

Statewide Flood Resiliency Blueprint Implementation Report

Statutory Authority: Session Law 2021-180 Section 5.9(c)

Department of Environmental Quality

Division of Mitigation Services

July 1, 2023

Receiving Entities: Joint Legislative Commission on Governmental Operations and the Fiscal Research Division

In accordance with SL 2021-180 Section 5.9(c) and SL2022-75 Section 22.(b) the Department of Environmental Quality (DEQ) is submitting the following legislative report.

Background

In 2021, the North Carolina General Assembly directed the DEQ Division of Mitigation Services (DMS) to contract with an organization to develop a Statewide Flood Resiliency Blueprint (Blueprint) and to report a status update annually to the Joint Legislative Commission on Governmental Operations and the Fiscal Research Division. The first status report was submitted by July 1, 2022 and is available online:

<https://www.deq.nc.gov/blueprint-implementation-report/open>

DEQ is uniquely positioned to lead the effort. It has extensive expertise in stakeholder coordination and outreach relating resiliency activities, leading the development of the 2020 North Carolina Climate Risk Assessment and Resilience Plan, as well as a history of delivering results in flood mitigation, coastal resiliency, dam safety, landslide mapping, energy resilience, stream and wetland mitigation, nature-based solutions, and storm mitigation. DEQ staff are highly skilled in complex decision making; public engagement; regulations; receiving and awarding grants; research; data and economic analysis; program development and enforcement; federal, regional, and local partnerships; and innovation. DMS has extensive experience in strategic planning, river basin and watershed planning, mitigation project implementation, watershed modeling and spatial data analysis, water and stormwater quality and controls contracting, and project delivery by private companies. These fields of expertise are critical in the successful development of a Blueprint that will meet the criteria defined by North Carolina legislators.

DEQ leadership views the Blueprint as a priority for the state and an important tool in addressing flooding in the future. The Department is providing additional support and oversight to ensure a comprehensive approach and a timely delivery of the Blueprint.

Vision

The Blueprint's purpose is to be a standardized, basin-wide flood resiliency approach applicable to all 17 NC river basins along with an actionable, decision-support tool that will form the backbone of the State flood planning process. Such a process will inform how and where resources should be allocated and to identify flood resiliency projects and strategies that should be implemented to increase community resiliency to flooding. The Blueprint will be applied within all NC river basins affected by past flood events and those anticipated to be impacted by future flood-related losses. It is not intended to be a static report or set of reports, but rather a dynamic tool that can be iterative and flexible to incorporate new data and information as they become available based on identified gaps and advances in science and technology. The Blueprint's outcomes will meet the requirements of the legislation based on the best available science, stakeholder engagement, and sound decision making. A key objective is to produce products that will be implementable, understandable, sustainable, and close the technical resource gaps among local planners, project developers, and communities. It will result in decision-support tools for targeted audiences that are interactive, easy to understand and use, and dynamic over time.

End users include decision makers within state, regional, and local government, as well as businesses and members of communities affected by recurring and excessive flooding. The Blueprint will provide multi-scale modeling, scenario exploration systems, guidance documents, and iterative and interactive online planning tools which will increase decision makers' abilities to prioritize and implement projects and establish effective stormwater maintenance programs in response to current and future conditions. It will build on existing data, strategies, projects, plans, and efforts underway by academia, businesses, and nonprofits, and incorporate local knowledge. The vision for this project was developed through the legislation and through extensive

communication with interagency staff, other states involved in flood mitigation and resiliency, municipalities and communities on the front line of flood events, climate and flood resiliency experts, legislators, and other stakeholders.

Status update

To ensure the Blueprint project development is successful, DEQ underwent an extensive Scope of Work (SOW) buildout process in 2022. DEQ conducted internal research and engaged experts and end users in Virginia, South Carolina, Louisiana, and Texas who were experiencing similar flood-related impacts as North Carolina. DEQ met with and held workshops with federal, state, regional, and local government flood and flood resiliency experts, non-governmental organizations, academia, and end users to develop and refine a draft SOW. After an extensive procurement process, AECOM was awarded a contract to serve as the vendor for the first stage of the Blueprint development effort on December 28, 2022. These completed activities are summarized in Table 1.

