TOWN OF EDENTON

Resilience Strategy

Resilient Coastal Communities Program | Phases 1 & 2

SPRING 2024

North Carolina RESILIENT COASTAL COMMUNITIES PROGRAM

N.C. DIVISION OF COASTAL MANAGEMENT

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1 INTRODUCTION

1.1 PURPOSE AND CONTEXT

The Town of Edenton Resilience Strategy was developed through the Resilient Coastal Communities Program (RCCP), a program administered by the North Carolina Department of Environmental Quality's (DEQ) Division of Coastal Management (DCM) and funded by the N.C. State Legislature and the National Fish and Wildlife Foundation. RCCP is the culmination of several coastal resilience efforts in North Carolina over the last several years. The program aims to facilitate a community driven process for setting coastal resilience goals and address local capacity constraints that hinder the actions needed to enhance resilience and reduce vulnerability within coastal communities.

What is Resilience?

Resilience can be defined as increasing a community's ability to rebound, positively adapt to, or thrive amidst changing conditions or challenges—including disasters and climate change—and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.

After Hurricane Matthew in 2016 and Hurricane Florence in 2018, DCM began developing and expanding resources for local governments to address impacts of coastal hazards. In 2018, Governor Cooper issued Executive Order 80 – *North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy*. This executive order called for the development of the *2020 Climate Risk Assessment and Resilience Plan* which led to the creation of the NC Resilient Communities Program. The Resilient Communities Program seeks to improve local resilience by providing access to expertise, technical support for analysis and planning, and funding to implement measure that advance long-term resilience. The Resilient Communities Program responds to these needs through two distinct programs – RCCP and Regions Innovating for Strong Economies and Environments Program (RISE).

RCCP works with local governments throughout the 20 coastal North Carolina counties (designated under the Coastal Area Management Act (CAMA)) and provides funding to local governments to help overcome barriers in coastal resilience and adaptation planning, boost local government capacity, and support a proactive, sustainable, and equitable approach to coastal resilience planning and project implementation.

With support and guidance from RCCP, this plan was developed as a tool to better position the Town of Edenton to address current and future challenges related to flood hazards and climate change. Town leadership recognize that current issues will be exacerbated and complicated by future flood hazard events and that the Town's actions must account for future conditions to be lasting, economical, and sustainable. This plan aims to increase understanding of local risks and vulnerabilities and to identify strategies for building resilience to flood hazards.

1.2 PROJECT OBJECTIVES

Edenton was selected for participation in Phase 1: Community Engagement & Risk/Vulnerability Assessment and Phase 2: Planning, Project Identification, & Prioritization of the 2023-2024 RCCP funding cycle. Phase 1 includes performing a risk and vulnerability assessment, developing a community

action team, and engaging with the public. Phase 2 of involves a community- and data-driven process to identify priority actions that can be taken to adapt to short- and long-term hazards. This Resilience Strategy is the culmination of these efforts, and includes two major components:

- **Vulnerability Assessment Report:** Details the quantitative and qualitative assessment(s) performed, which will evaluate the vulnerability of critical assets, natural infrastructure, and vulnerable populations to several hazards, including flooding (rainfall, tidal and riverine), storm surge, sea level rise, and other locally relevant hazards such as erosion.
- **Project Portfolio:** Develop a portfolio of well-planned and prioritized solutions to address risks. This will include combination of structural (i.e., infrastructure) and non-structural (i.e., policy) approaches, and at least one natural or nature-based component.

1.3 PLANNING PROCESS

RCCP Program Objectives

RCCP provides a multi-phased planning framework to lead communities through a community engagement process, risk and vulnerability assessment, and development of a resilience project portfolio that address their unique needs. The RCCP Planning Handbook provides guidance for completing Phases 1 and 2 and specifies program requirements and existing data, tools, and resources to help communities meet these requirements. The planning handbook outlines the following steps for the planning process:

Phase 1: Community Engagement & Risk/ Vulnerability Assessment

- Step 1: Develop a Community Action Team (CAT)
- Step 2: Review Existing Plans and Efforts
- Step 3: Set Vision and Goals
- Step 4: Develop a Community Engagement Strategy
- Step 5: Identify and Map Critical Assets, Natural Infrastructure, and Socially Vulnerable Populations
- Step 6: Conduct Risk and Vulnerability Assessment

Phase 2: Planning, Project Identification, & Prioritization

- Step 1: Identify a Suite of Potential Solutions
- Step 2: Consolidate and Prioritize Projects

1.3.1 COMMUNITY ACTION TEAM

A Community Action Team (CAT) was formed to guide the Town through the planning process and oversee the development of this Resilience Strategy. The Assistant Town Manager and Planning Director, Dewayne Whealton, served as the CAT point person and led the development of the CAT by identifying and inviting Town staff and community members to participate. Participating Town staff and department heads included the Town Manager, Public Works Director, Floodplain Administrator, Public Information Officer, and County Emergency Manager. The Mayor's Task Force on Litter, Recycling, and the Environment, an existing group of engaged citizens concerned about Town environmental issues, also

agreed to join the CAT and to take on the development of this Resilience Strategy as a priority task force issue. CAT members and the departments and groups they represented are listed in Table 1.1.

Table 1.1 – Community Action Team Membership

Member	Department/Group Represented
Dewayne Whealton	Town Assistant Manager/Planning Director (CAT Point Person)
Corey Gooden	Town Manager
David Myers	Public Works Director
Kent Pierce	Floodplain Administrator
Cordell Palmer	Emergency Management Director
Tyler Newman	Public Information Officer
David Herlong	Mayor's Task Force
April Lane	Mayor's Task Force
Karen Mastin	Mayor's Task Force
Larry McLaughlin	Mayor's Task Force
Alta LeCompte	Mayor's Task Force
Susan Inglis	Mayor's Task Force
Stephen Karl	Mayor's Task Force
Tom Brennan	Mayor's Task Force
Mary Ellen Hill	Mayor's Task Force
Chuck Schmieler*	Mayor's Task Force
Missy Schmieler*	Mayor's Task Force
Patricia Rand*	Mayor's Task Force

*Vacated their roles on the Task Force and CAT during the Resilience Strategy planning process.

The CAT convened for four formal meetings over the course of the planning process, as detailed in Table 1.2. These meetings were organized around key project milestones to review progress and findings and make decisions on plan goals and content. In addition to these formal meetings, the CAT coordinated via email throughout the planning process. Detailed meeting notes and attendance records documenting CAT coordination efforts are provided in Appendix A.

Table 1.2 – Community Action Team Meetings

Date & Format	Meeting Summary
Meeting 1 – Project Kickoff	
10/19/2023 Town Council Chambers & Microsoft Teams	The CAT was presented with an overview of the RCCP and the Resilience Strategy project scope. The CAT reviewed relevant hazards and stressors and preliminary flood data. The CAT also discussed the type of assets that were to be assessed in the plan. Strategies for public and stakeholder involvement were discussed and the CAT provided input on existing planning efforts.
Meeting 2 – Identify Hazards, Stressors, and Assets	
2/27/2024 Town Council Chambers & Microsoft Teams	The CAT was presented with the updated critical asset inventory and provided feedback. The approach for the vulnerability assessment was reviewed, including methods for evaluating exposure, sensitivity, and adaptive capacity. The CAT also reviewed public feedback from the first workshop and survey to begin brainstorming a vision statement and goals.

Date & Format	Meeting Summary
Meeting 3 – Review Vulnerability Assessment & Develop Mitigation Strategy	
5/21/2024 Town Council Chambers & Microsoft Teams	The CAT reviewed the plan's vision state and goals and provided feedback. The final vulnerability assessment results were presented. The CAT started to brainstorm and discuss potential resilience actions.
Meeting 4 – Review Draft Plan & Strategy Prioritization	
6/20/2024 Microsoft Teams	In this final CAT meeting, the CAT was presented with a summary of the draft Resilience Strategy and discussed public and stakeholder input on the Project Portfolio. The CAT was also given the opportunity to review the draft Resilience Strategy report and provide feedback and comments.

1.3.2 PUBLIC AND STAKEHOLDER ENGAGEMENT

Public involvement in the development of this Resilience Strategy was sought throughout the planning process through a variety of methods, including a project webpage, public surveys, public workshops, targeted stakeholder outreach, and online announcements intended to publicize these opportunities for involvement. Documentation of public and stakeholder coordination efforts is provided in Appendix B.

In addition to these efforts, the CAT considered other opportunities for public engagement, including attendance at the local farmer's market, Sunday street parties, and Chowan Arts Council events. However, these events were ultimately not deemed viable options for engagement. In some cases, the seasonal nature of the events meant that opportunities were not available during key milestones in this planning process. In other cases, events were thought to be attended more by short-term visitors and tourists who might be less knowledgeable about local hazards, assets, and resilience priorities. The CAT sought to prioritize input from local residents and stakeholders through the engagement efforts detailed below.

PLAN WEBPAGE

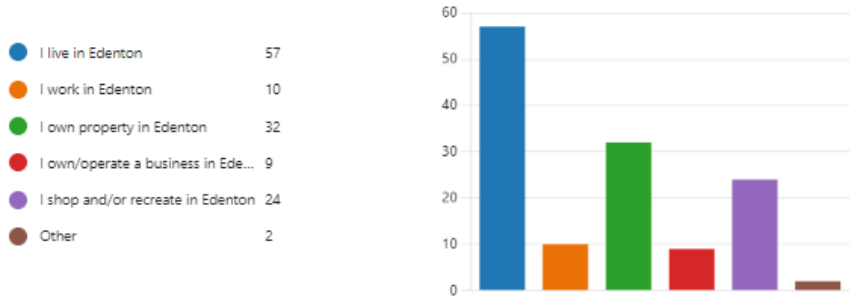
To kick off the planning process, a project webpage for the Edenton Resilience Strategy was created and linked to the Town's planning webpage. This project webpage served as a tool to educate and engage the public by providing ways to learn about the plan goals, get involved in the planning process, complete the public survey, and provide feedback to the CAT. The website housed agendas, minutes, and presentations from the CAT meetings and public workshops; and shared links to key resources that supported and informed the planning process.

PUBLIC SURVEY

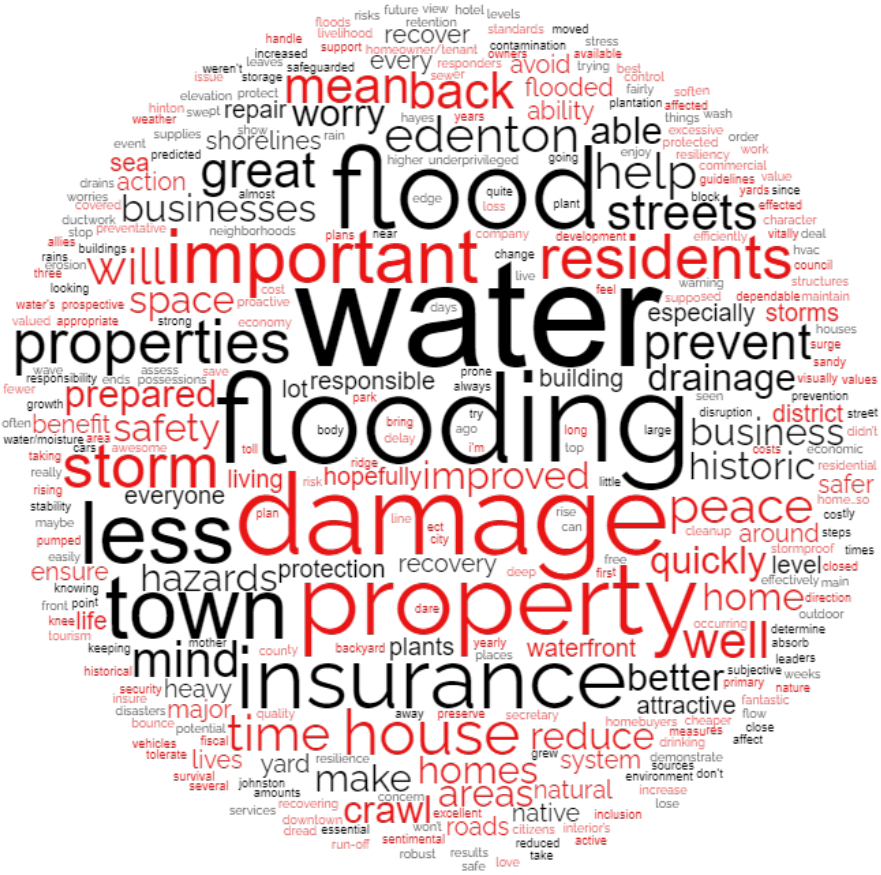
A key element of public engagement, which was incorporated into the project webpage and publicized through additional Town outreach networks, was the use of a web-based survey to gather public and stakeholder input. The CAT promoted the public survey to gather input on defining resilience, evaluating experiences with flooding, and understanding priorities for resilience objectives and strategies. Summary results from the public survey are provided below.

There were 61 responses to the public survey. Most responses came from Edenton residents. Over a half of respondents work in or own property in Edenton.

1. **What is your affiliation with Edenton?**



2. **What would it mean for Edenton to be resilient to flooding and other hazards?**

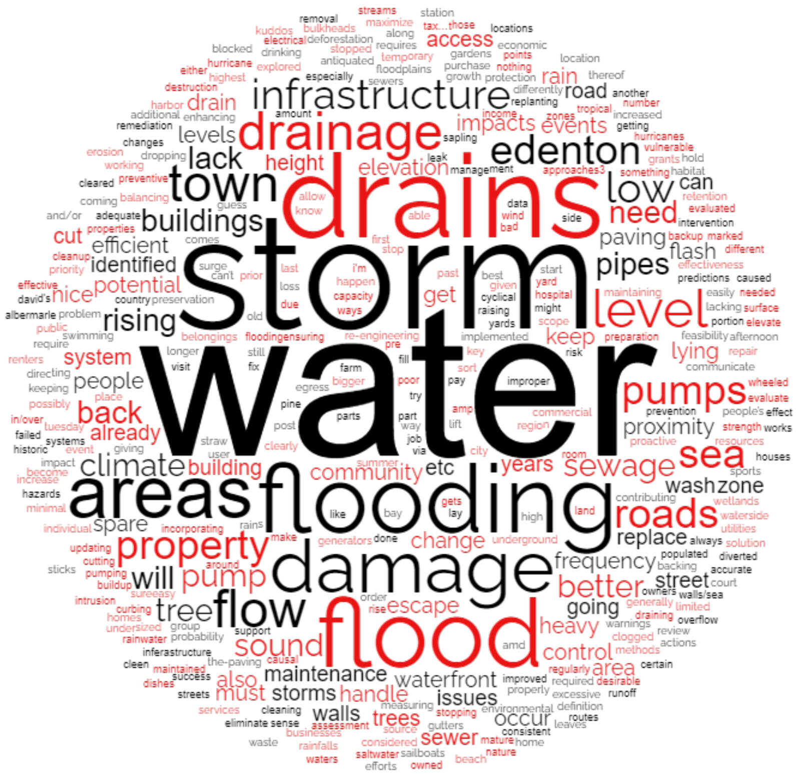


When asked to characterize resilience for Edenton, public input emphasized the ability to recover quickly from flood events, safety and peace of mind, and less damage to property and the environment. Several comments also spoke the need to adapt to and live with increased/large amounts of water.

3. **Have you experienced flooding, erosion, or other hazards in Edenton? If so, please describe where and when it occurred.**

Seventeen of the respondents said they have not experienced flooding. The respondents that have experienced flooding indicated impacts from hurricanes, road inundation and street closures, and localized flooding in their neighborhoods.

4. What factors should be considered in evaluating flooding in Edenton?



Most responses were related to managing and improving draining issues. Several responses addressed the vulnerability of the waterfront portions of town and vulnerability to sea level rise and shoreline erosion. Other responses indicated a need for resources or support with personal property protection.

5. Are there any specific local assets (including buildings, infrastructure, and cultural, historic, or natural resources) that you think the vulnerability assessment should address?

Respondents overwhelmingly mentioned the need to protect waterfront areas and properties, and historic buildings and districts. Other common assets included the downtown district and natural assets.

6. Are there any particularly vulnerable locations in Edenton that you think the vulnerability assessment should address?

Some of the common vulnerable areas that were listed included areas along Queen Anne Creek, Downtown Edenton, Water Street, and North Edenton.

7. What are some things Edenton could do to become more resilient to flooding and other hazards?

Some of the top responses include:

- Clean debris from storm drains
- Expand capacity of drainage
- Expand bulkheads
- Increase tree coverage and vegetation along shoreline
- Improve communication and flood awareness information for residents particularly in North Edenton
- Elevate infrastructure (buildings and roads) in low-lying areas

8. Is there anything else you'd like the CAT to know?

— Town's social media posts, flood alerts, and road closure warning have been reaching people in the community
— Examine and address flooding in areas outside of the historic areas
— Residents are worried that flood will negatively impact local wildlife and natural assets

TARGETED STAKEHOLDER OUTREACH

A range of local stakeholders were contacted with a request for participation in the planning process. Stakeholder input was sought to ensure the assessment considered the viewpoints of a range of multi-disciplinary stakeholders and community members and to undergo a more holistic process to develop a comprehensive resilience strategy. The objective in reaching out to stakeholders was to coordinate with those who may bring additional information to the planning process regarding flood risks and vulnerability issues within Edenton. The following organizations were contacted for plan input, participation in the public workshops and, completion of the public survey.

Organization
Albemarle Regional Health Services
Edenton-Chowan Chamber of Commerce
Edenton-Chowan Food Pantry
Edenton National Fish Hatchery
Roots of Edenton (resident blog)
Chowan-Perquimans Habitat for Humanity
Edenton House, Assisted Living
Chowan Senior Center
College of The Albemarle (Edenton-Chowan Campus)
Edenton Racial Reconciliation Group (Edenton United Methodist Church)
Edenton United Methodist Church
The Peanut Factory (artist collective, land conservation, cultural society)
Kadesh A. M. E. Zion Church
Providence Missionary Baptist Church

PUBLIC WORKSHOPS

To further engage the public and provide a forum for input on key planning milestones, Edenton held two public workshops throughout the planning process.

Table 1.3 – Public Workshops

Date & Format	Meeting Summary
Public Workshop 1 – Risk and Vulnerability Assessment	
January 16, 2024, 5pm Shepard-Pruden Memorial Library, 106 West Water Street	The public was presented with an overview of the RCCP and the hazards, stressors, and assets identified by the CAT. Public input was gathered on flooding issues and problem areas as well as critical assets. Public input was also sought to develop a vision and goals for a resilient Edenton.

Date & Format	Meeting Summary
Public Workshop 2 – Flood Resilience Lunch & Learn for Resilience Strategy Prioritization	
June 13, 2024, 12pm Shepard-Pruden Memorial Library, 106 West Water Street	The public was presented with the resilience actions identified by the CAT for review and feedback. Public input helped to prioritize actions for the Resilience Project Portfolio.

1.4 DATA COLLECTION

Detailed data related to the Town's assets and flood-related scenarios was required to assess exposure, sensitivity, adaptive capacity, and vulnerability. This section describes the data sources for the asset inventory and hazard scenarios. Further details on the asset inventory are provided in Section 4.

1.4.1 ASSET DATA

Asset data was used to understand and determine what is at risk and the potential impacts from flooding. The RCCP Handbook was used to identify local assets. The planning team also worked with Town officials, the CAT, and the public to identify any important assets not initially identifies. The spatial data for critical assets were sourced from town, county, and state datasets. The database is organized by four overarching asset groups: Critical Assets, Historic and Cultural Resources, Natural Resources, and Socially Vulnerable Populations. Data sources used to develop the statewide dataset are listed in Table 1.4.

Table 1.4 – Asset Data Sources

Data Source
US Census Bureau
CDC Social Vulnerability Index (SVI), 2019
Harvard Open Environments Dataverse
Town of Edenton Resilience Evaluation and Needs Assessment, 2018
Chowan County Parcel Data
National Register of Historic Places
National Wetlands Inventory

1.4.2 FLOOD HAZARD DATA

FLOOD HAZARD AREAS

Regulated floodplains are illustrated on inundation maps called Flood Insurance Rate Maps (FIRMs). It is the official map for a community on which FEMA has delineated both the SFHAs and the risk premium zones applicable to the community. Flood prone areas were identified within Edenton using the Effective FIRMs dated 12/21/2018. This data was downloaded from the FEMA Flood Map Service Center.

SEA LEVEL RISE

Sea level rise inundation used data from the NOAA Office for Coastal Management's Sea Level Rise Viewer. The Sea Level Rise Viewer is created and maintained through NOAA's Office for Coastal

Management Digital Coast. The maps are produced using detailed elevation maps with local and regional tidal variability.

STORM SURGE

The Sea, Lake and Overland Surges from Hurricanes (SLOSH) model is a computerized numerical model developed by the National Weather Service to estimate storm surge heights resulting from historical, hypothetical, or predicted hurricanes by taking into account the atmospheric pressure, size, forward speed, and track data. These parameters are used to create a model of the wind field which drives the storm surge. The SLOSH model consists of a set of physics equations which are applied to a specific locale's shoreline, incorporating the unique bay and river configurations, water depths, bridges, roads, levees and other physical features. The model creates outputs for all different storm simulations from all points of the compass. Each direction has a MEOW (maximum envelope of water) for each category of storm (1-5), and all directions combined result in a MOMs (maximum of maximums) set of data.

SHORELINE EROSION

Erosion hotspots were identified through CAT, Town staff, and public feedback.

STORMWATER FLOODING

Data was gathered from CAT meetings, the public survey, the public workshop, and the 2018 Town of Edenton Resilience Evaluation and Needs Assessment to identify problems areas where stormwater flooding occurs.

2 REVIEW OF EXISTING PLANS AND EFFORTS

2.1 PLAN REVIEW

A crucial step in this planning process is to ensure an integrated approach to resilience that is tailored to Edenton's specific needs. To build upon past local, regional, and state efforts, the CAT evaluated existing plans to identify what the community has already done that can be incorporated into this planning process. Specifically, the CAT reviewed existing plans and efforts for information on asset locations, hazards, potential resilience projects, resilience strategies already in place, and relevant goals and objectives.

Below is a summary of local and regional plans and ordinances that are relevant to the Town of Edenton's resilience planning efforts.

CHOWAN COUNTY & TOWN OF EDENTON JOINT LAND USE PLAN (2018)

The Chowan County & Town of Edenton Joint Land Use Plan was updated in 2018 to meet the requirement of the Coastal Area Management Act (CAMA) of 1974 which requires coastal counties and municipalities in North Carolina to prepare land use plans outlining current conditions and planned future actions in sensitive coastal areas. Land use planning lies at the center of local government's involvement and helps establish guidelines for future zoning, land use, infrastructure, resilience, capital improvement, and hazard mitigation decisions.

The plan adopts policies for Natural Hazards Areas that support hazard mitigation and resilience, including conservation of fragile environments, continued enforcement of flood damage prevention requirements and building code requirements, discouraging development in the most hazardous areas, and pursuing land acquisition. Additionally, the plan provides background data on natural systems and environmental conditions in Edenton, including a discussion of the locations of repetitive flooding and highly critical facilities that are exposed to flooding.

TOWN OF EDENTON RESILIENCE EVALUATION AND NEEDS ASSESSMENT REPORT (2018)

The Town of Edenton Resilience Evaluation and Needs Assessment Report documents the data and findings from Edenton's participation in a Division of Coastal Management pilot program to identify social and physical vulnerabilities to coastal hazards and uncover community-specific needs in building resilience. The planning process consisted of asset mapping, community workshops and interviews, and hotspot identification for future project implementation. The report also provides a thorough summary of resilience efforts already being undertaken in Edenton and details specific project recommendations from the public, Town staff, and DCM.

ALBEMARLE REGIONAL HAZARD MITIGATION PLAN (2020)

A local hazard mitigation plan is a community's blueprint for how it intends to reduce the impact of natural, and in some cases human-caused, hazards on people and the built environment. The essential elements of a hazard mitigation plan include a risk assessment, capability assessment, and mitigation strategy.

The Town of Edenton is one of the participating jurisdictions in the Albemarle Regional Hazard Mitigation Plan, which was updated and adopted in 2020. The Albemarle region encompasses the northeast corner of the state of North Carolina and includes Camden, Chowan, Gates, Hertford, Pasquotank, and Perquimans Counties. The 2020 Regional Hazard Mitigation Plan includes a risk assessment that identified and profiled hazards that pose risk to the planning area, assessed the planning area's vulnerability to these hazards, and examined each participating jurisdiction's capabilities in place to mitigate them. Some of the hazards profiled in this plan include Dam & Levee Failure, Drought, Earthquakes, Erosion, Extreme Heat, Flood, Hurricane & Tropical Storms, Severe Weather, Severe Winter Storm, Tornado, Wildfire, and Radiological Incident. This plan serves as an important source of information on natural hazards and climate change risks, vulnerabilities, and mitigation opportunities for the Town of Edenton.

CHOWAN COUNTY RESILIENT REDEVELOPMENT PLAN (2017)

The Chowan County Resilient Redevelopment Plan is the local plan produced for Chowan County and Edenton as part of the North Carolina Resilience Redevelopment Planning (NCRRP) program that was established in 2016 after Hurricane Matthew. The NCRRP program aimed to provide communities damaged by Hurricane Matthew with a roadmap for community rebuilding and revitalization assistance. This plan summarizes the impact from Hurricane Matthew and presents strategies for resilient redevelopment in Chowan County, including several infrastructure and property protection projects within Edenton.

ALBEMARLE REGIONAL RESILIENCE PORTFOLIO (2022)

The Albemarle Regional Resilience Portfolio comprises two reports, a Climate Change and Natural Hazards Vulnerability Assessment for the Albemarle Region and Climate Resilience Projects for the Albemarle Region, which were developed as part of the North Carolina Office of Recovery and Resiliency (NCORR) Regions Innovating for Strong Economic and Environment (RISE) Program. The Albemarle Region includes 10 counties and their incorporated municipalities, and planning efforts for the region were led by the Albemarle Commission. The vulnerability assessment evaluates climate change impacts on each hazard and summarizes vulnerability according to hazard impacts on social vulnerability and equity, health, and safety; housing, critical infrastructure and community support systems; economy; natural environmental systems; historical and cultural resources; and cascading impacts. The portfolio report presents broad strategies to support resilience at the regional level, including five priority projects and a selection of other considered projects.

CHOWAN COUNTY & EDENTON GREENWAYS AND OPEN SPACE PLAN (2003)

Chowan County and the Town of Edenton partnered to create the 2003 Greenways and Open Space Plan to serve as a guide for developing a system of trails and protected areas in the community. The plan serves as a framework document to outline the general alignment and characteristics of the community's open space areas. The Greenway & Open Space Plan goals focus on greater connectivity, increased opportunities for recreation, alternative transportation options, economic development, and flood and soil erosion control. Although the plan has not been updated since 2003, it still serves as a reference on how Edenton's open spaces and recreation areas are impacted by flooding and how the Town can pursue flood protection and resilience through open space preservation.

NEIGHBORHOOD REDEVELOPMENT PLANS (2015)

In 2015, Edenton developed two Neighborhood Redevelopment Plans within the Town's Historic District. One redevelopment plan focuses on North Oakum Street while the other focuses on Moseley Street. For the North Oakum Street area, the goal of the plan was to preserve the Historic housing, offer affordable and standard housing to middle income owners and renters in the Town, and re-establish the commercial corridor with viable neighborhood-oriented businesses. In the Moseley Street area, the focus

of the plan was on renovation of residential structures and infill development to increase the Town's housing stock. Both plans look to redevelop areas that have been classified as "blighted" because over half the structures in each area are considered deteriorating. Redevelopment will allow for demolition of dilapidated houses to eliminate substandard housing and residential vacancies. Ultimately, the plans aim to achieve stabilization of the area and reduction in neighborhood crime. Although these plans do not discuss natural hazards, they do contain detailed lists and locations of historic assets in the Town of Edenton. They plan are also indicative of the Town's goals to preserve and restore historic neighborhood character, improve housing availability and affordability, and support the local community and economy.

STATE OF NORTH CAROLINA HAZARD MITIGATION PLAN (2023)

The North Carolina 2023 Hazard Mitigation Plan is a federally mandated plan that evaluates hazards that could potentially affect North Carolina and identifies actions to help reduce the loss of life and property from a disaster. The plan was developed by North Carolina Emergency Management (NCEM) with the collaboration of other state agencies. The plan provides a risk and vulnerability assessment, capabilities assessment, mitigation strategy, and monitoring and implementation methods.

Although this plan is focused on statewide hazard mitigation, it incorporates data and findings from regional hazard mitigation plans and presents summarized vulnerability information at a county level. This approach provides statewide context for hazards that impact Chowan County and the Town of Edenton. However, as the State plan draws local hazard risk and vulnerability related information from the regional hazard mitigation plans, the Albemarle Regional Hazard Mitigation Plan is a better source of hazard related information for the Town of Edenton.

Within the capability assessment, the State Hazard Mitigation Plan reviews existing State plans, planning functions, and programs that support resilience, summarizes each relevant State agency's resources and capabilities to implement mitigation, reviews federal and state programs and funding for mitigation, and evaluates local and tribal mitigation capabilities and opportunities to build local capacity. The plan summarizes local capabilities and their effectiveness for mitigation; this summary may be useful to Edenton and the CAT when considering resilience action alternatives.

NC CLIMATE RISK ASSESSMENT AND RESILIENCE PLAN (2020)

To help understand the state of North Carolina's vulnerability to climate change, the North Carolina Climate Risk Assessment and Resilience Plan was created in 2020 by NCDEQ with support from other state agencies and stakeholders. The plan defines a vision of making North Carolina more resilient to both climate and non-climate related stressors to ensure the health and safety of communities, economies, and ecosystems within the state. The plan summarizes climate change projections and non-climate stressors facing North Carolina and evaluates the vulnerability of key state sectors to these hazards and stressors. The plan concludes with recommendations for nature-based solutions to enhance ecosystem resiliency. The climate change projections, non-climate stressor projections, and recommendations are relevant to the Town of Edenton's resilience planning efforts.

2.2 SUMMARY OF EXISTING EFFORTS

Table 2.1 summarizes the findings from the review of existing local and regional plans and efforts that impact the Town of Edenton.

Table 2.1 – Summary of Findings from Existing Plans and Efforts

Document Name (Year)	Asset Locations	Hazard Information	Potential Resilience Projects	Resilience Strategies Already in Place	Resilience Goals and Objectives
Edenton-Chowan CAMA Land Use Plan (2018)		•		•	
Town of Edenton Resilience Evaluation and Needs Assessment (2018)	•	•	•	•	
Albemarle Regional Hazard Mitigation Plan (2020)	•	•	•	•	•
Chowan County Resilient Redevelopment Plan (2017)		•	•		
Albemarle Regional Resilience Portfolio (2022)		•	•	•	
Chowan County & Edenton Greenways and Open Space Plan (2003)		•			•
Edenton Neighborhood Development Plans (2015)	•				
State of North Carolina Hazard Mitigation Plan (2023)	•	•	•	•	•
NC Climate Risk Assessment and Resilience Plan (2020)		•	•	•	•

3 VISION AND GOALS

A vision statement is a forward-looking, aspirational statement that describes the intended long-term outcome of this planning process. To develop the vision statement for this plan, the CAT participated in a facilitated discussion to explain the impetus for this plan and to describe what a resilient Edenton would look like in the future. After sharing their own ideas on these topics, CAT members were presented with summarized responses from the first public survey and the first public workshop and discussed common themes from this feedback. From there, the CAT agreed upon a statement that combined the key elements of all contributors.

The resulting vision statement reflects the aspirations of the CAT, Town staff, and the public for a resilient Edenton.

Edenton is a safe and adaptable Town with a commitment to preparedness and sustainability that ensures all community members live with a sense of stability and peace of mind.

Goals are general guidelines that explain what is to be achieved. They are usually broad-based policy type statements and represent long term comprehensive visions. Goals help define the benefits that the plan is trying to achieve. Goals are also necessary to guide the review of possible resilience strategies and to ensure that recommended actions are consistent with what is appropriate for the Town. Resilience goals need to reflect community priorities and should be aligned with other Town plans.

To set a path for how to realize the vision statement, the CAT further refined the planning intentions into three plan goals. These goals offer broad approaches to building resilience and will serve as a guide for identifying resilience strategies:

Goal 1: Safety and Preparedness
Protect people and property from flood risk and prepare for quick and effective flood response to reduce harm and recover quickly.
Goals 2: Natural Asset Protection
Invest in strategies and programs that enhance the community's ability to adapt to flood events while safeguarding the integrity of the natural environment.
Goal 3: Preservation and Adaptation
Collaborate with the community to ensure that flood adaptation measures complement the Town's character and accommodate the lifestyle of a waterfront community.

4 ASSET INVENTORY

4.1 OVERVIEW

Edenton followed DCM guidance and the North Carolina Resilient Coastal Communities Program Planning Handbook to compile an asset inventory. This process involved collaboration between Edenton staff, the CAT, and WSP to collect relevant data and identify and map assets. Preliminary data collection was focused on the seven required asset categories identified by DCM, shown in Figure 4.1 below, as well as areas of social vulnerability.

Figure 4.1 – Required Critical Assets

Source: NC Resilient Coastal Communities Program Planning Handbook

Data related to these asset categories was collected from Edenton, Chowan County, and other publicly available sources and presented to the CAT for review. CAT members provided supplemental information concerning locally significant assets. Given Edenton's historical significance, the asset inventory was expanded to include historic districts, historic sites, and other culturally important assets.

To present the asset inventory and related analyses, assets are grouped into four categories: critical assets, historic and cultural resources, natural resources, and socially vulnerable populations. Details on each of these categories are presented in the following sections.

4.2 CRITICAL ASSETS

Data on critical assets were gathered from Edenton, Chowan County, and Edenton's 2018 Resilience Evaluation and Needs Assessment report. Critical assets were further categorized using FEMA's Community Lifelines framework to indicate each assets significance relative to the continuity of government operations and/or other services or functions essential to human health, safety, and economic security in Edenton. Critical assets are listed in Table 4.1 and mapped in Figure 4.2.

Table 4.1 – Critical Assets

ASSET	ADDRESS	FEMA LIFELINE
Edenton Police Department*	301 N. Oakum Street	Safety and Security
Chowan County Public Safety Center*	305 W. Freemason Street	Safety and Security
Edenton Public Works Department*	118 W. Hicks Street	Government
Edenton Electric Department*	107 W. Freemason Street	Energy
Edenton Fire Department*	704 N. Broad Street	Safety and Security
Water Tower*	304 Park Avenue	Water Systems
Shepard-Pruden Memorial Library	106 W. Water Street	Food, Hydration, Shelter
John A Holmes High School	600 Woodard Street	Food, Hydration, Shelter
Chowan Senior Center	101 Court Street	Food, Hydration, Shelter
ECU Health Chowan Hospital*	211 Virginia Road	Health and Medical
Town of Edenton Municipal Offices	400 S. Broad Street	Government
Substation*	227 E. Freemason Street	Energy
College of the Albemarle/Temporary High School	824 N. Oakum Street	Food, Hydration, Shelter
Cell Towers	304 Park Avenue	Communications
Fybe OLT cabinet	225 E. Freemason Street	Communications
Century Link	104 E. King Street	Communications
Water Treatment/Well	Near Beaver Hill Cemetery	Water Systems
Well	314 Boswell Street	Water Systems
Water Tower	202 Twiddy Avenue	Water Systems
Public Works Gas Pump Station	North Granville Street	Energy

*Indicates that these assets were identified as essential to community and emergency operations for the purpose of the sensitivity analysis, described in Section 6.

4.3 HISTORIC AND CULTURAL RESOURCES

-Historic and cultural resources include historic districts and historic sites that are identified by the North Carolina State Historic Preservation Office with the following statuses: listed on the National Register of Historic Places (NR), determined eligible for listing (DOE), or potentially eligible for listing (SL). Note

that several locations are listed as an historic district and have an associated structure that is listed as an historic site. This asset category also includes several historical assets identified through the 2018 Resilience Evaluation and Needs Assessment report, including sites with surveyed only (SO) status on the State register, as well as churches and cemeteries identified by Chowan County. Historic and cultural resources are listed in Table 4.2 through Table 4.5. These assets are mapped in Figure 4.3.

Table 4.2 – Historic Districts

ASSET	ACRES	DESCRIPTION	STATUS
Shelton Plantation House*	20.9	c. 1820 Federal pediment-front 2-story frame house	NR
Hicks Field*	5.22	1939 WPA baseball field, grandstand	NR
St. Paul's Episcopal Church and Churchyard*	4.67	1736, 1806-09, 1848, 1950 Georgian brick church	NR
Edenton Station, U.S. Fish & Fisheries Commission*	34.0	1899-1940 staff houses and hatchery facilities	NR
Speight House and Cotton Gin*	4.98	1900-02 Queen Anne 2-story brick house, cotton gin complex	NR
Strawberry Hill*	1.61	1780s & later Georgian/Federal 2-story frame house	NR
Hayes Plantation (Samuel Johnston House)*	1293	1814-1817 2-story frame Federal house	NR
Edenton Historic District	268	Mid 18th - early 20th c. maritime town; Georgian, Federal	NR
Edenton Historic District Boundary Expansion I	3.16	Four contributing houses; small area	NR
Edenton Historic District Boundary Increase II	277	Boundary expansion	NR
Edenton Cotton Mill Village Historic District	67.8	Early 20th c. mill houses and brick textile mill	NR
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House)*	0.26	c. 1855, 1958, 1970 2-story side gable brick Gothic Revival	NR
(Former) Marine Corps Air Station (Edenton Airport)	471		DOE
North Edenton Historic District	109		SL
Westover Heights Historic District		Post-WWII subdivision	SL

*Also listed as an historic site

Table 4.3 – Historic Sites

ASSET	LOCATION	DESCRIPTION	STATUS
St. Paul's Episcopal Church and Churchyard*	W. Church Street at Broad Street Edenton	1736, 1806-1809, 1848 Georgian Revival church	NR
Shelton Plantation House*	Down lane, W side NC 32, 0.9 mi. N of jct. w/SR 1200 Edenton	c. 1820 Federal pediment-front 2-story frame house	NR

ASSET	LOCATION	DESCRIPTION	STATUS
Strawberry Hill*	S side E. Church Street Extension at SR 1105 Edenton	1780s & later Georgian/Federal 2-story frame house	NR
Cupola House	408 S. Broad Street (W side, just N. of Water Street) Edenton	1758 Georgian 2-story frame house; NHL	NR
Barker House	S. terminus of Broad Street on Edenton Bay 509 S. Broad Street	1782, E 19th C. 2-story frame house with double porch	NR
Pembroke Hall	121 W. King Street Edenton	1850 2-story Greek Revival house	NR
Chowan County Courthouse	E. King St., at head of Courthouse Green 117 E. King Street	1767 Georgian 2-story brick courthouse; attributed to John Hawks; NHL	NR
James Iredell House	107 E. Church Street Edenton	1800, 1827 Federal 2-story frame house, State Historic Site	NR
Hicks Field*	NE corner Freemason and Woodard Streets Edenton	1939 WPA baseball field, grandstand	NR
Queen Anne Creek Railroad Trestle	Queen Anne Creek Edenton		DOE
Edenton Station, U.S. Fish & Fisheries Commission*	200 block Old Fish Hatchery Road Edenton	1899-1940 staff houses and hatchery facilities	NR
Hayes Plantation (Samuel Johnston House)*	E side Edenton Bay on S side of Queen Anne Creek E. Water	1814-1817 2-story frame Federal house	NR
Peanut Factory	E. Church Street Extension at head of Wood Avenue Edenton	1909 5-story brick industrial building	NR
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House, Freedom House)*	122 W Peterson St, Edenton	c. 1855, 1958, 1970 2-story side gable brick Gothic Revival house	NR
Speight House and Cotton Gin*	N side E. Church St. Extension (NC 32) at SR 1105 Edenton	1900-1902 Queen Anne 2-story brick house, cotton gin complex	NR
Roanoke River Lighthouse (Current site)	Colonial park waterway Albania Place Chowan	1887 Stick-style river lighthouse	SL
D.F. Walker Junior High School	824 North Oakum Street Edenton	1987	SL
Albania	201 Dickinson Street, Edenton	Mid 19th C. Greek Revival 2-story frame house	NR
Colonial Motel	1390 North Broad Street	1987	SL
Wessington House	120 West King Street Edenton	1851 2 1/2-story brick "French Villa"	NR
NC National Guard Armory	702 N Broad St.		SO

ASSET	LOCATION	DESCRIPTION	STATUS
(Former) Edenton Grade School (Swain School)	101 Court St, Edenton		SO

*Also listed as an historic district

Table 4.4 – Churches

ASSET	LOCATION
Edenton Baptist	200 S Granville St
Great Mt Zion	107 Cox Ave
Church	515 Coke Ave
Gale Street Baptist	118 W Gale St
Providence Baptist	214 W Church St
St Luke Church of Christ	1215 Vann St
Edenton United Methodist	225 Virginia Rd
Union Grove Ame Zion	212 Tyler Ln
Pleasant Grove	121 E Carteret St
Praise Temple Worship Center	820 Dr Martin Luther King Jr Ave
Apostolic Church of God	676 Virginia Rd
Church Of God in Christ	510 N Granville St
Kadesh Methodist Zion	117 E Gale St
St Johns Episcopal	212 E Church St
Church Of Christ	117 Mexico Rd
First Presbyterian	200 S Moseley St
First Assembly of God	1201 W Queen St
Church Of Th Lord Jesus Christ	400 First St
Church Of God	906 Johnston St
Roman Catholic Diocese	207 N Broad St
Edenton Congregation of Jehovah's Witnesses	1536 N Broad St

Table 4.5 – Cemeteries

ASSET	LOCATION/FAMILY
667 B Virginia Rd	Hoskins
266 B Yeopim Rd	Creecy-Benbury
1034 Hayes Farm Rd	Baker-Rice-Blair-Cathcart
214 Mexico Rd	Sanctified Church Cemetery/Jordan
200 S Granville St	Edenton Baptist Church

ASSET	LOCATION/FAMILY
207 N Broad St	St Annes Catholic
101 W Gale St	St Paul's Episcopal
203 E Peterson St	*unnamed*
105 N Oakum St	Methodist Cemetery

4.4 NATURAL RESOURCES

Natural resources in Edenton include several county and town parks, state game land, federal land at the National Fish Hatchery, and wetlands, including natural wetlands and a constructed wetland adjacent to North Granville Street. These assets are mapped in Figure 4.4.

4.5 SOCIALLY VULNERABLE POPULATIONS

Social vulnerability refers to a community or an individual's capacity to prepare for and respond to the stress of hazard events. Social vulnerability is often discussed in terms of the characteristics that have historically made certain groups of people more at risk when they are exposed to the impacts of a hazard (Cutter, 2010; Berke et al., 2019). Even if different groups share similar exposure to a hazard, some groups may have a greater capacity to anticipate, cope, and recover from a disaster than others. The Center for Disease Control and Prevention's (CDC) social vulnerability index (SVI) measures relative social vulnerability at the Census tract level based on 15 social factors: poverty, unemployment, income, education, age, disability, household composition, minority status, language, housing type, and transportation access. Communities and individuals throughout Edenton may have varying levels of vulnerability based on these and other characteristics, and the CAT recognized that resilience strategies to address some aspects of social vulnerability must be communitywide.

The CDC SVI data is assessed at the Census tract level, however, Harvard Dataverse has used a projection model to provide a lower level of geography – block groups. A map of the overall SVI results is provided in Figure 4.5. While this data provides a more granular assessment of social vulnerability the CAT provided more specific input to assess vulnerability in Edenton.

In addition to recognizing communitywide vulnerabilities, the CAT sought to identify specific locations in town where vulnerable populations are found so that site specific actions could also be implemented, if needed. Socially vulnerable populations were identified using data from the Town of Edenton Resilience Evaluation and Needs Assessment, which included the town's redevelopment areas at North Oakum Street and Moseley Street as well as two retirement/assisted living facilities. The CAT identified two additional senior living facilities to add to this list. These locations are mapped in Figure 4.6.

