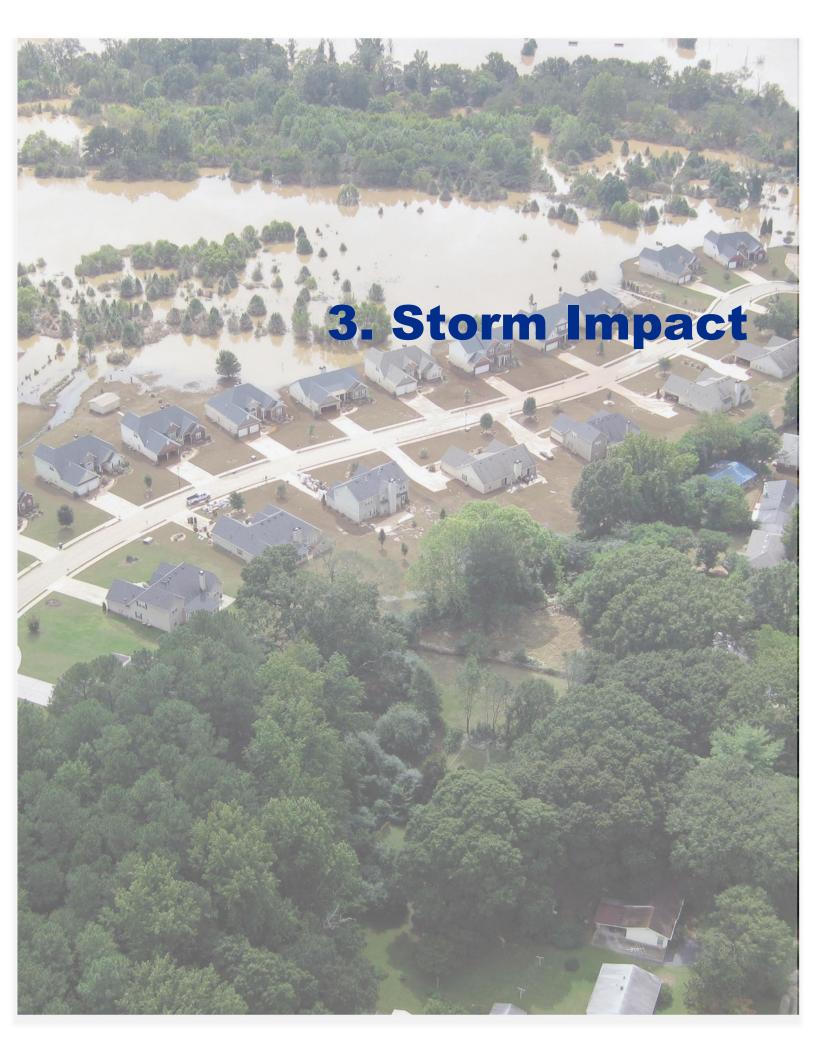
The administrative capabilities of Pitt County and the municipalities within the County are discussed in great detail within Section 4 of the Neuse River Basin Regional Hazard Mitigation Plan 2015-2020. The assessment evaluates the capabilities of the County and municipalities to implement mitigation actions across the areas of administrative and technical capabilities, planning and regulatory capabilities, financial capabilities, educational and outreach capabilities and legal and political capabilities. Many more details about the capabilities of Pitt 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. Pitt County has Emergency Services 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, Floodplain Management Ordinance, Stormwater Management Plan. These plans, policies and procedures help ensure that new development in the County will be done in a responsible manner and in non-hazardous areas.

The City of Greenville 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. Smaller communities and towns within Pitt County 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.

<sup>24</sup> Source: NC Natural Heritage Program

<sup>25</sup> Sources: City of Greenville and Pitt County



## 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 nearly two days of heavy precipitation over much of North Carolina that caused major flooding in parts of the eastern Piedmont and Coastal Plain. The storm produced widespread rainfall of 3-8 inches in the central regions of North Carolina and 8 to more than 15 inches in parts of eastern North Carolina. A number of locations received all-time record, one-day rainfall amounts. Many locations in the Coastal Plain of North Carolina had received above normal rainfall in the month of September leading to wet antecedent conditions prior to Hurricane Matthew. Total rainfall depth for Pitt County is highlighted graphically in the figure below.

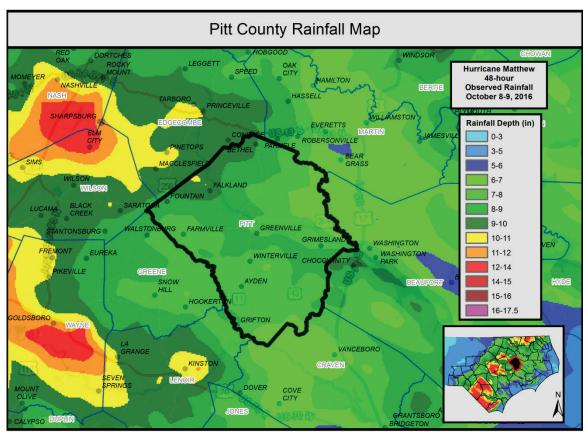


Figure 10. 48-hour Observed Rainfall Depth (October 8-9, 2016)

#### **Riverine Flooding Summary**

USGS documented stream gage data in the report "Preliminary Peak Stage and Streamflow Data at Selected Stream gaging Stations in North Carolina and South Carolina for Flooding Following Hurricane Matthew, October 2016". Stream gage data from the USGS report for Pitt County and nearby gages is summarized in Table 3.

USGS Gage	County	River Name and Location	Drainage Area (sq mi)	Peak Matthew Elevation (ft)	Previous Record (ft)
02084000	Pitt	Tar River at Greenville, NC	2660.0	24.46	29.72

Table 3. Pitt County USGS Stream gage Data

The USGS data validates what was experienced in the county. Details of impacts categorized under housing, economic, infrastructure, and environment are included in the following sub-sections.

#### Housing

According to Individual Assistance claims as of March 2017, Hurricane Matthew impacted 3,303 houses in Pitt County. It should be noted that additional claims from Hurricane Matthew may still be pending, so this number may not reflect the final claims data from the event. This also does not take into account other historic impacts to the county or other areas of concern for flooding that may not have occurred during this storm. With that in mind, the planning team attempted to take a comprehensive look at both Hurricane Matthew impacts and any historic impacts that local officials felt would indicate that areas are at a high risk to future flooding.

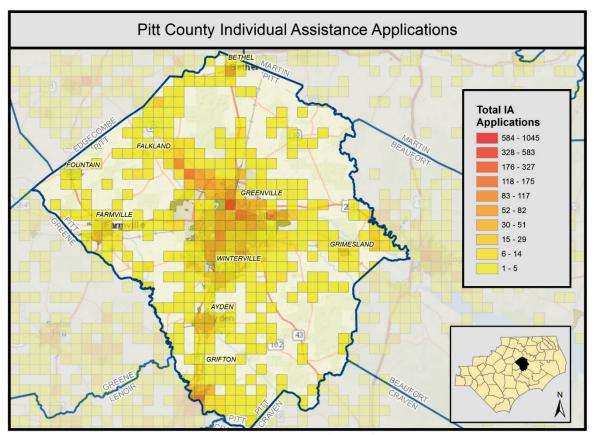


Figure 11. Pitt County IA Applications by Area

The bullets below summarize some of the major impacts to housing identified by local officials in multiple meetings.

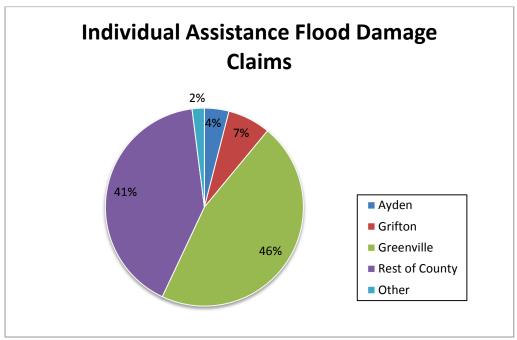


Figure 12. IA Flood Damage Claims by Area

- Shortage of Resilient Affordable Housing Units: As described above, there is a shortage of affordable housing in Pitt County, which means that there is a waiting list for those wishing to access these units. There is also a specific need for affordable senior citizen housing. Because these individuals may be limited in mobility and face challenges in relocating after storm-induced flooding, there is additional incentive to either ensure their homes are resilient against future events or relocate them to less vulnerable locations.
- Homes Flooded from Hurricane Matthew: Many properties throughout the county are located in floodprone areas. These areas flooded during both Hurricane Matthew and previous storm events. Based on historic flooding information, these communities include a significant amount of repetitive loss properties.

