

# RESILIENCE STRATEGY

**TOWN OF AHOSKIE** 

Spring 2024

Source: NC DCM

# **EXECUTIVE SUMMARY**

The North Carolina Resilient Coastal Communities Program (RCCP) was established with the objective of providing financial grants and technical assistance to support a proactive, locally and data driven, and equitable approach to coastal resilience planning and project implementation. The RCCP is administered by the North Carolina Department of Environmental Quality – Division of Coastal Management (DCM) and is comprised of four phases.



#### The four phases of the RCCP are focused on:

- Forming a Community Action Team (CAT) and identifying and engaging stakeholders, including traditionally underserved populations;
- Establishing community vision and goals;
- Assessing coastal risks and vulnerabilities;
- Developing nature-based solutions that incorporate sustainable planning, design, engineering, and natural resource management; and,
- Linking communities to funding streams and technical expertise for project implementation

The **Town of Ahoskie** was selected to participate in the first two phases of the RCCP in Spring 2023. Phases 1 and 2 were completed between August 2023 and June 2024, culminating in this Resilience Strategy, the main deliverable of the program's initial phases, which is designed to be integrated into existing local plans and ordinances.

#### The Resilience Strategy provides a framework to:

- Document the steps and outcomes of the Phase 1 and 2 resiliency planning process;
- Provide a clarity of purpose;
- Identify opportunities for short-term and long-term resiliency actions based on community input;
- Set project priorities for Phase 3 Engineering and Design; and,
- Identify, attract, and secure potential funding opportunities for project implementation

Through input from the CAT and the public and available data, community hazards were identified to include flooding (riverine and nuisance), drought and wildfire risk. Storm surge and sea level rise hazard areas were not included. Varying types of critical assets and natural infrastructure located throughout the town's jurisdiction were identified. Critical assets were also identified outside of the Town's jurisdictional boundaries, in the case of particularly vital assets or services.

The Town's **resilience vision** is defined as "Ahoskie is a resilient community supporting healthy economic growth by protecting critical infrastructure, providing quality infrastructure and services, and preserving natural resources for present and future generations. The town is able to quickly rebound from hazard events due to proactive measures to reduce risk and prevent loss, strong and inclusive partnerships, and a focus on serving vulnerable and disadvantaged populations."



To implement the vision, fifteen (15) resiliency **goals and objectives** were defined and grouped under economic, social, and environmental categories.

Based on local input and the risk and vulnerability assessment, a suite of nine (9) potential solutions, including planning/policy related solutions and green/hybrid and hard/grey infrastructure projects, were evaluated using the FEMA STAPLEE method and a benefit-cost analysis. This method takes into consideration the social, technical, administrative, political, legal, economic, and environmental aspects, and potential impacts of each project solution.

#### Source: FEMA

The cost or the economic case for

different strategies or actions must be considered when developing resilience strategies. The proposed adaptation actions were also reviewed using an informal benefit-cost analysis. Ratings of high, medium, or low are assigned to the anticipated costs and the benefits associated with each action based on general criteria that are established by the community.

	Benefit/cost ratings
	<u>Benefit</u>
HIGH	Action would have significant impact on risk reduction
MEDIUM	Action would have an impact on risk reduction
LOW	Long-term benefits are difficult to quantify in the short term
	<u>Cost</u>
HIGH	Cost of project is high and/or funding will be more difficult to acquire
MEDIUM	Cost of project is medium and/or funding will be easier to acquire
LOW	Cost of project is low and/or funding is available in existing budget

After additional stakeholder input, scoring analysis and consideration by the CAT, eight (8) **prioritized project solutions** were identified for the Town of Ahoskie (see Table 1). The CAT selected the Stormwater Action Plan to move forward to RCCP Phase 3. This will be combined with the Upgrade Stormwater System project, the most popular project based upon Phase 2 Open House input, to move forward into Phase 4 implementation. These project solutions are described in more detail in the Project Portfolio.

# Table 1. Priority Project Solutions

Project Name	Project Description				
<ul> <li>✓ Stormwater Action Plan and Stormwater System Upgrade</li> </ul>	Develop a Stormwater Action Plan combined with strategically upgrading the stormwater system through improved and expanded infrastructure. The project will establish mapping and condition assessments for stormwater system components and outfalls with a focus on known problem areas and areas identified via a desktop analysis. The project will promote proactive stormwater maintenance through development of interactive mapping tools and maintenance guidance. The project will encourage stormwater quality awareness through public outreach efforts and produce construction drawings for a priority project. (Combined project to move forward to Phase 3 and Phase 4)				
Backup Generators at Critical Facilities	The purchase and installation of backup generators at critical facilities.				
Stream Cleanout	Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries. This would include Ahoskie Creek and its tributaries with a primary focus on Ahoskie Creek to increase drainage flow within the watershed.				
Green Stormwater Infrastructure at the R.L. Vann Center	Engineer, design, and construct low impact development (LID) stormwater infrastructure at the R.L. Vann Community Resource Center.				
Retrofit or Relocate Town Hall	Retrofit or relocate townhall to mitigate for flood events.				
Green Stormwater Infrastructure at Public Housing Developments	Implement green stormwater infrastructure throughout public housing developments owned by Ahoskie Housing Authority. 1.) Pierce Ave. / Burden St. / Vinson Dr. 2.) Parker Ave. / E First St.				
Stormwater Wetland at the Ballfields in Ahoskie Creek Recreational Complex	Design and construct a stormwater wetland west of the ballfields at the Ahoskie Creek Recreation Complex.				
Green Stormwater Infrastructure on Town-owned property	Complete a Feasibility Study with concept designs followed by strategically designing and constructing green stormwater infrastructure on Town-owned property.				

Table of Contents	
EXECUTIVE SUMMARY	i
INTRODUCTION	1
COMMUNITY ACTION TEAM REPORT	1
COMMUNITY ACTION TEAM MEMBERS	2
REVIEW OF EXISTING LOCAL & REGIONAL EFFORTS	2
RELEVANT PLANS, ORDINANCES, POLICIES, and PROGRAMS	2
VISION & GOALS	4
RESILIENCE VISION	4
RESILIENCE GOALS and OBJECTIVES	4
Economic	4
Environmental	6
Social	6
STAKEHOLDER ENGAGEMENT STRATEGY	7
EXISTING CONDITIONS, ISSUES, and OPPORTUNITIES	7
Public Survey	8
Phase 1 Open House	8
DRAFT RESILIENCY ACTIONS	9
Phase 2 Open House	9
ENGAGEMENT TOOLS LIST	9
RISK AND VULNERABILITY ASSESSMENT REPORT	9
MAPPING ASSETS, NATURAL INFRASTRUCTURE, AND VULNERABLE POPULATIONS	10
Community Assets	10
Natural Infrastructure	10
Vulnerable Populations	11
IDENTIFYING AND MAPPING HAZARDS	11
Riverine Flooding	11
Nuisance Flooding	11
Drought (2000-Present)	12
Wildfire	12
ASSESSING VULNERABILITY	12

Exposure Parameters	
Groups	
ESTIMATING RISK	
Asset Values	17
PROJECT PORTFOLIO	20
IDENTIFY A SUITE OF POTENTIAL PROJECT SOLUTIONS	
CONSOLIDATE AND PRIORITIZE PROJECTS	20
Priority Projects	
APPENDIX A: COMMUNITY ACTION TEAM MATERIALS	45
COMMUNITY ACTION TEAM CONTACT LIST	
COMMUNITY ACTION TEAM MEETING FRAMEWORK	
COMMUNITY ACTION TEAM MEETING 1 SUMMARY	51
COMMUNITY ACTION TEAM MEETING 2 SUMMARY	
COMMUNITY ACTION TEAM MEETING 3 SUMMARY	
COMMUNITY ACTION TEAM MEETING 4 SUMMARY	62
COMMUNITY ACTION TEAM MEETING 5 SUMMARY	67
COMMUNITY ACTION TEAM MEETING 6 SUMMARY	72
COMMUNITY ACTION TEAM MEETING 7 SUMMARY	76
VULNERABLE POPULATIONS DATA AND MAPPING	
FIRST ROUND STAPLEE PROJECT WORKSHEET	115
BENEFIT COST WORKSHEET	
FINAL ROUND STAPLEE PROJECT WORKSHEET	
APPENDIX B: STAKEHOLDER ENGAGEMENT MATERIALS	126
PUBLIC SURVEY SUMMARY	
PHASE 1 PUBLIC OPEN HOUSE SUMMARY	142
PHASE 2 PUBLIC OPEN HOUSE SUMMARY	143
APPENDIX C: RISK AND VULNERABILITY ASSESSMENT MATERIALS	165
CRITICAL ASSETS AND NATURAL INFRASTRUCTURE LIST	
VULNERABILITY ASSESSMENT WORKSHEET	174
CRITICAL ASSETS AND NATURAL INFRASTRUCTURE MAPPING	
HAZARDS MAPPING	

# INTRODUCTION

The <u>Resilient Coastal Communities Program (RCCP)</u> is funded through the North Carolina General Assembly, the National Fish and Wildlife Foundation, and the National Oceanic and Atmospheric Administration (NOAA) and administered by the North Carolina Department of Environmental Quality – Division of Coastal Management (DCM). Program partners include the North Carolina Office of Recovery and Resiliency, the North Carolina Sea Grant, and the North Carolina Nature Conservancy. The goal of the RCCP is to increase community adaptation ability and resilience and is a component of the statewide North Carolina Resilient Communities Program, called for in the <u>North Carolina Climate Risk Assessment and Resilience Plan.</u>

The four phases of the RCCP are designed to address barriers to coastal resilience at the local level; engage community stakeholders including those that are socially vulnerable; assess coastal risks and vulnerabilities; develop nature-based solutions to strategically improve the resiliency of communities and their natural and built infrastructure; and link communities to funding streams for project implementation.

- Phase 1 Community Engagement/Risk and Vulnerability Assessment
- Phase 2 Planning, Project Identification and Prioritization
- Phase 3 Engineering and Design
- Phase 4 Project Implementation

The 20 designated North Carolina Coastal Area Management Act (CAMA) counties, as well as, municipalities, homeowners associations, and federal and state-recognized tribes within this jurisdictional area are eligible to apply for the RCCP. The Town of Ahoskie was selected to participate in the first two phases in Spring 2023 which were completed between August 2023 and June 2024.

This Resilience Strategy documents Phase 1 and 2 steps and includes all associated deliverables/materials including those for the development of a CAT, stakeholder engagement, inventory and review of existing local and regional plans, defining of community vision and goals, development of a Community Engagement Strategy, identification/mapping of hazards and critical assets/natural infrastructure/socially vulnerable populations, Risk and Vulnerability Assessment Report, identification of a suite of potential project solutions, project prioritization, and the concluding Project Portfolio.

# COMMUNITY ACTION TEAM REPORT

RCCP Phase 1, Step 1 involves of the creation of a CAT consisting of key stakeholders, ideally with diverse and multi-disciplinary backgrounds, and expertise in planning and community development, hazard mitigation, utility management, engineering, the community's economy, engaging with vulnerable and underrepresented populations, and nature-based solutions. CAT members could include:

- Community residents
- Neighborhood or faith leaders
- Municipal/county managers
- Planners
- Elected officials
- Utility managers
- Community and economic developers
- Business community representatives

- Disaster recovery coalitions/groups
- Councils of Governments (COGs)
- State and federal land managers
- Non-governmental organizations (NGOs)
- Others working with the community on resilience planning

The CAT Champion, or lead member, was identified and worked with the contractors to identify additional CAT members to fill the roles detailed above. Potential members were contacted by phone and/or email either by the contractors or the CAT Champion. The need for CAT members was announced to the public at Town Council meetings and elected officials were selected to serve and underserved community representatives were identified.

# COMMUNITY ACTION TEAM MEMBERS

- CAT Champion Jennifer Bracy, Town Clerk, Certified Floodplain Manager, Interim Town Manager
- Morgan Askew, Planning/Zoning Administrator and Floodplain Manager
- David Hunt, Councilman
- Roy Sharpe, Councilman
- Mike Bradley, Fire Marshall and Building Inspector
- Stephen Lassiter, Public Works Director
- Hunter Smith, Assistant Public Works Director
- Pat Byrd, Christian Women's Job Corp.
- Paul Moore, Pastor of The Rock Church

# Refer to Appendix A for Community Action Team Materials.

# REVIEW OF EXISTING LOCAL & REGIONAL EFFORTS

To avoid the duplication of work and build upon and remain consistent with previous resiliency efforts, existing programs, plans, policies and ordinances were reviewed and incorporated as part of RCCP Phase 1, Step 2. The Albemarle Regional Hazard Mitigation Plan contains a baseline vulnerability and risk assessment and served as a reference point for conducting the assessments while considering additional factors and the local context.

# RELEVANT PLANS, ORDINANCES, POLICIES, and PROGRAMS



NCORR Regions Innovating for Strong Economies and Environment (RISE) Program: Resilience Projects for the Mid-East Region (2022) – The Regional Resilience Portfolio Program is a two-part effort consisting of the Climate Change and Natural Hazards Vulnerability Assessment for the Mid-East Region and a Project Portfolio. The Project Portfolio is a compilation of regionally focused resilience projects that will provide benefits throughout the Mid-East Region. (Source: NCORR)

- Albemarle-Pamlico National Estuary Partnership Comprehensive Conservation and Management Plan (2012-2022) – This plan is organized around four basic questions and related answers: what is a healthy Albemarle-Pamlico system; what is the current condition of the system; what are the most significant challenges facing the system over the next 10 years; and what actions should be implemented to best achieve a healthy system? (Source: APNEP)
- Albemarle Regional Hazard Mitigation Plan (2020) This plan ensures all possible activities are reviewed and implemented so that the problems are addressed by the most appropriate and efficient solutions. This plan provides a framework for all interested parties to work together toward mitigation. It establishes the vision and guiding principles for reducing hazard risk and proposes specific mitigation actions to eliminate or reduce identified vulnerabilities. (Source: Holland Consulting Partners/Wood.)
- Hertford County Emergency Operations Plan (2020) The Hertford County Emergency Operations Plan has been developed to address multiple hazards which threaten the county. Using a functional format, this plan encourages an Integrated Emergency Management approach to disaster and fosters prompt, efficient and coordinated response operations by elements of the emergency organization. (Source: NCEM)
- Hurricane Matthew Resilient Redevelopment Plan, Hertford County (2017) The purpose of the plan 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. (Source: NCEM)
- Hurricane Matthew Resilient Redevelopment Plan, Northeast Region (2017) As part of the program, NC Emergency Management facilitated development of regional resilient redevelopment plans for four "prosperity zones" as identified by the NC Dept of Commerce, created to facilitate collaborative and coordinated planning and use of resources. (Source: NCEM)
- Hertford County Comprehensive Transportation Plan (2015) The Hertford County Comprehensive Transportation Plan (CTP) is a long-range plan which identifies major transportation improvement needs and develops long term solutions for the next 25 to 30 years. The CTP study involves both government officials and the public in an effort to determine the area's future transportation needs based on the best information available including, but not limited to, population, economic conditions, traffic trends and patterns of land development in the county. (Source: NCDOT)
- Hertford County CAMA Land Use Plan (2011) This locally adopted land use plan is certified by the North Carolina Coastal Resources Commission and is then used by DCM in making CAMA permit decisions and to ensure projects and activities remain consistent with the policies of a local land use plan. (Source: NCDEQ)
- Town of Ahoskie Comprehensive Bicycle Plan (2010) This plan functions as a guide for the town to develop a bike-friendly community, to assist in budgetary decisions and to apply for grant funds from regional, state, federal and private funding sources. (Source: Rivers and Associates)
- Town of Ahoskie Economic Development Strategy (2018) This plan includes an inventory of assets, identification of economic drivers, strengths, weaknesses, opportunities and threats and the setting of objectives to implement the plan's vision. (Source: NC Main Street and Rural Planning Center)
- Town of Ahoskie Comprehensive Land Use Plan (2022) The purpose of the Ahoskie Comprehensive plan is to help chart a new course for the community over the next 20 years. This plan seeks to identify Ahoskie's assets, opportunities, and weaknesses, to create inclusive growth that

will serve the needs of desires of those who live and work nearby. (Source: UNC-CH Dept. of City and Regional Planning)

 Town of Ahoskie Code of Ordinances – The adopted code includes applicable ordinances such as Building Code; Emergency Management; Flood Damage Prevention; Housing Code; Subdivision; Zoning; Streets, Sidewalks, and Other Municipal Property; and Utilities: Water and Sewer.

# **VISION & GOALS**

Phase 1, Step 3 involves developing a community-specific vision, goals, and objectives to guide the planning process. Relevant local and regional plans were summarized for the CAT and vision statements and goals from each plan were reviewed as well as, example goals from resiliency plans outside the area. Using this input, example vision statements, goals, and themes were identified and were used to guide the CAT's brainstorming process during CAT Meeting 1.

The team was encouraged to employ the triple bottom line approach to resiliency, which considers environmental, economic, and social factors. Worksheets were provided to CAT members for use in identifying draft vision statements, goals, and objectives that reflected local values and priorities. The team worked together during the meeting to complete the worksheets. Team members also had an opportunity to complete the worksheets following the meeting.

Input from the CAT was used to finalize the resilience vision, goals, and objectives listed below.

# **RESILIENCE VISION**

Ahoskie is a resilient community supporting healthy economic growth by protecting critical infrastructure, providing quality infrastructure and services, and preserving natural resources for present and future generations. The town is able to quickly rebound from hazard events due to proactive measures to reduce risk and prevent loss, strong and inclusive partnerships, and a focus on serving vulnerable and disadvantaged populations.

# **RESILIENCE GOALS and OBJECTIVES**

#### Economic

Goal 1: Promote economic growth and development. *Objectives:* 

- Revitalize the historic downtown.
- Attract new, sustainable businesses.
- Support businesses in achieving natural hazard resilience and in recovery efforts when events occur.
- Strive for a sustainable economic base that allows all residents equal access to good jobs and meaningful education.

Goal 2: Provide quality municipal infrastructure and services.

Objectives:

- Maintain the town's sewer system and improve/upgrade the system as needed.
- Maintain the town's water system and improve/upgrade the system as needed.
- Maintain the town's road system and improve/upgrade the system as needed.

- Develop strong partnerships with electric providers including Dominion Energy and Roanoke Electric Membership Cooperative (EMC).
- Provide high quality public services.

Goal 3: Support smart growth principles with future development. *Objectives:* 

- Provide guidance on how future development can minimize additional damages and recovery costs from hazard events.
- Discourage development in areas at high-risk for flooding or storm damage.
- Encourage the demolition of unused and dilapidated impermeable surfaces and buildings.
- Implement mitigation activities that will assist in protecting lives and property.
- Recognize that low level nuisance flooding and tidal flooding are going to become increasingly frequent, and that infrastructure needs to be built or retrofitted in anticipation of these events.
- Plan for sea level rise in coastal areas.

Goal 4: Improve and maintain buildings to support resilience to hazards. *Objectives:* 

- Incentivize the construction of "flood resistant" homes.
- Elevate homes in flood prone areas.
- Floodproof businesses and other non-residential buildings in flood prone areas.
- Promote research and development of building construction and design standards that can better withstand storm damage.
- Promote energy efficiency and solar panels for homes and businesses.

Goal 5: Protect and maintain critical infrastructure and ensure that critical infrastructure is resilient to anticipated hazards.

Objectives:

- Identify key community assets that will need increased physical and fiscal protection from the major weather events and incremental climate change impacts we will face in the next 20-50 years.
- Protect, maintain, and enhance critical infrastructure.
- Reduce power outages for residents and businesses.
- Promote research and development of utility infrastructure hardening.
- Create redundancies in the water and sewer service networks.

Goal 6: Support strong, resilient local businesses and neighborhoods. *Objectives:* 

- Invest in community development projects (e.g., bicycle and pedestrian facilities, public parks, affordable and diverse housing options) and create a connected community fabric where residents support thriving local businesses.
- Support and strengthen the local economy.
- Ensure that local businesses are able to reopen quickly following a hazard event.
- Ensure that residents are able to return home, have services, and return to normal life quickly following a hazard event.

Goal 7: Identify and obtain funding for resilience projects. *Objectives:* 

Develop a list of resilience projects suitable for funding.

- Identify funding and grant opportunities to implement resilience projects.
- Identify funding to reduce repetitive losses from previous hazard events, such as funding for building elevation/floodproofing and equitable buyouts.
- Utilize partnerships and apply for identified grant opportunities to implement projects.

#### Environmental

Goal 8: Reduce flooding.

Objectives:

- Reduce the potential for flooding of homes and businesses.
- Develop flood mitigation projects, including nature based and sustainable solutions.
- Identify both structural and non-structural solutions to flooding.

Goal 9: Improve stormwater management.

Objectives:

- Map the city's stormwater system in GIS.
- Maintain and improve the capacity of the stormwater system.
- Conduct planning processes leading to recommendations for stormwater BMPs.
- Improve construction and site design standards to reduce debris caused by flooding and storms.
- Demolish dilapidated homes and remove impervious surfaces as practicable and feasible.
- Encourage the construction of permeable surfaces to reduce flash flooding.
- Drainage ditches should be targeted for stormwater projects to reduce runoff and improve water quality.

#### Goal 10: Preserve natural resources.

Objectives:

- Incentivize reliance on "natural" protective systems as much as possible (i.e., leaving wetlands, forests and marshes as intact as possible to absorb floodwaters and mitigate storm surge).
- Discourage excessive covering of land with impervious surfaces.
- Conserve resources for present and future generations.
- Protect a connected network of green spaces.
- Clean up trash in and along waterways.
- Control illegal dumping.

Goal 11: Maintain, protect, and where possible, enhance water quality in all wetlands, rivers, streams, and estuaries.

Objectives:

- Improve the water quality of the Chowan River, Ahoskie Creek, and their tributaries.
- Explore implementation of a local riparian buffer ordinance to encourage intensive development to occur away from rivers and streams.
- Support federal and state regulations related to water quality and report known violations.
- Partner with the local council of governments, environmental non-profits, and local universities to plan, develop, and implement water quality projects.

#### Social

Goal 12: Develop and nurture strong social networks supporting resiliency and a connected community fabric. *Objectives:* 

- Continue developing and nurturing partnerships with community and business organizations and nonprofit organizations.
- Utilize social networks for hazard resilience education and for recovery following hazard events.
- Improve partnerships with Hertford County and with other municipalities in the county.

Goal 13: Serve vulnerable and disadvantaged populations. *Objectives:* 

- Enhance public education about available transportation options during evacuations.
- Ensure that bedridden citizens, elderly non-drivers, low income, and other vulnerable populations have information on available transportation options.
- Provide the public, including socially vulnerable populations, with the tools needed to protect themselves from natural hazards.
- Conduct grassroots outreach efforts to share information and engage residents in resiliency efforts.
- Partner with local community groups and faith organizations.
- Ensure that all programs are equitable.

Goal 14: Reduce the risk of loss of life and personal injury from natural hazards through local land development regulations, capital improvements planning/investment, and proactive long-range planning regarding land use and post-disaster redevelopment.

Objectives:

- Continue partnering with Hertford County Emergency Management.
- Restore services quickly and efficiently following a hazard event.
- Minimize damage and loss of life from disasters.
- Plan how to deal with increased solid waste and storm debris disposal as natural disasters are anticipated to result in more home and property destruction in the future.
- Develop a Comprehensive Evacuation Plan.
- Plan for serving areas cut off by flood waters post storm events.
- Rebound quickly following a hazard event.
- Review local land development regulations and capital improvement plans for opportunities to incorporate hazard resilience.

Goal 15: Support a thriving, healthy and resilient community, local identity, and recreational access to nature. *Objectives:* 

- Promote riparian buffers as spaces for recreation, education, and enjoyment.
- Promote outdoor recreational activities for everyone, including public waterfront access.
- Ensure that all residents have access to clean water, food, healthcare, quality education, good jobs, and affordable, suitable housing.
- Preserve historic buildings and other cultural and historic resources.
- Support community improvements which improve the quality of life for all citizens.

# STAKEHOLDER ENGAGEMENT STRATEGY

# EXISTING CONDITIONS, ISSUES, and OPPORTUNITIES

RCCP Phase 1, Step 4 directs contractors to develop and implement a stakeholder engagement strategy. Information was presented and stakeholder input was gathered through various methods such as site visits,

two public open houses coinciding with Phase 1 and Phase 2, a public survey, interactive displays, handouts, PowerPoint presentations and a GIS storymap available at the second open house.

#### **Public Survey**

A public survey was developed in partnership with the CAT and released after CAT Meeting 1. Survey questions were based around resiliency to flooding, coastal erosion, coastal storms and sea level rise and were designed to be completed in 15 minutes or less depending on the amount of input.