Figure 4.2 – Critical Asset Locations

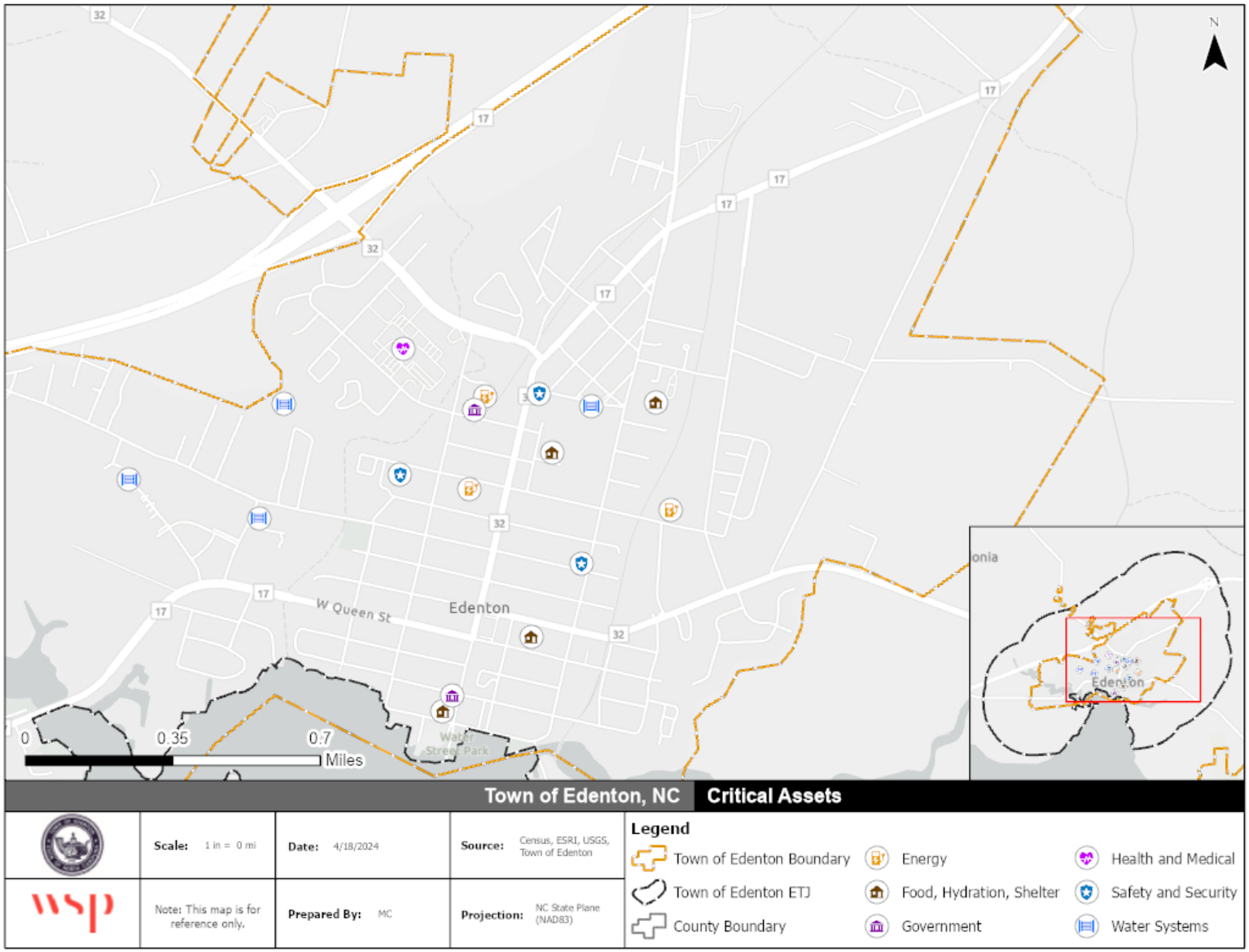


Figure 4.3 – Historic and Cultural Resources

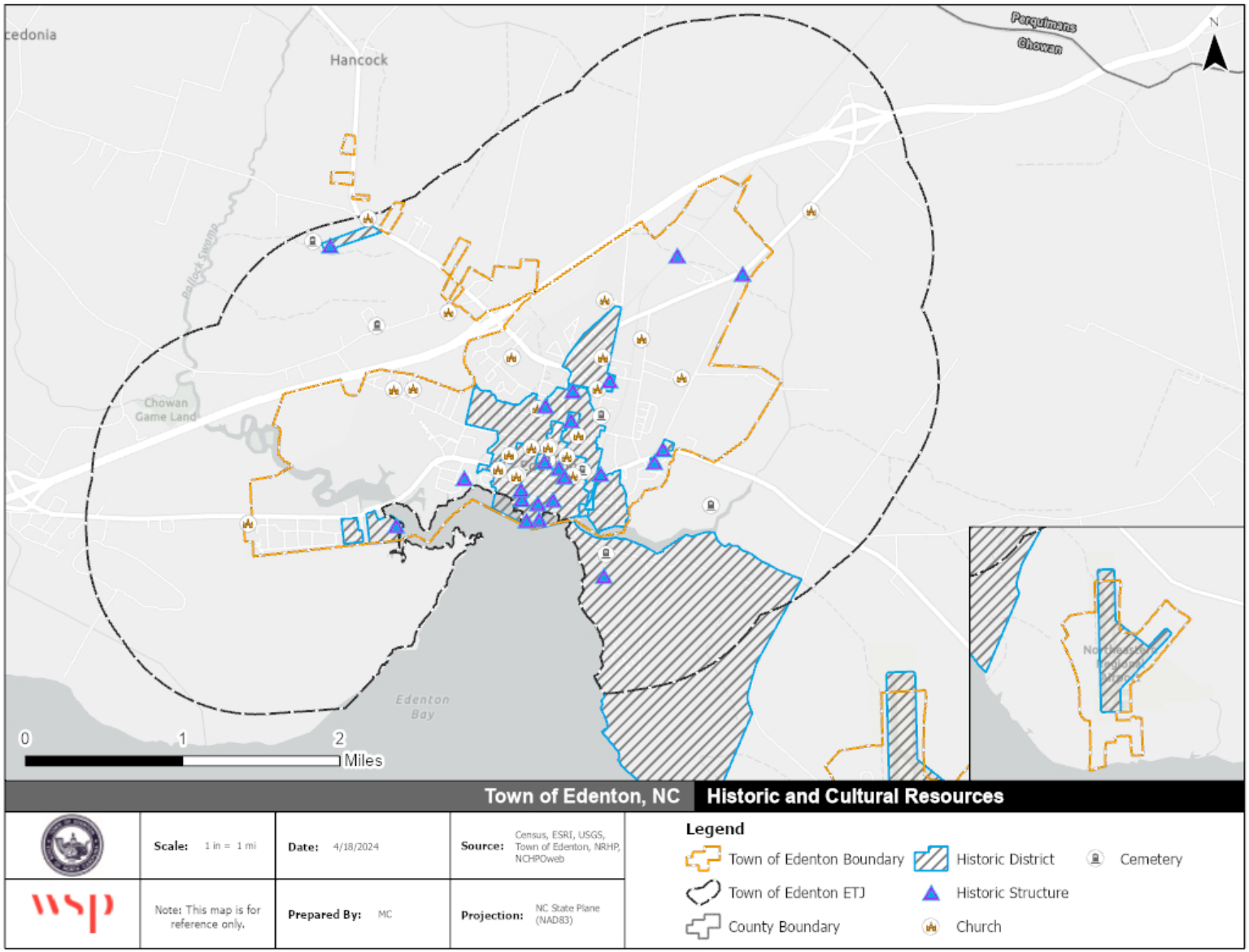


Figure 4.4 – Natural Resources

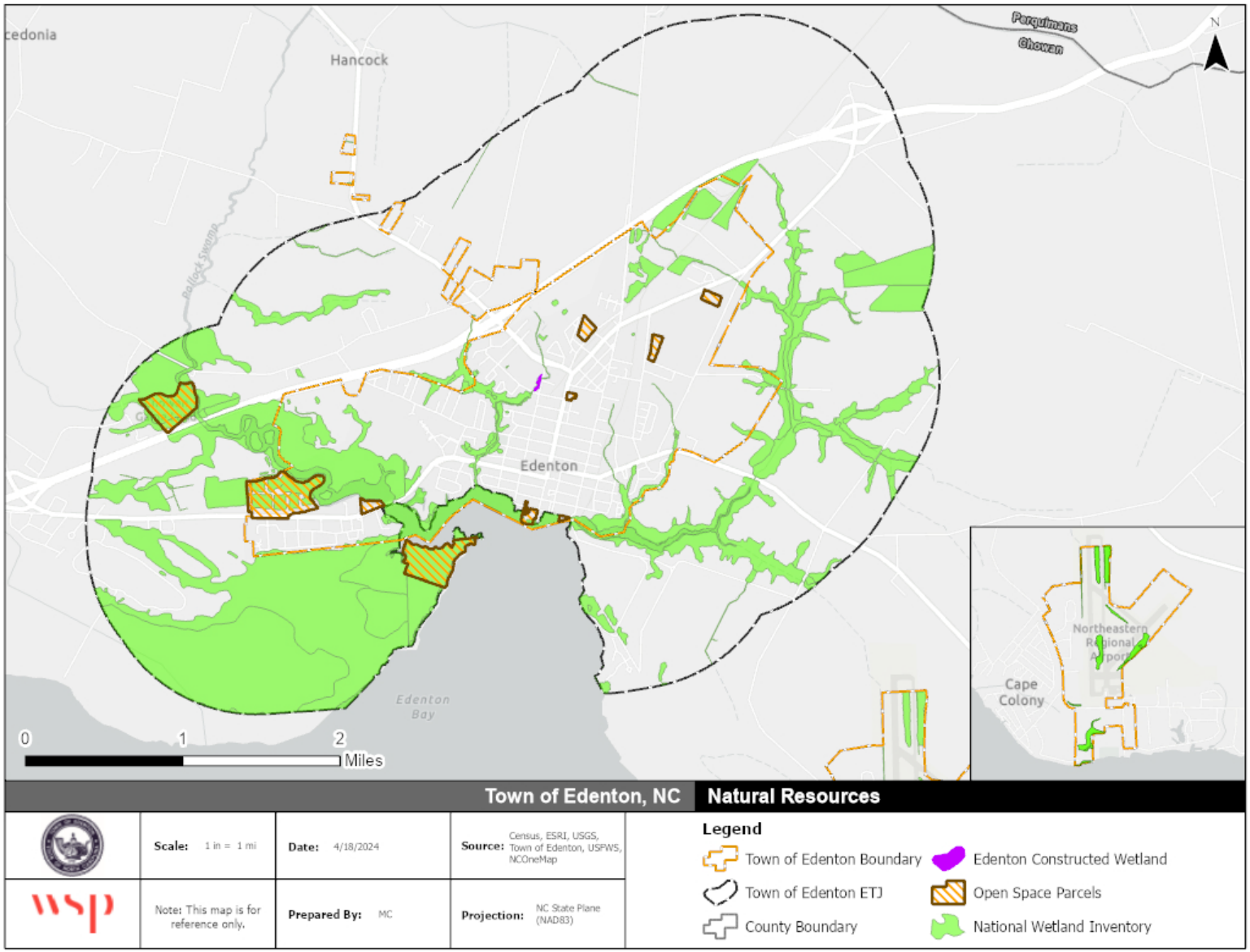


Figure 4.5 – Social Vulnerability Index – Block Group

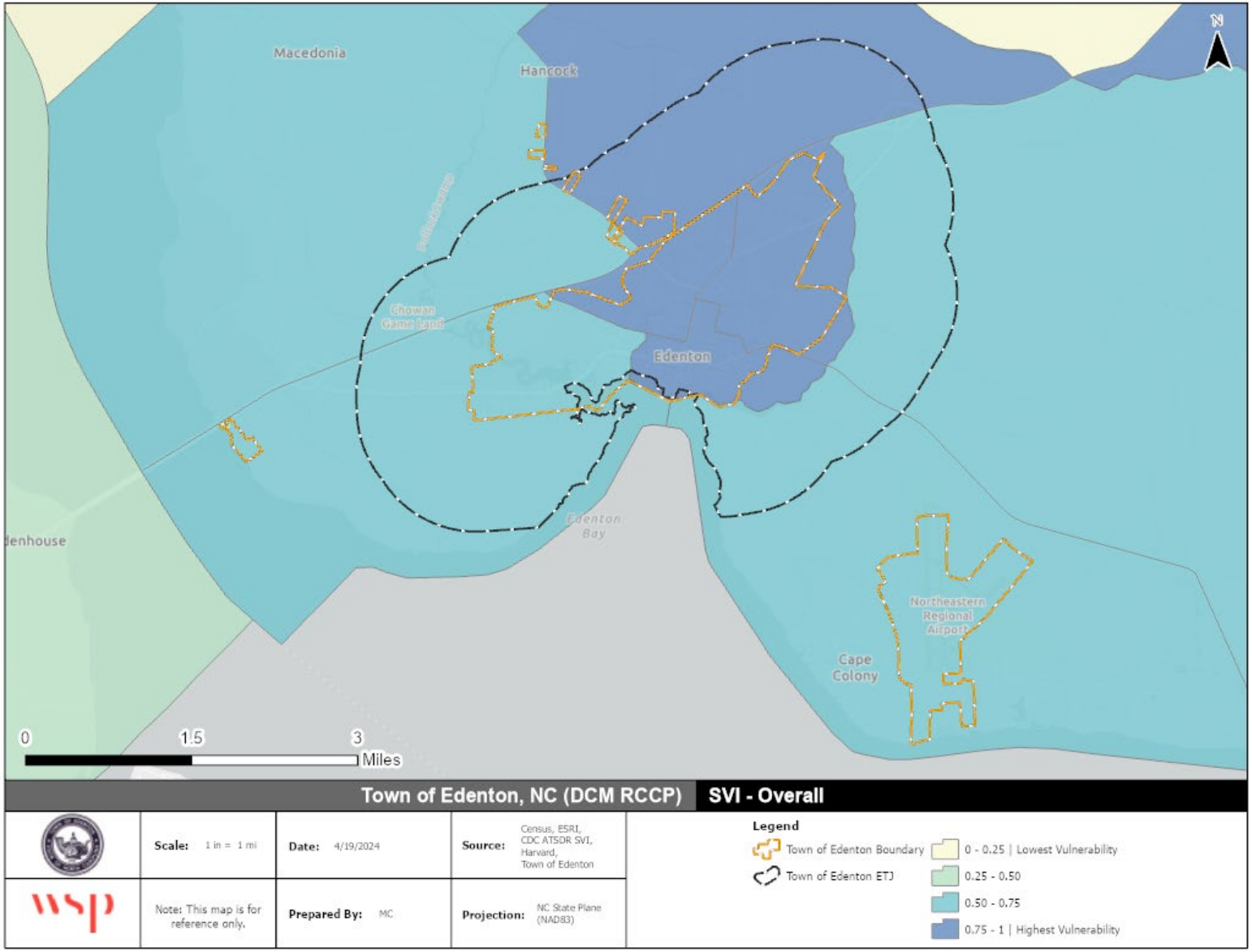
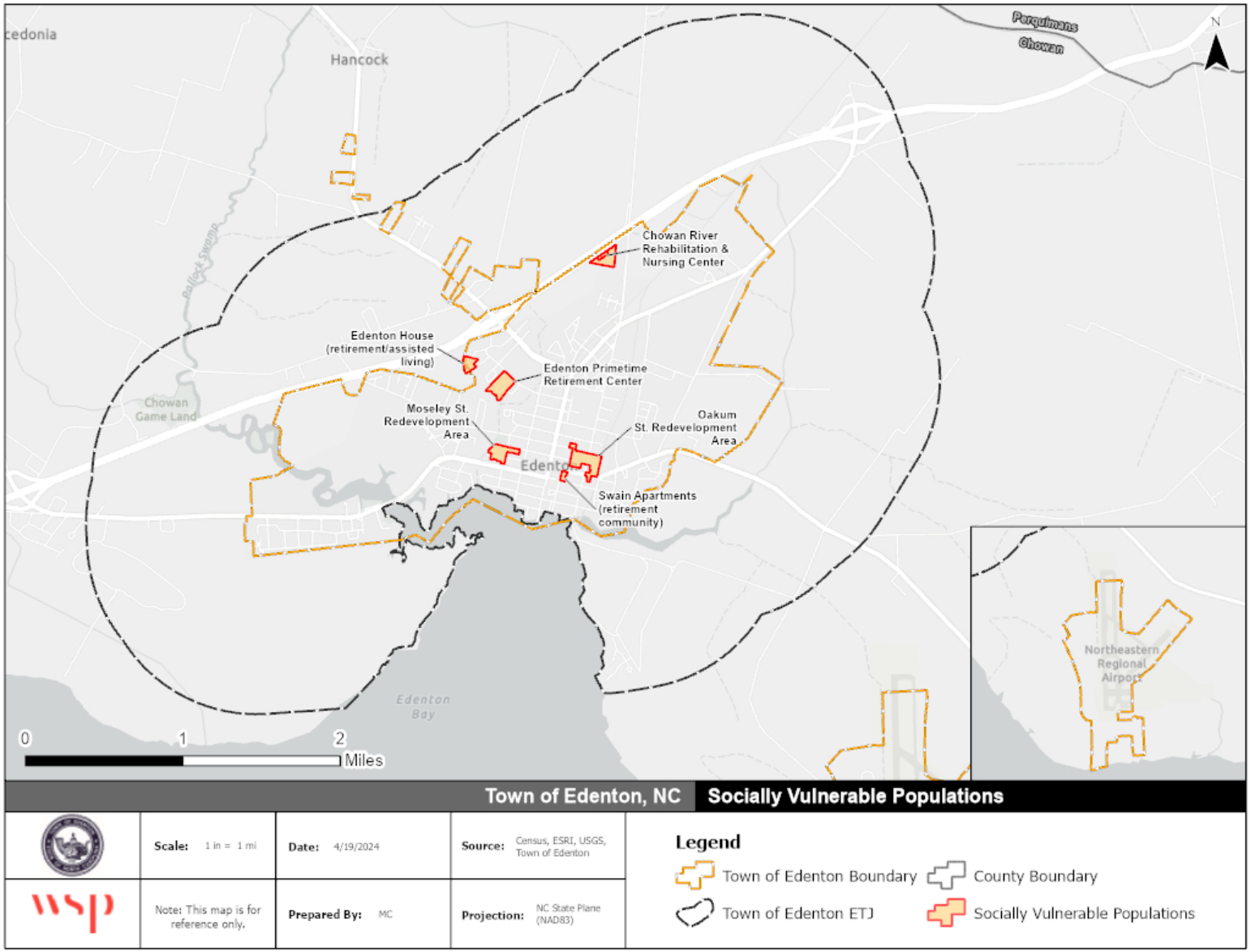


Figure 4.6 – Socially Vulnerable Populations



5 HAZARDS & STRESSORS

5.1 OVERVIEW

Coastal communities face varying levels of risks from natural hazards and non-climate stressors. Potential hazards and stressors in Edenton were identified based on past events records and experiences, current local and regional trends, and expected future changes. Identifying hazards and stressors is important to understanding how Edenton's assets may be threatened.

The Albemarle Regional Hazard Mitigation Plan was the first point of reference for identifying hazards relevant to Edenton. Based on the flood-related hazards in the HMP and input from the CAT on local flood conditions, the following list of hazards were selected for assessment in this plan:

- Sea Level Rise
- Riverine & Coastal Flooding
- Stormwater Flooding
- Storm Surge & Wind-Driven Tidal Flooding
- Shoreline Erosion

In evaluating these hazards, the CAT considered both current and future conditions based on the projected impacts of climate change. The following subsections summarize each of the identified potential hazards based on current best available data and past occurrences. Where possible, findings from the 2020 North Carolina Climate Science Report relevant to each potential hazard are discussed.

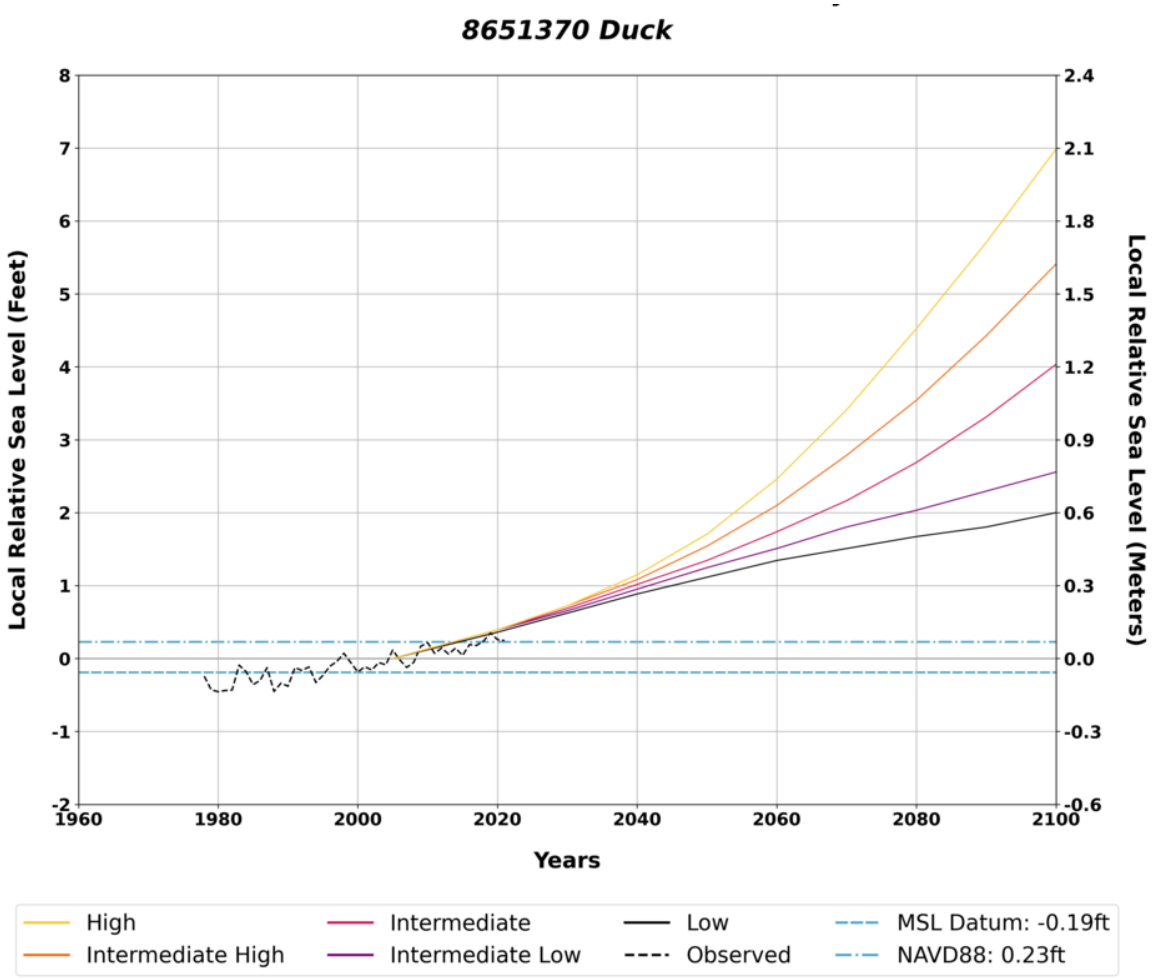
5.2 HAZARDS

5.2.1 SEA LEVEL RISE

Data compiled from tidal gauges by NOAA helps to approximate local relative sea level rise projections. The two closest tidal gauges to Edenton are located in Duck, NC and Oregon Inlet Marina, NC. Figure 5.1 and Figure 5.2 below from NOAA Tides & Currents show five regionalized sea level rise scenarios for each station, plotted relative to a 1996-2014 baseline period with the year 2005 as the "zero" point. The five scenarios are generated to account for emissions uncertainty and process uncertainty. Emissions uncertainty relates to the unknown amount of greenhouse gases that will be emitted in the future, and process uncertainty relates to ice-mass loss, ocean thermal expansion, and local ocean dynamic changes, which will be affected by increased emissions. Based on these projections, under the Intermediate scenario, Edenton could experience 1 foot of sea level rise by 2040, 2 feet by about 2065, and around 4 feet by 2100.

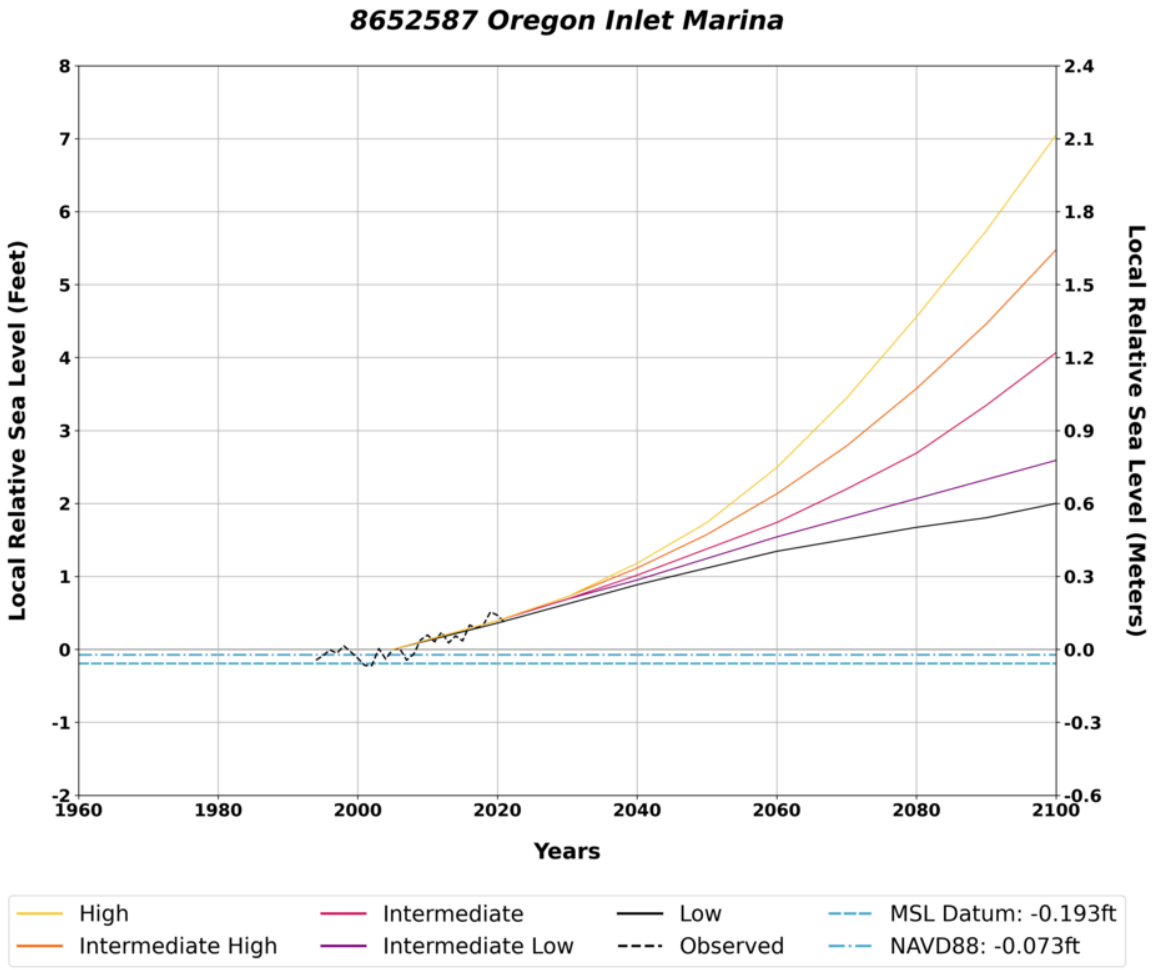
Figure 5.3 shows the area that would be inundated by 1, 2, and 3 feet of sea level rise in Edenton, using data from the NOAA Office for Coastal Management's Sea Level Rise Viewer.

Figure 5.1 – Annual Relative Sea Level Since 1960 and Projections for Duck, NC



Source: NOAA Tides & Currents

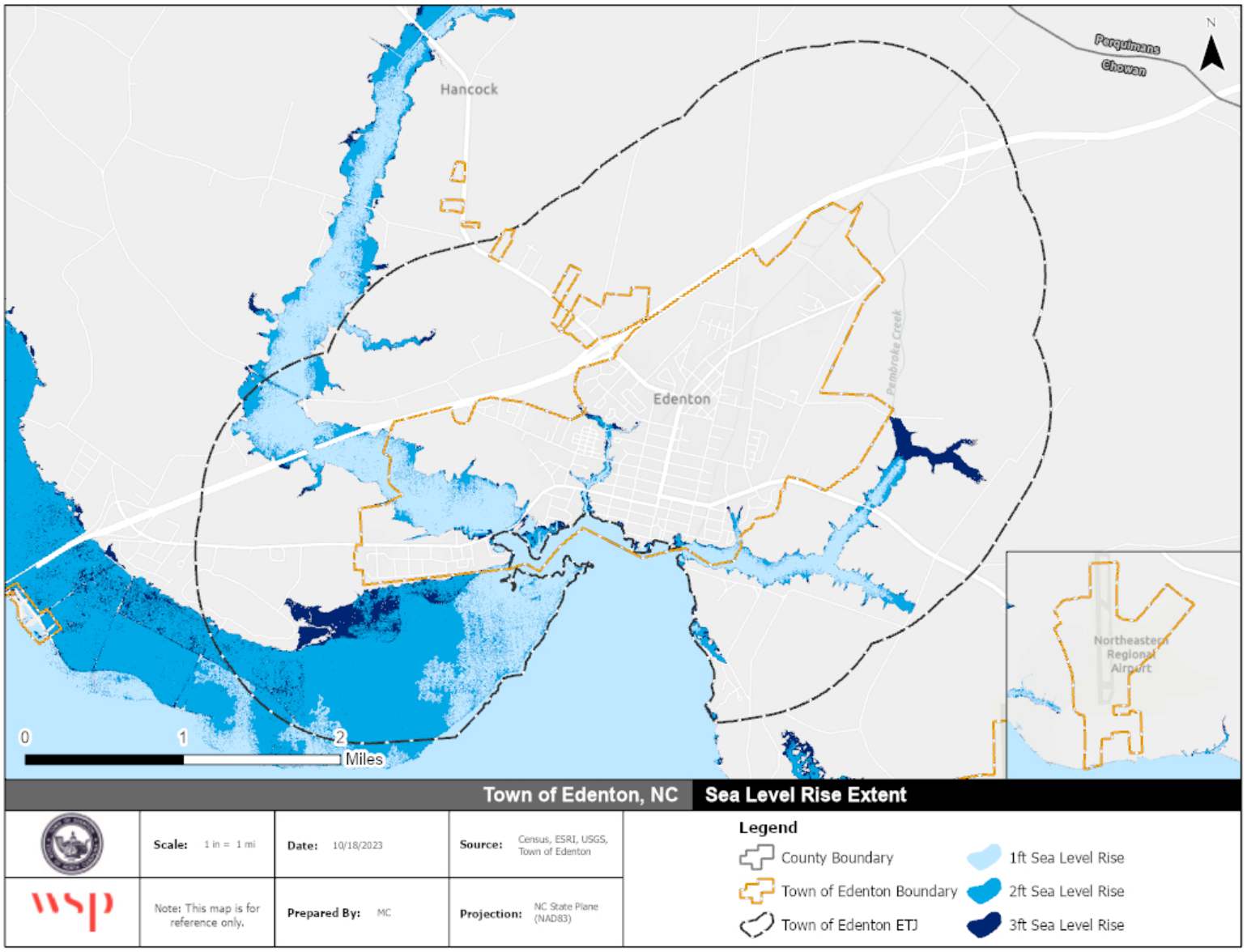
Figure 5.2 – Annual Relative Sea Level Since 1960 and Projections for Oregon Inlet Marina, NC



Source: NOAA Tides & Currents

Per the 2020 North Carolina Climate Science Report, by 2100, coastal areas are expected to experience high tide flooding, which is water levels of 1.6-2.1 feet above mean higher high water, nearly every day. This change is largely due to projected sea level rise.

Figure 5.3 - Sea Level Rise Extent



5.2.2 RIVERINE AND COASTAL FLOODING

During and following heavy rainfall events, the primary riverine flooding sources in Edenton are Queen Anne Creek and tributaries, Pembroke Creek tributaries, and Filberts Creek. Rainfall-induced flooding can be compounded by astronomical tides and storm surge along the Albemarle Sound. FEMA's Flood Insurance Study (FIS) for Chowan County and the Town of Edenton, revised effective on December 21, 2018, incorporates astronomical tides, freshwater inputs from rainfall and runoff, and storm surge into calculated stillwater elevations for the 1% annual change storm event which is used to delineate flood zones. The flood zones delineated on the resulting Flood Insurance Rate Maps (FIRMs) are representative of the areas vulnerable to compound flooding for the 1% and 0.2% annual chance storms. The FIRM zones for Edenton are shown in Figure 5.4. The estimated depth of flooding during the 1% annual chance flood event is shown in Figure 5.5.

Per the 2020 North Carolina Climate Science Report, total annual precipitation is likely to increase across the state, and it is very likely that extreme precipitation frequency and intensity will increase. Additionally, it is very likely that heavy precipitation accompanying hurricanes that pass near North Carolina will increase, which would increase the potential for freshwater flooding.

Figure 5.4 – Flood Hazard Areas

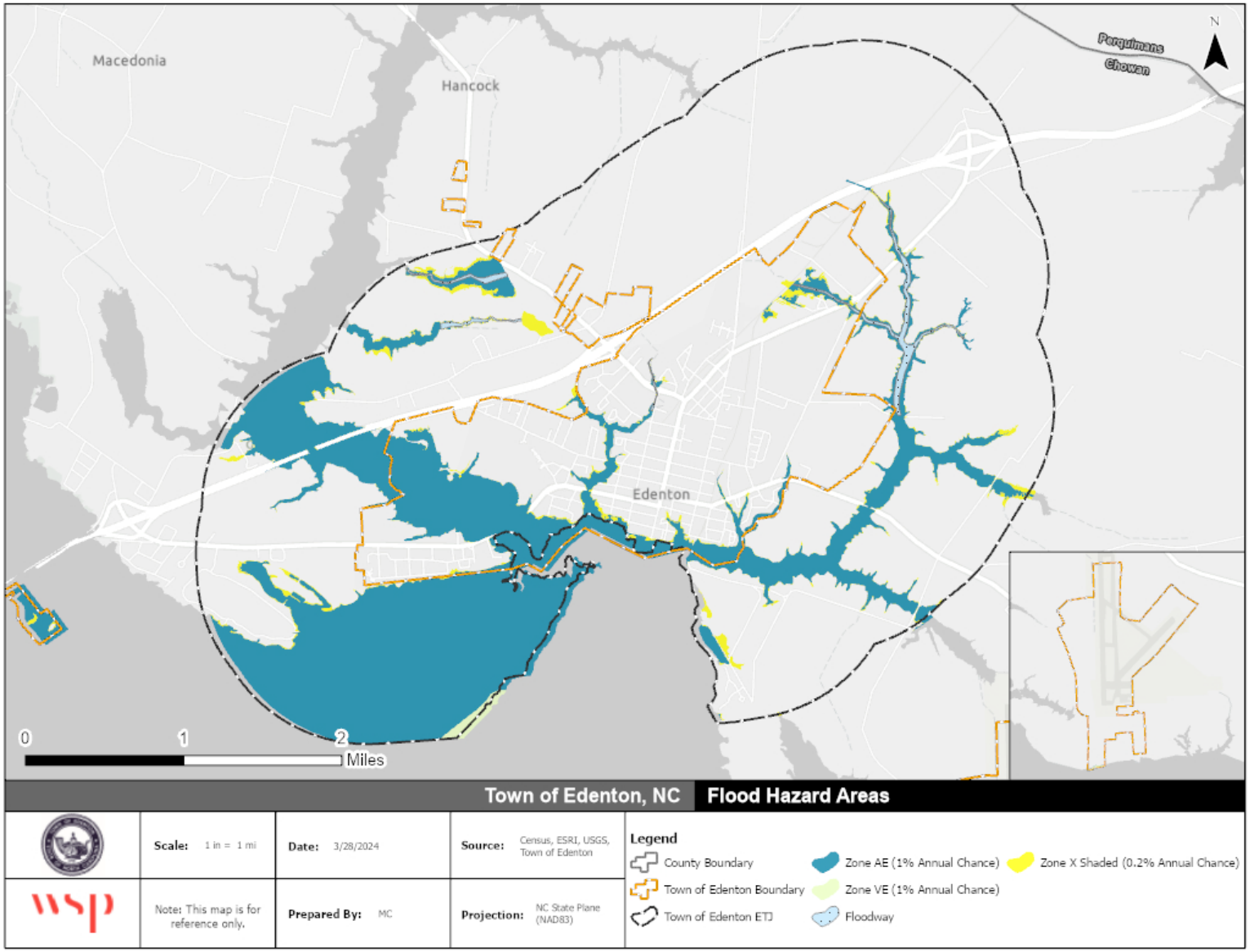
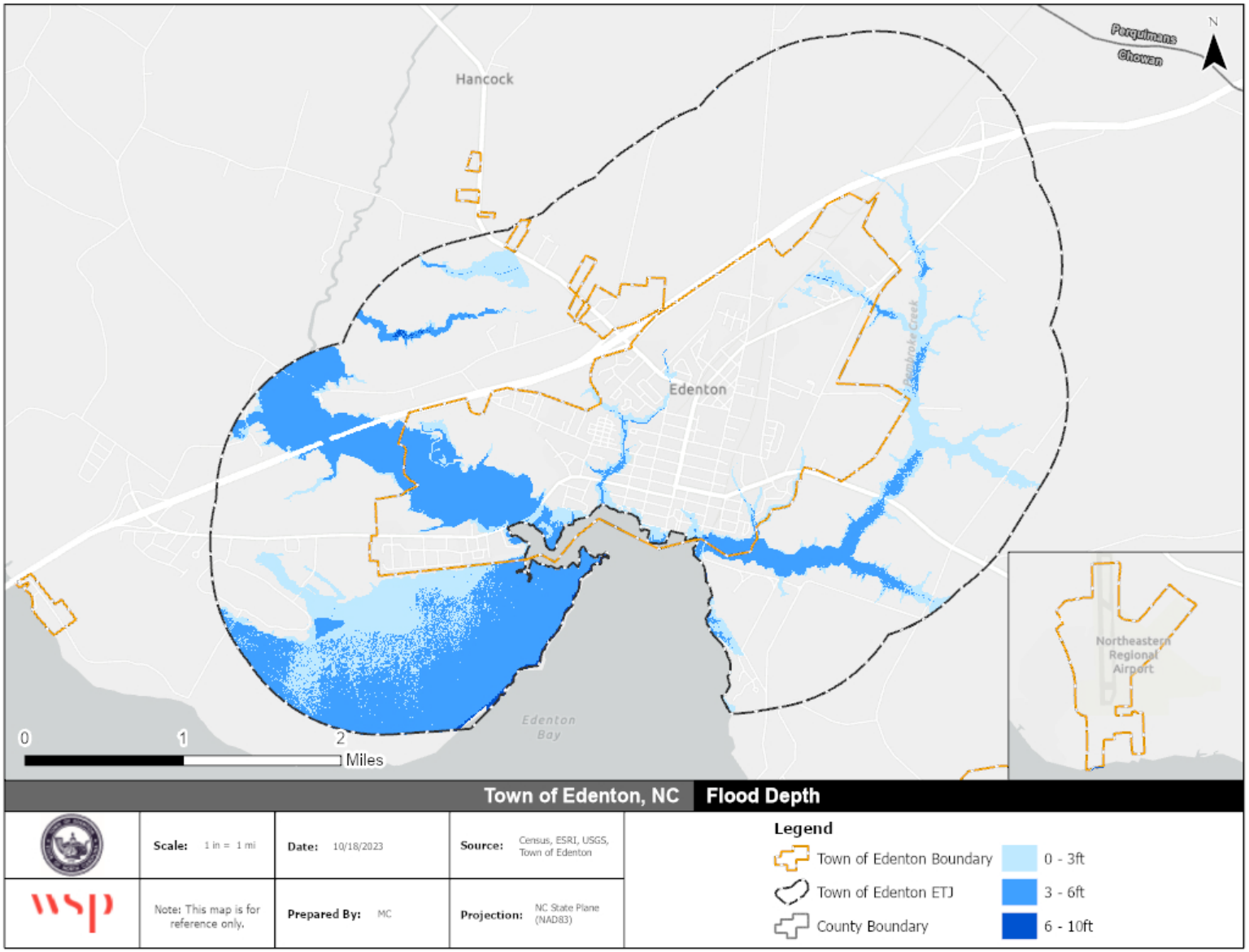


Figure 5.5 – Estimated 1% Annual Chance Flood Depth



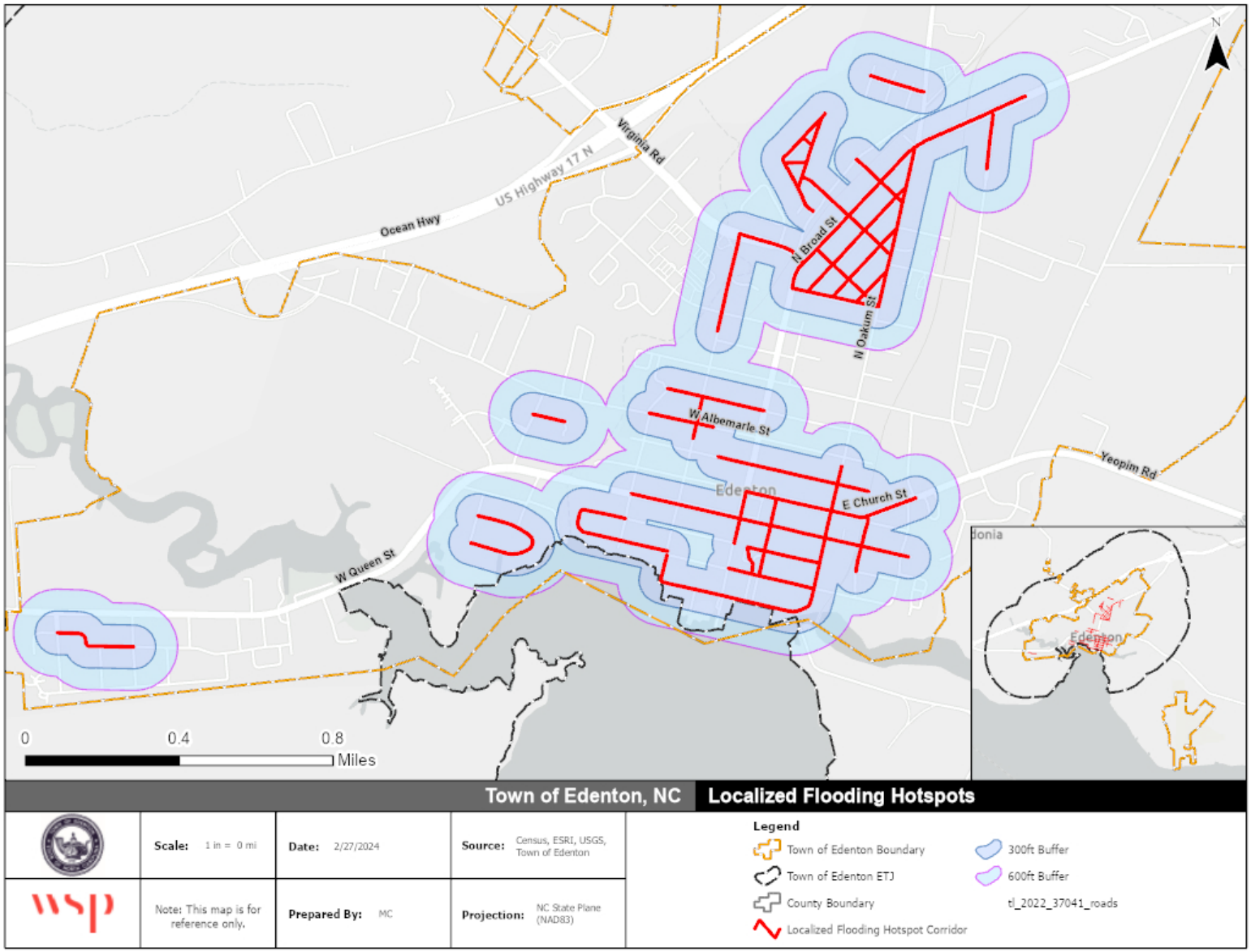
5.2.3 STORMWATER FLOODING

Stormwater flooding is typically highly localized and results from heavy rainfall and runoff that overwhelms the stormwater system. Stormwater flooding may be caused by inadequate capacity in the pipe system, clogged inlets or improper grade that reduce or prevent flow into the system, clogs within the system that reduce carrying capacity, or outfalls blocked by debris or high tide that prevent drainage out of the system.

Data was gathered from CAT meetings, the public survey, the public workshop, and the 2018 Town of Edenton Resilience Evaluation and Needs Assessment to identify problems areas where stormwater flooding occurs. The identified stormwater flooding hotspot areas are shown in Figure 5.6.

As noted above, the 2020 North Carolina Climate Science Report indicates the frequency and intensity of extreme precipitation events is very likely to increase, which may result in increased stormwater flooding. Similarly, rainfall design values are very likely to increase in the future, meaning stormwater infrastructure designed to current design values will fail more frequently in the future. The report states that an increase of 10%-20% in rainfall design values is possible by 2050.

Figure 5.6 – Localized Stormwater Flooding Hotspots and Buffers



5.2.4 STORM SURGE

During tropical storms and hurricanes, wind pushes water toward the shore and can increase the mean water level to heights impacting roads, buildings, and critical infrastructure. Storm surge can be particularly damaging when it coincides with the normal high tides. During more severe storm events, storm surge flooding can also involve wind driven waves.

NOAA's Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model outputs were used to estimate the potential impact area of storm surge in Edenton. The SLOSH model accounts for atmospheric pressure, size, forward speed, storm track, and unique geography and water depths to estimate surge. The composite approach, used for this vulnerability assessment, generates Maximum Envelopes of Water (MEOWs) and Maximum of MEOWs (MOMs) by compiling the results of thousands of hypothetical storm conditions and presenting the maximum height of surge for each storm category. This output is considered by the National Hurricane Center to be the best approach for determining an area's storm surge vulnerability because it accounts for forecast uncertainty.

Members of the CAT indicated that Edenton regularly experiences low-level nuisance flooding from wind-driven tides. Areas vulnerable to low levels of storm surge, approximated by the Category 1 storm SLOSH model output, also capture the risk of wind driven tidal flooding.