#### **Economics / Business / Jobs**

Local officials in multiple meetings identified impacts to the economy in Pitt County from Hurricane Matthew to the economy/businesses/jobs.

- **Direct Impacts to Businesses:** Several businesses in Pitt County were damaged during Hurricane Matthew and were unable to operate for a time thereafter. The most notable of these impacts occurred at the Piggly Wiggly in Grifton. The store flooded during Hurricane Matthew and, following the storm, the store announced it would not re-open. At present, there is no grocery store in Grifton.
- Indirect Impacts to Businesses: Closing of roads, employers and academic institutions had an adverse effect on the economic health of the county, e.g. East Carolina University in Greenville canceled classes for a week for its 28,000 students. A number of downtown areas, particularly in Grifton, are struggling to attract new businesses. This challenge is due in part to residual damage to the area from Hurricane Matthew, as well as reluctance on the part of businesses to move into such a flood-prone area. Officials stated that this area could benefit from programs to increase commercial and industrial development and create job opportunities.

#### Infrastructure

According to Public Assistance (PA) claims, which are often closely tied to infrastructure, as of 2017 there was \$10,142 of claims in Pitt County as a result of Hurricane Matthew. It should be noted that additional claims from Hurricane Matthew might still be pending, so this number may not reflect the final claims data from the event.

County infrastructure was one of the greatest areas of concern in the wake of Hurricane Matthew as there were several types of infrastructure that were damaged in multiple locations. The bullets below summarize some of the major impacts to infrastructure identified by local officials from multiple meetings.

- Lack of Central Emergency Shelter: Local officials expressed agreement that the current emergency shelter system in the County is inadequate. Currently, Pitt County operates approximately 20 Red Cross shelters out of public schools throughout the County. While functional, this arrangement is suboptimal because of the challenges inherent in mixing the general population with the student population.
- Impacts to Greenville Utilities Commission Infrastructure: A number of facilities owned and operated by the Greenville Utilities Commission, including the Operations Center, experienced damage as a result of Hurricane Matthew. The Operations Center was forced to relocate during Matthew, inhibiting GUC's ability to respond quickly to utility-related emergency.
  - Both electric substations and transmission equipment experienced flooding, which could have caused widespread power outages. Officials expressed a need for reinforcement of existing infrastructure and the purchase of additional equipment to create redundancy.
  - During Hurricane Matthew, the existing sewer main (located within the floodplain of the Tar River) experienced significant infiltration and inflow from river flooding. This inflow reduced the treatment capacity of GUC's wastewater treatment plant.
  - Several remote pump stations exceeded their operational capacity during Hurricane Matthew,
     limiting their ability to control flows and threatening their operation.
  - During Hurricane Matthew, GUC received notification of an accidental contamination event in the Tar River. The Water Treatment Plant was able to utilize one day's worth of off-stream storage while assessing risks posed by the release; however, the capacity of this impoundment would be inadequate if contamination rendered water from the Tar River unusable for more than one day.
  - Currently, there is only one compressed natural gas (CNG) fueling station in Pitt County. This
    station is located north of the Tar River, while much of the development in the county is located
    south of the River. Several crossings of the Tar River were flooding during and after Hurricane
    Matthew, which presented a challenge for customers requiring CNG to continue their daily
    operations.
  - Approximately 1,600 linear feet of natural gas mains are attached to bridges within Pitt County.
     These exposed gas mains are at a high risk of damage from rising, fast-moving water that could be carrying debris.
- Contentnea Metropolitan Sewerage Plant: Contentnea Metropolitan Sewerage Plant, located in Grifton, provides wastewater service to the Towns of Grifton, Ayden and Winterville. During Hurricane Matthew, the berm protecting the plant nearly overtopped. Additionally, inundation resulted in erosion

- of this protective barrier. A breech in the barrier could result in interruptions to wastewater service and numerous resultant public health hazards.
- Damages to Transportation Infrastructure: A number of roads and bridges were flooded or overtopped during Hurricane Matthew. In some places, water rose so quickly that motorists were stranded and had to be rescued by police. In addition, the Pitt-Greenville Airport tarmac is in need of repaving after repetitive damage from Hurricane Matthew and previous storm events. Roadways that were impacted included:
  - o In Greenville, severe flooding at the intersection of Arlington Boulevard and Fire Tower Road left both roads impassable. High water flowed swiftly over Williams Road near Dickenson Avenue.
  - o Flooding from Tyson creek made Windham Road impassable.
  - o Car drove into severe flooding near Mozingo Road in Arthur; one fatality reported.
  - Several cars washed off Highway 33 east of Greenville.
  - o Roundtree Road collapsed due to severe flooding near Ayden.
  - Tucker Road south of Simpson closed due to damage from flooding.
  - Severe flooding along Highway 903 in Winterville left several cars stranded in floodwaters.

Highway 33 flooded and was impassable along Chicod Creek between Simpson and Grimesland.

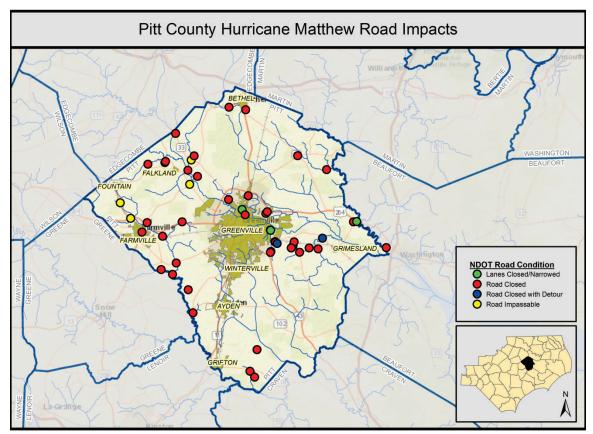
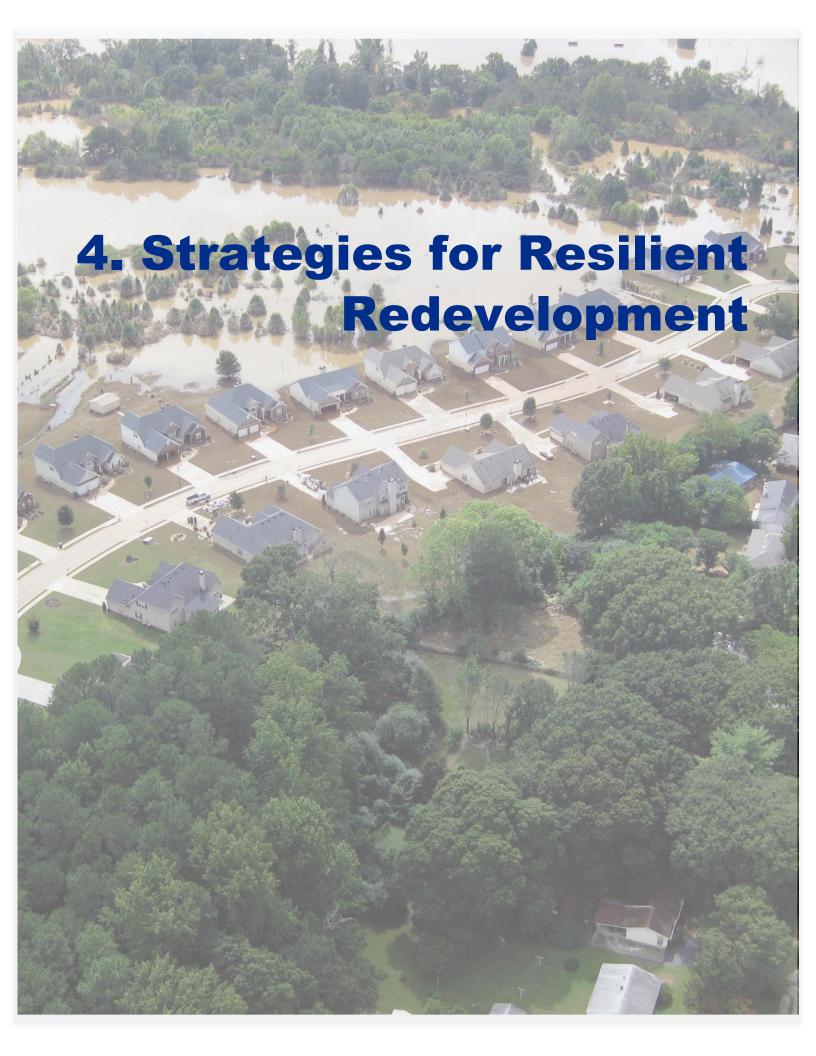


Figure 13. Impacted NCDOT Roads in Pitt County

## **Ecosystems / Environment**

Overall, environmental impacts in Pitt County because of Hurricane Matthew were relatively minimal. However, the storm brought to light some underlying issues related to maintenance of environmental features that have impacted the county over the longer term.