Advertisement methods included:

- Flyer contained a link to the online survey and information on hard copies available at Town Hall, plus
  a phone number to request a mailed hard copy
  - Flyer posted electronically Town website, Town Facebook page
  - Flyer posted in person Town Hall, Fire Dept./Town Council Meeting Chambers, Ahoskie Public Library
  - Flyer mailed to all local churches
  - Flyers distributed at Fall Fling event
- Announcement was made at Town Council meeting

Survey input was used to identify existing conditions, issues, needs, and opportunities to enhance resiliency. Information was gathered on how personal lives and property have been affected by flooding, how flooding is perceived in the community, and what measures they have taken to prevent or avoid flooding. This information was used to recommend appropriate strategies for flooding resilience including public education campaigns. A total of 36 stakeholders responded to the survey.

#### Phase 1 Open House

The in-person Phase 1 Open House was held on December 13, 2023 from 4:00 p.m. – 6:30 p.m. and a virtual meeting was held December 15, 2023 from 4:00 p.m. – 6:30 p.m.

Advertisement methods included:

- Flyer posted electronically Town website, Town Facebook page
- Flyer posted in-person Town Hall, Fire Dept./Town Council Chambers, Ahoskie Public Library
- Flyer mailed to all local churches
- Event posted on electronic message board
- News release ran in the Roanoke Chowan News Herald newspaper
- Announcement was made at Town Council meeting

For the Phase 1 Open House, poster displays included:

- What is resiliency?
- Hazard Identification Exercise Maps (interactive)
- What does resiliency mean to you? (interactive)
- North Carolina Resilient Coastal Communities Program
- Community Vision and Goals Exercise (interactive)

The public survey was available at the Phase 1 Open House to gather stakeholder input and there was also a resource table with handouts on topics such as the RCCP, flood readiness, stormwater education, creating home rain gardens, septic maintenance, mold remediation, etc. Some of these materials were made available

in Spanish. Contractors and CAT members were on hand to interact with the public during the in-person and virtual events.

# DRAFT RESILIENCY ACTIONS

In Spring 2024, a storymap was created using ArcGIS Online and was posted at AhoskieFloodResilience.org. The storymap presented Resiliency 101, Ahoskie's vision statement, CAT members, existing resiliency plans, public survey input, the risk and vulnerability assessment, the top flood related hazards, the STAPLEE analysis, and proposed draft actions. The storymap was presented at the Phase 2 Open House.

#### Phase 2 Open House

The Phase 2 Open House was held on March 14, 2024 from 4:30 p.m. - 5:45 p.m. prior to a regularly scheduled council meeting in an effort to encourage attendance and participation. This event was advertised through the same methods employed for the Phase 1 Open House.

For the Phase 2 Open House, displays included:

- What is resiliency?
- North Carolina Resilient Coastal Communities Program
- Action Strategy Areas
- Draft Actions
  - Provide input on your top (6) preferred actions and an option to suggest other projects that were not listed (interactive)

In addition to the interactive posters, comment forms were also available to provide another method to solicit feedback on preferred projects and other aspects of the community's resiliency program. Resource handouts were also available, and contractors were in attendance to interact with the public.

Public input indicates that the most popular project for the community is the Stormwater System Upgrade.

# ENGAGEMENT TOOLS LIST

- Public Survey
- Webpage/GIS storymap
- Notifications (news release, social media ads, flyers, announcements)
- Public Open Houses (In-person and Virtual)

# Refer to Appendix B for Stakeholder Engagement Materials.

# RISK AND VULNERABILITY ASSESSMENT REPORT

The Risk and Vulnerability Report details the quantitative and qualitative assessments performed for evaluating the vulnerability of critical assets, natural infrastructure, and vulnerable populations to hazards faced by the community.



As part of Phase 1, Step 5, the contractor team identified critical assets including community resources, built infrastructure, natural infrastructure, and socially vulnerable populations. Critical assets were identified primarily within the Town's jurisdictional boundaries, and in some cases were identified outside of the Town's jurisdictional boundaries in the case of particularly vital assets or services.

# MAPPING ASSETS, NATURAL INFRASTRUCTURE, AND VULNERABLE POPULATIONS

#### Community Assets

Contractors worked with the CAT at Meeting 2 to identify community assets in list format, then researched what GIS data was available and created maps of community assets located within the Town's jurisdictional boundaries. In some cases, there was already a data layer available. In other instances, the GIS data was created by the contractors based on CAT input on which assets to include. In the sources listed below, "created" is used to designate data that was developed by the contractor.

#### Sources:

- Emergency Management created
- Law Enforcement created
- Fire and EMS Stations NC Office of State Fire Marshall
- 911 Dispatch created
- Government Services created
- Food created
- Water/Wastewater
  - Public Water Supply Wells NC Dept. of Environmental Quality (NC DEQ) Division of Water Resources
  - Wastewater Discharge Permits NC DEQ Division of Water Resources
  - o Town Wide Water and Wastewater System Mapping Wooten Company
- Propane suppliers created
- Transportation
  - Road Network Hertford County
  - Bridges NC Dept. of Transportation (NCDOT)
  - o Rail NCDOT
- Medical created
- Schools created
- Libraries created
- Community Buildings and Museums created
- Affordable Housing Areas created
- Downtown Commercial District created
- Tax Parcels Hertford County

#### Natural Infrastructure

Contractors researched existing natural infrastructure data and shared an initial list with the CAT. The team helped to add additional natural assets to the list. Contractors also worked with the team to identify local public land and private land used for public recreational purposes. Contractors then created maps of natural infrastructure located within the Town's jurisdictional boundaries.

#### Sources:

- Wetlands NC Coastal Regional Evaluation of Wetland Significance (NC CREWS)
- Parks and Public Land created
- Priority Forests NC Natural Heritage Program
- Floodplains FEMA
- Surface Water
  - Rivers and Streams NCDEQ
- Managed Areas NC Natural Heritage Program
- Biodiversity and Wildlife Habitat Assessment NC Natural Heritage Program

#### **Vulnerable Populations**

Maps of vulnerable populations were downloaded from the Center for Disease Control including the overall Social Vulnerability Index, Socioeconomic Status, Household Composition/Disability, Race/Ethnicity/Language, and Housing Type/Transportation. The CAT reviewed the series of vulnerable populations maps and provided additional input on the presence of vulnerable populations and the accuracy of the data.

#### Sources:

- Social Vulnerability Index US Center for Disease Control
- 2021 American Community Survey 5-year estimates from the US Census Bureau
- EPA Environmental Justice Screen Reports

## IDENTIFYING AND MAPPING HAZARDS

Riverine flooding, nuisance flooding, sea level rise, storm surge, drought, wildfire and coastal erosion were initially considered as community hazards to assess risk and vulnerability within the community. Hazards not applicable to specific communities were not factored into the complete risk and vulnerability assessments. After the initial assessment, riverine flooding, nuisance flooding, drought and wildfire were evaluated for Ahoskie as community hazards. Definitions of each hazard and the data used to calculate risk and vulnerability are shown below. Refer to the vulnerability index for the thresholds used for each dataset and how each dataset was used to calculate vulnerability. Contractors also created maps of each hazard, including hazard layers overlaid with critical assets and natural infrastructure.

#### **Riverine Flooding**

Riverine flooding is defined as when a stream exceeds its capacity and overflows into adjacent low-lying or dry land (<u>Riverine Flooding | National Risk Index (fema.gov</u>)). FEMA has created datasets to indicate flooded areas during a 100-yr and 500-yr storms. This data, along with Zone X indicating moderate to low flooding risk, was used to identify potential flood vulnerabilities within the community.

#### Sources:

- North Carolina Emergency Management Floodplain Mapping program
- OpenFEMA Data Sets | FEMA.gov
- <u>Riverine Flooding | National Risk Index (fema.gov)</u>

#### Nuisance Flooding

Nuisance flooding is caused by stormwater holding in low-lying areas within a community. To assess nuisance flooding, a digital elevation model was downloaded from the <u>North Carolina Spatial Data Download (nc.gov)</u> to identify low lying areas using ESRI ArcGIS PRO Hydrology tools including Fill DEM, and Sink. Low lying areas

capable of holding a storm greater than or equal to the 5-yr storm were evaluated based on proximity to an asset to determine vulnerability.

Sources:

- North Carolina Spatial Data Download (nc.gov)
- ESRI Arc Hydro
- <u>National Stormwater Calculator (epa.gov)</u>

#### Drought (2000-Present)

Drought is defined as a prolonged period of dry conditions caused by a lack of precipitation, resulting in a water shortage. To assess drought conditions for each community, the Historical Drought data from Drought.gov was used to calculate the potential vulnerability for drought conditions based on previous data (2000-2023). Each community was given a constant drought vulnerability score based on the thresholds presented with the vulnerability index.

Sources:

- <u>Historical Data and Conditions | Drought.gov</u>
- Drought Basics | Drought.gov

#### Wildfire

A wildfire is an unplanned, uncontrolled fire that spreads quickly. The Wildfire Risk to Communities data from the US Forest Service was used to predict the vulnerability of a wildfire affecting each community and its assets. This data takes into consideration population, building location, building coverage, land cover, and wildfire hazards.

Sources:

- Data: USFS Wildfire Risk to Communities Wildfire VHazard Potential
- WRC\_PopulatedAreas\_Methods\_Dec2020.pdf (wildfirerisk.org)

# ASSESSING VULNERABILITY

#### Vulnerability = Exposure + Sensitivity - Adaptive Capacity

- Vulnerability Describes a system's susceptibility to harm or change. Vulnerability is the combined
  result of exposure, sensitivity, and adaptive or response capacity and, as such, a function of the
  character, magnitude, and rate of the climate change hazard to which a system is exposed, as well as
  of non-climatic (social and environmental) characteristics of the system, which determine its
  sensitivity and adaptive capacity.
- **Exposure** Refers to the probability of physical contact between an asset and a hazard.
- Sensitivity Is the degree to which an asset is impacted by a hazard.
- Adaptive Capacity Is the ability of an asset to cumulatively adapt to all hazards.

To assess vulnerability, the contractor developed multiple vulnerability indexes which combined exposure, sensitivity, and adaptive capacity to estimate cumulative vulnerability of critical assets within six categories: Building Infrastructure, Affordable Housing, Downtown Commercial District, Transportation Infrastructure, Sewer & Utility System Infrastructure, and Natural Resources.

Exposure and sensitivity were objective factors within the vulnerability equation.

**EXPOSURE** – The exposure parameter analyzed effects of different coastal hazards on community critical assets by categorizing each exposure to the individual hazard as high, medium, or low. This score was weighted based on the hazard risk within the community. These hazards included: riverine flooding, nuisance flooding, storm surge, drought, fire, and sea level rise. Hazards that did not directly affect the community were considered and removed from the list. Exposure thresholds were set based on best available data and can be viewed in the Vulnerability Index.

**SENSITIVITY** – The sensitivity parameter analyzed the cumulative effects of the hazards on critical assets within each category by assigning a percent threshold or indicating a high/low need for that asset within the community. For example, high sensitivity for building infrastructure indicates that greater than 66% of the community asset building – within a certain subcategory (e.g., police stations) - were affected by the coastal hazard or that a particular building was highly sensitive to the function of the community. This assessment indicated the value of redundancy and alternative uses of assets.

**ADAPTIVE CAPACITY** – Adaptive capacity was a subjective factor within our assessment that used objective data and community input to evaluate an asset's ability to recover and/or the ability of that assets to be modified for resiliency. Factors such as: social vulnerability, feasibility of relocation, feasibility of retrofit, and possible alternatives were evaluated to give each critical asset an adaptive capacity score. Contractors relied on input from the CAT to evaluate the adaptive capacity of each critical asset. Thresholds for adaptive capacity are within the Vulnerability Index.

Asset	Exposure Score 0-3	Sensitivity Score 0-3	Adaptive Capacity 0-3	Vulnerability Score 0-6
Asset name	0 = no exposure	0 = no sensitivity	0 = no adaptive capacity	0-2 = low
	1 = low	1 = low	1 = low	3-4 = medium
	2 = medium	2 = medium	2 = medium	5-6 = high
	3 = high	3 = high	3 = high	

Critical assets were given a score based on the average exposure, sensitivity, and adaptive capacity scores. These scores were then used in the vulnerability equation to calculate cumulative vulnerability. The thresholds for each category are listed below:

#### **Exposure Parameters**

#### **Riverine Flooding**

- High: Zone AE (100-yr flood level)
- Med: 0.2 percent (500-yr flood level)
- Low: X Zone (Low to Moderate risk)

#### Nuisance Flooding

- High: Low lying area on the property or within 25 ft of structure or asset / intersect linear feature
- Med: Up to 50 ft from property or within 50 ft of structure or asset
- Low: >50 ft from property or >50 ft of structure or asset

#### Drought (2000 - Present)

Ahoskie was given a consistent score of 2 based on county evaluation. <u>Historical Data and Conditions</u> <u>Drought.gov</u>

- High 3+ periods >18 days of Extreme or Exceptional Drought or 5+ periods of 30+ days of Severe Drought
- Med 1-2 periods of Extreme or Exceptional Drought or >12 days or 2-5 periods of Severe Drought >18 days
- Low No cases of prolonged (>12 day) severe or Extreme or Exceptional Drought periods

#### Wildfire - (Data: USFS - Wildfire Risk to Communities Wildfire VHazard Potential)

- Low: USFS Very low or low
- Med: USFS Moderate
- High: USFS High or very high

Generated Report for Risk and Vulnerability. <u>Map | National Risk Index (fema.gov)</u>

#### Groups

#### Buildings

Exposure

- High weight (3): Riverine Flood, Nuisance Flood, Fire
- Med weight (2): Drought

Sensitivity (Infrastructure group)

- o High: >66%+ Facilities affected / Needed by the community
- Medium: 33%-66% / Other facilities can be used (Alternatives)
- Low: <33% / Facility not needed to operate</li>

#### Adaptive Capacity

- o Subjective need community input
- o Social Vulnerability Index
- Ability to relocate building infrastructure (Ex. From 25yr to 50yr floodplain)
- The ability to raise structure
- Accessibility to residents once moved (SVI)
- Land availability
- o Ability to retrofit for flooding (raise generator/sensitive components)
- Another facility can be used in its place
- Facility is not needed to operate

#### Affordable Housing

#### Exposure

o Average Score of exposure parameters

Sensitivity (Infrastructure group)

- o High: >66% of area affected by 2 exposure parameters / High SVI
- o Medium: 33%-66% of area affected by 2 exposure parameters / Moderate SVI
- $\circ$  Low: <33% of area affected by 2 exposure parameters / Low SVI

#### Adaptive Capacity

- Subjective need community input
- Social Vulnerability Index
- o Ability to relocate building infrastructure
- o The ability to raise structure

- o Accessibility to residents once moved (SVI)
- Land availability
- o Ability to retrofit for flooding (raise generator/sensitive components)

#### Downtown Commercial District

#### Exposure

o Average Score of exposure parameters

Sensitivity (Infrastructure group)

- High: >66% of area affected by 2 exposure parameters / Buildings affected are needed by the community / Cultural significance
- o Medium: 33%-66% of area affected by 2 exposure parameters / Alternatives available
- Low: <33% of area affected by 2 exposure parameters / Buildings affected do not impact the community

#### Adaptive Capacity

- Subjective need community input
- o Economically viable
- o Ability to relocate building infrastructure
- The ability to raise structure
- o Accessibility to residents once moved (SVI)
- Land availability
- Ability to retrofit for flooding (raise generator/sensitive components)

#### Transportation Infrastructure

#### Exposure

- High weight (3): Riverine Flood and Nuisance Flood
- o Med weight (2): Fire, Drought

#### Sensitivity

- High: >50% of structures affected by natural hazards
- Medium: 25% 50% affected by natural hazards
- Low: <25% affected by natural hazards

#### Adaptive Capacity

- Subjective need community input
- o Replacement cost
- o Detour length
- Disruption duration
- FHWA roadway functional classification (roadways with higher functional classification may cause greater system disruptions if damaged)
- Evacuation routes
- o Emergency services/freight route
- Access to food and services (supermarkets, bottled water, prescriptions, batteries, critical goods)
- Historical repair cost
- Access to critical areas (roads that provide the only access to critical areas are more significant to the adaptive capacity of larger response systems)

# Sewer Infrastructure & Utility System Infrastructure (Sewer/Water/Electric/Communications) *Exposure*

- Weighted value (3): Riverine Flood, Nuisance Flood, and Drought
- Weighted value (2): Fire

#### Sensitivity

- High: > 66% Exposure and/or Age >30 yrs. and structural repair needed
- o Medium: 33% 66% Exposure and/or Age 15-30 yrs. and maintenance needed
- Low: >33% Exposure and/or Age <15 and No action needed for repair or maintenance

#### Adaptive capacity

- $\circ$  Waterlines
  - Low = 8" or greater pipe
  - Med = 4" to 6" pipe
  - High = 2" or less diameter pipe
- o Subjective- need community input
- Social Vulnerability Index
- o Ability to relocate utility infrastructure (Ex. From 25-yr to 50-yr floodplain)
- The ability to increase capacity
- o Ability to retrofit infrastructure to be more resilient to flooding

Natural Resources (Streams, Wetlands, Managed Areas, Natural Areas)

#### Exposure

• Average Score of exposure parameters

Sensitivity (Increased flooding due to deforestation or removal of buffers and no ability to replace)

- High: Buffer <50 ft / 50 ft from structure / 50% affected
- Med: Buffer <50 ft and >100 ft / 100 ft from structure / 25%-50%
- $\circ$  Low: Buffer >100 ft / >100 ft from structure / >25%

#### Adaptive Capacity

- o Wetlands/ Open Areas
  - Low = Less than 5 ac.
  - Med = >5 <15 ac.
  - High= >15 ac.
- o Stream
  - Low = Less than 3000 ft
  - Med = >3000 ft and <10,000 ft</p>
  - High = >10,000 ft
- Restorative capacity
- Ability to increase flood capacity
- Alternative use capacity (Ex. Park and floodplain)

## ESTIMATING RISK

In order to estimate risk to critical assets, supplemental data was gathered in addition to what was available from the hazard mitigation and a quantitative tool was utilized.

## Asset Values

The following critical assets and natural infrastructure were assigned a rough estimate of monetary value using the identified methodology. Assets were only valued if they were in Ahoskie's jurisdiction (city limits or ETJ).

Table 2. Risk Estimate Methodology and Sources

Critical Asset or Natural Infrastructure	Methodology and Sources		
Law Enforcement	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)		
Fire and EMS Stations	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS Land Records  Hertford County, NC)		
Government Services	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)		
Food	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)		
Water System	\$57.73 per linear foot of water line (Uni-Bell PVC Pipe Association) + \$7,000 per fire hydrant + \$506,104 per water storage tank (Landmark) + \$57,500 per public water supply well (Landmark) + tax value of water treatment plant (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)		
Wastewater System	\$110 per linear foot of sewer line (Next Level Pipe Lining) + \$250,000 per pump station (Water Level Controls) + \$5,015 per manhole (Buncombe County) + tax value of head station (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC) + refinance value of wastewater treatment plant (Town of Ahoskie)		
Electric System	<ul> <li>\$73.86 per linear foot of electric transmission lines (Power Grid International)</li> <li>+ tax value of electric substations (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)</li> </ul>		
Propane Suppliers         Sum of tax value of each critical asset (Hertford County 2023 Land Records  Hertford County, NC)			
Roads	\$8,650,000 per mile of roadway (NCDOT average cost)		
Bridges \$4,800,000 per bridge (NCDOT average cost from Improving Re Cost Data for NCDOT Highway Bridges, Microsoft Word - FinalReportRP2017-09, ncdot.gov)			
Railroad	\$2,000,000 per mile of railroad (National Academies Press)		
Medical	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS Land Records  Hertford County, NC)		
Schools         Sum of tax value of each critical asset (Hertford County 2023 ta: Land Records  Hertford County, NC)			

Libraries	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			
Community Buildings and Facilities	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			
Downtown Commercial Districts	Sum of tax value of each property in district (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			
Affordable Housing Areas	Sum of tax value of each property (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			
Wetlands	\$76,150.13 per acre for non-coastal wetlands (NC Division of Mitigation Services rate schedule, Current Rate Schedules   North Carolina Department of Environmental Quality)			
Streams	\$740.09 per linear foot (NC Division of Mitigation Services rate schedule, Current Rate Schedules   North Carolina Department of Environmental Quality)			
Parks/Public Land	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			
Managed Areas	Sum of tax value of each critical asset (Hertford County 2023 tax values, GIS / Land Records  Hertford County, NC)			

#### Table 3. Risk Estimate Worksheet

Critical Asset or Natural Number of Critical Assets or nfrastructure Areas at Risk		Estimated Monetary Value		
Law Enforcement	1 building/property	\$1,565,695		
Fire and EMS Stations	2 buildings/properties	\$1,275,844		
Government Services	9 buildings/properties	\$4,144,372		
Food	6 buildings/properties	\$13,863,618		
Water System	224,510 linear feet of water lines, 240 fire hydrants, 3 water storage tanks, 7 water supply wells	\$16,561,774		
Wastewater System	244,549 linear feet of sewer lines, 878 manholes, 32 pump stations, 1 wastewater treatment plant, 1 head station	\$51,357,670		
Electric System	284,592 linear feet of electric lines, 1 electric substation	\$24,082,377		
Propane Suppliers	3 buildings/properties	\$1,002,286		

Roads	53.9 linear miles	\$466,235,000	
Bridges	3 buildings/properties	\$14,400,000	
Railroad	4.83 linear miles	\$9,659,900	
Medical	14 buildings/properties	\$34,746,625	
Schools	5 buildings/properties	\$36,541,757	
Libraries	1 building/properties	\$128,393	
Community Buildings and Facilities	3 buildings/properties	\$1,258,036	
Downtown Commercial District	113 tax parcels (most parcels contain buildings, some do not)	\$8,388,538	
Affordable Housing Areas	504 tax parcels (some parcels contain multi-unit housing)	\$39,365,170	
Wetlands	1,071.4 acres	\$81,587,249	
Streams	75,543 linear feet	\$55,908,619	
Parks/Public Land	6 properties	\$2,470,814	
Managed Areas	2 properties \$99,596		

# Refer to Appendix C for Risk and Vulnerability Assessment Materials.

# **PROJECT PORTFOLIO**

The assembled project portfolio details eight (8) shovel-ready priority projects, addressing hazards, type of strategy area and approach, priority rating, potential sources of funding, cost and project duration estimates, project map(s), project description, and project scope. These projects were developed to coincide with the top priority solution that would help make the community more resilient to the hazards identified: riverine flooding, nuisance flooding, drought, and wildfire. One naturebased or hybrid solution project is eligible to move forward into Phase 3 of the RCCP, Engineering and Design. The Town of Ahoskie CAT, along with stakeholders, choose to move forward with the Stormwater Action Plan. This will be combined with the Upgrade Stormwater System project, the most popular project based upon Phase 2 Open House input, to move forward into Phase 4 implementation. Steps taken to assemble the project portfolio that led to the community and the CAT choosing this project are outlined below.



# IDENTIFY A SUITE OF POTENTIAL PROJECT SOLUTIONS

The first step to assembling the project portfolio was to identify a suite of potential solutions. The contractors helped the CAT identify 35 potential solutions. The Albemarle Sound Hazard Mitigation Strategies identified an additional 21 potential solutions that could also be carried forward. These solutions were categorized by Planning/Policy, Green and Hybrid Infrastructure Solutions, and Hard/Grey Infrastructure Solutions and presented to the CAT at Meeting 4. Each CAT member then identified their top solutions.

# CONSOLIDATE AND PRIORITIZE PROJECTS

The second step in assembling the project portfolio was to consolidate and prioritize the project solutions. The CAT identified nine (9) solutions from the suite of potential solutions that could move forward based on the STAPLEE Method and a simple benefit/cost rating system to help consolidate and prioritize all the potential project solutions. The STAPLEE Method assesses the social, technical, administrative, political, legal, economic, and environmental aspects and potential impacts of each project solution. The benefit/cost rating system used a high/medium/low scoring system to predict benefits and costs of each project solution.

Potential priority projects were presented to the CAT during the 5<sup>th</sup> meeting where the STAPLEE and benefit/cost rating metrics were reviewed and finalized. These projects were then brought to the community for additional feedback at the Phase 2 Public Open House. The Town of Ahoskie along with the CAT identified eight (8) priority projects to be presented in the project portfolio.

