



Stormwater Utility Discussion Durham County

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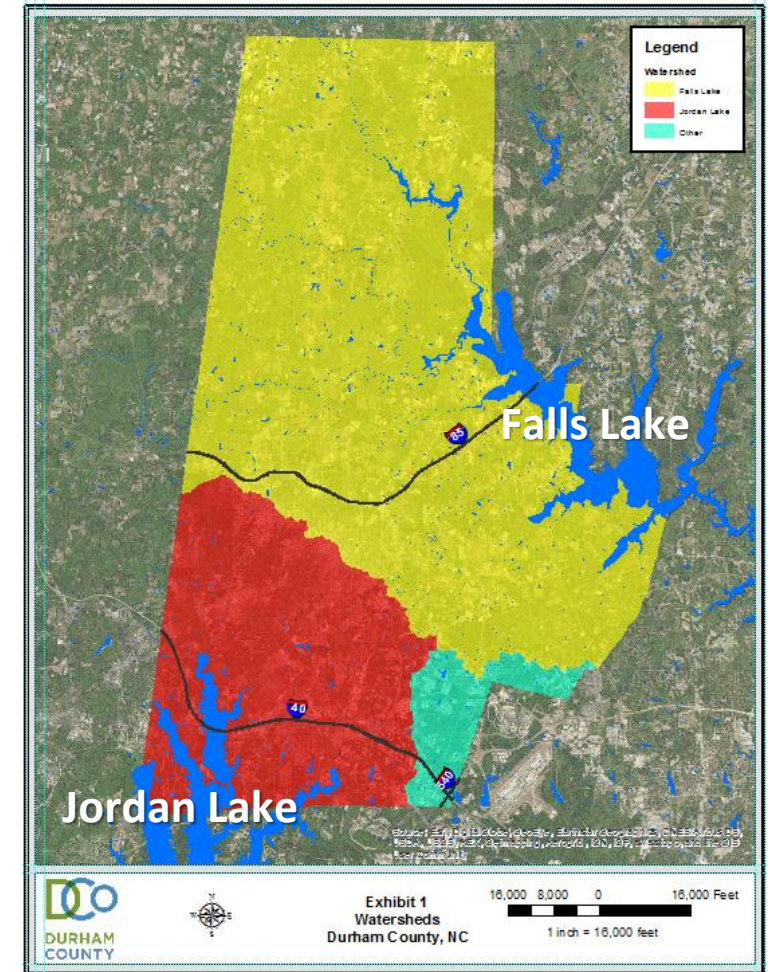
What We Plan to Cover

- Background
- Purpose of Today's Presentation
- Guiding Principles
- Progress to Date
- Commissioner Input and Feedback
- Next Steps



Durham County Watersheds

- Neuse River - including Falls Lake & Remainder
- Cape Fear River - including Jordan Lake
 - Neuse River Rules = No New Cost
 - Falls Lake Rules (estimated costs):
 - Stage 1 = \$1,000,000
 - Stage 2 = \$67,000,000
 - Jordan Lake Rules (estimated costs):
 - Stage 1 = No New Cost
 - Stage 2 = \$5,900,000