Figure 5.7 through Figure 5.11 show the extent of the estimated maximum storm surge for a Category 1 through Category 5 storm.

Figure 5.7 – Estimated Category 1 Storm Surge

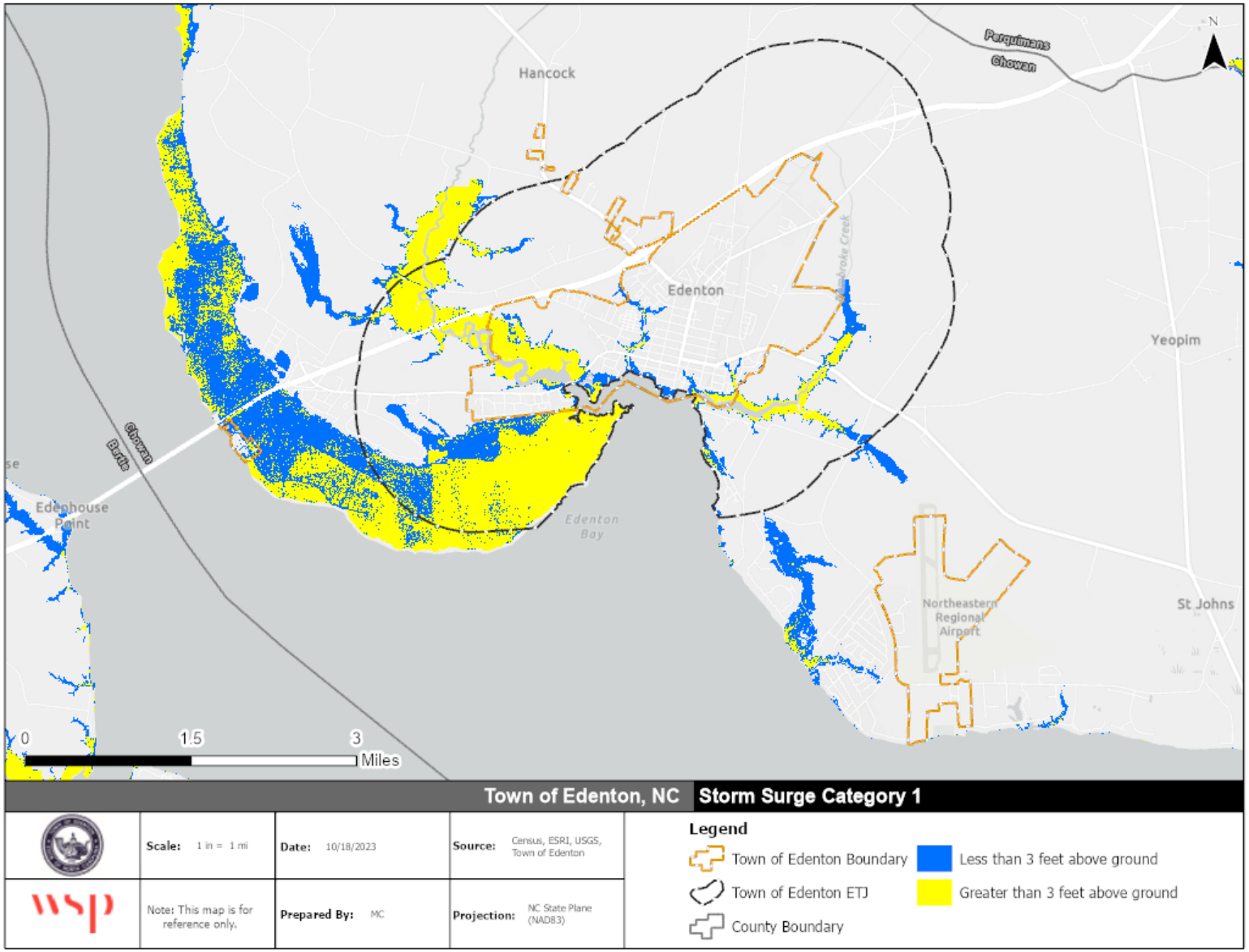


Figure 5.8 – Estimated Category 2 Storm Surge

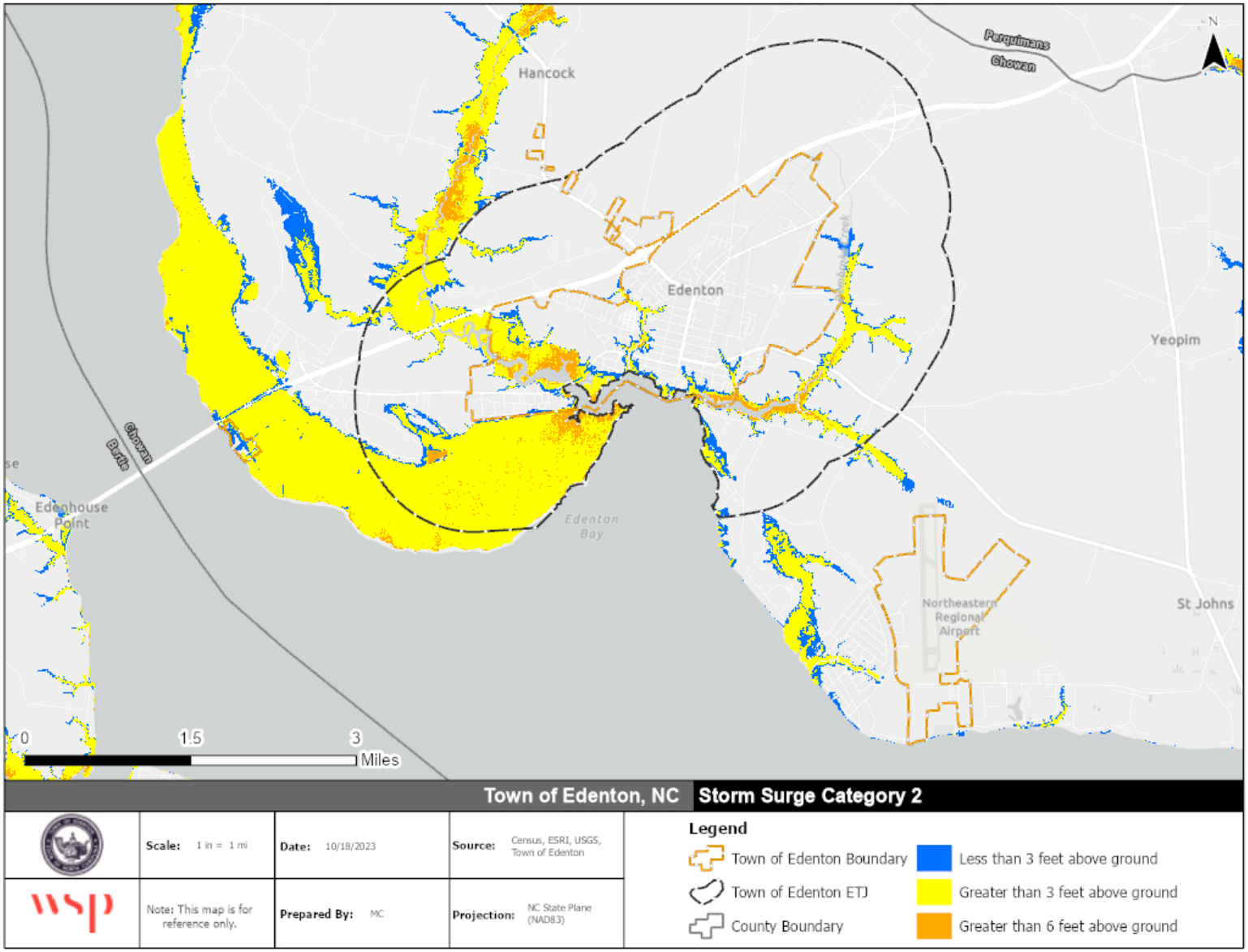


Figure 5.9 – Estimated Category 3 Storm Surge

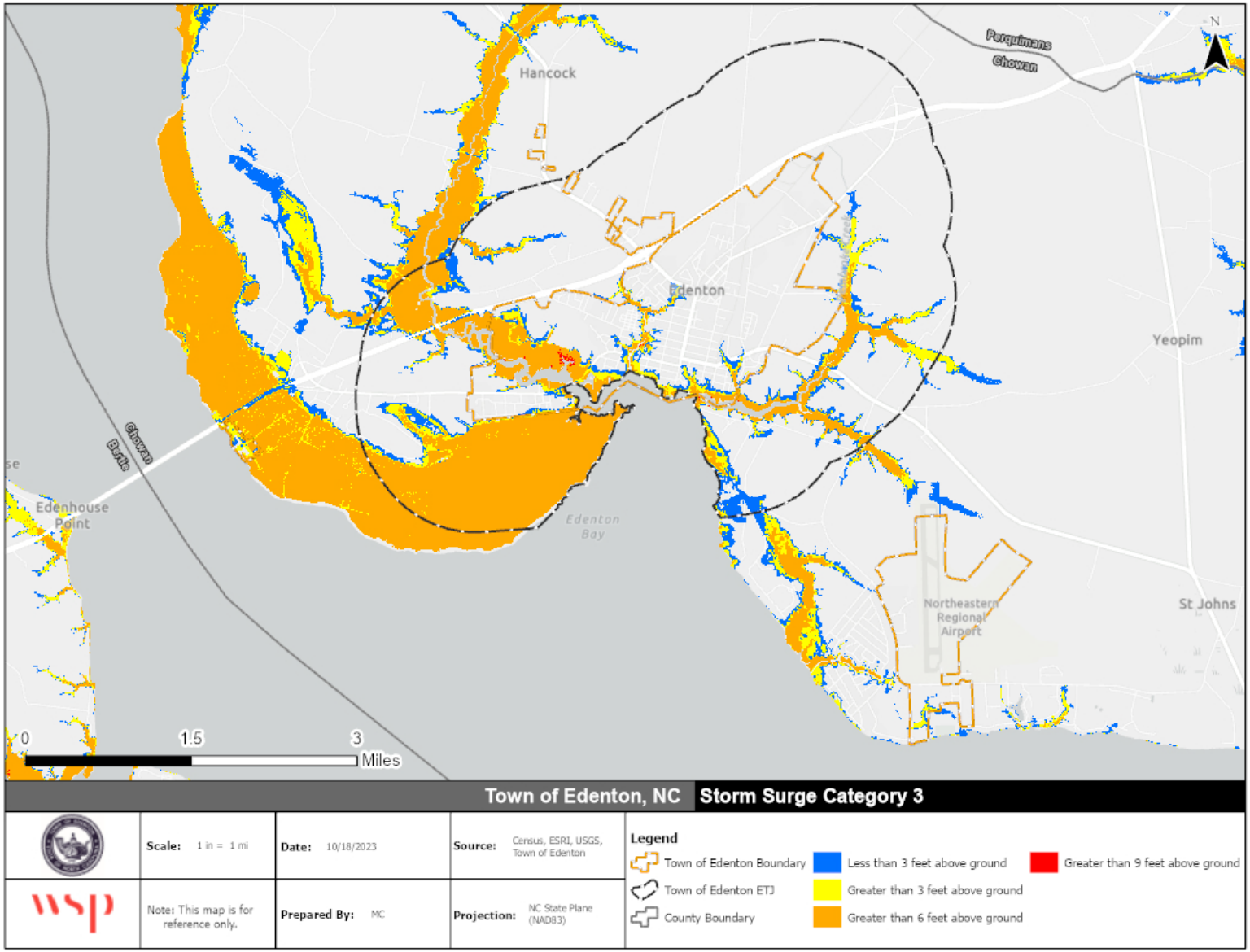


Figure 5.10 – Estimated Category 4 Storm Surge

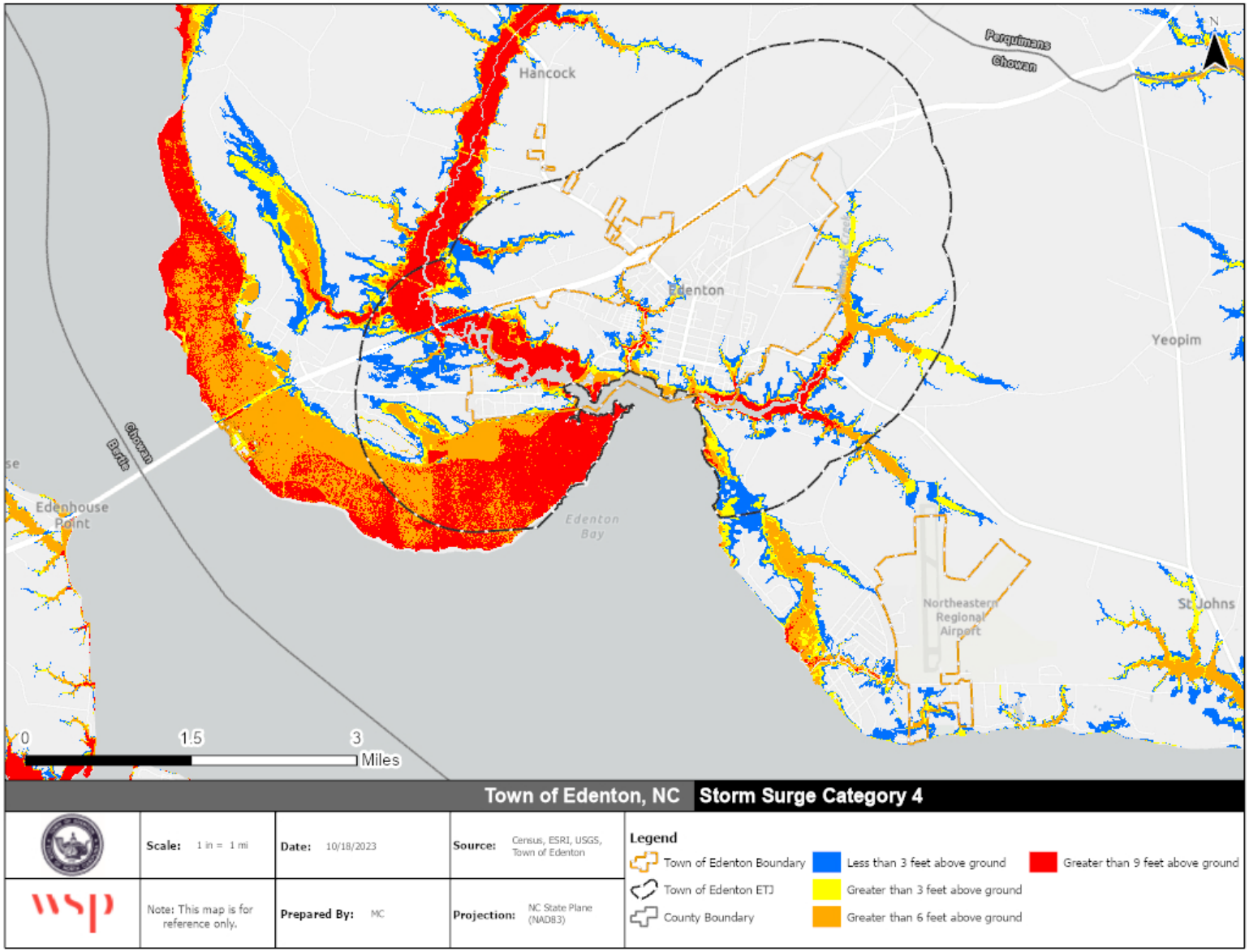
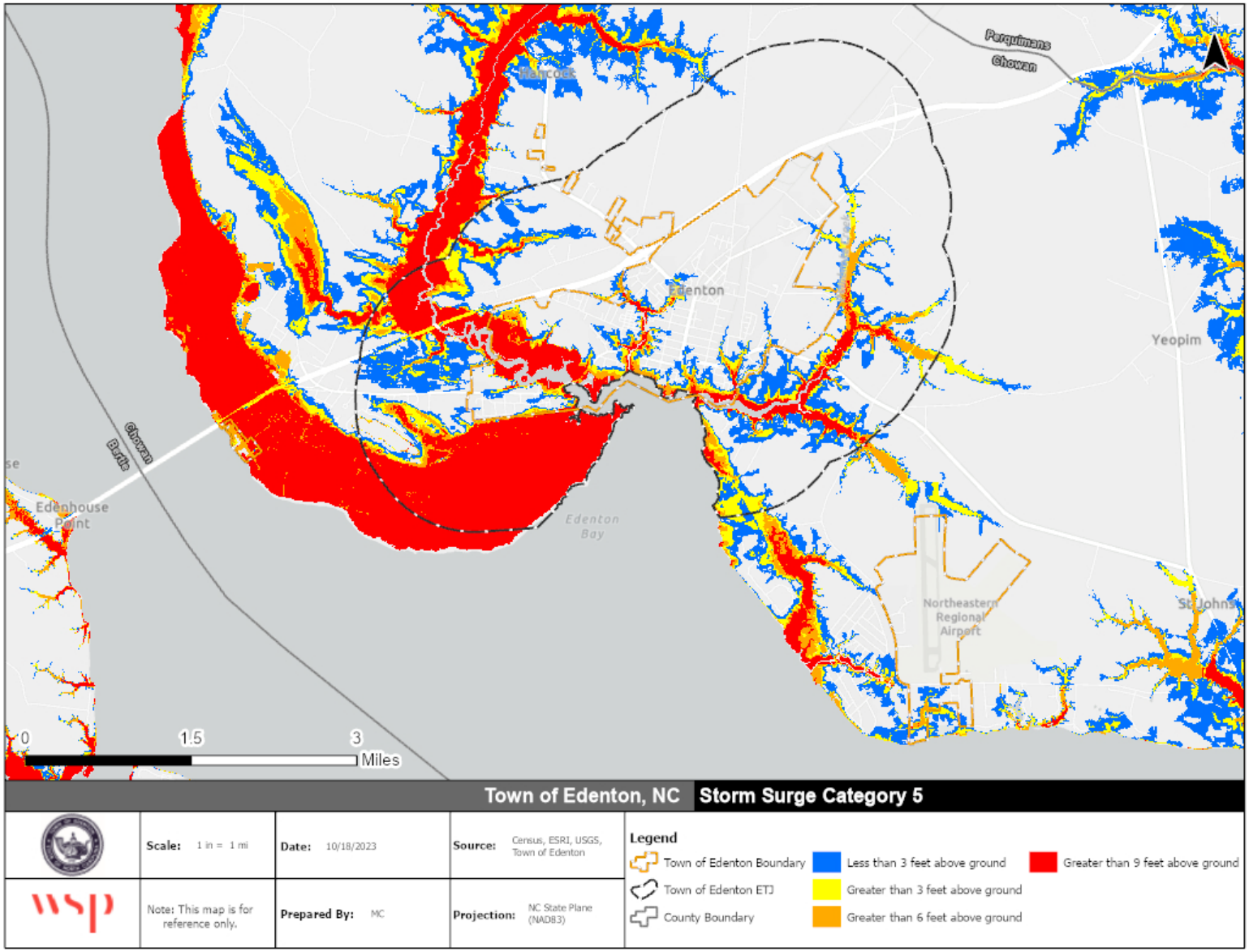


Figure 5.11 – Estimated Category 5 Storm Surge



5.2.5 SHORELINE EROSION

Gradual erosion occurs naturally along streambanks and coastal waterfronts. Severe erosion can occur over a very short period of time when the area is impacted by hurricanes, tropical storms, and other weather systems that intensify flows, currents, and sedimentation.

Respondents to the public survey noted erosion along Pembroke Creek, and the CAT noted erosion along the North Granville Street constructed wetland, along Little Creek at East Water Street down to the Hayesfarm Road bridge and extending to the opposite direction along the entire coastal area of Colonial Waterfront Park. Identified erosion hot spot locations are shown in Figure 5.12.

Figure 5.12 – Erosion Hotspots

5.3 NON-CLIMATE STRESSORS

Stressors are factors or conditions that contribute to or exacerbate the impacts of a hazard. Many stressors reflect existing challenges and social vulnerability in the community, and when coupled with severe weather or flooding, these challenges can make it difficult for the community and individuals to cope and adapt. The following section outlines the identified non-climate stressors affecting Edenton and discussed how these stressors may be exacerbated by climate change, how they may change over time, and how they interact with hazards.

5.3.1 AGING INFRASTRUCTURE

Infrastructure age and disrepair make failure or interrupted service from extreme weather even more likely. According to the U.S. Climate Resilience Toolkit, the impacts of climate change can pose significant challenges to existing built infrastructure. There were 28-billion-dollar weather and climate disasters in 2023, setting a historical record. Old and insufficient infrastructure contributes to the amount and extent of damage that occurs.

Many of the nation's infrastructure elements such as buildings and components of our energy, transportation, water, and sanitation systems, were not built to withstand the projected range of climate conditions and increased frequency of extreme weather events. For example, stormwater management systems may not have the capacity to drain city streets after extreme precipitation events. Other impacts include reduced energy performance of buildings, corrosion of structures, and risk to transportation systems from flooding and degradation.

Based on feedback from the CAT and the public survey, aging and undersized drainage infrastructure often contributes to flooding in Edenton. Public feedback highlighted the desire for improved drainage equipped to can handle more frequent flood events.

5.3.2 HOUSING AVAILABILITY, AFFORDABILITY, AND AGE

HOUSING AGE

Older homes may be susceptible to greater damage from natural hazards and the increased impacts from climate change because they may be less structurally sound from age and wear. For example, seals at entry doors and windows may be insufficient to resist the wind-driven rain of tropical storms, and repeated flooding can wear on the soil and material around the base of a home, which can compromise the integrity of structures' foundations.

Additionally, older homes did not have to adhere to newer building codes that are designed to mitigate the impacts of extreme weather. For example, the Town of Edenton first entered the National Flood Insurance Program (NFIP) and adopted a flood damage prevention ordinance in 1977. Table 5.1 summarizes housing unit counts by year built. Based on these housing age estimates, approximately 62 percent of housing units in Edenton were built before any floodplain development restrictions were required.

Table 5.1 – Housing Units by Year Built

YEAR STRUCTURE BUILT	NUMBER OF HOUSING UNITS	PERCENT OF TOTAL HOUSING UNITS
2020 or later	0*	0.0%
2010 to 2019	121*	4.5%

YEAR STRUCTURE BUILT	NUMBER OF HOUSING UNITS	PERCENT OF TOTAL HOUSING UNITS
2000 to 2009	69*	2.6%
1990 to 1999	130*	4.9%
1980 to 1989	425	15.9%
1970 to 1979	657	24.6%
1960 to 1969	170	6.4%
1950 to 1959	246	9.2%
1940 to 1949	334	12.5%
1939 or earlier	519	19.4%

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates
*Note: the margin of error for these estimates exceeds 80% of the reported value

HOUSING AVAILABILITY

After a disaster, displaced families and individuals need safe, accessible, and affordable places to live. Housing is essential to individual wellbeing and community recovery. In the Handbook of Disaster Research, Peacock et al. explain, "without housing, the individuals necessary to populate the economy, fill the jobs, and restart and reopen businesses as well as consume the services and purchase the goods will be absent". An essential component of this recovery is available housing within the community. If housing stock is limited, families may have to relocate outside the jurisdiction.

Housing availability is particularly important for renters and low-income residents. Studies have found that housing assistance after extreme weather events often favors middle-class households, particularly homeowners. As a result, renters and low-income households have limited resources to repair or recover impacted homes, which can cause them to be displaced from their community if there is limited alternative housing. Disasters can also exacerbate a lack of affordable housing stock as damaged homes are often demolished rather than rebuilt.

Per U.S. Census Bureau statistics as of 2022, there were an estimated 461 vacant housing units in Edenton. Homeowner vacancy rate is the ratio of vacant available for-sale and sold housing units to the total number of vacant and owner-occupied housing units. The homeowner vacancy rate in Edenton is 7.2%, which may indicate excess inventory. However, the rental vacancy rate, which is the ratio of vacant available for-rent and rented unoccupied units to the total number of vacant available and rental-occupied housing units, is estimated at 0.0%, which represents and extremely competitive market. Rental vacancy is considered "healthy" if it is between 5-7%.

HOUSING AFFORDABILITY

Affordable housing not only provides alternative housing to those displaced by disasters but allows individuals to maintain housing within their financial means.

Housing affordability can be measured by the degree to which households are cost burdened, which is defined by HUD as households spending more than 30% of their annual income on housing costs. Severely cost burdened households spend more than 50% of their income. Independent from median income, cost burden serves as an indicator of a homeowner's ability to afford property maintenance and improvements. As a household spends an increasing proportion of its income on housing costs, there is less income available for other necessities such as groceries, health care, and transportation, and less

ability to recovery and cope with disaster events. Table 5.2 summarizes cost burden statistics for renters and homeowners in Edenton.

Table 5.2 – Cost Burdened Households in Edenton, 2022

COST BURDEN	OWNER[1]		RENTER[2]	
30.0%-34.9%	15	2.5%	210	16.9%
35% or more	151	25.4%	299	24.1%
Total	**166**	**27.9%**	**509**	**41%**

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates
[1]Total number and percentage of cost burdened homeowners with mortgages
[2]Total number and percentage of cost burdened occupied units paying rent

Public housing and other federally assisted housing units are more likely to be located in areas of very high or relatively high risk of a negative impact from natural hazards compared to owner and renter occupied housing units. In Edenton, the Edenton Housing Authority (EHA) oversees both public housing and voucher programs that are available to the community. EHA owns and manages one housing development with a total of 100 units in the city limits.

Federal assistance housing programs disproportionately serve people of color, older adults, individuals with disabilities, and families with children. Nearly half of households living in public housing properties are older adults, living with a disability, or both. Additionally, these households tend to have lower incomes compared to other low-income individuals not residing in public housing. As a result, federally assisted renters may find it more difficult to prepare for or evacuate and recover from a disaster due to limited financial resources and possible health limitations.

5.3.3 POPULATION SHIFTS

AGING POPULATION

Per the Fourth National Climate Assessment, older adults, as well as their caregivers, are one of many vulnerable population groups that are disproportionately affected by extreme weather and climate risks.

Older populations tend to have less access to information, resources, and institutions to prepare for and avoid health risks of disaster events and climate change. Chronic conditions that exist prior to an emergency can be exacerbated, equipment damaged or lost, and services or treatments interrupted, causing additional harm or stress.

For example, older adults may have mobility problems or chronic health conditions that make evacuations difficult. This is particularly challenging for people who may be socially isolated or live alone. Additionally, support services that are usually available, such as help from caregivers, in-home health care, and meal delivery services, may be unavailable during a severe weather event. Older adults may experience challenges that come with advanced age, such as hearing or vision problems or cognitive impairment, which may make it difficult to access, understand, and respond to emergency instructions.

Older adults are particularly vulnerable to extreme events that cause increased temperatures, power outages, and/or require evacuation. Power outages may disrupt critical at home health equipment, as well as air conditioning and heat. The CDC reports that in the case of an extreme heat event, older adults cannot adjust to sudden temperature changes as fast as younger people. This could be due to certain medicines they take or chronic illnesses that affect their ability to regulate body temperature.

It is also important to note that elderly persons are more likely to live on fixed, very low incomes and/or require special supportive service to complete their daily routines. With limited resources, older residents especially need access to affordable housing options and easy access to service providers, in the event of a destructive weather event.

In the Town of Edenton, 28.7 percent of the population is age 65 and older, of those, 21.3 percent have a disability. Over 38 percent of households in Edenton have one or more people 65 years or older living there, and of the percentage of individuals whose income is below poverty level, 9.8 percent are 65 years and over. According to the 2021-2022 Chowan County Community Health Needs Assessment the rate of adults age 65 years and older living in poverty is 2.3% higher in Chowan County than the State of North Carolina. Table 5.3 and Table 5.4 display statistics for Edenton residents age 65 years and older.

Table 5.3 – Edenton Population 65 Years and Older

AGE GROUP	NUMBER OF PEOPLE	PERCENT OF TOTAL POPULATION
65 to 74 years old	776	17.2%
75 to 84 years old	370	8.2%
85 years and over	149	3.3%
Total	**1,295**	**28.7%**

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

Table 5.4 – Statistics for Population 65 Years and Older, Edenton, 2022

	NUMBER OF PEOPLE	PERCENT OF POPULATION 65 AND OLDER
Living with a Disability	234	21.3%
Living Below Poverty Level	(X)	9.8%
Living Alone (Male Householder) *	141	6.4%
Living Alone (Female Householder) *	282	12.8%

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates
*Individual living alone with no spouse/partner present

5.3.4 ECONOMIC ISSUES

Economically disadvantaged populations are disproportionately affected by disasters. Disasters exacerbate the existing challenges faced by low-income individuals and households. Low-income residents are less likely to have the income or assets necessary to prepare for a possible disaster or to recover after a disaster (Cutter et al. 2003). Additionally, people with lower incomes tend to have increased exposure, as they are more likely to live in flood-prone areas, urban areas with aging infrastructure, areas with low tree cover and high amounts of impermeable surfaces, and areas with greater exposure to high levels of air pollution.

As a result, people with lower incomes experience higher rates of chronic illnesses such as diabetes, cardiovascular disease, asthma, and COPD than people in higher income groups. Such health challenges greatly increase vulnerability to extreme weather events and the impacts of climate change. However, unemployed individuals may not have access to benefits plans that provide income and health cost assistance in the event of sickness or injury.

Housing quality and access is closely tied to socio-economic status. Low-income households may live in less structurally sound houses or mobile homes, which are particularly vulnerable to strong storms or earthquakes. When residents are displaced from their homes, low-income people are disproportionality impacted through lost wages or inability to locate secure alternative housing. For households with restrictive income, lost or damaged property is proportionately more expensive to replace, especially without homeowner's or renter's insurance. Often renters are not insured properly to recover from property loss. Additionally, older or insufficient housing structures may result in higher utility bills during periods of extreme cold or extreme heat. As temperature extremes become more frequent, the cost of heating and air conditioning can become a financial burden as the cost of living is increased.

It is not uncommon that people with lower income have less access to healthy food, either due to a lack of availability or affordability. These conditions are exacerbated during periods of extreme weather either through displacement or the interruption in access to full-service grocery stores.

According to the Census Bureau's 2022 ACS 5-year estimates, the median household income in the Town of Edenton was $46,979 and more than 44 percent of the population makes less than the median household income. More than 36 percent of Edenton residents have an income below poverty level. Around 130 individuals, or 5.7 percent, of the Edenton population receives cash public assistance income. Additionally, 720 Edenton residents, or 32.6% of the population receives food stamps or SNAP benefits and 8.8 percent of the population does not have health insurance.

5.3.5 LAND COVER CHANGE

REDEVELOPMENT/NEW DEVELOPMENT

Flooding is greatly influenced by development and the amount of impervious surface coverage in a community. This is particularly important for resilience, as localized development and land use changes have a cumulative impact on how a community is affected and responds to hazards. For example, an area focused on expanding development may increase impervious surface cover, which can lead to increased flooding and runoff for the surrounding area. Similarly, new development or redevelopment in or near the SFHA or localized flooding areas, can increase exposure of people, property, and infrastructure to flood impacts such as inundation or erosion.

The removal of vegetation and soil, grading the land surface, and the construction of drainage networks are all actions associated with development projects. Such activities can increase runoff to streams from rainfall and eventually limit their capacity to convey floodwaters which can result in localized flooding challenges.

Based on the Town's current land use plan (Chown County Town of Edenton Joint Land Use Plan, 2018), around 25% of Town's land use is developed land designated for residential uses (19%), institutional (3%), commercial (2%), and industrial (2%). The majority of the Town's land use, 63%, is agricultural. Around 8.5% of the Town's land use is vacant and undeveloped.

Edenton's future land use map indicates a significant transition away from primarily agricultural land uses toward residential land designation. Based on the future land use map, over 70% of the Town's land use is classified as either low density (51%) or medium/high density residential (20%). The future land use map indicates that more intense development could occur throughout the entire Town, but particularly in the areas surrounding the Town core that were primarily designated for agricultural use.

5.3.6 PUBLIC HEALTH ISSUES

The U.S. Global Change Research Program's Climate and Health Assessment, explains that climate change has and will continue to exacerbate existing climate-sensitive health threats and create new challenges, exposing more people to hazardous weather and climate conditions. For example, climate change affects human health by altering exposures to heat waves, floods, droughts, and other extreme events. Such events can increase vector, food, and waterborne infectious diseases, as well as influence changes in the quality and safety of air, food, and water. These increased impacts can exacerbate underlying medical conditions, increase stress, and lead to adverse mental health effects.

VECTOR-BORNE DISEASES

Climate is one of the factors that influence the distribution of diseases borne by vectors (such as fleas, ticks, and mosquitoes, which spread pathogens that cause illness). The CDC reports that the Southeast is the region of the country with the most favorable conditions for the Aedes aegypti mosquito and thus faces the greatest threat from diseases the mosquito carries. It is expected that summer months will produce an increase in dengue cases across every southeastern state and potentially increase mosquitos' capacity to transmit Zika virus.

INFECTIOUS DISEASES

Infectious diseases can add a layer of stress to planning and preparing for extreme weather events. For example, natural disasters coupled with public health emergencies, like the COVID-19 pandemic, can make it harder to gain access to medical and social services and get certain medications and supplies needed for emergency preparedness. Additionally, caring for children and the elderly can be difficult when trying to minimize the spread of a contagious virus. As seen during the COVID-19 pandemic, quarantine and social distancing can interfere with regular caregiving responsibilities. Seeking shelter during a natural disaster may also be complicated during a public health emergency like COVID-19.

EXTREME HEAT

Extreme heat events also contribute to public health challenges as they can cause respiratory difficulties, heat cramps, exhaustion, and heat stroke amongst other health concerns. People living in cities are at a higher risk of heat waves due to increased heat island effect. According to the CDC 61 percent of major Southeast cities are exhibiting some aspects of worsening heat waves, which is a higher percentage than any other region of the country. Some factors that may increase risk of developing heat related illness include obesity, fever, dehydration, prescription drug use, heart disease, mental illness, high levels of humidity, and poor circulation. Older adults, the very young, and people with mental illness and chronic diseases are at highest risk.

ENVIRONMENTAL HEALTH (AIR AND WATER QUALITY)

Poor air quality directly impacts human health, resulting in respiratory disease and other health challenges. Per the CDC and Fourth National Climate Assessment, poor air quality in the Southeast can result from emissions (mostly from vehicles and power plants), wildfires, and allergens such as pollen. The reports also found that the Southeast has more days with stagnant air masses than other regions of the country (40% of summer days) and higher levels of fine (small) particulate matter (PM2.5), which cause heart and lung disease.

Climate change is projected to exacerbate human health challenges by increasing ground-level ozone and particulate matter air pollution in some locations. Ground-level ozone (a key component of smog) is associated with many health problems, such as diminished lung function, increased hospital admissions and emergency room visits for asthma, and increases in premature deaths. The Fourth National Climate Assessment also reported that projected increases in extreme precipitation and flooding, combined with inadequate water and sewer infrastructure, can contribute to viral and bacterial contamination from combined sewage overflows and a lack of access to potable drinking water, increasing exposure to pathogens that lead to gastrointestinal illness.

FOOD ACCESS, SECURITY, AND NUTRITION

Limited access to supermarkets, grocery stores, or other sources of healthy and affordable food may make it harder for some people to eat a healthy diet. Some people and places, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security. Factors such as travel time and cost play a huge role in food access and security. Disaster events can interrupt access to food by limiting transportation options, and financially overwhelming those with lower incomes. As a result, people may have insufficient access to food and rely on less-healthy alternatives that are often cheaper and, in some cases, more convenient.

Climate change impacts such as rising temperatures and changes in extreme weather are projected to adversely affect food security by altering exposure to certain pathogens and toxins. As a result, these changes can adversely impact food security in the U.S. by threatening food safety, disrupting food availability, decreasing food access and increasing food prices.

MENTAL HEALTH AND SUBSTANCE ABUSE

People with mental health disorders may react more strongly to public health and natural disaster emergencies. Stress and anxiety levels may increase during preparation for extreme event and/or evacuation from homes. After exposure to both short-lived and prolonged weather or public health emergencies, people can experience a range of mental health consequences including minimal stress, distress symptoms, clinical disorders like anxiety, depression, and post-traumatic stress. Impacts from disaster event can persist for several years after the event. Disasters can be particularly burdensome on the mental health of children when there is forced displacement from their home or a loss of family and community stability. Also, increased use of alcohol and tobacco are common following disasters events.

Local data on public health in Edenton is approximated by County-level information compiled by the Albemarle Regional Health Services and most recently reported in the 2021-2022 Chowan County Community Health Needs Assessment.

The leading causes of death in Chowan County are heart disease, cancer, and Alzheimer's disease. Identified health priorities for Chowan County include healthy lifestyle behaviors, access to healthcare, and mental health/substance misuse. Access to primary care is essential to improving the health priorities and outcomes of communities. The North Carolina Institute of Medicine (NCIOM) has established a target ratio of communities supplying 1 primary care provider to every 1,500 people. According to the 2021-2022 Chowan County Community Health Needs Assessment, Chowan County does not currently meet this target ratio.

6 VULNERABILITY ASSESSMENT

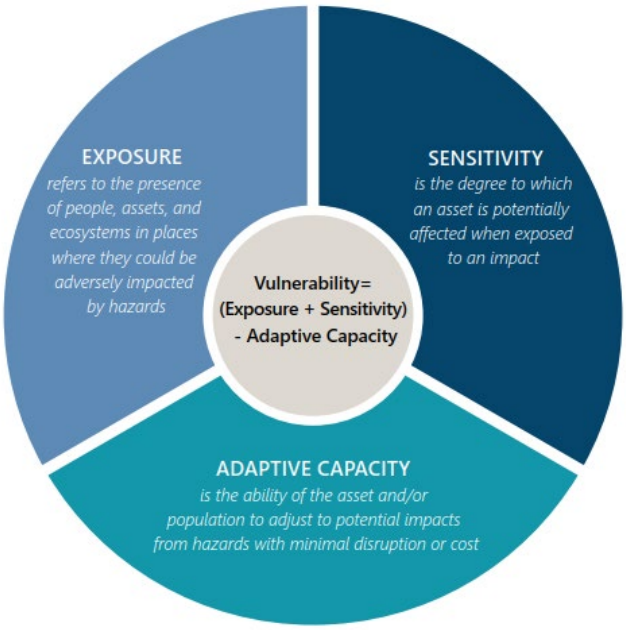
6.1 OVERVIEW

The vulnerability assessment followed the criteria outlined by the NC Resilient Coastal Communities Planning Handbook, which defines vulnerability is a function of exposure, sensitivity, and adaptive capacity. Exposure is the presence of an asset in a hazardous area. An asset may have varying degrees of exposure for one or multiple hazards. Sensitivity is the degree to which an asset is affected by a hazard. Sensitivity involves the significance of an asset to the community and how much hazards impact the functionality of that asset. Adaptive capacity is the ability of an asset to adjust to potential impacts through relocation, retrofits, or temporary alternatives.

With CAT input, specific thresholds and criteria were established to define varying degrees of exposure, sensitivity, and adaptive capacity. Through this assessment, each asset was evaluated and rated on a scale of 0-3 on its exposure, sensitivity, and adaptive capacity. The overall vulnerability of each asset was then calculated with the following equation:

Vulnerability = (Exposure + Sensitivity) – Adaptive Capacity

This equation produced overall vulnerability scores of 0-6, where 0-2 is considered low vulnerability, 3-4 is considered medium vulnerability, and 5-6 is considered high vulnerability.



The vulnerability equation from the NC Resilient Coastal Communities Planning Handbook, 2023

6.2 EXPOSURE ANALYSIS

6.2.1 METHODOLOGY

To evaluate exposure, a spatial analysis was conducted overlaying the location of identified assets with the extent of known hazards. Each asset was assigned an exposure score of 0-3 for each hazard based on its location relative to the hazard extent, where 0 indicates no exposure, 1 is low, 2 is medium, and 3 is high. Table 6.1 below provides the criteria used to assign exposure scores for each hazard.

Table 6.1 – Exposure Analysis Ranking Criteria

	EXPOSURE			
HAZARD	*0 - NONE*	*1 - LOW*	*2 - MEDIUM*	*3 - HIGH*
Sea Level Rise	No Exposure	Asset in 3 ft extent	Asset in 2 ft extent	Asset in 1 ft extent
Riverine & Coastal Flooding	No Exposure	Asset in 0.2% floodplain	Asset in AE / A Zones	Asset in VE / V Zones
Stormwater Flooding	No Exposure	Asset within 600 feet of a stormwater hotspot	Asset within 300 feet of a stormwater hotspot	Asset adjacent to a stormwater hotspot
Storm Surge	No Exposure	Asset in Cat 5 surge zone	Asset in Cat 3-4 surge zone	Asset in Cat 1-2 surge zone
Erosion	No Exposure	Asset within 100 feet of an erosion hotspot	Asset within 75 feet of an erosion hotspot	Asset within 50 feet of an erosion hotspot

After exposure was evaluated for each hazard, each asset's hazard exposure scores were averaged to arrive at an overall exposure score for each asset. Overall exposure scores were categorized as follows:

0 = No Exposure	**< 1 = LOW**	**1-2 = MEDIUM**	**>2 = HIGH**

6.2.2 RESULTS

The results of the exposure analysis are presented by asset category in tables and maps on the following pages. In each table, assets are listed from greatest to least exposure.

Exposure of critical assets is summarized in Table 6.2. Based on this assessment, most critical assets have low exposure ratings. None of the identified assets are exposed to sea level rise, riverine & coastal flooding, or erosion. Only two assets, the library and Chowan Senior Center, are exposed to potential storm surge. However, most assets have some exposure to stormwater flooding.

Historic and cultural asset exposure is summarized in Table 6.3. Most historic districts have high exposure; however, this only means that some portion of the district is exposed. The exposure of sites within each district may vary considerably. The Roanoke River lighthouse and Barker house have medium exposure ratings, and all other identified historic sites have low or no exposure.