#### **Priority Projects**

- Stormwater Action Plan and Stormwater System Upgrade (combined project to advance to Phase 3 and Phase 4 applications)
- Backup Generators at Critical Facilities
- Stream Cleanout

- Green Stormwater Infrastructure at the R.L. Vann Center
- Retrofit or Relocate Town Hall
- Green Stormwater Infrastructure at Public Housing Developments
- Stormwater Wetland at the Ballfields in Ahoskie Creek Recreation Complex
- Green Stormwater Infrastructure on Town-owned property

# Stormwater Action Plan and Stormwater System Upgrade (combined project to advance to Phase 3 and Phase 4 applications)

Phase 4 applications)					
North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM	TOWN OF AHOSKIE				
	Stormwater A	ction Plan – Stormwater System Upgrade			
Project Summary Project Description		Develop a Stormwater Action Plan combined with strategically upgrading the stormwater system through improved and expanded infrastructure. The project will establish mapping and condition assessments for stormwater system components and outfalls with a focus on known problem areas and areas identified via a desktop analysis. The project will promote proactive stormwater maintenance through development of interactive mapping tools and maintenance guidance. The project will encourage stormwater quality awareness through public outreach efforts and produce construction drawings for a priority project.			
Project Scope		Engineering/Design - Develop a Stormwater Action Plan. This plan will complete a stormwater ground assessment and surface hydrology analysis that will be incorporated into an online mapping system that can submit real-time data to analyze, prioritize, and take action on a problem area. The plan will also incorporate a maintenance plan that will be tracked by the online tool. The plan will include assessing and documenting the type and location of stormwater infrastructure, collecting and analyzing data on the hydraulic flow, assessing stormwater system capacity and functionality, and identifying projects to upgrade the system and improve the ability of the system to convey water and/or improve water quality. Both hard/grey infrastructure and green/nature-based solutions will be considered in the Stormwater Action Plan. A public education campaign on stormwater responsibilities will also be included. Design and Construction drawings will be completed for one project chosen in partnership with the community.			
		<ul> <li>Hydro Analysis / vulnerability assessment</li> <li>Field Work</li> <li>Natural Resource Technical Report</li> <li>Project Prioritization/Recommendations</li> <li>Arc Online Tool</li> <li>Stormwater Maintenance Manual</li> <li>Public Education Campaign – Stormwater Responsibilities</li> <li>Permitting Due Diligence</li> <li>Project Surveys / Utility Locations</li> <li>Project Engineering/Design</li> </ul>			
		Implementation - Strategically upgrade the stormwater system through pipe replacements (upsizing where needed), increasing the size and quantity of			

	culverts and catch basins, redefining ditches, implementing backflow preventors, installing bioswales, bioretention cells, etc. The previously developed Stormwater Action Plan will determine project prioritization. - Permitting - Construction - Construction Administration - Construction Inspections
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) Flooding (Nuisance, Riverine)
Type of Solution/Strategy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure) <u>Stormwater Action Plan</u> Planning Green and Hybrid Solutions <u>Stormwater System Upgrade</u> Green and Hybrid Solutions
Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Build Adaptive Capacity Accommodate
Project Estimated Cost	Engineering/Design - \$500,000 Implementation - \$200,000 - \$750,000 (per stormwater retrofit)
Potential Implementation Funding Sources	<ul> <li>Potential Sources for Project/Action Implementation</li> <li><u>Stormwater Action Plan</u> <ul> <li>NC Resilient Coastal Communities Program Phase 3</li> <li>Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Capability and Capacity Building (C&amp;CB) Grant</li> <li>NC Department of Environmental Quality Water Resources Development Grant (WRDG)</li> </ul> </li> </ul>
	<ul> <li>Stormwater System Upgrade         <ul> <li>NC Resilient Coastal Communities Program Phase 4</li> <li>Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant</li> <li>Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance (FMA) Grant</li> <li>NC Environmental Enhancement Grant (EEG)</li> <li>NC Land and Water Fund Grant</li> </ul> </li> </ul>

	C • N • H	<ul> <li>Development Grant (WRDG)</li> <li>NC Department of Environmental Quality 319 Grant</li> <li>HUD Community Development Block Grant – Mitigation (CDBG-MIT)</li> </ul>			
Project Estimated Timeline	3 – 10 years (project may be completed in phases)				
Priority Rating	High				
Potential Submission for RCCP Phase 3	•	Yes		No	Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.
Project Map					



# Backup Generators at Critical Facilities

PROGRAM	TOWN OF AHOSKIE Backup Generators at Critical Facilities	
Project Summary		
Project Description	The purchase and installation of backup generators at critical facilities.	
Project Scope	Current generator needs include public water supply wells (7), sewer lift stations (32), and Town Hall (no generators in place). Facilities needing replacement generators include the Police Department, Public Works building, and the Fire Department.	
	Establish back-up generators at all identified critical facilities and replace aging generators that are no longer operating efficiently. This would include developing a regularly scheduled equipment evaluation and maintenance method to ensure the generators continue to meet operational demands at town facilities.	
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) <ul> <li>Flooding (Nuisance, Riverine)</li> <li>Wildfire</li> </ul>	
Type of Solution/Strategy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure) Hard/Grey Infrastructure	
Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Build Adaptive Capacity	
Project Estimated Cost	1 – 100 kw: \$50,000 each with installation 42 – 50 kw generators: \$35,000 each with installation	
Potential Implementation Funding Sources	<ul> <li>Potential Sources for Project/Action Implementation</li> <li>FEMA Hazard Mitigation Grant Program (HMGP)</li> <li>FEMA Pre-Disaster Mitigation Grant Program</li> <li>Golden Leaf Grant</li> <li>HUD Community Development Block Grant – Mitigation (CDBG-MIT)</li> </ul>	
Project Estimated Timeline	1-2 years	
Priority Rating	High	

Town of Ahoskie Resilience Strategy

#### June 2024



#### Stream Cleanout

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM	TOWN ( Stream Cle	OF AHOSKIE anout
Project Summary		
Project Description		Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries. This would include Ahoskie Creek and its tributaries with a primary focus on Ahoskie Creek to increase drainage flow within the watershed.
Project Scope		Plan and implement a stream cleanout using the U.S. Army Corps of Engineers 1992 Woody Removal Guide and the NRCS Conservation Practice Standard – Clearing and Snagging (code 326) document. Only those log accumulations that are obstructing the flow of water shall be removed. This includes downed trees, broken tops and woody/vegetative debris that has fallen into the stream beds and is restricting water flow and/or contributing to flooding with heavy rains. Minimal disturbance to stream banks is required, therefore; hand-operated equipment will be the first choice in removal, such as winches, chain saws, shallow draft barge, or boat. Current requirements include all debris located within the 100-year flood plain must be removed from the flood plain or place a minimum of 30' from the top of the stream bank and strapped in place. Beavers will be eradicated, and dams will be removed in the cleanout process.
Hazard(s) Addressed by	Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) Flooding (Nuisance, Riverine)
Type of Solution/Strateg	gy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure) Hybrid/Green Infrastructure Solution
Type of Strategy Approa	ich	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) <ul> <li>Build Adaptive Capacity</li> <li>Accommodate</li> </ul>
Project Estimated Cost		Up to \$25 / linear foot (currently StRAP funds pay \$10.80 / linear foot for coastal streams)
Potential Implementation Funding Sources		<ul> <li>Potential Sources for Project/Action Implementation</li> <li>NC Dept. of Agriculture Streamflow Rehabilitation Assistance Program (StRAP)</li> <li>NCDEQ Stream Debris Removal Program</li> </ul>

28

Town of Ahoskie Resilience Strategy

June 2024



#### Green Stormwater Infrastructure at the R.L. Vann Center

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM	TOWN OF AHOSKIE Green Stormwater Infrastructure at R.L. Vann Center				
Draigat Churcher arth					
Project Summary Project Description	Engineer, design, and construct low impact development (LID) stormwater infrastructure at the R.L. Vann Community Resource Center.				
Project Scope	<u>Engineering/Design</u> – Identify appropriate projects and complete designs for a LID stormwater infrastructure facility at the R.L. Vann Center. This important resource is located in Ward B. and provides support and assistance to the surrounding community. Elements of this project could include stormwater wetlands, rain gardens, bioretention cells, and vegetative plantings. This project will include an educational component such as signage and the development of materials for community residents, local officials and developers.				
	<ul> <li>Hydro analysis</li> <li>Natural Resources Assessment</li> <li>Concept Planning</li> <li>Engineering/Design</li> <li>Permitting Due Diligence</li> </ul>				
	Implementation – Construct projects identified in the engineering/design phase. Elements of this project could include stormwater wetlands, rain gardens, bioretention cells, and vegetative plantings.				
	<ul> <li>Permitting</li> <li>Construction</li> <li>Construction Administration</li> <li>Construction Inspections</li> </ul>				
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) <ul> <li>Flooding (Nuisance, Riverine)</li> </ul>				
Type of Solution/Strategy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure) Green and Hybrid Solutions				
Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Accommodate				
Project Estimated Cost	Engineering/Design – \$65,000				
	Implementation	<u>n</u> – \$175,000	) – \$250,000		
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Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation Engineering/Design				
	<ul><li>NC Res</li><li>NC Env</li><li>NC Land</li></ul>	ilient Coasta /ironmental E d and Water	Enhancement G		3
	<ul><li>NC Env</li><li>NC Land</li></ul>	 iilient Coasta rironmental E id and Water	Enhancement G		4
Project Estimated Timeline	2-3 years (engir	neering/desi	gn and constru	ction)	
Priority Rating	High				
Potential Submission for RCCP Phase 3	♦ Ye	25		No	Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.
Project Map					



## Retrofit or Relocate Town Hall

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM	TOWN OF AHOSKIE				
	Retrofit or Relocate Town Hall				
Project Summary					
Project Description		Retrofit or relocate Town Hall to mitigate flood events.			
Project Scope		<u>Engineering/Design</u> – Develop a Feasibility Study which conducts a facility assessment to determine the best solution to resolve basement flooding of the existing Town Hall. The resulting engineering/architecture/design scope will vary depending on assessed needs. The building could possibly be retrofitted, or a site for relocation of Town Hall may be determined. Flooding has periodically required that the Town Hall be closed, affecting town operations. In addition, flooding has caused mold in the basement and the need for remediation which could occur again if another major storm floods the basement, constituting a public health risk. The town's preference is to retrofit the existing historic Town Hall.			
		<ul> <li>Facility Assessment</li> <li>Feasibility Study</li> <li>Engineering/Design (Retrofit for flooding relief or new building at alternative site. Architectural and landscaping design included if new site.)</li> </ul>			
		<u>Implementation</u> – The retrofitting or relocation of Town Hall, to be determined by the Feasibility Study and engineering/design phases.			
		<ul> <li>Permitting</li> <li>Construction</li> <li>Construction Administration</li> <li>Construction Inspections</li> </ul>			
Hazard(s) Addressed by	Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) Flooding (Nuisance, Riverine)			
Type of Solution/Strategy Area		List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure) Hard/Grey Infrastructure			

Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Avoid Accommodate Retreat Protect		
Project Estimated Cost	<u>Feasibility Study</u> - \$75,000 <u>Engineering/Architectural/Design</u> – \$120,000 – \$400,000 Implementation – \$250,000 - \$3,500,000		
Potential Implementation Funding Sources	<ul> <li>Potential Sources for Project/Action Implementation</li> <li>FEMA Flood Mitigation Assistance (FMA) Grant</li> <li>FEMA Building Resilient Infrastructure in Communities (BRIC) Grant</li> <li>FEMA Hazard Mitigation Grant Program (HMGP)</li> <li>Golden Leaf Foundation</li> <li>HUD Community Development Block Grant – Mitigation (CDBG-MIT)</li> </ul>		
Project Estimated Timeline	1-3 years		
Priority Rating	High		
Potential Submission for RCCP Phase 3 Project Map	Yes Yes Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.		



# Green Stormwater Infrastructure at Public Housing Developments

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM Project Summary Project Description	TOWN OF AHOSKIE Green Stormwater Infrastructure at Public Housing Developments Implement green stormwater infrastructure throughout public housing developments owned by Ahoskie Housing Authority. 1.) Pierce Ave. / Burden St. / Vinson Dr. 2.) Parker
Project Scope	Ave. / E First St. Engineering/Design – Assess both public housing developments owned by the Ahoskie Housing Authority and develop Feasibility Studies to identify appropriate projects to relieve flooding. Complete engineering/design for identified solutions which could include hard/grey infrastructure elements (raising houses) and green stormwater infrastructure. Green stormwater infrastructure could include permeable parking, bioretention cells, etc. Educational signage will also be included. Feasibility Studies will be followed by engineering/design of construction ready projects for the two public housing developments.
	<ul> <li>Site Assessment</li> <li>Hydro Analysis</li> <li>Feasibility Study</li> <li>Concept Planning</li> <li>Engineering/Design</li> <li>Permitting Due Diligence</li> </ul>
	<ul> <li>projects. Specific projects and placement will be determined during Feasibility Study and engineering/design phases. Educational signage will also be included.</li> <li>Permitting <ul> <li>Construction</li> <li>Construction Administration</li> <li>Construction Inspections</li> </ul> </li> </ul>
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) <ul> <li>Flooding (Nuisance, Riverine)</li> </ul>
Type of Solution/Strategy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature- Based] Solutions, Hard/Grey Infrastructure) Green and Hybrid Solutions

Eng Potential Implementation Po	plementation tential Source gineering/Des NC Resil NC Envir NC Land NC Wate FEMA Fl	sign – \$150,000 - \$ – \$200,000 - \$1,00 s for Project/Actio sign lient Coastal Comm ronmental Enhance l and Water Fund G er Resources Devel	00,000 / project on Implementati nunities Progran ement Grant (EE Grant lopment Grant	on n Phase 3	
Potential Implementation Po	tential Source gineering/Des NC Resil NC Envir NC Land NC Wate FEMA Fl	es for Project/Actio sign lient Coastal Comm ronmental Enhanco I and Water Fund G er Resources Devel	on Implementati nunities Progran ement Grant (EE Grant lopment Grant	on n Phase 3	
<u>Im</u>	<ul> <li>Potential Sources for Project/Action Implementation</li> <li><u>Engineering/Design</u></li> <li>NC Resilient Coastal Communities Program Phase 3</li> <li>NC Environmental Enhancement Grant (EEG)</li> <li>NC Land and Water Fund Grant</li> <li>NC Water Resources Development Grant</li> </ul>				
Timeline	5 years (engin	azard Mitigation G eering/design and			
Priority Rating Hig	gh				
Potential Submission for RCCP Phase 3	•	Yes		No	Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.



## Stormwater Wetland at the Ballfields in Ahoskie Creek Recreation Complex

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM	TOWN OF AHOSKIE			
Project Summary Project Description		Design and construct a stormwater wetland west of the ballfields at the Ahoskie Creek Recreation Complex.		
Project Scope		<ul> <li><u>Engineering/Design</u> – The design of a forested wetland (4 acres) with a 1,200 ft trail system that mimics the functions of natural wetlands and uses physical, chemical, and biological processes to treat stormwater pollution. Educational signage will be included. This feature will help relieve sogginess on the ball fields after heavy rain events along with improving water quality into Ahoskie Creek.</li> <li>Survey <ul> <li>Natural Resources Assessment</li> <li>Concept Design</li> <li>Hydro Analysis</li> <li>Engineering/Design</li> <li>Permitting Due Diligence</li> </ul> </li> </ul>		
		<ul> <li><u>Implementation</u> – Construct a forested wetland to reduce flooding and improve water quality. Include a trail system with educational signage. Improvements could include grading, planting trees and other vegetation.</li> <li>Permitting</li> <li>Construction</li> </ul>		
		<ul> <li>Construction Administration</li> <li>Construction Inspections</li> <li><u>Monitoring</u> – 5 yr. monitoring period to assess the success of the wetland system. This is also a mitigation eligibility requirement since the Ahoskie Recreation Complex is a FEMA buyout property. The wetland can also be used to provide wetland banking mitigation credits should the town need credits to offset other development projects.</li> </ul>		
		<ul> <li>Hydrology Monitoring</li> <li>Vegetation Quadrate Monitoring</li> <li>Yearly Reports</li> </ul>		

Town of Ahoskie Resilience Strategy

[Nature-Based] Solutions, Hard/Grey Infrastructure]         • Green and Hybrid Solutions         Type of Strategy Approach         List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreated Build Adaptive Capacity)         • Build Adaptive Capacity)         • Build Adaptive Capacity)         • Project Estimated Cost         Engineering/Design = \$130,000         Implementation = \$500,000 - \$1,200,000         Monitoring = \$25,000 - \$35,000 / year         Potential Implementation Funding         Potential Sources for Project/Action Implementation         Engineering/Design         • NC Resilient Coastal Communities Program Phase 3         • NC Resilient Coastal Communities Program Phase 4         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Communities Program Phase 4         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)         • NC Cesilient Coastal Communities Program Phase 4         • NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)         • NC Land and Water Fund Grant         • NC DEQ Water Resources Dev. Grant (WRDG)     <	Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) <ul> <li>Flooding (Nuisance, Riverine)</li> </ul>			
Build Adaptive Capacity)       Build Adaptive Capacity         Project Estimated Cost       Engineering/Design – \$130,000         Implementation – \$500,000 – \$1,200,000       Monitoring - \$25,000 - \$1,200,000         Monitoring - \$25,000 - \$35,000 / year       Potential Implementation         Potential Implementation Funding       Potential Sources for Project/Action Implementation         Sources       Engineering/Design         • NC Resilient Coastal Communities Program Phase 3       NC Environmental Enhancement Grant (EEG)         • NC Environmental Enhancement Grant (EEG)       • NC Environmental Enhancement Grant (WRDG)         Implementation       • NC Resilient Coastal Communities Program Phase 4         • NC DEQ Water Resources Dev. Grant (WRDG)       • NC Environmental Enhancement Grant (EEG)         • NC Land and Water Fund Grant       • NC DEQ Water Resources Dev. Grant (WRDG)         Project Estimated Timeline       2-3 years (engineering/design and construction)         Priority Rating       High         Potential Submission for RCCP Phase 3       No	Type of Solution/Strategy Area				
Implementation - \$500,000 - \$1,200,000         Monitoring - \$25,000 - \$35,000 / year         Potential Implementation Funding Sources       Potential Sources for Project/Action Implementation         Engineering/Design • NC Resilient Coastal Communities Program Phase 3 • NC Environmental Enhancement Grant (EEG) • NC Land and Water Fund Grant • NC DEQ Water Resources Dev. Grant (WRDG)         Implementation • NC Resilient Coastal Communities Program Phase 4 • NC Environmental Enhancement Grant (EEG) • NC Land and Water Fund Grant • NC DEQ Water Resources Dev. Grant (WRDG)         Project Estimated Timeline       2-3 years (engineering/design and construction)         Priority Rating       High	Type of Strategy Approach	<ul> <li>Build Adaptive Capacity</li> </ul>			
Sources       Engineering/Design         • NC Resilient Coastal Communities Program Phase 3         • NC Environmental Enhancement Grant (EEG)         • NC Land and Water Fund Grant         • NC DEQ Water Resources Dev. Grant (WRDG)         Implementation         • NC Resilient Coastal Communities Program Phase 4         • NC DEQ Water Resources Dev. Grant (WRDG)         Implementation         • NC Resilient Coastal Communities Program Phase 4         • NC Environmental Enhancement Grant (EEG)         • NC Land and Water Fund Grant         • NC DEQ Water Resources Dev. Grant (WRDG)         Project Estimated Timeline         2-3 years (engineering/design and construction)         Priority Rating         High         Project must be a nature-based solution or hybrid solution to based	Project Estimated Cost	Implementation – \$500,000 – \$1,200,000			
Priority Rating High Potential Submission for RCCP Phase 3 Ves No Project must be a nature-based solution or hybrid solution to be		<ul> <li>Engineering/Design         <ul> <li>NC Resilient Coastal Communities Program Phase 3</li> <li>NC Environmental Enhancement Grant (EEG)</li> <li>NC Land and Water Fund Grant</li> <li>NC DEQ Water Resources Dev. Grant (WRDG)</li> </ul> </li> <li>Implementation         <ul> <li>NC Resilient Coastal Communities Program Phase 4</li> <li>NC Environmental Enhancement Grant (EEG)</li> <li>NC Land and Water Fund Grant</li> </ul> </li> </ul>			
Potential Submission for RCCP Phase 3 Ves No Project must be a nature-based solution or hybrid solution to be	Project Estimated Timeline	2-3 years (engineering/design and construction)			
	Priority Rating	High			
considered for RCCP Phase 3.	Potential Submission for RCCP Phase 3	• Yes No Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.			



## Green Stormwater Infrastructure on Town-owned property

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM Project Summary Project Description	TOWN OF AHOSKIE Green Stormwater Infrastructure on Town-owned Property Complete a Feasibility Study with concept designs followed by strategically designing and constructing green stormwater infrastructure on Town-owned property.
Project Scope	Engineering/Design – Develop a Feasibility Study including site analysis of all town owned properties, identification of appropriate projects and concept designs as the first stage. Complete engineering/design for green stormwater infrastructure on town-owned property as the second stage to develop construction ready designs. There are several parcels where impermeable surfaces could be removed, bioretention cells could be installed, trees could be planted, stormwater infiltration medians, permeable parking, etc.         -       Site Analysis       -         -       Perasibility Study       -         -       Site Analysis       -         -       Permitting Due planted       -         -       Premitting Due Diligence       -         Implementation – Construct identified green stormwater infrastructure projects. Specific projects and placement will be determined during Feasibility Study and engineering/design phases.         -       Permitting       -         -       Permitting       -
	<ul> <li>Construction Administration</li> <li>Construction Inspections</li> </ul>
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) <ul> <li>Flooding (Nuisance, Riverine)</li> </ul>
Type of Solution/Strategy Area	List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature- Based] Solutions, Hard/Grey Infrastructure) Green and Hybrid Solutions
Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Accommodate

Project Estimated Cost	Feasibility Study	<u>/</u> -\$100,000			
	Engineering/De	<u>sign</u> – \$60,000 - \$3	175,000 (per pro	ject)	
	<u>Implementation</u>	<u>n</u> – \$200,000 – \$1,	000,000 (per pro	oject)	
Potential Implementation Funding Sources	Engineering/De NC Resi NC Envi NC Land NC Wat Implementation NC Resi	lient Coastal Comi ronmental Enhand and Water Fund er Resources Deve	munities Prograr cement Grant (El Grant elopment Grant munities Prograr	n Phase 3 EG) n Phase 4	
		d and Water Fund er Resources Deve			
Project Estimated Timeline	2-3 years (engir	eering/design and	d construction)		
Priority Rating	High				
Potential Submission for RCCP Phase 3	•	Yes		No	Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.
Project Map					





# <u>Appendix A</u>

**Community Action Team Materials** 



**Community Action Team** 

#### **Community Action Team Members:**

Jennifer Bracy, Town Clerk, Certified Floodplain Manager (CFM), Interim Town Manager – jenniferbracy@ahoskienc.gov (Champion) (252) 332-5146, administration extension

Morgan Askew, Planning/Zoning Administrator and Floodplain Manager – morganaskew@ahoskienc.gov (252) 862-8402

David Hunt, Councilman – davidhunt@ahoskienc.gov (252) 642-9725

Roy Sharpe, Councilman – rhueplace@hotmail.com (252) 287-9324

Mike Bradley, Fire Chief – georgebradley@ahoskienc.gov

Hunter Smith, Assistant Public Works Director – csmith@ahoskienc.gov (252) 332-5165

Pat Byrd, Christian Women's Job Corp. – pbyrdcwjc@gmail.com (252) 209-4301

Paul Moore, Pastor of The Rock Church – prmoore58@yahoo.com (252) 209-7537

Keith Urquhart, Your Cultural Connection – keith7sherry25@yahoo.com (252) 370-4740

#### **Contractors:**

Mid-East Commission:

Jamie Heath, Planner (primary contact) jheath@mideastcom.org (252)296-1656 Lisa Williams, Disaster Recovery Coordinator lwilliams@mideastcom.org (252)974-1843

Seth Laughlin, Planner slaughlin@mideastcom.org (252)946-8043

RK&K:

Tris Ford, Project Manager (primary contact) tford@rkk.com (919)653-7335

Gordon Marsh, Project Scientist gmarsh@rkk.com (919)653-7343

Doug Keller, Project Engineer dkeller@rkk.com (919)653-7375

#### **NC Division of Coastal Management:**

Mackenzie Todd, Coastal Resilience Specialist mackenzie.todd@deq.nc.gov (252)515-5434

Kasen Wally, Coastal Resilience Specialist kasen.wally@deq.nc.gov (252)515-5424

#### NC Sea Grant:

Sarah Spiegler, Coastal Resilience Specialist sespiegl@ncsu.edu (252)222-6307

Cayla Cothron, Coastal Planning Specialist cdcothro@ncsu.edu (919)515-1686

North Carolina Resilient Coastal Communities Program



**Town of Ahoskie** 

**Community Action Team - Meeting Framework** 

Each meeting is anticipated to be approximately 2-hours in duration. Meeting dates, times and locations are noted below. The review of relevant RCCP materials and CAT coordination will occur between each meeting. Meeting agendas will be provided in advance of each meeting. Meeting topics are subject to change as additional topics or needs are identified.

