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Subtask 1.4: Catalogue of Government and Organization Watershed Planning Efforts in the Neuse River Basin

North Carolina Flood Resiliency Blueprint

Prepared for the North Carolina Department of Environmental Quality by AECOM and ESP Associates

September 2023

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Definitions

A comprehensive list of definitions applicable to multiple Flood Resiliency Blueprint documents is provided in a separate document.

Acronyms

APNEP – Albemarle Pamlico National Estuary Program

CAMA – Coastal Area Management Act

CarWa – Carolina Wetlands Association

CDBG – Community Development Block Grant

CDDL – Coastal Dynamics Design Lab

COG – Council of Government

CRC – Coastal Resilience Center of Excellence

CTNC – Conservation Trust of North Carolina

DEMLR – Division of Energy, Mineral, and Land Resources

DMS – Division of Mitigation Services within DEQ

DNCR –Department of Natural and Cultural Resources

DWR – Division of Water Resources

ECCOG – Eastern Carolina Council of Government

ECU – East Carolina University

ECWA – Ellerbe Creek Watershed Association

EDF – Environmental Defense Fund

EJ – Environmental Justice

EPA – Environmental Protection Agency

HUD – Department of Housing and Urban Development

NC – North Carolina

NCDEQ – North Carolina Department of Environmental Quality

NCEJN – North Carolina Environmental Justice Network

NCEM – North Carolina Emergency Management

NCFB – North Carolina Farm Bureau

NCLWF – North Carolina Land and Water Fund

NCORR – North Carolina Office of Recovery and Resiliency

NCSU – North Carolina State University

NCWRRI – North Carolina Water Resources Research Institute

NWL – Natural and Working Lands

PEJ - Partners for Environmental Justice

PFAS - Polyfluoroalkyl Substances

PTRC – Piedmont Triad Regional Council

RISE – Regions Innovating for Strong Economies and Environment

TJCOG – Triangle J Council of Government

TLC – Triangle Land Conservancy

UNC – University of North Carolina

UNCWI – Upper Neuse Clean Water Initiative

UNRBA – Upper Neuse River Basin Association

US – United States

USACE – United States Army Corps of Engineers

UWFP – Urban Waters Federal Partnership

WAP – Watershed Action Plan

WASA – Water and Sewer Authority

1 Introduction

1.1 Purpose and Intended Uses of Catalogue

Subtask 1.4 is a catalogue of local, regional, and state organizations engaged in watershed planning or resiliency efforts in the pilot river basin. This document includes the mission, history, level of engagement, area of expertise, capacity to engage in flood resilience planning and implementation through providing local input, and other information that will inform the North Carolina Flood Resiliency Blueprint (Blueprint) team on how to complement existing efforts and skills. This effort will result in a report and presentation that summarizes findings.

The intent of this catalogue is to identify local, regional, and state organizations engaged in watershed or resiliency planning efforts in the Neuse River Basin. Identification of these organizations is essential for determining what efforts have previously been undertaken, who was involved and helps ensure that resilience planning efforts through the Blueprint recognize and build upon these previous efforts.

This catalogue serves as a tool to help identify which entities should be involved in the Neuse River Basin Pilot Project and in what capacity. This information is intended to leverage and build upon existing efforts and skills in a complementary and proactive manner. It provides information on each organization's core mission, history, level of engagement, area of expertise, and capacity to engage in flood resilience planning and implementation. The entities identified range from those that would be significantly or directly involved in the Neuse River Basin Pilot, those that could provide supplemental information or support, or those indirectly involved in the project.

Stakeholder groups are organized into the following categories.

- Academic and Research Institutions
- County Governments
- Municipal Governments
- State and Federal Government Agencies
- Tribes
- Regional Stakeholders
- Non-Governmental Organizations (NGOs)

1.2 Catalogue Geographic Scope

The geographic scope for this catalogue includes the Neuse River Basin. The Neuse River Basin is more than 6,200 square miles, including both land and open water. It originates in Person and Orange counties, flowing from the Piedmont to the outer Coastal Plain. The river is essentially freshwater from its headwaters to New Bern, where it broadens and assumes estuarine characteristics.

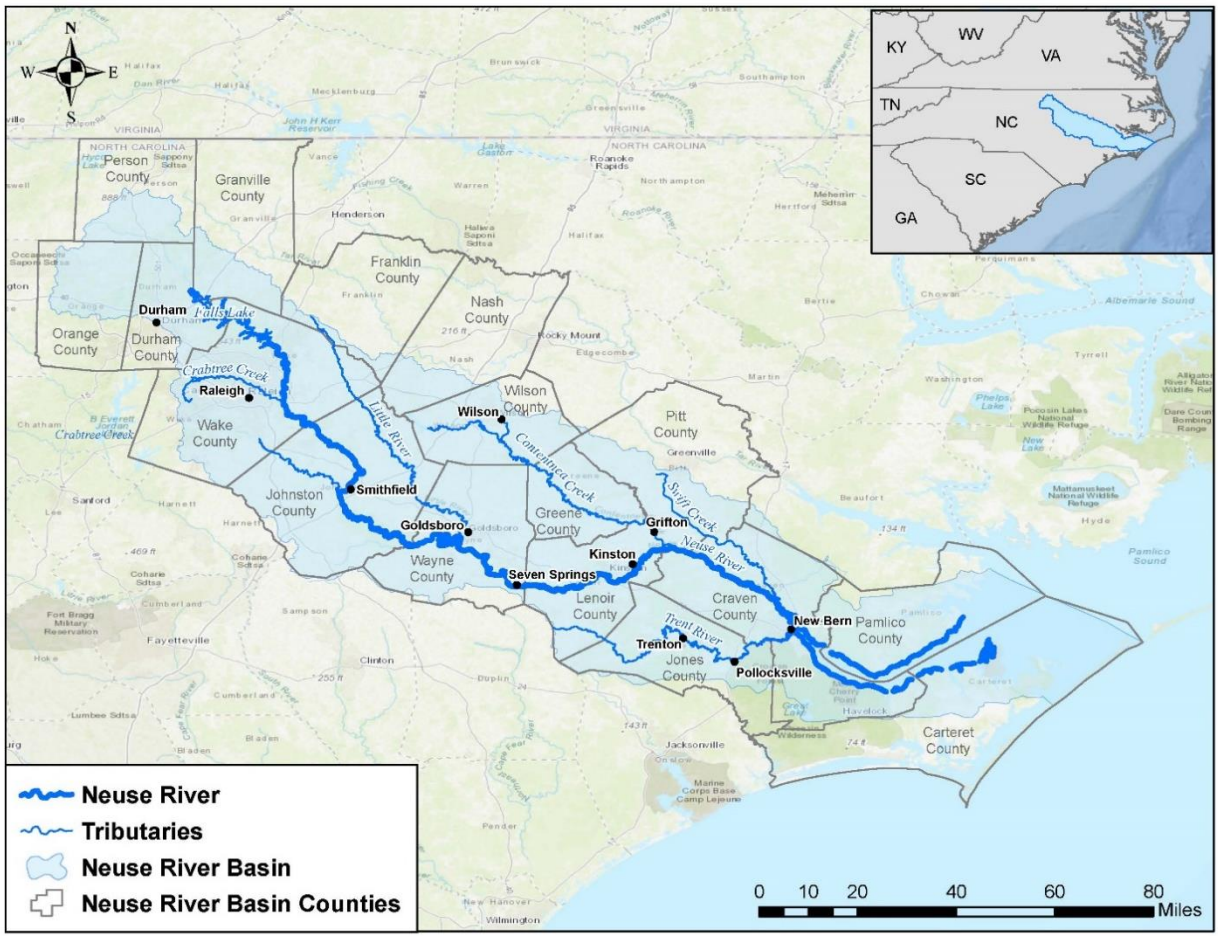

Figure 1-1: Neuse River Basin

2 Government and Organization Catalogue

2.1 Academic and Research Institutions

Academic and research institutions have been actively working to address flood resiliency in the Neuse River Basin through a variety of projects. The following is a summary of the institutions and their work.

2.1.1 Duke University (https://duke.edu/)

Mission: The university is committed to assessment of the environmental impacts associated with activities and services and will develop and track measures of progress. Duke University is committed to playing a constructive and collaborative role as a responsible environmental citizen in the life of the surrounding community.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The university's proximity to the basin has resulted in collaborative research funded by various sources like the National Science Foundation to conduct research and report findings on the Neuse River. This research covers topics including drinking water protection, nutrient assimilation, watershed service programs, total maximum daily load program effectiveness, regional water management, and hydrologic implication of land use change.

2.1.1.1 The Nicholas Institute for Energy, Environment and Sustainability (https://nicholasinstitute.duke.edu/about)

Mission: To help decision makers create timely, effective, and economically practical solutions to the world's critical environmental challenges.

The Nicholas Institute was created by a July 2021 merger of two of the university's interdisciplinary units.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Nicholas Institute led a Natural and Working Lands (NWL; further described below) subcommittee on floodplains and wetlands and coordinated development of a recommendation for coordinated buyouts and restoration in frequently flooded areas. The Institute also conducted spatial analysis to identify the geographic scope of many of the NWL group's recommendations, the potential scale of the recommended actions' carbon and resilience benefits, and how the recommended actions overlap with areas important for co-benefits such as improved water quality and recreational access.

2.1.1.1.1 NATURAL AND WORKING LANDS ACTIONS PLAN

(North Carolina Natural and Working Lands | The Nicholas Institute for Energy, Environment & Sustainability (duke.edu)

The Natural and Working Lands Action Plan, part of the North Carolina Climate Risk Assessment and Resilience Plan, was created in response to Executive Order 80 to identify opportunities for North Carolina's natural and working lands, including farms, forests, and wetlands, to sequester carbon, support ecosystem and community resilience, and enhance the state's economy. In collaboration with the North Carolina's Natural and Working Lands stakeholder group, the Nicholas Institute helped to develop maps and recommendations for the NWL Action Plan related to manage lands in the state to enhance these benefits.

These results are included in the NWL Action Plan, and data and maps are available for download. The data is also summarized in a series of StoryMaps which include state-level maps and information as well as examples of using the data at local scales. This information can be useful for targeting actions and understanding co-benefits and trade-offs at both the state and local levels. The StoryMaps include spotlights of Neuse River Basin communities such as Kinston and New Bern.

2.1.2 East Carolina University (ecu.edu)

Mission: To be a national model for student success, public service, and regional transformation.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin:

2.1.2.1 Supporting Environmental Justice in Connected Coastal Communities through a Regional Approach to Collaborative Community Science (BUILDING RESILIENCY | News Services | ECU)

East Carolina University (ECU) was awarded a $5 million grant in 2021 as part of the National Science Foundation's 2021 Coastlines and People Awards, which will fund the university's five-year project. The federal grant will be used to support ECU's researchers and students as they work to strengthen resilience in communities along the Albemarle-Pamlico estuary system of coastal North Carolina. The goals of this project include four major program areas: system mapping, vulnerability assessment, community adaptation, and environmental justice.

