

# NEUSE RIVER BASIN FLOOD RISK MANAGEMENT STUDY

## STATUS UPDATE FOR STATE OF NORTH CAROLINA RSF#7 – ENVIRONMENTAL PRESERVATION GROUP

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*“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”*



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# AGENDA



- Study Overview
  - Background Information
  - Flood Risk Consequences
  - Potential Management Measures
  - Areas Under Consideration
  - Current Schedule
- Take-aways



# NORTH CAROLINA BASIN STUDIES





## BACKGROUND INFORMATION

- Feasibility-level basin study
- Supplemental Federal funding
- Assessing consequences of flood risk
- Focusing on riverine/tributary flooding – not local drainage issues
- Evaluating benefits and costs of multiple flood risk management measures
- May capture ancillary benefits beyond flood risk reduction





# NEUSE RIVER BASIN





# FLOOD RISK CONSEQUENCES

1. Economic damages
  - Residential and commercial structures
  - Impacts to industry and commerce
  - Public infrastructure
  - Traffic delays and detours
  - Environmental remediation
  
2. Life safety risks
  - Inundation of structures
  - Loss of evacuation routes
  - Access to critical facilities/recovery aid
  - Inundation of occupied vehicles
  - Impacts to critical infrastructure



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Trenton, NC  
Hurricane Florence

# POTENTIAL MANAGEMENT MEASURES

## Structural Measures:



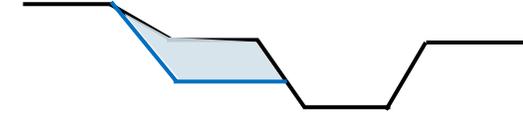
Detention



Floodwall



Levee



Channel Widening

## Nonstructural Measures:



Acquisition



Elevation



Floodproofing



Flood Warning

## Natural/Nature-Based Measures:

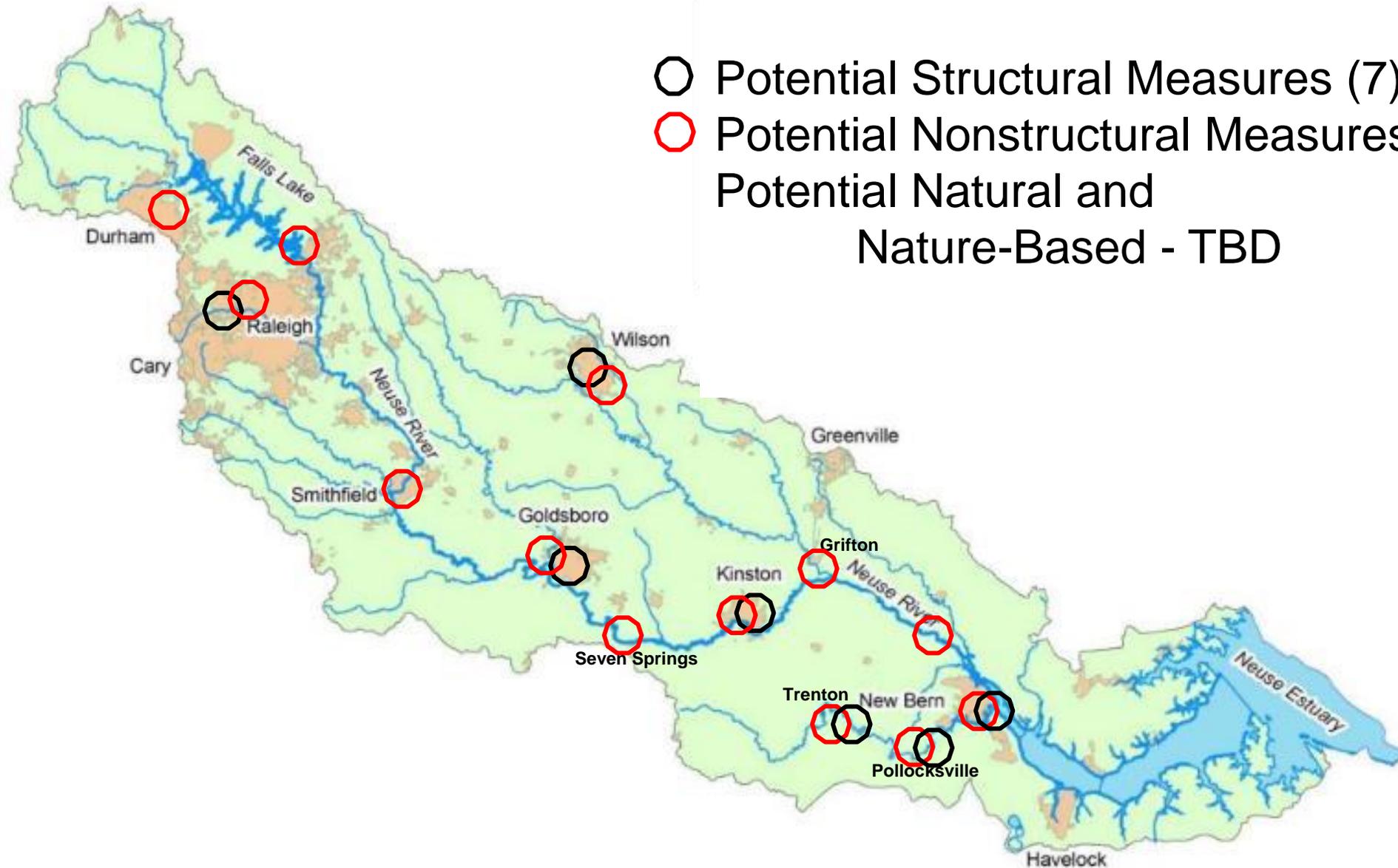
- Floodplain/wetland/stream restoration
- Watershed conservation



Watershed Storage



# NEUSE RIVER BASIN – AREAS UNDER PRELIMINARY ASSESSMENT



- Potential Structural Measures (7)
- Potential Nonstructural Measures (13)
- Potential Natural and Nature-Based - TBD



# NEUSE RIVER BASIN STUDY WORKING SCHEDULE



DATES SUBJECT TO CHANGE

Activity	Current Schedule
<input checked="" type="checkbox"/> Study Initiated	April 3, 2020 (A)
<input checked="" type="checkbox"/> Alternative Milestone Meeting (Corps and Sponsor)	July 13, 2020 (A)
<input type="checkbox"/> Tentatively Selected Plan (TSP) Meeting (Corps and Sponsor)	December 2021
<input type="checkbox"/> Public, Agency, Corps' Peer and Policy Review of Draft Report	February 2022
<input type="checkbox"/> Agency Decision Meeting (Corps and Sponsor)	June 2022
<input type="checkbox"/> Final Policy Review by Corps' Vertical Team	September 2022
<input type="checkbox"/> Chief of Engineer's Report Approval	April 2023

NOTE: (A) – Actual Date



# TAKE-AWAYS



- Actively seeking holistic solutions to manage flood risk within basin
- Not likely to recommend a comprehensive plan to alleviate all flood risks
- Opportunities for engagement with sponsor and stakeholders in the future
- +/- February 2022 - Release of draft report for public, agency and Corps' peer and policy review



# NEUSE RIVER BASIN – QUESTIONS



**Trent River Flooding – Trenton  
Hurricane Florence**