PHASE 1	COMMUNITY ENGAGEMENT AND RISK/VULNERABILITY ASSESSMENT
PHASE I         MEETING 1         Date: Thurs. Oct. 5, 2023         Time: 2:00 – 4:00 pm         Location: Council Chambers at         Ahoskie Fire Dept., 301 S.         Martin Luther King Jr. Dr.         Ahoskie, NC 27910	<ul> <li>COMMONITY ENGAGEMENT AND RISK/VOLNERABILITY ASSESSMENT</li> <li>VISION AND GOALS, EXISTING PLANS &amp; COMMUNITY ENGAGEMENT</li> <li>Phase 1, Step 1: Form Community Action Team</li> <li>A. Introduce team members and contractors.</li> <li>Phase 1, Step 2: Review Existing Plans and Efforts</li> <li>A. Review existing plans, ordinances, policies, and programs, including Pamlico Sound Regional Hazard Mitigation Plan.</li> <li>B. Compile information on critical assets, natural resources, social vulnerability, risk assessments, and resiliency related projects.</li> <li>C. Identify and document additional data and resources necessary to complete the community's Risk and Vulnerability Assessment.</li> <li>Phase 1, Step 3: Set Vision and Goals</li> <li>A. Review community plans and Hazard Mitigation Plan for resiliency vision and goal statements.</li> <li>B. Identify example resiliency vision and goals.</li> <li>Phase 1, Step 4: Develop a Community Engagement Strategy</li> <li>A. Identify audiences/stakeholders, including vulnerable populations.</li> <li>B. Identify tools, techniques, and strategies for informing and engaging the community, including a targeted approach for reaching vulnerable populations.</li> <li>C. Develop a community engagement strategy and schedule.</li> </ul>
MEETING 2 Date: Thurs. Nov. 2, 2023 Time: TBD Location: Council Chambers at Ahoskie Fire Dept., 301 S. Martin Luther King Jr. Dr. Ahoskie, NC 27910	<ul> <li>EXISTING CONDITIONS - CRITICAL ASSETS &amp; NATURAL INFRASTRUCTURE</li> <li>Phase 1, Step 5: Map Critical Assets and Natural Infrastructure</li> <li>Review inventory of critical assets and natural infrastructure.</li> <li>Review and discuss critical assets, natural resources, social vulnerability, available risk assessments, and resiliency related projects.</li> <li>Review draft mapping of critical assets and natural infrastructure.</li> <li>Select critical assets and natural infrastructure to include in the RCCP Risk and Vulnerability Assessment.</li> <li>Discuss hazards to include in the Risk and Vulnerability Assessment.</li> </ul>

#### MEETING 3

Date: Thurs. TBD

*Time:* TBD

PHASE 2

Time: TBD

MEETING 4 Date: Thurs. TBD

*Location:* Council Chambers at Ahoskie Fire Dept., 301 S. Martin Luther King Jr. Dr. Ahoskie, NC 27910

## **RISK & VULNERABILITY ASSESSMENT & PUBLIC MEETING PLANNING**

#### Phase 1, Step 6: Conduct Risk and Vulnerability Assessment

- A. Identify and map the hazards.
  - Review hazard mapping including hazards overlaid with critical assets and natural resources.
  - B. Assess Vulnerability
    - Review vulnerability index to measure exposure, sensitivity and adaptive risk for critical assets and natural infrastructure.
    - 2. Complete vulnerability worksheets.
- C. Estimate Risk
  - 1. Complete quantitative risk worksheets.
- Community Engagement: Plan a Public Open House to engage the community during Phase 1. Two-week public comment period required before moving into Phase 2.

## PLANNING, PROJECT IDENTIFICATION, AND PRIORITIZATION

## SUITE OF POTENTIAL STRATEGIES

Phase 2, Step 1: Identify a Suite of Potential Solutions

- A. Review the community's plans and other local sources for previously identified projects.
- B. Brainstorm a suite of potential solutions.
- C. Capture a suite of innovative solutions that can be used to apply for funding or self-funding.
- D. Link various strategies to the Phase I Risk Assessment with those being most vulnerable or most at risk
- E. Collaborate to further define the solutions.
- F. Discuss development of resiliency projects and actions portfolio.

#### MEETING 5

Date: Thurs. TBD

*Time:* TBD

- PLANNING Phase 2, Step 2: Consolidate and Prioritize Projects
- A. Describe strategies.
  - B. Evaluate strategies and their feasibility (STAPLEE method).

PRELIMINARY PROJECT PRIORITIZATION & PUBLIC MEETING

- C. Conduct an informal cost-benefit analysis to review proposed strategies.
- D. CAT to review strategies and discuss preliminary project priorities.
- Community Engagement: Plan a Public Open House to engage the community during Phase 2 and obtain input on strategies and priorities. One-week public comment period following Open House.

Ahoskie Fire Dept., 301 S. Martin Luther King Jr. Dr. Ahoskie, NC 27910

Location: Council Chambers at

Location: Council Chambers at

Ahoskie Fire Dept., 301 S.

Martin Luther King Jr. Dr.

Ahoskie, NC 27910

#### MEETING 6

*Date:* Thurs. TBD

*Time:* TBD

Location: Council Chambers at Ahoskie Fire Dept., 301 S. Martin Luther King Jr. Dr. Ahoskie, NC 27910 

## PUBLIC INPUT & DRAFT RESILIENCE STRATEGY ELEMENTS

Phase 2, Step 2: Consolidate and Prioritize Projects (continued)

- A. Consider public input and select priority projects.
- B. Identify at least five (5) priority projects for final project portfolio.
- C. Discuss project sites and details for each priority project.
- D. Collaborate on priority project templates.

## MEETING 7

Date: Thurs. TBD

*Time:* TBD

Phase 2, Step 3: Develop the Resilience Strategy Document

**RESILIENCE STRATEGY DOCUMENT** 

- A. High level review of Resilience Strategy document.
- *Location:* Council Chambers at Ahoskie Fire Dept., 301 S. Martin Luther King Jr. Dr. Ahoskie, NC 27910
- B. Review priority project portfolio.
  C. Discuss RCCP Phase 3 and 4 application process.
- D. Pick one nature-based or hybrid project to apply for Phase 3 & 4 funding.
  - E. Vote on endorsement of Resilience Strategy document.

## RESILIENCY STRATEGY DOCUMENT

Following Meeting 6, the Contractor team will develop the Town of Ahoskie Resilience Strategy Document. Elements of the document will be shared with the CAT as developed throughout the planning process. The CAT will be provided the entire draft Resilience Strategy Document for review and comment before the plan is finalized.

> Thank you for participating on the Town of Ahoskie Community Action Team! We appreciate your involvement as we plan for a more resilient community.



Community Action Team - Meeting #1

## AGENDA

Thursday, Oct. 05, 2023, 2:00 - 4:00 PM

Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr. Drive, Ahoskie, NC 27910

2:00 – 2:15 PM	Introduction to Resilient Coastal Communities Program
	<ul> <li>Introduction of contractors and team members</li> <li>Review of Resilient Coastal Communities Program</li> <li>Review of Community Action Team meeting schedule and tasks         <ul> <li>See Community Action Team Meeting Framework document</li> </ul> </li> </ul>
2:15 – 2:30 PM	Review of Existing Plans and Ordinances
2:30 – 2:50 PM	Community Vision Statement Exercise
	<ul> <li>Review Vision Statements from adopted plans and other vision statement examples</li> <li>Exercise: Community Vision Statement</li> </ul>
2:50 – 3:15 PM	Community Goals Exercise
	<ul> <li>Review goals from adopted plans and other resiliency goal examples</li> <li>Goals should address all three points; economic, environmental, social</li> <li>Exercise: Community Goals</li> </ul>
3:15 – 3:30 PM	Social Vulnerability Data
3:30 – 3:50 PM	Community Engagement Strategy
	<ul> <li>Public Survey</li> <li>Public Open House</li> <li>Strategies to engage the community, including vulnerable populations</li> </ul>
3:50 – 4:00 PM	Discussion / Adjournment



Community Action Team - Meeting #1

## MEETING SUMMARY THURSDAY, OCTOBER 5, 2023, 2:00 PM - 4:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

#### Attendees:

- Jamie Heath, Mid-East Commission
- Tris Ford, RK&K
- Sarah Spiegler, NC Sea Grant
- Mackenzie Todd, NC Division of Coastal Management
- Leigh Etheridge, Town of Ahoskie
- Roy Sharpe, Town of Ahoskie
- David Hunt, Town of Ahoskie
- Hunter Smith, Town of Ahoskie
- Pat Byrd, RCCWTC
- Morgan Askew, Town of Ahoskie
- John Rawls, Town of Ahoskie
- Jennifer Bracy, Town of Ahoskie

#### **Meeting Purpose:**

- Introduction of contractors and team members
- Review of Resilient Coastal Communities Program
- Review of Community Action Team meeting schedule and tasks
- Review of existing plans and ordinances
- Review vision statements from adopted plans and other vision statement examples
- Exercise: Community Vision Statement
- Review goals from adopted plans and other resiliency goal examples
- Exercise: Community Goals
- Review social vulnerability data
- Plan Community Engagement Strategy

#### Notes:

- All team members introduced themselves.
- Jamie Heath presented overview of Resilient Coastal Communities Program.
- Existing plans and ordinances were reviewed.
- Example vision statements were reviewed.



- The Community Vision Statement exercise was completed and worksheets were collected. Jamie Heath stated draft vision statement would be made available for comment via email.
- Example goals were reviewed.
- The Community Goals exercise was completed and worksheets were collected. Jamie Heath stated draft goals and objectives would be made available for comment via email.
  - There was a question on whether team members not able to attend would be able to submit a worksheet. Jamie Heath stated she would follow up with them to request worksheets by email.
- Social vulnerability data was reviewed.
  - Center for Disease Control (CDC) Social Vulnerability Index data was reviewed.
    - Socioeconomic status Group agreed that SVI seemed accurate.
    - Household characteristics Group agreed that SVI seemed accurate.
    - Racial and ethnic minority Group agreed that SVI seemed accurate.
    - Housing type & transportation Group agreed that SVI seemed accurate.
  - EPA Environmental Justice Screen reports were reviewed.
  - Local census data was reviewed.
- The Community Engagement Strategy was planned, including vulnerable populations to consider and outreach methods. There will be a survey and public open house in Phase 1 and Phase 2.
  - The draft public survey for Phase 1 was reviewed. The survey will be available both online and in hard copy format.
    - Survey comments
      - Add that surveys can be dropped off at town hall.
      - Add "inside the town limits" when asking if people live or work in Ahoskie.
      - Separate into two questions, "Do you live inside the town limits of Ahoskie?" and, "Do you work inside the town limits of Ahoskie?".
      - Under stakeholder engagement, remove mail and newsletter as options. It is too costly for a town this size to direct mail and digital outreach options are preferred by the town for cost savings.
      - Under demographics, type of housing question. Remove townhomes, none in town. Add duplex to the list instead. Also add multi-family.
  - Outreach methods were discussed.
    - Town has a website and Facebook page plus other social media. Jennifer Bracy does social media.
    - There is a project in the works where monitors will be all through town that can display events.
    - An information system is also forthcoming.
    - All listed public places will allow flyers to be posted. The food pantry is active and will allow flyer distribution as well.
    - There are good partnerships with local businesses.



- There are good partnerships with faith based organizations.
- There is currently an electronic sign on Academy Street.
- Oct. 14<sup>th</sup> is the Fall Fling on Main Street. Survey flyers will be available at the event.
- Roanoke Chowan News Herald is the local newspaper.
- Jamie Heath stated that she could have the public survey and flyer ready before Tuesday's Town Council meeting.



# **Town of Ahoskie**

Community Action Team - Meeting #2

## AGENDA

Thursday, Nov. 02, 2023, 10:00 AM - 12:00 PM Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr. Drive, Ahoskie, NC 27910

10:00 – 10:30 AM	Critical Assets and Natural Infrastructure
	<ul><li>Inventory list</li><li>Maps</li></ul>
10:30 – 10:45 AM	Potential Hazards and Non-Climate Stressors
10:45 – 11:00 AM	<ul><li>Available Risk Assessments</li><li>From Albemarle Regional Hazard Mitigation Plan</li></ul>
11:00 – 11:30 AM	<ul> <li>Known Issues</li> <li>From RCCP application</li> <li>Other known issues</li> </ul>
11:30 – 11:45 AM	Current / Past Resilience Projects
11:45 – 12:00 PM	Discussion / Adjournment



Community Action Team - Meeting #2

## MEETING SUMMARY THURSDAY, NOVEMBER 02, 2023, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

#### Attendees:

- Jamie Heath, Mid-East Commission
- Seth Laughlin, Mid-East Commission
- Gordon Marsh, RK&K
- Tris Ford, RK&K
- Sarah Spiegler, NC Sea Grant
- Mackenzie Todd, NC Division of Coastal Management
- Kasen Wally, NC Division of Coastal Management
- Leigh Etheridge, Town of Ahoskie
- Jennifer Bracy, Town of Ahoskie
- Paul Moore II, Rock Church
- John Rawls, Town of Ahoskie

#### **Meeting Purpose:**

- Review draft critical assets and natural infrastructure inventory list and maps
- Discuss potential hazards and non-climate stressors
- Review available risk assessments
- Discuss known coastal hazard issues
- Discuss any current/past resilience projects

#### Notes:

- Draft critical assets and natural infrastructure inventory lists and maps
  - Noted that Hunter Smith can be contacted regarding water and sewer system GIS data.
     The Wooten Company assisted the town with this.
  - o Noted the name should be "Drug Co. Discount Pharmacy" not "Drugo"
  - Roanoke-Chowan Community College is outside the town's jurisdiction but close by and should be noted in schools list.
  - Noted that the Ahoskie Regional Visitor's Center and Ahoskie Museum suffered water damage and has temporarily relocated to "The Gathering Place". They will move back into the building once repaired.
  - Noted to add "The Gathering Place" under community buildings.



- Other critical assets seemed accurate.
- Under parks/public land, add "No Man's Land" on Main Street. Events are held there and the Veteran's Statue is located there. At the intersection of Main St. and Railroad St.
- Noted that we may need to look at endangered species, both aquatic species and terrestrial plants. Certain endangered species are known to be located in the area.
- o Other natural infrastructure seemed accurate.
- Noted symbol is missing for Fire and EMS on legends of critical assets maps.
- Noted to darken floodplain layers, particularly the 500-year floodplain is hard to see on map.
- Potential hazards and non-climate stressors
  - Storm surge, sea level rise, and coastal erosion are not major issues of concern for the town
  - Flooding is a concern in some areas including riverine and rainfall driven flooding. No tidal flooding. Nuisance stormwater flooding also affects some areas.
  - Damaging storms, tornadoes and winds are a concern (tornadoes not as much as winds associated with tropical storms and hurricanes)
  - Wildfire is a high risk for the area. Drought and heat waves are also a concern.
  - For non-climate stressors, all were applicable, including;
    - Aging or potentially undersized infrastructure
      - Noted this is beginning to be addressed through NC DEQ's Asset and Inventory Assessment grant
      - Population dynamics
        - Noted large low income population
        - Noted that the work day population changes from 5,000 residents to 15,000 people in town for work. Ahoskie is an economic hub for the county.
      - Economic shifts
      - Increased subsidence
      - Altered drainage patterns
      - Land cover change
        - Noted large impervious area in town core
- Review available risk assessments.
  - Reviewed Hertford County risk assessment from the Albemarle Regional Hazard Mitigation Plan. No comments.
- Discussed known coastal hazard issues.
  - Noted that Stephen Lassiter can be contacted for specific flood area details if needed.
  - Reviewed known issues from RCCP application including roadways experiencing nuisance flooding and critical assets known to be at risk.



- Noted that there was flooding in Hurricane Matthew. Town Hall basement flooded and is still not usable due to the levels of mold. The Ford Dealership also flooded during Matthew. Flood maps were updated after Matthew because areas flooded that never had before.
- Noted there was some wind damage from the recent Tropical Storm Ophelia from trees falling in some neighborhoods.
- Noted that a lot of buildings on Main Street get water in during any type of rain. The doors are too close to the street and water drains right into the buildings.
- Noted to add S 4<sup>th</sup> Street and Memorial Drive as an area for nuisance roadway flooding.
- Noted that the area around Ahoskie Creek near the recreation complex is a high priority (includes Health Department). The flood area around NC-42 is a high priority as well.
   FEMA has not allowed redevelopment in some of these areas.
- Many of the roadways with nuisance flooding issues are in low-income areas or areas with multi-family housing. For example, at Peachtree and Memorial there is a low income housing development.
- Wildfire risk, noted that MLK Dr. to Ahoskie Cofield Rd. is a high wildfire risk area. Developments are close to the woods and houses are small and close together. There are also a lot of older homes in the area not up to current codes. The area spans parts of the town limits and the ETJ.
- Current/past resilience projects
  - The Ahoskie Recreation Complex was a FEMA buyout from Hurricane Floyd.
  - The town recently updated its Floodplain Ordinance.
  - The town's Zoning Ordinance will be updated in the near future.
  - The town will be applying for grants to evaluate the stormwater system.
  - The town will be evaluating stormwater pipes for materials in the near future.
  - There have not been any nature-based projects to date.
- Other
- Confirmed next Community Action Team meeting for Thurs. Dec. 7<sup>th</sup> from 10:00 am 12:00 pm.
- Confirmed Public Open House for Phase 1 on Wed. Dec. 13<sup>th</sup>, drop-in style from 4:00 –
   6:30 pm. Same location, Council meeting chambers at Fire Dept. Jamie Heath will work with Jennifer Bracy to advertise.
- Virtual Public Open House for Phase 1 will be Fri. Dec. 15<sup>th</sup>, drop-in style from 4:00 –
   6:30 pm. Will be co-hosted for all 4 of our participating communities.



# **Town of Ahoskie**

Community Action Team - Meeting #3

## AGENDA

Thursday, Dec. 7, 2023, 10:00 AM - 12:00 PM Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr. Drive, Ahoskie, NC 27910

10:00 – 10:30 AM	Hazards Mapping
10:30 – 11:15 AM	Vulnerability Assessment
11:15 – 11:30 AM	Risk Estimate
11:30 – 11:45 AM	Public Open House Activity Plan
11:45 – 12:00 PM	Discussion / Adjournment



Community Action Team - Meeting #3

## MEETING SUMMARY THURSDAY, DECEMBER 7, 2023, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

#### Attendees:

- Jamie Heath, Mid-East Commission
- Gordon Marsh, RK&K
- John Rawls, Town of Ahoskie
- Paul Moore Jr., Rock Church
- Christopher H. Smith, Town of Ahoskie
- Morgan Askew, Town of Ahoskie
- Jennifer Bracy, Town of Ahoskie
- Roy Sharpe, Town of Ahoskie
- David Hunt, Town of Ahoskie
- Kasen Wally, DCM

#### **Meeting Purpose:**

- Review draft hazards mapping
- Review draft vulnerability assessment
- Review draft risk estimate
- Discuss public open house activity plan

#### Notes:

- Draft hazards maps
  - Draft hazards maps for Ahoskie were reviewed including floodplain and wildfire risk layers overlaid with critical assets and affordable housing areas, and potential hazardous sites.
  - Noted that sea level rise and storm surge layers were not available this far inland. (Layers end at river near Windsor).
  - There was a question on leaking underground storage tanks and what they were leaking. The answer was that they are usually gas or sometimes heating fuel.
- Draft vulnerability assessment
  - Vulnerability assessment thresholds were reviewed.
  - The draft vulnerability assessment worksheet was reviewed.
  - Low-income housing should be updated to affordable housing areas.



- Propane suppliers has a typo on the worksheet.
- Wetlands should be exposure 3 (says 4).
- Some affordable housing areas will be better explained on the worksheet where street names are the same.
- Street names will be combined where needed.
- The wastewater treatment plant and head station for the sewer system should be added and evaluated separately from the sewer system as a whole.
- We need to add a shapefile for the head station. It is located at S Rhue St. extension.
- The streets on the worksheet seem accurate.
- Everett St., North St., and South St. should be added.
- The Ahoskie Regional Visitor's Center and Ahoskie Museum should be removed. The building was rented and they are no longer using it. It is now located in the same building as The Gathering Place.
- Draft risk estimate
  - o Reviewed draft risk estimate methodology and worksheet.
  - Discussed that many community-owned assets were valued based on property tax values, which some communities feel undervalues the asset.
  - WWTP (Johnny Mitchell Rd.) refinancing amount was \$8,883,637. Update value to this number.
  - Need to add the value of the head station at S Rhue St. extension. These changes will increase the value of the sewer system as a whole.
  - Town staff will send updated numbers from insurance documents where applicable for better risk estimate values.
- Public open house
  - Discussed public open house and activities we will have. Open house will occur on Dec. 13<sup>th</sup> in person and Dec. 15<sup>th</sup> virtually.
- Other
- The next Community Action Team meeting will be held Thurs. Jan. 18, 2024 at 10:00 am.



Community Action Team - Meeting #4

## AGENDA Thursday, Jan. 18, 2024, 10:00 AM - 12:00 PM Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr.

Drive, Ahoskie, NC 27910

10:00 – 10:30 AM	Phase 1 Public Input Review
	<ul><li>Public survey response summary</li><li>Public open house feedback summary</li></ul>
10:30 – 11:45 AM	Identify a Suite of Potential Solutions
	STAPLEE worksheets
11:45 – 12:00 PM	Discussion / Adjournment



Community Action Team - Meeting #4

## MEETING SUMMARY THURSDAY, JANUARY 18, 2024, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

#### Attendees:

- Jamie Heath, Mid-East Commission
- Seth Laughlin, Mid-East Commission
- Gordon Marsh, RK&K
- Jennifer Bracy, Town of Ahoskie
- Hunter Smith, Town of Ahoskie
- Morgan Askew, Town of Ahoskie
- Mike Bradley, Town of Ahoskie

#### **Meeting Purpose:**

- Review Phase 1 public input (survey and open house)
- Review draft Suite of Potential Solutions

#### Notes:

- Phase 1 public survey results
  - Phase 1 public survey results were reviewed. There were 36 total responses.
  - Noted some areas in the public survey results summary document where lists need to be bulleted.
  - We discussed listing text as a communication method on the next public survey.
  - There were no comments on the public survey results.
- Phase 1 public open house results
  - Phase 1 public open house results were reviewed. There was a low turnout despite a variety of advertising methods.
  - We discussed linking the next public open house to the term flooding rather than the term resilience.
  - $\circ$   $\;$  There were no comments on the feedback received at the public open house.
  - The group discussed the possibility of having the Phase 2 public open house occur at a town event to increase attendance, but the event would have to occur in the next 3 months for this to be an option. Ms. Bracy said that the town has had better attendance doing open houses prior to Town Council meetings from 4:30 5:30 (Town Council meetings start at 6:00). Residents who normally attend the Council meetings are



#### Community Action Team - Meeting #4

sometimes willing to come out early. If we want to have the open house in March, the date would be Thurs. March 14<sup>th</sup>.

- Draft suite of potential solutions
  - The draft suite of potential solutions on the STAPLEE worksheets were reviewed. There was also a brief explanation of the STAPLEE scoring method which will be used to further prioritize projects at the next meeting.
  - Noted that the town wants to focus on tangible, on the ground, visible projects.
  - The town would like to focus on the "Ward B" area (voting district). This is the more socially vulnerable area of town opposite the recreation complex area. Ms. Askew provided hard copy maps showing the "Ward A" and "Ward B" districts and said she would email a digital copy. Noted that Horse Run Swamp drains to "Ward B".
  - Under policy, "Explore stormwater fee" should be removed. It is not politically feasible.
     Noted that the county charges a drainage fee but it seems like they are not cleaning out ditches in Ahoskie.
  - Under policy, noted that development restrictions in flood prone areas are already strict in local ordinances. Strengthening local codes/ordinances projects should be removed.
  - Discussed adding a project for a citizen participation mapping tool using Blue Spot software and ArcGIS online. For flood prone areas staff and citizens can take photos and upload to the system. They can track flooding based on rainfall events.
  - Under planning, "Stormwater assessment". Noted that there was a stormwater assessment done in the early 2000s, possibly by the Wooten Company. They recommended a pumping station but there was nowhere to pump to unless it was unrealistically far away. Ms. Bracy said she would see if she can locate a copy of that assessment.
  - Under planning, discussed adding a project to map the stormwater system (the town is working off dated paper maps).
  - Under green and hybrid infrastructure, add a green stormwater infrastructure project at the RL Vann Community Center. The town has an existing partnership with the center and also owns some land behind it. It is located in "Ward B" where the town would like to focus their RCCP project. It should be paired with an educational component.
  - Under green and hybrid infrastructure solutions, "Ahoskie Creek stream restoration".
     Noted that snag and drag is needed and dredging is also needed as the creek has filled in with sand over the years.
  - Under green and hybrid infrastructure solutions, "Incorporate green stormwater infrastructure in the downtown commercial district". Noted that downtown district is a priority and it is in both Ward A and B.
  - Under green and hybrid infrastructure solutions, "Increase stormwater capacity along railroad." Noted that Horse Run Swamp runs beside the railroad bed and flows north to the Chowan River.