Table 6.2 – Critical Asset Exposure

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
Shepard-Pruden Memorial Library	0	0	2	2	0	0.8	Low
Edenton Fire Department	0	0	3	0	0	0.6	Low
Water Tower (Park Avenue)	0	0	3	0	0	0.6	Low
Chowan Senior Center	0	0	2	1	0	0.6	Low
Edenton Police Department	0	0	2	0	0	0.4	Low
Chowan County Public Safety Center	0	0	2	0	0	0.4	Low
Edenton Public Works Department	0	0	2	0	0	0.4	Low
Town of Edenton Municipal Offices	0	0	2	0	0	0.4	Low
Edenton Electric Department	0	0	1	0	0	0.2	Low
College of the Albemarle/Temporary High School	0	0	1	0	0	0.2	Low
John A Holmes High School	0	0	0	0	0	0	None
ECU Health Chowan Hospital	0	0	0	0	0	0	None
Substation	0	0	0	0	0	0	None
Cell Towers	0	0	3	0	0	0.2	Low
Fybe OLT Cabinet	0	0	0	0	0	0	None
Century Link	0	0	2	0	0	0.2	Low
Water Treatment/Well	0	0	0	1	0	0.2	Low
Well	0	0	0	0	0	0	None
Water Tower	0	0	2	0	0	0.2	Low
Public Works Gas Pump Station	0	0	1	0	0	0.2	Low

Figure 6.1 – Critical Asset Exposure

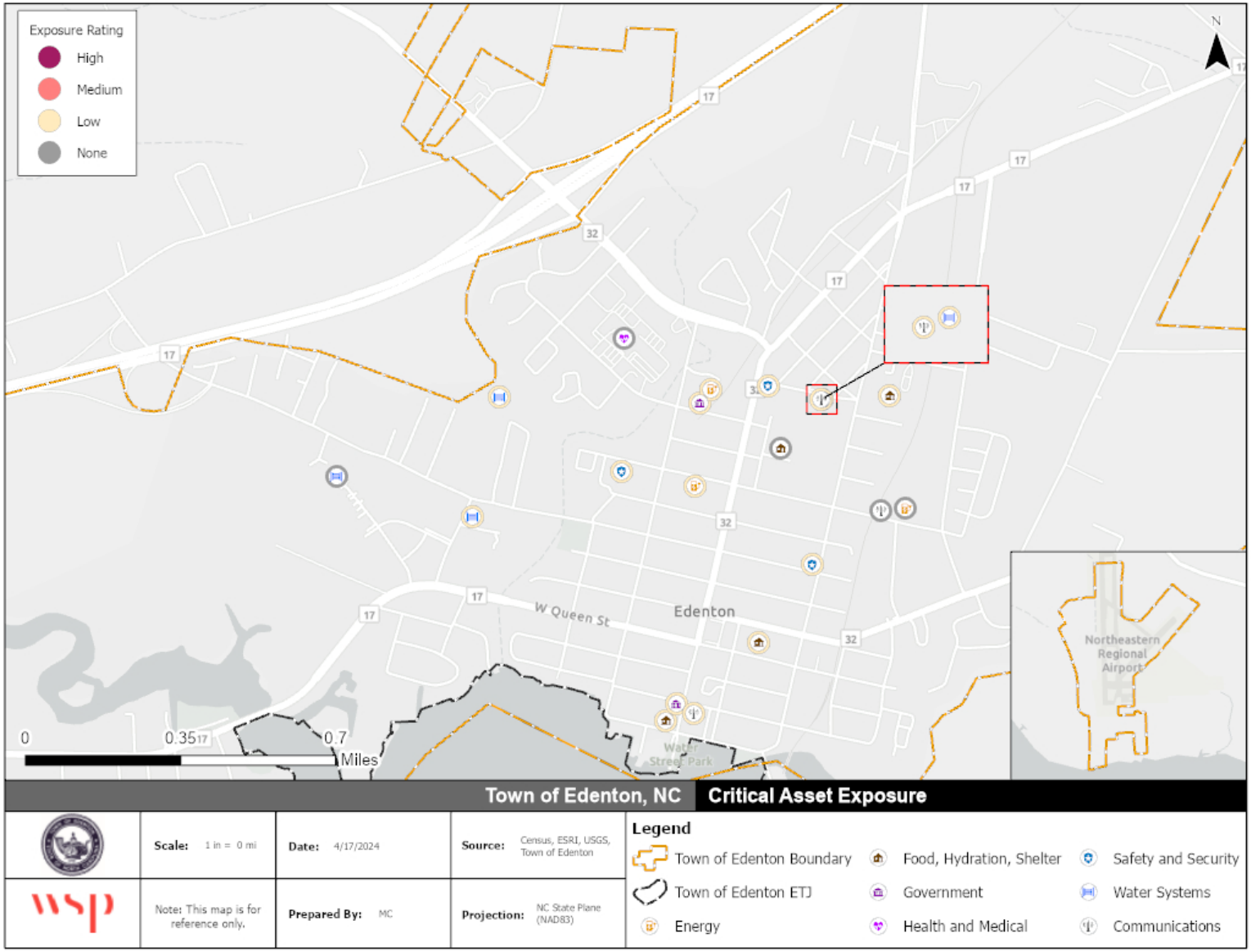


Table 6.3 – Historic and Cultural Resources Exposure

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
Historic Districts							
Edenton Historic District	3	2	3	3	3	2.8	High
Edenton Historic District Boundary Increase II	3	2	3	3	3	2.8	High
Hayes Plantation (Samuel Johnston House) (NHL)	3	2	2	3	3	2.6	High
Edenton Cotton Mill Village Historic District	3	2	3	3	0	2.2	High
Edenton Historic District Boundary Expansion I	3	2	3	3	0	2.2	High
Westover Heights Historic District	0	2	0	3	0	1.0	Medium
North Edenton Historic District	0	0	3	1	0	0.8	Low
(Former) Marine Corps Air Station (Edenton Airport)	0	0	0	2	0	0.4	Low
Historic Sites							
Roanoke River Lighthouse (Current site)	3	2	1	3	3	1.8	Medium
Barker House	1	2	1	3	3	1.4	Medium
Cupola House (NHL)	0	0	2	1	0	0.6	Low
Chowan County Courthouse (NHL)	0	0	3	0	0	0.6	Low
James Iredell House	0	0	3	0	0	0.6	Low
Peanut Factory	0	0	3	0	0	0.6	Low
St. Paul's Episcopal Church and Churchyard*	0	0	3	0	0	0.6	Low
Pembroke Hall	0	0	2	0	0	0.4	Low
D.F. Walker Junior High School	0	0	2	0	0	0.4	Low
Albania	0	0	2	0	0	0.4	Low
Wessington House	0	0	2	0	0	0.4	Low

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
NC National Guard Armory	0	0	2	0	0	0.4	Low
(former) Edenton Graded School (Swain School)	0	0	2	0	0	0.4	Low
Queen Anne Creek Railroad Trestle	0	1	0	0	0	0.2	Low
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House, Freedom House) *	0	0	2	0	0	0.4	Low
Strawberry Hill*	0	0	0	0	0	0	None
Edenton Station, U.S. Fish & Fisheries Commission*	3	2	0	3	0	1.6	Medium
Hayes Plantation (Samuel Johnston House) (NHL)	0	0	0	0	0	0	None
Speight House and Cotton Gin*	0	2	0	1	0	0.6	Low
Colonial Motel	0	0	0	0	0	0	None
Hicks Field*	0	0	1	0	0	0.2	Low
Shelton Plantation House*	0	2	0	1	0	0.6	Low
Churches							
200 S Granville St (Edenton Baptist)	0	0	2	0	0	0.4	Low
107 Cox Ave (Great Mt Zion)	0	0	0	0	0	0	None
515 Coke Ave (Church)	0	0	2	0	0	0.4	Low
118 W Gale St (Gale Street Baptist)	0	0	2	0	0	0.4	Low
214 W Church St (Providence Baptist)	0	0	1	1	0	0.4	Low
1215 Vann St (St Luke Church of Christ)	0	0	3	0	0	0.6	Low
225 Virginia Rd (Edenton United Methodist)	0	0	0	0	0	0	None
212 Tyler Ln (Union Grove Ame Zion)	0	0	0	0	0	0	None
121 E Carteret St (Pleasant Grove)	0	0	0	0	0	0	None
820 Dr Martin Luther King Jr Ave (Praise Temple Worship Center)	0	0	0	0	0	0	None

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
676 Virginia Rd (Apostolic Church of God)	0	0	0	0	0	0	None
510 N Granville St (Church of God in Christ)	0	0	2	0	0	0.4	Low
117 E Gale St (Kadesh Methodist Zion)	0	0	3	0	0	0.6	Low
212 E Church St (St Johns Episcopal)	0	0	2	0	0	0.4	Low
117 Mexico Rd (Church of Christ)	0	0	0	0	0	0	None
200 S Moseley St (First Presbyterian)	0	0	2	0	0	0.4	Low
1201 W Queen St (First Assembly of God)	0	0	0	0	0	0	None
400 First St (Church of Th Lord Jesus Christ)	0	0	3	0	0	0.6	Low
906 Johnston St (Church of God)	0	0	3	0	0	0.6	Low
207 N Broad St (Roman Catholic Diocese)	0	0	2	0	0	0.4	Low
1536 N Broad St (Edenton Congregation of Jehovahs Witnesses)	0	0	0	0	0	0	None
Cemeteries							
667 B Virginia Rd (Hoskins)	0	0	0	0	0	0	None
266 B Yeopim Rd (Creecy-Benbury)	0	0	0	1	0	0.2	Low
1034 Hayes Farm Rd (Baker-Rice-Blair-Cathcart)	0	0	0	0	0	0	None
214 Mexico Rd (Jordan)	0	0	0	0	0	0	None
200 S Granville St (Edenton Baptist Church)	0	0	3	0	0	0.6	Low
207 N Broad St (St. Anne's Catholic Church)	0	0	1	0	0	0.2	Low
101 W Gale St (St. Paul's Episcopal Church)	0	0	2	0	0	0.4	Low
203 E Peterson St	0	0	0	0	0	0	None
105 N Oakum St (Methodist Cemetery)	0	0	3	0	0	0.6	Low

*Historical site – polygon feature, not point

Figure 6.2 – Historic and Cultural Resources Exposure

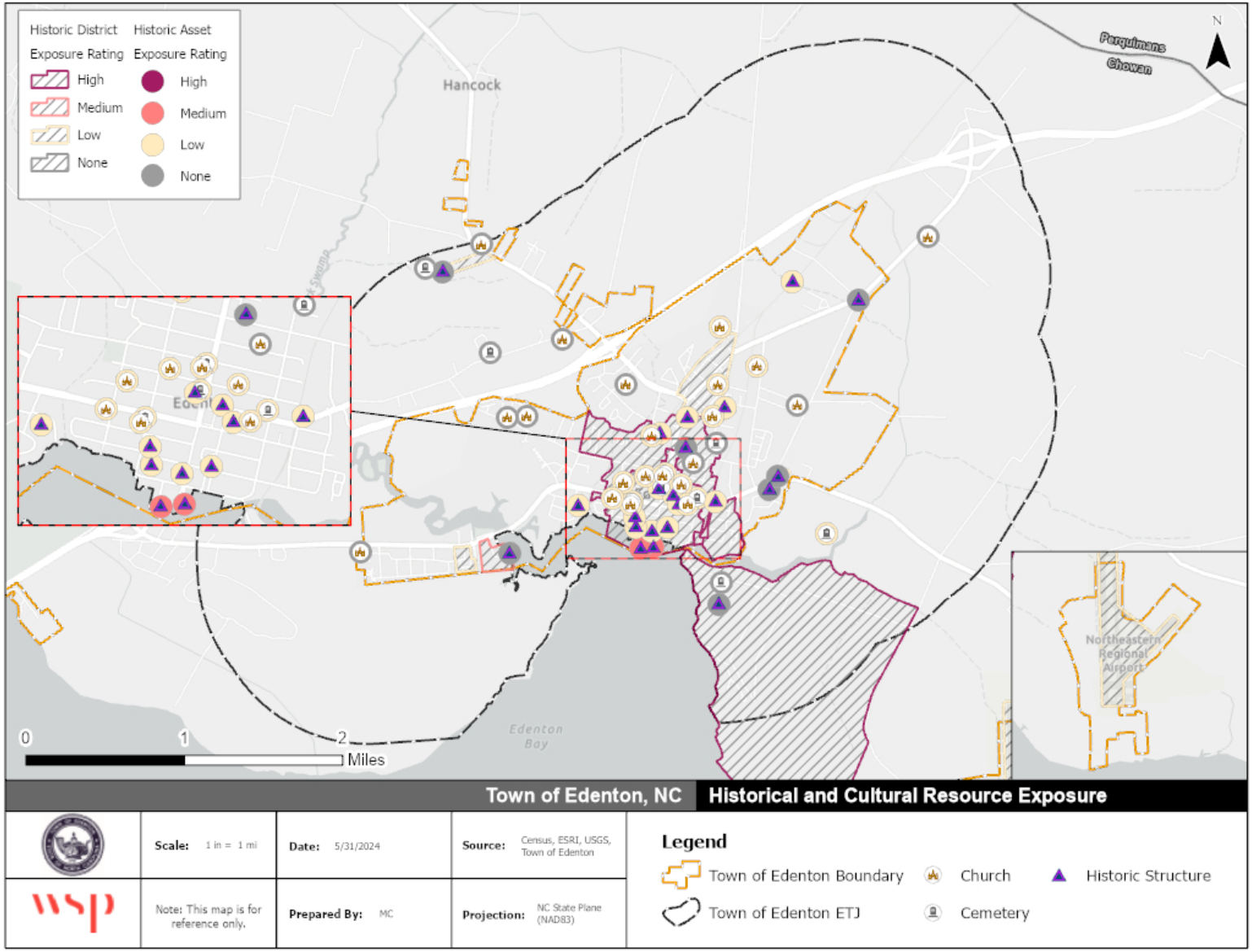


Table 6.4 – Natural Resource Exposure

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
Queen Anne Park-Front of Masonic Lodge	3	2	3	0	3	2.2	High
Colonial Waterfront Park	3	2	3	0	3	1.6	Medium
WRC Chowan Game Land	3	2	0	3	0	1.6	Medium
Edenton National Fish Hatchery	3	2	2	0	0	1.4	Medium
Lots 67,68, Pembroke-Dixon	3	2	0	0	0	1.0	Medium
Fishing Site-Johns Island	3	2	0	0	0	1.0	Medium
Lot C (Fisher Field)	0	0	3	0	0	0.6	Low
Lot A, Flagstaff Hill	0	0	3	0	0	0.6	Low
Boys Scout Hut/Tennis Court	0	0	2	0	0	0.4	Low
Purser Soccer Field	0	0	2	0	0	0.4	Low
Earnhardt Field (Old Drive-In)	0	0	0	0	0	0	None

Note: See exposure mapping for overall exposure ratings of natural and constructed wetlands.

Figure 6.3 - Natural Resource Exposure

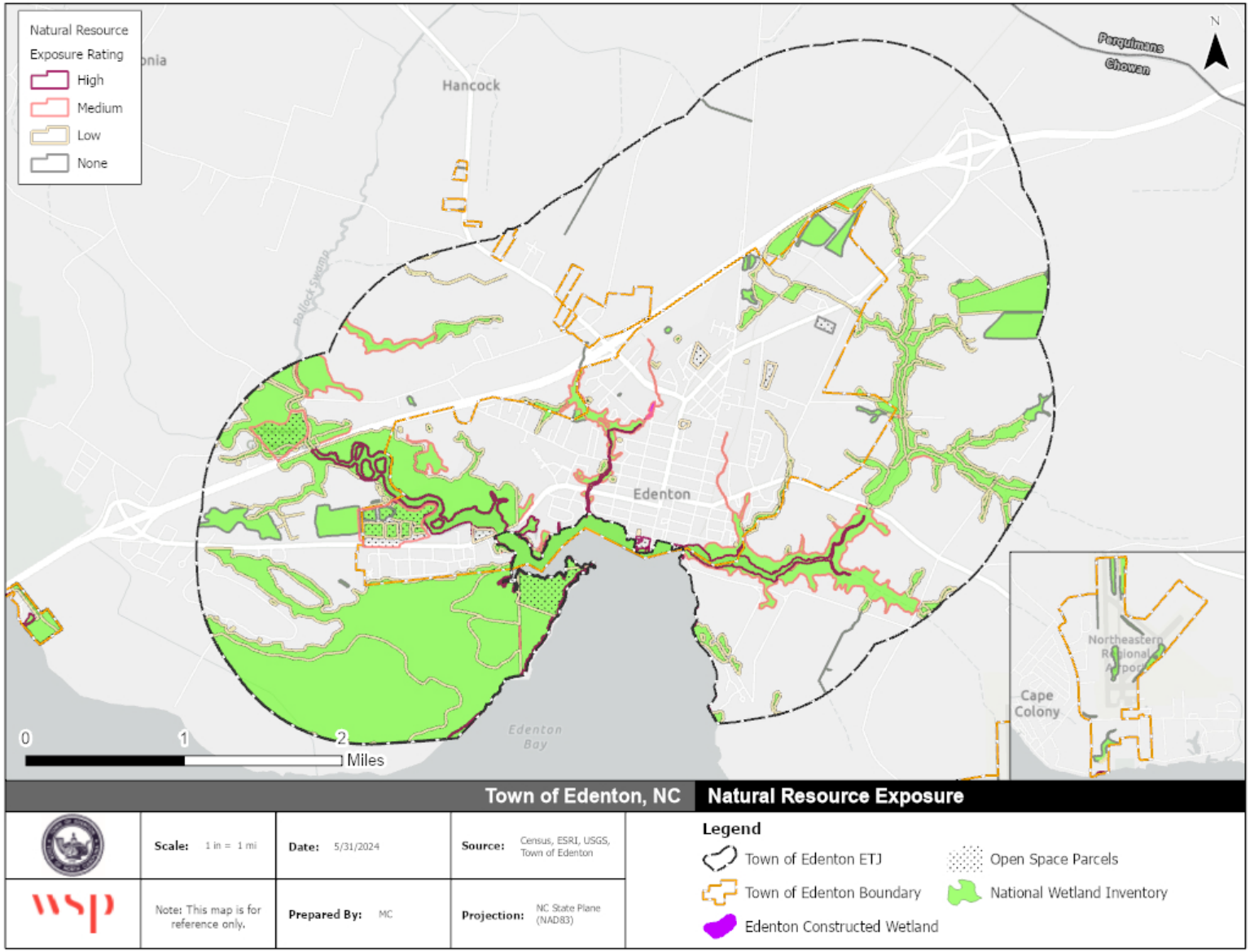
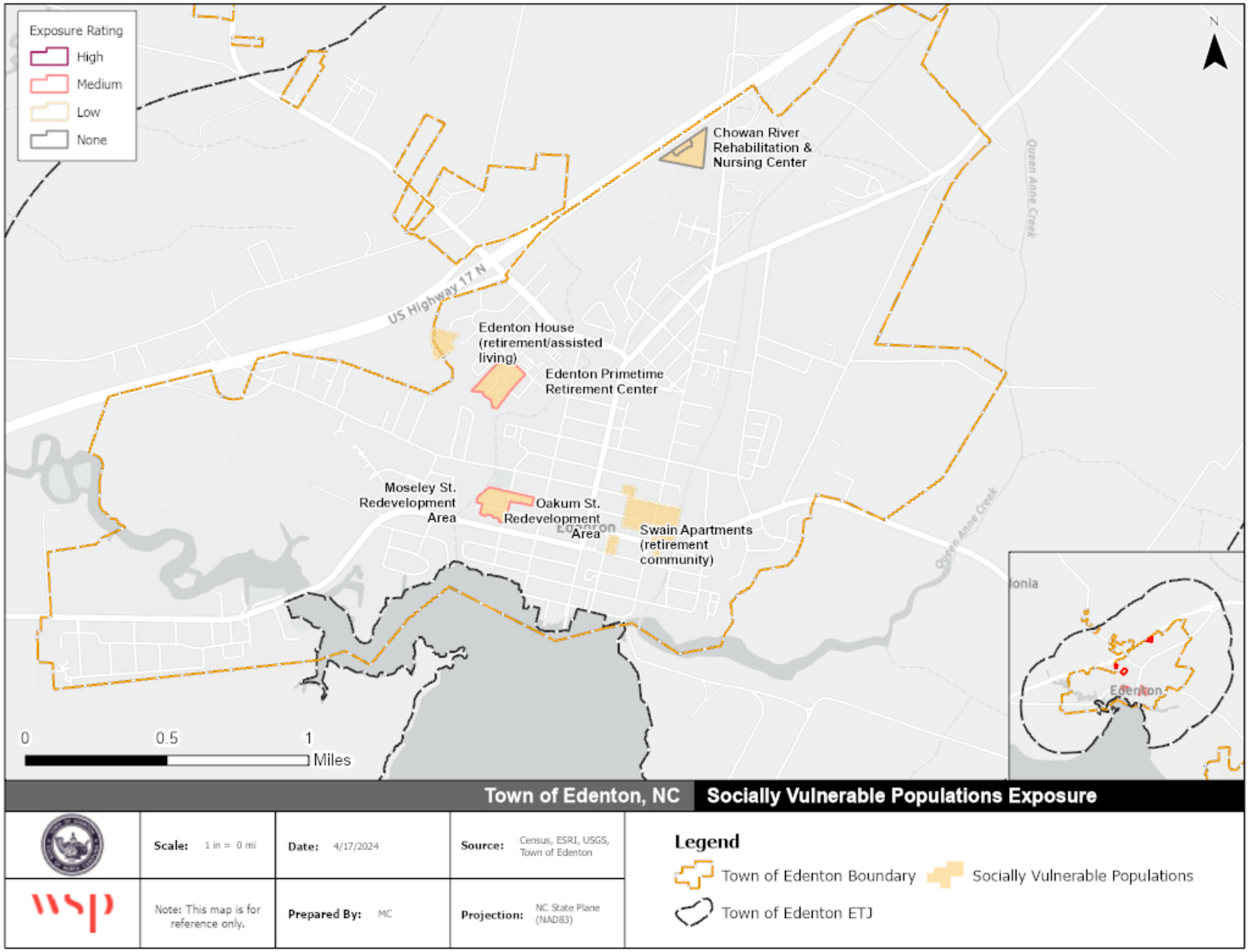


Table 6.5 – Socially Vulnerable Population Exposure

ASSET	HAZARD EXPOSURE SCORES					AVERAGE EXPOSURE SCORE	OVERALL EXPOSURE RATING
	SEA LEVEL RISE	RIVERINE & COASTAL FLOOD	STORMWATER	STORM SURGE	EROSION		
Moseley St. Redevelopment Area	3	2	2	3	0	2	Medium
Edenton Primetime Retirement Center	3	2	0	3	0	1.6	Medium
Oakum St. Redevelopment Area	0	0	3	1	0	0.8	Low
Chowan River Rehabilitation & Nursing Center (Bldg 1)	0	0	0	0	0	0	None
Chowan River Rehabilitation & Nursing Center (Bldg 2)	0	0	0	0	0	0	None
Edenton House	0	2	0	3	0	1	Low
Swain Apartments	0	0	1	1	0	0.4	Low

Note: See exposure mapping for overall exposure ratings of natural and constructed wetlands.

Figure 6.4 – Socially Vulnerable Population Exposure



6.3 SENSITIVITY ANALYSIS

6.3.1 METHODOLOGY

An asset's sensitivity to hazards is influenced by the degree to which it's impacted by hazards and the need for that asset within the community. To capture these variables and account for the differences in sensitivity that may be applicable to different asset types, scoring criteria were developed for each asset category. For critical assets, historic and cultural resources, and socially vulnerable populations, each asset was assigned a point for each applicable criterion within its category. The point total for each asset was used to assign an overall sensitivity score of 0-3, where 0 indicates no sensitivity, 1 is low, 2 is medium, and 3 is high. Sensitivity criteria for each of these categories are as follows:

Critical Assets

- Over 66% of assets of the same type are exposed to any hazard (or over 50% if there are less than 3 total assets of that asset type)
- The asset is exposed to multiple hazards
- The asset is considered essential to community operations

Historic & Cultural Resources

- The asset has inherent community & cultural value (applies to all historic and cultural resource assets)
- The asset is affected by multiple hazards
- The asset was constructed on or before 1900

Socially Vulnerable Populations

- The population has heightened social vulnerability (applies to all socially vulnerable population assets)
- Over 50% of assets of the same type are exposed to any hazard
- The individual location is exposed to multiple hazards

For natural infrastructure, sensitivity was rated based on the percentage of each asset's total area that is exposed to two feet of sea level rise. This approach defines sensitivity by the degree to which the asset may become permanently or more regularly inundated, conditions which could compromise the asset's long term flood mitigation and ecosystem functions. The criteria for low, medium, and high sensitivity for natural infrastructure are as follows:

Natural Resources

- Low = <25% of asset area is affected by 2' of sea level rise
- Medium = 25-50% of asset area is affected by 2' sea level rise
- High = >50% of asset area is affected by 2' sea level rise

After sensitivity was evaluated for each asset, the point total was summed to arrive at an overall sensitivity score for each asset. Overall sensitivity scores were categorized as follows:

0 = No Sensitivity	< 1 = LOW	2 = MEDIUM	3 = HIGH

6.3.2 RESULTS

Table 6.6 – Critical Asset Sensitivity

	SENSITIVITY SCORES				
ASSET	**66%+ OF ASSET TYPE AFFECTED**	**IMPACTED BY MULTIPLE HAZARDS**	**ESSENTIAL TO OPERATIONS**	**TOTAL**	**OVERALL SENSITIVITY RATING**
Shepard-Pruden Memorial Library	0	1	0	1	Low
Edenton Fire Department	1	0	1	2	Medium
Water Tower (Park Avenue)	1	0	1	2	Medium
Chowan Senior Center	0	1	0	1	Low
Edenton Police Department	1	0	1	2	Medium
Chowan County Public Safety Center	1	0	1	2	Medium
Edenton Public Works Department	1	0	1	2	Medium
Town of Edenton Municipal Offices	1	0	0	1	Low
Edenton Electric Department	0	0	1	1	Low
College of the Albemarle/Temporary High School	0	0	0	0	None
John A Holmes High School	0	0	0	0	None
ECU Health Chowan Hospital	0	0	1	1	Low
Dominion Substation	0	0	1	1	Low
Cell Towers	1	0	1	2	Medium
Fybe OLT Cabinet	0	0	0	0	None
Century Link	1	0	0	1	Low
Water Treatment/Well	1	0	1	2	Medium
Well	1	0	1	2	Medium
Water Tower	1	0	1	2	Medium
Public Works Gas Pump Station	0	0	1	1	Low

Figure 6.5 – Critical Asset Sensitivity

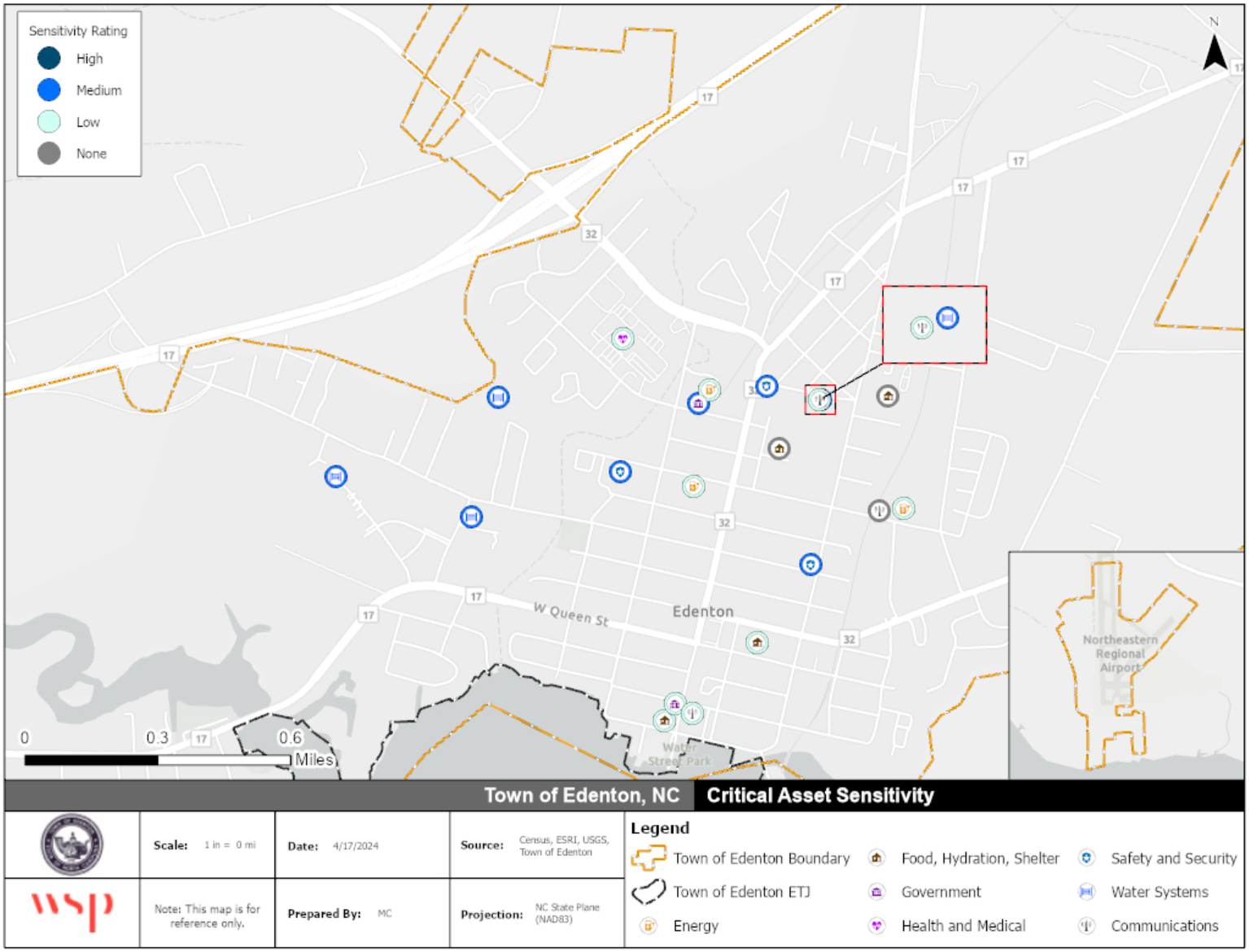


Table 6.7 – Historic and Cultural Resources Sensitivity

	SENSITIVITY SCORES				
ASSET	**INHERENT COMMUNITY & CULTURAL VALUE**	**IMPACTED BY MULTIPLE HAZARDS**	**CONSTRUCTED ON OR BEFORE 1990**	**TOTAL**	**OVERALL SENSITIVITY RATING**
Historic Districts					
Edenton Historic District	1	1	1	3	High
Edenton Historic District Boundary Increase II	1	1	0	2	Medium
Hayes Plantation (Samuel Johnston House) (NHL)	1	1	1	3	High
Edenton Cotton Mill Village Historic District	1	1	0	2	Medium
Edenton Historic District Boundary Expansion I	1	1	0	2	Medium
Westover Heights Historic District	1	1	0	2	Medium
North Edenton Historic District	1	1	0	2	Medium
(Former) Marine Corps Air Station (Edenton Airport)	1	0	0	1	Low
Historic Sites					
Roanoke River Lighthouse (Current site)	1	1	1	3	High
Barker House	1	1	1	3	High
Cupola House (NHL)	1	1	1	3	High
Chowan County Courthouse (NHL)	1	0	1	2	Medium
James Iredell House	1	0	1	2	Medium
Peanut Factory	1	0	0	1	Low
St. Paul's Episcopal Church and Churchyard*	1	0	1	2	Medium
Pembroke Hall	1	0	1	2	Medium
D.F. Walker Junior High School	1	0	0	1	Low
Albania	1	0	1	2	Medium
Wessington House	1	0	1	2	Medium
NC National Guard Armory	1	0	0	1	Low
(former) Edenton Graded School (Swain School)	1	0	0	1	Low
Queen Anne Creek Railroad Trestle	1	0	0	1	Low

	SENSITIVITY SCORES				
ASSET	**INHERENT COMMUNITY & CULTURAL VALUE**	**IMPACTED BY MULTIPLE HAZARDS**	**CONSTRUCTED ON OR BEFORE 1990**	**TOTAL**	**OVERALL SENSITIVITY RATING**
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House, Freedom House)*	1	0	1	2	Medium
Strawberry Hill*	1	0	1	2	Medium
Edenton Station, U.S. Fish & Fisheries Commission*	1	1	0	2	Medium
Hayes Plantation (Samuel Johnston House) (NHL)	1	0	1	2	Medium
Speight House and Cotton Gin*	1	1	0	2	Medium
Colonial Motel	1	0	0	1	Low
Hicks Field*	1	0	0	1	Low
Shelton Plantation House*	1	1	1	3	High
Churches					
200 S Granville St (Edenton Baptist)	1	0	1	2	Medium
107 Cox Ave (Great Mt Zion)	1	0	0	1	Low
515 Coke Ave (Church)	1	0	0	1	Low
118 W Gale St (Gale Street Baptist)	1	0	0	1	Low
214 W Church St (Providence Baptist)	1	1	1	3	High
1215 Vann St (St Luke Church of Christ)	1	0	0	1	Low
225 Virginia Rd (Edenton United Methodist)	1	0	0	1	Low
212 Tyler Ln (Union Grove Ame Zion)	1	0	0	1	Low
121 E Carteret St (Pleasant Grove)	1	0	0	1	Low
820 Dr Martin Luther King Jr Ave (Praise Temple Worship Center)	1	0	0	1	Low
676 Virginia Rd (Apostolic Church of God)	1	0	0	1	Low
510 N Granville St (Church of God in Christ)	1	0	0	1	Low
117 E Gale St (Kadesh Methodist Zion)	1	0	0	1	Low
212 E Church St (St Johns Episcopal)	1	0	1	2	Medium
117 Mexico Rd (Church of Christ)	1	0	0	1	Low

	SENSITIVITY SCORES				
ASSET	**INHERENT COMMUNITY & CULTURAL VALUE**	**IMPACTED BY MULTIPLE HAZARDS**	**CONSTRUCTED ON OR BEFORE 1990**	**TOTAL**	**OVERALL SENSITIVITY RATING**
200 S Moseley St (First Presbyterian)	1	0	0	1	Low
1201 W Queen St (First Assembly of God)	1	0	0	1	Low
400 First St (Church of Th Lord Jesus Christ)	1	0	0	1	Low
906 Johnston St (Church of God)	1	0	0	1	Low
207 N Broad St (Roman Catholic Diocese)	1	0	1	2	Medium
1536 N Broad St (Edenton Congregation of Jehovahs Witnesses)	1	0	0	1	Low
Cemeteries					
667 B Virginia Rd (Hoskins)	1	0	1	2	Medium
266 B Yeopim Rd (Creecy-Benbury)	1	0	1	2	Medium
1034 Hayes Farm Rd (Baker-Rice-Blair-Cathcart)	1	0	1	2	Medium
214 Mexico Rd (Jordan)	1	0	0	1	Low
200 S Granville St (Edenton Baptist Church)	1	0	1	2	Medium
207 N Broad St (St. Anne's Catholic Church)	1	0	1	2	Medium
101 W Gale St (St. Paul's Episcopal Church)	1	0	1	2	Medium
203 E Peterson St	1	0	0	1	Low
105 N Oakum St (Methodist Cemetery)	1	0	1	2	Medium

*Historical site – polygon feature, not point

Figure 6.6 – Historic and Cultural Resources Sensitivity

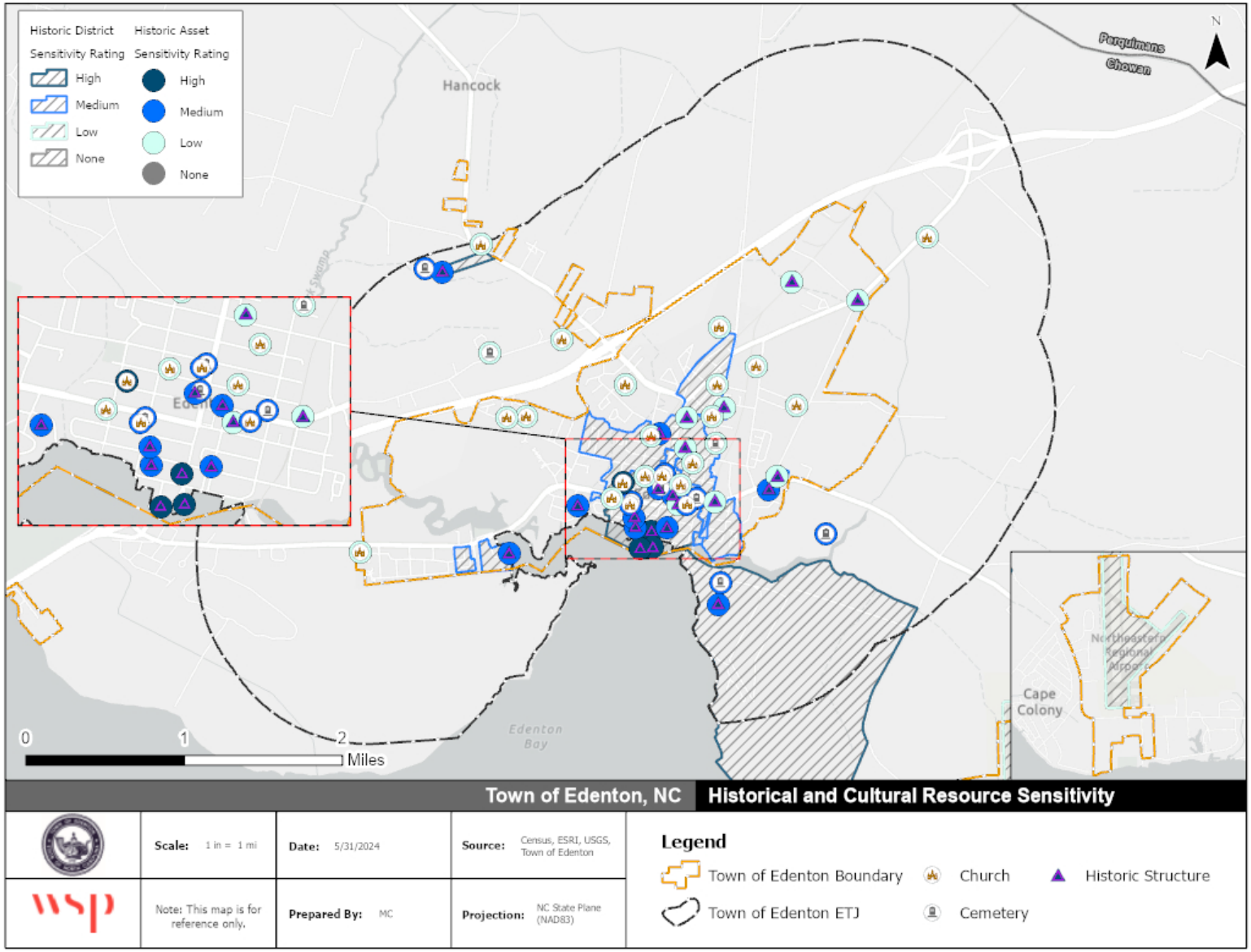


Table 6.8 – Natural Resource Sensitivity

	SENSITIVITY SCORES				
ASSET	**<25% IMPACTED BY 2' SLR**	**25-50% IMPACTED BY 2' SLR**	**>50% IMPACTED BY 2' SLR**	**TOTAL**	**OVERALL SENSITIVITY RATING**
Queen Anne Park-Front of Masonic Lodge	1	1	1	3	High
Colonial Waterfront Park	1	1	1	3	High
WRC Chowan Game Land	1	1	1	3	High
Edenton National Fish Hatchery	1	1	1	3	High
Lots 67,68, Pembroke-Dixon	1	1	1	3	High
Fishing Site-Johns Island	1	1	1	3	High
Lot C (Fisher Field)	1	0	0	1	Low
Lot A, Flagstaff Hill	1	0	0	1	Low
Boys Scout Hut/Tennis Court	1	0	0	1	Low
Purser Soccer Field	1	0	0	1	Low
Earnhardt Field (Old Drive-In)	1	0	0	1	Low

Note: See sensitivity mapping for overall sensitivity ratings of natural and constructed wetlands.

Figure 6.7 – Natural Resource Sensitivity

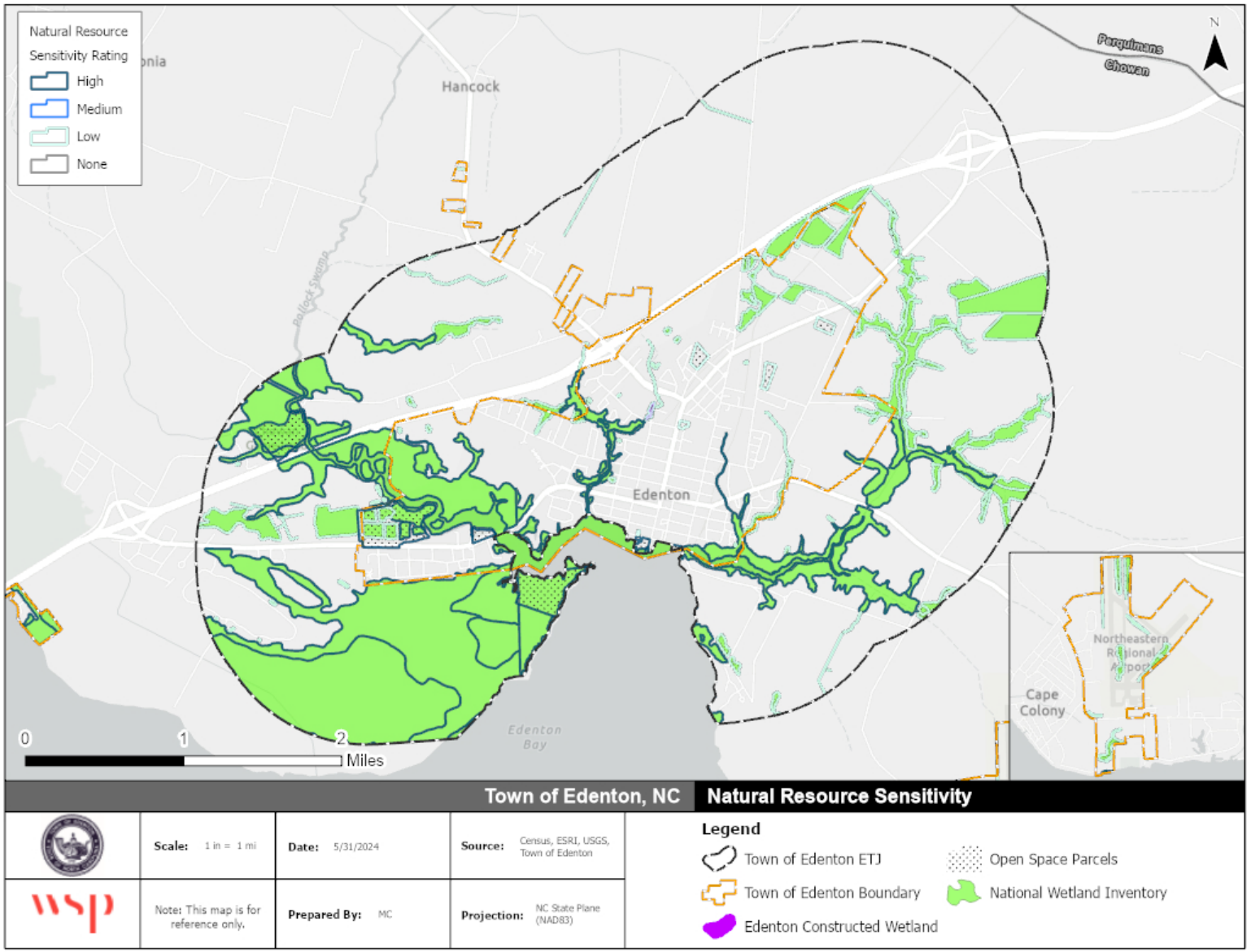
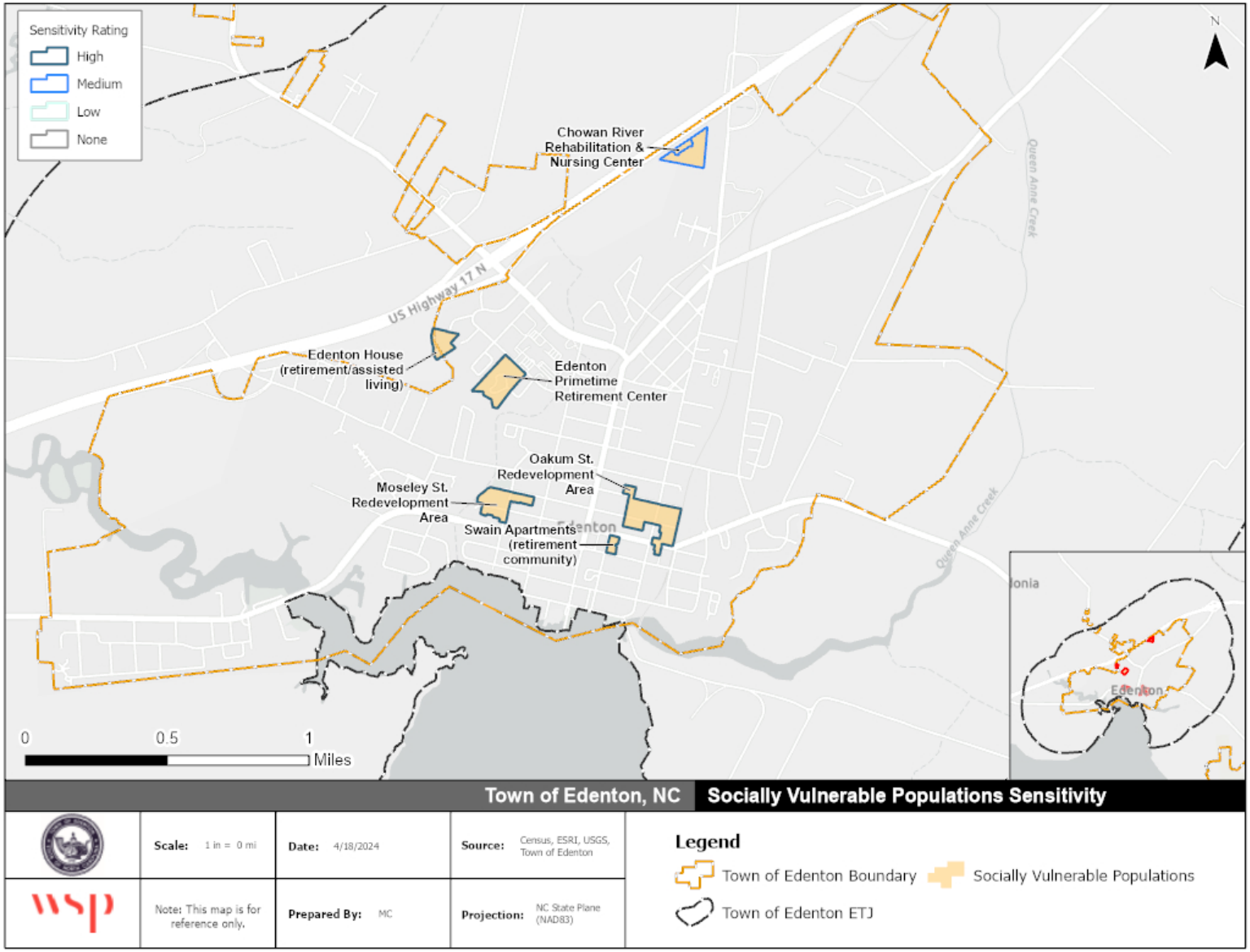


Table 6.9 – Socially Vulnerable Populations Sensitivity

	SENSITIVITY SCORES				
ASSET	**HEIGHTENED SOCIAL VULNERABILITY**	**>50% OF ASSET TYPE EXPOSED TO HAZARD**	**LOCATION EXPOSED TO MULTIPLE HAZARDS**	**TOTAL**	**OVERALL SENSITIVITY RATING**
Moseley St. Redevelopment Area	1	1	1	3	High
Edenton Primetime Retirement Center	1	1	1	3	High
Oakum St. Redevelopment Area	1	1	1	3	High
Chowan River Rehabilitation & Nursing Center (Bldg 1)	1	1	0	2	Medium
Chowan River Rehabilitation & Nursing Center (Bldg 2)	1	1	0	2	Medium
Edenton House	1	1	1	3	High
Swain Apartments	1	1	1	3	High

Figure 6.8 – Socially Vulnerable Populations Sensitivity



6.4 ADAPTIVE CAPACITY ANALYSIS

6.4.1 METHODOLOGY

Adaptive capacity is a subjective category that describes an asset's ability to adapt or withstand hazard impacts. Measures of adaptive capacity can include physical elements or conditions that help, or hinder, how an asset avoids or absorbs an impact. High adaptive capacity is the ability to adjust to a disruption or reduce the extent of the impact. To evaluate adaptive capacity, each asset was assessed for its potential for protection or adaptation measures. Asset categories were assessed using different criteria that best evaluate adaptive capacity based on their unique characteristics. Each asset was assigned an adaptive capacity score of 0-3 where 0 indicates no adaptive capacity, 1 is low, 2 is medium, and 3 is high.