• **Natural Debris Buildup Causing Flooding:** Streams throughout Pitt County are often congested with debris, including downed trees and other organic material. This debris gets trapped underneath bridges and in culverts, inhibiting water flow and causing flooding.



## 4. Strategies for Resilient Redevelopment

This section provides details about the resilience and revitalization strategies and actions identified in Pitt 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	Project/Action Count
Housing	3
Economic Development	2
Infrastructure	16
Environment	1
Grand Total	22

**Table 4. Pitt County Summary of Projects by Pillar** 

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

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Pitt County Infrastructure Action 15: Debris Removal and Rehab of Stormwater Drainage, Waterways, and Watersheds	High	1
Housing	Pitt County Housing Action 2: Creation of Affordable Rental Housing	High	2
Infrastructure	Pitt County Infrastructure Action 1: Flood Protection for Contentnea Metropolitan Sewerage District	High	3
Housing	Pitt County Housing Action 3: Repair and Replacement of Damaged Housing	High	4
Infrastructure	Pitt County Infrastructure Action 13: Construction of Gym/Emergency Shelter	High	5
Infrastructure	Pitt County Infrastructure Action 16:New Greenville Utilities Commission (GUC) Operations Center Phase II	High	6
Infrastructure	Pitt County Infrastructure Action 14: Relocation of Grifton Police Department	High	7
Infrastructure	Pitt County Infrastructure Action 11: Installation of new River Gauges	Medium	8
Infrastructure	Pitt County Infrastructure Action 12: Installation of Fixed Generators at Primary Shelter Locations	Medium	9

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Pitt County Infrastructure Action 10: Pitt Greenville Airport General Aviation Ramp Reconstruction	Medium	10
Housing	Pitt County Housing Action 1: Acquisition of Homes within Flood Hazard Area	Medium	11
Infrastructure	Pitt County Infrastructure Action 2: Greenville 230kV West Substation Upgrade	Medium	12
Infrastructure	Pitt County Infrastructure Action 3: Transmission Circuit #18 Upgrades	Medium	13
Infrastructure	Pitt County Infrastructure Action 7: Pump Station Resiliency and Protection	Medium	14
Infrastructure	Pitt County Infrastructure Action 6: Greenville Utilities Off-Stream Storage Impoundment	Medium	15
Infrastructure	Pitt County Infrastructure Action 9: Natural Gas Bridge Attachment Relocation	Medium	16
Infrastructure	Pitt County Infrastructure Action 8: CNG Fueling Station #2	Medium	17
Infrastructure	Pitt County Infrastructure Action 4: 115kV Transmission Pole Upgrades	Medium	18
Infrastructure	Pitt County Infrastructure Action 5:Green Street Pump Station and Force Main Upgrades	Medium	19
Economic Development	Pitt County Economic Development Action 2: Retail Space to be Combined with Affordable Housing	Low	20
Environment	Pitt County Environment Approach 1: Delineation of Environmentally Sensitive Areas with the County:	Low	21
Economic Development	Pitt County Economic Development Action 1: Renewal of Restaurant/Businesses	Low	22

Table 5. Projects by Rank

On the following pages, we have organized the projects and actions by pillar. Within each pillar, the projects are grouped by county priority. 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**

## **High Priority Housing Strategies**

Pillar	Action Name	Priority	Overall Ranking
Housing	Pitt County Housing Action 2: Creation of Affordable Rental Housing	High	2
Housing	Pitt County Housing Action 3: Repair and Replacement of Damaged Housing	High	4

**Table 6. Pitt High Priority Housing Summary** 

These two projects represent the housing strategies that Pitt County indicated are the highest priority to address. Additional detail on the projects can be found below:

- Creation of Affordable Rental Housing Units: The county will explore options to purchase land outside of the flood zones and build affordable housing units; whether those will be single family (SF) or multifamily (MF) still needs to be determined. The new housing will keep and increase the population within the county and therefore will positively affect the economy. New development would include an infrastructure component as installation of water, sewer, and electric may be necessary.
- This is a county-wide project so no project area map is included.

## **Housing Action 2: Creation of Affordable Rental Housing**

County: Pitt

Priority Grouping: High Priority Priority Priority 2

Project Timeframe: Unknown

Location: Pitt County, various locations

**Project Summary:** The county will explore options to purchase land outside of the flood zones and build affordable housing units; whether those will be single family (SF) or multifamily (MF) still needs to be determined. The new housing will keep and increase the population within the county and therefore will positively affect the economy.

Question	Response	Disposition
that has been created by damage from Hurricane Matthew.	Many families still need long-term affordable housing after Hurricane Matthew as their homes have been permanently damaged. Additionally residents and local officials agree there is a general need for affordable housing within the County as well as a need for backup support housing immediately following a disaster.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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
county from this project.	Providing permanent affordable housing outside of the floodplain will stabilize and possible increase the consumer base adding to the flow of money into the economy.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Unknown	N/A
What impact will this action have on the local economy/tax base?	Unknown	Agree
What impacts to the environment of the county will result from this project?	None	N/A
What is the capability of the local government to administer this project?	High	Agree
What is the financial range of this project?	\$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?	Local	Agree

- **Repair and Replacement of Damaged Housing:** The County will create a repair and replacement housing program to address outstanding need as a result of Hurricane Matthew damage.
- This is a county-wide project so no project area map is included.

## **Housing Action 3: Repair and Replacement of Damaged Housing**

County: Pitt

Priority Grouping: High Priority Priority Priority 2 Priority Ranking: 4

Project Timeframe: 2 years

Location: Pitt County

Project Summary: The County will create a repair and replacement housing program to address outstanding need as a result of

Hurricane Matthew damage.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Many homes were damaged throughout Pitt County during Hurricane Matthew. This project would allow the repair or reconstruction of homes that still have outstanding hurricane damage.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes.	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.	None.	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)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Minimal to low confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	None.	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$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

#### **Medium Priority Housing Strategies**

Pillar	Action Name	Priority	Overall Ranking
Housing	Pitt County Housing Action 1: Acquisition of Homes within Flood Hazard Area	Medium	11

**Table 7. Pitt Medium Priority Housing Summary** 

This project represents the infrastructure strategy that Pitt County indicated is of a medium priority to address. Additional detail can be found below:

- Acquisition of Homes within Flood Hazard Area (100 year floodplain, flood ways, special flood hazard
  areas): Residents would need to accept acquisition of the property by the County to participate. The priority
  will be on repetitive loss properties as they reduce the most suffering to resident and are most likely to be
  cost effective. A requirement of participation is the relocation to another area that is not within a flood zone
  or floodway.
- This is a county-wide project so no project area map is included.

## Housing Action 1: Acquisition of Homes within Flood Hazard Area

County: Pitt

Priority Grouping: Medium Priority Priority Priority 11

Project Timeframe: Unknown

Location: Greenville

**Project Summary:** Residents would need to accept acquisition of the property by the County to participate. The priority will be on repetitive loss properties as they reduce the most suffering to resident and are most likely to be cost effective. A requirement of participation is the relocation to another area that is not within a flood zone or flood way.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Buyout and elevation of flood prone homes reduces the possibility of repetitive loss in the future and reduces the need for temporary or interim housing after future flooding events as homes enrolled in the project would suffer less damage.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	If applicant chooses to move outside of the County there is a possibility that the economy could be negatively impacted.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	l 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?	Buyout of properties in the floodplain and restoring them to permanent open space will increase the capacity of the floodplain to store flood waters reducing the intensity of future floods.	N/A
What is the capability of the local government to administer this project?	High	Agree
What is the financial range of this project?	\$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?	Local	Agree

#### **Economic Development Strategies**

#### **Low Priority Economic Development Strategies**

Pillar	Action Name	Priority	Overall Ranking
Economic Development	Pitt County Economic Development Action 2: Retail Space to be Combined with Affordable Housing	Low	20
Economic Development	Pitt County Economic Development Action 1: Renewal of Restaurant/Businesses	Low	22

**Table 8. Pitt Low Priority Economic Development Summary** 

These two projects represent the economic development strategies that Pitt County indicated are strategies they would like to address, both rank low in priority in the overall ranking. Additional detail on the projects can be found below:

Retail Space to be Combined with Affordable Housing Effort: The town of Grifton would like to combine
retail and market space within its affordable housing MF project should the affordable housing project
strategy be approved. Including space for new business will encourage a self-sustaining community and the
creation of jobs.