2.1.3 North Carolina Central University (nccu.edu)

Mission: Prepare students to become global leaders and practitioners who transform communities.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: North Carolina Central University is engaged as a partner university for ECU's Supporting Environmental Justice in Connected Coastal Communities through a Regional Approach to Collaborative Community Science project.

2.1.4 North Carolina State University (https://www.ncsu.edu/)

North Carolina State University has developed a highly esteemed team of designers, researchers, and educators whose work strongly aligns with resilience efforts across the region and state. The university works with both inland and coastal North Carolina communities.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: North Carolina State University has primarily been engaged in watershed planning, resilience and mitigation efforts through the Coastal Dynamics Design Lab, North Carolina Water Resources Research Institute, and Sea Grant.

2.1.4.1 Coastal Dynamics Design Lab (https://www.coastaldynamicsdesignlab.com/)

Mission: The mission of the Coastal Dynamics Design Lab (CDDL) is to organize and lead trans-disciplinary research and design teams to address critical ecological and community development challenges in vulnerable coastal regions and shoreline communities, with a concentrated focus on Eastern North Carolina and the Mid-Atlantic coastal plain.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin:

2.1.4.1.1 THE POLLOCKSVILLE FLOODPRINT (TOWN OF POLLOCKSVILLE, NC - FLOODPRINT)

The CDDL led the development of the Pollocksville Floodprint which aims to make the town more resilient by providing planning and design recommendations that (1) identify the most flood-vulnerable properties, (2) propose a series of projects to reduce future flood damages, and (3) link flood reduction measures with existing and/or potential community assets.

2.1.4.1.2 HOME PLACE: KINSTON AND SEVEN SPRINGS (HOMEPLACE — COASTAL DYNAMICS DESIGN LAB)

The CDDL also collaborated with the North Carolina (NC) State College of Design to develop Home Place: A Conversation Guide for Community Rebuilding Following Hurricane Matthew for Kinston and Seven Springs. The document provides Kinston residents with a menu of high-quality, community-specific designs and strategies at multiple scales, resulting in a coordinated post-disaster rebuilding effort that strengthens communities in the long run. This guide's primary focus is residential renovation and construction. It offers strategies for application from the household scale to the community scale, along with consideration for broader community infrastructures, development patterns, and population trends. The ultimate goal is to build the local capacity of North Carolina's flood-prone communities, providing them with tools and with design, planning, and policy strategies to promote the long-term function, health, and vitality of their residents and neighborhoods.

2.1.4.1.3 GOLDSBORO FLOODPRINT (GOLDSBORO-FLOODPRINT_DEC22_HANDOUTS_FINAL.PDF (GOLDSBORONC.GOV)

Through allocated Community Development Block Grant (CDBG)-Mitigation funds, North Carolina Office of Recovery and Resiliency (NCORR) and the CDDL will be leading the creation of five new "Community Floodprint" planning reports for select cities and towns including the City of Goldsboro. The Goldsboro Floodprint aims to make the city more resilient by providing planning and designing recommendations that identify the most flood-vulnerable properties, propose a series of projects to reduce future flood damages, and link flood reduction measures with existing and/or potential community assets.

2.1.4.2 Sea Grant (https://ncseagrant.ncsu.edu/)

Mission: North Carolina Sea Grant provides research, education and outreach opportunities relating to current issues affecting the North Carolina coast and its communities. Since 1970, it has been a valuable resource for scientists, educators, local officials, government agencies, coastal businesses, and the public to find unbiased, scientifically sound information about the state's coastal ecosystems.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: North Carolina Sea Grant spearheads and collaborates on a number of projects aimed to help North Carolina plan, recover, respond, and adapt to coastal hazards and climate challenges. Sea Grant collaboration on stormwater master plans for over 20 schools in the Neuse and Tar River basins resulted in the design and implementation of new stormwater wetlands. In addition, a local watershed plan provided momentum for projects that addressed stormwater runoff in Raleigh.

2.1.4.2.1 IMPROVING NORTH CAROLINA'S RESILIENCE TO COASTAL RIVERINE FLOODING (IMPROVING NORTH CAROLINA'S RESILIENCE TO COASTAL RIVERINE FLOODING (UNC.EDU)

A research team comprised of both professors and students prepared this report for the NC Policy Collaboratory in 2021. The team spent 16 months evaluating the potential for natural infrastructure (NI) to mitigate riverine flooding in eastern North Carolina. The study team conducted geospatial

mapping analyses; hydrologic, hydraulic and water quality modeling; economic analyses; landowner and community outreach and a preliminary review of potential programs and measures for implementing a conservation-based NI program. The Middle Neuse River Basin from Johnston to Lenoir County, which has been heavily impacted by recent riverine flooding events, was the focus area of the study.

2.1.4.3 NC Water Resources Research Institute (https://wrri.ncsu.edu/)

Mission: The North Carolina Water Resources Research Institute (NCWRRI) and the 53 other water institutes that are part of the National Institutes for Water Resources were created with a common mission to:

- Plan, facilitate, and conduct research to aid in the resolution of state and regional water problems
- Promote technology transfer and the dissemination and application of research results
- Provide for the training of scientists and engineers through their participation in research
- Provide for competitive grants to be awarded under the Water Resources Research Act

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Through integrated research, community engagement, and outreach efforts, the NCWRRI promotes understanding of critical water issues and supports the sustainable use of conservation of water resources to benefit communities, ecosystems, and economies throughout the state of North Carolina. The NCWRRI partners with other organizations focused on improving water quality in the Neuse River Basin including the Walnut Creek Wetland Community Partnership, Black Creek Watershed Association, and Sound Rivers. Current projects underway are summarized below:

- Embracing ways to engage research in the Walnut Creek Watershed in partnership with Sound Rivers – This project will provide the local community with training to monitor and advocate for water quality improvements in Little Rock Creek in Raleigh.
- Stormwater diversion, storage, and treatment by beaver-enhanced wetlands in Piedmont urban watersheds – This project studies the impact that the North American beaver is having on the Walnut Creek urban wetland. Chris Norcross of NC State University hypothesizes that beavers are helping reduce the negative impacts of flooding downstream and aims to quantify the benefits to water quality and availability made by beavers.
- A novel approach to polyfluoroalkyl substances (PFAS) quantification and attribution in freshwater resources: Indicator compounds in a stormwater and wastewater dominated urban stream – This project seeks to determine whether there is a correlation between common contaminants (from road runoff, treated wastewater, lawn herbicide, and raw sewage) and PFAS contamination, in hopes of identifying sources that contribute to PFAS loading in Ellerbe Creek in Durham, a tributary to the Falls Lake Reservoir.

2.1.5 University of North Carolina (https://www.unc.edu/)

Similar to other higher education institutions, the University of North Carolina fosters a dynamic learning environment that leverages resources to conduct research, provide real-life experience to students, and make long-term sustainable changes.

2.1.5.1 The Paerl Lab - History – The Paerl Lab (unc.edu)

Mission: Created in 1978, the Paerl Lab at the University of North Carolina- Chapel Hill (UNC-CH) has mentored dozens of students pursuing their degree at UNC Institute of the Environment and others completing research.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The lab conducts regular observations of the Neuse River and provides monthly reports on Neuse River Estuary conditions. These reports include information on salinity, microscopic examination, turbidity, etc.

2.1.5.2 UNC Collaboratory – (https://collaboratory.unc.edu/about/)

Mission: The Collaboratory facilitates and funds research related to the environmental and economic components of the management of natural resources and public health concerns. The Collaboratory's work is focused within the State of North Carolina and is designed to inform the policy-making process with the latest research findings and relevant data.

The Collaboratory develops and disseminates relevant best practices to interested parties, leads and participates in projects across the state related to environmental quality, natural resource management, and public health, and makes recommendations to the North Carolina General Assembly.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Collaboratory works in partnership with the Upper Neuse River Basin Association (UNRBA) as part of the Falls Lake study. The UNRBA was formed in 1996 "to provide an ongoing forum for cooperation on water quality protection and water resource planning and management within the 770-square-mile watershed." The Collaboratory works closely with the UNRBA, who have been conducting ongoing research for Falls Lake, to ensure it is not duplicating prior efforts and addressing the most critical issues facing Falls Lake.

2.1.5.2.1 ESTIMATING CHANGES IN PEAK FLOW AND ASSOCIATED REDUCTIONS IN FLOODING RESULTING FROM IMPLEMENTING NATURAL INFRASTRUCTURE IN THE NEUSE RIVER BASIN, NORTH CAROLINA, USA (ESTIMATING CHANGES IN PEAK FLOW AND ASSOCIATED REDUCTIONS... - CITATION INDEX - NCSU LIBRARIES)

This study was done by NC State University with funding from North Carolina Collaboratory and UNC Chapel Hill . Afforestation, water farming, and flood control wetlands were evaluated in the Neuse River Basin of eastern North Carolina. Detailed geospatial opportunity and hydrologic modeling of the measures were conducted in three sub-watersheds of the basin and results were extrapolated to other sub-watersheds.

2.1.5.3 Coastal Resilience Center - https://coastalresiliencecenter.unc.edu/

Mission: The mission of the Coastal Resilience Center of Excellence (CRC) is to conduct research and education to enhance the resilience of the nation's people, infrastructure, economies and the natural environment to the impacts of coastal hazards such as floods and hurricanes, including the effects of future trends.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The CRC has led a number of mitigation, resilience and post-disaster recovery efforts in the Neuse River Basin. A few examples of this work include the following:

- Hurricane Matthew Disaster Recovery and Resilience Initiative (Hurricane Matthew Recovery - Coastal Resilience Center (unc.edu)
- Seven Springs Recovery Plan (Seven-Springs-Recovery-Plan-1 (unc.edu) Kinston Homeplace document – previously discussed under the Coastal Dynamics Design Lab narrative above Hurricane Matthew Recovery - Kinston - Coastal Resilience Center (unc.edu)

2.2 County Government

For many years, county governments in the Neuse River Basin have participated in a number of watershed planning, mitigation and resiliency efforts. The counties listed below are those that are located within the Neuse River Watershed.

