



The 5**W**1**H** of Stormwater in Durham County

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To Date...

- Phase I of Stormwater Utility Study Complete
- Jan/Feb 2018 One-on-One Discussions
- NCDWR Nutrient Loading Guidance



Who?

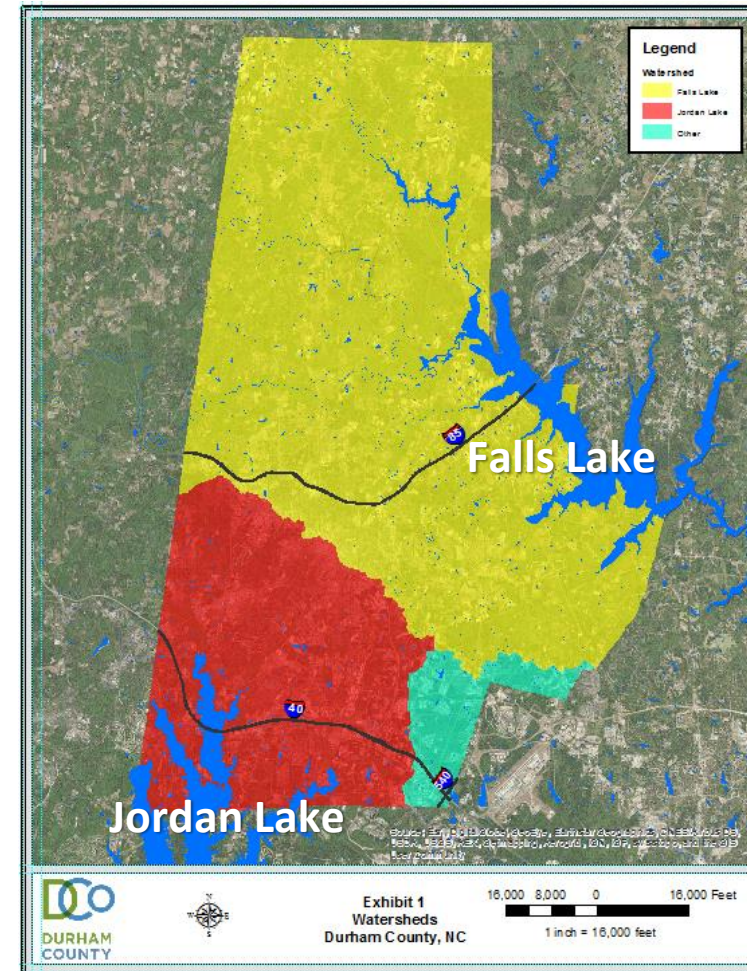
NC Nutrient Management Rules Watersheds





Durham County Watersheds

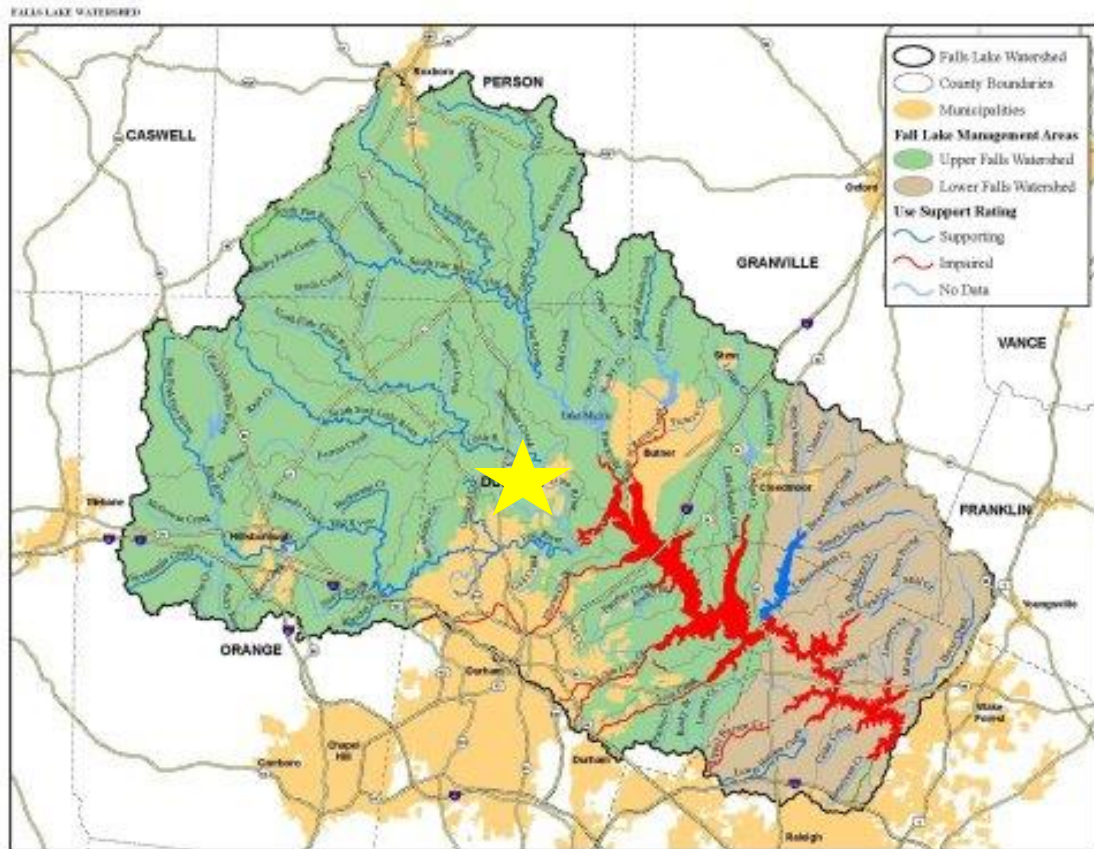
- Durham County is within 2 main river basins
 - Neuse River - including Falls Lake & Remainder
 - Cape Fear River - including Jordan Lake