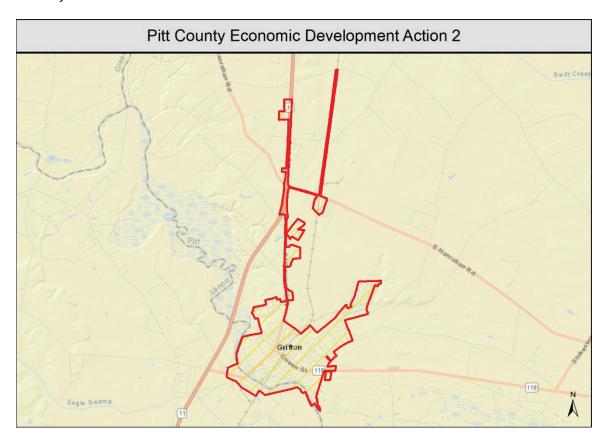


Figure 14. Economic Development Action 2: Retail Space to be Combined with Affordable Housing

# **Economic Development Action 2: Retail Space to be Combined with Affordable Housing**

County: Pitt

Priority Grouping: Low Priority Priority Priority 20

Project Timeframe: 0-2 years

Location: Grifton, NC

**Project Summary:** Retail Space to be Combined with Affordable Housing Effort: The town of Grifton would like to combine retail and market space within its affordable housing MF project should the affordable housing project strategy be approved. Including space for new business will encourage a self-sustaining community and the creation of jobs.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The town of Grifton is in need of local retail shops as well as affordable housing following the disaster. This project will support the suggested affordable housing creation in the area.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes.	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.	Creating retail space will also create jobs for the local economy.	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)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Minimal to low 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?	None anticipated.	N/A
What is the capability of the local government to administer this project?	Unknown	Agree
What is the financial range of this project?	\$501K - \$1M	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	Unknown	Agree
Who will administer this project?	Local	Agree

- Renewal of Restaurant/Businesses Countywide: A grant program will be created for those that would like to open a business within the County, with preference given to locally owned businesses that were previously located within the County but had to close as a result of Hurricane Matthew. The following categories of business within the County will be eligible for the grant program: those that existed prior to the hurricane but were not able to reopen, those that had an intention of opening but were not able to, and those that would like to provide a service in place of a now-closed business.
- This is a county-wide project so no project area map is included.

## **Economic Development Action 1: Renewal of Restaurant/Businesses**

County: Pitt

Priority Grouping: Low Priority Priority Priority 22

Project Timeframe: Unknown

Location: County-wide

**Project Summary:** A grant program will be created for those that would like to open a business within the County. The following categories of business within the County will be eligible for the grant program: those that existed prior to the hurricane but were not able to reopen, those that had an intention of opening but were not able to, and those that would like to provide a service in place of a now-closed business.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	As an example Hurricane Matthew damage led to the only grocery store in Grifton closing. Opening a new grocery store within the town of Grifton would address that need.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Offering a grant opportunity to stimulate the establishment or re-establishment of businesses within the County will generate economic growth by increasing local spending and providing jobs to County residents.	Agree
For how long will this solution be effective?	Less than 10 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needec to complete this project?	Yes	Agree
ls this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	Less than 25%	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Unknown	N/A
What impact will this action have on the local economy/tax base?	Between 51 and 75%	Agree
What impacts to the environment of the county will result from this project?	It is unknown at this time most likely minimal.	N/A
What is the capability of the local government to administer this project?	High	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

#### **Infrastructure Strategies**

#### **High Priority Infrastructure Strategies**

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Pitt County Infrastructure Action 15: Debris Removal and Rehab of Stormwater Drainage, Waterways, and Watersheds	High	1
Infrastructure	Pitt County Infrastructure Action 1: Flood Protection for Contentnea Metropolitan Sewerage District	High	3
Infrastructure	Pitt County Infrastructure Action 13: Construction of Gym/Emergency Shelter	High	5
Infrastructure	Pitt County Infrastructure Action 16:New Greenville Utilities Commission (GUC) Operations Center Phase II	High	6
Infrastructure	Pitt County Infrastructure Action 14: Relocation of Grifton Police Department	High	7

**Table 9. Pitt High Priority Infrastructure Summary** 

These projects represent the infrastructure strategies that Pitt County indicated are the highest priority to address. Additional detail can be found below:

• Debris Removal and Rehab of Stormwater Drainage, Waterways, and Watersheds throughout the County: Many waterways throughout the County are so full of debris that boats and water commerce cannot get in or out of the areas necessary to continue business. Additionally, areas of drainage ditch throughout the County are clogged with debris and therefore force water on to major roadways throughout the area. Drainage ditches, waterways, and watersheds will be dredged and cleared of debris and obstruction left in the wake of Hurricane Matthew.

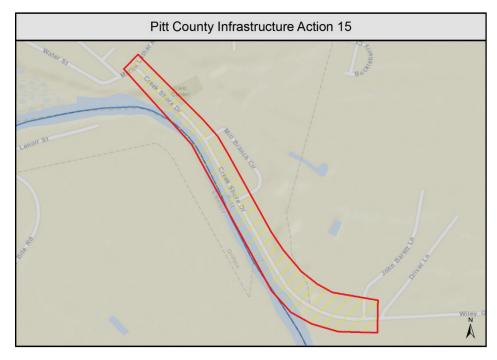


Figure 15. Infrastructure Action 15: Debris Removal and Rehab of Stormwater Drainage, Waterways, and Watersheds

## Infrastructure Action 15: Debris Removal and Rehab of Stormwater Drainage, Waterways, and Watersheds

County: Pitt

Priority Grouping: High Priority Priority Priority 2 Priority Ranking: 1

**Project Timeframe:** 1 year **Location:** Pitt County

**Project Summary:** Debris Removal and Rehabilitation of Stormwater Drainage, Waterways, and Watersheds throughout the County. Many waterways throughout the County are so full of debris that boats and water commerce cannot get in or out of the areas necessary to continue business. Additionally, areas of drainage ditch throughout the County are clogged with debris and therefore force water on to major roadways throughout the area. Drainage ditches, waterways, and watersheds will be dredged and cleared of debris and obstruction left in the wake of Hurricane Matthew.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Many areas and critical roads remained under water for extended periods of time following Matthew. Clearing of the drainage ditches and waterways will allow the water to recede more quickly.	N/A
Consistent with existing plans (describe points of ntersection/departure)	Yes	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.	The economy will most likely benefit as water ways are cleared for boating.	Agree
For how long will this solution be effective?	Less than 10 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	>6	Agree
s coordination with other communities/counties needed to complete this project?	No	Agree
s this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	Unknown	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?	Unknown at this time.	N/A
What is the capability of the local government to administer this project?	Unknown	Agree
What is the financial range of this project?	\$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

- Flood Protection for Contentnea Metropolitan Sewerage District (CMSD): The Towns of Grifton, Ayden, and Winterville jointly own and finance the operation of one regional wastewater treatment plant called Contentnea Metropolitan Sewerage Plant, located in Grifton on Creekshore Drive. During Hurricane Matthew, the existing berm at the plant almost overtopped, which could have interrupted critical wastewater services for the area. This project will identify and construct flood protection measures, which could include either repairing and reinforcing the existing berm or implementing other measures for greater protection. Additionally, two pump stations will be addressed that are affiliated with Contentnea, specifically the two facilities at Ayden-Grifton High School (on Highway 11) and the station on Waters Street.
- This is a project with multiple components that will impact multiple towns so no project area map is included.

