PROJECT PORTFOLIO

The assembled project portfolio details eight (8) high 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 nature-based or hybrid solution project is eligible to move forward into Phase 3 of the RCCP, Engineering and Design. The Town of Aulander CAT, along with stakeholders, choose to move forward with the Permeable Pavement and Green Stormwater Infrastructure Implementation Projects to RCCP Phase 3. 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 21 potential solutions. The Northeastern NC Hazard Mitigation strategies identified an additional 15 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 twelve (12) 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 Aulander along with the CAT identified eight (8) priority projects to be presented in the project portfolio.

Priority Projects

- Permeable Pavement and Green Stormwater Infrastructure Implementation Projects (project to advance to Phase 3)
- Stormwater Action Plan – Stormwater System Upgrade (combined project)
- Floodplain Improvements at Grit Chamber Entrance
- Back-up Generators at Critical Facilities
- Economic Development Plan
- Aulander Park and Fitness Trails Resiliency Master Plan and Design
- Downtown Revitalization with Green Stormwater Infrastructure

- Regional Stormwater Maintenance Plan and Stormwater Coordinating Committee

Permeable Pavement and Green Stormwater Infrastructure Implementation Projects (project to advance to Phase 3)

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

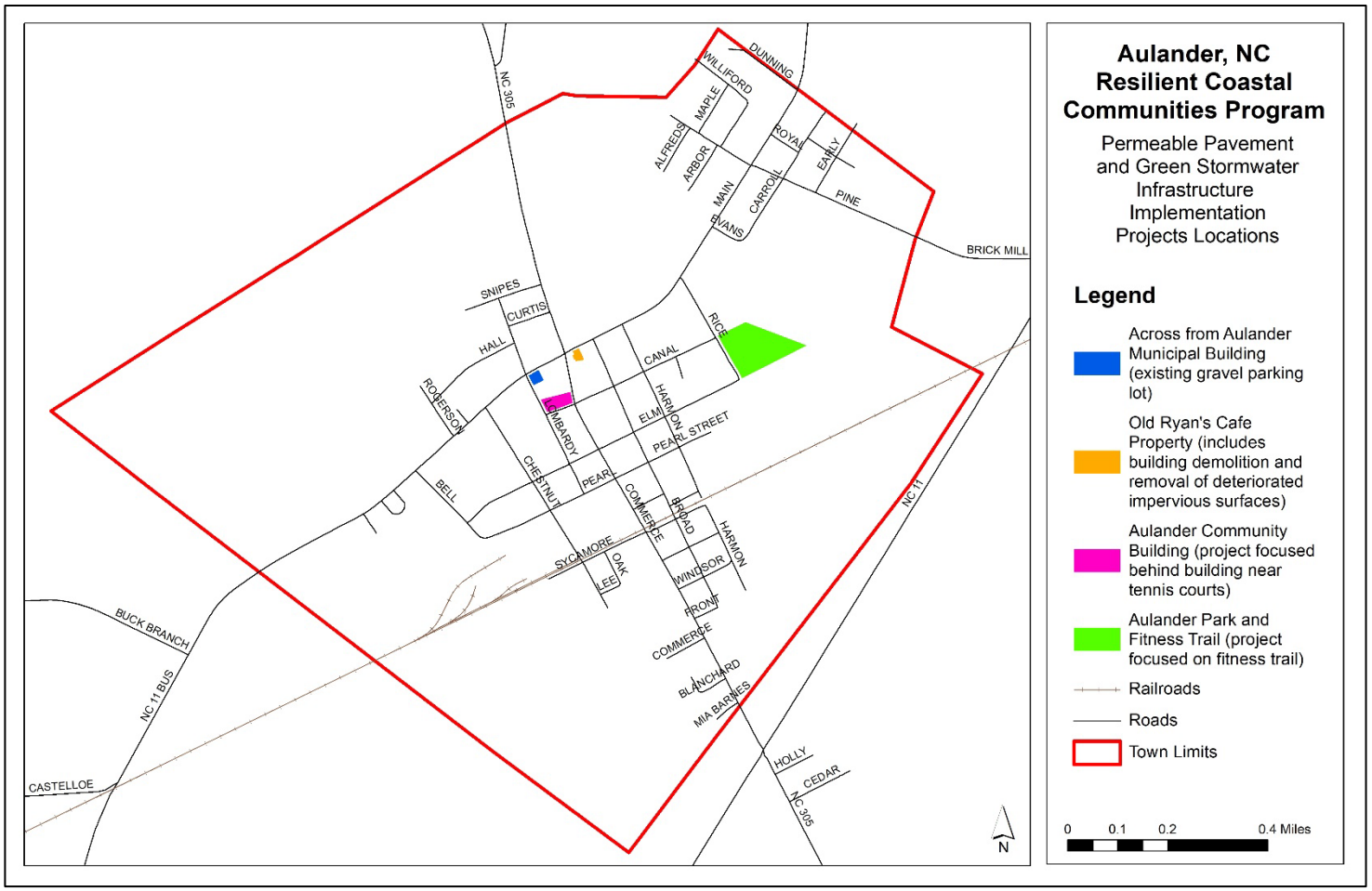
TOWN OF AULANDER

Permeable Pavement and Green Stormwater Infrastructure Implementation Projects

Project Summary	
Project Description	Utilize town-owned property at four locations (old Ryan's Café property, across from the Aulander Municipal Building, Aulander Community Building, and Aulander fitness trail) to install permeable pavement for parking areas and trails that incorporate green stormwater infrastructure and public education. This project will decrease impervious surfaces in the town and replace them with permeable pavement that allows stormwater infiltration (approx. 42,000 sq ft.).
Project Scope	Engineering/Design – Engineer and design permeable pavement parking areas (three locations) and a permeable pavement walking trail (Aulander Fitness Trail) with green stormwater infrastructure design elements such as rain gardens and bioretention cells. Educational signage will be included. The Aulander Fitness Trail is in disrepair and already needs to be repaved. There is a preference to reroute the Fitness Trail to avoid the need to remove mature trees which have damaged the existing fitness trail. The old Ryan's Café project will include building demolition and removal of dilapidated impervious surfaces. The old Ryan's Café project will include two to three electric vehicle charging stations if deemed feasible for the site. The Aulander Community Building will focus on the area behind the building around the tennis courts. The project across from the municipal building will focus on the existing gravel parking lot area. All projects will include permeable pavement along with planted green stormwater features. All properties are town owned. - Survey - Engineering/Design - Permitting Due Diligence - Educational Material - Maintenance Manual Implementation – Utilize town-owned property at four locations (old Ryan's Café property, across from the Aulander Municipal Building, Aulander Community Building, and Aulander Fitness Trail) (approx. 42,000 sq ft.) to implement permeable areas for parking and trails that incorporate green stormwater infrastructure and public education. In addition to permeable pavement, green stormwater infrastructure will include at least one bioretention cell at each site, improving the area's aesthetics. Educational signage will be included. Two to three electric vehicle charging stations will potentially 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) ▪ Economic resilience
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>Engineering/Design</u> – $165,000 <u>Implementation</u> – $650,000 – $850,000 (includes $150,000 for two electric vehicle charging stations)
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation <u>Engineering/Design</u> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant ▪ NC Water Resources Development Grant <u>Implementation</u> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant ▪ NC Water Resources Development Grant ▪ NC DEQ Division of Air Quality – DC Fast Charging Infrastructure Program and Level 2 Infrastructure Program ▪ US DOT – Charging and Fueling Infrastructure Discretionary Grant Program
Project Estimated Timeline	2 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					


Aulander, NC
Resilient Coastal Communities Program
Permeable Pavement and Green Stormwater Infrastructure Implementation Projects Locations
Legend
Across from Aulander Municipal Building (existing gravel parking lot)
Old Ryan's Cafe Property (includes building demolition and removal of deteriorated impervious surfaces)
Aulander Community Building (project focused behind building near tennis courts)
Aulander Park and Fitness Trail (project focused on fitness trail)
Railroads
Roads
Town Limits
0 0.1 0.2 0.4 Miles
N
NC 305
DUNNING
WILLIFORD
MAPLE
ALFREDS
ARBOR
ROYAL
EARLY
MAIN
CARROLL
PINE
EVANS
BRICK MILL
SNIPES
CURTIS
HALL
RICE
CANAL
ROBERSON
LIMBARDY
HARMON
ELM
PEARL STREET
CHESTNUT
PEAR
BELL
COMMERCE
BROAD
HARMON
SYCAMORE
OAK
LEE
WINDSOR
FRONT
COMMERCE
BLANCHARD
MIA BARNES
NC 11
BUCK BRANCH
NC 11 BUS
CASTELLOE
HOLLY
CEDAR
NC 305

Stormwater Action Plan – Stormwater System Upgrade (combined project)