2.2.1 Carteret County (https://www.carteretcountync.gov/)

2.2.2 Craven County (https://www.cravencountync.gov/)

2.2.3 Durham County (https://www.dconc.gov/)

2.2.4 Franklin County https://www.franklincountync.gov/)

2.2.5 Granville County (https://www.granvillecounty.org/)

2.2.6 Greene County (https://greenecountync.gov/)

2.2.7 Johnston County (https://johnstonnc.com/)

2.2.8 Jones County (https://jonescountync.gov/)

2.2.9 Lenoir County (https://lenoircountync.gov/)

2.2.10 Nash County (https://nashcountync.gov/)

2.2.11 Orange County (https://orangecountync.gov/)

2.2.12 Pamlico County (https://www.pamlicocounty.org/)

2.2.13 Person County (https://www.personcountync.gov/)

2.2.14 Pitt County (https://www.pittcountync.gov/)

2.2.15 Wake County (https://www.wakegov.com/)

2.2.16 Wayne County (https://waynegov.com/)

2.2.17 Wilson County (https://www.wilsoncountync.gov)

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: All counties located in the Neuse River Basin have and continue to participate in mitigation and resilience efforts to reduce the impact of natural hazards with flooding as a primary concern. These plans include, but are not limited to, regional hazard mitigation plans, Hurricane Matthew Redevelopment

Plans, and more recently, Regions Innovating for Strong Economies and Environment (RISE) Regional Resilience Portfolios. Wake County is developing a One Water Plan that will include a Waterfall Model, MODFLOW, and OASIS as well as land use change and climate change scenario analysis. Although different in context and scope, these plans all propose strategies to heighten resilience through proactive planning and prevention measures. These plans reiterate the counties' priority to minimize flood impacts as well as their capacity to successfully draft and implement a plan.

2.3 Municipal Government

The Neuse watershed contains 77 incorporated municipalities. Similar to county governments, municipal governments in the Neuse River Basin have participated in several watershed planning, mitigation and resiliency efforts for many years, especially those municipalities located directly along or adjacent to the Neuse River. A subset of municipalities located within the Neuse River Watershed are listed below.

2.3.1 Raleigh (https://raleighnc.gov/)

2.3.2 Durham (https://www.durhamnc.gov/)

2.3.3 Wilson (https://www.wilsonnc.org/)

2.3.4 Goldsboro (https://www.goldsboronc.gov/)

2.3.5 New Bern (https://www.newbernnc.gov/)

2.3.6 Kinston (https://www.ci.kinston.nc.us/)

2.3.7 Smithfield (https://www.smithfield-nc.com/)

2.3.8 Grifton (https://grifton.com/)

2.3.9 Pollocksville (https://www.townofpollocksville.com/)

2.3.10 Trenton (https://www.townoftrenton.com/)

2.3.11 Seven Springs (https://www.facebook.com/sevenspringsnc/)

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Municipalities located in the Neuse River Basin have been directly involved in watershed planning, mitigation and resilience efforts. For example, communities are included as participants in regional hazard mitigation planning process and the redevelopment plans following Hurricane Matthew. Raleigh is incorporating innovative flood alert systems based upon live data feeds from gauges across Wake and Durham counties. The same will likely hold true for the Blueprint. New Bern, Kinston, and Goldsboro have been identified to participate as Municipal Partners in the Neuse Regional Advisory Group.

It should be noted that some communities are significantly more vulnerable to flooding from the Neuse River and its tributaries. Additional consideration and engagement efforts will be given to vulnerable communities throughout the planning process to ensure equitable outcomes for those heavily impacted and the traditionally underserved. For example, the Neuse River Basin Flood Analysis and Mitigation Strategies Study (May 2018) identified the City of Goldsboro, the Town of Seven Springs, the City of Kinston, the Town of Grifton, as well as unincorporated portions of Johnston, Wayne, Lenoir, and Craven Counties because of their increased risk of flooding in comparison to other communities located in the basin. Information and outreach efforts will encompass municipal governments in effort to obtain community input representative of local, county and regional concerns.

2.3.12 Councils of Government

The North Carolina Councils of Government (COG) are voluntary associations of county and municipal governments, established by the North Carolina General Assembly in 1972, that serve as an avenue for local governments across the state to discuss and address issues that are particular to their region. Most citizens and local governments in North Carolina are represented by regional councils heightening their role as an important conduit between local governments and state/federal partners.

- Eastern Carolina Council of Government (ECCOG) (includes Carteret, Craven, Duplin, Greene, Jones, Lenoir, Onslow, Pamlico, and Wayne Counties) ECCOG – Eastern Carolina Council of Government
- Kerr-Tar Council of Governments (includes Franklin, Granville, Person, Vance, and Warren Counties) Kerr Tar COG
- Triangle J Council of Governments (includes Chatham, Durham, Johnston, Lee, Moore, Orange, and Wake Counties) Triangle J Council of Government (TJCOG)
- Mid-East Commission (includes Beaufort, Bertie, Hertford, Martin, and Pitt Counties) Mid-East Commission – Beaufort, Bertie, Hertford, Martin and Pitt Counties in NC (mideastcom.org)
- Mid-Carolina Council of Governments (includes Cumberland, Harnett, and Sampson Counties) Mid-Carolina Council of Government (mccog.org)
- Upper Coastal Plain Council of Governments (includes Edgecombe, Johnston, Nash, and Wilson Counties) Welcome to Upper Coastal Plain (ucpcog.org)

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The six COGs were invited to participate in the Neuse Regional Advisory Group. All six recently participated in NCORR's Regional Resilience Portfolio Program in 2022. The aim of this program sought to develop an initial vulnerability assessment and a portfolio of priority projects that reduce risk and increase resilience in Eastern North Carolina. The Regional Resilience Portfolios (discussed previously under the North Carolina Office of Recovery and Resiliency narrative) will serve as a useful tool for the Blueprint project as they provide information on implementation pathways including funding opportunities, project phasing, and other relevant details.

2.3.12.1 Upper Neuse Clean Water Initiative (Upper Neuse Clean Water Initiative - Conservation Trust for North Carolina (ctnc.org)

Triangle J Council of Government (COG) administers the Upper Neuse Clean Water Initiative (UNCWI), which was created to protect water quality within the drinking water supply watersheds in Raleigh. Another initiative is the City of Raleigh Watershed Protection Program(WPP) started in 2005, (previously referred to as the Upper Neuse Clean Water Initiative). To date, the WPP has helped

protect 10,800 acres and 117 miles of streams within the critical water supply watersheds. Partners include Conservation Trust for North Carolina, the Conservation Fund, Triangle Land Conservancy, Ellerbe Creek Watershed Association, Triangle Greenways Council, City of Raleigh Public Utilities Department, Tar River Land Conservancy, and Eno River Association. These organizations should be considered as potential stakeholders for the Blueprint.

2.3.12.2 TJCOG Water Resources Program | Triangle J Council of Government

In addition, the Triangle J COG Water Resource Program facilitates intergovernmental partnerships and provides technical assistance (including watershed planning, stormwater infrastructure mapping, management and education) to sustainably manage water supply and water quality across jurisdictional lines.

The Upper Coastal Plain COG has partnered with the North Carolina Department of Environmental Quality Division of Water Resources to raise awareness to the importance of improving water quality and implementing planning measures to conserve water resources.

2.4 State and Federal Government Agencies

State and federal partners play a significant role with watershed, resilience, and mitigation efforts in the Neuse River Basin. These partners are often tasked with implementing state and federal laws that are aimed at such activities in the basin.

2.4.1 NC Department of Environmental Quality (https://www.deq.nc.gov/)

The North Carolina Department of Environmental Quality (NCDEQ) is the lead stewardship agency for the protection of North Carolina's environmental resources. The organization administers regulatory programs designed to protect air quality, water quality, dam safety and the public's health, and works to advance an all-of-the-above energy strategy that fits North Carolina's needs. NCDEQ also offers technical assistance to businesses, farmers, local governments, and the public and encourages environmental stewardship through education programs provided at NCDEQ facilities and through the state's school system. NCDEQ's Director of Legislative Affairs has been identified as a partner for the Neuse Regional Advisory Group.

2.4.1.1 Division of Coastal Management (https://www.deq.nc.gov/about/divisions/division-coastal-management)

Mission: The Division of Coastal Management works to protect, conserve, and manage North Carolina's coastal resources through an integrated program of planning, permitting, education and research.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Division of Coastal Management is engaged in watershed planning through oversight of Coastal Area Management Act (CAMA) Land Use Plans[1] and the Resilient Coastal Communities Program.

[1] https://deq.nc.gov/about/divisions/coastal-management/coastal-management-land-use-planning/about-cama-land-use-planning

2.4.1.1.1 RESILIENT COASTAL COMMUNITIES PROGRAM (NC RESILIENT COASTAL COMMUNITIES PROGRAM | NCDEQ)

The Resilient Coastal Communities Program aims to facilitate a community-driven process for setting coastal resilience goals, assessing existing and needed local capacity, and identifying and prioritizing projects to enhance community resilience to coastal hazards. Participating communities will walk through a framework leading to the development of "shovel-ready" projects. Local governments throughout the 20 coastal counties will be eligible to apply for direct technical assistance to complete a community engagement process, risk, and vulnerability assessment, and develop a resilience project portfolio.

The four phases of the program include:

- Phase 1: Community Engagement and Risk and Vulnerability Assessment (see Figure 2.1)
- Phase 2: Planning, Project Selection, and Prioritization (see Figure 2.1)
- Phase 3: Engineering and Design
- Phase 4: Implementation

This initiative, funded through the N.C. State Legislature and the National Fish and Wildlife Foundation, is providing 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.

Mission: To facilitate a community-driven process for setting coastal regional goals, assessing existing and needed capacity, and identifying and prioritizing projects to enhance community resilience to coastal hazards.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Funding for Phase 3: Engineering and Design has been awarded to the following communities located in the Neuse River Basin: the Duffyfield Community Resilience Improvement-Basin Restoration and Enhancement project in New Bern was awarded $45,000, the Cape Carteret Flood Mitigation Planning Project in Cape Carteret, $45,000 for the Craven County Living Shoreline Prioritization and Engineering Design in Craven County was awarded $85,000, the Town-Wide Nature-Based Stormwater Solutions in Pine Knoll Shores was awarded $45,000, the Topsail Island Roadside Stormwater Project in Topsail Island (Surf City, N. Topsail Beach, and Topsail Beach) was awarded $135,000, and $45,000 was awarded for improving stormwater culverts and drainage in Vandemere.

Funding for Phase 4: Implementation and Construction has been awarded to the following communities located in the Neuse River Basin: $175,320 for the Duffyfield Community Resilience-Rose Street Basin Restoration in New Bern, $215,000 for street tree swales in Pine Knoll Shores, and $250,000 for drainage improvements in Vandemere.