## Infrastructure Action 1: Flood Protection for Contentnea Metropolitan Sewerage District

County: Pitt

Priority Grouping: High Priority Priority Priority 3

Project Timeframe: 1-5 years

Location: Creekshore Drive, Grifton

**Project Summary:** The Towns of Grifton, Ayden, and Winterville jointly own and finance the operation of one regional wastewater treatment plant called Contentnea Metropolitan Sewerage Plant, located in Grifton on Creekshore Drive. This project will identify and construct flood protection measures, which could include either repairing and reinforcing the existing berm or implementing other measures for greater protection. Additionally, two pump stations will be addressed that are affiliated with Contentnea, specifically the two facilities at Ayden-Grifton High School (on Highway 11) and the station on Waters Street.

Question	Response	Disposition
that has been created by damage from Hurricane	The existing berm was damaged by Hurricane Matthew and remains vulnerable to future storm impacts without further repairs and/or improvements.	N/A
Consistent with existing plans (describe points of intersection/departure)	Not inconsistent with current plans.	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
county from this project.	Increasing the resiliency of the wastewater treatment plant will reduce the likelihood of the plant being damaged by future storm events.	Agree
For how long will this solution be effective?	More than 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?	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?	No Impact	Agree
What impacts to the environment of the county will result from this project?	Preventing discharges by improving the plant's resiliency therefore represents a substantial benefit to the environment.	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$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

• Construction of Gym/Emergency Shelter on Community Center Property to Serve as Emergency Sheltering: The community center and gym will serve as an emergency shelter out of the floodplain. The shelter will be more reliably accessible and available to stay open in times of disaster.

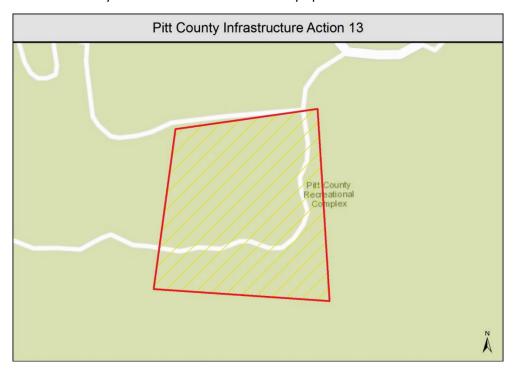


Figure 16. Infrastructure Action 13: Construction of Gym/Emergency Shelter

## Infrastructure Action 13: Construction of Gym/Emergency Shelter

County: Pitt

**Priority Grouping:** High Priority **Priority Ranking:** 5

Project Timeframe: 0-2 years

Location: County Home Road, Greenville, NC

**Project Summary:** Construction of Gym/Emergency Shelter on Community Center Property on County Home Road: The community center and gym will serve as an emergency shelter out of the floodplain. The shelter will be more reliably accessible and available to stay open in times of disaster.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Following Hurricane Matthew evacuees were housed in the middle schools that had been designated for sheltering; however the shelters being at schools created an issue once school resumed. Creation of a gym at the existing community center will allow sheltering of evacuees without the interruption of having to ask them to leave so that school can resume.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes.	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.	None.	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?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	Less than 25%	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Unknown	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	None.	N/A
What is the capability of the local government to administer this project?	High	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project?	County	Agree

New Greenville Utilities Commission (GUC) Operations Center Phase II: In 2016 the Greenville Utilities Commission Operations Center experienced extensive flooding due to rising flood water from Parker's Creek and the Tar River. These events caused property loss, environmental degradation and threatened business continuity. The proposed new site takes it out of the floodway and flood zone reducing risk and improving efficiency during emergency response. GUC on plans to build a new Operations Center at its Hwy 43 West property to facilitate day to day operations for Electric, Water, Sewer, Natura | Gas operations and support services (Fleet Maintenance, Warehousing and Storage, Human Resources, Call Center, Information Technology, and Risk/Facilities Management). This development will include 220,000 covered square feet on 82 acres and will incorporate offices, training and assembly facilities, warehouses, fleet storage, maintenance shops, a garage and material lay down and storage yard).

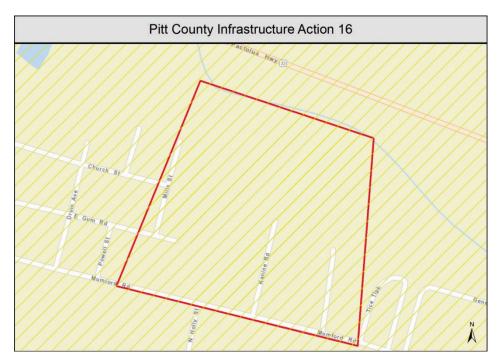


Figure 17. Infrastructure Action 16: New Greenville Utilities Commission (GUC) Operations Center Phase II

## Infrastructure Action 16: New Greenville Utilities Commission (GUC) Operations Center Phase II

County: Pitt

Priority Grouping: High Priority Priority Priority 8 Priority Ranking: 6

Project Timeframe: 0-2 years

Location: Greenville, NC

**Project Summary:** GUC plans to build a new Operations Center at its Hwy 43 West property to facilitate day to day operations for Electric, Water, Sewer, Natura | Gas operations, and support services (Fleet Maintenance, Warehousing and Storage, Human Resources, Call Center, Information Technology, and Risk/Facilities Management). This development will include 220,000 covered square feet on 82 acres and will incorporate offices, training and assembly facilities, warehouses, fleet storage, maintenance shops, a garage and material lay down and storage yard.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The GUC Operations Center experienced extensive flooding due to rising flood water from Parker's Creek and the Tar River. These events caused property loss environmental degradation and threatened business continuity.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes.	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.	Improved utility service during flooding events allowing businesses to stay open.	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?	l No	Agree
ls 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?	Unknown	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?	None.	N/A
What is the capability of the local government to administer this project?	Unknown	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	Unknown	Agree
Who will administer this project?	Local	Agree

Relocation of Grifton Police Department: The police department is currently located within the floodplain
and would be best suited in an area that did not flood during major flooding events. Would allow the police
department to relocate out of the flood zone and free up three building locations on our boulevard for new
businesses that could bring jobs and income into the area.

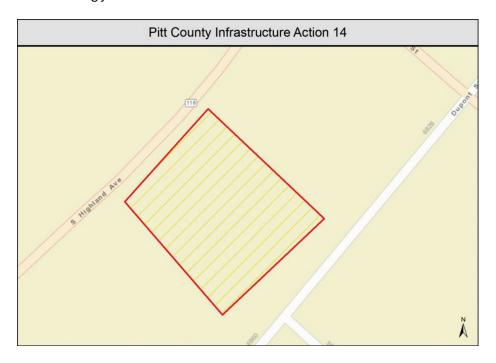


Figure 18. Infrastructure Action 14: Relocation of Grifton Police Department

## Infrastructure Action 14: Relocation of Grifton Police Department

County: Pitt

Priority Grouping: High Priority Priority Priority 2 Priority Ranking: 7

Project Timeframe: 0-2 years

Location: Grifton, NC

**Project Summary:** Relocation of Grifton Police Department: The police department is currently located within the floodplain and would be best suited in an area that did not flood during major flooding events. Would allow the police department to relocate out of the flood zone and free up three building locations on our Boulevard for new businesses that could bring jobs and income into the area.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The current police station floods easily. Moving the police station to higher ground will support better service to the community during major flooding events.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes.	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.	None.	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?	l No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	Less than 25%	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Unknown	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?	None.	N/A
What is the capability of the local government to administer this project?	Unknown	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	Unknown	Agree
Who will administer this project?	Unknown	Agree

#### **Medium Priority Infrastructure Strategies**

Pillar	Action Name	Priority	Overall Ranking
Infrastructure	Pitt County Infrastructure Action 11: Installation of new River Gauges	Medium	8
Infrastructure	Pitt County Infrastructure Action 12: Installation of Fixed Generators at Primary Shelter Locations	Medium	9
Infrastructure	Pitt County Infrastructure Action 10: Pitt Greenville Airport General Aviation Ramp Reconstruction	Medium	10
Infrastructure	Pitt County Infrastructure Action 2: Greenville 230kV West Substation Upgrade	Medium	12
Infrastructure	Pitt County Infrastructure Action 3: Transmission Circuit #18 Upgrades	Medium	13
Infrastructure	Pitt County Infrastructure Action 7: Pump Station Resiliency and Protection	Medium	14
Infrastructure	Pitt County Infrastructure Action 6: Greenville Utilities Off-Stream Storage Impoundment	Medium	15
Infrastructure	Pitt County Infrastructure Action 9: Natural Gas Bridge Attachment Relocation	Medium	16
Infrastructure	Pitt County Infrastructure Action 8: CNG Fueling Station #2	Medium	17
Infrastructure	Pitt County Infrastructure Action 4: 115kV Transmission Pole Upgrades	Medium	18
Infrastructure	Pitt County Infrastructure Action 5:Green Street Pump Station and Force Main Upgrades	Medium	19

**Table 10. Pitt Medium Priority Infrastructure Summary** 

This project represents the infrastructure strategy that Pitt County indicated is of a medium priority to address. Additional detail can be found below:

Installation of new River Gauges: During Hurricane Matthew, incomplete stream gauge data made it
challenging for County and local officials to monitor the rising and falling of flood waters. Installing a gauge
on the Tar River as it enters the County as well as on Contentnea Creek at the Pitt/Green/Lenoir county lines
will provide officials and emergency response personnel with more advanced warning about potential
flooding, giving them more time to prepare the County for its impacts.