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

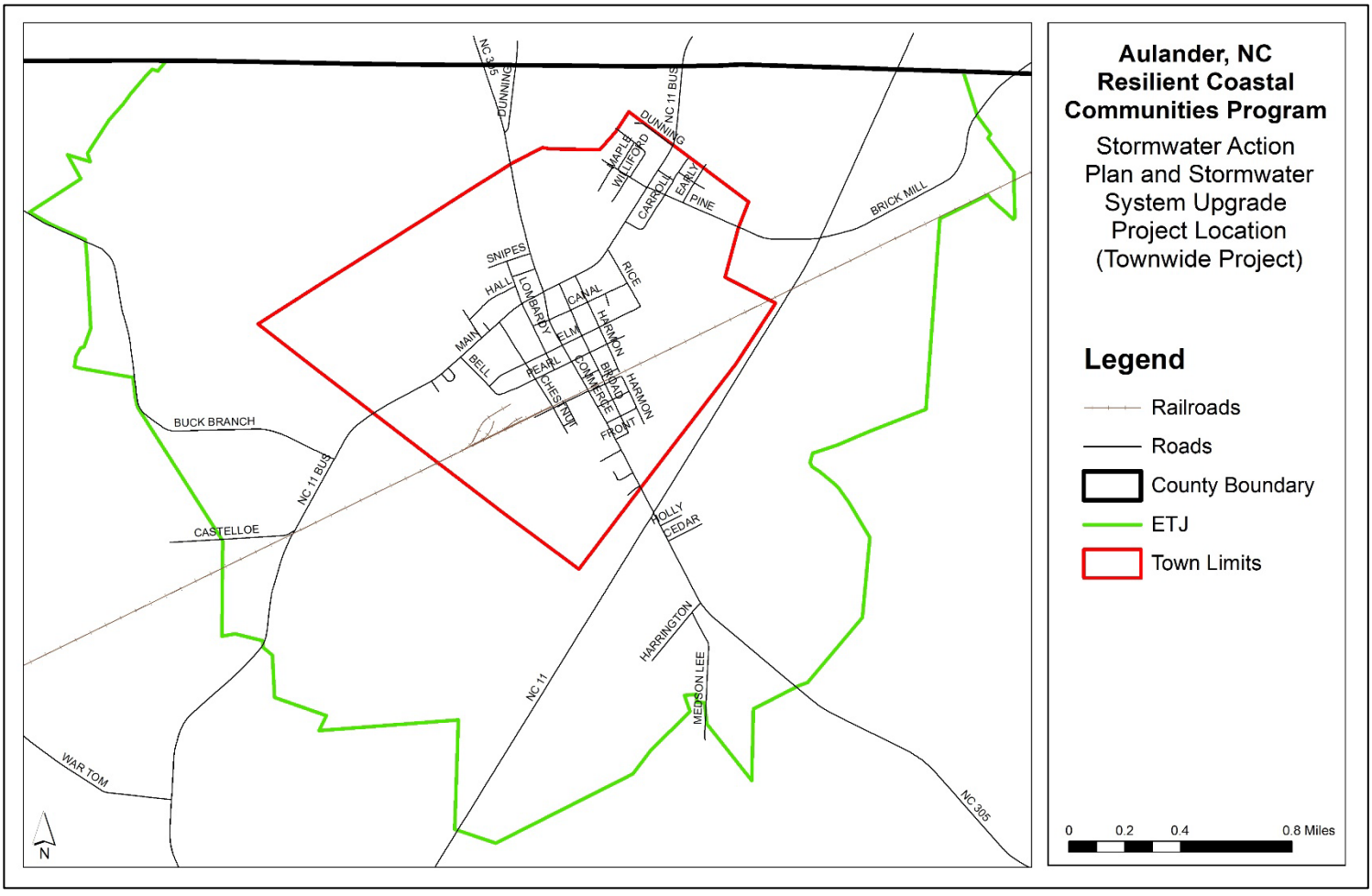
TOWN OF AULANDER

Stormwater Action Plan and 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 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)
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) ▪ Accommodate ▪ Build Adaptive Capacity
Project Estimated Cost	<u>Engineering/Design</u> - $350,000 <u>Implementation</u> - $150,000 - $350,000 (per stormwater retrofit project)
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation <u>Stormwater Action Plan</u> ▪ 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) <u>Stormwater System Upgrade</u> ▪ 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					



Floodplain Improvements at Grit Chamber Entrance

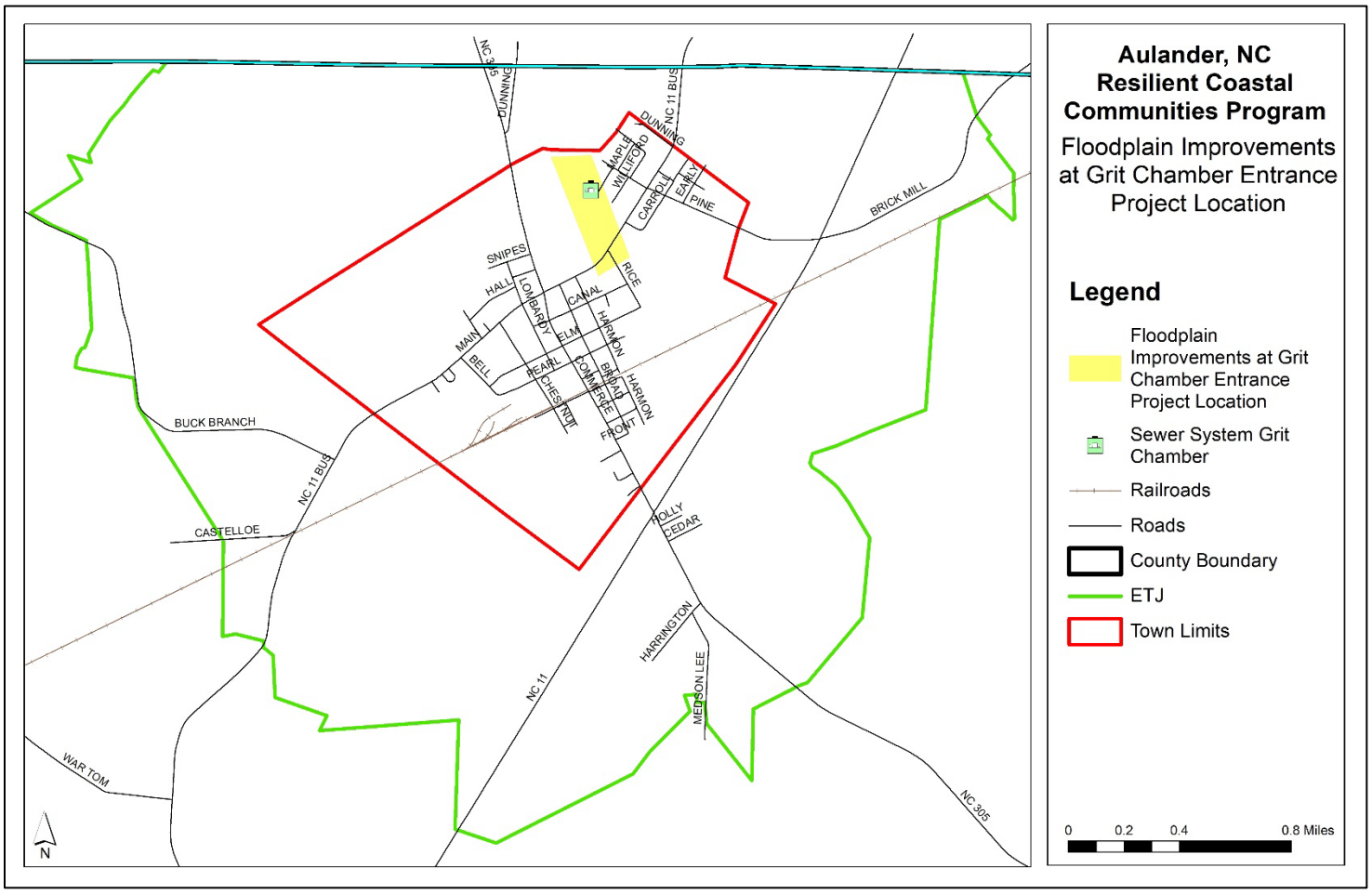
North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

Floodplain Improvements at Grit Chamber Entrance

Project Summary	
Project Description	Utilize town owned property to increase floodplain capacity along Fort Branch at the entrance of the grit chamber (town sewer system facility).
Project Scope	Engineering/Design – Utilize town owned property to design a project to increase floodplain capacity along Fort Branch at the entrance of the grit chamber (town sewer system facility). Partner with property owners north of E Main St. at grit chamber entrance. Partner with NC Dept. of Transportation Division 1 and Highway Drainage Group. - NEPA/SEPA - Hydro Analysis - Engineering/Design - Permitting Due Diligence Implementation – Complete a stream and floodplain restoration along Fort Branch. - 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 (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 ▪ Build Adaptive Capacity
Project Estimated Cost	Engineering/Design – $65,000 Implementation – $150,000 - $250,000

Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation <u>Engineering/Design</u> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ FEMA Building Resilient Infrastructure in Communities (BRIC) Grant ▪ NC Water Resources Development Grant ▪ NC Land and Water Fund Grant ▪ NC Dept. of Transportation <u>Implementation</u> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG) ▪ FEMA Building Resilient Infrastructure in Communities (BRIC) Grant ▪ NC Water Resources Development Grant ▪ NC Land and Water Fund Grant ▪ NC Dept. of Transportation				
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					


Aulander, NC
Resilient Coastal Communities Program
Floodplain Improvements at Grit Chamber Entrance Project Location
Legend
Floodplain Improvements at Grit Chamber Entrance Project Location
Sewer System Grit Chamber
Railroads
Roads
County Boundary
ETJ
Town Limits
0 0.2 0.4 0.8 Miles
N
NC 305
DUNNING
NC 11 BUS
MAPLE
WILLIFORD
CARROLL
EARLY
PINE
BRICK MILL
SNIPES
HALL
LOMBARDY
CANAL
RICE
MAIN
ELM
HARMON
BELL
PEARL
CHESTNUT
COMMERCE
BROAD
FRONT
BUCK BRANCH
CASTELLOE
HOLLY
CEDAR
HARRINGTON
NC 11
MEDSON LEE
WAR TOM

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

Back-up Generators at Critical Facilities

Project Summary	
Project Description	Obtain funding for and installation of backup generators at critical facilities.
Project Scope	Acquire, install and/or replace backup generators or other forms of redundant power supply to ensure that critical facilities and infrastructure remain operational where normal power supply is not available. Current generator needs include Town Hall, the Fire Department, the Municipal Building/Police Department, the Aulander Gym/Senior Center, the Aulander Community Building, public water supply wells (2), and sewer lift stations (6). This would include regularly scheduled equipment evaluation and maintenance to ensure the generators continue to meet operational demands at town facilities. An electrician has evaluated a majority of the sites for generator needs. The summary of recommendations from the electrician follows: <u>Aulander Community Building</u> Notes: 200 amp 120/240 single phase service. No outside disconnect. Two 3.5 ton cooling units on building. Refrigerators and freezers on site. Ovens on site. LP Gas on site. Recommendations: Need to add an outdoor service disconnect and auto transfer switch. Install a 25KW to 30KW liquid cooled generator. 120/240 volt single phase. Will need concrete pad. LP gas. <u>Aulander Fire Department</u> Notes: 100 amp, 120/240 volt, 3 phase service. Open delta with high leg. Service is for diesel pumps, gas pumps, and motor driven siren. Service needs to be upgraded. Recommendations: 120/240 Volt, 3 phase generator, 20 kw generator. No LP or natural gas on site. <u>Aulander Gym/Senior Center</u>

Notes:
200 amp 120/240 Volt Service single phase. LP Gas on site already. 3.5 tons of cooling for building.

Recommendations:
Recommended 22KW generator LP gas with 200 amp transfer switch. 120/240 volt single phase.

Aulander Police Department/Municipal Building

Notes:
120/240 volt 200 amp, single phase service. Currently an outdated transfer switch for an old arm surplus diesel generator onsite. Two 3 ton heating and cooling units onsite.

Recommendations:
Install 200 auto transfer switch. Install a 25 KW 120/240 single phase generator, liquid cooled, on concrete pad. No LP or NG onsite currently.

Aulander Town Hall

Notes:
200 amp, 120/208 Volt, 3 phase service for the building. One 5 ton 3 phase cooling system onsite. No LP gas or natural gas on site.

Recommendations:
Auto transfer switch 200amp. 20 to 25 KW generator 3 phase 120/208 volt.

Bell St. Lift station

Notes:
100 amp, 120/240 volt, 3 phase open delta, with high leg. System is already set up for portable generator hook up with manual transfer switch. Two 1.5 HP pumps.

Recommendations:
Portable Diesel Generator 120/20 volt 3 phase, 10 kw.

Canal Street Lift Station

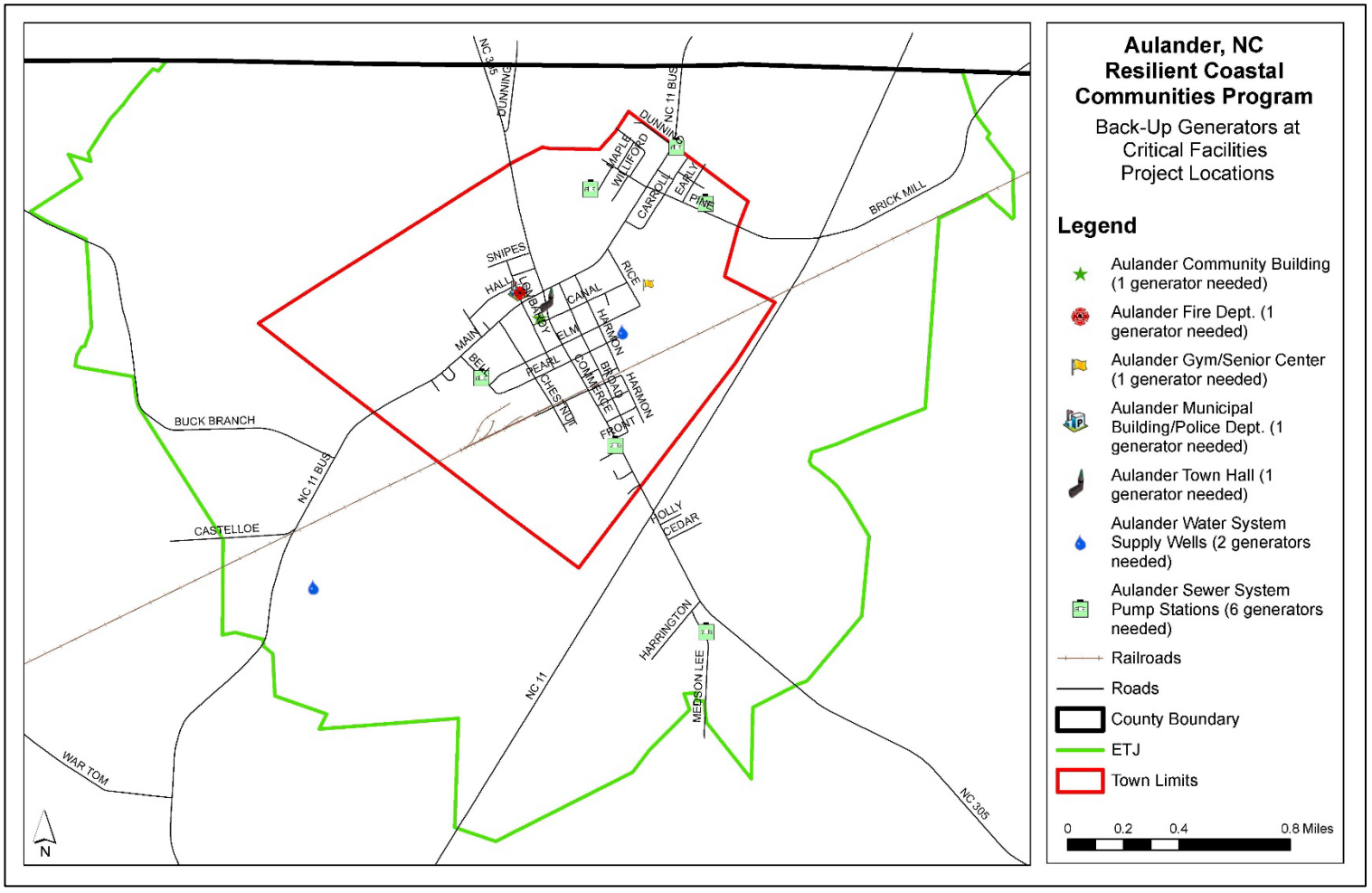
Notes:
120/240 Volt 100 amp single phase service. One 2 HP lift pump 240 volt single phase.