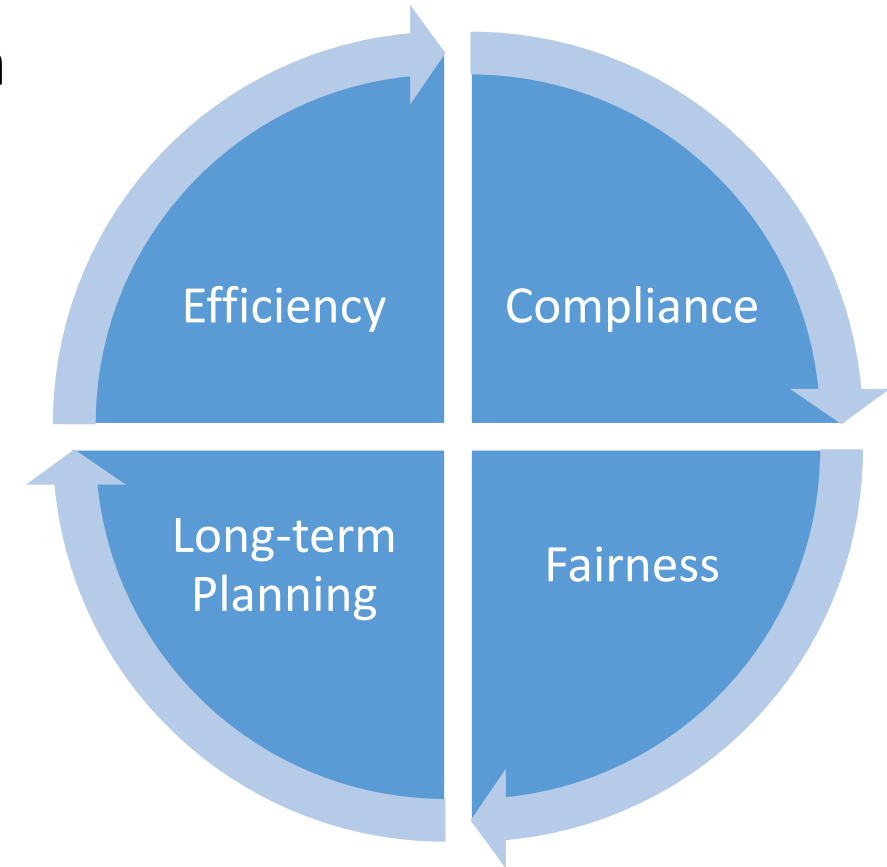
Purpose

- Present results of additional data development, data relationship assessment, and credit program review
- Recommendations and next steps



Guiding Principles

- **Comply with the law** and support a high quality of life, maintain public health, and be good stewards of the environment
- **Be fair** to our citizens in how we generate the needed revenue
- **Implement a long-term financial plan** being mindful of the need to increase revenues over time, minimize rate shocks, and account for future uncertainty regarding the regulations
- **Make efficient choices**





Revenue Requirements

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Staffing	\$ 458,000	\$ 472,000	\$ 486,000	\$ 500,000	\$ 516,000	\$ 531,000	\$ 547,000
Program Expenses	\$ 118,000	\$ 119,000	\$ 120,000	\$ 120,000	\$ 121,000	\$ 121,000	\$ 122,000
Capital Administration	\$ 207,000	\$ 214,000	\$ 262,000	\$ 270,000	\$ 280,000	\$ 290,000	\$ 300,000
Capital	\$ 583,000	\$ 607,000	\$ 631,000	\$ 656,000	\$ 4,452,000	\$4,630,000	\$4,815,000
Reserves	\$ 116,000	\$189,000	\$203,000	\$215,000	\$222,000	\$581,000	\$622,000
Total Revenue Requirement	\$ 1,482,000	\$ 1,601,000	\$ 1,702,000	\$ 1,761,000	\$ 5,591,000	\$ 6,153,000	\$ 6,406,000



November 4th Direction

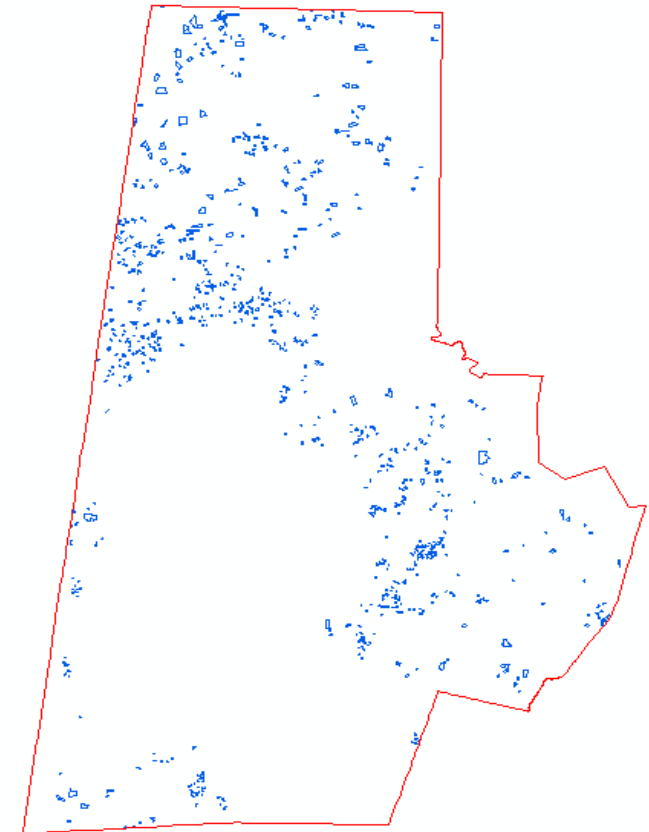
- Additional data development to inform residential rate structure choices
 - Digitize 1,000 residential parcels
 - Recalculate Equivalent Residential Unit (ERU)
- Evaluate data relationships
- Looks for ways to reward environmental stewardship
 - Assessment of credit program options, costs, challenges, and benefits