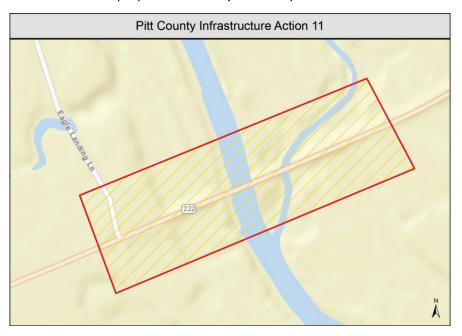


Figure 19. Infrastructure Action 11: Installation of new River Gauges

## **Infrastructure Action 11: Installation of new River Gauges**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 8

**Project Timeframe:** 6 months

Location: Crossing of NC-222 over Tar River

Project Summary: Installation of a River Gauge at NC-222 Bridge on Tar River: Installing a gauge will provide officials and emergency

response personnel with more advanced warning about potential flooding.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	During Hurricane Matthew more comprehensive stream height data could have allowed for more informed decisionmaking by officials and first responders within Pitt County. Damage from future storms would therefore by mitigated by the addition of a stream gauge on the Tar River.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Increased advance warning for rising flood waters gives business owners more time to prepare for flood impacts. This could minimize the amount of economic damage the floods inflict on the County.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	is project 0	
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?	Unknown	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	No adverse impacts expected.	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$101K - \$250K	Agree
What is the level of public support for this project?	is the level of public support for this project? Medium	
What is the technical feasibility of this project? Higher than 75%		Agree
Who will administer this project?	County	Agree

- Installation of Fixed Generators at Primary Shelter Locations: Installation of fixed generators will provide power to the shelters in the event that the power grid servicing each shelter goes off line in a disaster situation. Generators will be installed at the following locations:
  - o Ayden Middle School
  - Hope Middle School
  - o Farmville Middle School
  - o EB Aycock Middle School
  - o Wellcome Middle School

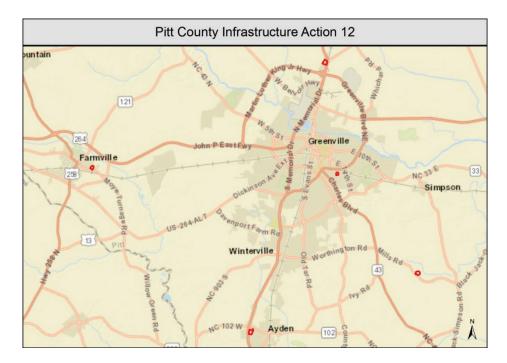


Figure 20. Infrastructure Action 12: Installation of Fixed Generators at Primary Shelter Locations

## Infrastructure Action 12: Installation of Fixed Generators at Primary Shelter Locations

County: Pitt

**Priority Grouping:** Medium Priority **Priority Ranking:** 9

Project Timeframe: 2 years

Location: Pitt County

Project Summary: Installation of Fixed Generators at Primary Shelter Locations: Installation of fixed generators will provide power to

the shelters in the event that the power grid servicing each shelter goes offline in a disaster situation.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	During Hurricane Matthew the schools that were used as shelters were at risk of losing power during various states of the event. Installation of fixed generators will provide power to the shelters in the event that the power grid servicing each shelter goes off line in a disaster situation.	N/A
Consistent with existing plans (describe points of intersection/departure)	Consistent with the overall goal of the hazard mitigation plan to minimize the effects of natural hazards.	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.	None	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)?	4-6	Agree
Is coordination with other communities/counties needed to complete this project?	l No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?		
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?		
What impact will this action have on the local economy/tax base?	No Impact	
What impacts to the environment of the county will result from this project?	ty will None	
What is the capability of the local government to administer this project?		
What is the financial range of this project?	\$1M+	Agree
nat is the level of public support for this project? High		Agree
What is the technical feasibility of this project?	the technical feasibility of this project? Higher than 75%	
Who will administer this project?	County	Agree

• Pitt Greenville Airport General Aviation Ramp Reconstruction: General aviation ramp at the Pitt-Greenville airport will be reconstructed to alleviate damages from water inundation. Estimated cost is approximately \$2M. Taxiways have been funded but general aviation ramp is still in need of funding to reconstruct.

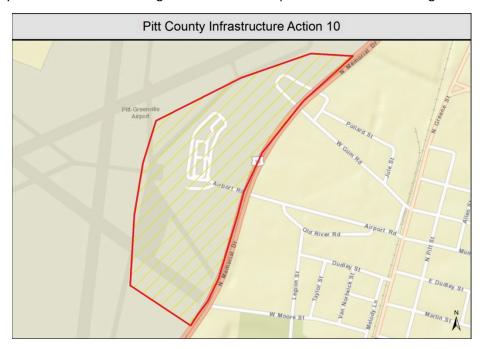


Figure 21. Infrastructure Action 10: Pitt Greenville Airport General Aviation Ramp Reconstruction

## Infrastructure Action 10: Pitt Greenville Airport General Aviation Ramp Reconstruction

County: Pitt

Priority Grouping: Medium Priority Priority Priority Ranking: 10

Project Timeframe: 1 year

Location: Pitt-Greenville Airport Aviation Ramp

**Project Summary:** General aviation ramp at the Pitt-Greenville airport will be reconstructed to alleviate damages from water inundation. Estimated cost is approximately \$2M. Taxiways have been funded but general aviation ramp is still in need of funding to reconstruct.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	_ , , , , , , , , , , , , , , , , , , ,	
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Pitt-Greenville Airport is the only public airport in eastern North Carolina. Better connectivity through the airport will help the economy of the County.	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?	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?	Unknown	N/A
What impact will this action have on the local economy/tax base?	Unknown	Agree
What impacts to the environment of the county will result from this project?	Minimal to none	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Medium	Agree
What is the technical feasibility of this project?	Unknown	Agree
Who will administer this project?	Regional	Agree

Greenville 230kV West Substation Upgrade: During Hurricane Matthew (and previous storm events), the
Mumford Road Point of Delivery (POD) experienced flooding. Flooding of electrical infrastructure places the
entire service area at risk for power outages. Installing a supplemental 120 MVA transformer at the G230
West McGregor Down Road POD will increase redundancy and help the GUC to meet electric peak load
capacity during flood events.