Community Action Team - Meeting #4

- Under green and hybrid infrastructure solutions, "Install permeable parking through the town." Noted that the school or the RL Vann Community Center may be good opportunities.
- Under green and hybrid infrastructure solutions, "Rails to trails project on abandoned rail line located." Should say located downtown.
- Under green and hybrid infrastructure solutions, "Partner with property owners and NC Forest Service to perform controlled burns and brush clean out from..." This should be removed because it is already being done.
- Under hard/grey infrastructure solutions, "Install fire watch tower/emergency sirens" should be removed. There are good partnerships around fire already. The Forest Service took the tower down because now they use drones. The town has a drone as well. The town already participates in events to educate the public on fire awareness and also gets out into the local schools. Open burning is also prohibited in town.
- Under hard/gray infrastructure solutions, "Retrofit or relocate the Hertford County Health Department" should be removed since it is a county responsibility.
- Under Albemarle Regional Hazard Mitigation Plan, "HER3 Maintain, and where necessary establish back up generators at all identified critical facilities" should be moved up. The town has generator needs. Most of the generators are aging and constantly needing to be worked on. The generator for the Fire Department is now out of commission. Public Works has some generators but most are aging and becoming more unreliable. The Police Department generator is the only one currently not in need of replacement."
- Asked CAT members to turn in STAPLEE worksheet comments if desired and they will be incorporated into prioritization.

#### Other

- Noted that the town does handle their own building inspections.
- Noted that there are some educational pamphlets placed in water bills.
- Noted that the area behind the post office is a problem for stormwater flooding. Located in "Ward A".
- Noted that easements for ditches are generally already set up.
- Noted that there was extreme flooding in Floyd and people had to be rescued by boat. Isabella was a bad hurricane in the area for wind damage. Irene and Matthew both caused flooding.
- Noted that the town gets lots of complaints about clogged storm drains. There is lots of pine straw from trees in some areas. The clogged drains cause stormwater flooding. The town does not have the manpower to constantly clean out all storm drains and it would be ideal if residents would keep storm drains in front of their properties clear.
- Noted that Ahoskie experiences flash flooding in different areas depending on intensity and location of rainfall. Sometimes one area will flash flood but stays dry in the next storm while another area flash floods.



- Noted that a one inch rainfall event roughly doubles the WWTP intake. Sometimes
  rainfall causes WWTP capacity to be exceeded but in this case they can utilize the
  pond/spray field. It is not a combined system. Pipes are infiltrated due to age. Sewer
  system upgrades needed. Staff spends the night at the WWTP during heavy rain events
  to monitor.
- Noted that the emergency alert system is good. The county has the Code Red system. The town implemented the Connect Ahoskie program to send alerts.
- Noted to remove John Rawls from CAT member list.
- We will contact the town and send everyone an email and calendar invite to schedule CAT meeting 5.


Community Action Team - Meeting #5

# AGENDA Thursday, Feb. 15, 2024, 10:00 AM - 12:00 PM Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr. Drive, Ahoskie, NC 27910

10:00 – 11:30 AM	Consolidate and Prioritize Projects
	<ul> <li>Project examples</li> <li>Revised project list</li> <li>STAPLEE scoring explanation</li> <li>STAPLEE worksheet</li> <li>Cost-benefit worksheet</li> </ul>
11:30 – 11:45 AM	Phase 2 Public Open House
	<ul> <li>Thurs. March 14th, 4:30 – 5:45 pm, drop-in style before Council meeting</li> <li>Activities</li> <li>Advertising</li> </ul>
11:45 – 12:00 PM	Discussion / Adjournment
	<ul> <li>Next CAT meeting: Thurs. April 11<sup>th</sup>, 10:00 am – 12:00 pm</li> </ul>



Community Action Team - Meeting #5

# MEETING SUMMARY THURSDAY, FEBRUARY 15, 2024, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

### Attendees:

- Jamie Heath, Mid-East Commission
- Gordon Marsh, RK&K
- Tris Ford, RK&K
- Doug Keller, RK&K
- Jennifer Bracy, Town of Ahoskie
- Hunter Smith, Town of Ahoskie
- Morgan Askew, Town of Ahoskie
- Mike Bradley, Town of Ahoskie

### **Meeting Purpose:**

- Consolidate and prioritize projects
- Plan Phase 2 public open house

### Notes:

- Consolidate and prioritize projects
  - Project categories were discussed including policy, planning, green/hybrid infrastructure solutions and hard/grey infrastructure solutions.
  - Examples of nature-based solutions (green infrastructure) were discussed with example photos on PowerPoint.
  - The STAPLEE scoring method was discussed.
  - The cost-benefit analysis was discussed.
  - The updated draft suite of potential solutions was reviewed.
    - Discussed Ahoskie Creek stream restoration project which was removed from the list. The full stream restoration is not feasible due to an existing main sewer line. A littoral shelf along the stream would be possible.
    - Under planning, "Work with local Council of Governments and/or contractor to match local projects with grant opportunity, apply for those grants and administer successful grants." This is important, but should be an implementation step for projects, not a project in itself. The town does have



Community Action Team - Meeting #5

state representative support. They applied for the Hometown grant in September. Staff capacity is an issue. Matching funding is also a struggle.

- Under planning, "Develop a Stormwater Action Plan..." This is a need. The model could be helpful in different aspects. However, it is not the highest priority as the town wants to focus on tangible on the ground projects.
- Under planning, "Develop a stormwater personnel training guide..." This can be removed. Current training is sufficient.
- Under planning, "Scale the Fire Safety Prevention planning and education program." The program is already robust. This can be noted as a continuing action but can be removed as a project.
- Under planning, "Improve upon efforts to inform citizens of the location and availability of shelters and evacuation routes..." This is a continuing action in partnership with county emergency management. This can be noted as a continuing action but can be removed as a project.
- Under planning, "Establish backup generators..." This is a need with good community support and political support and staff capacity for maintenance. Noted it should be moved under hard/grey infrastructure category.
- Under planning, "At the local government staff level, work with the North Carolina Dept. of Transportation and the Regional Planning Organization to identify drainage problem areas..." This is already happening through the town's participation on Peanut Belt RPO. This can be noted as a continuing action but can be removed as a project.
- Under green and hybrid infrastructure solutions, "Inspect debris blockage problems and secure funds for the clearance of debris from river, streams and tributaries." This is a high need. Ahoskie Creek needs a snag and drag project throughout, especially near the railroad where it is currently dammed up.
- Under green and hybrid infrastructure solutions, "Engineer, design, and construct a low impact stormwater infrastructure facility at R.L. Vann Community Center. Partnering with this group is a high priority and this may be the RCCP project selected to move forward. Discussed that retention pond would not be the best solution. The project should have easy maintenance and improve the aesthetics of the area, rain gardens, bioretention cells, tree planting, etc. The project should also include public educational signage. This is a high traffic area so the project would have great visibility.
- Under green and hybrid infrastructure solutions, "Design and construct a stormwater wetland west of Ahoskie Creek Recreational Ball fields." This area is a need for nuisance flooding as the baseball field frequently gets soggy. Yes, there would be good community support and political support due to the baseball league. Maintenane of the stormwater wetland is possible. Staff are already out there maintaining the recreation complex.



Community Action Team - Meeting #5

- Under green and hybrid infrastructure solutions, "Implement green stormwater infrastructure throughout public housing developments." There are several public housing developments in town. Some already have retention ponds. Green stormwater projects could be possible. Most public housing developments have their own maintenance people. Maintenance could be an agreement with the HOA.
- Under green and hybrid infrastructure solutions, "Incorporate green stormwater infrastructure downtown commercial district." This project can be removed. There are other areas of town that would benefit more.
- Under green and hybrid infrastructure solutions, "Strategically design and construct green stormwater infrastructure on town owned property." Maybe not as much community support on this one but yes political support. Maintenance would be a positive for property owned by the town. The wastewater headworks floods badly but there is a retaining wall around it. A lot of town owned property was sold in the recent past. This project can be kept on this list in case, but the team could not think of an ideal location offhand.
- Under green and hybrid infrastructure solutions, "Plan, design and construct a Rails to Trials project..." This can be removed. The town already tried to do this, but the railroad would not give up the corridor because they thought it might be used again.
- Under hard/grey infrastructure solutions, "Strategically upgrade the stormwater system..." This is a need. Yes, there would be community support and political support. Maintenance is a positive, town staff already maintain the system.
- Under hard/grey infrastructure solutions, "Retrofit Town Hall for flood events." Should be, "Retrofit or relocate Town Hall for flood events." Yes, there would be community support and political support.
- The Phase 2 Public Open House was discussed.
  - The event will be held on Thurs. March 14<sup>th</sup> from 4:30 5:45 pm, drop-in style, at the Fire Dept. The event is being held prior to the Town Council meeting to encourage attendance.
  - We will be asking the public for input on the priority projects, and they will be able to vote for which projects they like. There will also be education on the program and the project types including green infrastructure/nature-based solutions.
  - Advertisement materials were discussed. A flyer will be sent to the town to be shared on the town's Facebook page and posted in person at Town Hall, the Council Chambers/Fire Dept., and the Ahoskie Public Library.
  - The event will be on the town website calendar.
  - There will be a notice scrolling on the electronic message board closer to the event.
  - A press release will be developed and sent to the Roanoke Chowan News Herald.
  - Jennifer Bracy said she will also print out flyers and mail to the local churches.



Community Action Team - Meeting #5

• The next Community Action Team meeting will occur on Thurs. April 11<sup>th</sup> at 10:00 am.



Community Action Team - Meeting #6

# AGENDA Thursday, April 11, 2024, 10:00 AM - 12:00 PM Location: Ahoskie Council Chambers at Ahoskie Fire Dept., 301 S Martin Luther King Jr. Drive, Ahoskie, NC 27910

10:00 – 10:30 AM	Phase 2 Public Open House Results
10:30 – 11:45 AM	<ul> <li>Priority Project Portfolios</li> <li>Review draft project portfolios</li> <li>Discuss additional project details for portfolios</li> <li>Select project to move forward – RCCP Phase 3 (engineering/design) applications due May 31st</li> </ul>
11:45 – 12:00 PM	Discussion / Adjournment



Community Action Team - Meeting #6

# MEETING SUMMARY THURSDAY, APRIL 11, 2024, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

### Attendees:

- Jamie Heath, Mid-East Commission
- Tris Ford, RK&K
- Gordon Marsh, RK&K
- Doug Keller, RK&K
- Kasen Wally, DCM
- Sarah Spiegler, NC Sea Grant
- Jennifer Bracy, Town of Ahoskie
- Morgan Askew, Town of Ahoskie
- Hunter Smith, Town of Ahoskie
- Steven Lassiter, Town of Ahoskie
- Paul Moore Jr., Pastor of Rock Church

### **Meeting Purpose:**

- Review Phase 2 public open house results
- Review draft project portfolios
- Discuss additional details for project portfolios
- Select project to move forward to RCCP Phase 3

### Notes:

- Reviewed results from public open house. There was a good turnout. Holding the open house prior to the regular council meeting seemed to help. The most popular project from the open house was "Upgrade the Stormwater System".
- Reviewed draft priority project portfolios.
  - Upgrade the Stormwater System
    - Discussed combining this project with the Stormwater Action Plan project. Stormwater Action Plan being first step (planning/engineering/design) and Upgrade the Stormwater System being the implementation project.
    - Noted that mapping has not been done for the stormwater system.
    - Noted that this could potentially be a hybrid project rather than just hard/grey infrastructure if green/nature-based solutions are evaluated as well.



## Community Action Team - Meeting #6

- Noted that the timeframe for project needs to be adjusted.
- Noted there are many issues with storm drains that are too small. Need to identify where pipes need upsizing.
- Additional storm drains are also needed. Need to identify ideal placement for new storm drains.
- The retention pond at the Police Dept. needs maintenance and the town needs guidance on how to properly maintain. They have been cutting the edge plants annually.
- Noted that there is a Garden Club that does landscaping projects around town.
   Public works provides maintenance such as mulching, pruning, etc.
- Stormwater Action Plan
  - Discussed combining this with the Upgrade Stormwater System project, as discussed above.
  - Noted that the two public works supervisors would use the online system, but field staff are unlikely to. They also need hard copy information that can be handed off to workers. The online system combined with hard copy plans and maps is preferable. Poster sized print outs and field maps for employees would be nice. But it is important to have both resources even if online is not as frequently used.
  - Need to check into subscription cost for online system. Just ArcGIS online needed?
  - Can grant pay for subscription? Can grant pay for I-Pads?
- Back-up Generators for Critical Facilities
  - List needs: sewer lift stations, drinking water wells, and Town Hall currently have no generators. Police Dept., Public Works building, and Fire Dept. have generators but they are aging and in need of rehab or replacement.
- o Stream Cleanout
  - This is an important need as Ahoskie Creek is plugged up with debris which is causing flooding issues.
  - Considered as RCCP Phase 3 application but recommendation was to apply for NC Dept. of Agriculture Streamflow Rehabilitation Assistance Program (StRAP). This program is specifically for stream cleanouts and application is relatively simple.
- o Green Stormwater Infrastructure at RL Vann Center
  - Add educational signage to project description.
  - Need to adjust cost and timeline.
  - Discussed maintenance of green stormwater infrastructure. Depends on feature. For bioretention cells maintenance is re-mulching once or twice a year. Pruning is optional depending on aesthetic preferences.



### Community Action Team - Meeting #6

- Retrofit or Relocate Town Hall
  - Noted that the town just had to have mold remediated from basement at an \$8,000 cost. This was due to past flooding events.
- Green Stormwater Infrastructure at Public Housing Developments
  - Add educational signage to project description.
  - Discussed that this is possibly not worth the investment since it was not popular with public votes.
  - Discussed that the public housing complex on Jernigan Swamp Rd. has flooding issues and would probably be interested in this project. The complex is near Ahoskie Creek.
- o Stormwater Wetland at Ahoskie Creek Ballfields
  - Add educational signage to project description.
  - Noted that the town would prefer green stormwater projects with low maintenance, but they can work with other ideas as well.
  - This project would likely be a woody wetland which would require no maintenance. The other option is a constructed marsh, and maintenance would still be very minimal.
- o Green Stormwater Infrastructure on Town-Owned Property
  - Noted that this could relate to the stormwater system upgrade project. Town
    property is the ideal location to evaluate for green stormwater infrastructure.
  - Charles H. Jenkins building on Memorial Dr. has been sold. Other properties on town-owned property map seem accurate.
- The project the team selected to move forward to RCCP Phase 3 (engineering/design) was the Stormwater Action Plan (which will be combined with the Upgrade the Stormwater System project as the implementation piece, as discussed above). Applications are due May 31<sup>st</sup>.
- The next Community Action Team meeting will occur on Thurs. May 30<sup>th</sup> at 10:00 am.



Community Action Team - Meeting #7

# MEETING SUMMARY THURSDAY, MAY 30, 2024, 10:00 AM - 12:00 PM, AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPT.

### Attendees:

- Jamie Heath, Mid-East Commission
- Lisa Williams, Mid-East Commission
- Tris Ford, RK&K
- Doug Keller, RK&K
- Gordon Marsh, RK&K
- Jennifer Bracy, Town of Ahoskie
- Morgan Askew, Town of Ahoskie
- Paul Moore, Resident and Pastor of Rock Church

### **Meeting Purpose:**

Review draft Ahoskie Resilience Strategy and vote on endorsement.

### Notes:

- The draft Ahoskie Resilience Strategy was reviewed. A general overview of the document layout was
  given and the project profiles were the primary focus.
- Updates needed:
  - SVI maps in Appendix A need to be changed to landscape format/page size standardized.
  - Credit Hertford County for parcel data where mapping is discussed.
  - See if blurriness in EPA EJ profiles in appendix can be fixed.
  - Maps need to be changed from "Low Income Housing" to "Affordable Housing".
     Floodplain overlay map, WUI overlay map, and characteristic fire intensity scale overlay map.
  - Stormwater Action Plan Upgrade the Stormwater System project profile: There should be a line between scope and hazards rows.
  - Stream Cleanout project profile: Title is slightly cut off. Change project estimated cost.
     "Up to \$25 per linear foot (currently StRap funds pay \$10.80 per linear foot for coastal streams)."
  - Retrofit or Relocate Town Hall project profile: Note in the project profile that it is a historic building and they would like to keep Town Hall downtown. Therefore, retrofit is



Community Action Team - Meeting #7

preferred over relocation. Note that Town Hall does sometimes need to be shut down due to flooding. Note that mold remediation had to occur in the basement and mold could occur again if another major storm floods the basement, which is a public health risk. Dollar sign missing in project cost.

- Green Stormwater Infrastructure at Public Housing Developments project profile: CEI in implementation scope, spell out Construction Engineering and Inspections, or remove since it is covered in bullet list (construction administration and construction inspections). Implementation cost, should say "(per project)".
- Stormwater Wetlands at Ballfields in Ahoskie Recreation Complex project profile: Title cut off. NC EQUIP acronym follows WRDG grant, remove text. NC EQUIP grant remove from grant list, not applicable since it is for private property owners of agricultural and forestry lands.
- Green Stormwater Infrastructure on Town Owned Properties project profile: Spell out CEI services in scope or remove. Project cost for engineering/design and implementation should say "(per project)".
- The Community Action Team voted to endorse the Ahoskie Resilience Strategy with the noted updates.
- This was the final Community Action Team meeting. Board adoption of the Ahoskie Resilience Strategy document is recommended. Jamie Heath is available to facilitate if needed and will deliver three final bound hard copies after board adoption is completed.

Variables Used

American Community Survey (ACS), 2016-2020 (5-year) data for the following estimates:

		Below 150% Poverty			
₹	Castananaula	Unemployed			
	Socioeconomic	Housing Cost Burden			
	Status	No High School Diploma			
Ģ		No Health Insurance			
a		Aged 65 & Older			
	Ususahald	Aged 17 & Younger			
Ĕ	Household	Civilian with a Disability			
Overall Vulnerability	Characteristics	Single-Parent Households			
		English Language Proficiency			
	Racial & Ethnic Minority Status	Hispanic or Latino (of any race) Black or African American, Not Hispanic or Latino Asian, Not Hispanic or Latino American Indian or Alaska Native, Not Hispanic or Latino Native Hawaiian or Pacific Islander, Not Hispanic or Latino Two or More Races, Not Hispanic or Latino Other Races, Not Hispanic or Latino			
Ó		Multi-Unit Structures			
	Housing Type &	Mobile Homes			
		Crowding			
	Transportation	No Vehicle			
		Group Quarters			

# **CDC/ATSDR Social Vulnerability Index 2020**

HERTFORD COUNTY, NORTH CAROLINA





Social vulnerability refers to a county. CDC/ATSDR SVI 2020 groups community's capacity to prepare for sixteen census-derived factors into and respond to the stress of **four themes** that summarize the hazardous events ranging from extent to which the area is socially natural disasters, such as tornadoes or disease outbreaks, to humancaused threats, such as toxic chemical spills. The **CDC/ATSDR Social** characteristics, housing, language **Vulnerability Index (CDC/ATSDR** ability, ethnicity, and vehicle access. **SVI 2020)**<sup>4</sup> **County Map** depicts the social vulnerability of communities, at all the variables to provide a census tract level, within a specified

vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language Overall Social Vulnerability combines comprehensive assessment.



Agency for Toxic Substances ATSDR and Disease Registry

G R A S P

Services Program

Geospatial Research, Analysis, and

Socioeconomic Status<sup>5</sup>

Highest Vulnerability Lowest (SVI 2020)<sup>2</sup> (Bottom 4th)



Data Sources: <sup>2</sup>CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMapTM Premium. Latino. <sup>8</sup>Housing Type/Transportation: Multi-Unit Structures, Mobile Homes, Crowding, No Vehicle, Group Quarters. Projection: NAD 1983 StatePlane North Carolina FIPS 3200 Feet.

References: Flanagan, B.E., et al., A Social Vulnerability Index for Disaster Management. Journal of Homeland Security and Emergency Management, 2011. 8(1). CDC/ATSDR SVI web page: https://www.atsdr.cdc.gov/placeandhealth/svi/index.html.

# CDC/ATSDR SVI 2020 - HERTFORD COUNTY, NORTH CAROLINA



# **CDC/ATSDR SVI Themes**





Notes: <sup>1</sup>Overall Social Vulnerability: All 16 variables. <sup>3</sup>Census tracts with 0 population. <sup>4</sup>The CDC/ATSDR SVI combines percentile rankings of US Census American Community Survey (ACS) 2016-2020 variables, for the state, at the census tract level. <sup>5</sup>Socioeconomic Status: Below 150% Poverty, Unemployed, Housing Costs Burden, No High School Diploma, No Health Insurance. <sup>6</sup>Household Characteristics: Aged 65 and Older, Aged 17 and Younger, Civilian with a Disability, Single-Parent Household, English Language Proficiency. 7Race/Ethnicity: Hispanic or Latino (of any race); Black and African American, Not Hispanic or Latino; American Indian and Alaska Native, Not Hispanic or Latino; Asian, Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino; Two or More Races, Not Hispanic or Latino; Other Races, Not Hispanic or







Low	Low-Medium	Medium-High	



High









Low-Medium

Low

83

No Data







No Data











Low	Low-Medium	Medium-High	

High

No Data





### Blockgroup: 370919504011, NORTH CAROLINA, EPA Region 4

# Approximate Population: 864

Input Area (sq. miles): 2.74

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	35	24
Ozone EJ index	20	43
Diesel Particulate Matter EJ index*	52	43
Air Toxics Cancer Risk EJ index <sup>*</sup>	76	77
Air Toxics Respiratory HI EJ index*	46	60
Traffic Proximity EJ index	N/A	N/A
Lead Paint EJ index	86	78
Superfund Proximity EJ index	14	23
RMP Facility Proximity EJ index	19	20
Hazardous Waste Proximity EJ index	16	27
Underground Storage Tanks EJ index	81	82
Wastewater Discharge EJ index	N/A	N/A

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.





Blockgroup: 370919504011, NORTH CAROLINA, EPA Region 4

### Approximate Population: 864 Input Area (sq. miles): 2.74



Sites reporting to EPA			
Superfund NPL	0		
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0		





Blockgroup: 370919504011, NORTH CAROLINA, EPA Region 4

**Approximate Population: 864** 

Input Area (sq. miles): 2.74

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m³)	6.7	7.67	19	8.67	9
Ozone (ppb)	37.6	41.5	11	42.5	19
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.117	0.178	28	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.33	0.15	82	0.27	60
Superfund Proximity (site count/km distance)	0.014	0.08	7	0.13	9
RMP Facility Proximity (facility count/km distance)	0.058	0.41	8	0.77	7
Hazardous Waste Proximity (facility count/km distance)	0.056	0.83	7	2.2	10
Underground Storage Tanks (count/km <sup>2</sup> )	4.9	3.9	76	3.9	77
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	48%	35%	73	35%	72
Supplemental Demographic Index	13%	15%	40	15%	48
People of Color	68%	37%	82	40%	77
Low Income	28%	33%	41	30%	50
Unemployment Rate	4%	5%	52	5%	53
Limited English Speaking Households	1%	2%	68	5%	58
Less Than High School Education	9%	11%	45	12%	52
Under Age 5	9%	6%	81	6%	80
Over Age 64	15%	16%	43	16%	46
Low Life Expectancy	21%	21%	53	20%	65

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





### Blockgroup: 370919504011, NORTH CAROLINA, EPA Region 4

## Approximate Population: 864

Input Area (sq. miles): 2.74

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	19	12
Ozone Supplemental Index	11	23
Diesel Particulate Matter Supplemental Index*	31	23
Air Toxics Cancer Risk Supplemental Index*	53	61
Air Toxics Respiratory HI Supplemental Index*	19	41
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	67	60
Superfund Proximity Supplemental Index	7	10
RMP Facility Proximity Supplemental Index	8	9
Hazardous Waste Proximity Supplemental Index	6	12
Underground Storage Tanks Supplemental Index	68	71
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.





### Blockgroup: 370919504012, NORTH CAROLINA, EPA Region 4

### Approximate Population: 880 Input Area (sq. miles): 3.54

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	37	25
Ozone EJ index	22	45
Diesel Particulate Matter EJ index <sup>*</sup>	54	44
Air Toxics Cancer Risk EJ index*	79	78
Air Toxics Respiratory HI EJ index*	49	62
Traffic Proximity EJ index	N/A	N/A
Lead Paint EJ index	88	81
Superfund Proximity EJ index	12	24
RMP Facility Proximity EJ index	18	21
Hazardous Waste Proximity EJ index	15	29
Underground Storage Tanks EJ index	80	80
Wastewater Discharge EJ index	N/A	N/A

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.