Recommendations:
Install a new 100 amp service disconnect (currently not one) and install a manual transfer switch and a 50 amp generator connection plug. 120/240 volt single phase.

	Need at least a 5KW continuous watt portable generator to run and cord to connect. Can be gas or diesel. 120/240 volt single phase. Would not hurt to size larger. <u>Commerce Street Lift Station</u> Notes: 120/240 Volt single phase, 100 amp service. Two 2 HP lift pumps onsite System is already set up for portable generator with manual transfer switch. Recommendations: Portable generator with cord. Single Phase 120/240 Volt generator 10KW. <u>Medson Lee Rd Lift Station</u> Notes: 277/480 Volt 3 phase 60 amp service. Already set up for portable generator with manual transfer switch. Two 10 HP lift pumps. Recommendations: Portable generator 277/480 volt 3 phase 50KW. Cord, diesel. <u>North Main St Force Pump</u> Notes: 120/240 volt Single phase 100 amp service. Two 2 hp lift motors. Already set up for portable generators with manual switch. Recommendations: 120/240 volt single phase generator 10KW with cord.
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) ▪ Any major storm or event which makes normal power supply unavailable (hurricane, tornado, flooding, wildfire, etc.) ▪ Economic and social resilience
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	13 generators – 50 kw generators or under: $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				
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