0 = No Adaptive Capacity	1 = LOW	2 = MEDIUM	3 = HIGH

For critical assets and historic and cultural resources, factors considered include if the asset is already protected; if retrofit, relocation, or another alternative is possible, if there are multiple strategies for adaptation; and if another facility could provide temporary service if/when an asset is affected. Table 6.10 below provides the criteria used to assign adaptive capacity scores.

Table 6.10 – Critical Assets & Historic and Cultural Adaptive Capacity Analysis Ranking Criteria

	ADAPTIVE CAPACITY			
HAZARD	*0 - NONE*	*1 - LOW*	*2 - MEDIUM*	*3 - HIGH*
Critical Assets; Historic & Cultural Resources	No options available	No temporary service and very limited options for adaptation	No temporary service; Multiple adaptation strategies could be employed (retrofit, relocation, or protection measures)	A temporary service is available from an alternative asset and/or multiple adaptation strategies could be employed (retrofit, relocation, or protection measures).

Adaptive capacity for socially vulnerable populations was determined using the CDC's Social Vulnerability Index (SVI) at the block group level. Census tracts are the lowest level of geography that the CDC's SVI data is provided, however, the Harvard Open Environments Dataverse provides the same SVI data recast to Census block groups to enable a more granular analysis.

Socially vulnerable populations are assigned a rating based on the SVI score of the census block that asset intersects. Assets within areas with low SVI scores have high adaptive capacity and assets in areas with high SVI block groups have low adaptive capacity. Table 6.11 below provides the criteria used to assign adaptive capacity scores.

Table 6.11 – Socially Vulnerable Populations Adaptive Capacity Analysis Ranking Criteria

	ADAPTIVE CAPACITY			
HAZARD	*0 - NONE*	*1 - LOW*	*2 - MEDIUM*	*3 - HIGH*
Socially Vulnerable Populations	No SVI data	SVI score is greater than 0.75 (high)	SVI score is between 0.25 – 0.75 (low-medium and medium-high)	SVI score is less than 0.25 (low)

For natural infrastructure, adaptive capacity for parks was determined based on the land cover and general use of each park. Parks with significant vegetation and tree cover are assigned high adaptive capacity while those with more impervious surface cover are assigned a low adaptive capacity. Parks with sports fields are given medium adaptive capacity.

The adaptive capacity of wetlands was rated based on the wetland's *Class* provided by the National Wetlands Inventory (NWI). Wetland Class is more specific than the Wetland *Type* which is the primary way the NWI categorizes and displays wetlands in the community. Wetland Class describes the general appearance of the habitat in terms of either the dominant life form of the vegetation or the physiography and composition of the substrate—features that can be recognized without the aid of detailed environmental measurements. Wetland classifications are defined and described by the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979) – often referred to as the Cowardin System. It is a hierarchical system that captures the aquatic system, type of substrate, and water regime of wetlands. It became a National Standard in 1996 but has been the standard for mapping U.S. wetlands and deepwater habitats since 1976.

This approach defines adaptive capacity by the wetland Class – based on the general class description (stability, vegetation, inundation) it is assigned an adaptive capacity rating. Table 6.12 includes the various wetland Classes found in Edenton, along with a description, and the corresponding adaptive capacity rank. For further context, the table also displays the associated overarching wetland *Type* and *Subclass* that are found in each Class category.

Table 6.12 – Edenton Wetland Classifications and Descriptions

WETLAND CLASS	WETLAND TYPE*	SUBCLASS TYPES	CLASS DESCRIPTION & ADAPTIVE CAPACITY
Unconsolidated Bottom	Estuarine and Marine Deepwater, Freshwater Pond, Riverine	Cobble-Gravel, Sand, Mud, Organic	**LOW:** Unconsolidated Bottoms are characterized by the lack of large stable surfaces for plant and animal attachment. Exposure to wave and current action, temperature, salinity, and light penetration determines the composition and distribution of organisms.
Streambed	Riverine	Bedrock, Rubble, Cobble-Gravel, Sand, Mud, Organic, Vegetated	**LOW:** Streambeds vary greatly in substrate and form depending on the gradient of the channel, the velocity of the water, and the sediment load. The substrate material frequently changes abruptly between riffles and pools, and complex patterns of bars may form on the convex side of single channels or be included as islands within the bed of braided streams. In most cases streambeds are not vegetated because of the scouring effect of moving water.
Aquatic Bed	Freshwater Pond	Algal, aquatic Moss, Rooted Vascular, Floating Vascular	**MEDIUM:** The class Aquatic Bed includes wetlands and deepwater habitats where plants grow principally on or below the surface of the water. Plants include submerged or floating leaved rooted vascular plants, free-floating vascular plants, submergent mosses, and algae. They are best developed in relatively permanent water or under conditions of repeated flooding. The plants are either attached to the substrate or float freely on, or beneath, the water surface.

WETLAND CLASS	WETLAND TYPE*	SUBCLASS TYPES	CLASS DESCRIPTION & ADAPTIVE CAPACITY
Emergent Wetland	Freshwater Emergent Wetland	Persistent (stems and leaves are evident all year above the surface of the water), Nonpersistent (stems and leaves evident only during growing season)	**HIGH:** In this wetland Class, emergent plants—i.e., erect, rooted, herbaceous hydrophytes, excluding mosses and lichens—are the tallest life form with at least 30% areal coverage. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants. Emergent Wetlands are known by many names, including marsh, wet meadow, fen, prairie pothole, and slough.
Scrub-Shrub Wetland	Freshwater Forested/Shrub Wetland	Broad-leaved Deciduous, Needle-leaved Deciduous, Broad-leaved Evergreen, Needle-leaved Evergreen, Dead	**HIGH:** In Scrub-Shrub Wetlands, woody plants less than 6 m (20 ft) tall are the dominant life form. The "shrub" life form actually includes true shrubs, young specimens of tree species that have not yet reached 6 m in height, and woody plants (including tree species) that are stunted because of adverse environmental conditions. Scrub-Shrub Wetlands are known by many names, such as shrub swamp, bog, fen, and pocosin.
Forested Wetland	Freshwater Forested/Shrub Wetland, Estuarine and Marine Wetland	Broad-leaved Deciduous, Needle-leaved Deciduous, Broad-leaved Evergreen, Needle-leaved Evergreen, Dead	**HIGH:** In Forested Wetlands, trees are the dominant life form – trees are defined as woody plants at least 6m (20 ft) in height. Most common in eastern U.S. and in those sections of the West where moisture is relatively abundant, particularly along rivers and in the mountains. They occur only in the Palustrine and Estuarine Systems and normally possess an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer.

*Wetland Types found in Edenton
Source: USFWS National Wetlands Mapper Documentation - The Classification of Wetlands and Deepwater Habitats of the United States (Cowardin System), Federal Geographic Data Committee

The criteria for low, medium, and high adaptive capacity for wetlands are as follows:

Table 6.13 – Natural Resources – Wetlands Adaptive Capacity Analysis Ranking Criteria

	ADAPTIVE CAPACITY			
HAZARD	*0 - NONE*	*1 - LOW*	*2 - MEDIUM*	*3 - HIGH*
Natural Resources	No wetland (100% outside of any wetland)	Unconsolidated Bottom, Streambed	Aquatic Bed	Emergent, Scrub-Shrub, or Forested

The constructed wetlands in Edenton are composed of multiple wetland classifications, however, the Town has already determined that these wetlands require work and remediation. Therefore, they were assigned low adaptive capacity.

6.4.2 RESULTS

Table 6.14 – Critical Asset Adaptive Capacity

ADAPTIVE CAPACITY SCORES		
ASSET	**SCORE**	**ADAPTIVE CAPACITY RATING**
Shepard-Pruden Memorial Library	3	High
Edenton Fire Department	2	Medium
Water Tower (Park Avenue)	1	Low
Chowan Senior Center	3	High
Edenton Police Department	2	Medium
Chowan County Public Safety Center	2	Medium
Edenton Public Works Department	3	High
Town of Edenton Municipal Offices	2	Medium
Edenton Electric Department	2	Medium
College of the Albemarle/Temporary High School	2	Medium
John A Holmes High School	2	Medium
ECU Health Chowan Hospital	1	Low
Dominion Substation	1	Low
Cell Towers	1	Low
Fybe OLT cabinet	2	Medium
Century Link	2	Medium
Water Treatment/Well	1	Low
Well	1	Low
Water Tower (Twiddy Ave)	1	Low
Public Works Gas Pump Station	1	Low

Figure 6.9 – Critical Asset Adaptive Capacity

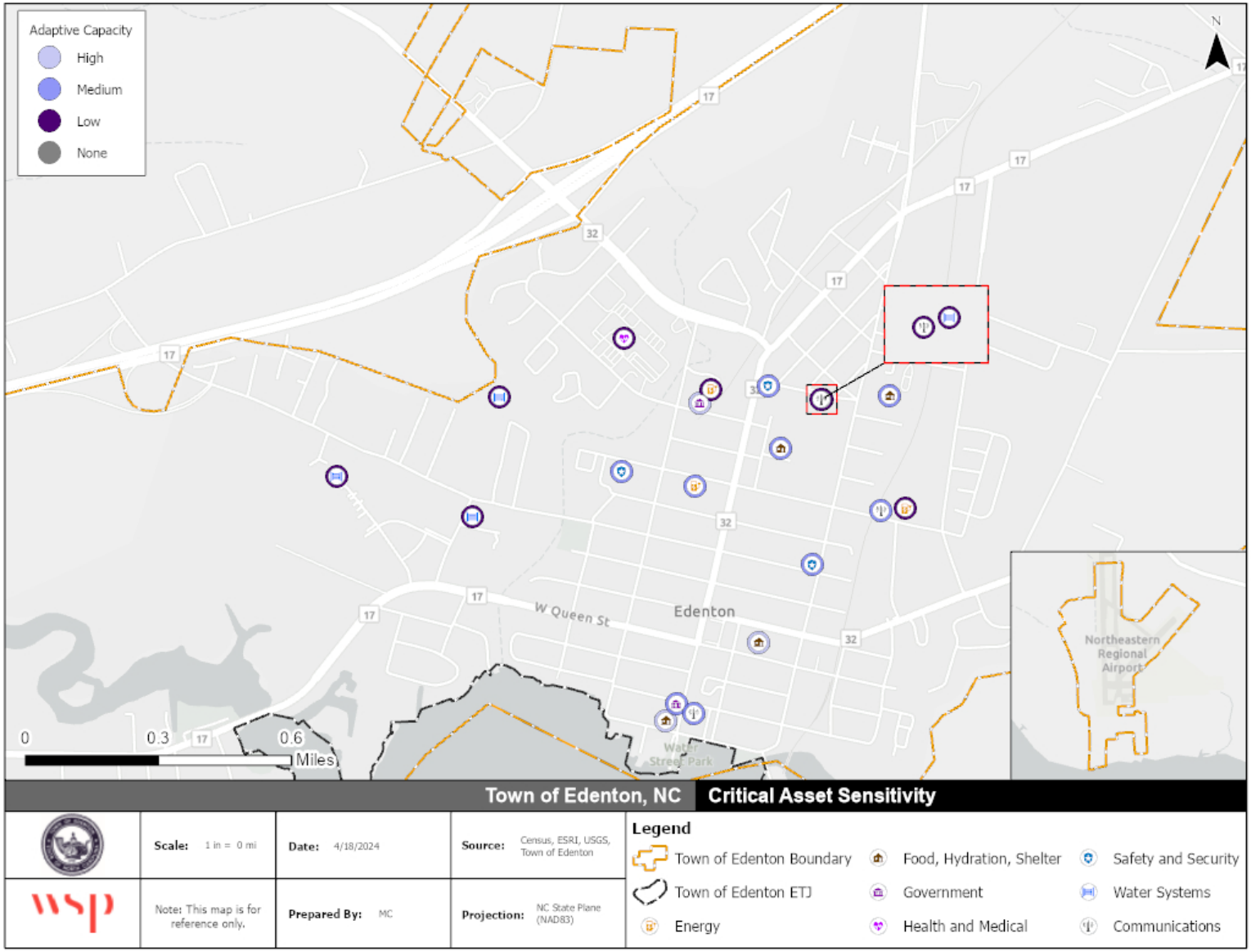


Table 6.15 – Historic and Cultural Adaptive Capacity

ADAPTIVE CAPACITY SCORES		
ASSET	**SCORE**	**ADAPTIVE CAPACITY RATING**
Historic Districts		
Edenton Historic District	0	None
Edenton Historic District Boundary Increase II	0	None
Hayes Plantation (Samuel Johnston House) (NHL)	0	None
Edenton Cotton Mill Village Historic District	0	None
Edenton Historic District Boundary Expansion I	0	None
Westover Heights Historic District	0	None
North Edenton Historic District	0	None
(Former) Marine Corps Air Station (Edenton Airport)	0	None
Historic Sites		
Roanoke River Lighthouse (Current site)	0	None
Barker House	1	Low
Cupola House (NHL)	1	Low
Chowan County Courthouse (NHL)	1	Low
James Iredell House	1	Low
Peanut Factory	2	Medium
St. Paul's Episcopal Church and Churchyard*	2	Medium
Pembroke Hall	1	Low
D.F. Walker Junior High School	2	Medium
Albania	1	Low
Wessington House	1	Low
NC National Guard Armory	0	None
(former) Edenton Grade School (Swain Apartments)	2	Medium
Queen Anne Creek Railroad Trestle	0	None
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House, Freedom House)*	1	Low
Strawberry Hill*	1	Low
Edenton Station, U.S. Fish & Fisheries Commission*	1	Low
Hayes Plantation (Samuel Johnston House) (NHL)	1	Low
Speight House and Cotton Gin*	0	None
Colonial Motel	2	Medium
Hicks Field*	3	High
Shelton Plantation House*	1	Low
Churches		
200 S Granville St (Edenton Baptist)	2	Medium
107 Cox Ave (Great Mt Zion)	2	Medium

ADAPTIVE CAPACITY SCORES

ASSET	SCORE	ADAPTIVE CAPACITY RATING
515 Coke Ave (Church)	2	Medium
118 W Gale St (Gale Street Baptist)	2	Medium
214 W Church St (Providence Baptist)	2	Medium
1215 Vann St (St Luke Church of Christ)	2	Medium
225 Virginia Rd (Edenton United Methodist)	2	Medium
212 Tyler Ln (Union Grove Ame Zion)	2	Medium
121 E Carteret St (Pleasant Grove)	2	Medium
820 Dr Martin Luther King Jr Ave (Praise Temple Worship Center)	2	Medium
676 Virginia Rd (Apostolic Church of God)	2	Medium
510 N Granville St (Church of God in Christ)	2	Medium
117 E Gale St (Kadesh Methodist Zion)	2	Medium
212 E Church St (St Johns Episcopal)	2	Medium
117 Mexico Rd (Church of Christ)	2	Medium
200 S Moseley St (First Presbyterian)	2	Medium
1201 W Queen St (First Assembly of God)	2	Medium
400 First St (Church of The Lord Jesus Christ)	2	Medium
906 Johnston St (Church of God)	2	Medium
207 N Broad St (Roman Catholic Diocese)	2	Medium
1536 N Broad St (Edenton Congregation of Jehovahs Witnesses)	2	Medium
Cemeteries		
667 B Virginia Rd (Hoskins)	0	None
266 B Yeopim Rd (Creecy-Benbury)	0	None
1034 Hayes Farm Rd (Baker-Rice-Blair-Cathcart)	0	None
214 Mexico Rd (Jordan)	0	None
200 S Granville St (Edenton Baptist Church)	0	None
207 N Broad St (St. Anne's Catholic Church)	0	None
101 W Gale St (St. Paul's Episcopal Church)	0	None
203 E Peterson St	0	None
105 N Oakum St (Methodist Cemetery)	0	None

*Historical site – polygon feature, not point

Figure 6.10 – Historic and Cultural Adaptive Capacity

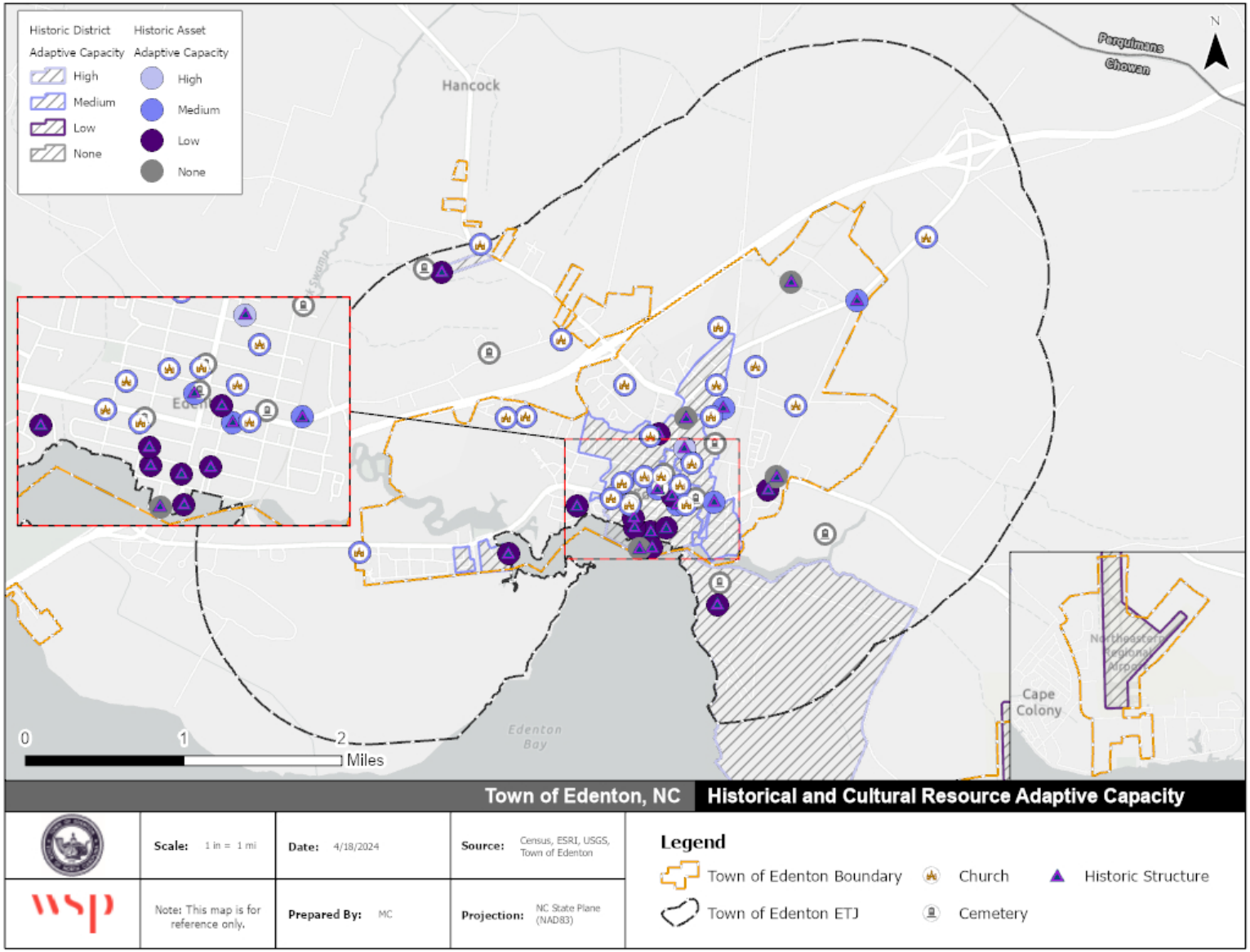


Table 6.16 – Natural Resource – Parks Adaptative Capacity

ADAPTIVE CAPACITY SCORES		
ASSET	**TOTAL**	**OVERALL ADAPTIVE CAPACITY RATING**
Queen Anne Park-Front of Masonic Lodge	1	Low
Colonial Waterfront Park	1	Low
WRC Chowan Game Land	3	High
Edenton National Fish Hatchery	2	Medium
Lots 67,68, Pembroke-Dixon	3	High
Fishing Site-Johns Island	3	High
Lot C (Fisher Field)	2	Medium
Lot A, Flagstaff Hill	2	Medium
Boys Scout Hut/Tennis Court	1	Low
Purser Soccer Field	2	Medium
Earnhardt Field (Old Drive-In)	2	Medium

Note: See adaptive capacity mapping for overall adaptive capacity ratings of natural and constructed wetlands.

Figure 6.11 – Natural Resource Adaptative Capacity

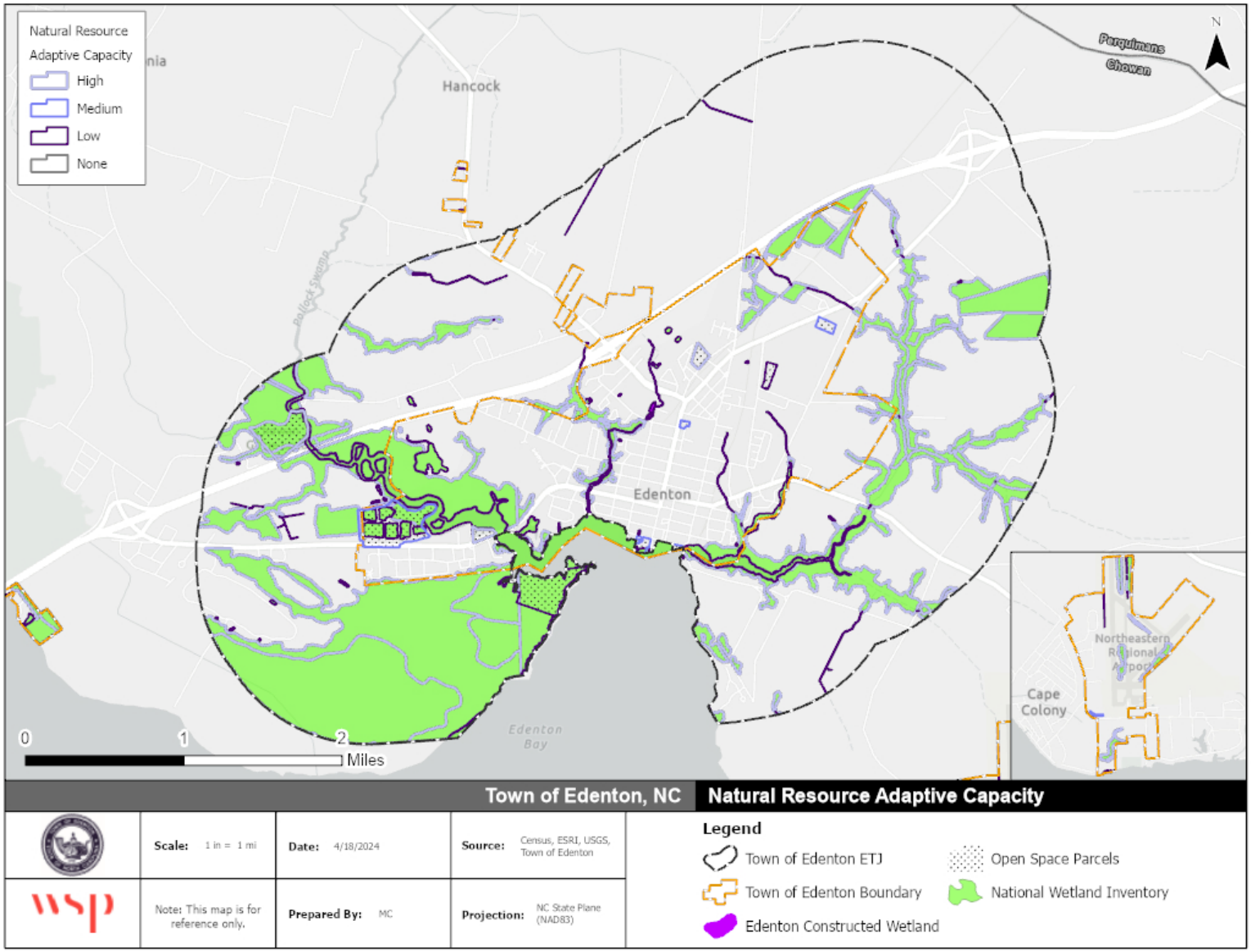
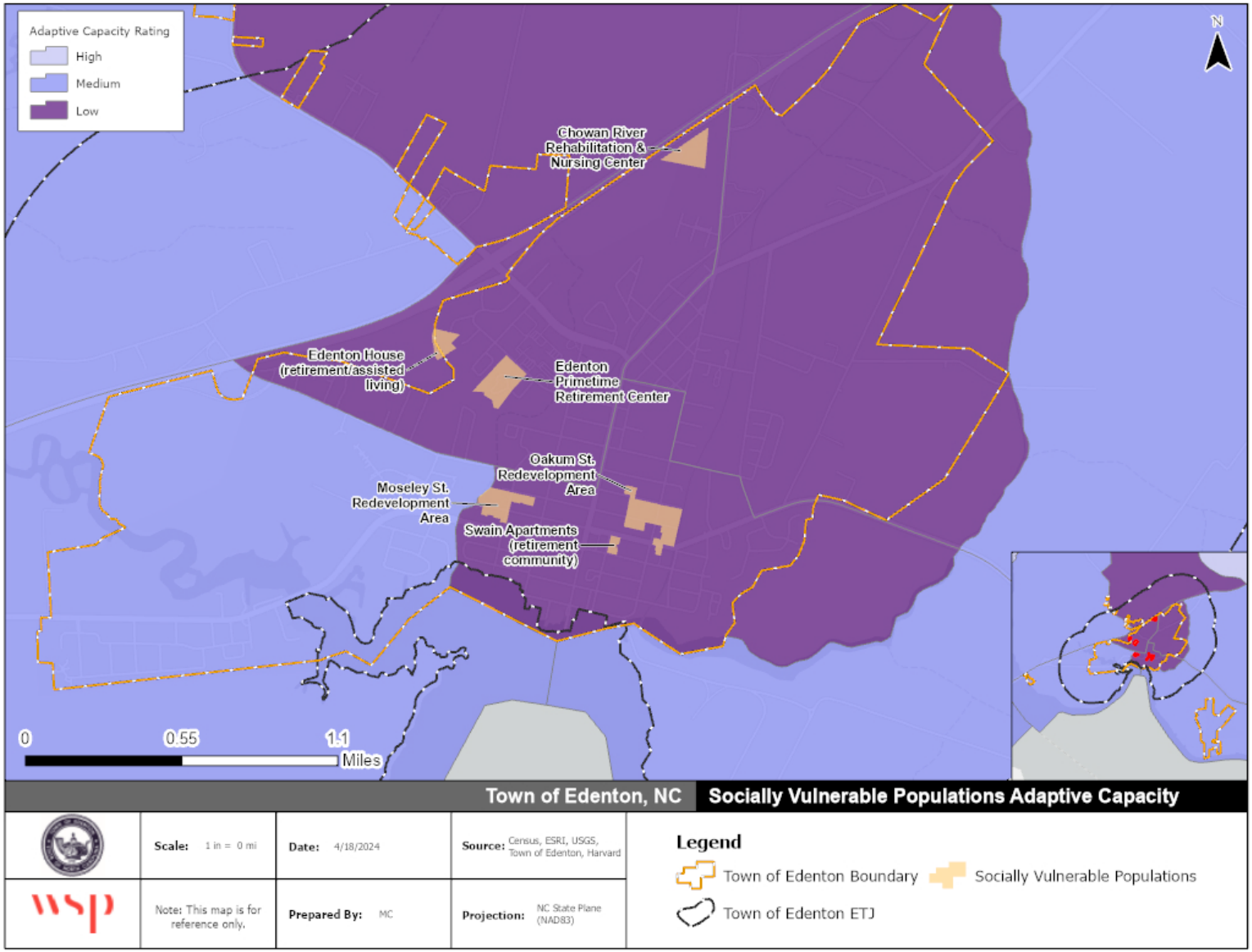


Table 6.17 – Socially Vulnerable Populations Adaptive Capacity

	ADAPTIVE CAPACITY SCORES	
ASSET	**TOTAL**	**OVERALL ADAPTIVE CAPACITY RATING**
Moseley St. Redevelopment Area	1	Low
Edenton Primetime Retirement Center	1	Low
Oakum St. Redevelopment Area	1	Low
Chowan River Rehabilitation & Nursing Center (Bldg 1)	1	Low
Chowan River Rehabilitation & Nursing Center (Bldg 2)	1	Low
Edenton House	1	Low
Swain Apartments	1	Low
Edenton Primetime Retirement Center	1	Low
Chowan River Rehabilitation & Nursing Center	1	Low

Figure 6.12 – Socially Vulnerable Populations Adaptive Capacity



6.5 VULNERABILITY ASSESSMENT CONCLUSIONS

6.5.1 METHODOLOGY

Vulnerability considers how an asset might be impacted by a flood hazard and its ability to withstand or adapt to that hazard. The overall exposure, sensitivity, and adaptive capacity scores are used to determine the cumulative vulnerability of the assessed assets. The following equation is applied to each asset to determine the cumulative vulnerability score:

VULNERABILITY SCORE = (EXPOSURE SCORE + SENSITIVITY SCORE) – ADAPTIVE CAPACITY SCORE

Cumulative vulnerability scores are categorized as follows:

>2 = LOW	**3 – 4 = MEDIUM**	**5 – 6 = HIGH**

The vulnerability results are presented in the tables and maps in Section 6.5.2, followed by a summary of key takeaways for each asset category in Section 6.5.3.

6.5.2 RESULTS

Table 6.18 – Critical Asset Vulnerability

	CUMULATIVE VULNERABILITY SCORES				
ASSET	**EXPOSURE SCORE**	**SENSITIVITY SCORE**	**ADAPTIVE CAPACITY SCORE**	**VULNERABILITY SCORE**	**VULNERABILITY RATING**
Shepard-Pruden Memorial Library	1	1	3	-1	Low
Edenton Fire Department	1	2	2	1	Low
Water Tower (Park Avenue)	1	2	1	2	Low
Chowan Senior Center	1	1	3	-1	Low
Edenton Police Department	1	2	2	1	Low
Chowan County Public Safety Center	1	2	2	1	Low
Edenton Public Works Department	1	2	3	0	Low
Town of Edenton Municipal Offices	1	1	2	0	Low
Edenton Electric Department	1	1	2	0	Low
College of the Albemarle/Temporary High School	1	0	2	-1	Low
John A Holmes High School	0	0	2	-2	Low
ECU Health Chowan Hospital	0	1	1	0	Low
Substation	0	1	1	0	Low
Cell Towers	1	1	1	1	Low
Fybe OLT cabinet	0	0	2	-2	Low
Century Link	1	1	2	0	Low
Water Treatment/Well	1	2	1	2	Low
Well	0	2	1	1	Low
Water Tower	1	2	1	2	Low
Public Works Gas Pump Station	1	1	1	1	Low

Figure 6.13 – Critical Asset Vulnerability

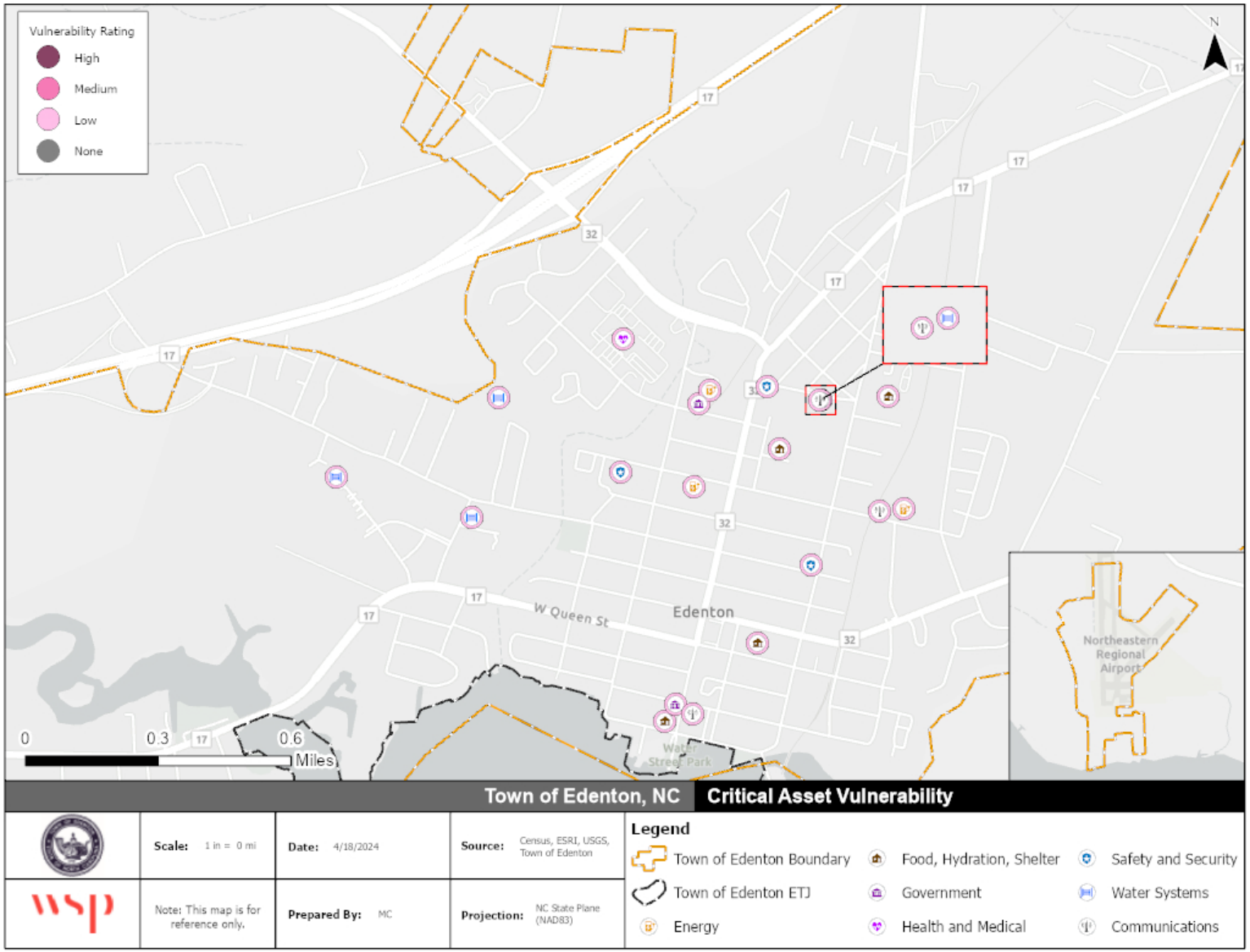


Table 6.19 – Historic and Cultural Resources Vulnerability

	CUMULATIVE VULNERABILITY SCORES				
ASSET	**EXPOSURE SCORE**	**SENSITIVITY SCORE**	**ADAPTIVE CAPACITY SCORE**	**VULNERABILITY SCORE**	**VULNERABILITY RATING**
Historic Districts					
Edenton Historic District	3	3	0	6	High
Edenton Historic District Boundary Increase II	3	2	0	5	High
Hayes Plantation (Samuel Johnston House) (NHL)	3	3	0	6	High
Edenton Cotton Mill Village Historic District	3	2	0	5	High
Edenton Historic District Boundary Expansion I	3	2	0	5	High
Westover Heights Historic District	1	2	0	3	Medium
North Edenton Historic District	1	2	0	3	Medium
(Former) Marine Corps Air Station (Edenton Airport)	1	1	0	2	Low
Historic Sites					
Roanoke River Lighthouse (Current site)	2	3	0	5	High
Barker House	2	3	1	4	Medium
Cupola House (NHL)	1	3	1	3	Medium
Chowan County Courthouse (NHL)	1	2	1	2	Low
James Iredell House	1	2	1	2	Low
Peanut Factory	1	1	2	0	Low
St. Paul's Episcopal Church and Churchyard*	1	2	2	1	Low
Pembroke Hall	1	2	1	2	Low
D.F. Walker Junior High School	1	1	2	0	Low
Albania	1	2	1	2	Low
Wessington House	1	2	1	2	Low
NC National Guard Armory	1	1	0	2	Low
(former) Edenton Graded School (Swain School)	1	1	2	0	Low
Queen Anne Creek Railroad Trestle	1	1	0	2	Low

	CUMULATIVE VULNERABILITY SCORES				
ASSET	**EXPOSURE SCORE**	**SENSITIVITY SCORE**	**ADAPTIVE CAPACITY SCORE**	**VULNERABILITY SCORE**	**VULNERABILITY RATING**
Golden Asro and Ruth Holley Frinks House (Benbury-Frinks House, Freedom House)*	1	2	1	2	Low
Strawberry Hill*	0	2	1	1	Low
Edenton Station, U.S. Fish & Fisheries Commission*	2	2	1	3	Medium
Hayes Plantation (Samuel Johnston House) (NHL)	0	2	1	1	Low
Speight House and Cotton Gin*	1	2	0	3	Medium
Colonial Motel	0	1	2	-1	Low
Hicks Field*	1	1	3	-1	Low
Shelton Plantation House*	1	3	1	3	Medium
Churches					
200 S Granville St (Edenton Baptist)	1	2	2	1	Low
107 Cox Ave (Great Mt Zion)	0	1	2	-1	Low
515 Coke Ave (Church)	1	1	2	0	Low
118 W Gale St (Gale Street Baptist)	1	1	2	0	Low
214 W Church St (Providence Baptist)	1	3	2	2	Low
1215 Vann St (St Luke Church of Christ)	1	1	2	0	Low
225 Virginia Rd (Edenton United Methodist)	0	1	2	-1	Low
212 Tyler Ln (Union Grove Ame Zion)	0	1	2	-1	Low
121 E Carteret St (Pleasant Grove)	0	1	2	-1	Low
820 Dr Martin Luther King Jr Ave (Praise Temple Worship Center)	0	1	2	-1	Low
676 Virginia Rd (Apostolic Church of God)	0	1	2	-1	Low
510 N Granville St (Church of God in Christ)	1	1	2	0	Low
117 E Gale St (Kadesh Methodist Zion)	1	1	2	0	Low
212 E Church St (St Johns Episcopal)	1	2	2	1	Low
117 Mexico Rd (Church of Christ)	0	1	2	-1	Low
200 S Moseley St (First Presbyterian)	1	1	2	0	Low

	CUMULATIVE VULNERABILITY SCORES				
ASSET	**EXPOSURE SCORE**	**SENSITIVITY SCORE**	**ADAPTIVE CAPACITY SCORE**	**VULNERABILITY SCORE**	**VULNERABILITY RATING**
1201 W Queen St (First Assembly of God)	0	1	2	-1	Low
400 First St (Church of Th Lord Jesus Christ)	1	1	2	0	Low
906 Johnston St (Church of God)	1	1	2	0	Low
207 N Broad St (Roman Catholic Diocese)	1	2	2	1	Low
1536 N Broad St (Edenton Congregation of Jehovahs Witnesses)	0	1	2	-1	Low
Cemeteries					
667 B Virginia Rd (Hoskins)	0	2	0	2	Low
266 B Yeopim Rd (Creecy-Benbury)	1	2	0	3	Medium
1034 Hayes Farm Rd (Baker-Rice-Blair-Cathcart)	0	2	0	2	Low
214 Mexico Rd (Jordan)	0	1	0	1	Low
200 S Granville St (Edenton Baptist Church)	1	2	0	3	Medium
207 N Broad St (St. Anne's Catholic Church)	1	2	0	3	Medium
101 W Gale St (St. Paul's Episcopal Church)	1	2	0	3	Medium
203 E Peterson St	0	1	0	1	Low
105 N Oakum St (Methodist Cemetery)	1	2	0	3	Medium

Figure 6.14 – Historic and Cultural Resources Vulnerability

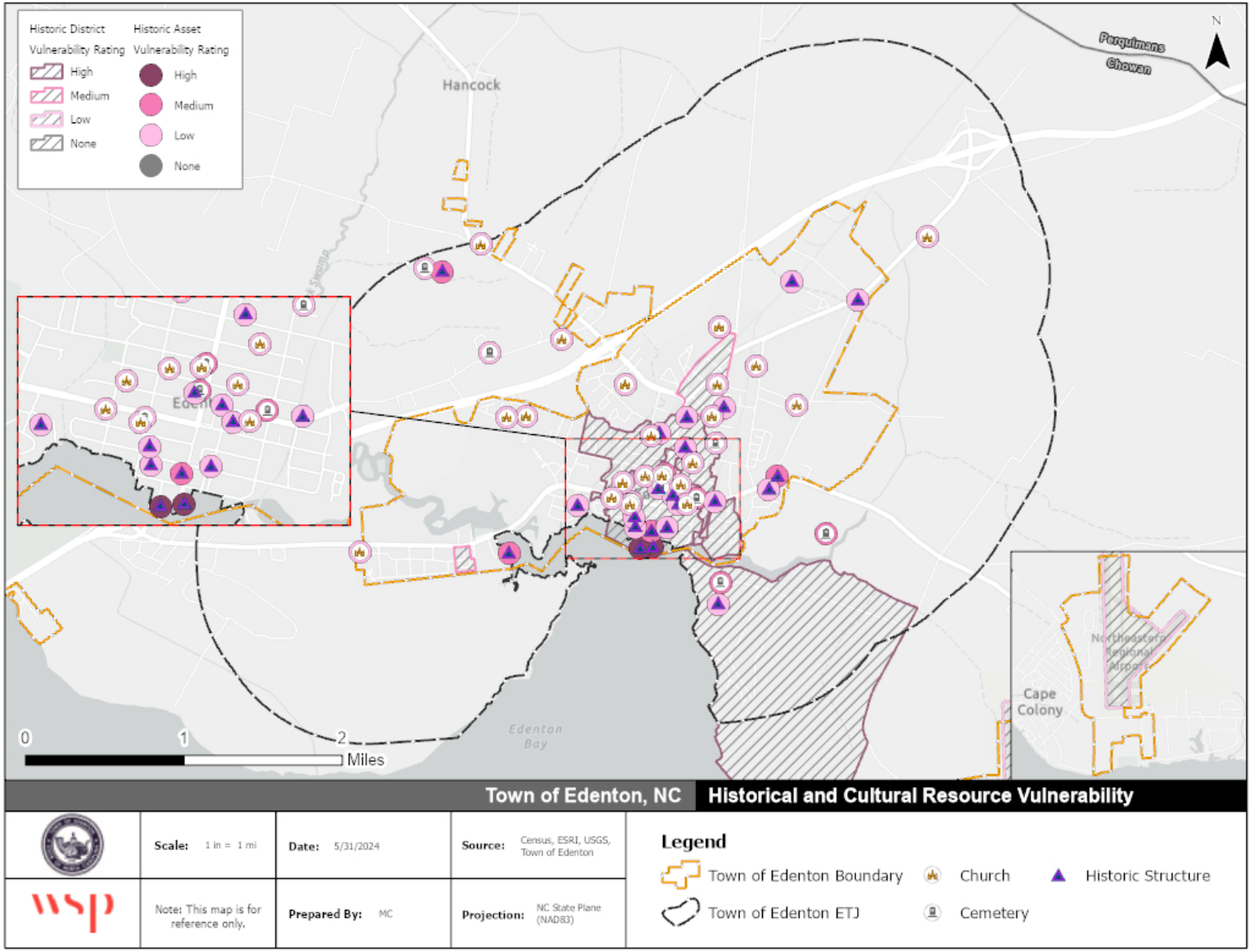


Table 6.20 – Natural Resource – Parks Vulnerability

	CUMULATIVE VULNERABILITY SCORES				
ASSET	EXPOSURE SCORE	SENSITIVITY SCORE	ADAPTIVE CAPACITY SCORE	VULNERABILITY SCORE	VULNERABILITY RATING
Queen Anne Park-Front of Masonic Lodge	3	3	1	5	High
Colonial Waterfront Park	3	3	1	5	High
WRC Chowan Game Land	2	3	3	2	Low
Edenton National Fish Hatchery	2	3	2	3	Medium
Lots 67,68, Pembroke-Dixon	1	3	3	1	Low
Fishing Site-Johns Island	1	3	3	1	Low
Lot C (Fisher Field)	1	1	2	0	Low
Lot A, Flagstaff Hill	1	1	2	0	Low
Boys Scout Hut/Tennis Court	1	1	1	1	Low
Purser Soccer Field	1	1	2	0	Low
Earnhardt Field (Old Drive-In)	0	1	2	-1	Low

Note: See vulnerability mapping for overall vulnerability ratings of natural and constructed wetlands.