The Statewide Flood Resiliency Blueprint will be executed in three phases as described below. The phases will allow for more nimble decision making and constant evaluation of the process to incorporate learning. After each phase, there will be a review of findings and recommendations, the direction of the project will be evaluated, and the scope of work for subsequent phases will be refined accordingly.

Flood Resiliency Blueprint Phase I:

DEQ developed a broad-ranging participatory advisory process to ensure DEQ receives expert advice and recommendations from stakeholders across the state, representing wide-ranging interests, during the development of the statewide Flood Resiliency Blueprint. DEQ recruited 90 subject matter experts for its six technical advisory groups (TAGs), 16 members for the basin-specific Neuse Regional Advisory Group, and 30 members for the Principal Advisory Group. Appendix A identifies organizations and agencies represented.

Technical Advisory Groups (TAGs): Comprised of subject matter experts from federal, state, county, municipal, and tribal governments; non-governmental organizations; and other partners across the state of North Carolina to review vendor deliverables and provide recommendations to DEQ's development of the statewide approach for the Flood Resiliency Blueprint.

The Neuse Regional Advisory Group: Encompasses subject matter experts across the entire Neuse Basin to review vendor deliverables and provide input, feedback, and advice on Neuse River Basin specific needs regarding additional stakeholder engagement in the basin, flooding, impacts, mitigation, and vulnerability.

The Principal Advisory Group: Purpose is to provide high-level policy feedback to DEQ during the development of the Blueprint and receive regular updates from DEQ. Each of the TAG chairs sits on the Principal Advisory Group alongside stakeholders representing the policy or executive components of an agency or organization. DEQ relies on the Principal Advisory Group to provide insight and clarification if differences of view arise during the technical review process.

Key deliverables in Phase I are the requirements for the development of the online decision support tool, the draft Neuse Basin Action Strategy, and the draft Flood Resiliency Blueprint Process Document. The process to develop these key deliverables includes four tasks, which build on each other towards the key deliverables. Table 1 identifies status for each of the four Phase I tasks.

Phase I – Task 1: outreach and engagement activities, data and literature review

Phase I – Task 2: develop gap analysis based, in part, on data and literature review (i.e., Task 1)

Phase I – Task 3: develop recommendations based, in part, on data and literature review (i.e., Task 1) and gap analysis (i.e., Task 2). These recommendations include requirements for online decision support tool applications.

Phase I – Task 4: development of key deliverables: Draft NC Flood Resiliency Blueprint and Neuse-Basin specific Action Strategy. Table 1 describes each of these key deliverables in more detail.

Flood Resiliency Blueprint Phase II: Phase II is the development (i.e., writing, testing, and deploying computer code) of the beta version of the web-based decision support tool. Phase II will run concurrent with the latter portion of Phase I and during the development of the Neuse Basin Action Strategy in Phase I.

Flood Resiliency Blueprint Phase III: Phase III is the application of the online support tool, developed in Phase II, and draft Flood Resiliency Blueprint, developed in Phase I, to river basins statewide. Phase III will develop river-basin specific action strategies, similar to the Neuse Basin Action Strategy developed in Phase I, for the additional targeted river basins in the state of North Carolina with additional basins as funds allow. The additional targeted river basins in NC are the Cape Fear, Yadkin-PeeDee, Tar-Pamlico, White Oak, and French Broad basins. Interested parties can learn more about the Blueprint and status by visiting <https://www.deq.nc.gov/about/divisions/mitigation-services/flood-resiliency-blueprint>.

Table 2 provides anticipated completion dates for Flood Resiliency Blueprint Phases II and III.

Update on the Following Information per SL2022-75 Section 22.(b)

(1) Recommendations on how data can be incorporated into decision making through local planning and State project prioritization for capital improvement plans.

