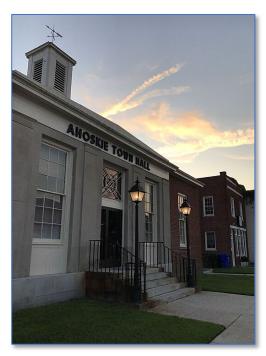
PROJECT PORTFOLIO

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 5th 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)



TOWN OF AHOSKIE

Stormwater Action 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

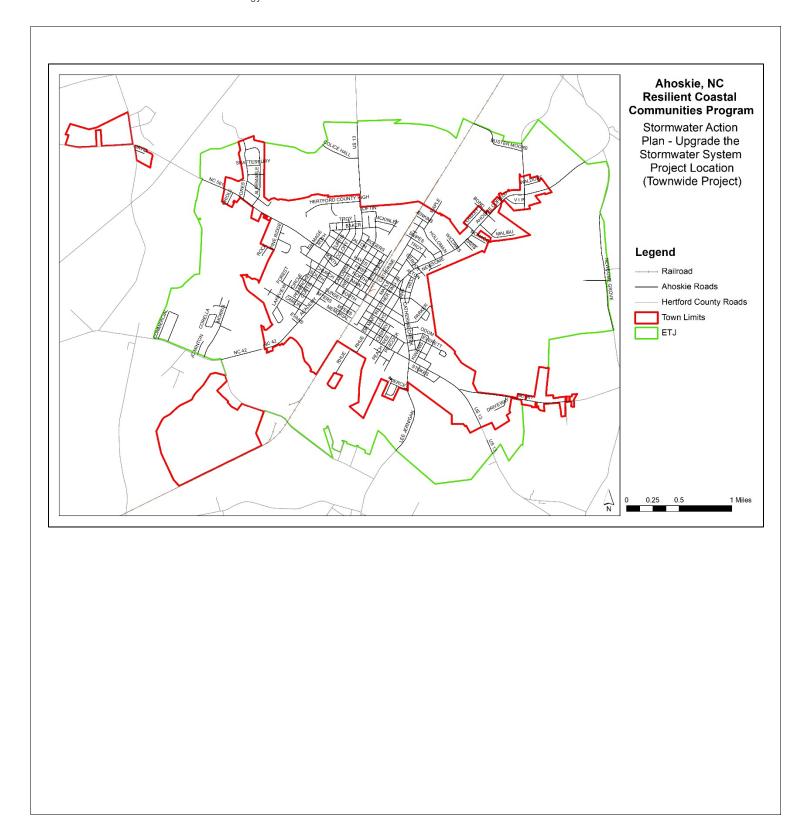
Engineering/Design - Develop a Stormwater Action Plan. This plan will complete a stormwater ground assessment and surface hydrology analysis that will be incorporated into an online mapping system that can submit real-time data to analyze, prioritize, and take action on a problem area. The plan will 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.

- Hydro Analysis / vulnerability assessment
- Field Work
- Natural Resource Technical Report
- Project Prioritization/Recommendations
- Arc Online Tool
- Stormwater Maintenance Manual
- Public Education Campaign Stormwater Responsibilities
- Permitting Due Diligence
- Project Surveys / Utility Locations
- Project Engineering/Design

<u>Implementation</u> - 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) Stormwater Action Plan Planning Green and Hybrid Solutions Stormwater System Upgrade 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	Potential Sources for Project/Action Implementation Stormwater Action Plan NC Resilient Coastal Communities Program Phase 3 Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Capability and Capacity Building (C&CB) Grant NC Department of Environmental Quality Water Resources Development Grant (WRDG)
	 Stormwater System Upgrade NC Resilient Coastal Communities Program Phase 4 Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance (FMA) Grant NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant

	 NC Department of Environmental Quality Water Resources Development Grant (WRDG) NC Department of Environmental Quality 319 Grant HUD Community Development Block Grant – Mitigation (CDBG-MIT) 				
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



TOWN OF AHOSKIE

Backup Generators at Critical Facilities

3000	
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) Flooding (Nuisance, Riverine) Wildfire
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	Potential Sources for Project/Action Implementation
	FEMA Hazard Mitigation Grant Program (HMGP)
	 FEMA Pre-Disaster Mitigation Grant Program Golden Leaf Grant
	HUD Community Development Block Grant – Mitigation (CDBG-MIT)
Project Estimated Timeline	1-2 years
Priority Rating	High