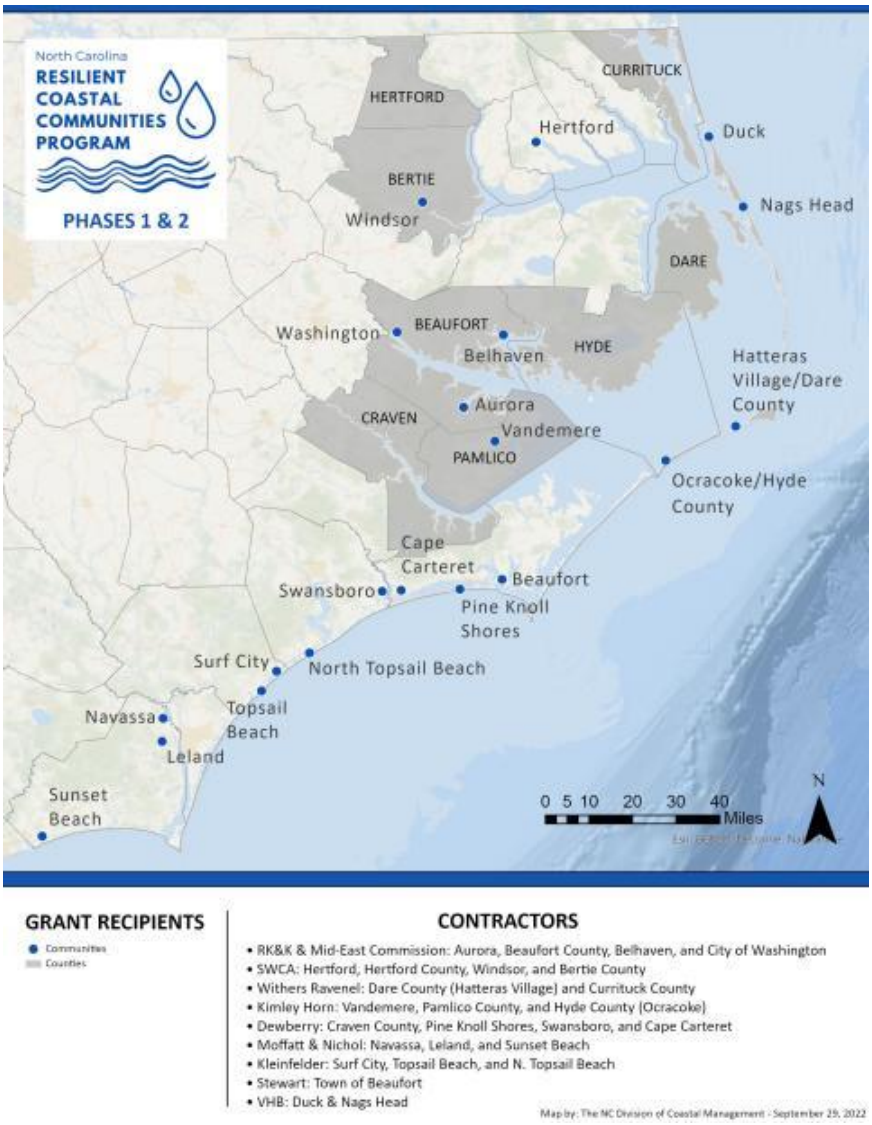

Figure 2-1: Resilient Coastal Communities Program Phase 1 and 2 Participants

2.4.1.2 Division of Energy, Mineral, and Land Resources (https://www.deq.nc.gov/about/divisions/energy-mineral-and-land-resources)

The Division of Energy, Mineral, and Land Resources (DEMLR) regulates and provides technical assistance related to mining, dams, sediment and erosion control, and stormwater management.

Mission: The division seeks to promote the wise use and protection of North Carolina's land and geologic resources.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: DEMLR oversees two key programs in the state that are tied to water quality and flood resiliency.

2.4.1.2.1 STORMWATER PROGRAM (STORMWATER PROGRAM | NCDEQ)

DEMLR Stormwater Program protects North Carolina's surface water from water quality impacts due to stormwater runoff.

2.4.1.2.2 NORTH CAROLINA DAM SAFETY PROGRAM (DAM SAFETY | NCDEQ)

In addition, the North Carolina Dam Safety Program provides oversight of more than 3,000 dams statewide, working to provide for the certification and inspection of dams to reduce the risk of failure of dams; to prevent property damage, personal injury, and loss of reservoir storage, and to ensure maintenance of minimum flows of adequate quantity and quality below dams.

2.4.1.3 Division of Mitigation Services (https://www.deq.nc.gov/about/divisions/mitigation-services)

The Division of Mitigation Services (DMS) restores and protects wetlands and waterways for future generations while offsetting unavoidable environmental impacts from development projects. The DMS offers four In-Lieu Fee mitigation programs designed to assist private and public developers in meeting state and federal compensatory mitigation and nutrient offset requirements. The DMS maximizes mitigation investments to restore streams, wetlands and riparian buffer areas using a watershed planning approach. Watershed planning combines data analysis and stakeholders (e.g., state and local partners and willing landowners) to concentrate mitigation resources in areas where they will have the greatest benefit. Customers voluntarily use the DMS to advance their development projects in a timely and cost-effective manner.

Mission: To provide cost-effective mitigation alternatives that improve the state's water resources.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: the DMS has multiple local watershed plans and a regional watershed plan in the Neuse River Basin. The DMS has been identified as a State Partner to participate in the Neuse Regional Advisory Group.

2.4.1.3.1 NATURAL INFRASTRUCTURE FLOOD MITIGATION PROGRAM (NATURAL INFRASTRUCTURE PROGRAM | NCDEQ)

In addition to being the lead State agency for Blueprint, the DMS administers the State's Natural Infrastructure Program that seeks to mitigate flooding by mimicking natural processed through using natural infrastructure and constructed systems. These systems can include strategies like restoring natural wetlands, building stormwater wetlands, reforestation, and restoring streams and reconnecting them to their floodplains which help store water and reduce flooding.

The first pilot project for this program is located in the Stoney Creek Watershed in Wayne County. Stoney Creek is a tributary for the Neuse River and the DMS and their team of consultants led by Ecosystems Planning and Restoration are working to identify and implement natural infrastructure flood mitigation projects within the watershed. The Stoney Creek Pilot Project will target flooding that impacts businesses, roadways, and access to emergency services in Goldsboro.

Success in the Stoney Creek watershed will serve as the basis for expanding natural infrastructure flood mitigation projects to additional watersheds. Lessons learned through the Stoney Creek project will help develop scaling solutions to enhance community flood resilience across North Carolina, including efforts like Blueprint.

Based on an assessment of existing watershed characteristics and resource information, the DMS has developed watershed plans with restoration and protection goals for the Neuse River Basin including (1) the promotion of nutrient reduction in municipal areas through the implementation of stormwater best management practices, (2) the promotion of nutrient and sediment reduction in agricultural areas by restoring and preserving wetlands, streams, and riparian buffers, and (3) to continue to

target the implementation of projects under the Nutrient Offset and Buffer programs, as well as focusing restoration in areas where it will provide the most functional improvement to the ecosystem.

2.4.1.4 Division of Water Resources (https://www.deq.nc.gov/about/divisions/water-resources)

Mission: Uphold the environmental protection and quality of the State's surface water and groundwater, and to ensure safe drinking water for its residents.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin:

2.4.1.4.1 HYDROLOGIC MODEL DEVELOPMENT PROJECT FOR NEUSE RIVER BASIN (NEUSE RIVER BASIN MODEL | NCDEQ)

In 2008, the DWR launched the hydrologic model development project for Neuse River Basin.[2] The computer model was used for surface water management purposes. The model also assisted the State in making regulatory decisions by evaluating potential impacts of proposed projects with significant water withdrawals within the basin and inter-basin transfer permit application while planning for increased water use due to continuous growth and managing the basin's resource challenges as well as operational and regulatory constraints during a drought condition.

2.4.1.4.2 RIPARIAN BUFFER PROTECTION PROGRAM (RIPARIAN BUFFER PROTECTION PROGRAM | NCDEQ)

The DWR is also charged with implementing the Riparian Buffer Protection Program[3] which puts in place riparian buffer rules protecting vegetated areas adjacent to intermittent and perennial streams, lakes, reservoirs, ponds, estuaries and modified natural streams. The Neuse River falls under this program and requires prohibition of certain activities within a 50-foot riparian buffer of the Neuse and its tributaries.

2.4.1.4.3 319 GRANT PROGRAM (319 GRANT PROGRAM | NCDEQ)

Through the 319 Grant Program[4], the DWR developed North Carolina Watershed Restoration Plans for the Neuse River Basin dating back to 2009 with a total of 11 plans. These plans include:

- Upper Middle Creek Watershed Action Plan (2022) developed by the Triangle J Council of Governments (TJCOG)
- Black Creek Watershed Management Plan (2009) developed by NC State University
- Ellerbe Creek Watershed Improvement Plan (2010) developed by Ellerbe Creek Watershed Association, TJCOG, City of Durham, Brown & Cauldwell
- Eno River Checklist (2016) developed by UNRBA, TJCOG, Tetra Tech, United States (US) Environmental Protection Agency (EPA), DWR, DMS, Piedmont Triad Regional Council (PTRC), DEMLR
- Hominy Swamp Restoration Plan (2018) developed by HDR, Inc.
- Knap of Reeds Checklist (2016) developed by UNRBA, TJCOG, Tetra Tech, EPA, DWR, DMS, PTRC, DEMLR
- Lick Creek Watershed Restoration Plan (2009) developed by City of Durham, UNRBA

[2] https://deq.nc.gov/about/divisions/water-resources/water-planning/basin-planning/neuse-river-basin-model
[3] https://deq.nc.gov/about/divisions/water-resources/water-quality-permitting/401-buffer-permitting/riparian-buffer-protection-program
[4] https://www.deq.nc.gov/about/divisions/water-resources/water-planning/nonpoint-source-planning/319-grant-program#Overview-2711

- Little Lick Creek Watershed Plan (2015) developed by City of Durham, TJCOG
- Smith Creek Watershed Restoration Plan (2015) developed by Town of Wake Forest
- Upper Barton Checklist (2016) developed by UNRBA, TJCOG, Tetra Tech, EPA, DWR, DMS, PTRC, DEMLR
- Upper Swift Creek 9-Element Checklist (2015) developed by TJCOG

2.4.1.5 The Albemarle Pamlico National Estuary Program (APNEP) (https://apnep.nc.gov/)

Mission: To identify, protect, and restore the significant natural resources of the Albemarle-Pamlico estuarine system.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Albemarle-Pamlico National Estuary Partnership, or APNEP, works throughout the Neuse River Basin (and others), which drains into the Albemarle-Pamlico estuarine system. Initiatives that APNEP leads or supports include research studies, measures to protect or restore ecosystems, environmental monitoring programs, and education and outreach efforts. Projects and initiatives completed in the Neuse River Basin include:

- Project Wet Facilitator Workshop (2013-2014 and 2015-2016)
- Technical Analyses to Support an Assessment of Environmental Indicators in the Albemarle-Pamlico Watershed (2015-2016)
- Graduate Fellowship in Estuarine Fellowship in Estuarine Research (2018-2019)
- AmeriCorps Mountain to Sea Program (2014-2015)
- Discover North Carolina's River Basins Education Program (2015 and 2016-2017)
- North Carolina Oyster Summit: Promoting a Healthy Coastal Environment and Economy (2014-2015)
- North Carolina Low Impact Development Summit: Advancing the Next Generation of Stormwater Management (2014-2015)
- Albemarle-Pamlico Watershed Highway Signs (2019-2020)
- Shad in the Classroom (2011-present)
- North Carolina Recreational Water Quality Program Support in the APNEP Region (2015-2021) ModMon Water Quality Monitoring (2014-2015)

2.4.2 NC Department of Natural and Cultural Resources (https://www.ncdcr.gov/)

The North Carolina Department of Natural and Cultural Resources (DNCR) oversees the state's resources for the arts, history, libraries, and nature.