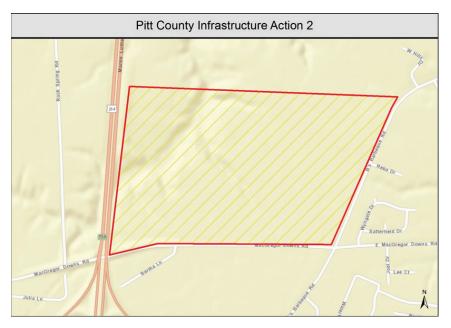


Figure 22. Infrastructure Action 2: Greenville 230kV West Substation Upgrade

## Infrastructure Action 2: Greenville 230kV West Substation Upgrade

County: Pitt

Priority Grouping: Medium Priority Priority Priority 2 Priority Ranking: 12

**Project Timeframe:** The project will take approximately 7 months to complete.

Location: 3280 MacGregor Downs Rd, Greenville, NC 27834

**Project Summary:** Installing a supplemental 120 MVA transformer at the G230 West McGregor Down Road POD will increase

redundancy and help the GUC to meet electric peak load capacity during flood events.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.		
Consistent with existing plans (describe points of intersection/departure)	Yes	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
county from this project.	Prolonged power outages could have impacts on the ability of businesses to operate during and after storms. Increasing redundancy minimizes the risk of these outages and their resultant economic impacts.	Agree
For how long will this solution be effective?	Between 31 and 50 years	Agree
How effective is the risk reduction? 100-200 year event		Agree
ow many public facilities are involved in this project pulldings and infrastructure)?		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?		
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?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	support for this project? Medium Agree	
What is the technical feasibility of this project?	nat is the technical feasibility of this project? Higher than 75%	
Who will administer this project? County		Agree

Transmission Circuit #18 Upgrades: During Hurricane Matthew, flood waters rose to within five feet of
Circuit 18's conductors, which typically have a minimum clearance of 25 feet. Flooding of these conductors
could have resulted in power outages and potentially dangerous situations. The project would involve
replacing 28 wood "H-frame" structures, 18 wood single pole structures, and 8 wood three-pole structures
with new elevated steel structures.

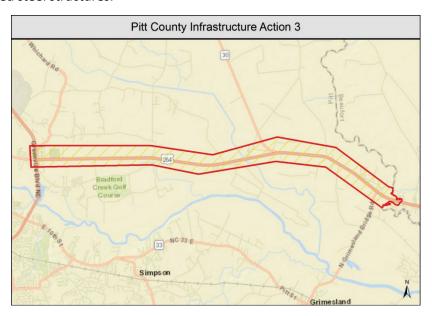


Figure 23. Infrastructure Action 3: Transmission Circuit #18 Upgrades

## **Infrastructure Action 3: Transmission Circuit #18 Upgrades**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 23

Project Timeframe: 0-6 months

Location: G230 Point of Delivery, at Holly St. and Mumford Road in Greenville, and the approximately 33 square miles it serves in east Greenville/Pitt County.

**Project Summary:** During Hurricane Matthew, flood waters rose to within five feet of Circuit 18's conductors, which typically have a minimum clearance of 25 feet. Flooding of these conductors could have resulted in power outages and potentially dangerous situations. The project would involve replacing 28 wood "H-frame" structures, 18 wood single pole structures, and 8 wood three-pole structures with new elevated steel structures.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Circuit #18 nearly flooded during Hurricane Matthew. This circuit is the only one of the three circuits running parallel to the Tar River that has not been hardened since 1999.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Prolonged power outages could have impacts on the ability of businesses to operate during and after storms. Increasing redundancy minimizes the risk of these outages and their resultant economic impacts.	Agree
For how long will this solution be effective?	More than 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?		
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?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	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

• Pump Station Resiliency and Protection: This project addresses threats to the capacity and operation of remote regional pump stations. Components of the project include bar screen additions at Green Mill Run Pump Station (\$1M), Fork Swamp (\$1M), Industrial Park (\$1M); PLC replacement at Industrial Park, Green Mill Run and Fork Swamp regional pump stations (\$180,000); and site erosion mitigation, seal water line install, and joint sealant/waterproofing at North Side pumping station (\$113,000). Retrofitting and upgrading pump stations will prevent not only flood water intrusion but also contamination.

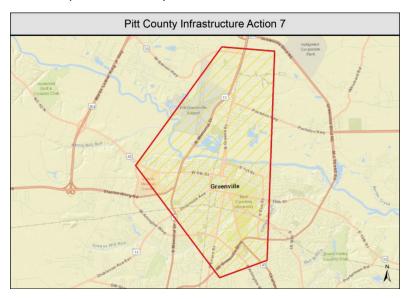


Figure 24. Infrastructure Action 7: Pump Station Resiliency and Protection

## **Infrastructure Action 7: Pump Station Resiliency and Protection**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 24

**Project Timeframe:** 12-18 months **Location:** Greenville and countywide

**Project Summary:** This project addresses threats to the capacity and operation of remote regional pump stations for GUC. Components of the project include bar screen additions at Green Mill Run Pump Station (\$1M), Fork Swamp (\$1M), Industrial Park (\$1M); PLC replacement at Industrial Park, Green Mill Run and Fork Swamp regional pump stations (\$180,000); and site erosion mitigation, seal water line install, and joint sealant/waterproofing at North Side pumping station (\$113,000). Retrofitting and upgrading pump stations will prevent not only flood water intrusion but also contamination.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	This project will help prevent intrusion and contamination during future events reducing the risk of an interruption to wastewater service.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	N/A	Agree
For how long will this solution be effective?	More than 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?	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?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$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

• Greenville Utilities Off-Stream Storage Impoundment: During Hurricane Matthew, Pitt County experienced accidental contamination as a result of discharge from an upstream facility. GUC used water stored in an off-stream impoundment to supply County residents with drinking water while the safety. The existing storage has capacity for approximately three days' worth of drinking water. The creation of additional off-stream storage would provide residents with three additional days' worth of safe drinking water in the event of a larger contamination event.

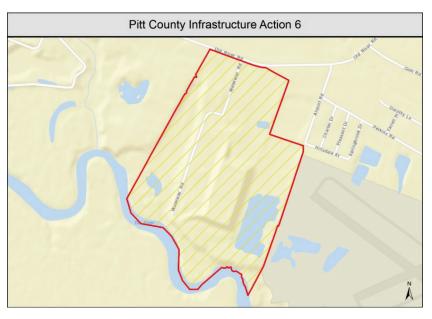


Figure 25. Infrastructure Action 6: Greenville Utilities Off-Stream Storage Impoundment

## Infrastructure Action 6: Greenville Utilities Off-Stream Storage Impoundment

County: Pitt

Priority Grouping: Medium Priority Priority Priority 25

**Project Timeframe:** 18 months **Location:** Adjacent to the Tar River

**Project Summary:** The creation of additional off-stream storage would provide residents with three additional days' worth of safe

drinking water in the event of a larger contamination event.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The accidental contamination event that occurred during Hurricane Matthew could have presented a major public health hazard to Pitt County. Existing off-stream storage was sufficient to provide continued water service during that event; however larger future events could require use of this emergency water source for longer periods of time.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	N/A	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Unknown	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$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

Natural Gas Bridge Attachment Relocation: This project would involve the relocation of approximately 1,600 LF of natural gas main that are currently attached to bridges over bodies of moving water. The project would involve burying the approximately 6,300 LF of pipe via horizontal directional drilling to replace the bridge attachments. This project will help reinforce Greenville Utility Commission's gas system by burying assets that could be damaged during a flood. Rising waters with debris have the potential to damage the existing exposed gas main.

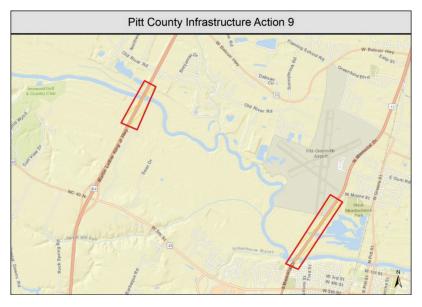


Figure 26. Infrastructure Action 9: Natural Gas Bridge Attachment Relocation

## **Infrastructure Action 9: Natural Gas Bridge Attachment Relocation**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 16

Project Timeframe: 18 months

Location: Greenville

**Project Summary:** This project would involve the relocation of approximately 1,600 LF of natural gas main that are currently attached to bridges over bodies of moving water. The project would involve burying the approximately 6,300 LF of pipe via horizontal directional drilling to replace the bridge attachments. This project will help reinforce Greenville Utility Commission's gas system by burying assets that could be damaged during a flood.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	, ,	
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Limited economic benefits will be directly attributable to this project.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	How effective is the risk reduction?  Unknown	
How many public facilities are involved in this project (buildings and infrastructure)?		
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?	Minimal to low confidence	N/A
What impact will this action have on the local economy/tax base?	Unknown	Agree
What impacts to the environment of the county will result from this project?	Impact on the environment could be high as burying of a gas main requires significant mitigation and disturbance.	N/A
What is the capability of the local government to administer this project?	Low	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	the technical feasibility of this project? Higher than 75%	
Who will administer this project? State		Agree

• CNG Fueling Station #2: This project would involve designing and building a Compressed Natural Gas (CNG) Fueling Station south of the Tar River. Currently, Greenville Utility Commission's (GUC) CNG station, located north of the Tar River, is the only CNG fueling station in Pitt County. Much of the development in Pitt County is located south of the Tar River, while the existing CNG Fueling Station is located north of the river. When the river floods, customers have difficulty accessing the station. Creating a new CNG station south of the river will allow customers such as ECU, Waste Industries, and GUC to purchase fuel and continue operating during and after storms.