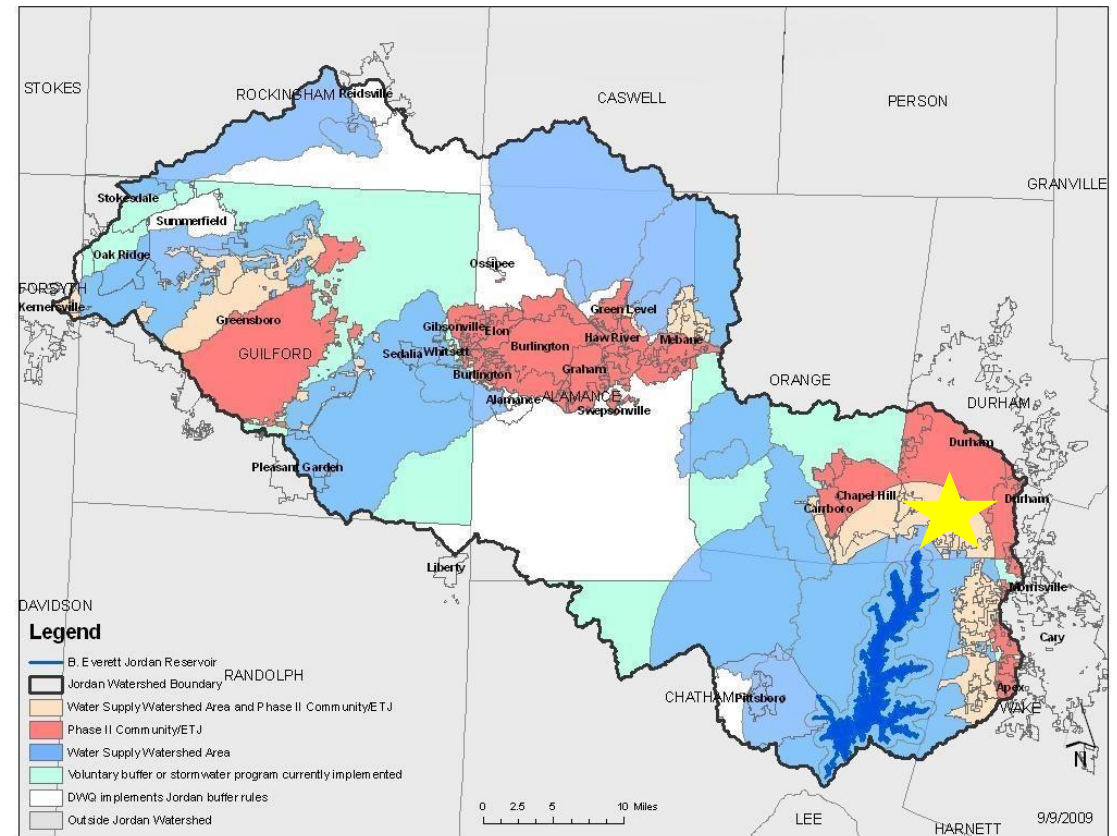


Where?

Falls Lake Watershed



Jordan Lake Watershed



Background

Work To Date

Next Steps

Discussion



Why are N and P a problem?

Too many pollutants



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What do we have to do?

Neuse River Rules

- New Development Requirements for N
- Public Education
- Identify Retrofit Opportunities

Falls Lake Rules

- New Development Requirements for N and P
- Existing Development Rules:
 - Stage 1: Reduce N and P loading to baseline levels
 - Stage 2: Reduce N by 40% and P by 77%

Jordan Lake Rules

- New Development Requirements for N and P
- Existing Development Rules:
 - Stage 1: Reduce N and P loading to baseline levels
 - Stage 2: Reduce N by 8% and P by 5%

DELAYED



When will all this happen?

Falls Lake Regulations

(current rules)

- New Development (currently enforcing) ✓
- Stage I – Existing Development (est. 2024)
 - Falls Lake Model Program estimated from NCDWR Spring/Summer 2020
- Stage II – Existing Development (By 2041?)



When will all this happen?

Jordan Lake Regulations

(current rules)

- New Development (Effective 2012 - Delayed)
- Stage I – Existing Development (By 2016) ✓
 - Program Development (education, illicit discharges, identify retrofits, etc.)
- Stage II – Existing Development (?)



How do we meet the rules?

- Nutrient Reduction Measures
 - New Stormwater Control Measures
 - Retrofits
 - Land Conservation
 - NCDWR Toolbox Activities
- Elimination of Onsite Wastewater discharges (?)





What is it going to cost?

- Neuse River Rules = No New Cost
- Falls Lake Rules:
 - Stage 1 = ~~\$6,500,000~~ < \$1,000,000
 - Stage 2 = ?
- Jordan Lake
 - Stage 1 = No New Cost
 - Stage 2 = \$5,900,000





Where will the \$ come from?

Tax Funding Approach

Fee Funding Approach



Stormwater
Utility



How do we get started?

- Contract approval for Phase II of Planning and Implementation Project (\$185,000)
- Updated Nutrient Removal Costs → Program Costs
- Evaluate GIS Data – Impervious Surface
- Develop Rate Structure Options:
 - Flat Fee
 - Impervious Surface-Based
 - Combination
 - Other
- Public Outreach

Implementation
Target: FY2021



Summary

- Upcoming Stormwater rules will likely require each jurisdiction to reduce nutrient loading
- Attaining reductions will require significant effort and funding by Durham County
- Stormwater Utility should begin sooner rather than later to meet current target dates
- Request for Board approval of Contract with WKD



Questions?

Background

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