Mission: DNCR's mission is to improve the quality of life in North Carolina by creating opportunities to experience excellence in the arts, history, libraries, and nature by stimulating learning, inspiring creativity, preserving the state's history, conserving the state's natural heritage, encouraging recreation and cultural heritage tourism, and promoting economic development.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: DNCR supports programs focused on preserving, restoring, and enhancing the state's water resources heightening flood resilience both locally and state-wide.

2.4.2.1 Division of Land and Water Stewardship

(https://www.ncdcr.gov/about/nature/division-land-and-water-stewardship)

Created with the newly formed Department of Natural and Cultural Resources in 2015, the state Division of Land and Water Stewardship has developed programs and initiatives focused on preservation.

2.4.2.1.1 THE NORTH CAROLINA LAND AND WATER FUND (NORTH CAROLINA LAND AND WATER FUND | NORTH CAROLINA LAND AND WATER FUND (NC.GOV))

The North Carolina Land and Water Fund (NCLWF) was established in 1996 by the General Assembly (formerly known as the Clean Water Management Trust Fund) as a non-regulatory organization with a focus on protecting and restoring the State's land and water resources. NCLWF awards grants to non-profit and governmental organizations to protect land for natural, historical and cultural benefit, limit encroachment on military installations, restore degraded streams, and develop and improve stormwater treatment technology.

Natural and Working Lands Initiative (Natural and Working Lands | NC DNCR (ncdcr.gov)North Carolina's Natural and Working Lands initiative offers opportunities to build ecosystem resilience and sequester carbon while continuing to deliver economic growth. NCDEQ in collaboration with DNCR developed the Natural and Working Lands Action Plan. This plan builds on a wide range of actions and measures that protect, restore, and enhance the lands and coastal areas that provide vital health, social, economic, and environmental benefits.

2.4.2.1.2 NORTH CAROLINA HERITAGE PROGRAM (NATURAL HERITAGE PROGRAM OF NORTH CAROLINA (NCNHP.ORG))

The North Carolina's Natural Heritage Program ensures public access to information that is needed to weigh the ecological significance of natural areas and to evaluate potential ecological impacts of conservation and development projects. The natural heritage inventory, information on rare species and natural communities, helps project planners and landowners make decisions that have the most benefit for society and the economy, while having the least ecological damage.

2.4.3 NC Department of Public Safety (https://www.ncdps.gov/)

2.4.3.1 North Carolina Emergency Management (https://www.ncdps.gov/our-organization/emergency-management)

North Carolina Emergency Management works to enhance the state's resiliency by actively collaborating, communicating, and coordinating to prevent, mitigate, respond and recover from disasters. The agency deploys state resources when needed, and coordinates with neighboring states and the federal government to augment staffing and resources. North Carolina Emergency Management (NCEM) also administers state and federal grants, manages multi-agency responses to disasters, oversees all hazards and threat risk management, coordinates regional hazard mitigation plans, facilitates trainings and exercises, and manages assets such as the regional hazmat response and search-and-rescue teams. In addition, the agency develops and maintains flood maps for each county in North Carolina and maintains the official survey database for the state. NCEM also manages the state's Homeland Security program.

Mission: NCEM works to enhance the state's resiliency by actively collaborating, communicating, and coordinating to prevent, mitigate, respond, and recover from disasters.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: North Carolina Emergency Management has provided funding and support for mitigation, watershed

planning and resilience studies in the Neuse River Basin for many years. Summaries of each are provided below.

2.4.3.1.1 LOCAL AND REGIONAL HAZARD MITIGATION PLANS

List below contains the Local and Regional Hazard Mitigation Plans that would impact the Neuse Basin.

- Pamlico Sound Regional Hazard Mitigation Plan (includes Carteret, Craven, Pamlico Counties, and the municipalities within those counties)
- Eno Haw Regional Hazard Mitigation Plan (includes Durham, Orange and Person Counties and the municipalities within those counties)
- Tar River Regional Hazard Mitigation Plan (includes Franklin and Granville Counties and the municipalities within those counties)
- Neuse River Regional Hazard Mitigation Plan (includes Greene, Jones, Lenoir, Pitt and Wayne Counties and the municipalities within those counties)
- Cape Fear Regional Hazard Mitigation Plan (includes Johnston County and the municipalities within the county)
- Nash, Edgecombe, Wilson Regional Hazard Mitigation Plan (includes Nash and Wilson Counties and the municipalities within those counties)
- Wake County Multi-Jurisdictional Hazard Mitigation Plan (includes Wake County and the municipalities within the county)

2.4.3.1.2 RESILIENT REDEVELOPMENT PLANS (HURRICANE MATTHEW RESILIENT REDEVELOPMENT PLANS | RESILIENCY | REBUILD NC)

Following Hurricane Matthew in 2016, the NC General Assembly allocated funding for Resilient Redevelopment Plans to be completed in the fifty counties that were part of the Presidential Disaster Declaration. Plans were completed for the following counties in the Neuse River Basin:

- Carteret County Resilient Redevelopment Plan
- Craven County Resilient Redevelopment Plan
- Franklin County Resilient Redevelopment Plan
- Greene County Resilient Redevelopment Plan
- Johnston County Resilient Redevelopment Plan
- Jones County Resilient Redevelopment Plan
- Lenoir County Resilient Redevelopment Plan
- Pamlico County Resilient Redevelopment Plan
- Pitt County Resilient Redevelopment Plan
- Wake County Resilient Redevelopment Plan
- Wayne County Resilient Redevelopment Plan
- Wilson County Resilient Redevelopment Plan

2.4.3.1.3 NEUSE RIVER BASIN FLOOD ANALYSIS AND MITIGATION STRATEGIES STUDY (NC CLIMATE DATA | RESILIENCY | REBUILD NC)

The NCEM, in partnership with North Carolina Department of Transportation, conducted a six-month study of the Neuse River Basin to determine the primary sources of flooding and identify possible mitigation strategies to prevent future flood damage. Research and engineering teams focused on the most viable mitigation options for the river basin so they could conduct a thorough analysis using

multiple flood scenarios. This report also included a benefits analysis, estimated cost, and anticipated time frames for each strategy using multiple likely scenarios.

2.4.3.2 North Carolina Office of Recovery and Resilience (https://www.rebuild.nc.gov/resiliency)

Mission: Build a stronger North Carolina, where communities, economies, and ecosystems rebound, adapt, and thrive amid changing conditions and challenges, including disasters and climate change.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The NCORR has managed resilience planning efforts in the Neuse River Basin through the RISE program.

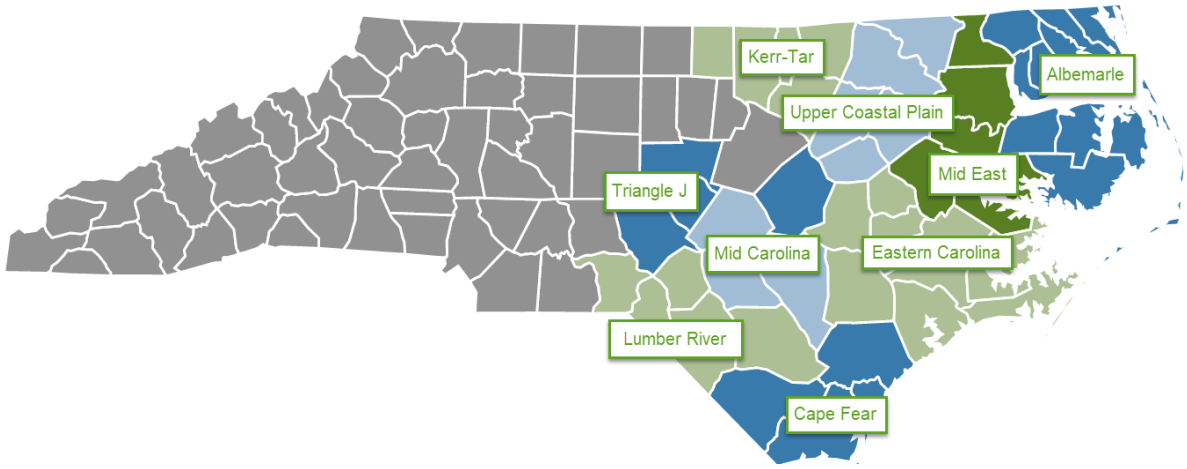

Figure 2-2: RISE Regions

2.4.3.2.1 REGIONAL RESILIENCE PORTFOLIO PROGRAM (REGIONAL RESILIENCE PORTFOLIO PROGRAM | RISE | REBUILD NC)

The Regional Resilience Portfolio Program supported nine regional partnerships, based on COG geographies in Eastern North Carolina, to develop vulnerability assessments and portfolios of priority resilience projects that reduce risk, including flood risk, and increase resilience in the region. The portfolios include all counties, the exception of Durham, Orange, and Wake Counties, within the Neuse River Basin:

- Eastern Carolina Regional Resilience Portfolio (includes Carteret, Craven, Greene, Jones, Lenoir, Pamlico, and Wayne Counties)
- Kerr-Tar Regional Resilience Portfolio (includes Franklin, Granville and Person Counties)
- Triangle J Regional Resilience Portfolio (includes Johnston County)
- Upper Coastal Plain Regional Resilience Portfolio (includes Wilson County)
- Mid-East Regional Resilience Portfolio (includes Pitt County)

2.4.3.2.2 HOMEGROWN LEADERS WITH NC RURAL CENTER

Homegrown Leaders is a regional leadership and economic development training program designed and developed by the NC Rural Center. The program supports and advances highly skilled existing and emerging leaders and equips community leaders with the skills needed to lead long-term economic development in their region. These leaders gain a better understanding of resiliency and a regional lens for long-term solutions to common problems and innovative opportunities for growth.