- Phase I will provide recommendations for linking identified mitigation solutions to the identified flooding issues (regional and local) within the Blueprint online tool. The goal is for the tool to help decision makers link their particular flooding issues with the suggested resiliency options and the associated costs and possible funding options for that solution. These actions are in progress and building on the completed work and work in progress from the literature review and gap analysis.
- Additionally, Phase I will provide recommendations for open source Hydrologic & Hydraulic modeling approaches and how the models can be leveraged and cross utilized. This work builds off of an inventory of the types and sources of flooding that create negative impacts (e.g., flooded infrastructure, structural damage, human safety, acute environmental impacts) throughout NC basins along with frequencies/spatial extent.

(2) Decision support tools and an implementation plan to reduce the cost and complexity for local government units to develop projects that reduce flood risks.

- A key output of Phase I is the requirements needed for a decision support tool. The draft Blueprint document and Neuse River Basin Action Strategy will include application of a beta version of the decision support tool. Work to develop the draft Blueprint and Neuse Basin Action Strategy is in progress and will include an online report and storyboard that contain findings and recommendations for improving flooding resiliency in the pilot basin. The goal is for the tool to help decision makers link their particular flooding issues with the suggested resiliency options and the associated costs and possible funding options for that solution.
- A second key output of Phase I is the development of the Draft Neuse River Basin Strategy. This pilot action strategy is the implementation plan for priority mitigation projects and strategies in the Neuse Basin. The Neuse Basin was chosen as the pilot because it likely has the most data related to flooding compared to other basins in the state. The action strategy will discuss identified projects in the basin, an explanation of their conditions, cost estimate, estimated timeline evaluation or potential pre/post gains, community benefits and impacts, a cost-benefit analysis which will include return on investment. This report will act as the pilot action strategy by which other NC basin action strategies are developed.
- Priority mitigation projects can include developing and maintaining local stormwater programs. Phase I will provide recommendations for developing and maintaining local stormwater programs in the Neuse Basin Action Strategy. The recommendation will include level of resources required, possible funding sources, and ways to address the funding gaps of small, under-resourced communities.
- Future Phase III (non-Neuse Action Strategies): Selected vendor(s) will develop additional action strategies for the other major river basins in North Carolina concurrently. These action strategies are the implementation plans for priority mitigation projects and strategies to reduce flood risks.

Summary of Phase I Scope and Deliverables

Below is an outline of progress in this reporting cycle (July 1, 2022 – July 1, 2023). Table 1 identifies Blueprint progress in this reporting cycle.

Table 1: Blueprint Development Progress to Date

Category	Task	Status
Phase I Scope of Work Development	Meet with flood resiliency experts and Blueprint end users from other North Carolina state government groups to develop the Blueprint SOW. This group was identified as the Core Technical Advisory Group (TAG). The goal of this task was to ensure the SOW requires the vendor to deliver a Blueprint that will incorporate and build on existing tools, plans, efforts, knowledge and skills within the state agencies and address the needs of state decision makers.	Completed. DEQ held several one-on-one meetings and three workshops with flood resiliency experts and Blueprint end users from several state teams to hear input on draft SOW. Examples of the teams engaged in the process included several NC DEQ Divisions, NC Department of Transportation, NC Emergency Management, NC Department of Agriculture and Consumer Services - Division of Soil and Water Conservation, NC Department of Natural and Cultural Resources, NC Land and Water Fund, NC Natural Heritage Program, NC Office of Recovery and Resiliency, NC Department of Administration. These discussions led to the development of a draft SOW built on experts’ knowledge across state agencies. Items developed and refined from this process included guiding principles, multi-scale watershed modeling decision making, gap analysis refinement, flood resiliency program and tool integration analysis approaches, data and model standardization strategies, virtual decision exploration tool development methods, and stakeholder engagement development approaches.
	Meet with flood resiliency experts and Blueprint end-users outside of state government to develop and refine the draft SOW. This group was identified as the Expanded TAG. The goal of this task was to develop a SOW that includes requirements and methods that ensure the Blueprint vendor will incorporate and build on existing plans, efforts, tools, knowledge and skills outside of state agencies and address flood resiliency needs of non-state	Completed. DEQ held several one-on-one meetings with non-governmental organizations (NGOs), academics, and federal agencies to develop the draft SOW and held a large workshop with those entities to review and refine the SOW. Groups engaged in this process included: American Flood Coalition, Environmental Defense Fund, The Pew Charitable Trusts, Conservation Trust of NC, The Nature Conservancy, NC Conservation Network, NC State University, UNC-Chapel Hill, Duke University, East Carolina University, NC League of Municipalities, NC Farm