Project must be a nature-based solution or Potential Submission for RCCP Phase 3 hybrid solution to be considered for RCCP Phase Yes No Project Map Ahoskie, NC Resilient Coastal **Communities Program** Back-Up Generators at Critical Facilities **Project Locations** Legend Ahoskie Fire Dept. (1 generator needed) Ahoskie Police Dept. (1 generator needed) Ahoskie Public Works Building (1 generator needed) Ahoskie Town Hall (1 generator needed) Ahoskie Water System Supply Wells (7 generators needed) Ahoskie Sewer System Pump Stations (32 generators needed) Railroad Ahoskie Roads Hertford County Roads Town Limits 1 Miles

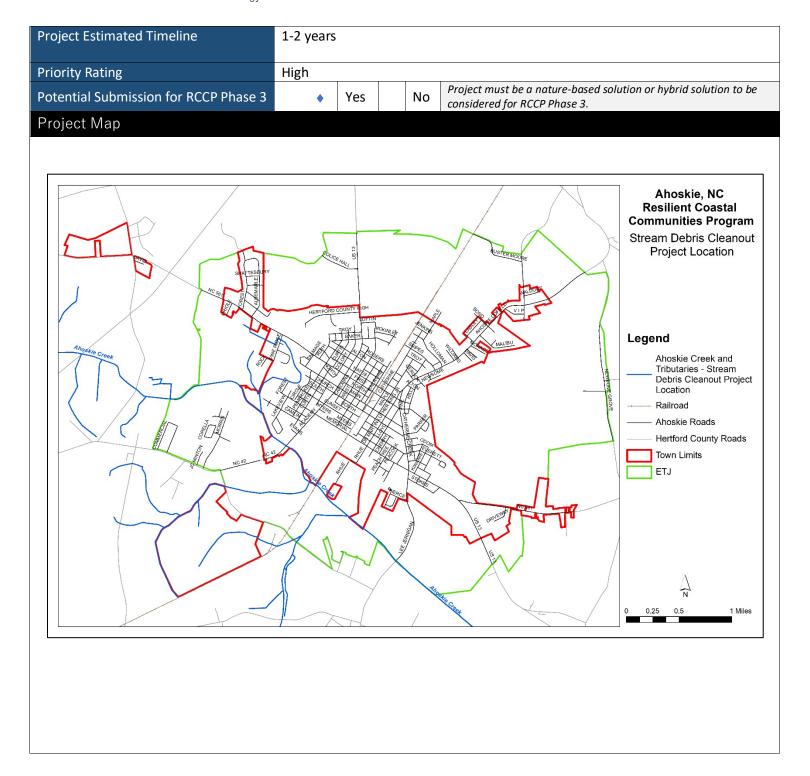
Stream Cleanout



TOWN OF AHOSKIE

Stream Cleanout

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/Strategy 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 Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) Build Adaptive Capacity Accommodate
Project Estimated Cost	Up to \$25 / linear foot (currently StRAP funds pay \$10.80 / linear foot for coastal streams)
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation NC Dept. of Agriculture Streamflow Rehabilitation Assistance Program (StRAP) NCDEQ Stream Debris Removal Program