Figure 6.15 – Natural Resource Vulnerability

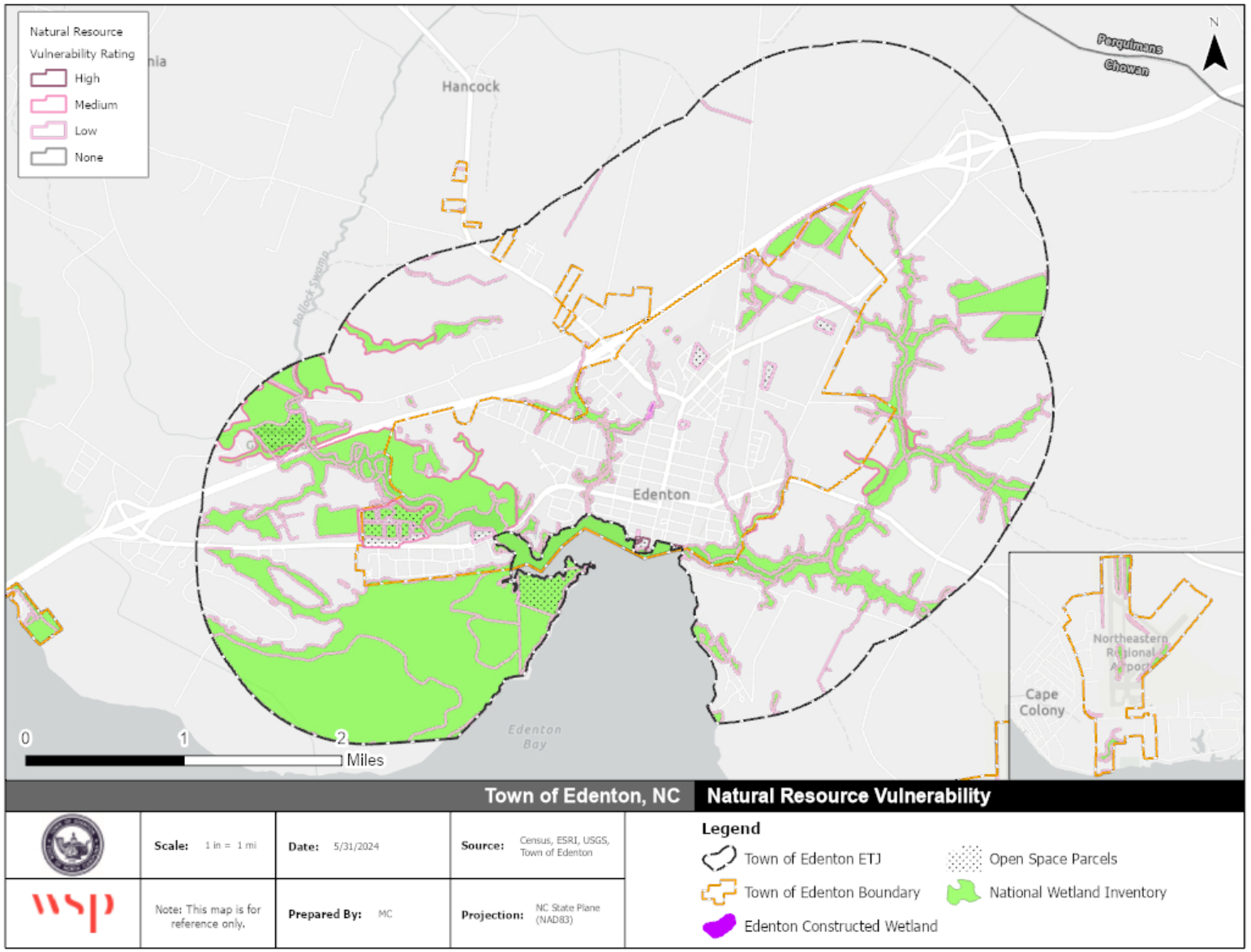
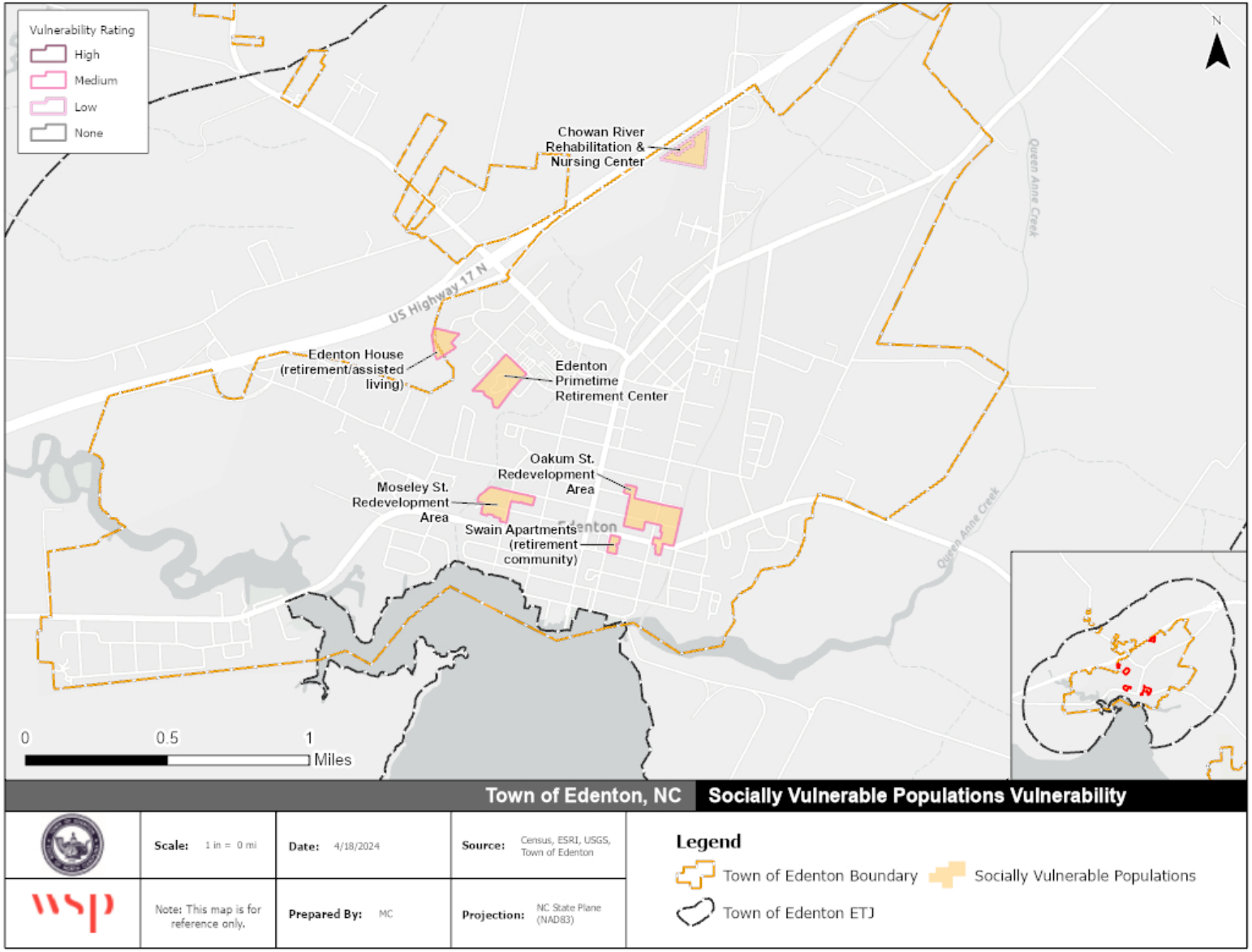


Table 6.21 – Socially Vulnerable Populations Vulnerability

	CUMULATIVE VULNERABILITY SCORES				
ASSET	**EXPOSURE SCORE**	**SENSITIVITY SCORE**	**ADAPTIVE CAPACITY SCORE**	**VULNERABILITY SCORE**	**VULNERABILITY RATING**
Moseley St. Redevelopment Area	2	3	1	4	Medium
Edenton Primetime Retirement Center	2	3	1	4	Medium
Oakum St. Redevelopment Area	1	3	1	3	Medium
Chowan River Rehabilitation & Nursing Center (Bldg 1)	0	2	1	1	Low
Chowan River Rehabilitation & Nursing Center (Bldg 2)	0	2	1	1	Low
Edenton House	1	3	1	3	Medium
Swain Apartments	1	3	1	3	Medium

Figure 6.16 – Socially Vulnerable Populations Vulnerability



6.5.3 VULNERABILITY ASSESSMENT KEY TAKEAWAYS

CRITICAL ASSETS

All the assessed assets have low vulnerability – shown in light pink in Figure 6.13. Many of the assets have relatively low exposure and medium to high adaptive capacity. Low vulnerability assets that are exposed to flood hazards and have low adaptive capacity may need to be monitored more closely. Similarly, any assets that have experienced flood inundation in the past should be assessed for protection.

Critical assets are the facilities, buildings and infrastructure that are essential to government and emergency operations, support the provision of essential services, or are otherwise integral to protecting health and safety and other key functions of the community. While all of these assets have low vulnerability, any flood damage can cause a disruption of essential services or make certain facilities inaccessible. This may limit access to schools, libraries, and other government-owned properties that provide public services.

HISTORIC AND CULTURAL RESOURCES

Six historic assets have high vulnerability – five districts and one site shown in purple in Figure 6.14. These assets have high exposure and high sensitivity ratings and no adaptive capacity. There are also several historic districts and sites with medium vulnerability. Most of these assets have lower exposure but moderate sensitivity and low adaptive capacity.

Historic and cultural places tend to be vulnerable as they are often older structures that in many cases are irreplaceable or difficult to repair. Flooding of historic buildings can cause structural damage, damage to furnishings and fittings, and ruin porous materials like old masonry. Such repairs can be difficult and expensive to complete. Buildings with a demonstrable risk of flooding can implement adaptive treatments to reduce the risk of flood damage as much as possible, but should do so without destroying significant historic materials, features, or spaces.

NATURAL RESOURCES

The majority of the assessed natural resources have low vulnerability – 93% of wetlands and 72% of parks. Wetlands and other types of undeveloped space tend to have minimal impacts from flooding and high adaptive capacity. Queen Anne Park is the only park asset with high vulnerability. The park has high exposure, high sensitivity, and low adaptive capacity. As a result, the asset is likely to experience a flood hazard but has limited ability to bounce back from impacts. However, parks tend to be more resilient as they have limited structures and land use better equipped to handle flood waters. Colonial Waterfront Park and the National Fish Hatchery have medium vulnerability as they have moderate exposure, high sensitivity and low to medium adaptive capacity.

Several parks have low exposure to flood hazards, and while this may limit disruptions to these amenities, parks located in flood-prone locations is a benefit to the community. Parks and open space can also play an important role in mitigating heavy floods when covered in vegetation that can help increase infiltration and limit runoff. They can also provide a development-free area for floodwater infiltration.

SOCIALLY VULNERABLE POPULATIONS

Five out of seven of the socially vulnerable population locations assessed have medium vulnerability. The assessed locations have low to medium exposure but high sensitivity and low adaptive capacity. All of the assessed locations have low adaptive capacity, which is often what characterizes such populations as vulnerability – a lack of support and resources to recover from a hazard event.

SVI data was used to assess adaptive capacity. The adaptive capacity map shown in Figure 6.12 shows that all of the assessed facilities and the majority of block groups in the planning area have high social vulnerability ratings. Based on the SVI data assessed at the block group level, Edenton has particularly high vulnerability within the socio-economic and household characteristics SVI themes. The Town has moderate to high vulnerability within the racial and ethnic minority status theme and housing type and transportation theme.

As the town explores options for resilience it should consider the high level of social vulnerability and the barriers that exist for residents. The Town should consider support for older populations, people living with disabilities, and financial barriers to mitigation and recovery.

7 RISK ASSESSMENT

7.1 OVERVIEW

After evaluating vulnerability, a risk assessment was conducted to determine the value of assets exposed to potential loss. Understanding the potential for financial loss when hazards occur helps determine what levels of risk call for immediate action.

Assets were summarized by type, with critical assets further divided into government facilities, utilities, hospital, schools, and community facilities. Values at risk were estimated for historic sites and churches, but historic districts were not evaluated separately because they contain most of the historic sites and many other identified assets, and cemeteries were not evaluated because they have an intrinsic cultural and historical value but no structure value at risk of damage. Socially vulnerable populations were divided into redevelopment areas and support facilities.

For all structure-based assets, values were derived from North Carolina Emergency Management's (NCEM) iRisk database building inventory and Chowan County GIS parcel data. In these cases, the asset value reflects only the structure value and does not account for the potential cost of service interruptions, temporary service, relocation, and other costs that could be incurred if an asset were damaged by a hazard event. Similarly, for vulnerable populations, the values here do not account for displacement, life safety, and the mental health costs associated with hazard impacts.

For parks and wetlands, values were based on a per acre cost according to methodology used in FEMA's Benefit-Cost Analysis tool for calculating ecosystem services benefits.

7.2 RESULTS

The value of assets at risk is summarized in Figure 7.1.

Figure 7.1 – Values at Risk by Asset Type

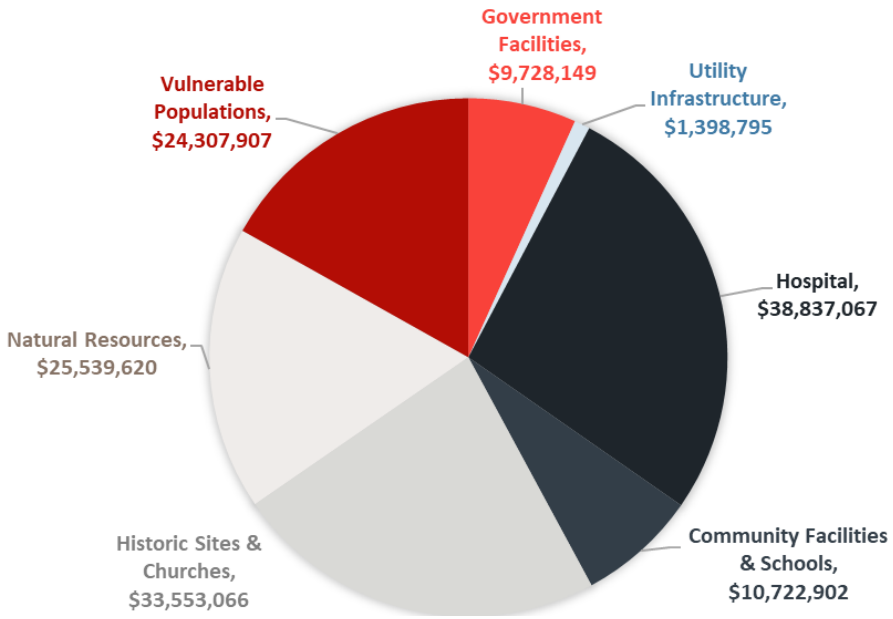


Table 7.1 provides the risk assessment results based on the approximate value of assets, summarized by asset type.

Table 7.1 – Asset Risk Estimation

ASSET	ASSET COUNT	TOTAL ASSET VALUE
Critical Assets		
Government Facilities[1]	6	$9,728,149
Utilities (water)[2]	4	$596,354
Utilities (gas/electric)	2	$350,727
Utilities (communications)	3	$451,714
Hospital[1]	1	$38,837,067
Schools[1]	2	$5,842,444
Community Facilities[1]	2	$4,880,458
Historic and Cultural Assets		
Historic Sites[1]	22	$18,114,271
Churches[1]	21	$15,438,795
Natural Resources		
Parks[3]	155 acres ($15,541/acre)	$2,408,855
Wetlands[3]	2,583 acres ($8,955/acre)	$23,130,765
Socially Vulnerable Populations		
Redevelopment Areas	2 areas; 100 buildings	$8,164,252
Support Facilities	5 facilities; 17 buildings	$16,143,655

[1]Values for these assets were derived from NCEM's iRisk database.
[2]Asset values were based on associate parcel values from Chowan County GIS.
[3]Park and wetland per acre values were based on the methodology in FEMA's Benefit-Cost Analysis tool for calculating ecosystem services benefits for urban green space and coastal wetlands.

8 RESILIENCE PROJECT PORTFOLIO

8.1 OVERVIEW

The project portfolio presented here is the culmination of the resilience strategy planning process, which was designed to help identify and implement tangible actions and policies that will improve resilience in Edenton.

To develop the project portfolio, the key findings from the vulnerability assessment and the review of existing plans and efforts were used to create an initial list of resilience strategies that could address the specific issues highlighted in asset evaluation as well as key takeaways from CAT and public input. The CAT worked together to refine this list and create resilience projects that support the plan objectives and reflect the Edenton's resilience needs.

The Town's planning consultant helped CAT members consider a variety of approaches to building resilience, including policy and regulations, local and regional planning, infrastructure projects, nature-based solutions, hybrid structural and nature-based solutions, capacity building, and education, awareness, and incentive programs. The CAT was also encouraged to consider ways to align projects with the risk assessment findings and the plan goals. The CAT discussed the following factors which were considered throughout the strategy development process to determine whether a potential project would be appropriate and feasible for inclusion in the project portfolio:

- **Comprehensive**: The project portfolio should support several approaches to resilience (nature-based solutions, structural projects, policy, capacity building, etc.).
- **Support Goals**: Projects should reflect plan goals and meet the unique needs of the town and its residents.
- **Capability**: Projects should support existing functions, capabilities, and funding opportunities.
- **Specific**: Projects should be specific and clear.
- **Timeline** for Implementation: The project portfolio should address short-term and long-term needs.
- **Priorities**: Projects should address the most at risk locations, assets, and populations.

The CAT also discussed plan integration and opportunities for resilience projects to complement actions and projects already identified in the Town's network of plans. Strategies from the Town's Greenways and Open Space Plan, the RENA report, and the Chowan County Hurricane Matthew Resilient Redevelopment Plan were considered for inclusion in the resilience project portfolio.

After evaluating a variety of strategies and their feasibility, the CAT consolidated the project list and prioritized the selected projects. Community feedback was sought through a second public workshop to help prioritize projects and ensure the project portfolio met the community's goals.

8.2 RESILIENCE PROJECTS CONSIDERED

Table 8.1 presents a summary of resilience projects that the CAT discussed and considered for inclusion in the project portfolio. These projects were based on the findings of the risk and vulnerability assessment as well as relevant project ideas documented in the RENA and the Hurricane Matthew Resilient Redevelopment Plan.

Table 8.1 – Draft Resilience Projects

DRAFT STRATEGY	RELATED ASSETS	STRATEGY AREA
Update and replace drainage infrastructure in downtown Edenton along Court Street.	Swain Apartments, Chowan Senior Center, historic districts, vulnerable populations	Infrastructure
Conduct maintenance to restore the constructed wetland along Filberts Creek. Undertake design and construction to expand this wetland.	ECU Health Chowan Hospital, Edenton House, wetlands, parks	Nature-Based Solutions
Update and expand bulkheads in known erosion areas, particularly along Water Street.	Roanoke River Lighthouse, Barker House, historic districts, wetlands, parks	Infrastructure
Construct a living shoreline along the waterfront that extends to Sunfish Park and into Queen Anne Creek.	Roanoke River Lighthouse, Barker House, historic districts, wetlands, parks	Nature-Based Solutions
Implement stormwater improvements to address drainage concerns along Robin Lane.	Edenton National Fish Hatchery	Infrastructure
Improve communication and collaboration with North Edenton Community.	Vulnerable populations	Education, Awareness, and Incentives
Promote development of trails and greenways in flood prone unbuilt areas.	Wetlands, parks	Local Policy and Regulations
Inventory the Town's stormwater infrastructure (inlets, pipe size, inverts, type of pipe direction of flow) so there is a complete GIS file of the stormwater system.	Critical assets, historic and cultural assets, vulnerable populations	Education, Awareness, and Incentives
Preserve empty waterfront property as natural open space.	Wetlands, parks	Local Policy and Regulations
Replace the culvert on Filberts Creek.	ECU Health Chowan Hospital, Edenton House, wetlands, parks	Infrastructure
Install tree islands on the bay side of the bulkheads, to reestablish bald cypress trees, which provide aesthetic value and protect against wave action.	Roanoke River Lighthouse, Barker House, historic districts, wetlands, parks	Nature-Based Solutions

8.3 PRIORITIZATION

To begin project prioritization, Edenton used a resilience scorecard developed by WSP that evaluates projects based on resilience criteria that a project should address, co-benefit impacts that a project can potentially provide, and considerations for ease of project implementation. The scorecard evaluates projects across three categories—Effectiveness, Implementation, and Benefits—to determine if one resilience project might be more important, more effective, or more likely to be implemented than another.

- **Effectiveness**: this category considers a project's ability to withstand shocks and stressors, whether it will provide long-term benefits, and its ability to be replicated or expanded.
- **Implementation**: this category considers the feasibility of project implementation, alignment with other town planning initiatives, and potential obstacles.
- **Benefits**: this category assesses the project's ability to provide overall benefits to the town, including quality of life for residents, environmental quality and protection, and economic growth.

The resilience scorecard, including the performance criteria within each category, is detailed in Table 8.2.

Table 8.2 – Resilience Scorecard

	CRITERIA	DESCRIPTION / GUIDING QUESTIONS
Effectiveness	Resilient	Is the project itself able to withstand identified hazards and stressors?
	Redundant	Does the project reduce/avoid service interruptions?
	Sustainable	Does the project provide long-term benefits and minimize future mitigation needs?
	Scalable	Can the project be expanded or duplicated if successful? Does this project enable future project implementation?
	Targeted	Does the project benefit high or moderate vulnerability assets?
Implementation	Feasible	Can the strategy be implemented with existing administrative and technical capabilities?
	Supported	Does the strategy have political and public support?
	Integrated	Does the strategy align with other town planning goals and projects?
Benefits	Cost-Beneficial	Do the benefits of the projects outweigh the costs?
	Social Benefits	Does the strategy increase equity within the Town?
	Economic Benefits	Does the strategy support the local economy?
	Environmental Benefits	Does the strategy protect existing natural systems and resources?

Each resilience project is rated as negative, neutral, or positive for each of the criteria listed in Table 8.2.

- **Negative** (-1 point) = the project opposes the criteria (i.e. costs outweigh benefits, the project contradicts existing plans or policies, there is public or political opposition, etc.)
- **Neutral** (0 points) = the criteria are not relevant to the project, or the pros and cons are balanced
- **Positive** (1 point) = the project meets or provides benefits within the criteria

Points for each the criteria are grouped and totaled for each of the three categories (effectiveness, implementation, and benefits) to provide a summary rating for each category and an overall prioritization score. For example, a resilience project could receive an Effectiveness score between 5 and -5 and an overall resilience score between 12 and -12. Strategies with resilience scores between 9 and 12 are considered high priority strategies, those with scores between 6 and 8 are medium priority, and those with scores of 5 or lower are low priority.

Project scores from the resilience scorecard were compared with public and stakeholder input, received at the final public workshop and through an online project poll, to ensure project prioritization aligned with community preferences. Preliminary prioritization results were presented to the CAT for final consensus.

Results of the resilience scorecard prioritization are presented in Table 8.3 below.

Table 8.3 – Resilience Scorecard Results

ACTION	PRIORITY	TOTAL	EFFECTIVENESS	IMPLEMENTATION	BENEFITS	RESILIENT	REDUNDANT	SUSTAINABLE	SCALABLE	TARGETED	FEASIBLE	SUPPORTED	INTEGRATED	COST-BENEFICIAL	SOCIAL BENEFITS	ECONOMIC BENEFITS	ENVIRONMENTAL BENEFITS
Bulkhead Improvement and Erosion Reduction	Medium	6	3	1	2	0	1	0	1	1	0	1	0	1	0	1	0
Establish Conservation Zones	Medium	8	3	3	2	1	0	1	0	1	1	1	1	1	0	0	1
Construct Living Shorelines	High	9	5	2	2	1	1	1	1	1	0	1	1	0	0	1	1
Court Street Stormwater and Water Quality	Medium	7	3	2	2	0	1	0	1	1	0	1	1	0	1	1	0
Filbert's Creek Restoration	High	10	5	2	3	1	1	1	1	1	0	1	1	1	1	1	0
East Edenton Stormwater Drainage Improvements	Medium	6	4	1	1	0	1	1	1	1	0	1	0	0	1	0	0
Stormwater Infrastructure Inventory	Low	5	2	2	1	0	0	1	1	0	1	1	0	1	0	0	0

In addition to the resilience scorecard, the CAT conducted an informal cost-benefit analysis for each project to support decision-making on project prioritization and implementation. The cost-benefit analysis ratings are provided in the project portfolio and are based on the following criteria from the RCCP Planning Handbook:

	BENEFIT	COST
High	Action would have a significant impact on risk reduction.	Existing funding is not adequate.
Medium	Action would have an impact on risk reduction.	Requires budget reapportionment or amendment.
Low	Long-term benefits are difficult to quantify in the short-term.	Funding available under the existing budget.

Source: RCCP Planning Handbook

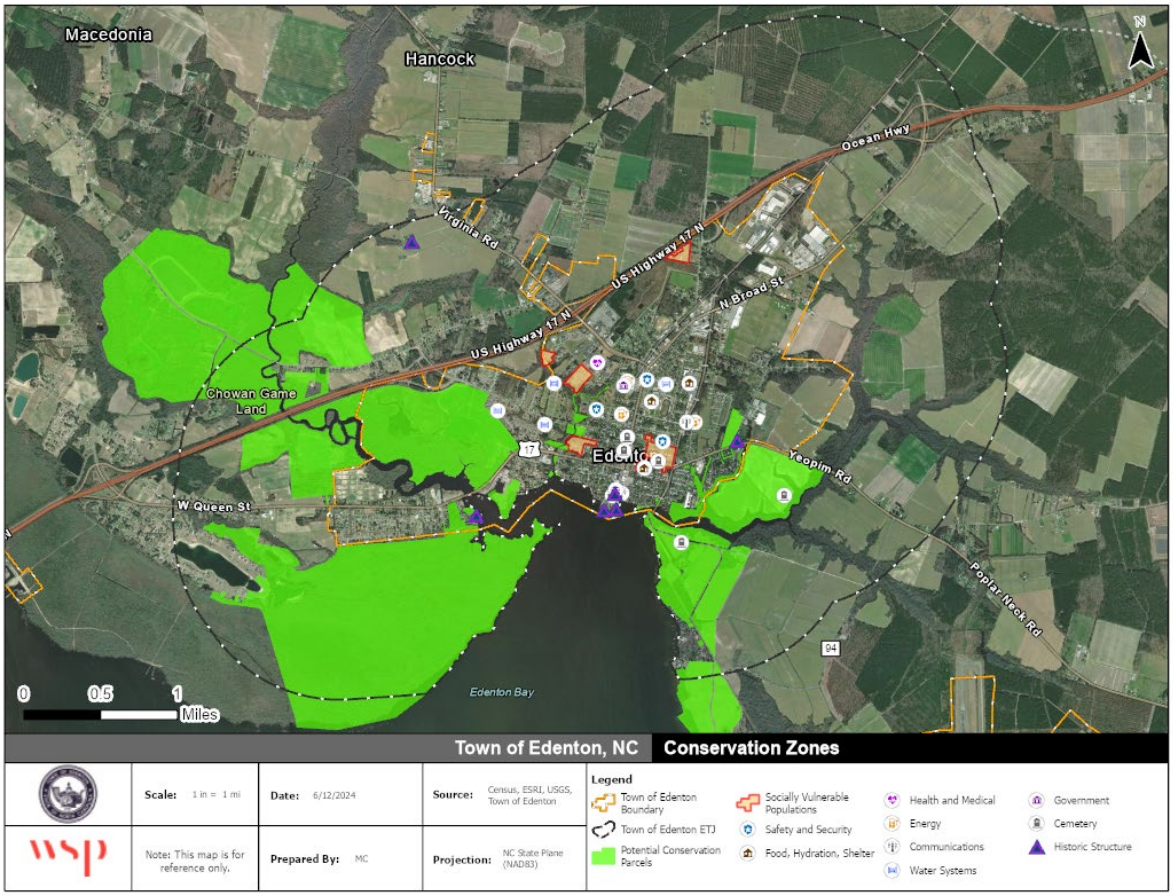
8.4 PROJECT PORTFOLIO

Project Name	Bulkhead Improvement and Erosion Reduction
Project Description	Update and expand bulkheads in known erosion areas along Water Street between Broad Street and Queen Anne Park and install erosion protection measures, possibly including rip rap and/or wetland grasses. As bulkheads are raised, they need carefully selected plantings of wetland grasses on their landward sides. Along Water Street a device for maintaining a photogenic background is called for, such as grid platforms.
Location	Water Street between Broad Street and Queen Anne Park
Source	CAT input, public survey
Scoping Questions	Where should expansions occur? What type of plantings are suitable and where should plantings occur? How and where can bulkheads be integrated with proposed erosion control measures?
Hazard(s) Addressed	Sea Level Rise, Coastal Flooding, Storm Surge, Erosion
Supporting Function	Community character, downtown, historic sites and districts
Type of Solution	Hybrid (infrastructure and nature-based)
Estimated Timeline	3-5 years
Responsible Entity	Town of Edenton, consultant support
Potential Partners	NCDEQ (DCM), USACE, NCEM
Existing Funding	None identified.
Potential Funding Sources	DCM, FEMA BRIC, FEMA HMGP, FEMA Flood Mitigation Assistance Program, USDA Watershed and Flood Prevention Operations Program
Estimated Cost	High – $450,000+/-
Anticipated Benefit	Medium – Bulkhead expansion could provide protection of Water Street and downtown, including historic sites and districts, up to a certain level of service.
Priority Rating	Medium

Project Map(s)

Project Name	Conservation Zones
Project Description	Establish conservation zoning along unbuilt waterfront lots and lots prone to flooding.
Location	Undeveloped waterfront and flood prone properties in Town of Edenton and ETJ
Source	CAT input, public survey
Scoping Questions	How should conservation areas be defined? What types of development regulations should be applied in these areas (e.g. setbacks, cluster development, etc.)?
Hazard(s) Addressed	Sea Level Rise, Riverine & Coastal Flooding, Storm Surge, Erosion
Supporting Function	Natural floodplain functions
Type of Solution	Policy and Regulations
Estimated Timeline	2-3 years
Responsible Entity	Planning Department, Administration, Edenton/Chowan Recreation Department
Potential Partners	Chowan County, Albemarle Regional Council of Government, Conservation Trust of North Carolina, Land Trust Alliance – North Carolina
Existing Funding	Staff time.
Potential Funding Sources	None identified.
Estimated Cost	Low – Conservation zoning could be established during the next land use plan update utilizing staff time.
Anticipated Benefit	Medium – Conservation zoning preserves open space while maintaining development values, which can reduce stormwater runoff, protect natural resources, and limit exposure to known hazard areas. Recreational and natural uses can be encouraged.
Priority Rating	Medium

Project Map(s)



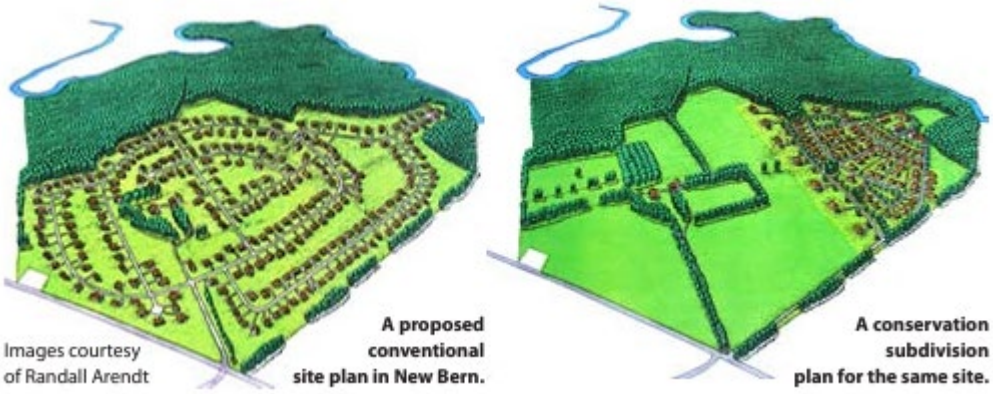


Image Source: Conservation Subdivision Handbook; A Guide for North Carolina Communities in the Use of Conservation Design for Land Use Planning. https://www.ncufc.org/uploads/Conservation_subdivision.pdf

Project Name	Construct Living Shorelines
Project Description	Construct living shorelines along the mouth of Queen Anne Creek and along Hayes Farm shoreline.
Location	Waterfront areas along Edenton Bay and Queen Anne Creek
Source	CAT input
Scoping Questions	What areas should be prioritized for living shorelines?
Hazard(s) Addressed	Sea Level Rise, Riverine & Coastal Flooding, Storm Surge, Erosion
Supporting Function	Community character, downtown, historic sites and districts
Type of Solution	Nature Based Solution
Estimated Timeline	5+ years
Responsible Entity	Planning Department, Administration
Potential Partners	North Carolina Coastal Federation; The Nature Conservancy, NCDEQ/DCM, NCEM
Existing Funding	None identified.
Potential Funding Sources	DCM, North Carolina Coastal Federation, NOAA's National Coastal Resilience Fund, FEMA BRIC, FEMA HMGP
Estimated Cost	High – $1,250,000+/-
Anticipated Benefit	Medium – Living shorelines filter pollutants from stormwater runoff, protect against erosion and flooding, and provide aesthetic and ecosystem benefits.
Priority Rating	High

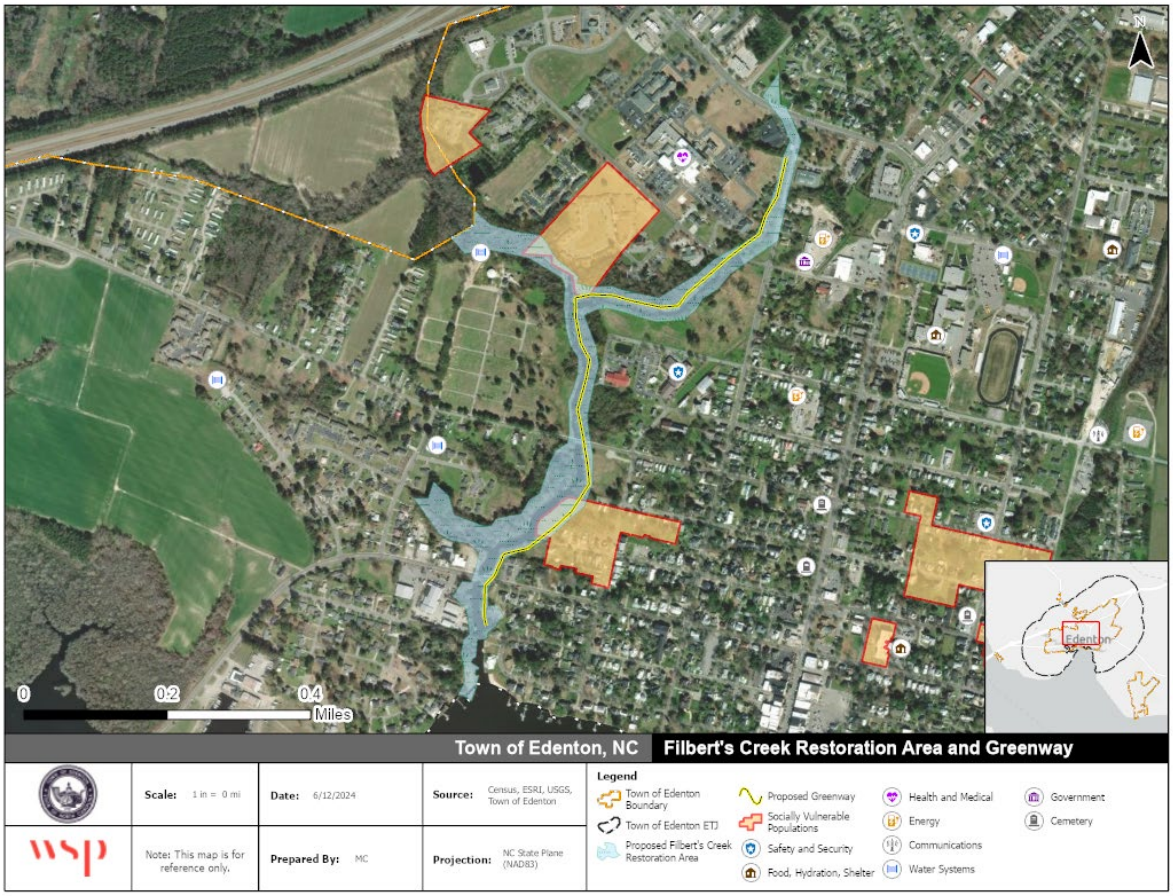
Project Map(s)

Project Name	Court Street Stormwater and Water Quality
Project Description	Update parking lot drainage with an appropriately planted drainage ditch to capture and treat run off from the parking lot behind downtown where runoff collects and causes flooding on Court Street.
Location	Court Street between Church Street and Water Street
Source	CAT input
Scoping Questions	What would be the best design to solve the flooding problem
Hazard(s) Addressed	Stormwater Flooding
Supporting Function	Stormwater, historic sites and districts
Type of Solution	Hybrid Infrastructure and Nature-Based
Estimated Timeline	2-3 years
Responsible Entity	Public Works Department, Administration
Potential Partners	Chowan County, private property owners, NCEM
Existing Funding	None identified.
Potential Funding Sources	Water/Sewer Fund, DCM RCCP, FEMA BRIC, North Carolina Land and Water Fund: Innovative Stormwater Program, Golden LEAF Foundation
Estimated Cost	High – $275,000+
Anticipated Benefit	High – Project would reduce stormwater flooding and improve water quality. Trees in downtown streetscaping could benefit if water is channelled to them.
Priority Rating	Medium

Project Map(s)

Project Name	Filbert's Creek Restoration
Project Description	Design and build a project with the following three major components: 1. Construct a forebay near Virginia Rd and N. Granville St. to catch sediment. 2. Restore/redesign the existing constructed wetland on Filbert's Creek to maintain previous capacity and/or increase capacity. 3. Update the weir and replace the culvert on Filbert's Creek. As part of these improvements, establish the proposed greenway from Virginia Road to West Queen Street.
Location	Filberts Creek from Virginia Road to confluence with Edenton Bay
Source	CAT input, Town staff, Hurricane Matthew Resilient Redevelopment Plan
Scoping Questions	How can the existing wetland be enlarged to retain more water and provide recreational benefit
Hazard(s) Addressed	Riverine & Coastal Flooding, Stormwater Flooding, Storm Surge, Erosion
Supporting Function	Natural floodplain functions, stormwater drainage, transportation, health & safety
Type of Solution	Hybrid (infrastructure and nature-based)
Estimated Timeline	3-5 years; components of this project could be implemented in 1-2 years
Responsible Entity	Edenton Planning and Public Works Departments, Edenton-Chowan Recreation Department
Potential Partners	Soil and Water Conservation Service, DCM (NCDEQ), US Fish & Wildlife Service, NCEM, Carolina Wetlands Association
Existing Funding	Grant pending for maintenance.
Potential Funding Sources	DCM RCCP, North Carolina Land and Water Fund: Innovative Stormwater Program, USDA Watershed and Flood Prevention Operations Program, NPS Rivers, Trails, and Conservation Assistance Program, FEMA BRIC, FEMA HMGP, Golden LEAF Foundation
Estimated Cost	High – $650,000+/-
Anticipated Benefit	Medium – Flood risk reduction, protection of critical hospital infrastructure, improved infiltration, and positive impacts to water quality, supports recreation
Priority Rating	High

Project Map(s)



Project Name	East Edenton Stormwater Drainage Improvements
Project Description	Assess drainage on the east side of town and determine needed improvements to existing infrastructure. Plan and construct a wetland on the downstream end of this area, near the culvert at McMullen Ave between Phillips St and Highway 32.
Location	East Edenton along McMullen Avenue
Source	CAT input
Scoping Questions	An analysis (modeling) of the sub watershed should be performed to determine the exact cause of flooding and appropriate solutions
Hazard(s) Addressed	Stormwater Flooding, Riverine & Coastal Flooding
Supporting Function	Stormwater, transportation
Type of Solution	Hybrid (infrastructure and nature-based)
Estimated Timeline	3-5 years
Responsible Entity	Edenton Public Works, Edenton Planning
Potential Partners	Chowan County, private property owners, NCEM
Existing Funding	None identified.
Potential Funding Sources	DCM RCCP, FEMA BRIC, FEMA HMGP, North Carolina Land and Water Fund: Innovative Stormwater Program, USDA Watershed and Flood Prevention Operations Program, Golden LEAF Foundation
Estimated Cost	High – $475,000+/-
Anticipated Benefit	Medium – Drainage improvements and wetland construction would reduce flood risk and provide ecological and water quality benefits associated with natural floodplain functions.
Priority Rating	Medium

Project Map(s)

Project Name	Stormwater Infrastructure Inventory
Project Description	Conduct data collection to compile a GIS inventory of all stormwater infrastructure in town.
Location	Entire stormwater system throughout Edenton
Source	Town staff, RENA report
Scoping Questions	What infrastructure components should be inventoried? What attribute data should be collected?
Hazard(s) Addressed	Stormwater Flooding
Supporting Function	Stormwater
Type of Solution	Education, Awareness, and Incentives
Estimated Timeline	1-2 years
Responsible Entity	Public Works Department
Potential Partners	Chowan County, NCDEQ, NCAPWA
Existing Funding	None identified.
Potential Funding Sources	DCM, NCDEQ LASSII Grant
Estimated Cost	Medium – $125,000+/-
Anticipated Benefit	Low – A stormwater inventory will provide data needed to inform maintenance and improvements to the stormwater system.
Priority Rating	Low
Project Map(s)	N/A

REFERENCES

- Albemarle Regional Hazard Mitigation Plan. June 2020.
- Bryan, Michael, 2022, "US Social Vulnerability by Census Block Groups", https://doi.org/10.7910/DVN/ARBHPK, Harvard Dataverse, V2, UNF:6:sM/cBUxMDjFYmAdIA/dWBg== [fileUNF]
- Chowan County & Town of Edenton Greenways & Open Space Plan. 2003.
- Chowan County & Town of Edenton Joint Land Use Plan. August 2018.
- Edenton Town Council 2020-2030 Vision Statement.
- FEMA. Benefit-Cost Analysis Sustainment and Enhancements. Standard Economic Value Methodology Report. May 2023.
- FEMA Benefit-Cost Analysis Toolkit Version 6.0 Help.
- Hurricane Matthew Resilient Redevelopment Plan. Chowan County. May 2017.
- North Carolina Climate Risk Assessment and Resilience Plan. 2020.
- NC Division of Coastal Management. Resilient Coastal Communities Program Planning Handbook. August 2023.
- State of North Carolina Hazard Mitigation Plan. 2023.
- Town of Edenton Capital Improvements Plan. 2014-2034.
- Town of Edenton Resilience Evaluation and Needs Assessment Report. 2018.

APPENDIX

A COMMUNITY ACTION TEAM ENGAGEMENT

APPENDIX

CAT Meeting #1 Minutes and Attendance

Town of Edenton, NC RCCP Resilience Strategy
Meeting #1
Thursday, October 19, 2023, 5:30 p.m.
Town Council Chambers, 504 South Broad St

David Stroud and Ranger Ruffins, from WSP, the Town's consultants, met with the Town of Edenton Community Acton Team (CAT), and Kasen Wally from NCDCM to cover the topics outlined in the following agenda:

1 Introductions
2 Project Overview
3 Hazard Stressors
4 Asset Identification
5 Public & Stakeholder Involvement Strategy
6 Review of Existing Planning Efforts
7 Next Steps
8 Discussion

Attendance

In addition to the consulting team, there were nine attendees:

- Dewayne Whealton, Assistant Manager/Planning Director
- Cordell Palmer, Emergency Management Director
- Tyler Newman, PIO
- Roger Coleman, Council Member
- Alta LeCompte, Environmental Task Force
- Susan Inglis, Environmental Task Force
- Stephen Karl, Environmental Task Force
- Kent Pierce, Floodplain Administrator
- David Herlong, Edenton resident

Project Overview

Resilient Coastal Communities Program
David provided and overview of the Resilient Coastal Communities Program (RCCP) noting that the program is a culmination of coastal resilience efforts in NC over several years. After Hurricane Matthew in 2016, the Resilience Evaluation and Needs Assessment (RENA) was piloted – Edenton was a pilot community. Hurricane Florence (2018) was the catalyst for the NC Coastal Community Resilience Guide, followed by Executive order 80 in 2020 with created the RCCP.

Scope
The RCCP program has several program objectives, outlined in the image below. The program is broken down into four overall Phases:

1. Community Engagement & Risk/Vulnerability Assessment
2. Planning, Project Identification, & Prioritization
3. Engineering & Design

4. Project Implementation

For this assessment, the Town of Edenton will focus on Phases 1 and 2 which will produce two deliverables: a Vulnerability Assessment Report and a Project Portfolio. The corresponding steps are outlined on slide 11 in the PowerPoint presentation.

Hazards and Stressors

David reviewed a list of hazards and stressors to be assessed:

- Potential Hazards: sea level rise, flooding, storm surge, shoreline erosion
- Non-Climate Stressors: aging infrastructure, population dynamics, economic shifts, altered drainage patterns, land cover change (redevelopment / new development)

The committee discussed assessing king tides as potential hazard, but it was determined that king tides do not impact the Town. However, it was noted that wind greatly impacts the tides in Edenton.

David noted that in addition to riverine flooding, localized and stormwater flooding would be evaluated. Additionally, WSP will complete a repetitive loss analysis for the Town's Community Rating System (CRS) program. WSP will also work with the CAT to determine areas of erosion that occur in the Town.

When reviewing non-climate stressors the CAT noted that aging and undersized drainage infrastructure often contributes to flooding in Edenton. They also noted that over the years development and fill has occurred on streams and existing water bodies. This has caused flooding to occur throughout the Town.