	decision makers to the extent practical.	<p>Bureau, NC Regional Council of Governments (COG), Triangle J COG, Eastern Carolina COG, The Conservation Fund, Carolina Wetlands Association, Upper Coastal Plain COG, NC Association of County Commissioners, Land of Sky, Western Piedmont COG, High Country COG, Mid-East Commission, Kerr-Tar COG, US Geological Survey, US Army Corps of Engineers, and the NC State Climate Office.</p> <p>These discussions refined and clarified elements of the draft SOW including Blueprint development approaches, stakeholder engagement strategies, language and terms, and watershed modeling requirements.</p>
	Completed Scope of Work	Completed. Final Request for Proposal (RFP) approved by Department of Administration (DOA) on September 28, 2022.
Phase I Vendor Selection	Issued RFP solicitation for the SOW developed by the comprehensive development process to the pre-qualified vendors.	Completed. RFP solicitation issued on September 29, 2022 and closed on October 31, 2022.
	Conducted vendor presentations and completed technical evaluation of vendor proposals	Completed November 7-9, 2022.
	Recommended contract award to DOA	Completed November 16, 2022.
	Executed Contract with AECOM Technical Services of North Carolina, Inc.	Completed December 28, 2022.
Blueprint Phase I (December 2022 – December 2023)		
Phase I - Task 1: Stakeholder Outreach	Ongoing. DEQ and Vendor compiled a list of stakeholders which included those that assisted with SOW development and other interested parties engaged in flood resiliency efforts. 161 subject matter experts across federal, state, tribal, and county/municipal/council of government agencies, academics, and non-government organizations agreed to participate on six Technical Advisory Groups (TAG) and one regional advisory group (Neuse Regional Advisory Group). Members of the TAGs, Neuse Regional Advisory Group, and Principal Advisory Group are listed at the end of the report in Appendix A.	

	<p>The TAG kick-off meeting was held on March 15, 2023 in Goldsboro. The second set of TAG meetings took place on May 3, 2023, at the DEQ Green Square Office.</p> <p>A Principal Advisory Group was formed to provide advisory input and feedback on the policy, process, engagement, modeling, tools, and support used to implement the Blueprint. The Principal Advisory Group is comprised of 30 members from federal, state, tribal, and county/municipal/council of government (COG) agencies and non-government organizations (NGOs). The first Principal meeting was held on March 22, 2023, at the DEQ Green Square Office.</p> <p>In summary, since January 2023 the NC Flood Resiliency Blueprint team has hosted and participated in the following stakeholder engagement activities:</p> <ul style="list-style-type: none"> • 3 TAG meetings (including all six TAGs) • 2 Neuse Regional Advisory Group meetings • 1 Principal meeting • 4 meetings with local leaders in New Bern, Lumberton, Wilmington, and Haywood County • 4 public community engagement events in New Bern, Lumberton, Wilmington, and Haywood County. • 1 Neuse Basin Workshop • 15 External Organization Meetings (3 conferences) • 1 Environmental Justice and Equity Advisory Board Meeting
<p>Phase I – Task 1: Data and Literature Reviews</p>	<p>Task 1 also involved data review which includes a literature review and inventory of data from existing planning efforts, studies, and regional scale modeling. The data review tasks also include cataloging local, regional, and state organizations engaged in watershed planning or resiliency as well as a review of governance structures of peer states that have completed similar platforms for decision making. These reviews have been completed and are currently under review by the assigned TAGs or under DEQ review for finalization. Task is nearly complete.</p>
<p>Phase I - Task 2: Gap Analysis</p>	<p>Vendor has started work on a statewide data inventory and gap analysis of resources necessary to develop the Blueprint and Neuse River Action Strategy. The TAGs are providing input and recommendations on deliverables. The Vendor is responding to TAG comments and incorporating additional information as appropriate. The Gap Analysis is approximately 75% complete.</p>
<p>Phase I - Task 3: Recommendations/Decision Framework</p>	<p>Vendor has started work on developing the recommendations and decision framework to support the Blueprint. The TAGs will be providing input and recommendations. The Vendor will be responding to TAG comments and incorporating additional information as appropriate. Upon completion of the subtasks, the information will be combined to result in a guidance document outlining the overall governance scheme to support the development and application of the decision support tool including data identification and management, and the procedure to implement the Blueprint program. Task is 25% complete.</p>