Green Stormwater Infrastructure at the R.L. Vann Center

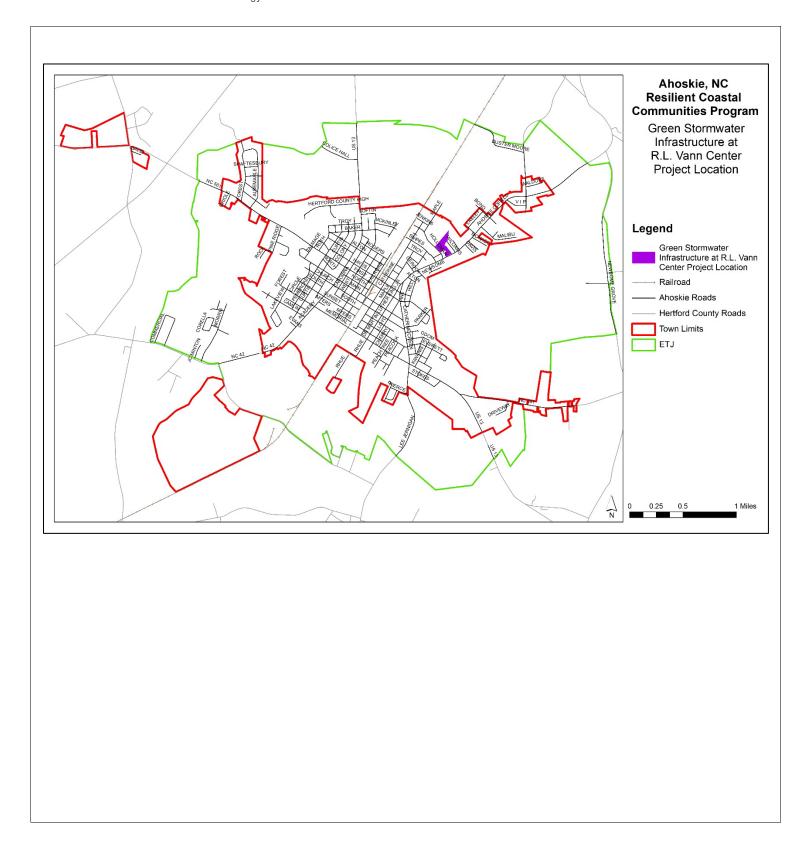


TOWN OF AHOSKIE

Green Stormwater Infrastructure at R.L. Vann Center

Project Summary	
Project Description	Engineer, design, and construct low impact development (LID) stormwater infrastructure at the R.L. Vann Community Resource Center.
Project Scope	Engineering/Design – 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.
	 Hydro analysis Natural Resources Assessment Concept Planning Engineering/Design Permitting Due Diligence
	Implementation – Construct projects identified in the engineering/design phase. Elements of this project could include stormwater wetlands, rain gardens, bioretention cells, and vegetative plantings.
	 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) 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

	<u>Implementation</u> – \$175,000 – \$250,000				
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 Water Resources Development Grant				
	 Implementation NC Resilient Coastal Communities Program Phase 4 NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant NC Water Resources Development Grant 				
Project Estimated Timeline	2-3 years (engineering/design and construction)				
Priority Rating	High				
Potential Submission for RCCP Phase 3	Yes Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.				
Project Map					