Blockgroup: 370919504012, NORTH CAROLINA, EPA Region 4

## Approximate Population: 880 Input Area (sq. miles): 3.54



Sites reporting to EPA			
Superfund NPL	0		
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0		





Blockgroup: 370919504012, NORTH CAROLINA, EPA Region 4

**Approximate Population: 880** 

Input Area (sq. miles): 3.54

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m <sup>3</sup> )	6.7	7.67	19	8.67	9
Ozone (ppb)	37.6	41.5	11	42.5	19
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.117	0.178	28	0.294	<50th
Air Toxics Cancer Risk <sup>*</sup> (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.37	0.15	85	0.27	63
Superfund Proximity (site count/km distance)	0.014	0.08	6	0.13	9
RMP Facility Proximity (facility count/km distance)	0.056	0.41	7	0.77	7
Hazardous Waste Proximity (facility count/km distance)	0.053	0.83	6	2.2	10
Underground Storage Tanks (count/km <sup>2</sup> )	3.3	3.9	68	3.9	68
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	50%	35%	76	35%	75
Supplemental Demographic Index	21%	15%	80	15%	80
People of Color	57%	37%	75	40%	71
Low Income	44%	33%	69	30%	74
Unemployment Rate	13%	5%	88	5%	88
Limited English Speaking Households	0%	2%	0	5%	0
Less Than High School Education	25%	11%	88	12%	87
Under Age 5	5%	6%	55	6%	53
Over Age 64	29%	16%	86	16%	87
Low Life Expectancy	21%	21%	53	20%	65

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





### Blockgroup: 370919504012, NORTH CAROLINA, EPA Region 4

# Approximate Population: 880

Input Area (sq. miles): 3.54

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	31	19
Ozone Supplemental Index	17	37
Diesel Particulate Matter Supplemental Index*	52	40
Air Toxics Cancer Risk Supplemental Index*	83	83
Air Toxics Respiratory HI Supplemental Index*	47	64
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	89	81
Superfund Proximity Supplemental Index	10	15
RMP Facility Proximity Supplemental Index	14	13
Hazardous Waste Proximity Supplemental Index	8	19
Underground Storage Tanks Supplemental Index	82	83
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.





### Blockgroup: 370919504013, NORTH CAROLINA, EPA Region 4

### Approximate Population: 1,521 Input Area (sq. miles): 14.52

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	40	26
Ozone EJ index	23	47
Diesel Particulate Matter EJ index <sup>*</sup>	57	46
Air Toxics Cancer Risk EJ index*	82	81
Air Toxics Respiratory HI EJ index*	52	65
Traffic Proximity EJ index	N/A	N/A
Lead Paint EJ index	77	69
Superfund Proximity EJ index	11	23
RMP Facility Proximity EJ index	19	23
Hazardous Waste Proximity EJ index	13	28
Underground Storage Tanks EJ index	77	78
Wastewater Discharge EJ index	N/A	N/A

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.





Blockgroup: 370919504013, NORTH CAROLINA, EPA Region 4

## Approximate Population: 1,521 Input Area (sq. miles): 14.52



Sites reporting to EPA		
Superfund NPL	0	
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0	





Blockgroup: 370919504013, NORTH CAROLINA, EPA Region 4

Approximate Population: 1,521

Input Area (sq. miles): 14.52

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m³)	6.7	7.67	19	8.67	9
Ozone (ppb)	37.6	41.5	11	42.5	19
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.117	0.178	28	0.294	<50th
Air Toxics Cancer Risk <sup>*</sup> (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.13	0.15	52	0.27	38
Superfund Proximity (site count/km distance)	0.013	0.08	5	0.13	8
RMP Facility Proximity (facility count/km distance)	0.057	0.41	7	0.77	7
Hazardous Waste Proximity (facility count/km distance)	0.052	0.83	5	2.2	9
Underground Storage Tanks (count/km <sup>2</sup> )	1.9	3.9	58	3.9	58
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	55%	35%	80	35%	78
Supplemental Demographic Index	15%	15%	54	15%	60
People of Color	75%	37%	87	40%	81
Low Income	35%	33%	52	30%	61
Unemployment Rate	8%	5%	74	5%	74
Limited English Speaking Households	0%	2%	0	5%	0
Less Than High School Education	12%	11%	57	12%	62
Under Age 5	3%	6%	29	6%	27
Over Age 64	25%	16%	79	16%	81
Low Life Expectancy	21%	21%	53	20%	65

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





### Blockgroup: 370919504013, NORTH CAROLINA, EPA Region 4

# Approximate Population: 1,521

Input Area (sq. miles): 14.52

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	22	14
Ozone Supplemental Index	12	27
Diesel Particulate Matter Supplemental Index*	37	29
Air Toxics Cancer Risk Supplemental Index*	63	69
Air Toxics Respiratory HI Supplemental Index*	29	49
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	56	48
Superfund Proximity Supplemental Index	6	10
RMP Facility Proximity Supplemental Index	10	9
Hazardous Waste Proximity Supplemental Index	6	13
Underground Storage Tanks Supplemental Index	65	67
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.





### Blockgroup: 370919504021, NORTH CAROLINA, EPA Region 4

### Approximate Population: 702 Input Area (sq. miles): 2.13

Selected Variables	State Percentile	USA Percentile		
Environmental Justice Indexes				
Particulate Matter 2.5 EJ index	33	23		
Ozone EJ index	20	41		
Diesel Particulate Matter EJ index <sup>*</sup>	42	38		
Air Toxics Cancer Risk EJ index <sup>*</sup>	76	76		
Air Toxics Respiratory HI EJ index*	46	60		
Traffic Proximity EJ index	N/A	N/A		
Lead Paint EJ index	83	75		
Superfund Proximity EJ index	14	23		
RMP Facility Proximity EJ index	21	23		
Hazardous Waste Proximity EJ index	19	29		
Underground Storage Tanks EJ index	83	83		
Wastewater Discharge EJ index	N/A	N/A		

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.




Blockgroup: 370919504021, NORTH CAROLINA, EPA Region 4

## Approximate Population: 702 Input Area (sq. miles): 2.13



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0





Blockgroup: 370919504021, NORTH CAROLINA, EPA Region 4

**Approximate Population: 702** 

Input Area (sq. miles): 2.13

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m³)	6.65	7.67	18	8.67	9
Ozone (ppb)	37.5	41.5	11	42.5	18
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.106	0.178	21	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.27	0.15	76	0.27	55
Superfund Proximity (site count/km distance)	0.014	0.08	7	0.13	9
RMP Facility Proximity (facility count/km distance)	0.063	0.41	9	0.77	8
Hazardous Waste Proximity (facility count/km distance)	0.06	0.83	8	2.2	11
Underground Storage Tanks (count/km <sup>2</sup> )	6.7	3.9	82	3.9	82
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	47%	35%	72	35%	72
Supplemental Demographic Index	17%	15%	65	15%	69
People of Color	59%	37%	76	40%	72
Low Income	36%	33%	54	30%	63
Unemployment Rate	5%	5%	56	5%	56
Limited English Speaking Households	0%	2%	0	5%	0
Less Than High School Education	23%	11%	84	12%	84
Under Age 5	5%	6%	51	6%	48
Over Age 64	23%	16%	74	16%	76
Low Life Expectancy	23%	21%	76	20%	82

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





## Blockgroup: 370919504021, NORTH CAROLINA, EPA Region 4

# Approximate Population: 702

Input Area (sq. miles): 2.13

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	24	16
Ozone Supplemental Index	14	30
Diesel Particulate Matter Supplemental Index*	32	28
Air Toxics Cancer Risk Supplemental Index*	72	75
Air Toxics Respiratory HI Supplemental Index*	36	55
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	78	69
Superfund Proximity Supplemental Index	10	14
RMP Facility Proximity Supplemental Index	15	15
Hazardous Waste Proximity Supplemental Index	10	18
Underground Storage Tanks Supplemental Index	82	83
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.





## Blockgroup: 370919504022, NORTH CAROLINA, EPA Region 4

## Approximate Population: 592 Input Area (sq. miles): 1.83

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	45	31
Ozone EJ index	29	52
Diesel Particulate Matter EJ index <sup>*</sup>	54	47
Air Toxics Cancer Risk EJ index*	90	88
Air Toxics Respiratory HI EJ index*	61	72
Traffic Proximity EJ index	N/A	N/A
Lead Paint EJ index	92	85
Superfund Proximity EJ index	23	31
RMP Facility Proximity EJ index	31	31
Hazardous Waste Proximity EJ index	29	39
Underground Storage Tanks EJ index	88	88
Wastewater Discharge EJ index	N/A	N/A

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.





Blockgroup: 370919504022, NORTH CAROLINA, EPA Region 4

## Approximate Population: 592 Input Area (sq. miles): 1.83



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0





Blockgroup: 370919504022, NORTH CAROLINA, EPA Region 4

**Approximate Population: 592** 

Input Area (sq. miles): 1.83

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m <sup>3</sup> )	6.65	7.67	18	8.67	9
Ozone (ppb)	37.5	41.5	11	42.5	18
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.106	0.178	21	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.29	0.15	79	0.27	57
Superfund Proximity (site count/km distance)	0.014	0.08	8	0.13	9
RMP Facility Proximity (facility count/km distance)	0.066	0.41	10	0.77	9
Hazardous Waste Proximity (facility count/km distance)	0.063	0.83	9	2.2	12
Underground Storage Tanks (count/km <sup>2</sup> )	3.6	3.9	70	3.9	70
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	66%	35%	89	35%	87
Supplemental Demographic Index	20%	15%	79	15%	79
People of Color	93%	37%	96	40%	91
Low Income	39%	33%	60	30%	68
Unemployment Rate	20%	5%	95	5%	95
Limited English Speaking Households	0%	2%	0	5%	0
Less Than High School Education	20%	11%	79	12%	80
Under Age 5	2%	6%	21	6%	20
Over Age 64	22%	16%	71	16%	73
Low Life Expectancy	23%	21%	76	20%	82

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## Blockgroup: 370919504022, NORTH CAROLINA, EPA Region 4

# Approximate Population: 592

Input Area (sq. miles): 1.83

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	29	19
Ozone Supplemental Index	17	35
Diesel Particulate Matter Supplemental Index*	38	33
Air Toxics Cancer Risk Supplemental Index*	82	82
Air Toxics Respiratory HI Supplemental Index*	47	63
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	86	77
Superfund Proximity Supplemental Index	11	17
RMP Facility Proximity Supplemental Index	20	18
Hazardous Waste Proximity Supplemental Index	14	24
Underground Storage Tanks Supplemental Index	82	83
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.





## Blockgroup: 370919504024, NORTH CAROLINA, EPA Region 4

# Approximate Population: 1,981

Input Area (sq. miles): 19.21

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	39	27
Ozone EJ index	24	47
Diesel Particulate Matter EJ index*	48	43
Air Toxics Cancer Risk EJ index <sup>*</sup>	83	82
Air Toxics Respiratory HI EJ index*	54	66
Traffic Proximity EJ index	N/A	N/A
Lead Paint EJ index	88	81
Superfund Proximity EJ index	17	27
RMP Facility Proximity EJ index	34	30
Hazardous Waste Proximity EJ index	25	35
Underground Storage Tanks EJ index	71	74
Wastewater Discharge EJ index	N/A	N/A

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



\*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.





Blockgroup: 370919504024, NORTH CAROLINA, EPA Region 4

## Approximate Population: 1,981 Input Area (sq. miles): 19.21



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0





Blockgroup: 370919504024, NORTH CAROLINA, EPA Region 4

Approximate Population: 1,981

Input Area (sq. miles): 19.21

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m³)	6.65	7.67	18	8.67	9
Ozone (ppb)	37.5	41.5	11	42.5	18
Diesel Particulate Matter <sup>*</sup> (µg/m <sup>3</sup> )	0.106	0.178	21	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	28	95	28	80-90th
Air Toxics Respiratory HI*	0.3	0.36	39	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	N/A	400	N/A	760	N/A
Lead Paint (% Pre-1960 Housing)	0.28	0.15	77	0.27	56
Superfund Proximity (site count/km distance)	0.014	0.08	7	0.13	9
RMP Facility Proximity (facility count/km distance)	0.073	0.41	13	0.77	10
Hazardous Waste Proximity (facility count/km distance)	0.065	0.83	9	2.2	12
Underground Storage Tanks (count/km <sup>2</sup> )	1	3.9	45	3.9	48
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.28	N/A	12	N/A
Socioeconomic Indicators					
Demographic Index	56%	35%	81	35%	80
Supplemental Demographic Index	19%	15%	75	15%	76
People of Color	70%	37%	84	40%	78
Low Income	43%	33%	66	30%	72
Unemployment Rate	13%	5%	88	5%	88
Limited English Speaking Households	1%	2%	68	5%	57
Less Than High School Education	18%	11%	75	12%	77
Under Age 5	5%	6%	56	6%	54
Over Age 64	19%	16%	62	16%	64
Low Life Expectancy	23%	21%	76	20%	82

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





## Blockgroup: 370919504024, NORTH CAROLINA, EPA Region 4

## Approximate Population: 1,981

Input Area (sq. miles): 19.21

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	27	18
Ozone Supplemental Index	16	33
Diesel Particulate Matter Supplemental Index*	36	32
Air Toxics Cancer Risk Supplemental Index*	79	80
Air Toxics Respiratory HI Supplemental Index*	44	61
Traffic Proximity Supplemental Index	N/A	N/A
Lead Paint Supplemental Index	84	75
Superfund Proximity Supplemental Index	11	16
RMP Facility Proximity Supplemental Index	23	21
Hazardous Waste Proximity Supplemental Index	15	24
Underground Storage Tanks Supplemental Index	65	70
Wastewater Discharge Supplemental Index	N/A	N/A

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



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Town Level Social Vulnerability Data – US Census Bureau

## TOWN OF AHOSKIE CENSUS DATA

Total Population: 4,891 **Disability:** 20.1% of population with a disability Elderly: 18.7% of population 65 years and over Language Barrier: 6.2% of population speak a language other than English at home Median Household Income: \$36,271 **Minority:** 76.3% minority population (2020 US Decennial Census) **Poverty Rate:** 25.1% of population below poverty rate Vehicle Access: 16.4% of households have no vehicle available (All data except total population and minority population is 2021 American Community Survey 5-year estimates from the US Census Bureau.)

RCCP STAPLEE Criteria Worksheet Ahoskie																								
STAPLEE Criteria >>	So	cial	Т	Technical		Administrative		Political		al	Legal			Economic				Environmental						
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
POLICY 1. Responsible Development Policy																							_	
<b>Comments:</b> Implement regulations for responsible and sustainable coastal development, considering factors such as setback requirements, building materials (fire and flood resistant), and energy efficiency.		1	0	1	1							1		0	1	1	1	1	1	0	0	1	1	11
<ol> <li>Low-Impact Development Policy on Government facilities</li> <li>Comments: Policy geared toward enforcing stormwater retention and infiltration through design</li> </ol>		1	1	1	1							1		0	1	0	1	1	1	0	0	0	1	10
3. Explore Stormwater fee Comments: Policy to implement a stormwater fee to generate income for stormwater projects		0	0	1	1							1		0	1	0	1	0	1	0	0	0	1	7
<ol> <li>Renewable energy policy</li> <li>Comments: Policy that addresses renewable energy development</li> </ol>		1	0	1	1							1		0	1	1	0	1	1	0	0	0	1	9
5. Improve building codes Comments: higher electrical outlet, elevation requirements, material requirements		0	1	1	1							1		0	1	0	1	1	0	0	0	0	1	8
<ol> <li>Improve land use policies (including zoning code, subdivision code, floodplain development code)</li> <li>Comments: Stricter codes within flood and wildfire prone areas</li> </ol>		0	0	1	1							1		0	1	0	1	1	1	0	0	1	1	9
PLANNING																								
7. Complete a grant analysis to assess future grant opportunities Comments:		1	1	1	1							1		1	1	1	1	0	1	1	1	1	1	14
8. Complete a hydro analysis for the town to assess flood prone areas Comments: Assess drainage issues within the town. Could be combined with Stormwater assessment.		1	0	1	1							1		1	1	0	0	1	1	0	0	1	1	10
9. Develop a land management and stewardship plan Comments: List, define, and evaluate current property for potential environmental value		1	0	1	1							1		0	1	0	1	1	1	0	1	1	1	11
10. Stormwater Maintenance Plan Comments: Includes ditches and tributaries		1	1	1	1							1		1	1	0	1	1	1	0	0	0	1	11

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STAPLEE Criteria >>	So	cial	т	echnic	al	Adm	inistra	ative	F	Politica	ı		Legal			Ecor	nomic			Envi	ronme	ental		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
11. Emergency Preparedness and Response plan Comments: Including floods and fires		1	1	1	1							1		1	1	1	1	1	0	0	0	0	1	11
<ol> <li>Social Equity Resiliency Plan.</li> <li>Comments: Implement actions to remove lower-income from high flood prone areas or retrofit homes to accommodate</li> </ol>		1	0	1	1							1		1	1	1	1	1	1	0	0	0	1	11
<ol> <li>Stormwater assessment</li> <li>Comments: Assess the vulnerability of the stormwater infrastructure and the viability of a stormwater fee and closing ditches</li> </ol>		1	0	1	1							1		1	1	0	1	1	1	0	0	0	1	10
14. Stormwater personnel training Comments: Erosion control, stormwater maintenance, stormwater repair training		1	1	1	1							1		1	1	1	1	1	1	0	0	0	1	12
15. Wildfire Prevention Plan Comments: Assess wildfire vulnerability and techniques to prevent and prepare for wildfires		1	0	1	1							1		1	1	1	1	1	1	0	0	1	1	12
GREEN AND HYBRID INFRASTRUCTURE SOLUTIONS																								
16. Ahoskie stream restoration Comments:		1	0	1	1							0		1	1	1	0	1	1	0	0	1	1	10
17. Stormwater wetland behind Hertford County Health Department Comments:		1	1	1	1							1		1	1	1	0	1	1	0	0	1	1	12
18. Stormwater wetland west of Ahoskie Creek Recreational Ball Fields Comments:		1	1	1	1							1		1	1	0	0	1	1	0	0	1	1	11
19. Implement green stormwater infrastructure throughout public housing developments. Comments: Permeable parking, stormwater infiltration medians, ext.		1	0	1	1							0		1	1	0	0	1	1	0	0	1	1	9
20. Incorporate green stormwater infrastructure downtown commercial district Comments: Incorporate bioswales, stream restoration, floodplain restoration and/or wetland creation		1	0	1	1							0		1	1	0	0	1	1	0	0	1	1	9

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STAPLEE Criteria >>	So	cial	T	echnio	al	Adn	ninistr	ative	F	Politica	al		Legal			Ecor	nomic			Envii	ronme	ntal		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
21. Incorporate green stormwater infrastructure on all school properties Comments:		1	0	1	1							0		1	1	0	0	1	1	0	0	1	1	9
22. Implement strategically placed bioretention cells throughout the town. Comments:		1	0	1	1							1		1	1	1	0	1	1	0	0	1	1	11
23. Increase stormwater capacity along railroad Comments:		1	0	1	1							0		0	1	1	0	1	1	0	0	1	1	9
24. Install permeable parking through the town Comments:		1	1	0	1							1		1	1	1	0	1	1	0	0	1	1	11
25. Partner with property owner and NC Forest Service to perform controlled burns and brush clean out from Davis St to Bond St off MLK Dr. <b>Comments:</b> Fire prevention and maintained plan needed		1	0	1	1							0		1	1	1	0	0	1	0	0	1	1	9
26. Rails to trails project on abandoned rail line located. Include green stormwaterinfrastructure and education. Comments:		1	1	1	1							1		0	1	1	0	1	1	0	0	1	1	11
HARD/GREY INFRASTRUCTURE SOLUTIONS 27. Increase culvert sizes at highly flooded areas Comments: Implement a stormwater assessment		1	0	1	1							1		0	1	0	0	1	1	0	0	0	1	8
28. Increase catch-basin capacity at highly flooded areas Comments: Implement a stormwater assessment		1	0	1	1							1		0	1	0	0	1	1	0	0	0	1	8
29. Strategically install retention ponds to decrease holistic flooding Comments: Implement a plan to determine where to install retention ponds		1	0	1	1							1		0	1	0	0	1	1	0	0	0	1	8
30. Upgrade storm water system capacity Comments: Implement a plan to determine weaknesses		1	0	1	1							1		0	1	0	0	1	1	0	0	0	1	8

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STAPLEE Criteria >>	So	cial	Т	echnic	al	A	Adminis	trative		Politica	al		Legal			Econ	nomic			Envi	ronme	ntal		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts		Staffing Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
31. Upgrade drainage system Comments: Complete overhaul of ditches and Drainage pipes		1	0	1	1							1		0	1	0	0	1	1	0	0	0	1	8
32. Eliminate open ditches Comments: Pipe the ditches		1	0	1	1							0		0	1	0	0	1	1	0	0	0	1	7
33. Install Fire watch tower/ Emergency sirens Comments:		1	1	1	1							1		1	1	1	0	1	1	0	0	1	1	12
34. Retrofit or relocate Herford County Health Department Comments:		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9
35. Retrofit Townhall for flood events Comments:		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9
36. XXXXXXX Comments:																								0
Albemarle Regional Hazard Mitigation Plan																								
HER1. Improve upon efforts to inform citizens of the location and availability of shelters and evacuation routes in the event of a natural disaster. These efforts will utilize local print and television media outlets, social networking, as well as Town and County websites. The County will also evaluate all shelter facilities to ensure that they all meet American Red Cross (ARC) standards.		1	0	0	1	l						1		1	1	1	0	1	0	0	0	1	1	9
HER2. Maintain continuous contact/working relationship with electric service providers in the County to address the following: (1) disaster preparedness techniques (e.g. tree trimming, vegetation planting requirements, pole replacement); (2) Identify critical electrical facilities needing retrofit or upgrade and map with elevation reference marks; \and (3) communication with County officials during and immediately after a natural hazard event that results in loss of electrical power.		1	1	0	1							1		1	1	1	0	1	0	0	0	1	1	10
HER3. Maintain, and where necessary, establish backup generators at all identified critical facilities. Additionally, County Emergency Services will evaluate the equipment on a regular basis to assure it continues to meet operational demands at county facilities.		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9

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STAPLEE Criteria >>	So	cial	Т	echnic	al	Adı	ministr	ative	F	Politica	al		Legal			Ecor	nomic			Envir	ronme	ental		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
HER4. Retrofit all County and Municipal facilities for lightning protection.		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9
HER5. Support through local ordinances conservation easements on all flood-prone property and impose such easements on all properties acquired with public assistance funds.		1	0	1	1							1		0	1	1	1	1	1	0	0	0	1	10
HER6. Provide annual review of development restrictions in floodplain areas and maintain initiatives to ensure limited residential and commercial development in the floodplain and optimal protection of critical facilities.		1	1	1	1							1		1	1	1	0	1	1	0	0	1	1	12
HER7. The HMPC will review "Firewise" zoning and subdivision standards and recommend their appropriateness for incorporation into existing or new zoning or subdivision ordinances. (Source http://www.firewise.org)		1	1	0	1							1		1	1	1	0	1	1	0	0	1	1	11
HER8. Review county and municipal zoning, subdivision, and flood damage prevention ordinances for improved control of flooding hazards and improvement of drainage.		1	1	0	1							1		1	1	1	0	1	1	0	0	1	1	11
HER9. Adopt and annually update a capital improvements plan with an emphasis on mitigation for critical facilities.		1	1	0	1							1		1	1	1	1	0	1	0	0	1	1	11
HER10. At the local government staff level, work with the North Carolina Dept. of Transportation (NCDOT) and the Regional Planning Organization to identify drainage problem areas; develop resolutions for drainage issues created by NCDOT facilities, including inspections of channels, retention basins; and, as needed, pursue debris removal.		1	0	1	1							1		1	1	1	0	1	1	0	0	1	1	11
HER11. Apply for all available funding from the Hazard Mitigation Grant Program (HMGP) and other funds to assist with the mitigation of severe repetitive loss properties by relocating structures out of the floodplain.		1	1	1	1							1		1	1	1	1	0	1	0	0	1	1	12
HER12. Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries.		1	0	1	1							1		1	1	1	0	1	1	0	0	1	1	11

		RCC	P STA		Crite hosk		Works	heet													RK		(D-EAST commission	
STAPLEE Criteria >>	So	cial	Т	echnio	al:	А	dminist	rative		Politica	al		Legal			Econ	nomic			Envi	ronme	ental		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	:	Staffing Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
HER13. Mail once annually a notice to all property owners whose land is located within a special flood hazard area. This notice should clearly state that the recipients' property is susceptible to flooding. The County will also maintain a flood map information service, whereby County residents can call or come by to receive information regarding their property in relation to the defined floodplain.		1	1	0	1							1		1	1	1	0	1	0	0	0	1	1	10
HER14. Make information regarding hazards and development regulations within the floodplain available through the following: (1) The County Planning Director will ensure that the local library maintains information relating to flooding and flood protection. (Maintain dates of distribution and librarian certification of availability); (2) The County will provide a link on their website to FEMA resources addressing flooding and flood protection. This information will be made available to citizens, realtors, developers, and contractors.		1	1	0	1							1		1	1	1	0	1	0	0	0	1	1	10
HER15. Coordinate with the Hertford County School System to establish a Hazards Awareness Educational Program for use by educators within the Hertford County School System.		1	1	0	1							1		1	1	1	0	0	0	0	0	1	1	9
HER16. Maintain a registry of special needs individuals which has been coordinated with the Hertford County Department of Social Services. This list will include: (1) Persons on life support systems; (2) Persons dependent on electricity for medical equipment; and (3) Persons with severe mental handicap or mental illness.		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9
HER17. Maintain a list of all hazardous material sites or transport corridors in Hertford County. This effort will be carried out through the efforts of the County LEPC.		1	1	0	1							1		1	1	1	0	1	0	0	0	0	1	9
<ul> <li>HER18. Actively work with Federal, State, local and private partners to identify mitigation measures and secure funding via grants to alleviate flooding. These efforts should focus on the following areas:</li> <li>US 13 at Ahoskie Creek</li> <li>Harrisville Island</li> <li>Ahoskie Creek and DT Road</li> <li>Murfreesboro Drainage and Culverts</li> <li>Ebo Road Drainage and Culverts</li> <li>Como Drainage and Culverts</li> </ul>		1	1	1	1							1		1	1	1	1	1	1	0	0	1	1	13
HER19. Annually review and update the County's Emergency Operations Plan (EOP) to ensure compliance with all NCEM and NCOEMS procedures and policies. Through these updates, the County will work closely with participating municipal jurisdictions to ensure that all jurisdictions continue to be educated and prepared for activation of the EOP in the event of a disaster event.		1	1	1	1							1		1	1	1	1	1	0	0	0	1	1	12

		RCC	P STA		Crite hoski		Vorksh	eet												l	RK	K .	(ID-EAST ommission	
STAPLEE Criteria >>	So	cial	Т	echnic	al	Ad	ministr	ative	F	Politica	I		Legal			Econ	omic			Envir	onme	ntal		
Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	тотац
HER20. Hertford County, and all participating jurisdictions, will work to implement all recommendations defined within the Hurricane Matthew Resiliency Redevelopment Plan .		1	0	1	1							1		1	1	0	1	1	1	0	0	1	1	11
HER21. Increase awareness regarding the impacts of natural disasters by educating and informing residents, businesses and visitors via public education, social media and print materials. These efforts should focus on ways to mitigate disaster impacts to both person and property.		1	1	0	1							1		1	1	1	0	1	0	0	0	1	1	10



**Benefit/Cost Ratings** 

# **Benefit-Cost Overview**

The cost or the economic case for different strategies or actions must be considered when developing resilience strategies. An informal cost-benefit analysis should be used to review proposed adaptation actions. Ratings of high, medium, or low are assigned to the anticipated costs and the benefits associated with each action based on general criteria that are established by the community.