Phase I Task 4: Online Decision Support Tool Requirements Analysis	Vendor has started work to develop a detailed requirements analysis needed to support an online decision support tool. This will include storyboards, wireframes and mockups that will inform the work under Phase II. Task is in development.
Phase I - Task 4: Draft Neuse Basin Flood Resiliency Action Strategy	Vendor will develop a Draft Neuse Basin Flood Resiliency Action Strategy, which is the written basin-specific flood resiliency plan with actionable recommendations for the Neuse River Basin. The Neuse River Basin will be the pilot river basin in which the Blueprint concepts and associated products are initially tested. This pilot action strategy will include recommendations for improving flood resiliency within the pilot basin and will identify and evaluate flood risk, consider multiple benefits, and prioritize actions that specifically address stakeholder needs. The Action Strategy will identify and prioritize realistic and implementable flood mitigation project opportunities that specifically address identified flood resilience issues. Each identified project shall, at a minimum, encompass: an explanation of existing conditions, cost estimate, timeline, and evaluation of potential pre/post gains including reduction of risk, community benefits and impacts, and a benefit-costs analysis. Task is in development.
Task 4: Draft North Carolina Flood Resiliency Blueprint	Vendor will develop a Draft North Carolina Flood Resiliency Blueprint that will be a procedural document that serves as a manual for conducting flood resiliency planning at the river basin level. The document will contain recommendations including policy and governance strategies that could be incorporated at the state, regional and community levels to coordinate efforts, affect change and improve the overall flood resiliency planning process. Task is in development.

Table 2: Blueprint Development Future Phases and Tasks

Category	Task	Status
Phase II & Phase III	Blueprint Phase II will include the development (writing, testing, and deploying computer code) of the beta web-based decision support tool and the conclusion of the Neuse Watershed Flood Resiliency Implementation Instrument.	July 2023 (concurrent to Phase 1) - November 2023 (substantial completion date)
	Blueprint Phase III will include the completion of the Blueprint and Online Support Tools and developing action strategies for targeted other major river basins statewide and other river basins, as funds permit (Targeted basins: Cape Fear, Yadkin-PeeDee, Tar-Pamlico, White Oak French Broad; Other basins: Roanoke, Pasquotank, Lumber, Catawba, Little Tennessee, Broad, Chowan, New, Hiwassee, Watauga, Savannah)	Start date January 2024 End date December 2024

Due to State contracting rules which ensure fair competition, more specific details on the Scope of Work for Phase II and Phase III cannot be shared until the contract selection process has been completed.

Budget

Of 3% administrative expenses (totaling \$600,000), \$38,847.86 was paid 2021-2022 and \$121,662.39 from 2022-2023 (as of 6/20/23). Of non-administrative expenses \$1,885,000 for Phase I is encumbered for FY22-23. Table 3 identifies estimated expenditures for the Blueprint across all three phases.

Table 3: Estimated expenditures for Flood Resiliency Blueprint across all Phases

	Phase I Estimated payment Schedule	Phase II & III Estimated Cost	Administrative Costs	DIT service	Totals
Budget	\$1,885,000	\$17,374,708	\$600,000	\$140,292	\$20,000,000
Spent or Encumbered	\$1,885,000	\$0	\$160,510.25	\$0	\$2,045,510.25
Remaining	\$0	\$17,374,708	\$439,489.75	\$140,292	\$17,954,489.75

Appendix A: Advisory Group Member List

As of 6/20/2023

Principal Advisory Group

Technical Advisory Groups:

Governance

Partnership and Funding

When/Where: Hazard Identification

Who/What: Vulnerability, Risk, Impact

How: Resilience, Mitigation, Reduction

Tool Development, Acceptance

Neuse Regional Advisory Group

Principal Advisory Group: The Principal Advisory Group will provide advisory input and feedback to DEQ on the policy, process, engagement, modeling, tools and support utilized to implement the Blueprint.