Retrofit or Relocate Town Hall

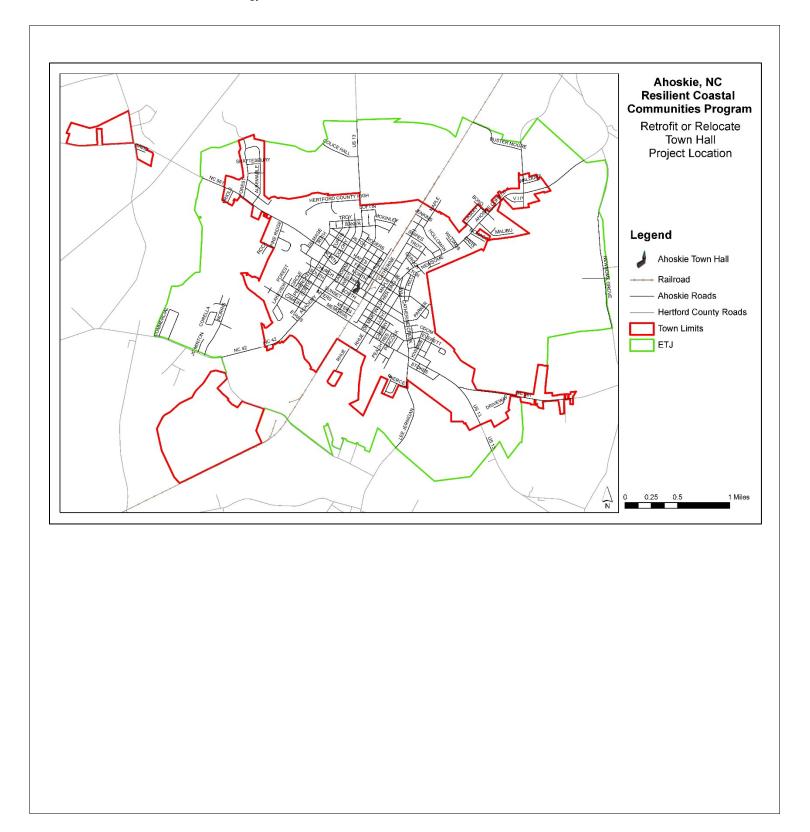


TOWN OF AHOSKIE

Retrofit or Relocate Town Hall

Project Summary	
Project Description	Retrofit or relocate Town Hall to mitigate flood events.
Project Scope	Engineering/Design – 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. - Facility Assessment - Feasibility Study - Engineering/Design (Retrofit for flooding relief or new building at
	alternative site. Architectural and landscaping design included if new site.) Implementation – The retrofitting or relocation of Town Hall, to be determined by the Feasibility Study and engineering/design phases.
	 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) 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	Feasibility Study - \$75,000					
	Engineering/Architectural/Design – \$120,000 – \$400,000					
	<u>Implementation</u> – \$250,000 - \$3,500,000					
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation					
	 FEMA Flood Mitigation Assistance (FMA) Grant 					
	 FEMA Building Resilient Infrastructure in Communities (BRIC) Grant 					
	 FEMA Hazard Mitigation Grant Program (HMGP) 					
	 Golden Leaf Foundation 					
	 HUD Community Development Block Grant – Mitigation (CDBG-MIT) 					
Project Estimated Timeline	1-3 years					
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						



Green Stormwater Infrastructure at Public Housing Developments

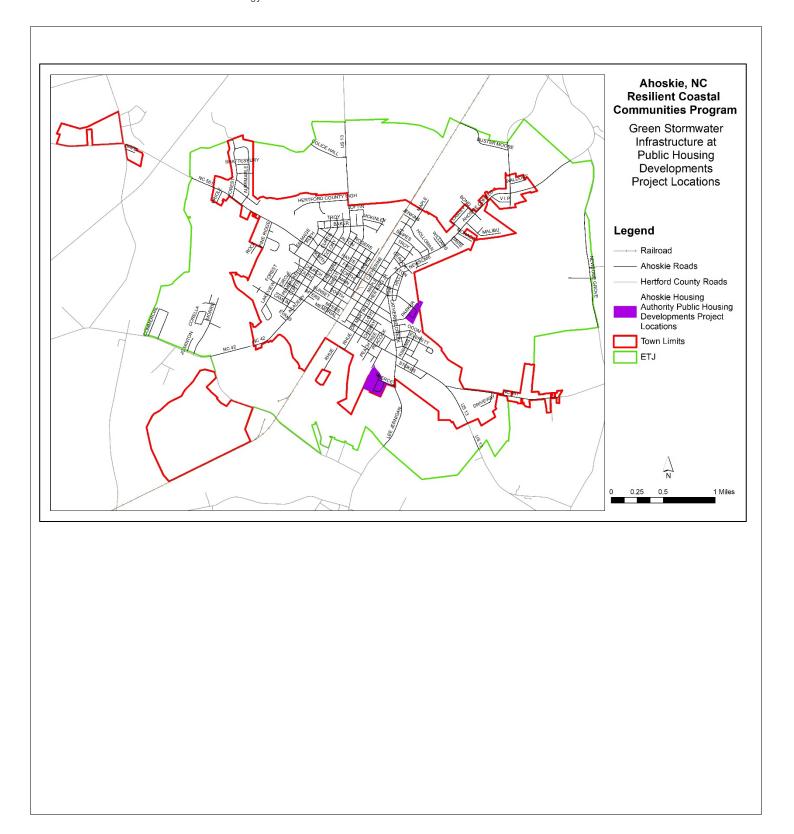


TOWN OF AHOSKIE

Green Stormwater Infrastructure at Public Housing Developments

<u> </u>	
Project Summary	
Project Description	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.
Project Scope	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.
	 Site Assessment Hydro Analysis Feasibility Study Concept Planning Engineering/Design Permitting Due Diligence
	Implementation – Construct identified flood mitigation / green stormwater infrastructure projects. Specific projects and placement will be determined during Feasibility Study and engineering/design phases. Educational signage will also be included.
	 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) 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	<u>Feasibility Study</u> - \$75,000 <u>Engineering/Design</u> — \$150,000 - \$250,000							
	<u>Implementation</u>	- \$200,000 - \$1,00	0,000 / project					
Potential Implementation	Potential Source	es for Project/Action	n Implementatio	n				
Funding Sources	Engineering/Des	sign_						
	NC Resil	lient Coastal Comm	unities Program	Phase 3				
		ronmental Enhance	•	3)				
		l and Water Fund G						
		er Resources Develo	•					
		lood Mitigation Assi	•					
	• FEMA H	FEMA Hazard Mitigation Grant Program (HMGP)						
	 Implementation NC Resilient Coastal Communities Program Phase 4 NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant NC Water Resources Development Grant FEMA Flood Mitigation Assistance (FMA) Grant FEMA Hazard Mitigation Grant Program (HMGP) 							
Project Estimated	4-5 years (engineering/design and construction)							
Timeline								
Priority Rating	High	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								