Economic Development Plan

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

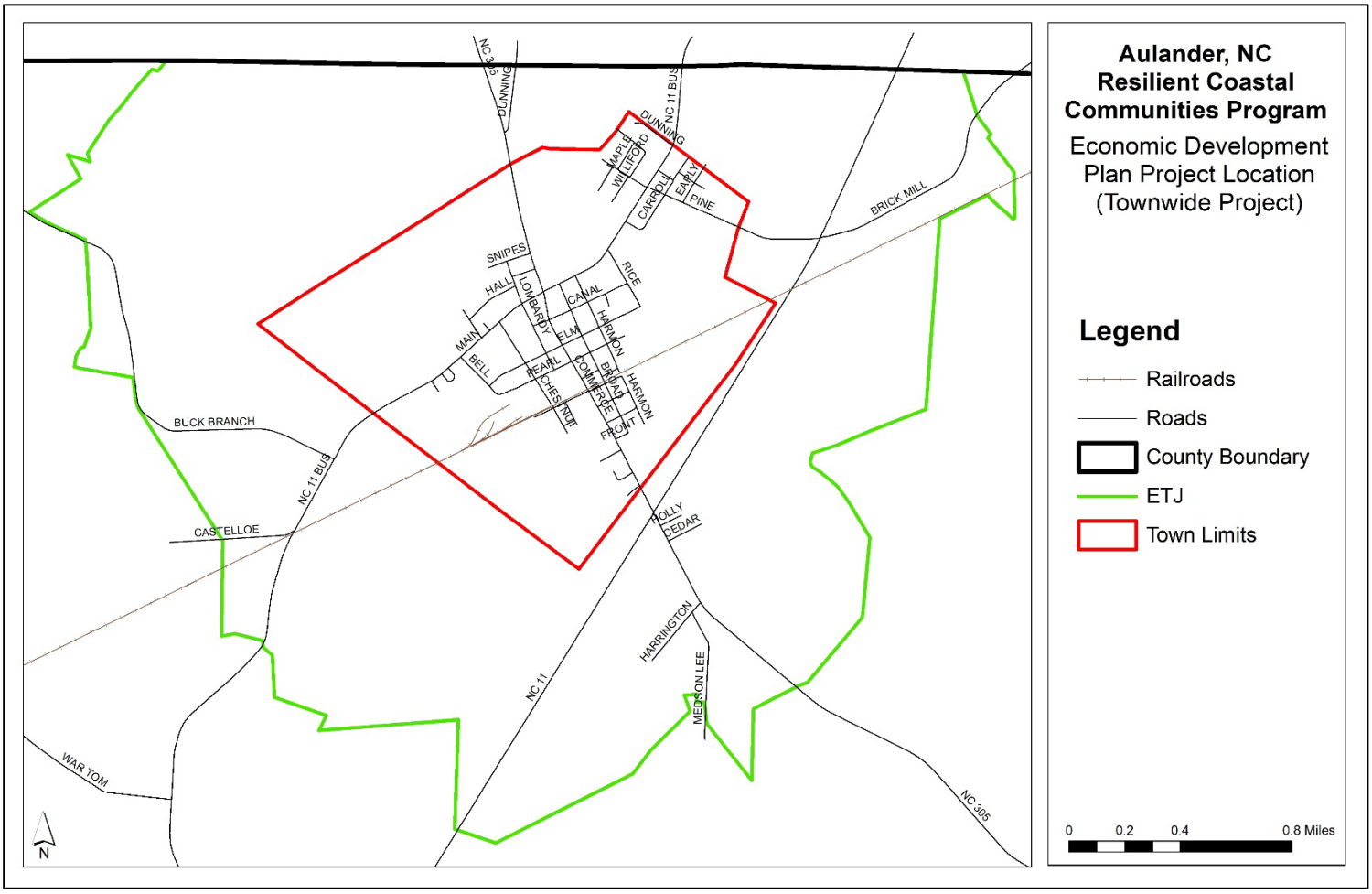
Economic Development Plan

Project Summary	
Project Description	Develop an Economic Development Plan.

Project Scope	<u>Planning</u>
	Develop an Economic Development Plan with a focus on downtown revitalization. This plan will build off existing town, county and regional plans. Bertie County is a potential partner.
	
	- Current Economic Assessment Analysis
	- Organize an Economic Development Team
	  ○ Vision and Goals
	- Provide Stakeholder Engagement Meetings
	- Perform Industry and Sector Analysis
	- Perform Commuting Analysis
	- Assess Infrastructure Development Needs
	  ○ Incorporate resiliency strategies
	- Assess and Develop Workforce Development Goals
	- Assess providing Business Support Services
	- Develop strategies and policies to incentivize sustainable economic growth
	- Develop marketing materials to attract business, industry and tourism
	- Establish metrics for Monitoring and Evaluation success
	- Establish an Economic Development Committee that will continue meeting to implement the plan
	- Workshops for tools to promote economic development
	
	Deliverable