Organization Type	Organization
County	Mecklenburg County
DEQ	DEQ/Secretary's Office
DEQ	DEQ/Division of Mitigation Services
DEQ	NC DEQ/ Division of Energy, Mineral, and Land Resources
EJ Partner	Secretary's Environmental Justice and Equity Advisory Board
Federal	USACE/Wilmington District
Federal	USGS
Federal	USGS
Federal	USGS
Municipality	NC Association of Floodplain Managers
Municipality	NC League of Municipalities
NGO	NC Farm Bureau
NGO	Conservation Trust for NC
NGO	Hispanic Federation
NGO	Conservation Trust for NC
NGO	Golden Leaf
NGO	NC Foundation for Soil & Water Conservation
NGO	The Nature Conservancy
NGO	NC Foundation for Soil & Water Conservation
NGO	American Flood Coalition
NGO	Environmental Defense Fund
State	NC State Climate Office
State	NC Office of Recovery and Resilience
State	NC Department of Information Technology
State	NC Department of Public Safety/Emergency Management
State	NC Department of Agriculture and Consumer Services/Division of Soil & Water Conservation
State	Governor's Office
State	NC Department of Information Technology/Center for Geographic Information & Analysis
State	NC Department of Public Safety/Emergency Management
Tribal	NC Commission of Indian Affairs

Governance: The Governance TAG will provide advisory input and feedback to DEQ on existing and proposed policies, processes, and programs at a Federal, State, Tribal, and/or other local level that will impact the rollout and operations of the Blueprint.

Organization Type	Organization
University	Duke University
DEQ	NC DEQ/ Division of Coastal Management
DEQ	NC DEQ/ Division of Energy, Mineral, and Land Resources
Federal	FEMA Region IV
Municipality	NC League of Municipalities
NGO	NC Foundation for Soil & Water Conservation
NGO	Robeson County Church and Community Center
NGO	North Carolina Coastal Federation Eastern North Carolina Sentinel Landscape
NGO	Environmental Defense Fund
NGO	American Flood Coalition
State	NC Department of Agriculture and Consumer Services
State	NC Department of Public Safety/Office of Recovery & Resiliency
State	NC Department of Commerce
State	NC Department of Public Safety/Floodplain Mapping Program
University	Duke University
University	UNC Policy Collaboratory
University/Tribal	UNC American Indian Center

Partnership and Funding: The Partnership/Funding TAG will advise DEQ on funding and financial partnership opportunities to support implementation of Blueprint projects. The group will also advise DEQ on criteria and modeling used to calculate benefit and prioritization.

Organization Type	Organization
COG	NC Association of Regional Councils of Government
County	NC Association of County Commissioners
DEQ	NC DEQ/ Office of Secretary
DEQ	NC DEQ/ Division of Water Infrastructure
DEQ	NC DEQ/ Division of Water Infrastructure
Federal	FEMA Region IV
NGO	The Conservation Fund
NGO	Golden Leaf Foundation
NGO	The Pew Charitable Trusts
State	NC Department of Public Safety/Office of Recovery & Resiliency
University	NC Water Resources Research Institute

When/Where: Hazard Identification - The Hazard Identification TAG will provide input to DEQ on data and modeling used to calculate and display flood probability and extent. This work will include consideration of deterministic and probabilistic riverine, lacustrine, dam and levee induced, urban, stormwater, and coastal and/or riverine confluence flooding.

Organization Type	Organization
DEQ	NC DEQ/ Division of Water Resources
DEQ	NC DEQ/ Division of Coastal Management
Federal	NOAA
Federal	USGS South Atlantic Water Science Center
Federal	USACE
NGO	Environmental Defense Fund
NGO	The Nature Conservancy
NGO	American Flood Coalition
NGO	MDC Rural Forward Director
State	NC Department of Transportation/ Hydraulics Unit
State	NC Department of Public Safety/Floodplain Mapping Program
University	University of North Carolina-Chapel Hill Institute of Marine Science

Who/What: Vulnerability, Risk, Impact - The Vulnerability/Risk/Impact TAG will advise DEQ on data and modeling to calculate and display present and future vulnerabilities and impacts to people and receptors. Populations include historically marginalized communities, and Tribes. Receptors include, e.g., environment, structures, infrastructure, and commerce. The group will also provide input and feedback to DEQ on criteria and modeling utilized for risk and equity ranking and rating.