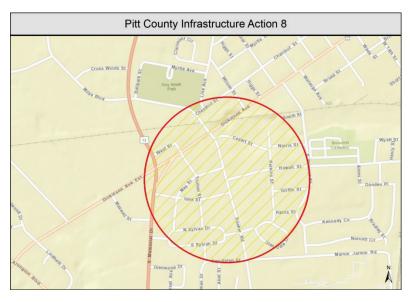


Figure 27. Infrastructure Action 8: CNG Fueling Station #2

## **Infrastructure Action 8: CNG Fueling Station #2**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 27

Project Timeframe: 0-2 years

Location: Greenville

**Project Summary:** This project would involve designing and building a Compressed Natural Gas (CNG) Fueling Station south of the Tar River. Creating a new CNG station south of the river will allow customers such as ECU, Waste Industries, and GUC to purchase

fuel and continue operating during and after storms.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	During Hurricane Matthew the Tar River flooded at several points making it challenging for potential CNG consumers to cross the river. Creating a second CNG fueling station will help local consumers companies and utility providers to resume normal activity following a storm.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Much of the development in Pitt County is located south of the Tar River while the existing CNG Fueling Station is located north of the river.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	project 0	
Is coordination with other communities/counties needed to complete this project?	d No	Agree
Is this project consistent with Federal Laws	Yes	Agree
what degree does this project adversely impact local odplain/coastal zone management?		Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Minimal to low confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$1M+	Agree
What is the level of public support for this project?	Medium	Agree
at is the technical feasibility of this project? Higher than 75%		Agree
Who will administer this project?	Local	Agree

• 115kV Transmission Pole Upgrades: There are currently approximately 60 wooden transmission poles within GUC's system. During Hurricane Matthew, one of these poles broke, which could have led to a widespread power outage. Replacing the current wood poles with steel poles will make the electrical system more resilient to future storms.

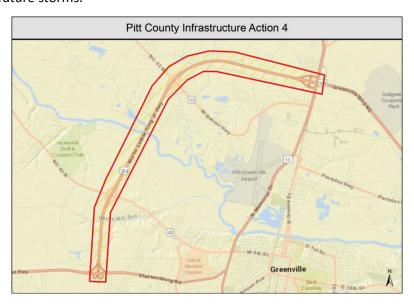


Figure 28. Infrastructure Action 4: 115kV Transmission Pole Upgrades

## **Infrastructure Action 4: 115kV Transmission Pole Upgrades**

County: Pitt

**Priority Ranking: 18 Priority Grouping:** Medium Priority

Project Timeframe: 3 years

Location: Throughout Greenville Utility Commission's service area

Project Summary: There are currently approximately 60 wooden transmission poles within GUC's system. During Hurricane Matthew, one of these poles broke, which could have led to a widespread power outage. Replacing the current wood poles with

steel poles will make the electrical system more resilient to future storms.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	One of GUC's wooden transmission poles broke during Hurricane Matthew which could have left thousands of electrical customers without power. Replacing these poles with steel will reduce the potential for outages during future storms.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Increasing redundancy minimizes the risk of these outages and their resultant economic impacts.	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?  Unknown		Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	No	Agree
Is this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	No Impact	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	Minimal to low confidence	N/A
What impact will this action have on the local economy/tax base?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	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?	Medium	Agree
What is the technical feasibility of this project?	Higher than 75%	Agree
Who will administer this project? County		Agree

Green Street Pump Station and Force Main Upgrades: During Hurricane Matthew and other recent storm
events, a segment of gravity sewer main located near the Tar River experienced substantial infiltration and
inflow. The inflow of flood waters reduced the capacity of GUC's wastewater treatment plant. The project
includes the construction of a new 0.25 mgd wastewater pump station and a 6-inch diameter force main,
which will allow the existing gravity sewer main to be abandoned.

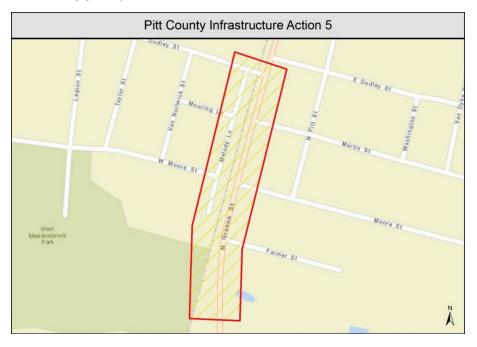


Figure 29. Infrastructure Action 5: Green Street Pump Station and Force Main Upgrades

## **Infrastructure Action 5: Green Street Pump Station and Force Main Upgrades**

County: Pitt

Priority Grouping: Medium Priority Priority Priority 19

**Project Timeframe:** 18 months **Location:** Green Street, Greenville

Project Summary: The project includes the construction of a new 0.25 mgd wastewater pump station and a 6-inch diameter force

main, which will allow the existing gravity sewer main to be abandoned.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	The existing gravity sewer main has experienced infiltration during several recent storm events including Hurricane Matthew. Building a new pump station will prevent this infiltration and inflow from occurring again during future storm events.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	N/A	Agree
For how long will this solution be effective?	More than 50 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
Is coordination with other communities/counties needed to complete this project?	d 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?	No Impact	Agree
What impacts to the environment of the county will result from this project?	N/A	N/A
What is the capability of the local government to administer this project?	Medium	Agree
What is the financial range of this project?	\$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**

#### **Low Priority Environmental Strategies**

Pillar	Action Name	Priority	Overall Ranking
Environment	Pitt County Environment Approach 1: Delineation of Environmentally Sensitive Areas with the County:	Low	21

**Table 11. Pitt Low Priority Environmental Summary** 

The following project represents the environmental strategy that Pitt County indicated was a priority to address. The project below was ranked with a low priority in relation to all other projects. Additional detail can be found below:

- Delineation of Environmentally Sensitive Areas with the County: Delineating environmentally sensitive
  areas will potentially allow the County to identify areas in which the CWMTF can be applied. Directing
  growth away from environmentally sensitive and high hazard areas, delineate environmentally sensitive
  areas both either they are suitable or unsuitable for growth and development through land use
  planning.
- This is a county-wide project so no project area map is included.

# **Environment Approach 1: Delineation of Environmentally Sensitive Areas with the County:**

County: Pitt

Priority Grouping: Low Priority Priority Priority 21

Project Timeframe: 6 months

Location: Pitt County

**Project Summary:** Delineation of Environmentally Sensitive Areas with the County: Delineating environmentally sensitive areas will potentially allow the County to identify areas in which the CWMTF can be applied. Directing growth away from environmentally sensitive and high hazard areas, delineate environmentally sensitive areas both are either suitable or unsuitable for growth and development through land use planning.

Question	Response	Disposition
Articulate how this project addresses an unmet need that has been created by damage from Hurricane Matthew.	Delineating environmentally sensitive areas will potentially allow the County to identify areas in which the CWMTF can be applied.	N/A
Consistent with existing plans (describe points of intersection/departure)	Yes	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.	Limited to areas identified that may lead to restrictions on business development.	Agree
For how long will this solution be effective?	Less than 10 years	Agree
How effective is the risk reduction?	Unknown	Agree
How many public facilities are involved in this project (buildings and infrastructure)?	0	Agree
ls coordination with other communities/counties needec to complete this project?	No	Agree
ls this project consistent with Federal Laws	Yes	Agree
To what degree does this project adversely impact local floodplain/coastal zone management?	Unknown	Agree
To what degree will it be possible to positively quantify the environmental benefits and ROI of this project?	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?	Positive impacts to the environment will be reflected in the delineation areas as areas that may be protected.	N/A
What is the capability of the local government to administer this project?	High	Agree
What is the financial range of this project?	\$0- \$50K	Agree
What is the level of public support for this project?	Unknown	Agree
What is the technical feasibility of this project?	Less than 25%	Agree
Who will administer this project?	County	Agree

#### **Summary**

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