2.4.3.2.3 RESILIENT COMMUNITIES GUIDEBOOK

This guidebook is intended to empower decision-makers at the local and regional scale to better understand their climate vulnerability and develop shared priorities for action. The guidebook is comprised of two sections: the Playbook and an Idea Book. The Playbook guides users through the process of building a team, analyzing vulnerability and assets, brainstorming, and prioritizing actions, and identifying implementation steps. The Idea Book provides examples of projects, programs, and policies that improve resilience across social, economic, and environmental domains.

2.4.4 NC Department of Transportation (https://www.ncdot.gov/Pages/default.aspx)

Mission: Connect people, products, and places safely and efficiently with customer focus, accountability, and environmental sensitivity to enhance the economy and vitality of North Carolina.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The NC Department of Transportation has been identified as a State Partner to participate in the Neuse Regional Advisory Group.

2.4.4.1.1 FLOOD ABATEMENT ASSESSMENT FOR NEUSE RIVER BASIN (CONNECT.NCDOT.GOV/PROJECTS/RESEARCH/RNAPROJDOCS/FINAL REPORT RP2018-32.PDF)

North Carolina Department of Transportation, in partnership with North Carolina State University, conducted hydrologic and hydraulic modeling and engineering analyses, coordinated technical meetings, and organized community outreach efforts focused on the flood mitigation in the Neuse River Basin. The aim of the study was to better understand the sources and nature of riverine flooding, test potential flood mitigation measures, improve early warning systems for transportation-related infrastructure, evaluate storm severity, and identify potential improvements to local floodplain ordinances.

The Department is active in large-scale resilience efforts across the state and outlines its activity progress in the NC Department of Transportation Resilience Strategy Report.[5]

2.4.5 NC Department of Agriculture and Consumer Services (http://www.ncagr.gov/)

Mission: To provide services that promote and improve agriculture, agribusiness, and forests; protect consumer and businesses; and conserve farmland and natural resources for the prosperity of all North Carolinians.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: In 1997, the Environmental Management Commission adopted rules to support the nutrient sensitive water management strategy for the Neuse River. These rules act as control mechanisms to limit nutrient pollution and algal blooms in the Neuse River. Since 2001, the Neuse River Basin has consistently met and exceeded its reduction goal (30% reduction from the nitrogen loading of the 1991-1995 baseline years). NC Department of Agriculture provides Annual Progress Reports to document and track progress.

[5] (https://www.ncdot.gov/initiatives-policies/Transportation/transportation-resilience/Documents/ncdot-resilience-report.pdf).

2.4.5.1.1 NORTH CAROLINA AGRICULTURAL DEVELOPMENT AND FARMLAND PRESERVATION TRUST FUND (NC AGRICULTURE DEVELOPMENT & FARMLAND PRESERVATION TRUST FUND (NCADFP.ORG)

The North Carolina Agricultural Development and Farmland Preservation Trust Fund supports farming, forestry, and horticulture communities through the purchase of agricultural conservation easements, funding public and private enterprise programs that will promote profitable and sustainable farming practices, and funding conservation agreements.

2.4.6 State Climate Office (https://climate.ncsu.edu/)

Mission: The State Climate Office of North Carolina is a UNC System Public Service Center dedicated to serving the needs of North Carolinians by translating climate information into useful and usable knowledge, and bridging the gap between scientists, decision-makers, and community members.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The State Climate Office was one of several North Carolina-based agencies with experts that independently produced the Climate Science Report[6] (among other datasets) that informs flood hazard risk information for the Neuse River Basin.

2.4.7 United States Army Corps of Engineers (https://www.usace.army.mil/)

Mission: Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce disaster risk.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The United States Army Corps of Engineers (USACE) has been identified as a Federal Partner to participate in the Neuse Regional Advisory Group.

2.4.7.1.1 DRAFT NEUSE RIVER BASIN FLOOD RISK MANAGEMENT - INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT (NEUSE RIVER BASIN (ARMY.MIL)

This report analyzed a series of alternatives designed to reduce on-going flood risks throughout the Neuse River Basin. The alternatives evaluated included a no action plan, as well as various combinations of structural and nonstructural measures.

The study area comprised the entire Neuse River Basin in North Carolina. The basin begins in the Piedmont of North Carolina and extends 248 miles southeast through the Coastal Plain and flows into the Pamlico Sound, covering approximately 6,200 square miles. The study encompassed all or part of 18 counties. Population centers in the Neuse River Basin include the cities of Durham, Raleigh, Wilson, Smithfield, Goldsboro, Kinston, and New Bern.

2.4.8 Federal Emergency Management Agency (https://www.fema.gov/)

Mission: Helping people before, during and after disasters. The agency supports citizens and emergency personnel to build, sustain, and improve the nation's capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Federal Emergency Management Agency has funded Hazard Mitigation grants (home acquisitions,

[6] https://ncics.org/programs/nccsr/

elevations, etc.), hazard mitigation and resilience planning efforts, and is in a Cooperating Technical Partnership with the State of North Carolina.

2.4.9 Natural Resources Conservation Service (https://www.nrcs.usda.gov/)

Mission: Natural Resources Conservation Service delivers conservation solutions so agricultural producers can protect natural resources and feed a growing world.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin:

2.4.9.1.1 REGIONAL CONSERVATION PARTNERSHIP PROGRAM (REGIONAL CONSERVATION PARTNERSHIP PROGRAM | NATURAL RESOURCES CONSERVATION SERVICE (USDA.GOV)

The North Carolina Department of Agriculture and Consumer Services was awarded $7,090,909 and plans to implement Phase II of a phased project that aims to reduce the negative impacts of soil erosion and runoff in the Piedmont and Sandhills river basins of North Carolina. Phase II will focus on farmland in the Upper Neuse River Basin located in portions of Orange, Person, Durham, Granville, Wake, Franklin, Nash, Wilson, and Johnston counties. The project should result in the permanent protection of over 4,000 acres of working farms and forests in the Neuse River Basin. In addition to protection of working farms, these conservation easements will provide additional benefits of reduced erosion and improved water quality in the eight-county project area by setting restrictions on uses of land to help preserve and prevent overdevelopment.

2.4.10 United States Environmental Protection Agency (https://www.epa.gov/)

Mission: To protect human health and the environment.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The EPA protects people and the environmental from significant health risks, sponsors and conducts research, and develops and enforces environmental regulations in the Neuse River Basin.

2.4.10.1 Urban Waters Federal Partnership (https://www.epa.gov/urbanwaterspartners)

Through the partnership, efforts aim to revitalize urban waters and the communities that surround them, transforming overlooked assets into treasured centerpieces and drivers of urban revival. Walnut Creek, located in Raleigh, North Carolina, has been designated as the nation's 21st Urban Waters Federal Partner location in the EPA's Urban Waters Federal Partnership (UWFP). The UWFP reconnects urban communities, particularly those that are overburdened or economically distressed, with their waterways by improving coordination among federal agencies. This effort also establishes a framework to hire an individual as a community watershed ambassador, to act as liaison between the watershed's communities, the various federal, state, and local government agencies who have been involved with the effort for the past several years.

2.4.11 United States Department of Housing and Urban Development

Mission: Create strong, sustainable, inclusive communities and quality affordable homes for all. The US Department of Housing and Urban Development (HUD) works to strengthen the housing market to bolster the economy and protect consumers, meet the need for quality affordable rental homes, utilize housing as a platform for improving quality of life, and build inclusive and sustainable communities free from discrimination.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: HUD was directly involved in the Hurricane Matthew Resilient Redevelopment Plans through North Carolina's Recovery Action Plan for CDBG-Disaster Recovery.

2.5 Regional Stakeholders

This section included regional stakeholders who would be interested in Neuse River Basin actions within the Blueprint.

2.5.1 Carolina Wetlands Association (https://www.carolinawetlands.org/)

Mission: The Carolina Wetlands Association (CarWa) promotes the understanding, protection, restoration, and enjoyment of North and South Carolina's wetlands and associated ecosystems through science-based programs, education, and advocacy.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: CarWa launched a Wetland Treasures of the Carolinas program in 2016 seeking to increase public awareness and appreciation for wetlands and generate community stewardship for wetlands with regional importance.

2.5.1.1.1 WETLAND TREASURES OF THE CAROLINAS PROGRAM (WETLAND TREASURES (CAROLINAWETLANDS.ORG)

Areas selected for the Wetland Treasures program found within the Neuse River Basin include Theodore Roosevelt State Natural Area in Carteret County; Brodgen Bottomlands in Johnston County; Croatan National Forest in Craven; Carteret and Jones Counties; Hemlock Bluffs in Wake County; Robertson Millpond in Wake County; and Mason Farm in Orange County.

2.5.2 Conservation Trust of North Carolina (https://ctnc.org/)

Mission: The Conservation Trust for North Carolina (CTNC) seeks to inspire and enable people to build resilient, just communities through meaningful engagement and responsive leadership.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Through the Upper Neuse Clean Water Initiative, a program of Raleigh Water, CTNC provided funding to advance land trusts' ability to conserve forests, wetlands and open fields to slow down rain and runoff. In partnership with Raleigh Water, CTNC supported the efforts of Ellerbe Creek Watershed Association, Eno River Association, Tar River Land Conservancy, Triangle Greenways Council, Triangle Land Conservancy, and the Conservation Fund to conserve critical lands upstream of these growing urban areas until 2020.

2.5.3 Neuse Regional Water and Sewer Authority (http://www.nrwasa.org/)

Mission: A reliable, sustainable, and high-quality water supply is critical to the environmental, social, and economic viability of the Lenoir County and Pitt County areas.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Neuse Regional Water and Sewer Authority (WASA) provides an abundant source of water that is treated using state-of-the-art technology to produce high quality drinking water. The Neuse Regional WASA has been identified as a partner to participate in the Neuse Regional Advisory Group as part of the Blueprint project.

2.5.4 North Carolina Environmental Justice Network (https://ncejn.org/)

Mission: To promote health and environmental equality for all people of North Carolina through community action for clean industry, safe workplaces, and fair access to all human and natural resources. The North Carolina Environmental Justice Network (NCEJN) seeks to accomplish these goals through organizing, advocacy, research, and education based on principles of economic equity and democracy for all people.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The NCEJN is a grass roots organization focused on environmental justice in North Carolina. The organization focuses on issues such as confined animal feeding operations or industrial farming operations, coal ash, fracking, pipelines, landfills, and biogas that disproportionately affect low-income communities across the state. More specific to the Neuse River Basin, the NCEJN recognizes that communities along the I-95 corridor are impacted by hog waste contamination and coal ash contamination. These issues cause contamination, pollution, and depletion of fresh water sources and drinking supply in North Carolina.