Organization Type	Organization
COG	Land of Sky Regional Council
DEQ	NC DEQ/ Division of Energy, Mineral and Land Resources
DEQ	NC DEQ/ Division of Waste Management
DEQ	NC DEQ/ Division of Waste Management
DEQ	NC DEQ/ State Energy Office
Municipality	City of Fayetteville/ Stormwater Management Program
NGO	NC State University
NGO	NC Black Alliance
NGO	Conservation Trust for NC
State	NC Department of Health and Human Services
State	NC Department of Agriculture and Consumer Services/Forest Service
State	NC Department of Health and Human Services
State	NC Department of Public Safety/Emergency Management
State	NC Chamber of Commerce
State	NC Department of Agriculture/Division of Soil and Water Conservation
University	NC State Climate Office
University	North Carolina A&T University
University	University of North Carolina

How: Resilience, Mitigation, Reduction - The Resilience/Mitigation/Reduction TAG will provide input to DEQ on data and modeling to best calculate and display present and future loss avoidance to people and receptors. The group will also provide advice to DEQ on criteria and modeling used for ranking and prioritizing mitigation strategies and projects.

Organization Type	Organization
COG	Lumber River
DEQ	NC DEQ / Division of Mitigation Services
Federal	USDA
Federal	FEMA Region IV
Federal	USACE - Wilmington District
NGO	NC Conservation Network
NGO	Hispanic Federation
NGO	Carolina Wetlands Association
NGO	NC Coastal Federation
NGO	NC Foundation for Soil & Water Conservation
NGO	Environmental Defense Fund
State	NC Department of Public Safety/ Emergency Management Division
State	NC Department of Public Safety/ Office of Recovery and Resiliency
State	NC Department of Natural and Cultural Resources/Natural Heritage Program
State	NC Department of Insurance
Tribal	Eastern Band of Cherokee Indians
University	NC State University
University	Duke University
University	University of North Carolina - Wilmington
University	University of North Carolina- Chapel Hill

Tool Development, Acceptance - The Tool Development/Acceptance TAG will provide input and feedback to DEQ on the business case and functional requirements of Blueprint tools, websites, and applications.

Organization Type	Organization
NGO	NC Conservation Network
County	Pender County
County	New Hanover County
DEQ	NC DEQ/ Division of Energy, Mineral, and Land Resources
DEQ	NC DEQ/ Division of Coastal Management
DEQ	NC DEQ/ Division of Energy, Mineral, and Land Resources
Municipality	City of Wilmington
Municipality	City of Asheville
Municipality	Charlotte-Mecklenburg/ Stormwater Services
NGO	NC Coastal Federation
State	NC Department of Information Technology
State	NC Department of Commerce

Neuse Regional Advisory Group - The Neuse Regional Advisory Group will provide input to DEQ on Neuse River Basin specific needs, including from historically marginalized communities and how to best use the information from Blueprint at a River Basin level. This group should be representative of the Basin and is intended to serve as a pilot that will help define how future basins are incorporated into the Blueprint process.

Organization Type	Organization
COG	Upper Coastal Plain COG
COG	Eastern Carolina COG (In Neuse)
COG	Mid-Carolina COG (In Neuse)
County	Wake County
DEQ	NC DEQ/ Division of Mitigation Services
DEQ	NC DEQ/ Division of Coastal Management
Municipality	City of New Bern/ Water Resources Administration
Municipality	City of Kinston/ Public Services
NGO	Neuse Regional Sewer and Water Authority
NGO	GPI
NGO	NC Farm Bureau
NGO	Southeast Drainage Commission
NGO	The Nature Conservancy
NGO	NC FIELD
NGO	Sound Rivers, Inc.
State	NC Department of Transportation/Public Involvement