	- Economic Development Plan

Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) ▪ Economic resilience
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) ▪ Planning

Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) ▪ Build Adaptive Capacity				
Project Estimated Cost	$150,000				
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation ▪ NC Dept. of Commerce ▪ Golden Leaf Grant ▪ US Economic Development Administration (EDA) Planning and Local Technical Assistance Program ▪ Private Sector Partnerships				
Project Estimated Timeline	2 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					


Aulander, NC
Resilient Coastal Communities Program
Economic Development Plan Project Location (Townwide Project)
Legend
Railroads
Roads
County Boundary
ETJ
Town Limits
0 0.2 0.4 0.8 Miles
N
NC 305
DUNNING
NC 11 BUS
MAPLE
WILFORD
CARROLL
EARLY
PINE
BRICK MILL
SNIPES
HALL
LOMBARDY
CANAL
RICE
MAIN
ELM
HARMON
BELL
PEARL
RICHESTUTL
COMMERCE
BROAD
FRONT
BUCK BRANCH
CASTELLOE
HOLLY
CEDAR
HARRINGTON
MEDSON LEE
NC 11
WAR TOM

Aulander Park and Fitness Trails Resiliency Master Plan and Design

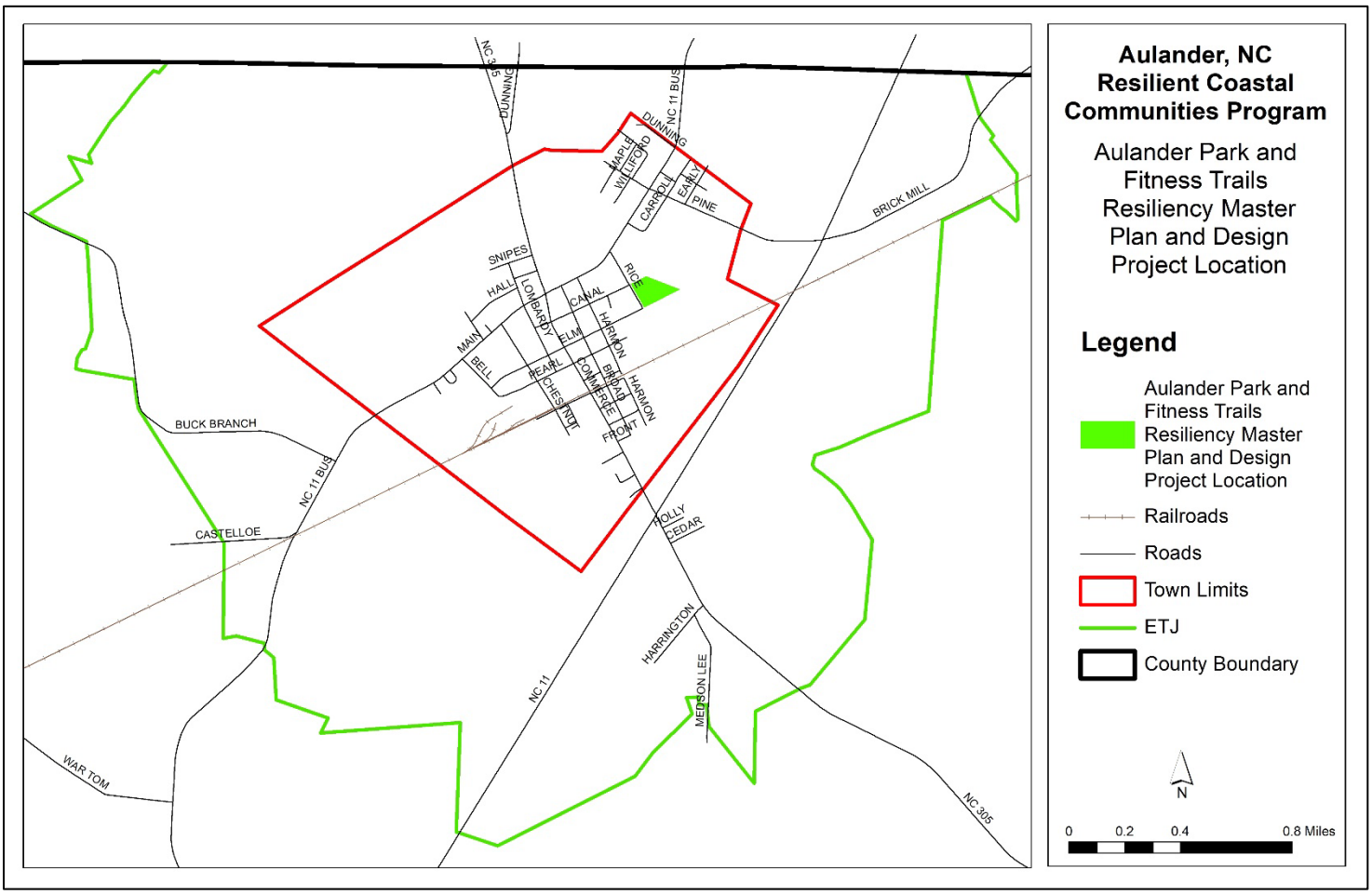
North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