Make sure to explore and identify potential funding mechanisms for project or action item implementation.

	Benefit/cost ratings
	<u>Benefit</u>
HIGH	Action would have significant impact on risk reduction
MEDIUM	Action would have an impact on risk reduction
LOW	Long-term benefits are difficult to quantify in the short term
	<u>Cost</u>
HIGH	Cost of project is high and/or funding will be more difficult to acquire
MEDIUM	Cost of project is medium and/or funding will be easier to acquire
LOW	Cost of project is low and/or funding is available in existing budget

Strategy	Benefit	Cost
<ol> <li>Develop a Stormwater Action Plan. This plan will complete a stormwater ground assessment and surface hydrology analysis that will be incorporated into an online mapping system that can submit real-time data to analyze, prioritize, and take action on potential problem areas. The plan will also incorporate a maintenance plan that will be tracked by the online tool.</li> <li>Comments: Assess drainage issues within the town. Could be combined with Stormwater assessment.</li> </ol>	HIGH	MEDIUM
Model may be helpful but online tool may or may not be needed. Operation background may be a barrier		
2. Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries. This would include Ahoskie Creek and its tributaries with a primary focus on Ahoskie Creek to increase drainage flow within the watershed.	HIGH	MEDIUM
<ul> <li>3. Engineer, design, and construct a low impact stormwater infrastructure facility at R.L. Vann School. Add Education.</li> <li>Comments: Located in Ward B. This could include stormwater wetlands, rain gardens, bioretention, tree</li> </ul>	HIGH	MEDIUM
planning, and education.		
4. Design and construct a Stormwater wetland west of Ahoskie Creek Recreational Ball Fields. Comments: Located in Ward A	MEDIUM	MEDIUM
5. Implement green stormwater infrastructure throughout public housing developments. Comments: Permeable parking, stormwater infiltration medians, ext.	HIGH	HIGH
<ul> <li>6. Strategically design and construct green stormwater infrastructure on Town owned property.</li> <li>Comments: There are a number of parcels where impermeable surfaces could be removed, bioretention cells could be installed, trees could be planted, permeable parking, ext.</li> </ul>	HIGH	HIGH
7. Establish back up generators at all identified critical facilities and replace aging generators that are no longer operating efficiently. Maintain and evaluate the equipment on a regular basis to ensure it continues to mete operational demands at town facilities.	HIGH	MEDIUM

Strategy	Benefit	Cost
<ul> <li>8. Strategically upgrade stormwater system through pipe replacements (upsizing where needed), increasing size and/or quantity of culverts and catch basins, redefining ditches, ext.</li> <li>Comments: The Stormwater Action Plan can be utilized to determine prioritization. If chosen, project will be defined for future grant opportunities.</li> </ul>	HIGH	HIGH
9. Retrofit or relocate Townhall for flood	HIGH	MEDIUM
events.		

		RCC	P ST/		Crite hoski		orksh	eet													RK	K		
STAPLEE Criteria >>	So	cial	Т	echnic	al	Adm	inistra	tive	P	Politica	al		Legal			Ecor	nomic			Envir	onme	ntal		
Green = High (19-20) Orange = Med (17-18) Yellow = Low (15-16) Considerations for Alternative Actions	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT Waste Sites	Consistent w/ Community Environmental Goals	Consistent w/ Federal Laws	TOTAL
PLANNING																								
<ol> <li>Develop a Stormwater Action Plan. This plan will complete a stormwater ground assessment and surface hydrology analysis that will be incorporated into an online mapping system that can submit real-time data to analyze, prioritize, and take action on potential problem areas. The plan will also incorporate a maintenance plan that will be tracked by the online tool.</li> <li>Comments: Assess drainage issues within the town. Could be combined with Stormwater assessment. Model may be helpful but online tool may or may not be needed. Operation background may be a barrier</li> </ol>	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	0	1	1	18
<ol> <li>Establish back up generators at all identified critical facilities and replace aging generators that are no longer operating efficiently. Maintain and evaluate the equipment on a regular basis to ensure it continues to mete operational demands at town facilities.</li> </ol>	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	16
GREEN AND HYBRID INFRASTRUCTURE SOLUTIONS																								
<ol> <li>Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams and tributaries. This would include Ahoskie Creek and its tributaries with a primary focus on Ahoskie Creek to increase drainage flow within the watershed.</li> </ol>	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	16
<ol> <li>Engineer, design, and construct a low impact stormwater infrastructure facility at R.L. Vann School. Add Education.</li> <li>Comments: Located in Ward B. This could include stormwater wetlands, rain gardens, bioretention, tree planning, and education.</li> </ol>	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	19
5. Design and construct a Stormwater wetland west of Ahoskie Creek Recreational Ball Fields. Comments: Located in Ward A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	18
<ol> <li>Implement green stormwater infrastructure throughout public housing developments.</li> <li>Comments: Permeable parking, stormwater infiltration medians, ext.</li> </ol>	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	18
<ol> <li>Strategically design and construct green stormwater infrastructure on Town owned property.</li> <li>Comments: There are a number of parcels where impermeable surfaces could be removed, bioretention cells could be installed, trees could be planted, permeable parking, ext.</li> </ol>	0	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	0	0	1	1	17
HARD/GREY INFRASTRUCTURE SOLUTIONS																								
<ol> <li>8. Strategically upgrade stormwater system through pipe replacements (upsizing where needed), increasing size and/or quantity of culverts and catchbasins, redefining ditches, ext.</li> <li>Comments: The Stormwater Action Plan can be utilized to determined prioritization. If chosen, project will be defined for future grant opportunities.</li> </ol>	1	1	0	1	1	1	0	1	1	1	1	1	1	0	1	0	1	1	1	0	0	0	1	16
9. Retrofit or relocate Townhall for flood events. Comments:	0	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	15



# Appendix B

Stakeholder Engagement Materials



Phase 1 Public Survey Summary

## Please tell us about yourself.

Do you live inside the town limits of Ahoskie?36 responses

No (18 responses) Yes (18 responses)

If yes, how long have you lived in Ahoskie?21 responses

N/A (2 responses) All my life (2 responses) 2 years 32 years 37 years 9 Months since 1959 since April 1995 30 yr. N/A (grew up in Ahoskie) Over 30 years 24 years 23 years **45 YRS** 25 yrs. 20 yrs. 20 years (plus) 16 yrs 50 years

Do you work inside the town limits of Ahoskie?36 responses

Yes (33 responses) No (3 responses)



Phase 1 Public Survey Summary

If yes, how long have you worked in Ahoskie?34 responses

N/A (2 responses) 20 yrs (2 responses) 2 yrs (2 responses) 8 years (2 responses) 2 years 33 years 51/2 years 10 yr. 8 yrs 11 years 30 years 6 years 3 months 9 years 20 YRS 12 years 5 yrs 17 yrs 3 years 22 1 y 4 months 15 years 20 yrs. 27 (plus) 13 yrs. 12 yrs 1.5 years 23 Years 17 yrs. 50 years



Phase 1 Public Survey Summary

Do you own and/or rent your property (home, business, or both as applicable)?36 responses

Rent (10 responses) No (6 responses) Own (10 responses) Yes (4 responses) Own home (3 responses) Own property

Please identify your zip code (home, work, or both as applicable).36 responses

27910 (24 responses) 27805 (3 responses) 27910 / 27922 27910 home 27942 work 27910 27855 27867 Windsor NC 27983 Ahoskie NC 27910 27805 27910 27983 27935

## Coastal Storms, Erosion and Flooding

On a scale of 1-5, how significant of a risk do you think coastal erosion poses to your community? <sup>34</sup> responses





**Phase 1 Public Survey Summary** 



On a scale of 1-5, how significant of a risk do you think flooding currently poses to your community? <sup>36</sup> responses





**Phase 1 Public Survey Summary** 

On a scale of 1-5, how significant of a risk do you think flooding will pose to your community in the next 20-40 years, given climate change and rising sea levels? 35 responses



Throughout your time living and/or working in Ahoskie, has your experience with flooding changed? <sup>36</sup> responses





**Phase 1 Public Survey Summary** 

Comments on previous question (optional).3 responses

- Climate change is a natural occurrence, has been for millions of years according to science. Claiming there is some urgent need to find a problem for a solution is not a good use of government time or my money.
- Question 9 comments: Not a concern in my immediate neighborhood but other areas of Ahoskie are more prone such as Ahoskie Creek and Stony Creek areas. Question 10 comments: No idea but probably same as above?? Who's to say? Question 11 comments: No changes in my immediate area.
- Chowan River erosion, Ahoskie Creek erosion (Question 7)

## Coastal Hazards and Impacts

What type of coastal hazards have you witnessed in your community? Select all that apply.36 responses





**Phase 1 Public Survey Summary** 

Comments on previous question (optional).2 responses

- can't tell if you are trying to back into implying that the above are due to "climate change" If that is the case please try and do better and perhaps get educated.
- Riverine flooding: Ahoskie and Stony Creeks. Stormwater flooding: esp. Church Street. Damage from high winds, fallen trees or branches, airborne debris: Isabel in 2003 and other heavy storms.

Which of those same hazards have directly impacted your home or your business? Select all that apply.35 responses



Comments on previous question (optional).1 response

• can't tell if you are trying to back into implying that the above are due to "climate change" If that is the case please try and do better and perhaps get educated.



**Phase 1 Public Survey Summary** 

Do you have measures in place to prevent and/or reduce flooding or flood-related damages and losses to your property? If yes, what type of actions have you taken? Check all that apply.34 responses



Have you ever considered moving to another location (can be inside or outside of Ahoskie) to avoid future flood losses, impacts, or damages? <sup>36 responses</sup>





**Phase 1 Public Survey Summary** 

Aside from any impacts to your home or business, have you experienced any other negative impacts as a result of flooding events? Check all that apply.36 responses



Comments on previous question (optional)1 response

Clean ditches & culvert pipes prior to storms (Question 14)



Phase 1 Public Survey Summary

Are there any specific areas of your community vulnerable to coastal hazards? If so, please list them by location. Please use street intersections or landmarks to describe locations.10 responses

- No
- The wooded area behind the homes on the 500block of Baker Street West from Hgwy13 to West Street floods almost anytime it rains with amy intensity
- Hayes Street, First Street
- Ahoskie Creek / Amphitheatre area. Stony Creek Area. Church Street (esp. P.O. & S. Bank areas). That's all I can think of for now.
- no
- Live in secluded area no flooding problems
- North end of Forest Drive Road floods low lots covered roads solution is install larger culvert driveway pipes for better flow and improving water exiting the neighborhood.
- Most of King St Windsor to the hospital floods
- None



Please rank the following activities, intended to restore daily life after a coastal storm.



Restoring electricity

Restoring beaches, wetlands, and other coastal landforms



**Phase 1 Public Survey Summary** 

Is there anything else you would like to share with us regarding flooding and coastal resilience in

Ahoskie?12 responses

No (10 responses) We do our best get it back! Clearing of the drains for water run off

## Stakeholder Engagement



Comment field. Complete if "Other (please specify)" was checked in previous question.1 response

Newspaper


**Phase 1 Public Survey Summary** 

Are there any local or community groups or organizations you feel we should coordinate with to create awareness of this program or similar programs in the future? If yes, please provide their name, website, and contact information if possible.6 responses

No (4 responses) local churches Hertford Co. DSS, NC DOT, Century Link, Spectrum, CADA, CPTA



#### Demographic Information (optional)



**Phase 1 Public Survey Summary** 



Comment field. Complete if "Other (please specify)" was checked in previous question.2 responses

Black/Caucasian/Alaskan/Pacific Islander with a small slice of Asian. Mexican



Phase 1 Public Survey Summary





Comment field. Complete if "Other (please specify)" was checked in previous question.1 response

all



Phase 1 Open House Summary

#### PHASE 1 OPEN HOUSE WEDNESDAY, DECEMBER 13, 2023, 4:00 PM - 6:30 PM; AHOSKIE COUNCIL CHAMBERS AT AHOSKIE FIRE DEPARTMENT

#### Attendees:

- Tris Ford, RK&K
- Sarah Spiegler, NC Sea Grant
- Kasen Wally, NC Division of Coastal Management
- Morgan Askew, CAT member, Town of Ahoskie Customer Service Specialist
- John Rawls, CAT member, Town of Ahoskie Assistant Fire Chief & Building Inspector
- Jennifer Bracy, CAT member, Town of Ahoskie Clerk
- Zero (0) stakeholder attendees

#### **Meeting Purpose:**

The Phase 1 Open House is the culmination of Phase 1 activities and was held to present information from the process to stakeholders such as critical asset and natural infrastructure inventories, defined community vision and goals, and risk and vulnerability assessment results, for additional comment and input. Hardcopies of the public surveys were made available and team members were available to answer questions. Open house materials also included various displays such as an overview of the RCCP and a board defining resiliency with Hertford County/Ahoskie flooding related facts and demographic data, existing hazard mapping, critical assets and natural infrastructure lists, and FEMA and DCM informational handouts. Stakeholders were asked to rank vision and goals on the displays from 'no support' (1) to 'fully support (5), identify additional hazards on displayed maps using stickers, and define what resilience means to them. A PowerPoint slide show was also prepared that contained additional information on the RCCP, the CDC SVI, and the risk and vulnerability assessment steps.

#### Notes:

Although no stakeholders attended despite a variety of advertisement methods, the CAT members were engaged and conversation centered around the completed Phase 1 activities, additional Phase 3 funding that has been secured by DCM and our team's success in getting projects to Phase 3 and 4. In general, CAT members were pleased with progress so far.



Phase 2 Open House Summary

#### PHASE 2 OPEN HOUSE THURSDAY, MARCH 14, 2024, 4:30 PM - 6:00 PM; AHOSKIE FIRE DEPARTMENT

#### Attendees:

- Jamie Heath, Mid-East Commission
- Gordon Marsh, RK&K
- Jennifer Bracy, CAT member, Ahoskie Planning Director/Town Clerk
- Morgan Askew, CAT member, Ahoskie Planning and Zoning Administrator/Floodplain Manager
- Mike Bradley, CAT member, Ahoskie Fire Chief
- David Hunt, CAT member, Ahoskie Councilman
- Randy Cherry, Kelford resident (works in Ahoskie)
- Susan McDoughtie, Aulander resident (works in Ahoskie)
- Vivian Chamblee, Ahoskie resident
- William Deanes, Aulander resident (works in Ahoskie)
- Charles Simmons, Ahoskie resident
- Pat Byrd, Ahoskie resident
- Charlie Morris, Ahoskie resident
- Charles Freeman, Ahoskie resident
- Martisa Raynor, Ahoskie resident
- Derrick R., Ahoskie resident
- Steven Lassiter, Ahoskie Public Works Director

#### **Meeting Purpose:**

The Phase 2 Open House is the culmination of Phase 2 activities and was held to present draft projects to the community. Attendees were asked to vote on projects to determine community priorities and assist the Community Action Team with the final round of project prioritization. Voting was conducted by placing stickers on project posters. Participants were also able to suggest additional projects. Education on the RCCP and on the various project types were also presented through posters, handouts, and an online Story Map, including education on green/nature-based solutions.

#### Notes:

- In addition to contractors and CAT members, many resident stakeholders participated in the Phase 2 open house (at least 11 according to sign in sheet).
- Draft priority projects were presented on posters and participants placed stickers on the posters to vote for their favorite projects.
- Draft projects received the following number of votes:



- o Green stormwater infrastructure on town owned property: 0 votes
- Stormwater Action Plan: 1 vote
- o Stormwater wetland at Ahoskie Creek Ballfields: 3 votes
- o Green stormwater infrastructure at public housing developments: 4 votes
- o Retrofit or relocate Town Hall: 4 votes
- o Green stormwater infrastructure at RL Vann Center: 6 votes
- Stream cleanout: 7 votes
- o Back-up generators at critical facilities: 11 votes
- Upgrade the stormwater system: 12 votes
- Additional suggested projects include the following:
  - o Corner of Baker & West St. flooding issues after heavy rains



Phase 2 Open House Summary

#### Copy of event sign-

in sheet:

COASTAL COMMUNITIES PROGRAM	HOUSE SIGN-IN SHEET
TitleTown of Ahoskie – RCCP PhDate3/14/2024Time	
Name	Address Email
Jamie Heath	1502 N Market. St., Washington jheath@mideastcom.org
Gorden Marsh	
Randy Cherry	8601 Six Farks R.J. Refersh g marsh @ rkk.com 801 Tyler School Rd Kellord, NC Radychard @ mail.com
Margan Askew	108 NC HWY 45 N Winton NC morganaskew @ahostcionc.go
Jennifer Bracy	432B US Huy is w, Anosnie Jenniferbracy & anosnienc. for
Mike Bredley	224 5:10 Form Dr. Autendo 27805 Searge tradley & aborbe or sor
Susan M Doughtie	329 Francis M. 11 Rd Aulander 27 05 Susan doughtie Cahoskiene.go
Vivian W. Chambles	819 Everett St. Hloskie, N.C.
William R. Deares	114 Bradley Drive, An lan Ler NC 27805 Wdeenes O whosk i enc. gov
Charley Simmons	506 Lalco un our Dirivo Abelill charler simmon, e abortion C. Sw
Gat Byd	921 alton SI Dove DC Damas . com
David Hunt	214 North St W Athoskie N27910 dourdhunt @ ahoskrene.gou
Charlie Monis	717 Staten Ave Atonie chucicmolab 4812/2 Smill, com
CHARLES FREEMA	13 & Albemarle Drive
District of the second se	Page of



Tile    Town of Ahoskie - RCCP Phase 2 Open House      Date    3/14/2024    Time    4:30 p.m 5:45 p.m.    Location    Council Chambers at the Ahoskie Fire Dept.      30 Dr. MLK Jr. Dr. 5, Ahoskie, NC 27910      Name    Address    Email      Maktisahaya    Maskee    Mathsanayar @gaailk      Japan    Amaskee    Jamitsanayar @gaailk      Japan    Address    Bautister State      Maktisahaya    Amaskee    Jauritk 1:9688 gm cul.com      Japan    Japan    Salas	COASTAL COMMUNITIES PROGRAM	OPEN HOUSE SIGN-	IN SHEE	Т
	Date 3/14/2024	Time 4:30 p.m. – 5:45 p.m.	Location	Email Martisorrayner @gmail.con deurkk.19688 gmail.com



#### Phase 2 Open House Summary

#### **Project vote results:**





















## Phase 2 Open House Summary

Photos from event:





















































# Appendix C

**Risk and Vulnerability Assessment Materials** 



#### **Critical Assets and Natural Infrastructure**

#### **Critical Assets**

**Emergency Management** 

 None in town limits or ETJ.
 Served by: Hertford County Emergency Management 102 Industrial Park Rd. Winton, NC 27986

Law Enforcement

• Town of Ahoskie Police Department 705 W Main St. Ahoskie, NC 27910

Fire and EMS Stations

- Town of Ahoskie Fire Department 301 S Dr. Martin Luther King Jr. Dr. Ahoskie, NC 27910
- Ahoskie Rural Fire Department 609 W Main St. Ahoskie, NC 27910
- No EMS provider in town limits or ETJ. Served by: Hertford County EMS 102 Industrial Park Rd. Winton, NC 27986

#### 911 Dispatch

 None in town limits or ETJ.
 Served by: Hertford County 911 Communications Department 115 Justice Dr. Suite 16 Winton, NC 27986

**Government Services** 

- Ahoskie Fire Department Includes Town Council meeting chambers and some town offices 301 S Dr. Martin Luther King Jr. Dr. Ahoskie, NC 27910
- Ahoskie Town Hall 201 W Main St. Ahoskie, NC 27910
- Ahoskie Public Works 500 S Catherine St. Ahoskie, NC 27910



#### **Critical Assets and Natural Infrastructure**

- Ahoskie Housing Authority
  200 Pierce Ave.
  Ahoskie, NC 27910
- Ahoskie Chamber of Commerce 310 S Catherine Creek Rd. Ahoskie, NC 27910
- US Post Office 115 W Church St. Ahoskie, NC 27910
- Social Security Administration 1231 W 1<sup>st</sup> St. Ahoskie, NC 27910
- NC Division of Transportation (NC DOT) District Office 230 NC-42 W Ahoskie, NC 27910
- NC Division of Motor Vehicles (DMV) 242 NC-42 W Ahoskie, NC 27910

#### Food

- Ahoskie Food Pantry 701 E Church St. Ahoskie, NC 27910
- The Family Resource Center of Ahoskie 309 W Church St. Ahoskie, NC 27910
- Calvary Missionary Baptist Church Food Pantry 600 N Catherine St. Ahoskie, NC 27910
- Walmart 2150 US-13 Ahoskie, NC 27910
- Food Lion 1498 E Memorial Dr. Ahoskie, NC 27910
- Piggly Wiggly 1007 E Memorial Dr. Ahoskie, NC 27910

#### Water/Wastewater

- Water and sewer service is provided by the town.
- Both systems have been digitally mapped by the Wooten Company.



**Critical Assets and Natural Infrastructure** 

- Water system
  - Public Water Supply Water Sources (NC DEQ Div. of Water Resources data)
    - 7 supply wells owned and operated by the Town of Ahoskie
- Sewer system
  - NPDES Discharge Permits (NC DEQ Div. of Water Resources data)
    - Ahoskie Wastewater Treatment Plant 208 Johnny Mitchell Rd. Ahoskie, NC 27910
  - Head Station
    S Rhue St.
    Ahoskie, NC 27910
    32 pump stations

Electric Power Grid

• Electric service provided by Dominion Energy and Roanoke Electric Membership Cooperative (EMC).

#### Propane Suppliers

- Jernigan Oil & Propane 415 E Main St. Ahoskie, NC 27910
- Sharp Energy 1525 US-13 S Ahoskie, NC 27910
- Ferrell Gas 326 NC-42 Ahoskie, NC 27910

#### **Transportation**

- Road network (Hertford County data)
  - US-13 is a NCDOT designated essential coastal evacuation route.
  - US-13 is a NCDOT designated Strategic Transportation Corridor (N).
- Bridges (NCDOT data)
  - 3 bridges in Ahoskie's jurisdiction.
    - US-13 bridge is along a NCDOT designated essential coastal evacuation route.
    - NC-42 bridge
    - Lee Jernigan Rd. bridge
- Rail (NCDOT data)
  - The North Carolina & Virginia Railroad Company operates an active railroad that runs through the center of town.
- Ferry terminals
  - No ferry terminals in Ahoskie's jurisdiction.