Stormwater Wetland at the Ballfields in Ahoskie Creek Recreation Complex

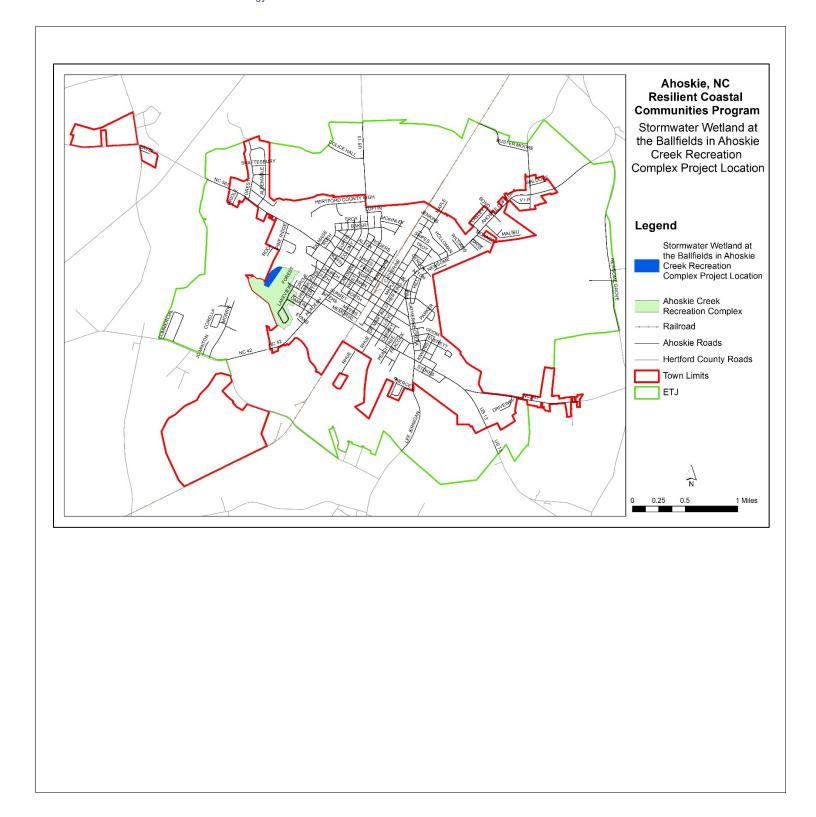


TOWN OF AHOSKIE

Stormwater Wetland at the Ballfields in Ahoskie Creek Recreation Complex

Project Summary	
Project Description	Design and construct a stormwater wetland west of the ballfields at the Ahoskie Creek Recreation Complex.
Project Scope	Engineering/Design – 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.
	 Survey Natural Resources Assessment Concept Design Hydro Analysis Engineering/Design Permitting Due Diligence
	Implementation – 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.
	 Permitting Construction Construction Administration Construction Inspections
	Monitoring – 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.
	 Hydrology Monitoring Vegetation Quadrate Monitoring Yearly Reports

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) 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 Protect						
Project Estimated Cost	Engineering/Design - \$130,000 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						
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							



Green Stormwater Infrastructure on Town-owned property



TOWN OF AHOSKIE

Green Stormwater Infrastructure on Town-owned Property

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Project Summary				
Project Description	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 Feasibility Study Concept Planning Engineering/Design Permitting Due Diligence 			
	Implementation – Construct identified green stormwater infrastructure projects. Specific projects and placement will be determined during Feasibility Study and engineering/design phases.			
	PermittingConstruction			
	Construction AdministrationConstruction 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) 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 – \$100,000					
	<u>Engineering/Design</u> – \$60,000 - \$175,000 (per project) <u>Implementation</u> – \$200,000 – \$1,000,000 (per project)					
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 Water Resources Development Grant Implementation NC Resilient Coastal Communities Program Phase 4 NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant NC Water Resources Development Grant					
Project Estimated Timeline	2-3 years (engineering/design and 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						