David also reviewed initial flood hazard mapping which can be seen on slides 15 to 20 in the PowerPoint presentation.

Asset Identification

David reviewed a list of critical assets that will be incorporated into the plan noting that this is not an exhaustive list and more assets can be added. The WSP team will work with the Town to inventory and map these assets. A previous mapping inventory was completed around 5 years ago. WSP will work with the Town to locate a shapefile. Please reach out to the WSP team if there are any assets missing from this list that you would like to include. The following assets will be collected and included in the vulnerability assessment.

Critical Assets

- Roads/Evacuation routes
- Water & sewer lines
- Water/sewer treatment facilities
- Historic and cultural properties, districts, key community resources
- Community government service offices
- Schools
- Health Services
- Public safety or emergency services (police, fire, etc.)

Natural Assets

- Natural areas
- Open space
- Watersheds

Social Vulnerability (CDC SVI data and themes)

It was noted that the northeastern portion of the town is low income and may have higher vulnerability.

Public and Stakeholder Involvement Strategy

WSP proposed four CAT meetings and two public meetings:

- Kickoff Meetings: CAT Meeting 1 & Public Meeting – project kickoff and hazard and asset identification
- CAT Meeting 2 – goal setting and preliminary vulnerability assessment review
- CAT Meeting 3 – finalize vulnerability and brainstorm resilience strategies

- Final Meetings: CAT Meeting 4 & Public Meeting – review draft plan, resilience strategy selection & prioritization

David also discussed additional public outreach which includes an online and hard copy public survey, an informational flyer, and information posted on the Town's website and social media pages. The CAT suggested several places to post hard copies of the survey and informational flyer, including schools, the grocery store, the library, and public housing properties. It was also suggested that a table be set up at the farmers market or grocery store to provide more information about the Vulnerability Assessment and Resilience Strategy.

WSP will work with the PIO officer and provide content for the Town's new website, social media pages, and flyers to be shared around Town. The public survey will also be shared with the CAT to review before sharing with the public.

Additional Stakeholder Involvement
David also reviewed a list of additional stakeholders to involve in the planning process. The list is shown on slide 25 of the presentation and includes a range of organizations, community groups, and churches to target for participation and input. Black churches were suggested as a stakeholder group to reach out to. The CAT was asked to please send the names of specific churches and additional stakeholders.

Stakeholders will be asked to attend public meetings and share information about plan and encourage participation. The CAT was asked to suggest additional stakeholders and provide any available contact information. It was also noted that when the plan is presented to the public it should be explained why the plan is important and how the resilience can impact their lives.

Existing Planning Efforts

David shared a list of existing town and county plans that will be reviewed to ensure an integrated approach to resilience. Slide 27 has a list of plans to be reviewed.

Next Steps and To-dos

WSP will work with the Town to set a date for the next CAT meeting. The Environmental Task force meets on the second Thursday of every month.

Below is a list of follow up items for the Town/CAT and WSP:

Edenton/CAT To-dos

- Send WSP any additional critical assets by **November 3rd**
- Send WSP shapefile of mapped critical assets
- Review public survey and provide edits to WSP by **Friday, October 27th**
- Publicize Vulnerability Assessment/Resilience Strategy and public survey on website, social media, and post hard copies in public places
- Provide names of black churches and additional stakeholders to reach out to
    - Names or contact information

WSP To-dos

- Work with Dewayne to set second CAT meeting based on task force dates
- Work with Dewayne and CAT to schedule first public meeting
- Send CAT the public survey to review
- Send Dewayne and PIO publicity language for the public survey and inform about the Vulnerability Assessment

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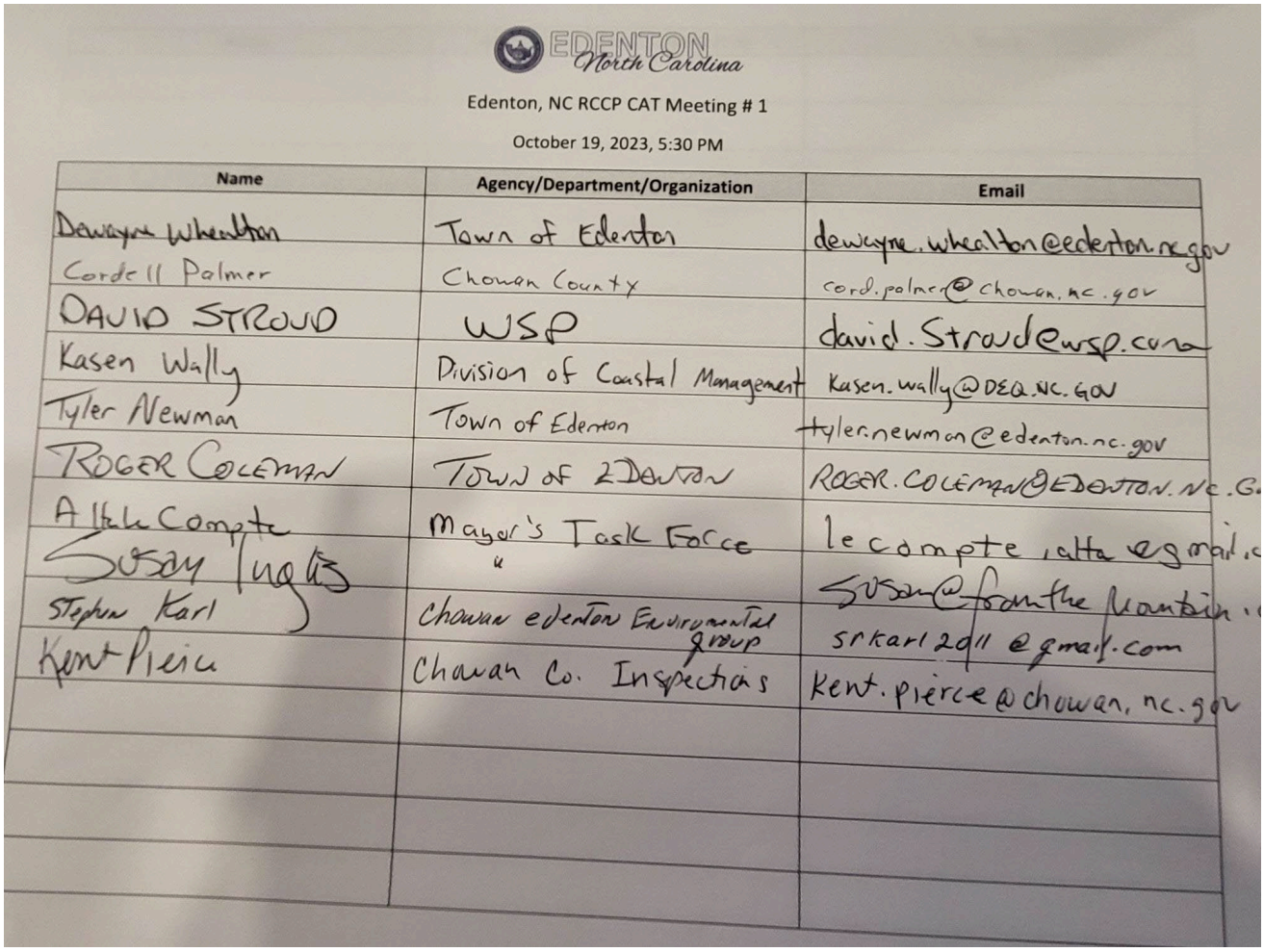

EDENTON North Carolina

Edenton, NC RCCP CAT Meeting # 1

October 19, 2023, 5:30 PM

Name	Agency/Department/Organization	Email
Dewayne Wheelton	Town of Edenton	dewayne.wheelton@edenton.nc.gov
Cordell Palmer	Chowan County	cord.palmer@chowan.nc.gov
DAVID STROUD	WSP	david.Stroud@wsp.com
Kasen Wally	Division of Coastal Management	Kasen.wally@DEQ.NC.GOV
Tyler Newman	Town of Edenton	tyler.newman@edenton.nc.gov
ROGER COLEMAN	TOWN OF EDENTON	ROGER.COLEMAN@EDENTON.NC.G
Alla Compte	Mayor's Task Force	lecompte.alla@gmail.c
Susan Hughes	"	Susan@fromthemountain.
Stephen Karl	Chowan edenton Environmental group	srkarl2011@gmail.com
Kent Pierce	Chowan Co. Inspections	Kent.pierce@chowan.nc.gov

APPENDIX

CAT Meeting #2 Minutes and Attendance

Town of Edenton, NC RCCP Resilience Strategy
Meeting #2
Tuesday, February 27, 2024, 3:30 p.m.
Town Council Chambers, 504 South Broad St

David Stroud, Ranger Ruffins, and Abby Moore, from WSP, the Town's consultants, met with the Town of Edenton Community Acton Team (CAT) to cover the topics outlined in the following agenda:

1. Project Update
2. Vision and Goal Setting
3. Asset Inventory
4. Preliminary Vulnerability Assessment Results
5. Next Steps
6. Discussion

Attendance

In addition to the consulting team, there were seven attendees:

- April Lane, Environmental Task Force
- Dewayne Whealton, Assistant Manager/Planning Director
- Kent Pierce, Floodplain Administrator
- Karen Mastin, Environmental Task Force
- Cordell Palmer, Emergency Management Director
- David Herlong, Environmental Task Force
- Susan Inglis, Environmental Task Force

Project Update

Resilient Coastal Communities Program

David reviewed the two phases of the Resilient Coastal Communities Program (RCCP) and the steps and deliverables associated with each. This process will produce a vulnerability assessment report and a project portfolio. In this meeting, the CAT will be discussing information related to Phase 1, Steps 3, 5, and 6.

David noted that in developing the vulnerability assessment report, we are drawing from the data collection and findings from the 2018 Resilience Evaluation and Needs Assessment (RENA), which is the product of a 2016-2018 Division of Coastal Management (DCM) pilot program to develop a resiliency planning framework for coastal communities. Data and findings gathered from the RENA include historical assets, redevelopment areas, retirement communities, critical assets, and priority flooding hotspots.

The CAT team will meet in early April (this meeting may be held virtually) and again in early May. A final public meeting will also be held in May.

Vision & Goal Setting

David reviewed public feedback from the first public meeting and the public survey, which has 61 responses so far. See slide 9 for a summary of responses.

Slide 9 and the comments from the survey were voiced by a couple of people as being tied into the vision and goals. CAT members added the following priorities for their vision and goals for Edenton:

- Want to be able to handle more water at higher levels
- Less damage to property and the environment in Edenton is key

Existing plans and efforts may provide a starting point for Edenton's vision and goals. CAT members were asked to consider if/how Edenton should build on existing plans such as the RENA, land use plan, regional hazard mitigation plan, Chowan County Resilient Redevelopment Plan, Albemarle Regional Resilience Portfolio, and Edenton's Neighborhood Redevelopment Plans. See slide 10 for a summary of these efforts.

A vision statement is an aspirational, future-oriented statement, and goals are specific, measurable steps to achieve the vision. WSP will draft a vision statement and goals for the CAT to review based on public input and this discussion.

Asset Inventory

The asset inventory includes all categories required by DCM, and was broken down into critical assets, historic & cultural assets, natural infrastructure, and socially vulnerable populations. David reviewed assets identified for each of these categories and asked for CAT input on any missing assets. See slides 14-19 for a summary of identified assets. CAT members contributed the following additional assets:

- Edenton House: an assisted living facility to add to socially vulnerable populations.
- Swain Apartments: retirement community at East Church and Court Street, attached to the senior center, that floods frequently.
- Private utilities: Dominion Power*, Century Link off East King Street, three cell towers on the water tower with infrastructure at ground level, Fybe (new service provider) infrastructure on Freemason Street near the substation. *Note, a specific location for Dominion Power infrastructure was not provided. The WSP team will verify locations with Dewayne.

Preliminary Vulnerability Assessment Results

David reviewed a list of hazards evaluated and stressors that may exacerbate vulnerability to these hazards:

- Potential Hazards: sea level rise, riverine & coastal flooding, stormwater flooding, storm surge and wind-driven tides, shoreline erosion
- Non-Climate Stressors: aging infrastructure, population dynamics, economic shifts, altered drainage patterns, land cover change (redevelopment / new development)

Maps of stormwater flooding areas and erosion hot spots were presented for CAT review. There was a question about the inclusion of Robin Lane; Dewayne confirmed that there is a drainage issue there which threatens West Queen Street, but only floods in major events. David indicated that the hotspot areas could be modified by the CAT/staff to make the areas more refined.

There was a question on the scope of this plan. David clarified that it covers Edenton and the ETJ where the Town may expand in the future, but not the rest of Chowan County.

David presented the methodology for the vulnerability assessment, which is a combination of exposure, sensitivity, and adaptive capacity. Each asset is rated on a scale of 0-3 for each of these categories. Exposure is determined by comparing asset locations to hazard impact areas; it is rated for each hazard and these scores are averaged to produce an overall exposure score. Sensitivity describes the degree to which an asset is cumulatively impacted by hazards. It includes how severely hazards impact an asset, whether similar assets are impacted, and how essential an asset is to community operations.

Criteria for the exposure analysis and the sensitivity analysis are summarized below.

Hazard	Exposure

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	0 - None	1 - Low	2 - Medium	3 - High
Sea Level Rise	No Exposure	Asset in 3 ft extent	Asset in 2 ft extent	Asset in 1 ft extent
Riverine & Coastal Flood	No Exposure	Asset in 0.2% floodplain	Asset in AE / A Zones	Asset in VE / V Zones
Stormwater	No Exposure	Asset within 1 block (600 ft)	Asset within 1/2 block (300 ft)	Asset located along stormwater hotspot
Storm Surge	No Exposure	Asset in Cat 5 surge zone	Asset in Cat 3-4 surge zone	Asset in Cat 1-2 surge zone
Erosion	No Exposure	Asset within 100 ft of hot spot	Asset within 75 ft of hot spot	Asset within 50 ft of hot spot

Sensitivity Scoring Criteria:

Critical Assets

- 1 point if over 66% of that asset type is affected by hazards (or over 50% if there are less than 3 assets of that type)
- 1 point if individual asset is affected by multiple hazards
- 1 point if the individual asset is essential to community operations

Historic & Cultural Resources

- 1 point for community & cultural value
- 1 point if affected by multiple hazards
- 1 point if year built is earlier than 1900

Natural Resources

- low = <25% of asset area is affected by 2' SLR
- medium = 25-50% of asset area is affected by 2' SLR
- high = >50% of asset area is affected by 2' SLR

Socially Vulnerable Populations

- 1 point for social vulnerability
- 1 point if over 50% of that asset type is affected by hazards
- 1 point if individual location is affected by multiple hazards

Examples of exposure and sensitivity scoring were presented for some of the identified critical assets.

Adaptive capacity is a subjective category that describes an asset's ability to adapt or withstand hazard impacts. Factors to consider include if the asset is already protected; if retrofit, relocation, or another alternative is possible or if there are multiple strategies for adaptation; and if another facility could provide temporary service if/when an asset is affected. David described several types of adaptation strategies that the CAT should consider when evaluating an asset's adaptive capacity.

WSP will propose adaptive capacity scoring for the CAT to review.

Next Steps & Discussion

The asset inventory must be finalized to complete the vulnerability assessment. Please provide additional asset information by March 8th.

WSP will then provide a draft vulnerability assessment for CAT review by March 22nd.

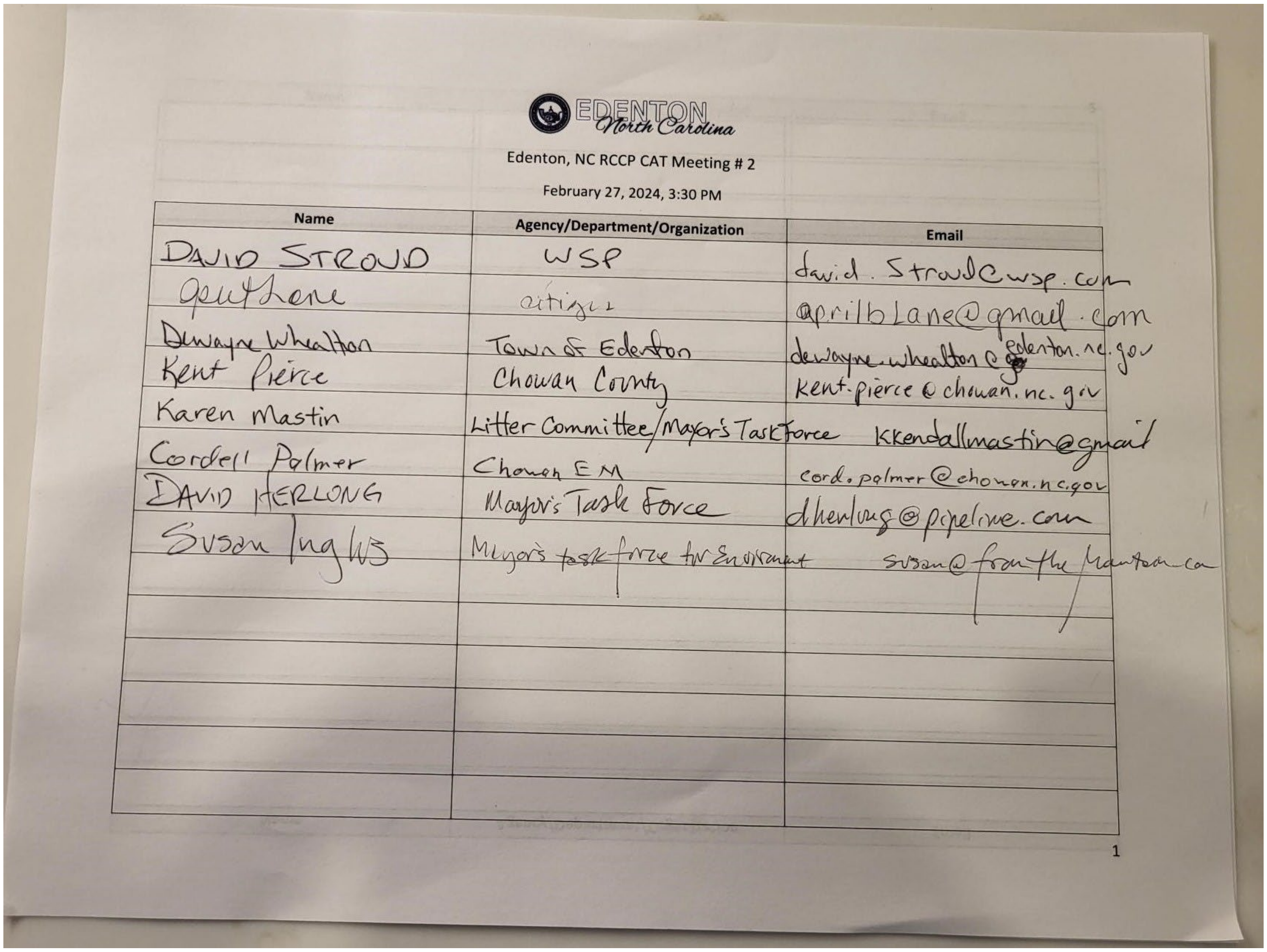
The next committee meeting will be scheduled for early April.

Discussion

Erosion areas were discussed. There is an erosion problem along the waterfront that extends to Sunfish Park and into Queen Anne Creek, under the bridge and east of the bridge. The erosion zone mapping should go in the opposite direction to the Herringbone restaurant. It was noted that projects to address this will affect use of Sunfish Park (including kayak and sunfish launching) and where ferries dock. There is also erosion around bulkheads. One CAT member felt that current bulkheading is problematic and more is needed, including protection on the land side and plantings on the water side.

Drain pipes were discussed. A CAT member recalled someone mentioned pipes under Swain at a recent Council Meeting during the public comment period. If there are drain pipes under Swain that are no longer performing, this should be covered in adaptive capacity. Dewayne mentioned the Town will investigate this location and potential projects.

APPENDIX



EDENTON North Carolina

Edenton, NC RCCP CAT Meeting # 2

February 27, 2024, 3:30 PM

Name	Agency/Department/Organization	Email
DAVID STROUD	WSP	david.stroud@wsp.com
April Lane	citizen	aprilblane@gmail.com
Dewayne Whealton	Town of Edenton	dewayne.whealton@edenton.nc.gov
Kent Pierce	Chowan County	kent.pierce@chowan.nc.gov
Karen Mastin	Litter Committee/Mayor's Task Force	kkendallmastin@gmail
Cordell Palmer	Chowan EM	cord.palmer@chowan.nc.gov
DAVID HERLONG	Mayor's Task Force	dherlong@pipeline.com
Susan Inglis	Mayor's task force for Environment	susan@fromthe[illegible]

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APPENDIX

CAT Meeting #3 Minutes and Attendance

Town of Edenton, NC RCCP Resilience Strategy
Meeting #3
Tuesday, Mary 21, 2024, 3:00 p.m.
Town Council Chambers, 504 South Broad St

David Stroud, Ranger Ruffins, and Abby Moore, from WSP, the Town's consultants, met with the Town of Edenton Community Acton Team (CAT) to cover the topics outlined in the following agenda:

1. Project Update
2. Review Vision and Goals
3. Review Vulnerability Assessment Results
4. Resilience Action Plan
   a. Review and Develop Resilience Actions
5. Next Steps
6. Discussion

Attendance

In addition to the consulting team, there were seven attendees:

- Dewayne Whealton, Assistant Manager/Planning Director
- Tyler Newman, Public Information Officer
- Karen Mastin, Environmental Task Force
- David Herlong, Environmental Task Force
- Susan Inglis, Environmental Task Force
- Stephen Karl, Environmental Task Force

Project Update

Resilient Coastal Communities Program
David reviewed the two phases of the Resilient Coastal Communities Program (RCCP) and the steps and deliverables associated with each. This process will produce a vulnerability assessment report and a project portfolio. In this meeting, the CAT will be discussing the plan's vision and goals and phase 2 deliverables.

A final public meeting will also be held in June followed by the fourth and final CAT meeting.

Vision & Goal Setting

David reviewed public feedback from the first public meeting and the public survey, which has 61 responses so far. See slide 10 for a summary of responses. This feedback was used to develop a vision statement and goals.

A vision statement is an aspirational, future-oriented statement, and goals are specific, measurable steps to achieve the vision. The proposed vision statement and goals area as follows:

Vision Statement: *Edenton is a safe and adaptable Town with a commitment to preparedness and sustainability that ensures all community members live with a sense of stability and peace of mind.*

- **Goal 1:** Safety and Preparedness - Protect people and property from flood risk and prepare for quick and effective flood response to reduce harm and recover quickly.

- **Goal 2:** Natural Asset Protection – Invest in strategies and programs that enhance the community's ability to adapt to flood events while safeguarding the integrity of the natural environment
- **Goal 3:** Preservation and Adaptation – Collaborate with the community to ensure that flood adaptation measures complement the Town's character and accommodate the lifestyle of a waterfront community.

Preliminary Vulnerability Assessment Results

David briefly reviewed a list of the type of assets evaluated and the assessed hazards. He also reminded the committed of the methodology for the vulnerability assessment, which is a combination of exposure, sensitivity, and adaptive capacity. Each asset is rated on a scale of 0-3 for each of these categories. Exposure is determined by comparing asset locations to hazard impact areas; it is rated for each hazard and these scores are averaged to produce an overall exposure score. Sensitivity describes the degree to which an asset is cumulatively impacted by hazards. It includes how severely hazards impact an asset, whether similar assets are impacted, and how essential an asset is to community operations. Adaptive capacity describes an asset's ability to adapt to or withstand hazard impacts. Measures of adaptive capacity include physical elements or conditions that help, or hinder, how an asset avoids or absorbs an impact.

The overall exposure, sensitivity, and adaptive capacity scores are used to determine the cumulative vulnerability of the assessed assets. The equation used to calculate vulnerability and the rating thresholds were provide by DCM guidance and is detailed below.

VULNERABILITY SCORE = (EXPOSURE SCORE + SENSITIVITY SCORE) – ADAPTIVE CAPACITY SCORE

>2 = LOW	3 – 4 = MEDIUM	5 – 6 = HIGH

Examples of the cumulative vulnerability scoring and vulnerability assessment maps were presented for some of the identified critical assets (see slide 16 and 17).

David presented a summary of key vulnerability assessment results for each asset category. He noted that most of the analyzed assets have low overall vulnerability, however, based on the assessment results, historic and cultural resources have the highest vulnerability ratings. David also explained that while most assets were found to have low vulnerability, some have low to moderate adaptive capacity which can indicate one level of potential vulnerability. As summary of the key takeaways are listed below.

Critical Assets

- 20 assets total
  - All have low vulnerability due to low exposure and sensitivity ratings and moderate adaptive capacity ratings
- Low vulnerability assets that are still exposed to flood hazards and have low adaptive capacity may need to be monitored more closely.

Historic and Cultural Resources

  - 60 resources total: high (5 districts, 1 site); 12 medium; 42 low
- Repairs to historic structures can be difficult and expensive to complete.

Natural Resources

- 11 parks total: 1 high; 2 medium; 8 low
- 213 wetlands total: 200 low; 11 medium; 2 high
- 93% of wetlands and 72% of parks have low vulnerability
- Queen Anne Park is the only park with high vulnerability

Socially Vulnerable Populations

- locations total: 5 medium; 2 low
- Based on the SVI data, Edenton has particularly high vulnerability within the socio-economic and household characteristics SVI themes.

Resilience Action Plan

The primary deliverable for Phase 2 is a resilience action plan. David explained that the goal is to develop a suite of actions (6-8), including at least one nature-based solution, that will be prioritized based on CAT and public input. David noted that this meeting should help to narrow down a list of actions/projects to ultimately be presented to the public for further discussion and prioritization input.

David presented potential projects based on feedback from the CAT and public. He also presented a list of relevant projects from the Resilience Evaluation and Needs Assessment (RENA), 2018 and the Chowan County Hurricane Matthew Resilient Redevelopment Plan, 2017. Below, is a list of the discussed projects and notes summarizing CAT comments and discussion. The list of projects can be found on presentation slides 22-24.

Proposed projects based on CAT and Public Feedback

- Update and replace drainage infrastructure at Swain Apartments and Edenton House
  - **One committee member noted that there are drainage issues around Edenton House and the nearby Primetime Retirement Center as they are only one block from each other. They noted that the overall vulnerability score may need to be adjusted from medium to high based on the building location and elevation. The WSP will look into this.**
- Restore and update constructed wetland (Granville) (nature-based solution)
  - **The Town has applied for a maintenance grant from the Soil and Water Conservation District to update the wetland. They will hear back soon. David suggested that the Town consider creating a project that redesigns the wetland to better mange future floods.**
- Updates/expansion of bulkheads in known erosion areas
- Construct a living shoreline along the waterfront that extends to Sunfish Park and into Queen Anne Creek
  - **Many members seemed interested in pursuing a project like this. Waterfront stabilization and increased protective vegetation was noted. The CAT should note any additional locations they would like to implement such projects.**
- Address flood and drainage concerns along Robin Lane
  - **WSP asked if there were other areas that should be considered**
- Existing drainage issue that threatens West Queen Street
  - **The CAT should note any other specific drainage locations that need to be addressed. Town staff can work with public works to suggest specific actions to include.**
- Improve communication and collaboration with North Edenton Community

Proposed projects from the RENA (2018)

- Increase the size of the culvert at McMullen Avenue between Phillips Street and Highway 32
  - **The CAT does not believe that the project has been completed. There was some discussion if it was worth pursuing this as an action as the flooding may have been from Isabell which was a large storm event.**
  - **One CAT member discussed drainage issues along Court St. that has impacted stores, the jail, and courthouse in Town. These may be better location to address drainage.**

- Adopt longer planning horizons for zoning and overall town planning
- Revise policies related to yard waste and commercial/residential trash. Debris ends up in storm drains and impacts their function during flood events.
    - **The CAT said that addressing debris in drainage would be an important issue to address. This has been a regular issue in the Town.**
- Identify and map all culverts in Edenton – create plan for regular drainage maintenance
    - **The CAT liked this idea and agreed that this would be a good project to pursue**.
- Add additional historic resources to national registries to increase funding options for mitigation work.

Proposed projects from the Chowan County Hurricane Matthew Resilient Redevelopment Plan (2017):

- Downtown Edenton Elevations and/or Buyouts: Elevations, buyouts, and/or flood protection of structures that flooded during Hurricane Matthew.
    - **David noted that it may be worth while to focus on flood protection measures for public buildings and facilities.**
- Provide Business Assistance: help small business to protect critical equipment and inventory by providing financial assistance for elevating or relocating critical equipment during hurricane events.
- Pump Station Capacity Increase: pump stations in Edenton – begin Chamber of Commerce and E. Water St/S. Oakum St.
    - **The CAT believes that these improvements have been completed.**
- Stormwater Infrastructure Improvements: Downtown Edenton – Freemason St. south and neighborhood north of high school
    - **Some stormwater improvements have been completed near the high school. There maybe other locations to consider.**
- Filberts Creek Culvert Replacement
    - **Some CAT members were curious about the specific location of the proposed project. The plan references the culverts on Filberts Creek under NC 32 (Virginia Road) and W. Hicks Street west of Granville Street**
    - **The Town should confirm if this has been completed and if this is a project that they would like to pursue.**
- Edenton Hydrologic and Hydraulic Study: Downtown Edenton
    - This has not been completed yet.
    - To address stormwater flooding, David suggested that the Town should consider a stormwater inventory to create a complete GIS layer indicating the location of stormwater inlets, pipe size and invert of the pipe as well as the direction of flow and the type of pipe.

That CAT discussed the following additional projects that they would like to consider:

- Development of trails and greenways in existing and unbuilt areas
    - Review the Edenton Bicycle and Pedestrian Plan, 2022
- Maintain empty waterfront property persevered as natural areas
    - No new development, particularly around the marina
    - Implement conservation zoning
        - Use this policy to maintain open space
        - Develop a GIS map of open space, wetlands and areas that should remain undeveloped.

David asked the CAT to review this list and note any changes, provide specific information about project locations, propose alternative projects or project locations, and note which actions they would like to discuss at the public meeting. WSP asked the committee to note provide comments by **June 6th**. The finalized list will be presented to the public for feedback and to discuss project prioritization.

Next Steps & Discussion

- WSP will work with the Town to set the next public meeting date and final CAT meeting (early June)
    - We will present the vision and goals and discuss the proposed actions and prioritization
- The CAT should review the proposed projects and provide feedback on resilience actions and finalize list by **June 6th**
- The CAT should review the vulnerability assessment results and provide final comments by **May 31st**

APPENDIX

EDENTON North Carolina

Edenton, NC RCCP CAT Meeting # 3

May 21, 2024, 3:00 PM

Name	Agency/Department/Organization	Email
DAVID STROUD	WSP	david.stroud@wsp.com
Dewayne Wheelton	Town of Edenton	dewayne.wheelton@edenton.nc.gov
Tyler Newman	Town of Edenton	tyler.newman@edenton.nc.gov
DAVID AERLONG	MTF	dherlong@pipeline.com
Kam Mastin	MTF	kkendallmastin@gmail
Stephen Karl	MT Force	Skarl2011@gmail.com
Susan Inglis	MTF	susan@fromthefrontsteps.com

APPENDIX

CAT Meeting #4 Minutes and Attendance

Town of Edenton, NC RCCP Resilience Strategy
Meeting #4
Thursday June 20, 2024, 2:00 p.m.
Virtual/Microsoft Teams

David Stroud, Ranger Ruffins, Abby Moore, and Kimmy Hansen from WSP, the Town's consultants, met with the Town of Edenton Community Acton Team (CAT) and Mackenzie Todd and Kasen Wally from NCDCM to cover the topics outlined in the following agenda:

1. Draft Plan Overview
2. Resilience Project Portfolio
3. Next Steps
4. Questions

Attendance

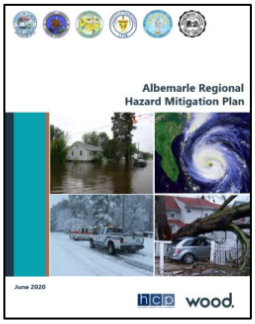
In addition to the consulting team, there were five attendees:

- Dewayne Whealton, Assistant Manager/Planning Director
- Karen Mastin, Environmental Task Force
- David Herlong, Environmental Task Force
- Susan Inglis, Environmental Task Force
- Kent Pierce, Community Action Team with Chowan County

Draft Plan Overview

Abby outlined the different section headings that have been included in the draft plan and briefly described the information that they will provide within the report. The draft plan sections are as follows:

- **Section 1: Introduction**
  - Purpose and Context
  - Project Objectives
  - Planning Process
    - Assisted by the Community Action Team and Public/Stakeholder Engagement
  - Data Collection
- **Section 2: Review of Existing Plans and Efforts**
  - Plan Overview
    - Review of nine relevant plans
  - Summary of Existing efforts
- **Section 3: Vision and Goals**
  - **Vision Statement**: *Edenton is a safe and adaptable Town with a commitment to preparedness and sustainability that ensures all community members live with a sense of stability and peace of mind.*



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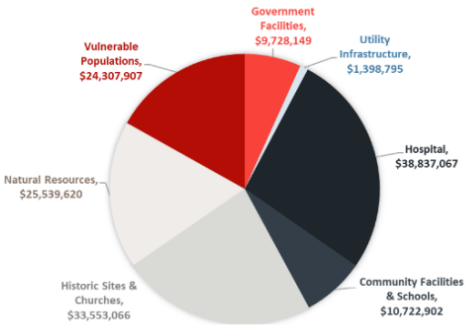
- **Goal 1:** Safety and Preparedness - Protect people and property from flood risk and prepare for quick and effective flood response to reduce harm and recover quickly.
- **Goal 2:** Natural Asset Protection – Invest in strategies and programs that enhance the community's ability to adapt to flood events while safeguarding the integrity of the natural environment.
- **Goal 3:** Preservation and Adaptation – Collaborate with the community to ensure that flood adaptation measures complement the Town's character and accommodate the lifestyle of a waterfront community.

- **Section 4: Asset Inventory**
  - Critical Assets
  - Historic and Cultural Resources
  - Natural Resources
  - Socially Vulnerable Populations
- **Section 5: Hazards and Stressors**
  - Hazards
    - Sea Level Rise
    - Riverine and Coastal Flooding
    - Stormwater Flooding
    - Storm Surge
    - Shoreline Erosion
  - Non-Climate Stressors
    - Aging Infrastructure
    - Housing Availability, Affordability, and Age
    - Population Shifts
    - Economic Issues
    - Land Cover Change
    - Public Health Issues
- **Section 6: Vulnerability Assessment**
  - Exposure Analysis
  - Sensitivity Analysis
  - Adaptive Capacity Analysis
  - Vulnerability Assessment Conclusions
- **Section 7: Risk Assessment**

  This section will include results from the risk assessment and summarize total asset count and value as shown in the graph to the right.
- **Section 8: Resilience Project Portfolio**
  - Resilience Projects Considered
  - Prioritization
  - Project Portfolio



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Resilience Project Portfolio

Abby explained the scorecard criteria and the description/guiding questions for each criteria found below.

	CRITERIA	DESCRIPTION / GUIDING QUESTIONS
Effectiveness	Resilient	Is the project itself able to withstand identified hazards and stressors?
	Redundant	Does the project reduce/avoid service interruptions?
	Sustainable	Does the project provide long-term benefits and minimize future mitigation needs?
	Scalable	Can the project be expanded or duplicated if successful? Does this project enable future project implementation?
	Targeted	Does the project benefit high or moderate vulnerability assets?
Implementation	Feasible	Can the strategy be implemented with existing administrative and technical capabilities?
	Supported	Does the strategy have political and public support?
	Integrated	Does the strategy align with other town planning goals and projects?
Benefits	Cost-Beneficial	Do the benefits of the projects outweigh the costs?
	Social Benefits	Does the strategy increase equity within the Town?
	Economic Benefits	Does the strategy support the local economy?
	Environmental Benefits	Does the strategy protect existing natural systems and resources?

Resilience Scorecard Results

Abby reviewed the scorecard results for the seven resilience projects, noting that the public feedback and poll responses played into the final scores. The breakdown of priority results are as follows:

0-5 → Low

6-8 → Medium

9-10 → High

One CAT member mentioned that the Stormwater Infrastructure Inventory project should be viewed as more important as it was the only project with an overall "low" final score. Abby noted that this project is a capacity building project and as a result was more difficult to score compared to other projects. This project is still important as it will help build the framework for other larger potential resilience projects and will not be as costly to complete. Abby reminded those in attendance that all seven resilience projects are of importance and should still be considered despite their overall scorecard results.

Abby noted that there were only six responses to the Project Poll from the public. Discussion from CAT members showed that there could be more room for improvement on collecting input from other residents living in the Town of Edenton.

Project Details

David briefly reviewed the resilience projects and then presented the project details which are outlined in the example table found on page 4.

When reviewing the different projects, there was ample discussion concerning the Living Shoreline and Bulkhead Improvement projects. CAT members had questions concerning the locations of the Living Shoreline project and mentioned building the living shoreline in front of the bulkheads near Water Street. David mentioned that these should be reviewed as two separate projects and should be considered in different locations to help secure funding sources. He explained that paired together, the hard infrastructure would eventually cause the living shoreline to erode. CAT members mentioned wanting to add extra vegetation and a hardy variety of grass that can help limit erosion in front of the bulkheads on

Water Street. David and Mackenzie responded and clarified that they may need to look for additional sources of funding as combining a living shoreline with a bulkhead is uncommon.

Project Name	**Bulkhead Upgrade and Expansion**
Project Description	Update and expand bulkheads in known erosion areas along Water Street between Broad Street and Queen Anne Park. As bulkheads are raised, they need carefully selected plantings of wetland grasses on their landward sides. Along Water Street a device for maintaining a photogenic background is called for, such as grid platforms.
Location	Water Street between Broad Street and Queen Anne Park
Source	CAT input, public survey
Scoping Questions	Where should expansions occur? What type of plantings are suitable and where should plantings occur? How and where can bulkheads be integrated with proposed living shorelines?
Hazard(s) Addressed	Sea Level Rise, Coastal Flooding, Storm Surge, Erosion
Supporting Function	Community character, downtown, historic sites and districts
Type of Solution	Infrastructure Project
Estimated Timeline	3-5 years
Responsible Entity	Town of Edenton, consultant support
Potential Partners	NCDEQ (DCM), USACE, NCEM
Existing Funding	None.
Potential Funding Sources	DCM, FEMA BRIC, FEMA Hazard Mitigation Grant Program, FEMA Flood Mitigation Assistance Program, USDA Watershed and Flood Prevention Operations Program
Estimated Cost	High – $450,000+/-
Anticipated Benefit	Medium – Bulkhead expansion could provide protection of Water Street and downtown, including historic sites and districts, up to a certain level of service.
Priority Rating	Medium

David mentioned that the Conservation Zones project could utilize the staff time from the Town of Edenton and could involve potential partners such as Albemarle Regional Council of Government or Conservation Trust of North Carolina. This project would help maintain open space and provide protection for the historic properties located near Water Street. Additionally, there is plenty of guidance and resources that can be found on how to define a conservation zone within a municipality.

CAT members noted that the Swain Apartments should not be included in the Court Street Stormwater Improvement project as they are flooded from a different source. The consulting team made note of these changes and will update the draft report.

Next Steps & Discussion

- Mackenzie mentioned that there may be potential for DCM to open phase 3 and 4 funding applications in the fall of 2024 and that they will be in touch with Dewayne.
- Moving forward it is expected of the committee members to help format and provide feedback on the project details with town staff of Edenton.
- The CAT should review the draft report and provide final comments by **June 25th**.
- This project is due to DCM by **June 30th**.

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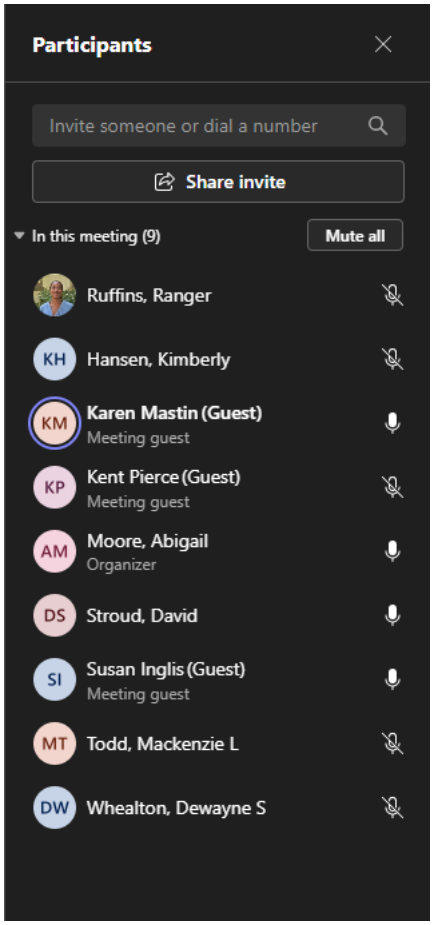
Participants
Invite someone or dial a number
Share invite
In this meeting (9)
Mute all
Ruffins, Ranger
KH
Hansen, Kimberly
KM
Karen Mastin (Guest)
Meeting guest
KP
Kent Pierce (Guest)
Meeting guest
AM
Moore, Abigail
Organizer
DS
Stroud, David
SI
Susan Inglis (Guest)
Meeting guest
MT
Todd, Mackenzie L
DW
Whealton, Dewayne S

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B PUBLIC AND STAKEHOLDER ENGAGEMENT

APPENDIX

Public Workshop #1 Meeting Notes

Town of Edenton, NC RCCP Resilience Strategy
Public Meeting #1
Tuesday, January 16, 2024, 5:00 p.m.
Shepard-Pruden Memorial Library, 106 West Water Street

David Stroud, from WSP, the Town's consultants, facilitated the first public meeting for the Resilient Coastal Communities Program (RCCP) and supported by Dewayne Whealton the Assistant Town Manager along with Tyler Newman the Edenton Public Information Officer. Makenzie Todd and Kasen Wally from the North Carolina Division of Coastal Management (DCM) were in attendance as staff supporting the RCCP. The agenda included the following topics:

1. Introductions
2. Project Overview
3. Hazard & Stressors
4. Asset Identification
5. Ways to Stay Involved
6. Questions and Discussion

Attendance

In addition to the consultant, the Town of Edenton Staff, and the Staff from DCM there were thirteen citizens in attendance.

Project Overview

Resilient Coastal Communities Program

David provided and overview of the Resilient Coastal Communities Program (RCCP) noting that the program is a culmination of coastal resilience efforts in NC over several years. After Hurricane Matthew in 2016, the Resilience Evaluation and Needs Assessment (RENA) was piloted – Edenton was a pilot community. Hurricane Florence (2018) was the catalyst for the NC Coastal Community Resilience Guide, followed by Executive order 80 in 2020 with created the RCCP.

Scope

The RCCP program has several program objectives, outlined in the image below. The program is broken down into four overall Phases:

1. Community Engagement & Risk/Vulnerability Assessment
2. Planning, Project Identification, & Prioritization
3. Engineering & Design
4. Project Implementation

For this assessment, the Town of Edenton will focus on Phases 1 and 2 which will produce two deliverables: a Vulnerability Assessment Report and a Project Portfolio. The corresponding steps are outlined on slide 9 in the PowerPoint presentation.

Hazards and Stressors

David reviewed a number of maps showing the Special Flood Hazard Area (SFHA), sea-level rise and coastal storm surge. David then highlighted a list of hazards and stressors to be assessed:

- Potential Hazards: sea level rise, flooding, storm surge, shoreline erosion, and wind-driven tidal flooding.
- Non-Climate Stressors: aging infrastructure, population dynamics, economic shifts, altered drainage patterns, land cover change (redevelopment / new development)

The members of the public discussed several areas of flooding throughout the Town from a stormwater or urban/pluvial flooding perspective where a drainage system cannot handle heavy rain in a short period of time and tidal flooding and/ or wind driven tides. During an exercise to identify areas of flooding concerns, the following areas were provided.

- ✓ Court Street (South of Queen Street and North of King Street) Between the jail and courthouse
- ✓ Parker Road area
- ✓ The area of Cabarrus Street and Johnston Street
- ✓ Near the Freeze Ice Cream Shop and Queen Street
- ✓ Dillard Avenue off of Paradise Road
- ✓ Court Street and the Senior Center (nearby train track may be acting as levee)
- ✓ Granville Street and Water Street
- ✓ Queen Street and Broad Street
- ✓ Gale Street and Broad Street
- ✓ Pembroke Circle
- ✓ Intersection of Court Street and East Eden Street (covered stream under parking lot)
- ✓ The area of Stratford Road and Hawthorn Road
- ✓ East Queen Street and Wood Street
- ✓ Junction of North Broad Street and Coke Avenue (between Colony Tire and Dollar General)
- ✓ East Water Street

There was a tremendous amount of discussion around flooding issues and areas throughout the town. An existing constructed critical wetland in the aera of Virginia Avenue, West Hicks Street, and Granville Street has filled in with sedimentation over the years and has overgrown vegetation. Because the wetland is not operating properly there are impacts to surrounding homes, medical offices, county offices and the hospital. The Town has applied for a grant to remove the sedimentation and overgrown vegetation to allow better flow.

It was discussed that for project design and development, any work should take into account the entire watershed as you have to understand the impacts from upstream and with any stormwater project that might be proposed, it must consider both water quantity and quality.