#### **Critical Assets and Natural Infrastructure**

- Public docks
  - $\circ \quad \text{No public docks in Ahoskie's jurisdiction.}$
- Airports/Airfields
  - None identified in Ahoskie's jurisdiction. (Jernigan's Airfield is defunct.)
- Public transportation
  - No public transportation facilities in town limits. The town is served by Choanoke Public Transportation Authority, an on demand rural public transportation system.

#### <u>Medical</u>

- ECU Health Roanoke-Chowan Hospital 500 S Academy St. Ahoskie, NC 27910
- Hertford County Health Department
  828 S Academy St.
  Ahoskie, NC 27910
- Roanoke Chowan Community Health Center 120 Health Center Dr. Ahoskie, NC 27910
- Ahoskie Family Physicians 240 S Academy St. Ahoskie, NC 27910
- Ahoskie Primary Care 113 Hertford County High School Rd. Ahoskie, NC 27910
- Ahoskie Adult Medicine 201 W South St. Ahoskie, NC 27910
- Ahoskie Medical Practice 703 S Catherine Creek Rd. Ahoskie, NC 27910
- Ahoskie Pediatrics 700 E Sunset St. Ahoskie, NC 27910
- ECU Health Wellness Center 117 Hertford County High School Rd. Ahoskie, NC 27910
- Ahoskie Health and Rehab 604 E Stokes St. Ahoskie, NC 27910
- Mizelle's Discount Drug Co. 925 E Memorial Dr. Ahoskie, NC 27910



#### **Critical Assets and Natural Infrastructure**

- Drug Co. Discount Pharmacy 312 S Academy St. Ahoskie, NC 27910
- Walmart Pharmacy 2150 US-13 Ahoskie, NC 27910
- Walgreens 700 S Catherine Creek Rd. Ahoskie, NC 27910

#### <u>Schools</u>

- Ahoskie Elementary School 1206 W 1<sup>st</sup> St. Ahoskie, NC 27910
- Bearfield Primary School 145 Hertford County High School Rd. Ahoskie, NC 27910
- Hertford County High School 1500 W 1<sup>st</sup> St. Ahoskie, NC 27910
- East Carolina University School of Dental Medicine 100 Health Center Dr. Ahoskie, NC 27910
- Roanoke Chowan Community College (approximately one mile outside of the town's jurisdiction)
  109 Community College Rd.
  Ahoskie, NC 27910

#### <u>Libraries</u>

• Ahoskie Public Library 210 E Church St. Ahoskie, NC 27910

Community Buildings and Museums

- Ahoskie Senior Center 418 Everett St. Ahoskie, NC 27910
- RL Vann Community Resource Center 415 Holloman Ave. Ahoskie, NC 27910
- Ahoskie Regional Visitor's Center and Ahoskie Museum / The Gathering Place 701 E Church St. Ahoskie, NC 27910



#### **Critical Assets and Natural Infrastructure**

#### Affordable Housing Areas

- Ahoskie Housing Authority (136 total units) Pierce Ave./Burden St./Vision Dr. Neighborhood and Parker Ave./ E First St. Neighborhood Ahoskie, NC 27910
- See "Affordable Housing" map for approximate boundaries of other affordable neighborhoods.

#### Downtown Commercial District

• Ahoskie Downtown Commercial District Main St. from Llyod St. to McGlohon St. Railroad St. from Main St. to North St. Mitchell St. from Main St. to North St. Ahoskie, NC 27910

#### Natural Infrastructure

#### Parks/Public Land

- Ahoskie Recreation Complex Lakeview Dr.
   Ahoskie, NC 27910
   87.4 acres
- Mitchell Park NC-42 Ahoskie, NC 27910
   48.5 acres
- Futrell Park Richard St. Ahoskie, NC 27910
  - 0.3 acres
- Hall Park
  Catherine Creek Rd.
  Ahoskie, NC 27910
  - o 0.6 acres
- Miracle on Main Main St. Ahoskie, NC 27910
  - o 7.5 acres
- No Man's Land Main St. & Railroad St. Ahoskie, NC 27910
  - o 0.4 acres



#### **Critical Assets and Natural Infrastructure**

#### Public Boat Ramps

• No public boat ramps in Ahoskie's jurisdiction.

#### **Wetlands**

- Wetlands (NC CREWS data)
  - o 1,071.4 acres identified in the Ahoskie jurisdiction.

#### **Forests**

- Working forest lands (NC Natural Heritage Program data)
  - $\circ$   $\;$  Areas in the town limits and ETJ were identified.
- Rural forest landscape (NC Natural Heritage Program data)
  - Areas in the town limits and ETJ were identified.
- Urban forest landscape (NC Natural Heritage Program data)
  - The majority of the town limits has been identified as priority urban forest.

#### **Floodplains**

- 100-year floodplain (FEMA data)
  - o 1,474.7 acres identified in the Ahoskie jurisdiction.
- 500-year floodplain (FEMA data)
  - 189.4 acres identified in the Ahoskie jurisdiction.

#### Surface Water Hydrology

- Rivers and streams (NC DEQ data)
  - Ahoskie Creek and its tributaries
  - Whiteoak Swamp and its tributaries
  - Horse Swamp and its tributaries
- High Quality Waters (NC DEQ data)
  - None identified in the Ahoskie area.
- 303(d) listed waters (EPA data)
  - None identified in the Ahoskie area.
- Fishery Nursery Areas (NC DEQ data) Primary and secondary
  - None identified in the Ahoskie area.

#### Natural Areas

- Managed Areas (NC Natural Heritage Program data)
  - Includes nature preserves, registered heritage areas, conservation easements, other protected areas, and lands under federal ownership, state ownership, or local government ownership.
    - Two parcels identified in Ahoskie's jurisdiction.
      - 75.5-acre conservation easement parcel adjacent to Ahoskie Recreation Complex
      - 12.5-acre conservation easement parcel in northeastern ETJ



#### **Critical Assets and Natural Infrastructure**

- Natural Areas (NC Natural Heritage Program data)
  - Sites that are of special biodiversity significance. A natural area's significance may be due to the presence of rare species, exemplary natural communities, or important animal assemblages, referred to collectively as "elements" of biodiversity.
    - None identified in Ahoskie's jurisdiction.

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

- Biodiversity and Wildlife Habitat Assessment (NC Natural Heritage Program data)
  - The Biodiversity and Wildlife Habitat Assessment was developed by the N.C. Natural Heritage Program. It provides information about the relative priority of aquatic and terrestrial habitat, landscape function and connectivity.

ASSET NAME	EXPOSURE SCORE 0-3	SENSITIVITY SCORE 0-3	ADAPTATION SCORE	VULNERABLITY SCORE 0-6
Asset Name	0 = no exposure 1 = low 2 = medium 3 = high	0 = no sensitivity 1 = low 2 = medium 3 = high	0 = no adaptation 1 = low 2 = medium 3 = high	0-2 = low 3-4 = medium 5-6 = high
LAW ENFORCEMENT				
Town of Ahoskie Police Department	2	2	2	Low
FIRE AND EMS				
Town of Ahoskie Fire Department	3	2	2	Med
Ahoskie Rural Fire Department	2	2	2	Low
Overall	3	2	2	Med
GOVERNMENT SERVICES				
Ahoskie Housing Authority	2	2	2	Low
Ahoskie Public Works	2	3	1	Med
Ahoskie Town Hall	2	2	2	Low
NC Division of Motor Vehicles (DMV)	2	2	2	Low
Social Security Administration	3	3	1	High
Ahoskie Chamber of Commerce	3	2	2	Med
US Post Office	3	3	2	Med
NC Dept. of Transportation (NCDOT) District Office	3	3	2	Med
Town Council Meeting Chambers at Ahoskie Fire Dept.	3	2	3	Low
Overall	3	3	2	Med
FOOD				
Piggly Wiggly	2	2	2	Low
Food Lion	2	2	2	Low
Walmart	3	2	2	Med
Ahoskie Food Pantry	3	2	2	Med
Calvary Missionary Baptist Church Food Pantry	3	2	2	Med
The Family Resource Center of Ahoskie	3	2	2	Med
Overall	3	2	2	Med
PROPANE SUPLIERS				
Sharp Energy	2	2	2	Low
Jernigan Oil and Propane	2	2	2	Low
Ferrell Gas	2	2	2	Low
Overall	2	2	2	Low
ASSET NAME	EXPOSURE SCORE	SENSITIVITY SCORE	ADAPTATION SCORE	VULNERABLITY SCORE
---	----------------	-------------------	------------------	--------------------
MEDICAL				
Walgreens	2	2	3	Low
Hertford County Health Department	3	3	1	High
Ahoskie Adult Medicine	2	3	2	Med
Ahoskie Health and Rehab	2	3	2	Med
Mizelle's Drug Co.	2	2	3	Low
Walmart Pharmacy	3	2	3	Low
Ahoskie Family Physicians	3	3	1	High
ECU Health Roanoke-Chowan Hospital	3	3	1	High
Roanoke Chowan Community Health Center	3	3	1	High
Ahoskie Primary Care	2	3	1	Med
Ahoskie Pediatrics	3	3	1	High
Ahoskie Medical Practice	3	3	1	High
Drug Co. Discount Pharmacy	3	2	3	Low
ECU Health Wellness Center	3	2	3	Low
Overall	3	3	2	Med
SCHOOL				
Hertford County High School	3	3	1	High
East Carolina University School of Dental Medicine	3	3	1	High
Bearfield Primary School	3	3	1	High
Ahoskie Elementary School	3	3	1	High
Overall	3	3	1	High
LIBRARIES				
Ahoskie Public Library	2	1	2	Low
COMMUNITY BUILDINGS AND MUSEMUMS				
Ahoskie Regional Visitor's Center and Ahoskie Museum	2	2	2	Low
Ahoskie Senior Center	3	2	2	Med
RL Vann Community Resource Center	3	2	2	Med
The Gathering Place	3	2	2	Med
Overall	3	2	2	Med

ASSET NAME	EXPOSURE SCORE	SENSITIVITY SCORE	ADAPTATION SCORE	VULNERABLITY SCORE
LOW-INCOME HOUSING				
Church St	2	3	1	Med
Everet St	2	3	1	Med
Pinewood	3	3	1	High
First	2	3	1	Med
Catherine Creek	2	3	1	Med
Troy	3	3	1	High
Stokes	3	3	1	High
Academy	2	3	1	Med
Mcglohon	2	3	1	Med
Rogers	3	3	1	High
Talmage St	3	3	1	High
Pierce St	3	3	1	High
Catherine Creek	3	3	1	High
Cypress	3	3	1	High
Sunset	3	3	1	High
Main	3	3	1	High
Loftin	3	3	1	High
Mitchell	3	3	1	High
Maple	3	3	1	High
Catherine	3	3	1	High
Snipes	3	3	1	High
Dr. Martin Luther King Jr.	3	3	1	High
VIP	3	3	1	High
Overall	3	3	1	High
PUBLIC HOUSING				
ROANOKE CHOWAN DEVELOPMENT	2	3	1	Med
СО	-			
AHOSKIE HOUSING AUTHORITY	3	3	1	High
AHOSKIE HOUSING AUTHORITY	2	3	1	Med
AHOSKIE HOUSING AUTHORITY	3	3	1	High
AHOSKIE HOUSING AUTHORITY	3	3	1	High
Overall	3	3	1	High
DOWNTOWN COMMERCIAL DISTRICT				
Downtown Commercial District	2	2	1	Med

ASSET NAME	EXPOSURE SCORE	SENSITIVITY SCORE	ADAPTATION SCORE	VULNERABLITY SCORE
STREAMS				
MOST VULVERABLE STREAMS				
Horse Swamp	3	2	2	Med
Ahoskie Creek	2	3	2	Med
Snake Branch	3	1	1	Med
Unnamed Tributary	2	2	1	Med
Unnamed Tributary	3	3	2	Med
Unnamed Tributary	3	3	2	Med
Unnamed Tributary	2	3	1	Med
Unnamed Tributary	2	3	1	Med
Unnamed Tributary	2	3	1	Med
Unnamed Tributary	3	2	1	Med
Unnamed Tributary	2	3	1	Med
Unnamed Tributary	3	3	1	High
OVERALL (ALL STREAMS)	3	2	2	Med
WETLAND				
Overall Wetland Assessment	4	1	2	Med
ROAD NETWORK				
25 Most Vulnerable Streets				
EDGEWOOD DR	3	3	1	High
LAKEVIEW DR	4	3	2	High
W MEMORIAL DR	4	3	2	High
WILLOUGHBY RD	3	3	1	High
E BAKER ST	3	3	1	High
BUSTER MOORE RD	3	3	1	High
CHAMBLEE AVE	3	3	1	High
CIRCLE DR	3	3	1	High
N DR MARTIN LUTHER KING JR DR	3	3	1	High
S EVERETT ST	3	3	1	High
E FIRST ST	3	3	1	High
N MAPLE ST	3	3	1	High
NC 42 W	3	3	1	High
NEWSOME GROVE RD	3	3	1	High
PINEWOOD DR	3	3	1	High
E RICHARD ST	3	3	1	High
S ACADEMY ST	3	2	1	Med
CAMLIN ST	3	2	1	Med
S CURTIS ST	3	2	1	Med
EVANS ST	3	2	1	Med
FOREST DR	3	2	1	Med
KENNEDY COURT APTS	3	2	1	Med

ASSET NAME	EXPOSURE SCORE	SENSITIVITY SCORE	ADAPTATION SCORE	VULNERABLITY SCORE
ROAD NETWORK cont.				
LEE JERNIGAN RD	3	2	1	Med
WOODLAWN ST	3	2	1	Med
S PEMBROKE AVE	3	2	2	Med
W STOKES ST	3	2	2	Med
Overall Vulnerability (ALL ROADS)	3	2	2	Med
Bridges (NCDOT data)				
SCLRR	2	2	1	Med
AHOSKIE CREEK	3	3	1	High
AHOSKIE CREEK	3	2	1	Med
Overall	3	3	1	Med
Water/Wastewater				
Water Storage				
Catherine St	2	3	2	Med
Catherine St	3	3	2	Med
Memorial Dr	2	3	2	Med
Overall	3	3	2	Med
Water Supply Wells				
NORTH CATHERINE ST	2	3	2	Med
TALMAGE AVE	2	3	2	Med
TALMAGE AVE	2	3	2	Med
ODOM ST	2	3	2	Med
ODOM STREET BEHIND WELL	2	2	2	D 4 a d
HOUSE FOR WELL #4	2	3	2	Med
Overall	2	3	2	Med
Sewer System				
Sewer System	3	2	2	Med
Water System				
Water System	2	2	2	Low

### Assess Vulnerability

This assessment explores the vulnerability of critical assets, natural infrastructure, and social systems. Use your team's <u>Critical Asset & Natural Infrastructure Vulnerability</u>

Vulnerability of critical assets and natural infrastructure to a hazard is a function of the exposure, sensitivity, and adaptive **Exposure** refers to the probability of physical contact between an asset and a hazard.

Sensitivity is the degree to which an asset is impacted by a hazard.

Adaptive Capacity is the ability of an asset to change its characteristics or behavior in response to a hazard.

Vulnerability = Exposure + Sensitivity - Adaptive Capacity













Critical Assets Town Core Inset

### Legend

	Ĭ	Bridg	jes	
			munity Building eums	s and
		Fire	and EMS	
		Food	1	
		Gove	ernment Service	es
	i,	Libra	iries	
		Medi	cal	
	B	Polic	e	
		Prop	ane Suppliers	
	٥	Publ	ic Water Supply	v Wells
		Scho	ools	
		Railr	oad	
		Ahos	skie Roads	
		Hertf	ord County Roa	ads
			skie Downtown mercial District	
		Towr	n Limits	
		ETJ		
Z	0 0.1	125	0.25	0.5 Miles















Natural Infrastructure Biodiversity and Wildlife Habitat Assessment

## Legend

- + Railroad
- Ahoskie Roads
- Hertford County Roads
- Town Limits



ETJ

### Biodiversity/Wildlife Habitat

# Relative Conservation Value

9-10 (Maximum)
 8
 7
 6
 5
 2-4
 1 (Moderate)
 0 (Unrated)
 Impervious surface >20%
 0.25 0.5 1 Miles





System data provided courtesy of the Wooten Company.



System data provided courtesy of the Wooten Company.

### Wildfire Risk data layers

### Descriptions from Southern Group of State Foresters, Wildfire Risk Assessment Portal

### WUI Risk Index

The **Wildland Urban Interface (WUI) Risk Index** layer is a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the Wildland Urban Interface and rural areas is key information for defining potential wildfire impacts to people and homes.

The WUI Risk Index is derived using a Response Function modeling approach. Response functions are a method of assigning a net change in the value to a resource or asset based on susceptibility to fire at different intensity levels, such as flame length. The WUI Risk Index range of values is from -1 to -9, with -1 representing the least negative impact and -9 representing the most negative impact. For example, areas with high housing density and high flame lengths are rated -9 while areas with low housing density and low flame lengths are rated - 1. To calculate the WUI Risk Index, the WUI housing density data was combined with Flame Length data and response functions were applied to represent potential impacts for all unique conditions of WUI housing density and flame length. The response functions were defined by a team of experts based on values defined by the SWRA Update technical team. By combining flame length with the WUI housing density data, you can determine where the greatest potential impact to homes and people is likely to occur.

Flame Length is used as a measure of fire intensity. With the WUI Risk Index the analysis incorporates penetration into urban fringe areas so that outputs better reflect real world conditions for fire spread and impact in urban interface areas. With this enhancement, houses in urban areas adjacent to wildland fuels are incorporated into the WUI risk modeling. All areas in the South have the WUI Risk Index calculated consistently, which allows for comparison and ordination of areas across the entire state (and South).

The risk output maps are derived at a 30 meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county or local protection mitigation or prevention planning.

### **Community Protection Zones**

**Community Protection Zones (CPZ)** represent those areas considered highest priority for mitigation planning activities. CPZs are based on an analysis of the Where People Live housing density data and surrounding fire behavior potential. Rate of Spread data is used to determine the

areas of concern around populated areas that are within a 2-hour fire spread distance. This is referred to as the Secondary CPZ.

General consensus among fire planners is that for fuel mitigation treatments to be effective in reducing wildfire hazard, they must be conducted within a close distance of a community. In the South, the WUI housing density has been used to reflect populated areas in place of community boundaries (Primary CPZ). This ensures that CPZs reflect where people are living, not jurisdictional boundaries.

Secondary CPZs represent a variable width buffer around populated areas that are within a 2-hour fire spread distance. Accordingly, CPZs will extend farther in areas where rates of spread are greater and less in areas where minimal rate of spread potential exists. Secondary CPZ boundaries inherently incorporate fire behavior conditions. Primary CPZs reflect areas with a predefined housing density, such as greater than 1 house per 7 acres. Secondary CPZs are the areas around Primary CPZs within a 2 hour fire spread distance.

All areas in the South have the CPZs calculated consistently, which allows for comparison and ordination of areas across the entire region. Data is modeled at a 30-meter cell resolution, which is consistent with other SWRA layers.

### Characteristic Fire Intensity Scale

**Characteristic Fire Intensity Scale (FIS)** specifically identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist based on weighted average of four percentile weather categories. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consist of 5 classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities. Refer to descriptions below.

### 1. Class 1, Very Low:

Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.

### 2. Class 2, Low:

Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.

### 3. Class 3, Moderate:

Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.

### 4. Class 4, High:

Large Flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.



Critical Assets and Floodplain

### Legend



100-year Floodplain (1% annual chance flood)



500-year Floodplain (0.2% annual chance flood)

- **Bridges**
- Community Buildings and Museums
- Fire and EMS
- (f) Food
- Government Services
- Libraries
- Medical
- Police
- Propane Suppliers
- Public Water Supply Wells
- Schools
- Wastewater Treatment Plant
  - Ahoskie Downtown Commercial District
- —— Railroad
- Ahoskie Roads
- Hertford County Roads
- Town Limits



1 Miles



**Critical Assets** and Floodplain Town Core Inset

## Legend

	100-year	Floodp	lain
Ś	100-year	Floodp	laiı

- 500-year Floodplain
- $\Xi$ Bridges
  - Community Buildings and Museums
  - Fire and EMS
- Food
- ÎÎÎ **Government Services**
- i Libraries
- Medical +
- Police P
- **Propane Suppliers** 
  - Public Water Supply Wells
  - Schools
  - Ahoskie Downtown **Commercial District**
- Railroad
- Ahoskie Roads
- Hertford County Roads
  - **Town Limits**
- ETJ
- 0.125 0.25





Critical Assets and Wildland-Urban Interface (WUI) Risk Index

## Legend

X	Bridges	<del></del>	Railroad
	Community		Ahoskie Roads
	Buildings and Museums		Hertford County Roads
۲	Fire and EMS		Town Limits
	Food		ETJ
	Government Services	WUI F	Risk Index
i	Libraries		-9: Major Impacts
•	Medical		-8
E	Police		-7
	Propane Suppliers		-6
٥	Public Water Supply Wells		-5: Moderate Impacts
Ł	Schools		-4
_	Wastewater		-3
	Treatment Plant		-2
			-1: Minor
	Ahoskie Downtown		Impacts
	Commercial		
	District		



Critical Assets and Wildland-Urban Interface (WUI) Risk Index Town Core Inset

### Legend

Ĭ	Bridges		Railroad
	Community		Ahoskie Roads
	Buildings and Museums		Hertford County Roads
<b>*</b>	Fire and EMS		Town Limits
	Food		ETJ
	Government Services	WUI F	Risk Index
ų	Libraries		-9: Major Impacts
•	Medical		-8
P	Police		-7
	Propane		-6
	Suppliers		-5: Moderate
۵	Public Water		Impacts
	Supply Wells		-4
	Schools		-3
	Ahoskie		-2
	Downtown Commercial		-1: Minor
	District		Impacts





Critical Assets and Wildfire Risk Assessment Community Protection Zones (CPZs)

## Legend

X	Bridges		Wastewater
	Community Buildings and		Treatment Plant
	Museums		Ahoskie
<b>*</b>	Fire and EMS		Downtown Commercial
	Food		District
血	Government	+	Railroad
	Services		Ahoskie Roads
<b>ئ</b>	Libraries		Hertford
•	Medical		County Roads
E	Police		Town Limits
	Propane		ETJ
	Suppliers		Primary CPZ
۵	Public Water Supply Wells		Secondary CPZ
	Schools		



Critical Assets and Characteristic Fire Intensity Scale

## Legend

X	Bridges		Railroad
	Community		Ahoskie Roads
	Buildings and Museums		Hertford County Roads
<b>*</b>	Fire and EMS		Town Limits
	Food		ETJ
	Government		
	Services	Fire Ir	ntensity Scale
Ŀ	Libraries		1: Lowest Intensity
•	Medical		2
F	Police		3: Moderate
	Propane		Intensity
	Suppliers		4
٥	Public Water Supply Wells		5: High Intensity
L	Schools		6
	Wastewater Treatment		7
	Plant		8: Highest
	Ahoskie Downtown Commercial		Intensity



0 0.25 0.5

District



Critical Assets and Characteristic Fire Intensity Scale Town Core Inset

### Legend

<b>—</b>	Bridges		Railroad
	Community		Ahoskie Roads
	Buildings and Museums		Hertford County Roads
<b>*</b>	Fire and EMS		Town Limits
	Food		ETJ
	Government Services	Fire Ir	ntensity Scale
ų	Libraries		1: Lowest Intensity
•	Medical		2
E	Police		3: Moderate Intensity
	Propane Suppliers		4
٥	Public Water Supply Wells		5: High Intensity
	Schools		6
	Ahoskie		7
	Downtown Commercial		8: Highest
	District		Intensity



0.5 Miles



Affordable Housing and Wildland-Urban Interface (WUI) Risk Index

## Legend

	Railroad
	Ahoskie Roads
	Hertford County Roads
	Town Limits
	ETJ
	Public Housing
	Other Affordable Housing
WUI R	lisk Index
	-9: Major Impacts
	-8
	-7
	-6
	-5: Moderate Impacts
	-4
	-3
	-2
	-1: Minor Impacts



Affordable Housing and Characteristic Fire Intensity Scale

## Legend

-++-	Railroad
	Ahoskie Roads
	Hertford County Roads
	Town Limits
	ETJ
	Public Housing
	Other Affordable Housing Areas
Fire Intensity Scale	
	1: Lowest Intensity
	2
	3: Moderate Intensity
	4
	5: High Intensity
	6
	7
	8: Highest Intensity

 N

 0
 0.25
 0.5
 1 Miles

