



**US Army Corps  
of Engineers**  
Wilmington District

## Neuse River Basin, NC Flood Risk Management Study

- **Study Area Impacted by Hurricanes Matthew (2016) and Florence (2018)**
- **Study Cost Sharing Agreement executed on April 8, 2020**
- **Sponsor – State of North Carolina**
- **Study Cost: \$3,000,000**
- **Fully funded under Disaster Relief Act of 2019**



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CONGRESSIONAL DISTRICTS: NC-1, 2, 3, 4, and 7

DATE: 01 APRIL 2022

1. **AUTHORIZATION**: Study Authority: House Committee on Transportation and Infrastructure Resolution adopted July 23, 1997.
2. **LOCATION AND DESCRIPTION**: The Neuse River Basin begins in the piedmont of North Carolina and extends 248 miles southeast through the Coastal Plain and flows into the Pamlico Sound. The basin covers about 6,200 square miles. The basin encompasses rural and urban areas in all or part of 14 counties, 75 municipalities, including population centers in the cities of Durham, Raleigh, Smithfield, Goldsboro, Kinston, and New Bern, NC. The Neuse River Basin is one of just four river basins contained entirely within North Carolina, and it is the second largest in the state.
3. **PURPOSE**: Conduct feasibility-level studies to determine the feasibility of structural, non-structural and natural/nature-based measures that could be implemented to reduce overall flood risks. Examples of flood risk impacts include Hurricanes Matthew and Florence on the southeast Atlantic Ocean coastline that led to record flooding within the study area. Hurricane Matthew produced record flood stages at Smithfield, Goldsboro and Kinston, NC. For example, recorded total rainfall at Kinston from Hurricanes Matthew and Florence was 19 and 17 inches, respectively. These and other non-hurricane events have caused tremendous damage to numerous residential and commercial structures as well as flooding of critical transportation infrastructure and evacuation routes supporting public and commercial activities. The study area includes the Federal multi-purpose Falls Lake project, located generally northwest of Raleigh, NC.

PROJECT INFORMATION – Neuse River Basin, NC, Flood Risk Management Study – Continued

4. **COST ESTIMATE:** Feasibility Study Phase:

\$ 3,000,000	(Federal)
\$ _____	0 (non-Federal)
\$ 3,000,000	Total

5. **FEDERAL FUNDING ALLOCATION THRU FY 2021:** \$2,000,000 (Disaster Relief Act of 2019).

6. **FY 2022 ALLOCATION AMOUNT:** \$600,000 (Disaster Relief Act of 2019).

7. **FY 2023 ALLOCATION AMOUNT:** \$400,000 (Disaster Relief Act of 2019).

8. **KEY DATES:**

Tentatively Selected Plan Meeting – December 2021 (actual)

Release of Draft Report to Public – April 2022

Agency Decision Meeting – July 2022

9. **STATUS:** Nonstructural plan under development focusing on structural elevation and floodproofing of 768 habitable structures throughout the basin plus flood warning system enhancements and developing public education and awareness information for remaining flood risks within the Neuse River Basin. Release of the draft report/EA scheduled for late April 2022.

10. **OTHER INFORMATION:**

In state-wide impacts from Hurricane Florence, North Carolina reported 42 fatalities with total damage estimates approaching \$17 billion. An estimated 75,000 structures were flooded and over 5,000 people were reportedly rescued from flooding in North Carolina.

All communities within the study area are part of state-wide risk assessments conducted by the State of North Carolina's Emergency Management, as well as in the on-going Corps' South Atlantic Coastal Comprehensive Study. No recommendations, or construction of risk management features has yet resulted from either effort.

Following Hurricane Matthew, the State of North Carolina completed a basin-wide report that included a flood analysis and an array of mitigation strategies, including flood risk avoidance and minimization.