# **Tar-Pamlico River Basin Flood Risk Management Feasibility Study**

## **Study Information**

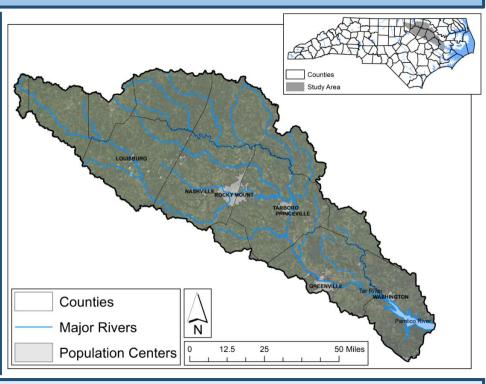
**Authorization:** House Committee on Transportation and Infrastructure Resolutions adopted on April 11, 2000 and May 21, 2003.

Phase: Feasibility

Total Study Cost: \$3.0M

**Appropriation:** 2019 Additional Supplemental Appropriations for Disaster Relief (H.R. 2157).

**Non-Federal Sponsor:** North Carolina Department of Environmental Quality



# **Study Area**

The study area comprises the entire Tar River Basin in North Carolina, as well as the area along the Pamlico River immediately downstream of the Tar River. The study area contains six major population centers (Washington, Greenville, Tarboro/Princeville, Rocky Mount, Nashville, and Louisburg), as well as more rural areas throughout all or portions of 13 counties (see map above).

#### **Problems**

#### **Economic damages**

- Residential and non-residential structures
- Industry (e.g., agriculture) and commerce
- Public infrastructure (e.g., roads, airports)
- Traffic delays

#### Elevated risks to life safety

- Isolation of communities
- Loss of life on roadways
- Inundation of critical infrastructure
- Vulnerable populations within the floodplain





# **Opportunities**

- Improved quality of life
- Improved habitat quality
- Reduced pollution to Tar River & Pamlico Sound
- Increased awareness of/preparedness for flood risk
- Increased resiliency of communities
- Reduced life safety risk
- Enhanced recreational opportunities

# **Study Objectives**

- 1. Reduce damage to structures/infrastructure
- 2. Reduce economic damage to industries (i.e., agriculture) and commerce
- 3. Reduce life safety risk associated with inundation of structures
- Reduce life safety risk associated with inundation of transportation infrastructure

## **Management Measures**

The study will assess the feasibility of implementing various structural (i.e., alter the flood hazard), non-structural (i.e., alter exposure to the flood hazard), and natural/nature-based (i.e., leverage or mimic natural processes) features to help meet study objectives.

#### **Structural**

- Floodwalls & levees
- Channel modification
- Roadway elevation
- Upstream detention basins
- Channel diversion/realignment
- Barrier removal

#### **Non-Structural**

- Acquisition & relocation
- Structure elevation
- Flood-proofing
- Emergency preparedness
- Flood warning

#### Natural/Nature-Based

- Floodplain restoration
- Wetland restoration
- Stream restoration
- Watershed conservation
- Watershed storage
- Living shorelines

## **Study Schedule**

The study will be completed over a three-year period. A timeline with major milestones and points of public involvement is presented below:



- 1. Study Initiation: Agreement with NC DEQ signed.
- **2. Alternatives Milestone:** First decisional study milestone. Study team has identified management measures and preliminary alternatives to address flood risk.
- 3. Public Involvement Meetings: Provide information, answer questions, and receive feedback.
- **4. Tentatively Selected Plan:** Evaluation and comparison of alternatives complete and a plan has been tentatively selected. Draft report is complete.
- 5. Public Review of Draft Report: Draft report released to public for review, comment, and feedback.
- **6. Agency Decision Milestone:** Corporate endorsement of the recommended plan and path forward for study completion
- 7. Final Report: Final report is submitted for final review.
- **8. Study Completion:** Chief of Engineers signs the Chief's Report, signaling approval of the project recommendation.



### **Contact Information**

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