Aulander Park and Fitness Trails Resiliency Master Plan and Design

Project Summary	
Project Description	Develop a Resiliency Master Plan and project designs for the Aulander Park and Fitness Trails which includes passive nature-based elements such as open space and vegetated areas which improve water quality and reduce stormwater flooding, along with active recreation components such as play equipment and entertainment areas.
Project Scope	Engineering/Design – Develop a Resiliency Master Plan and project designs for the Aulander Park and Fitness Trails which includes passive nature-based elements such as open space and vegetated areas which improve water quality and reduce stormwater flooding, along with active recreation components such as play equipment and entertainment areas. Nature-based elements could include features which improve the property's aesthetics including stormwater wetlands, bioretention cells, rain gardens, etc. coupled with educational signage. The first step will be development of the Master Plan. The second step will be engineering/design where all project elements of the Master Plan will be designed and construction ready. A potential limiting factor for development is that construction debris from the demolition of an old school building is buried on the site just under the soil's surface. - Site Analysis - Master Plan - Concept Designs - Engineering/Design - Permitting Due Diligence Implementation – Construct identified projects from the Aulander Park and Fitness Trails Resiliency Master Plan. Specific projects and placement will be determined during the Master Plan 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) ▪ Social resilience

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>Master Plan</u> – $100,000 <u>Engineering/Design</u> – $75,000 <u>Implementation</u> – $400,000 - $600,000				
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation <u>Engineering/Design</u> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant ▪ NC Water Resources Development Grant ▪ NC Parks and Recreation Trust Fund (PARTF) Grant ▪ HUD Community Development Block Grant (CDBG) Mitigation (MIT) Grant <u>Implementation</u> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant ▪ NC Water Resources Development Grant ▪ NC Parks and Recreation Trust Fund (PARTF) Grant ▪ HUD Community Development Block Grant (CDBG) Mitigation (MIT) Grant				
Project Estimated Timeline	3-5 years (planning, 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					


Aulander, NC
Resilient Coastal Communities Program
Aulander Park and Fitness Trails Resiliency Master Plan and Design Project Location
Legend
Aulander Park and Fitness Trails Resiliency Master Plan and Design Project Location
Railroads
Roads
Town Limits
ETJ
County Boundary
N
0 0.2 0.4 0.8 Miles
NC 305
DUNNING
NC 11 BUS
MAPLE
WILLIFORD
CARROLL
EARL
PINE
BRICK MILL
SNIPES
HALL
LOMBARDY
CANAL
RICE
MAIN
ELM
HARMON
BELL
PEARL
CHESTNUT
COMMERCE
BROAD
FRONT
BUCK BRANCH
CASTELLOE
HOLLY
CEDAR
HARRINGTON
NC 11
MEDSON LEE
WAR TOM

Downtown Revitalization with Green Stormwater Infrastructure

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

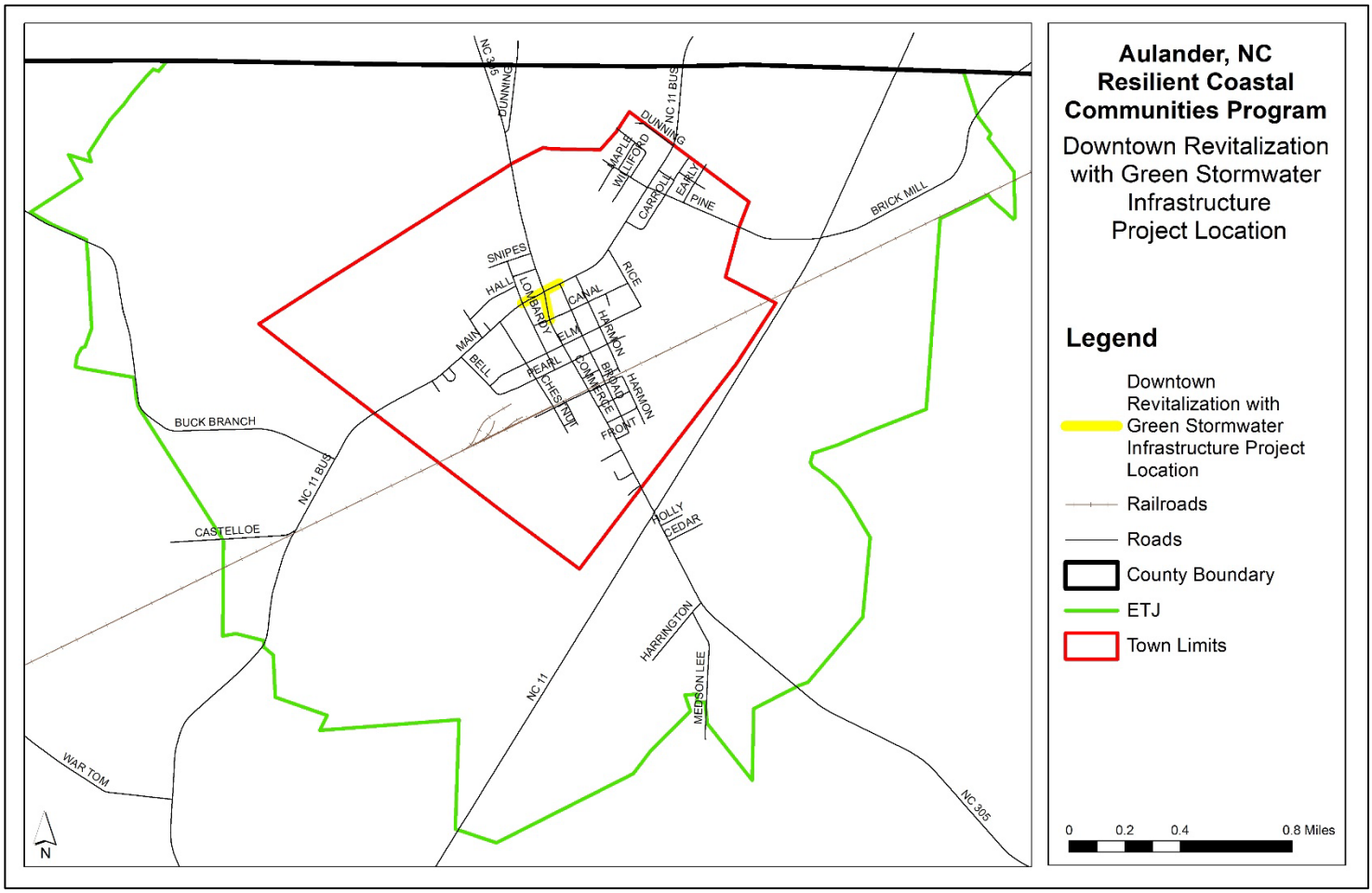
Downtown Revitalization with Green Stormwater Infrastructure