David asked members of the public what the biggest flooding risk impacting Edenton is. The first response was storm surge, and many agreed with that assessment, but others thought that excessive rainfall with inadequate drainage was the biggest threat.

Asset Identification

David reviewed a list of critical assets that Town staff identified as the most important assets to be protected. A list of the identified assets is in the table below. Critical assets can be buildings, roads, utilities, etc., natural areas such as wetlands, forest, parks and open space, social vulnerability such as underserved or disadvantaged populations, etc.

David asked member of the public what other critical assets were important to protect. There were comments about all historical buildings need to be protected and others thought wetlands and natural areas were important.

Map ID	Facility	Address	Asset type
0	Edenton Police Department	301 N. Oakum Street	Safety and Security
1	Chowan County Public Safety Center	305 W. Freemason Street	Safety and Security
2	Edenton Public Works Department	118 W. Hicks Street	Government
3	Edenton Electric Department	107 W. Freemason Street	Energy
4	Edenton Fire Department	704 N. Broad Street	Safety and Security
5	Water Tower	304 Park Avenue	Water Systems
6	Shepard-Pruden Memorial Library	106 W. Water Street	Food, Hydration, Shelter
7	John A Holmes High School	600 Woodard Street	Food, Hydration, Shelter
8	Edenton Primetime Retirement Center	106 Mark Dr.	Food, Hydration, Shelter
9	Chowan River Rehabilitation & Nursing Center	1341 Paradise Road	Food, Hydration, Shelter
10	Chowan Senior Center	101 Court Street	Food, Hydration, Shelter
11	ECU Health Chowan Hospital	211 Virginia Road	Health and Medical
12	Town of Edenton Municipal Offices	400 S. Broad Street	Government
13	Substation	227 E. Freemason Street	Energy
14	College of the Albemarle/Temporary High School	824 N. Oakum	Food, Hydration, Shelter

Plan Vision and Goals

David mentioned that 41 survey responses have already been received which is considered a good response rate so far. David then asked members of the public (instead of referring to resilience or being more resilient) "what would it mean to you to be protected from flooding." Several of those responses included.

- ✓ Safety for vulnerable populations
- ✓ Safety and less loss
- ✓ Safety
- ✓ Sustainability
- ✓ Longevity
- ✓ Peace of mind
- ✓ Ability to quickly recover
- ✓ Less cleanup
- ✓ Avoid damages (structure, contents, and landscaping)
- ✓ No insurance claims
- ✓ Avoid evacuation
- ✓ Safety for all residents
- ✓ Keep the character of the town intact
- ✓ Water will not damage my property or my neighbourhood

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Stay Involved

David indicated how the public could stay involved including the Town's flooding webpage for RCCP, the public survey (found HERE or the QR code) along with attending upcoming CAT meetings (see webpage for dates and locations).

The meeting ended at 6:25 pm.

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EDENTON North Carolina

Edenton, NC Resilient Coastal Communities Program (RCCP) Public Meeting #1

January 16, 2024, 5:30 PM

Name	Agency/Organization/Affiliation	Email
DAVID Stroud	WSP	david.straud@wsp.com
Vernon Fuerston	Chowan Herald	vfuerston@apgenc.com
Caroline Burden	CITIZEN	carolinsblairburden@gmail.com
Danny Burden	CITIZEN	dannyjordanburden@gmail.com
Kasen Wally	DCM	Kasen.Wally@DEQ.NC.GOV
Mackenzie Todd	DCM	Mackenzie.Todd@DEQ.NC.GOV
Larry McLaughlin	Chowan County Commissioner	laurence.mcl@gmail.com
RICHARD HEISER	CITIZEN	rheiser453@gmail.com
Dewayne Wheatton	Town of Edenton	dewayne.wheatton@edenton.nc.gov
DAVID HERLONG	Citizen	dherlong@pipeline.com
CYNTHIA HERLONG	Citizen	cynthia74758@gmail.com
Tyler Newman	Town of Edenton	tyler.newman@edenton.nc.gov
Rick Masters	Citizen	rmasters76@comcast.net
Susan Inglis	citizen (task force)	susan@fromthefountain

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Name	Agency/Organization/Affiliation	Email
Ellen Colodney	Citizen	Ellen@wetlandplantsinc.com
Trish Gregory Rand	Mayor's Taskforce for Env.	trishrand@icloud.com
Stephen/Colleen Karl	Chowan Edenton Environmental group	srkarl2011@gmail.com
Karen Martin	" "	KKendallmastin@gmail.com

APPENDIX

Outreach for Public Workshop #1

APPENDIX

Stakeholder Invitation to Public Workshop #1

Town of Edenton

400 SOUTH BROAD STREET
P.O. BOX 300
EDENTON, NC 27932

The Town of Edenton is developing a Resilience Strategy as part of the Resilient Coastal Communities Program (RCCP). RCCP is overseen by the Division of Costal Management (DCM) and is the culmination of coastal resilience efforts in North Carolina over the last several years. The Resilience Strategy will evaluate current and future costal flood risks and vulnerabilities and identify ways to adapt and become more resilient to flooding.

To ensure a more holistic process and a comprehensive resilience strategy, the Town of Edenton wants to ensure the assessment is developed under the guidance of a range of multi-disciplinary stakeholders and community members.

Our objective in reaching out is to coordinate with those who may bring additional information to the planning process regarding flood risks and vulnerability issues within Edenton. We think your input throughout the planning process would greatly enrich the outcome of the plan.

We'd like to invite you to the first public meeting which will be held on **January 16th** at the **Shepard-Pruden Memorial Library** in the upstairs conference room from **5:00 – 6:30PM**. Please visit the Edenton RCCP Website for more details.

We have also created a survey to better understand flood risks and adaptation needs. You can fill out the survey HERE, or click the link to share with your community!

If you have any questions or would like to further discuss ways to get involved please reach out to myself or the Town's consultant, David Stroud at david.stroud@wsp.com.

Additional Resilience Strategy and RCCP Details:

Through a multi-phased process, RCCP helps communities build long term resilience by supporting analysis planning that helps communities identify projects that address their unique needs.

Edenton has been selected for Phase 1: Community Engagement & Risk/Vulnerability Assessment and Phase 2: Planning, Project Identification, & Prioritization. The main deliverable of this effort is called The Resilience Strategy, which includes two major components:

- **Vulnerability Assessment Report:** Details the quantitative and qualitative assessment(s) performed, which will evaluate the vulnerability of critical assets, natural infrastructure, and vulnerable populations to several hazards, including flooding (rainfall, tidal and riverine), storm surge, sea level rise, and other locally relevant hazards such as wind and erosion.
- **Project Portfolio:** Develop a portfolio of well-planned and prioritized solutions to address risks. This will include combination of structural (i.e., infrastructure) and nonstructural (i.e., policy) approaches, and at least one natural or nature-based component.

Sincerely,

Dewayne Whealton
Assistant Town Manager
dewayne.whealton@edenton.nc.gov

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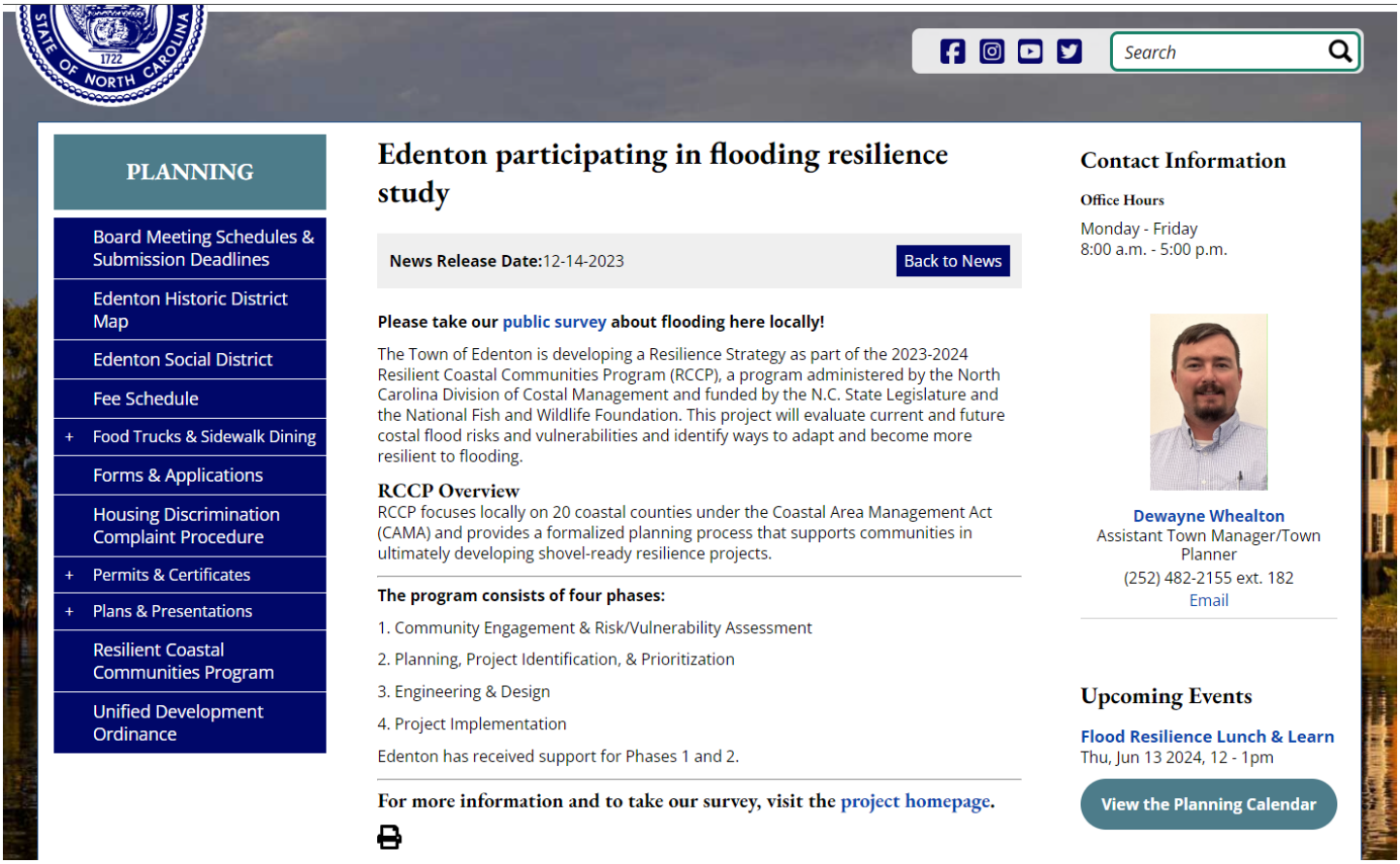
General Outreach Efforts



Search

PLANNING

- Board Meeting Schedules & Submission Deadlines
- Edenton Historic District Map
- Edenton Social District
- Fee Schedule
- \+ Food Trucks & Sidewalk Dining
- Forms & Applications
- Housing Discrimination Complaint Procedure
- \+ Permits & Certificates
- \+ Plans & Presentations
- Resilient Coastal Communities Program
- Unified Development Ordinance

Edenton participating in flooding resilience study

News Release Date: 12-14-2023 Back to News

Please take our public survey about flooding here locally!

The Town of Edenton is developing a Resilience Strategy as part of the 2023-2024 Resilient Coastal Communities Program (RCCP), a program administered by the North Carolina Division of Costal Management and funded by the N.C. State Legislature and the National Fish and Wildlife Foundation. This project will evaluate current and future costal flood risks and vulnerabilities and identify ways to adapt and become more resilient to flooding.

RCCP Overview

RCCP focuses locally on 20 coastal counties under the Coastal Area Management Act (CAMA) and provides a formalized planning process that supports communities in ultimately developing shovel-ready resilience projects.

The program consists of four phases:

1. Community Engagement & Risk/Vulnerability Assessment
2. Planning, Project Identification, & Prioritization
3. Engineering & Design
4. Project Implementation

Edenton has received support for Phases 1 and 2.

For more information and to take our survey, visit the project homepage.

Contact Information

Office Hours

Monday - Friday
8:00 a.m. - 5:00 p.m.

Dewayne Whealton
Assistant Town Manager/Town Planner
(252) 482-2155 ext. 182
Email

Upcoming Events

Flood Resilience Lunch & Learn
Thu, Jun 13 2024, 12 - 1pm

View the Planning Calendar

APPENDIX

The Town of Edenton is developing a Resilience Strategy as part of the Resilient Coastal Communities Program (RCCP), a program administered by the North Carolina Division of Costal Management and funded by the N.C. State Legislature and the National Fish and Wildlife Foundation. This project will evaluate current and future costal flood risks and vulnerabilities and identify ways to adapt and become more resilient to flooding.

What Is a Resilience Strategy?

Resilience can be defined as increasing a *community's ability to rebound, positively adapt to, or thrive amidst changing conditions or challenges—including disasters and climate change—and maintain quality of life, healthy growth, durable systems, and conservation of resources for present and future generations.*

A Resilience Strategy includes two major components:

Vulnerability Assessment: Helps a community to determine which critical assets, natural infrastructure, and vulnerable populations are likely to be impacted by current and future coastal flood hazards.

Project Portfolio: Based on the results of the vulnerability assessment, the portfolio outlines a comprehensive set of resilience projects/actions developed to help the community address and adapt to short – and long-term hazards.

Why is it Important to Me?

Citizen and stakeholder input are important to this planning process, so that the assessment reflects the challenges the community faces and the project portfolio includes solutions best suited to our local needs.

A Community Action Team (CAT) of Town staff and local stakeholders has been formed to guide the planning process. Your input will help the CAT to define goals and objectives for a resilient Edenton and identify critical assets, coastal risks, and opportunities for adaptation.

How Can I Participate?

Respond to the survey. Use the **QR code** below to respond to the public survey and help the planning committee understand coastal flood risks and adaptation needs. The survey should only take about five minutes to complete. Respond ASAP to ensure your input is captured!

Attend a public workshop. Two public workshops will be held throughout the planning process to provide updates and gather feedback and input to be incorporated into the assessment. Keep an eye out for meeting dates and announcements about how to join the workshops.

Review the Draft Plan. Toward the end of the planning process a draft Vulnerability Assessment report will be posted online for you to review. Keep an eye out for announcements and ways to provide feedback.

Which Hazards are Included?

The Vulnerability Assessment will evaluate several costal hazards including sea level rise, flooding, storm surge, and shoreline erosion.

Send us information or comments:

If you have additional information to share for inclusion in the Vulnerability Assessment or Project Portfolio, please contact the Town of Edenton's Assistant Town Manager at **dewayne.whealton@edenton.nc.gov** or the Town's planning consultant from WSP at: **david.stroud@wsp.com**.

APPENDIX

Public Workshop #2 Meeting Notes, Attendance, and Photos

Town of Edenton, NC RCCP Resilience Strategy
Public Workshop #2 – Flood Resilience Lunch & Learn
Thursday, June 13, 2024, 12:00 p.m.
Shepard-Pruden Memorial Library, 106 West Water Street

David Stroud, from WSP, the Town's consultants, facilitated the second public meeting for the Resilient Coastal Communities Program (RCCP) and supported by Dewayne Whealton the Assistant Town Manager along with Tyler Newman the Edenton Public Information Officer. Kimmy Hansen was also in attendance as supporting staff from WSP's consultant team. The agenda included the following topics:

1. Introductions
2. Project Overview
3. Potential Resilience Projects
4. Ways to Stay Involved
5. Questions and Discussion

Attendance

In addition to the consultants and the Town of Edenton staff, there were ten citizens in attendance.

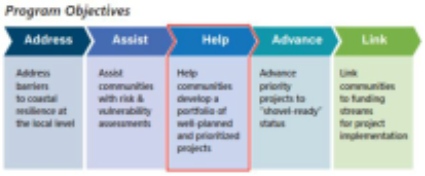
Project Overview

Resilient Coastal Communities Program

David provided an overview of the Resilient Coastal Communities Program (RCCP) noting that the program is a culmination of coastal resilience efforts in NC over several years. After Hurricane Matthew in 2016, the Resilience Evaluation and Needs Assessment (RENA) was piloted – Edenton was a pilot community. Hurricane Florence (2018) was the catalyst for the NC Coastal Community Resilience Guide, followed by Executive order 80 in 2020 which created the RCCP.

Scope

The RCCP program has several program objectives, outlined in the image below. David described that the current objective of the assessment is to help the Town of Edenton develop a portfolio of well-planned and prioritized projects.



The program broken down into four overall Phases:

1. Community Engagement & Risk/Vulnerability Assessment
2. Planning, Project Identification, & Prioritization
3. Engineering & Design
4. Project Implementation

For this assessment, the Town of Edenton will focus on Phases 1 and 2 which will produce two deliverables: a Vulnerability Assessment Report and a Project Portfolio. The corresponding steps are outlined on slide 9 in the PowerPoint presentation. David explained that this assessment is currently in Phase 2.

Potential Resilience Projects

David reviewed seven different potential resilience projects that could be implemented by the Town of Edenton. Each potential project was supported with project details, definitions, maps, and photos to help represent the impact that each project may have in the community if chosen. David also reminded those in attendance that these projects have not yet been designed but are ideas that could potentially move forward to the design process.

The potential resilience projects were categorized into three groups:

1. Stormwater and Shoreline Erosion
2. Stormwater and Water Quality
3. Stormwater and Storage Capacity

Update and Expand Bulkheads in Known Erosion Areas
Project details include:

- Build and expand existing bulkheads in areas that are prone to erosion.
- Carefully select plants and wetland grasses on their landward sides.
- Construct photogenic bulkheads, such as grid platforms, that can be used along Water Street.

Conservation Zones
David defined conservation zones as a method to protecting public open space and natural wildlife by limiting development and encouraging uses such as fishing, forestry, or forestry preserves. With this potential project, the Town of Edenton could create conservation overlay districts that could potentially be placed on unbuilt waterfront lots that are prone to flooding.

Construct Living Shorelines
Project details include:

- Shoreline would potentially be constructed along Water Street and into Queen Anne Creek.
- Additional living shorelines could be placed near Hollowell Park, which may be used as a wetland with a raised pier for fishing.

David explained that living shorelines can help improve water quality, provide habitat for wildlife, increase biodiversity, and are more resilient against storms.

Update Drainage Infrastructure Near Court Street
Project details include:

- Drainage infrastructure consists of a network of structures that are designed to manage and control storm water runoff and flood water.
- The goal of this project would be focused on capturing and treating stormwater runoff from the parking lot downtown that creates flooding on Court Street.

David mentioned that this project would potentially help alleviate flooding near senior residents who live in Swain Apartments and the Edenton House.

Restore Filbert's Creek Constructed Wetland
Project details include:

- Build a forebay near Virginia Rd and N. Granville Street to catch sediment.
- Restore existing wetland.
- Update weir and replace culvert.

- Establish greenway along creek.

East Edenton Stormwater Drainage Improvement
Project details include:

- Assess drainage on the east side of town and determine the needed improvements to existing infrastructure.
- Plan and construct a wetland on the downstream end near the culvert at McMullen Ave between Phillips Street and Highway 32.

Pursue Inventory of the Town's Stormwater System
Project details include:

- Create a comprehensive inventory of all stormwater assets and gather data on their condition and performance.
- Utilize GIS to map stormwater inventory.
- This project will allow the Town of Edenton to understand which structures are obsolete or in need of maintenance or improvement.

There was a tremendous amount of discussion around the potential resilience projects and the impact they may have on the Town of Edenton. David asked members of the public what potential resilience project felt the most important to limiting the flooding risk impacting Edenton. The first response was repairing the bulkheads as this area near Water Street is protecting a lot of historic town assets and has been eroding over time. Many agreed with that assessment, but others mentioned the living shoreline as a potential project as it may help alleviate some of the flooding stressors near Water Street and the shoreline extending into Queen Anne's Creek.

Others described their concerns with the inadequate drainage that they have noticed in their neighborhoods, and many have seen culverts and ditches overflow during rain events. This problem brought interest in the Town pursuing a comprehensive inventory of their stormwater system. David explained that this potential project could help the Town of Edenton staff know the exact details of the stormwater system and make improvements over time as some of the culverts and drainage pipes may be outdated or undersized.

Additional questions were asked concerning the timeline of applying for funding that would support these projects. David explained that applications for DCM won't be due until May of 2025 and that for now the community should look further into the details of these seven potential projects and decide which ones they would want to submit for funding. Dewayne mentioned looking for other potential avenues of grant funding that could help pay for some of the smaller projects.

Stay Involved

David indicated how the public could stay involved including the Town's flooding webpage for RCCP, the public survey (found HERE or the QR code) along with attending upcoming CAT meetings (see webpage for dates and locations).

The workshop ended at 1:04 pm.

APPENDIX

EDENTON North Carolina

Edenton, NC RCCP Public Workshop #2 – Flood Resilience Lunch & Learn

June 13, 2024, 12 PM

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Dewayne Wheaton	Town of Edenton	dewayne.wheaton@edenton.nc.gov
DAVID STROUD	WSP	david.straub@wsp.com
Kimmy Hansen	WSP	Kimberly.Hansen@wsp.com
Karen Mastin	MTF (Mayor's Task Force)	kkendallmastin@gmail.com
LORINN CURTIN	North Edenton Resident	imlawoman@hotmail
DAVE MORGAN	Edenton Resident	DMORGAN23464@gmail
Vernon Fuccton	Chowan Herald	vfuccton@apgenc.com
Flint Harding	Resident	flint111@msn.com
DAVID HERLONG	MTF CAT	dherlong@pipeline.com
Alta Le Compte	MTF	lecompte.alta@gmail.com
Pat Grother	Mill Village	rowerpat@aol.com
JUSTIN HOOTEN	RESIDENT	hooterdawg77@gmail.com
Tyler Newman	Edenton PIO	tyler.newman@edenton.nc.gov
Stephen Karl	MTF/CEEG	srkarl2011@gmail.com

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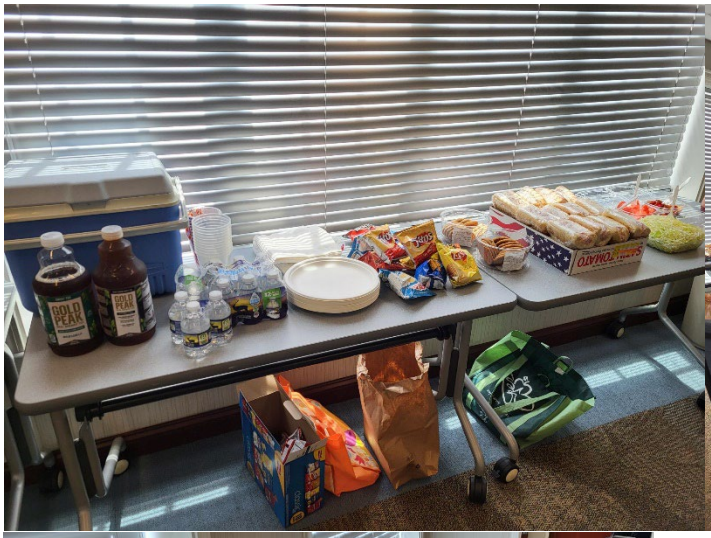
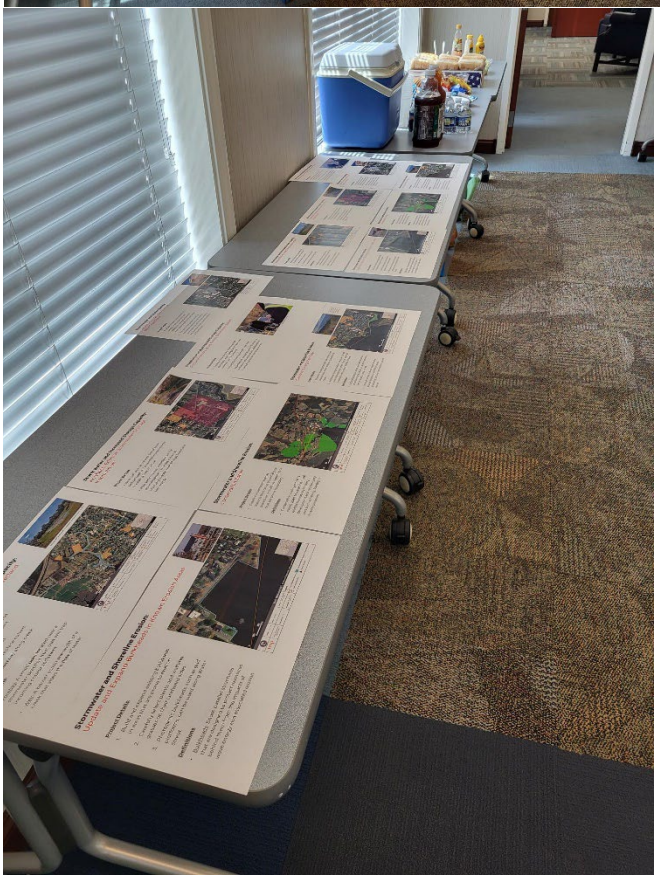
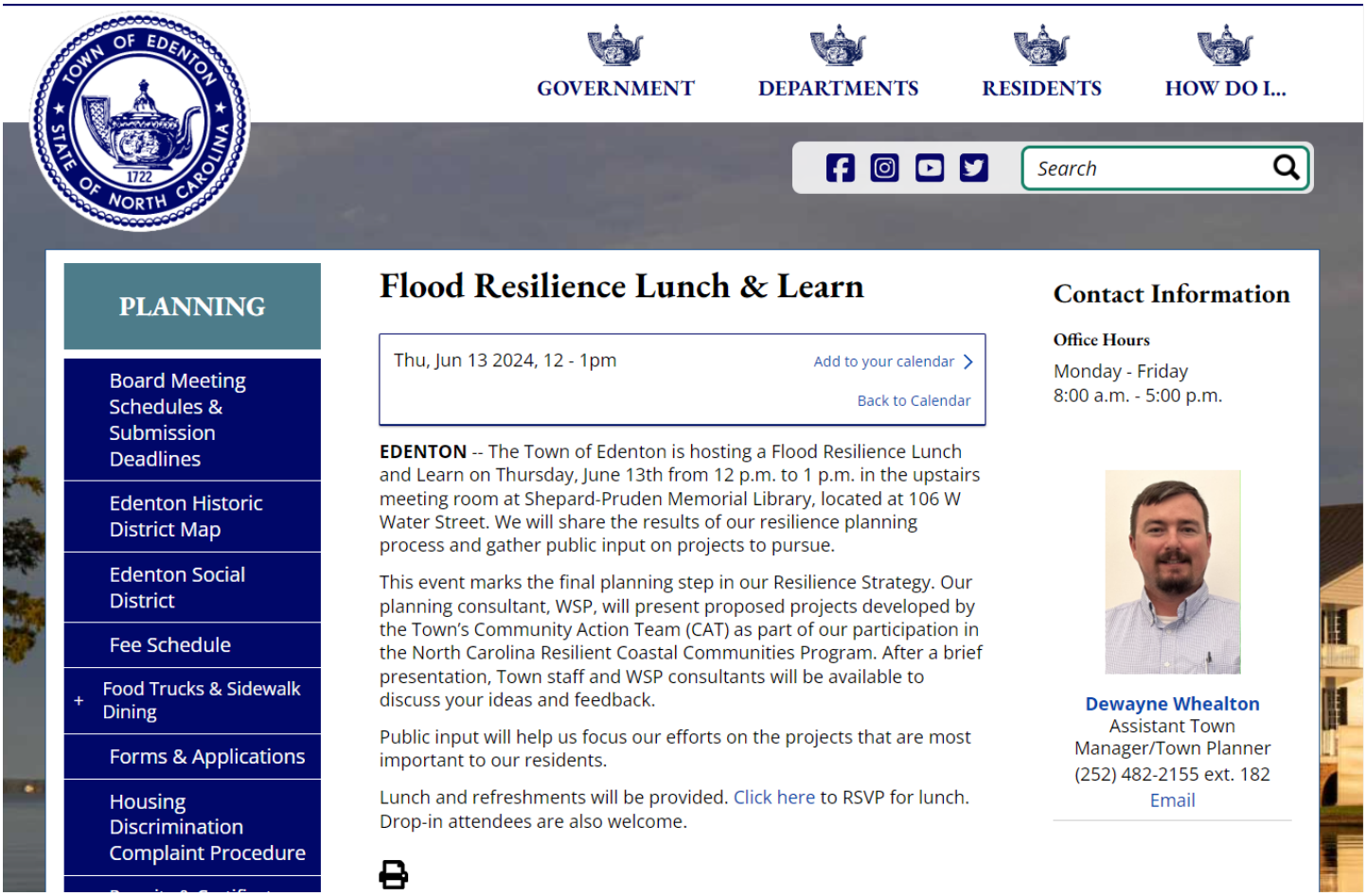
APPENDIX





APPENDIX

Public Workshop #2 Outreach



APPENDIX

Town of Edenton
38m ·

YOU'RE INVITED! Come out to the library next Thursday, June 13th from 12 PM to 1 PM for a Flood Resilience Lunch and Learn!

We have been hard at work these last few months as a community in the North Carolina Resilient Coastal Communities Program, to identify ways to mitigate flooding in Edenton. The next step is to get public input on the proposed projects, and then apply for grant dollars to help us fund them.

Our planning consultant, WSP, will present the proposed projects and will be available to discuss your ideas and feedback. Public input will help us focus our efforts on the projects that are most important to our residents.

The best part? Lunch and refreshments will be provided! Use the short link in the comments below, or QR code to RSVP for lunch. Drop-in attendees are also welcome.

1 4

Town of Edenton
June 12 at 12:00 PM ·

Don't forget, this free Lunch & Learn is TOMORROW! Come out to the library next Thursday, June 13th from 12 PM to 1 PM to hear about the projects we may be pursuing for flood mitigation in Edenton, and weigh in with your ideas and feedback!

Use the short link or QR code to RSVP for lunch. Drop-in attendees are also welcome. See you there!

2 1 comment 2 shares

APPENDIX

Project Poll

POLL: Rank Edenton's Potential Flood Resilience Projects

Please fill out this poll to help the Town of Edenton select and prioritize the flood resilience actions that will be included in the Resilience Strategy Plan. These projects are intended to help address flood-related and coastal challenges in Edenton. You can review a brief description of each project at **townofedenton.com/media/4686**.

These potential projects will be discussed in more detail at the upcoming Flood Resilience Lunch & Learn on **June 13, 2024 at 12pm in the library conference room.** Please join us and provide your input on which actions the Town should include in the Resilience Strategy.

1. Rank these projects in order of most important (top) to least important (bottom) based on which you think the Town of Edenton should pursue to address flooding and other coastal challenges.

- Update and Expand Bulkheads in Known Erosion Areas
- Establish Conservation Zones
- Construct Living Shorelines
- Update Drainage Infrastructure Near Court Street
- Restore Filberts Creek Constructed Wetland
- Northeast Edenton Stormwater Drainage Improvement
- Develop an Inventory of the Town's Stormwater System

2. Please explain your reasoning or leave any additional comments for review.

Enter your answer

APPENDIX

7	02:27
Responses	Average time to complete

1. Rank these projects in order of most important (top) to least important (bottom) based on which you think the Town of Edenton should pursue to address flooding and other coastal challenges.

More Details

2. Please explain your reasoning or leave any additional comments for review.

3 Responses

ID ↑	Name	Responses
1	anonymous	The storm water system needs to be adequate for larger storms to reduce flooding and adapted to the potential for sea level rise. This includes having wetlands for stormwater storage. Bulkheads should only be expanded where limited footprints are needed due to navigation or other concerns. Bulkheads are proven to exacerbate flanking erosion and reduce biodiversity, and they can be costly to maintain. Living shorelines should be the preferred alternative wherever possible. The NC Coastal Federation and many NC firms such as Native Shorelines and Quible & Associates can provide consultation to the town on living shoreline options.
2	anonymous	Best guess based on what I could determine from reading the proposals.
3	anonymous	I live on Court Street and have been greatly impacted by massive flooding....it is TERRIBLY IMPORTANT to me.

APPENDIX

Project Poll Outreach

PUBLIC SURVEY: We need input on proposed flooding projects!

GOVERNMENT DEPARTMENTS RESIDENTS HOW DO I...

Search

PLANNING

- Board Meeting Schedules & Submission Deadlines
- Edenton Historic District Map
- Edenton Social District
- Fee Schedule
- \+ Food Trucks & Sidewalk Dining
- Forms & Applications
- Housing Discrimination Complaint Procedure
- \+ Permits & Certificates
- \+ Plans & Presentations
- Resilient Coastal Communities Program
- Unified Development Ordinance

Resilient Coastal Communities Program

Program Objectives

Address	Assist	Help	Advance	Link
Address barriers to coastal resilience at the local level	Assist communities with risk & vulnerability assessments	Help communities develop a portfolio of well-planned and prioritized projects	Advance priority projects to "shovel-ready" status	Link communities to funding streams for project implementation

PUBLIC INPUT NEEDED! Please review our proposed flooding projects HERE, and RANK them in your own priority HERE.

The Town of Edenton's Community Action Team (CAT) has developed a list of potential resilience projects to pursue as part of North Carolina's Resilient Coastal Communities Program. A summary of potential projects can be found at the link above. Respond to this poll by June 20th to share your opinions on the projects you think are most important for the Town to pursue. Public input will help the CAT and the Town to focus our efforts on the projects that are most important to our residents. We hope to hear from you!

The Town of Edenton is developing a Resilience Strategy as part of the 2023-2024 Resilient Coastal Communities Program (RCCP), a program administered by the North Carolina

Contact Information

Office Hours

Monday - Friday
8:00 a.m. - 5:00 p.m.

Dewayne Whealton
Assistant Town Manager/Town Planner
(252) 482-2155 ext. 182
Email

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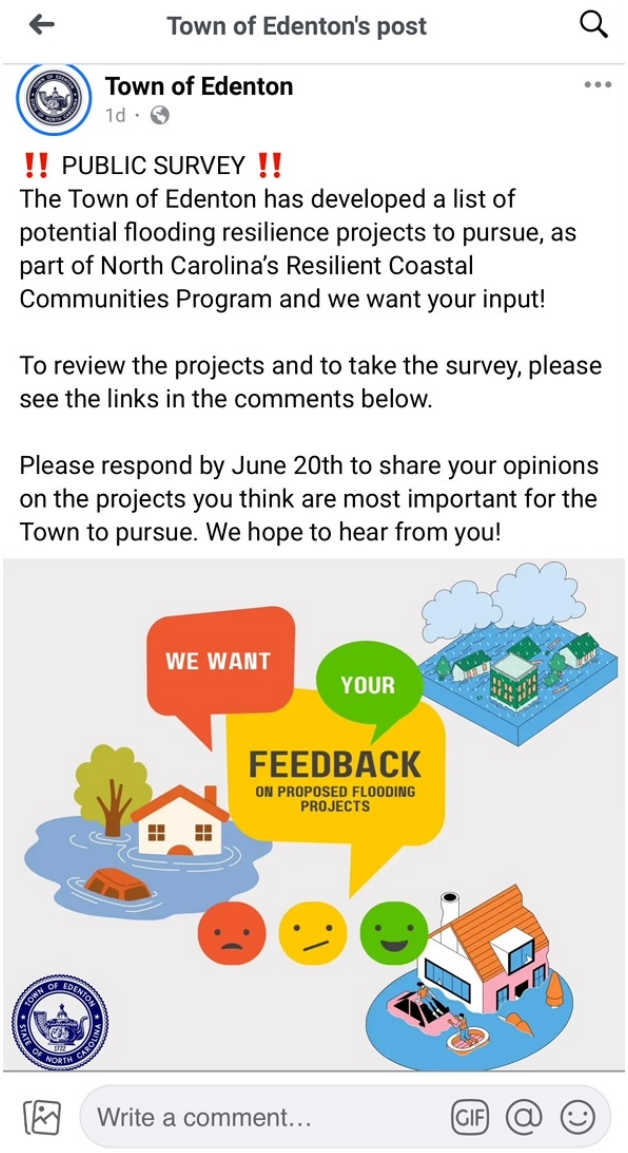
Town of Edenton's post
Town of Edenton
1d
‼ PUBLIC SURVEY ‼
The Town of Edenton has developed a list of potential flooding resilience projects to pursue, as part of North Carolina's Resilient Coastal Communities Program and we want your input!
To review the projects and to take the survey, please see the links in the comments below.
Please respond by June 20th to share your opinions on the projects you think are most important for the Town to pursue. We hope to hear from you!
WE WANT
YOUR
FEEDBACK
ON PROPOSED FLOODING PROJECTS
Write a comment…
GIF

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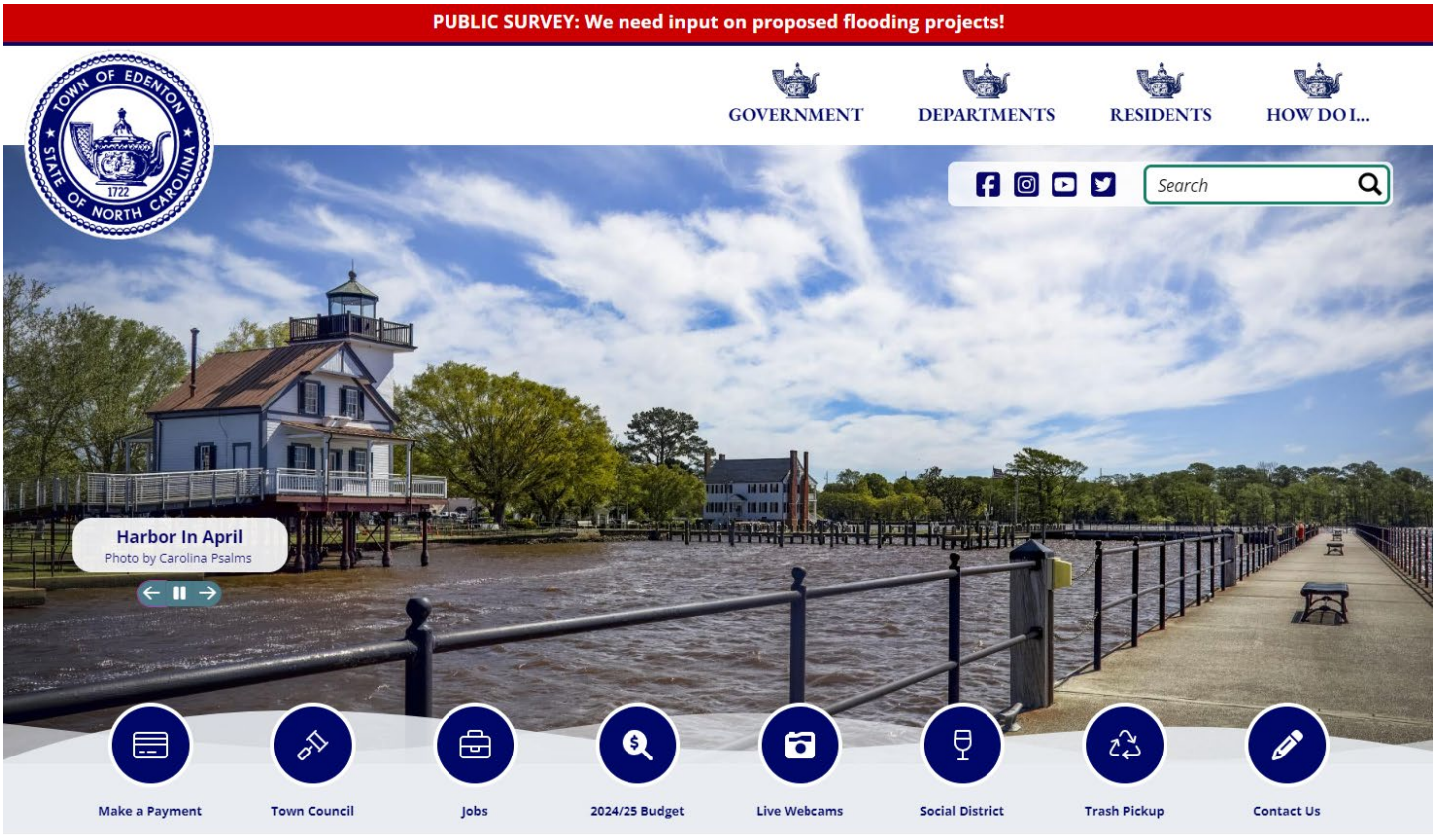
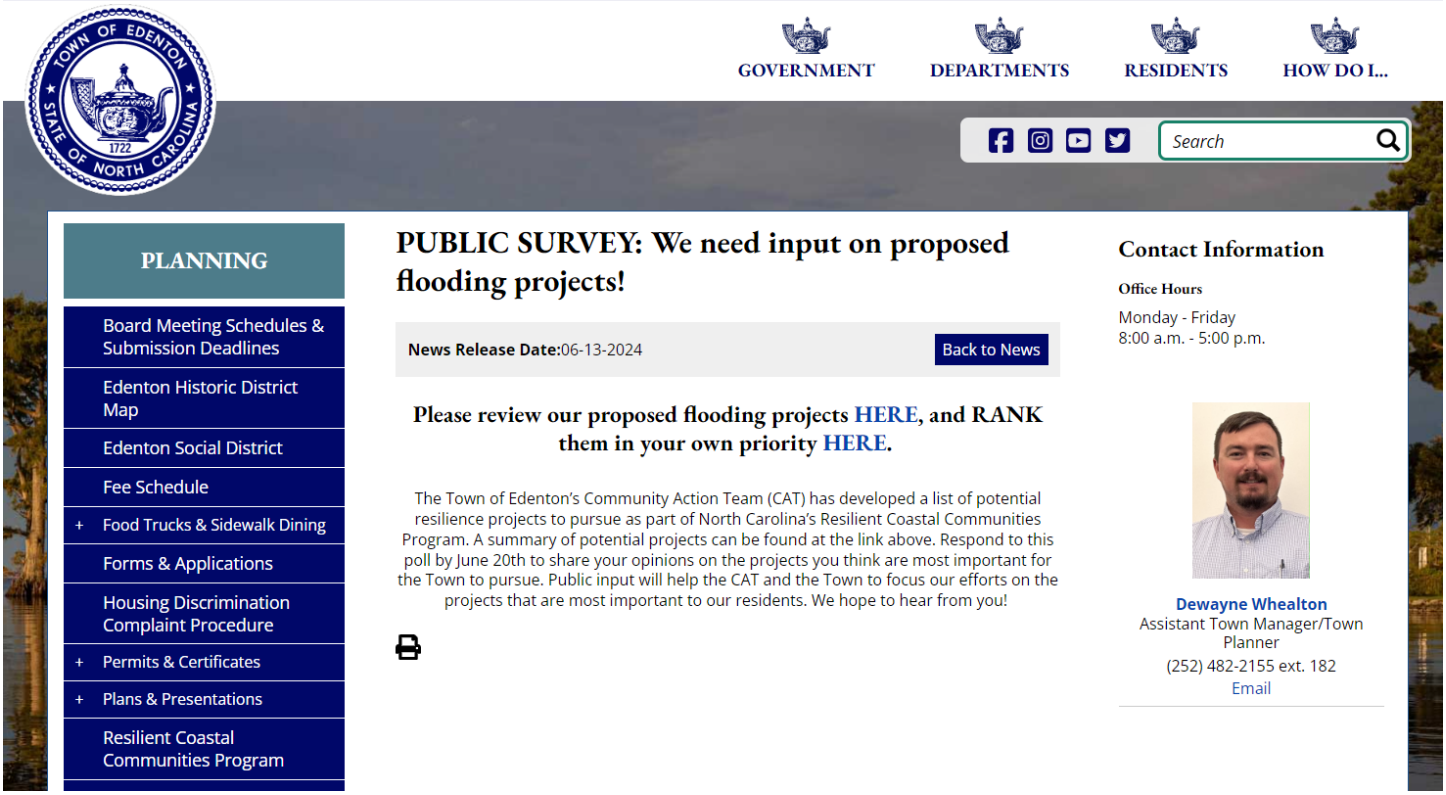

PUBLIC SURVEY: We need input on proposed flooding projects!
GOVERNMENT
DEPARTMENTS
RESIDENTS
HOW DO I...
Search
Harbor In April
Photo by Carolina Psalms
Make a Payment
Town Council
Jobs
2024/25 Budget
Live Webcams
Social District
Trash Pickup
Contact Us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Forms & Applications
Housing Discrimination Complaint Procedure
+ Permits & Certificates
+ Plans & Presentations
Resilient Coastal Communities Program
PUBLIC SURVEY: We need input on proposed flooding projects!
News Release Date:06-13-2024
Back to News
Please review our proposed flooding projects HERE, and RANK them in your own priority HERE.
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Dewayne Whealton
Assistant Town Manager/Town Planner
(252) 482-2155 ext. 182
Email

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Stakeholders Identified and Contacted for Targeted Engagement and Outreach

Albemarle Regional Health Services
Edenton-Chowan Chamber of Commerce
Edenton-Chowan Food Pantry
Edenton National Fish Hatchery
Roots of Edenton (resident blog)
Chowan-Perquimans Habitat for Humanity
Edenton House, Assisted Living
Chowan Senior Center
College of The Albemarle (Edenton-Chowan Campus)
Edenton Racial Reconciliation Group (Edenton United Methodist Church)
Edenton United Methodist Church
The Peanut Factory (artist collective, land conservation, cultural society)
Kadesh A. M. E. Zion Church
Providence Missionary Baptist Church