



# Wake County Water Partnership

## Meeting Agenda

Friday, August 9, 2024

1:00 p.m. –3:00 p.m.

Virtual Teams Meeting

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**Committee Members:** Daniel Wiebke, Chair; George Matthis,; Dr. Michael Burchell; Leah Harrison; Marc Collins; Rachel Ingham; Teresa Furr; Lori Avent; Michael Wagner; Steven Quarcelino, John Burt, Ike Archer, Samantha Krop

**MEETING CALLED TO ORDER:** Daniel Wiebke, Chair

**Item Title: Opening Remarks** **1:00**  
Daniel Wiebke, Chair

**Item Title: Adoption of April 12, 2024 and June 14, 2024 Meeting Minutes** **1:05**

- Motion: Marc Collins
- Approved

**Item Title: Wake County Flood Control Management** **1:10**  
Mark Hamlett, Deputy Director, Engineering and Maintenance

- Watershed Protection and Flood Prevention Operations Program (WFPO) was authorized by Flood Control Act of 1944 and provisions of Watershed Protection Act of 1954 (nationally funded dams to be constructed across US)
  - Provides cooperation between federal government and states to address resource concerns due to erosion, floodwater, and sediment
  - Federally managed by USDA-NRCS (Natural Resources Conservation Service)
- WFPO provides technical and financial assistance to states to plan and implement watershed projects. Wake County focus areas
  - Flood prevention
  - Watershed structure rehabilitation
- Original workplan developed for Crabtree Creek Watershed Workplan
  - Ten single purpose dams used for flood control
  - Six sites flow to Lake Crabtree; three sites downstream
- Agreement between USDA and Wake County
  - Original Operation & Maintenance (O&M) agreement 1975; updated in 1985
  - Potential for 11<sup>th</sup> dam included in agreement
- Wake County is local sponsor
  - Perform and fund maintenance
  - Obtain USDA-NRCS approval of plans for maintenance deviating from O&M Plan

- Replacement of parts or portions of structures with physical life less than duration than designed life of dam
  - Prohibit installation of any structure or facility that interferes O&M of dams (Wake County Crabtree Creek Watershed Project Policy)
- Work around dams requires plan review by County and must include signed and sealed engineered plans with cut/fill analysis and certification of “no net loss” in impacted structure and mitigation plan
- NRCS responsibilities
  - Adherence to state and federal requirements
  - Watershed program information, project planning, implementation assistance
  - Soil and Water Conservation District or National Resource District involvement
  - Dedicated staff to review watershed plans
- Telemetry and Flood Early Warning System
  - USGS installed level monitoring hardware at Lake Crabtree
  - Incorporate Raleigh rain gauge
  - Submitted approval to expand USGS telemetry at remaining nine sites; anticipate installation in early 2025
  - If water levels reach certain level, Wake County will be notified; coordinating with Raleigh on Flood Early Warning System
  - Working with Raleigh to identify additional rain gauges
- Emergency Action Plans (EAPs)
  - EAP intended to provide step-by-step guidance to first responders in emergency situation
  - Session Law 2015-7 requires EAPs for High and Intermediate hazard dams due by 12/31/2015
  - EAPs required to be updated and resubmitted annually
  - All 10 Crabtree dams are High Hazard
  - Completed 8 of 10 EAPs; remaining two dams to be submitted by end of 2024
  - Must show downstream impacted properties
- Watershed Rehabilitation Program
  - Flood Prevention, property protection
  - Managed by NRCS
  - Federally funded
  - Four phases (7-year process)
    - Dam assessment-High Hazard Dam Assessment; preliminary analysis and modeling; must meet full BMP (40 in storm); NRCS funds 100%
    - Planning-Identify problems and opportunities; evaluate alternatives, select preferred alternative; sediment study; NRCS funds 100%
      - Alternatives analysis:
        - No action
        - Decommissioning
        - Non-structural alternatives
        - Structural rehabilitation
    - Design-Preferred alternative submitted to National

Watershed Management Center; must be selected to receive federal funding; NRCS funds 100%

- Construction-Construction drawings submitted to National Watershed Management Center
  - Must be selected to receive federal funding to proceed
  - Must meet 50-year sediment storage requirement; Wake County will be required to fund sediment removal to qualify for construction funding
  - Construction funding; construction funding
    - 65% federal
    - 35% local sponsor

**Item Title: Neuse River Rule Implementation**

**1:40**

Sally Hoyt, City of Raleigh Stormwater Plan Review Supervisor

- City of Raleigh Implementation of 2023 Neuse Rules for New Development
- Timeline
  - UDO Changes effective 5/1/23
  - Training for designers on 4/20/23
  - Web materials posted 5/2023
  - Changes incorporated with Design Manual that goes to City Council September 2024
- Biggest changes
  - Built upon area (BUA) terminology instead of impervious area
  - Common plans of development defined; many grey areas remain
  - 5% threshold for single family dwellings (SFD) over 1 acre
  - Buydown rules changed- sites with >24% BUA must treat all BUA with primary SCM before buydown (or equivalent Water Quality volume); if less than or equal to 24% BUA, may meet nutrient target through buy down only
    - Difficult to direct all BUA to SCM
  - Date of existing BUA matters-state rules say can
    - Before May 2001 Neuse rules became effective, then exempt
    - Between May 2001 to May 2023, needs to meet original Neuse Rules and may require additional buy-down;
    - Permitted after May 2023 and later must use SNAP, would previously been treated by SCM, but may need to do additional buy-down
  - Total Nitrogen (TN) calculation method changed to SNAP tool
    - Differentiates between types of BUA and impacts setting max impervious limits for lots
- Websites:
  - <https://raleighnc.gov/stormwater/services/stormwater-permitting-and-inspections-development/neuse-nutrient-rule-changes>
  - <https://raleighnc.gov/stormwater/services/stormwater-design-manual>
- Betsy Pearce, Wake County Program Lead-Post Construction Stormwater

- Wake County program has not been adopted by state
- County submitted in April 2021; several delays; all future approvals are on hold until receive EMC approval from state
- Currently operating under Neuse Rules in place since 2001;
- Stormwater Design Manual is in draft

**Item Title: Subcommittee Updates**

**2:30**

Education and Outreach-Steven Quarcelino, Chair

- Did not meet last month; continue to work on the Water Resource Navigation Tool with GIS team

GSI-Ben Mills and Leah Harrison, Co-Chairs

- Met briefly last week; working on stormwater maintenance video; script is finalized and gathering video footage
- GSI data requested for One Water
- GSI Best Practice Update-updates requested by September 5

Comprehensive Planning-Teresa Furr, Chair

- Raleigh City Advisory Council (CAC) representatives presented
- Supports goal to connect with community, build relationships, and share information on efforts across Wake County
- Taking phased approach to Water Resources Navigation Tool

Coordination-Jeff Adkin, Chair

- No updates

**Item Title: Membership Water Perspectives**

**2:45**

- Furr-Working with Town of Morrisville on stream restoration project with CCAP funds
- Burt-Appointed to NC Ag Leads, focused specifically on harmonizing land use and natural resources; focusing on water issues

**Next meeting: October 11, 2024, 1pm-3pm**

Raleigh Bioenergy Recovery Facility  
8500 Battle Bridge Rd.  
Raleigh, NC 27610

**Adjourn**

**3:00**

- Motion: George Matthis
- Second: Steven Quarcelino