Project Summary	
Project Description	Complete a downtown revitalization Green Street project that incorporates green stormwater infrastructure along Main St. from S. Lombardy St. to Broad St. (‘800 ft./0.15 mi.) and along S Commerce St. from Main St. to Canal St (525 ft./0.1 mi.). The approximate total distance is 1,325 linear ft./0.25 miles. This project would improve the downtown streetscape aesthetics while providing green stormwater features. The project may include street trees, bioretention cells, planted medians, planted bulb outs with pedestrian crosswalks, benches, local art, educational signage, low energy lighting, and electric vehicle charging stations. A round-about with a public art installation is a potential. The project will also include road repaving (considering warm asphalt), sidewalk repairs, and stormwater system upgrades. Reused materials will be implemented where feasible and land and water conservation will be a priority. A “GreenRoads” certification is a potential after the project is completed.

Project Scope	Engineering/Design – Engineer and design a downtown revitalization project (0.25 miles) that incorporates green stormwater infrastructure along Main and Commerce Streets. This project will include downtown streetscape design to improve the aesthetics of the area. Project may include street trees, bioretention cells, planted medians, planted bulb outs with pedestrian crosswalks, benches, local art, educational signage, low energy lighting, and electric vehicle charging stations. The project will also include road repaving (considering warm asphalt), sidewalk repairs, and stormwater system upgrades.
	
	A round-about with a public art installation is a potential. However, the round-about may or may not be feasible. There is the potential that property would need to be bought out and partnerships with the NC Dept. of Transportation and the Albemarle Rural Planning Organization (RPO) that would be needed.
	
	Construction of this project should wait until the water main line in the area is replaced. The sewer main line has already been replaced and the water main line will be completed in the near future.
	
	- Survey
	- NEPA/SEPA
	- Concept Design
	- Design
	  ○ Roadway
	  ○ Hydro

	○ Transportation ○ Utility - GreenRoads Certification - Lifecycle Cost Analysis - Carbon Analysis - NC DOT coordination - Permitting due diligence <u>Implementation</u> – Construct identified downtown revitalization project. Specific improvements to be determined in the engineering/design phase. The project may be implemented in 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) ▪ Economic resilience
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>Engineering/Design</u> – $350,000 <u>Implementation</u> – $2,350,000 – $3,250,000
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation <u>Engineering/Design</u> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant ▪ NC DEQ Water Resources Development Grant ▪ NC Dept. of Commerce ▪ US Economic Development Administration (EDA) ▪ Golden Leaf <u>Implementation</u> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG)

	▪ NC Land and Water Fund Grant ▪ NC DEQ Water Resources Development Grant ▪ NC DEQ Division of Air Quality – DC Fast Charging Infrastructure Program and Level 2 Infrastructure Program ▪ US DOT – Charging and Fueling Infrastructure Discretionary Grant Program ▪ NC Dept. of Commerce ▪ US Economic Development Administration (EDA) ▪ Golden Leaf				
Project Estimated Timeline	3-5 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					



North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

TOWN OF AULANDER

Regional Stormwater Maintenance Plan and Stormwater Coordinating Committee

Project Summary	
Project Description	Establish a Stormwater Coordinating Committee and develop a Regional Stormwater Maintenance Plan.
Project Scope	Establish a Stormwater Coordinating Committee to ensure that all parties responsible for stormwater management within the town communicate to ensure maximum cooperation in developing and maintaining stormwater drainage systems with surrounding communities. Bertie County, Hertford County, Soil and Water Districts, and the Town of Ahoskie would be key committee members (Fort Branch in Aulander drains to Ahoskie Creek). Work with the team and develop a Regional Stormwater Maintenance Plan. - Establish committee - Set vision and goals - Analyze existing stormwater data - Identify and prioritize data gaps - Establish a stormwater agreement - Develop strategies to increase connectivity - Develop a Regional Stormwater Maintenance Plan - Workshops for committee members
Hazard(s) Addressed by Project	List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping) ▪ Flooding (nuisance)
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) ▪ Planning
Type of Strategy Approach	List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) ▪ Accommodate, Build Adaptive Capacity
Project Estimated Cost	$270,000
Potential Implementation Funding Sources	Potential Sources for Project/Action Implementation ▪ FEMA Building Resilient Infrastructure in Communities (BRIC) Capability and Capacity Building (C&CB) Grant ▪ NC Water Resources Development Grant

	▪ Local Funds (staff time)				
Project Estimated Timeline	Continual (2 years for committee development and planning)				
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