2.5.5 Upper Neuse River Basin Association (https://unrba.org/)

Mission: The mission of the UNRBA is to preserve the water quality of the Upper Neuse River Basin through innovative and cost-effective pollution reduction strategies, and to constitute a forum to cooperate on water supply issues within the Upper Neuse River Basin by:

1. Forming a coalition of units of government, public and private agencies, and other interested and affected communities, organizations, businesses and individuals to secure and pool financial resources and expertise;
2. Collecting and analyzing information and data and developing, evaluating and implementing strategies to reduce, control and manage pollutant discharge; and
3. Providing accurate technical, management, regulatory and legal recommendations regarding the implementation of strategies and appropriate effluent limitations on discharge into the Upper Neuse River Basin.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The UNRBA was formed to provide an ongoing forum for cooperation on water quality protection and water resource planning and management within the Neuse River Basin. The association performs extensive monitoring and modeling including the Annual Monitoring Report, the Nutrient Credit Development Project, and the Interim Alternative Implementation Approach Program.

2.6 Tribal Communities

There are two state recognized tribal communities located within the Neuse River Basin. These tribes include the Sappony and the Occaneechi Band of the Saponi Nation. The Sappony live along the border of North Carolina and Virginia known as the High Plains including portions of Person County. The Occaneechi Band of the Saponi Nation is located in Alamance, Caswell, and Orange counties. Additionally, the Triangle Native American Society located in Wake County holds membership in the NC Commission of Indian Affairs.

Current level of engagement with planning and/or resiliency efforts in the Neuse River Basin: NC State University Staff have been identified as a partner to participate in the Neuse Regional Advisory Group and the NC Commission of Indian Affairs Board has been invited to participate as a Technical

Advisory Group member for the statewide effort. The Sappony and Occaneechi Band of the Saponi Nation tribes will be contacted during the Neuse Strategy development. Upon request or if later identified, other potential partners will be invited to participate in the Neuse Advisory Group.

2.6.1.1 Ecohydrology and Watershed Science Lab (Ecohydrology & Watershed Science – NC State University,ncsu.edu)

The Ecohydrology and Watershed Science Laboratory is part of the Department of Forestry and Environmental Research at North Carolina State University. The group is made up of hydrologists, environmental scientists, and geospatial analysts who pursue research, education, and outreach activities in North Carolina and elsewhere. The group partners with Native American tribes and other communities to understand environmental change through the lenses of environmental justice and indigenous rights in effort to amplify voices of Indigenous and other marginalized groups.

2.7 Non-Governmental Organizations

There are a number of non-governmental organizations that have completed work within the Neuse River Basin and are actively working toward the basin's overall environmental health and improvement. Each organization brings a unique skillset with knowledge gained through work in the Neuse River Basin . When combined, these diverse backgrounds strengthen capacity and will help achieve the final deliverables for the Blueprint.

2.7.1 American Flood Coalition (https://floodcoalition.org/)

Mission: The American Flood Coalition drives adaptation to higher seas, stronger storms, and more frequent flooding. As a nonpartisan group of cities, elected officials, military leaders, businesses, and civic groups, the coalition provides a platform to advocate with a unified voice for solutions to flooding and sea level rise. They focus on policies that strengthen the economy, invest in cities and towns, and safeguard national security and advance solutions that support flood-affected communities.

Current level of engagement with planning and/or resiliency efforts in the Neuse River Basin: Members of the coalition that are located within the Neuse River Basin include New Bern in Craven County, Kinston, and Raleigh.

2.7.2 Black Creek Watershed Association (https://wrri.ncsu.edu/partnerships/bcwa/)

Mission: A group of citizens in Cary, NC, who work together to improve water quality, wildlife habitat, and recreation in Black Creek, a small urban watershed in the Neuse River Basin.

Current level of engagement with planning and/or resiliency efforts in the Neuse River Basin: The Black Creek Watershed is a sub-watershed to the Neuse River Basin. The Black Creek Watershed Association provides education and installs green infrastructure including bioretention, wetlands, and rainwater harvesting.

2.7.3 Ducks Unlimited (https://www.ducks.org/north-carolina)

Mission: Ducks Unlimited conserves, restores, and manages wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Ducks Unlimited has participated in regional watershed planning activities such as the Neuse River Basin Flood Analysis and Mitigation Strategies Study.

2.7.4 Ellerbe Creek Watershed Association (https://www.ellerbecreek.org/)

Mission: Ellerbe Creek Watershed Association's (ECWA) vision is a living creek connecting human and natural communities in Durham. Through land acquisition, collaboration with the city, and public education, ECWA hopes to create a Durham where residents can bike or walk across the watershed and stop at local businesses and nature preserves along the way.

To achieve this vision, ECWA will:

- Enable a living creek – a healthy stream in which an appropriately diverse group of native fish and invertebrate species thrive
- Create a network of preserves and trails along which people can hike, bike, and walk from the Ellerbe Creek headquarters to Falls Lake
- Build ties among Durham's diverse neighborhoods and communities using Ellerbe Creek as a link
- Partner with the city and other groups that seek to move Durham to become a regional model for proactive urban stormwater management
- Help adults, and especially kids, have the opportunity to enjoy and appreciate being outdoors in a learning and safe environment

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Ellerbe Creek watershed is a sub-watershed to the Neuse River Basin. The sub-watershed has the highest population density of Durham's watersheds. Water from Ellerbe Creek flows into Falls Lake, then it follows the Neuse River to the Albemarle-Pamlico Sound before emptying into the ocean. The state has added the creek to a list of impaired water bodies, also known as the 303(d) list, which limited the creek's environmental services provided to people and wildlife. ECWA developed the Parks with Purpose Project and Preserve Stewards Program as well as participates in the Creek Smart initiative. Efforts made by ECWA to heal and protect the urban streams and the communities around them directly impacts the Neuse River Basin.

2.7.5 Environmental Defense Fund (https://www.edf.org/)

Mission: The Environmental Defense Fund's (EDF) mission is to preserve the natural systems on which all life depends through practical and lasting solutions to the most serious environmental problems using science and economics.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Through the Coastal Resilience Program, the EDF is focused on advancing solutions to help communities and farmers across North Carolina's coastal plain become more resilient to extreme weather and a changing climate by (1) building science and modeling to help identify potential of natural infrastructure solutions to reduce downstream flood impacts; (2) advising on the state's new resilience plan, which emphasizes science-based, natural solutions to reduce risk; and (3) engaging farmers, residents, and local officials in the Neuse and Lumber river basins to grow local capacity and foster community-driven solutions.

2.7.6 Farm Bureau (https://www.ncfb.org/)

Mission: North Carolina Farm Bureau Federation was formed to serve farmers and provide a unified voice for the interests and needs of the farming community. Today, North Carolina Farm Bureau serves as an advocate for members at the local, state, national, and international levels – providing educational, economic, public affairs, marketing, and various other services to members.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Farm Bureau has been identified as a partner to participate in the Neuse Regional Advisory Group as part of the Blueprint project.

2.7.7 Partners for Environmental Justice (https://www.pejraleighnc.org/)

Mission: The mission of Partners for Environmental Justice (PEJ) is to promote understanding and protection of urban wetlands, enhance community pride, and encourage economic development.

Current level of engagement with planning and/or resilience efforts in the Neuse River Basin: Walnut Creek watershed is a sub-watershed of the Neuse River Basin. The water in the Walnut Creek watershed flows southeast into the Neuse River Basin and empties into the Pamlico Sound off the coast of North Carolina. Flooding, environmental injustices, and rapid development are challenges primarily concentrated in historically underserved and under-resourced areas of Southeast Raleigh. In effort to mitigate flooding and address environmental injustices, PEJ has led or partnered with other organizations to improve the conditions of Walnut Creek watershed including, but not limited to, Urban Waters Federal Partnership, Watershed Action Team and Watershed Action Plan, Walnut Creek Wetland Community Partnership, and Bailey Drive Gateway Project.

2.7.8 Sound Rivers (https://soundrivers.org/)

Mission: To monitor and protect the Neuse and Tar-Pamlico river watersheds covering nearly one quarter of North Carolina, and to preserve the health and beauty of the river basin through environmental justice.

Sound Rivers is committed to the goal of environmental justice and equity for all people in the watershed. The organization aims to represent the full diversity of people living within the watersheds through diverse leadership, building of trust in impacted communities, and programs that are inclusive to serve the needs of all those communities within the Neuse and Tar-Pamlico river basins.

Sound Rivers believes all people should have access to enjoyment of the natural world and a powerful voice in decisions that may affect their environment and health. No group of people should bear a disproportionate share of negative environmental consequences, nor should they have less access to beneficial environmental goods. The organization is committed to ongoing activities focused on learning, reflection, adaptation, and intentional and focused outreach to diverse communities to ensure our work reflects, respects, engages, and includes communities of color.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Sound Rivers has participated in regional watershed planning activities such as the Neuse River Basin Flood Analysis and Mitigation Strategies Study. Sound Rivers has been invited to participate in the Neuse Regional Advisory Group.

2.7.9 Southern Environmental Law Center (https://www.southernenvironment.org/)

Mission: To protect the basic right to clean air, clean water, and a livable climate; to preserve our region's natural treasures and rich biodiversity; and to provide a healthy environment for all.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The Southern Environmental Law Center has participated in regional watershed planning activities such as the Neuse River Basin Flood Analysis and Mitigation Strategies Study.

2.7.10 The Nature Conservancy (https://www.nature.org/en-us/)

Mission: The mission of the Nature Conservancy is to conserve the lands and waters on which all life depends where the diversity of life thrives, and people act to conserve nature for its own sake and its ability to fulfill our needs and enrich our lives.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin:

2.7.10.1.1 SUSTAINABLE RIVERS PROGRAM (SUSTAINABLE RIVERS PROGRAM (NATURE.ORG)

The Nature Conservancy partnered with the US Army Corps of Engineers to create the Sustainable Rivers Program. In North Carolina, that work is taking place on the Cape Fear and Roanoke rivers. These regions are located north and south the Neuse River Basin in the Coastal Plain region. Although no work has previously been completed in the Neuse River Basin, the proximity of other efforts offers an opportunity to migrate action into the Neuse River Basin for expanded regional benefit. The Nature Conservancy has been invited to participate in the Neuse Regional Advisory Group.

2.7.11 Triangle Land Conservancy (https://triangleland.org/)

Mission: Triangle Land Conservancy (TLC) strives to create a healthier and more vibrant Triangle region by safeguarding clean water, protecting natural habitats, supporting local farms and food, and connecting people with nature through land protection and stewardship, catalyzing community action and collaboration.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Much of the Triangle region is located in the Neuse River Basin. Over the last 35 years, TLC has permanently conserved 18,358 acres of land and over 138 miles of stream in the six-county region. To continue conservation efforts, the organization's Strategic Action Plan 2018-2025 explicitly states it intends to "continue to work with partners to protect an additional 5,000 acres in the Upper Neuse Watershed by purchasing property outright and through conservation easements."

2.7.12 Walnut Creek Watershed Community Partnership (https://wrri.ncsu.edu/partnerships/walnut-creek-wetland-community-partnership/)

Mission: A group of individuals from varying backgrounds who come together to discuss and improve the wetlands. Partners work together to identify and implement projects that support healthy wetlands and health communities.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: Walnut Creek watershed is a sub-watershed of the Neuse River Basin. The water in the Walnut Creek

watershed flows southeast into the Neuse River Basin and empties into the Pamlico Sound off the coast of North Carolina. The Walnut Creek Watershed Community Partnership works on local issues in the wetlands, by engaging the local community and partners, and by developing action-based strategies tied directly to the Neuse River Basin.

2.7.12.1.1 WATERSHED ACTION TEAM (WALNUT CREEK WATERSHED ACTION PLAN (ARCGIS.COM)

Coordinated by NC Department of Water Resources, the Watershed Action Team is a core group of stakeholders whose goal is to leverage efforts for education, outreach, and the implementation of watershed improvement projects within the Walnut Creek watershed. Primary goals of this group include improving conditions environmentally, economically, and socially in the watershed's communities. The primary tool for this effort is a web-based information clearinghouse called the Watershed Action Plan (WAP), an initiative in the NC Department of Water Resources. The focal point of the WAP is a Goals, Strategies, and Objectives document created as a practical guide for ways to help improve conditions within the watershed.

2.7.13 US 70 Corridor Commission (http://www.super70corridor.com/)

The I-42/US 70 Corridor Commission is a partnership between five Eastern North Carolina Counties: Johnston, Wayne, Lenoir, Craven and Carteret.

Mission: To partner with local, regional and state government agencies to effectively support initiatives enhancing safety, mobility and economic vitality along the Highway 70 corridor through land use planning, transportation improvement and economic development strategies.

Current level of engagement with planning and resiliency efforts in the Neuse River Basin: The US 70 Corridor Commission has participated in regional watershed planning activities such as the Neuse River Basin Flood Analysis and Mitigation Strategies Study.

2.8 Concluding Remarks

This catalogue is intended to give an overview of identified government, organizations, and potential partners for the Blueprint. These organizations were carefully selected based on area of expertise and previous experience relevant to the Neuse River Basin. These entities range from grassroot organizations to federal agencies. They cover a number of asset interests including, but not limited to, transportation, utilities, coastal and shoreline protection, recreational, cultural, and environmental.

The catalogue will be a useful tool to determine potential stakeholder roles and responsibilities while developing the Blueprint. This is a living document that will be updated throughout the process to reflect changes and add additional stakeholders as identified. All information provided in this document will be validated during outreach efforts including the Neuse River Basin focus groups.

Subtask 2.3 will be an expansion of Task 1, subtask 1 to conduct a literature review to document the most current plans, reports, and documents that identify current flood resiliency efforts and sources of flooding within the Neuse River Basin. This review will include existing resilience efforts local/regional/state, policy, plans, documentation of the age of information, and a relative level of detail. Further documentation to identify existing investments in flood resilience: structural, maintenance, and current ownership/management will be created. For plans, the review will indicate if recommendations have been implemented and if there are barriers to implementation. This review will include current state, regional, or local resilience staffing levels and relative levels and types of expertise.

Appendix A: Stakeholder Catalogue Summary Table

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Academic and Research Institutions		
Duke University	Nicholas Institute's (Natural and Working Lands Program)	High
NC State University	Coastal Dynamics Design Lab (Floodprints, Home Place) Sea Grant Ecohydrology and Watershed Lab	High
Eastern Carolina University	Supporting environmental justice (EJ) in Connected Coastal Communities	High
NC Central University	Supporting EJ in Connected Coastal Communities	High
University of North Carolina	The Paerl Lab UNC Collaboratory Coastal Resilience Center (Hurricane Matthew Redevelopment Plans, Seven Springs Recovery Plan, Homeplace Kinston, Goldsboro Floodprint)	High
County Governments		
Carteret County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio, CAMA Land Use Plan	High
Craven County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio, CAMA Land Use Plan	High
Durham County	Hazard Mitigation Planning	High
Franklin County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High

[7] Each stakeholder was designated an estimated rating of "high", "moderate," or "limited" for their perceived capacity to engage in flood resilience planning and implementation in the Neuse River Basin. This designation was based on the regulatory, technical, and financial capacity exhibited through previous planning efforts related to resilience.

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Granville County	Hazard Mitigation Planning, Regional Resilience Portfolio	High
Greene County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Johnston County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Jones County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Lenoir County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Nash County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Orange County	Hazard Mitigation Planning	High
Pamlico County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio, CAMA Land Use Plan	High
Person County	Hazard Mitigation Planning, Regional Resilience Portfolio	High
Pitt County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Wake County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Wake County Water Partnership	High
Wayne County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Wilson County	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Municipal Governments		
Raleigh	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio, South Raleigh Drainage Studies	High
Durham	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Wilson	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Goldsboro	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
New Bern	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Kinston	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	High
Smithfield	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	Moderate
Grifton	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	Moderate
Pollocksville	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	Limited
Trenton	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	Limited

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Seven Springs	Hazard Mitigation Planning, Resilient Redevelopment Planning, Regional Resilience Portfolio	Limited
State and Federal Government Agencies		
North Carolina Department of Environmental Quality	Division of Mitigation Services – North Carolina Flood Resiliency Blueprint, Natural Infrastructure Mitigation Program, Environmental Enhancement Program, Watershed Action Team, Watershed Action Plan, Watershed Plans Division of Energy, Mineral, and Land Resources – Stormwater Program, Dam Safety Program Division of Coastal Management – CAMA Land Use Plans, Resilient Coastal Communities Program Division of Water Resources – Neuse River Basin Hydrologic Model, Riparian Buffer Protection Program, 319 Grant Program/Watershed Plans	High
North Carolina Department of Public Safety	North Carolina Emergency Management – Hazard Mitigation Planning, State management of federal hazard mitigation funding programs North Carolina Office of Recovery and Resiliency – RISE Program	High
North Carolina Department of Transportation	Flood Abatement Assessment for the Neuse River Basin	High
North Carolina Department of Natural and Cultural Resource	Division of Land and Water Stewardship, Natural and Working Lands Initiative, North Carolina Heritage Program	High
North Carolina Department of Agriculture and Consumer Services	Natural Resources Conservation Service, North Carolina Agricultural Development and Farmland Preservation Trust Fund	High
State Climate Office	North Carolina Climate Science Report	High
United State Army Corps of Engineers	Neuse River Basin Flood Risk Management Study, Sustainable Rivers Program	High

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Federal Emergency Management Agency	Federal funding such as Hazard Mitigation Grant Program, Building Resilient Infrastructure and Communities Program, Flood Mitigation Assistance Program. Millions of federal hazard mitigation dollars have been spent in the Neuse River Basin	High
United States Environmental Protection Agency	Urban Waters Federal Partnership	High
United States Department of Housing and Development	Hurricane Matthew Resilient Redevelopment Plan	High
Regional Stakeholders		
Carolina Wetlands Association	Wetland Treasures Program, NCORR's Regional Resilience Portfolio Program	Moderate
Conservation Trust of North Carolina	Upper Neuse Clean Water Initiative	High
Councils of Government	NCORR's Regional Resilience Portfolio Program	High
Non-Governmental Organizations		
American Flood Coalition	Identified as potential stakeholders for Blueprint	Moderate
Black Creek Watershed Association	Identified as potential stakeholders for Blueprint	Moderate
Ducks Unlimited	Neuse River Basin Flood Analysis and Mitigation Strategies Study	Moderate
Ecosystems Planning and Restoration	Stoney Creek Watershed – NCDEQ Natural Systems Mitigation Program Pilot Project	Moderate
Ellerbe Creek Watershed Association	Parks With Purpose Project, Preserve Stewards Program, Creek Smart	Moderate
Environmental Defense Fund	Coastal Resilience Program	High
Farm Bureau	Neuse River Council (Blueprint)	High

Stakeholder	Why Included	Capacity to Engage in Flood Resilience Planning and Implementation[7]
Partners for Environmental Justice	Urban Waters Federal Partnership, Walnut Creek Watershed Action Team, Walnut Creek Watershed Action Plan, Bailey Drive Gateway Project	High
Sound Rivers	Neuse River Basin Flood Analysis and Mitigation Strategies Study	High
Southern Environmental Law Center	Identified as potential stakeholders for Blueprint	Moderate
The Nature Conservancy	Sustainable Rivers Program (partnered with USACE)	Moderate
Triangle Lab Conservancy	Pathways Into Natural Environments and Science Program, "NextGen" Farming Program, Critical Land Program	Moderate
US 70 Corridor Commission	Neuse River Basin Flood Analysis and Mitigation Strategies Study	Moderate
Walnut Creek Watershed Community Partnership	Walnut Creek Watershed Action Team, Walnut Creek Watershed Action Plan	Moderate

Appendix B: Neuse Regional Advisory Group Members

NAME	AGENCY
Anjie Ackerman	NCDEQ/Division of Mitigation Services
Chris Seaberg	City of New Bern
Bryan Farmer	NC Association of Soil and Water Conservation Districts
Ben Farmer	Upper Coastal Plain Council of Government (COG)
Carlton Gideon	Eastern Carolina COG (In Neuse)
Charlie Colie	Neuse Regional Sewer and Water Authority
Diane Cox	Kerr-Tar COG
Haley Hogg	Mid-Carolina COG (In Neuse)
Jamille Robbins	NC Department of Transportation/Public Involvement
Jonathan Hinkle	Greenman Pendersen, INC. (GPI)
Keith Larick, Chair	NC Farm Bureau
Nancy Daly	Wake County
Rachel Love-Adrick	NCDEQ/ Division of Coastal Management
Samantha Krop	Sound Rivers, Inc.
Steve Miller	City of Kinston/ Public Services
Thomas Caggiano	The Nature Conservancy
Yesenia Cuello	NC Inclusive Disaster Recovery Network/ MDC Rural Forward
Kendall Paramore	Southeastern Drainage Office