Residential Data Development

- Additional residential properties were digitized in order to inform the creation of potential residential tiers
 - An additional 933 parcels were digitized to create an expanded sample of 1,000 residential parcels
- Residential sample impervious area statistical comparison

	Original Sample (square feet)	Expanded Sample (square feet)
Min	1,853	764
Max	44,103	59,018
Average	6,412	5,261
Median	5,079	4,436
Standard Deviation	6,722	3,736

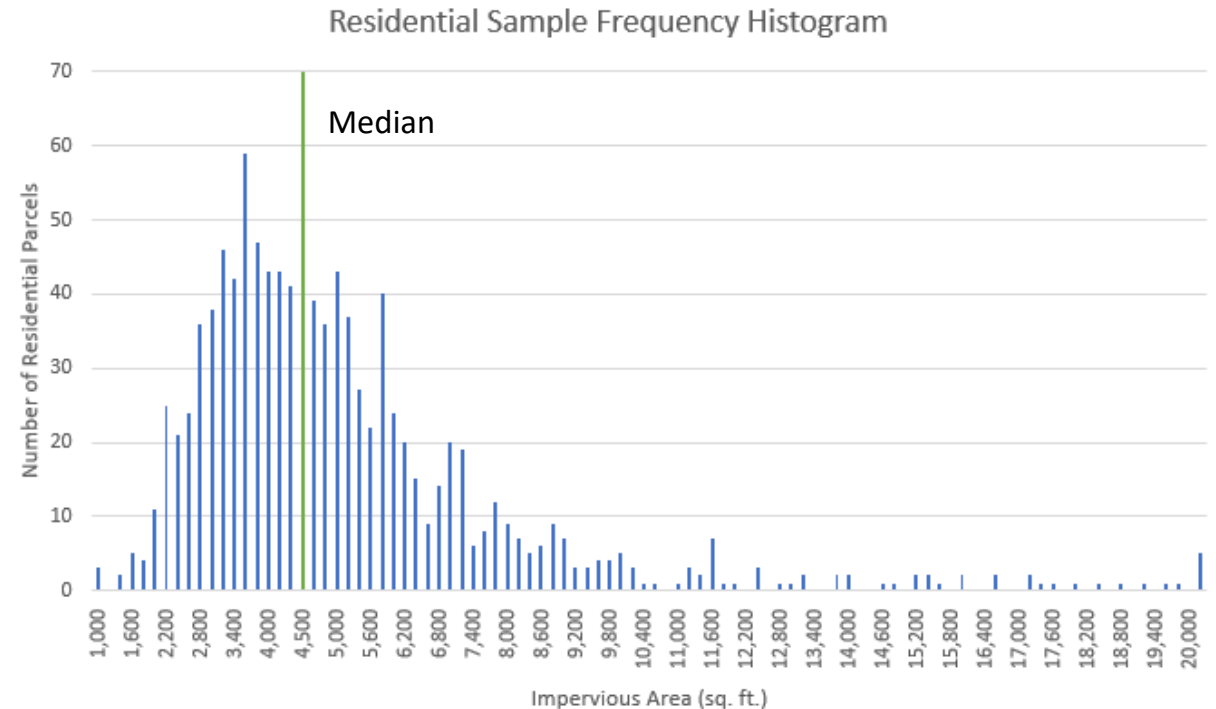


Residential Sample Locations



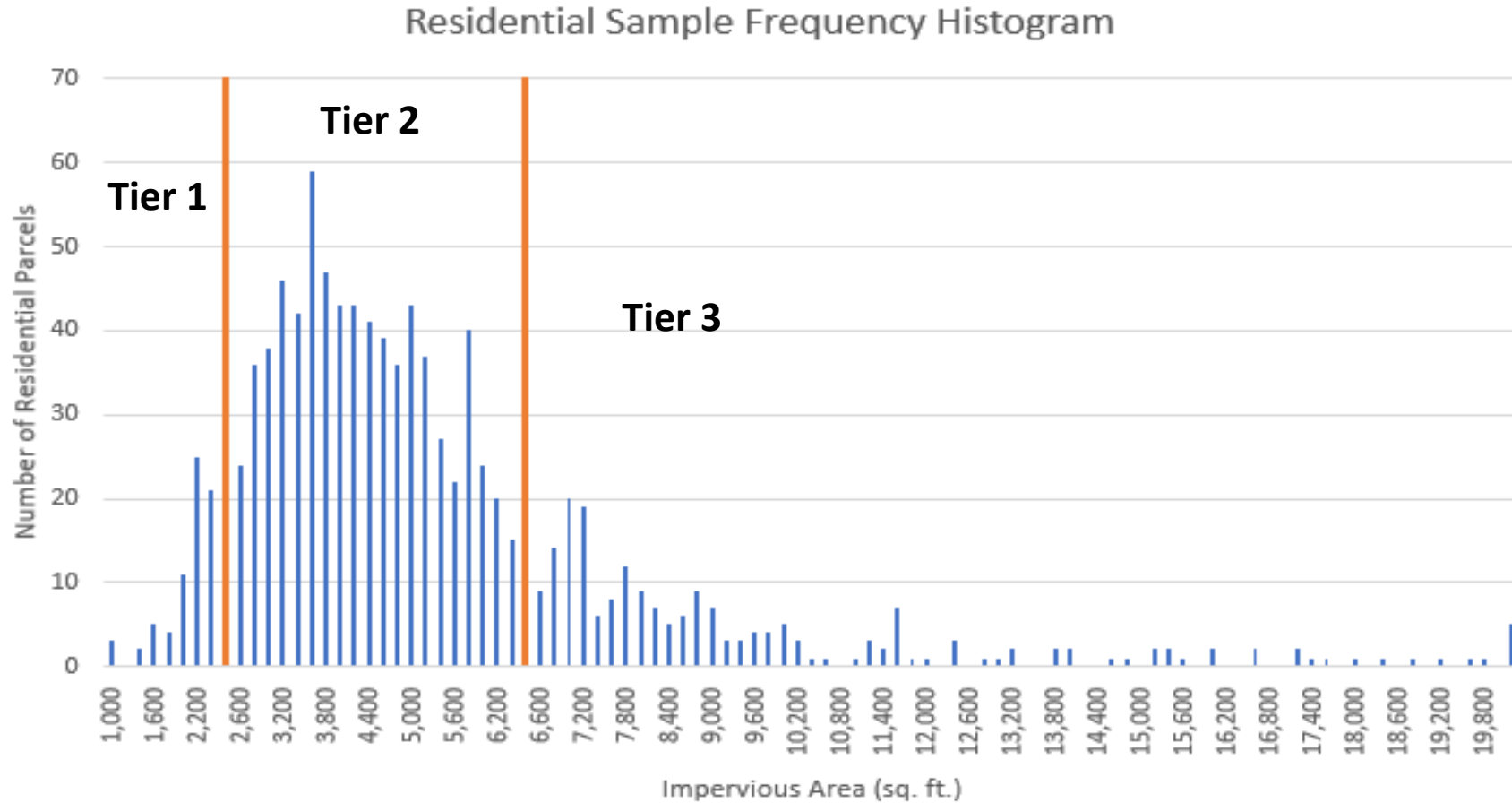
Residential Data Development

- The expanded residential sample resulted in a reduction of the Equivalent Residential Unit (ERU) by approximately 500 square feet.
- The new ERU may be rounded to 4,500 square feet of impervious area for ease of public communication.
- For reference, the ERU for the City of Durham is 2,400 square feet of impervious area
 - Three residential tiers with non-residential properties charged based on the number of ERUs





Example of Residential Tiers





Impervious Area and Income Assessment

- To evaluate concerns about affordability, we assessed correlations between impervious area and indicators of wealth
- Indicators of wealth used in the correlation assessment include
 - Total tax value (land and building)
 - Building tax value
 - Median household income at the Census Tract level
 - Median household income at the Census Block Group level



Impervious Area = 3,598 sq. ft.
Total Tax Value = \$602,798



Impervious Area and Income Assessment

- There is some correlation between wealth indicators and impervious area
- Impervious area and total tax value (land and building), has the strongest correlation
 - 32.7% of the variation in impervious area can be attributed to the total tax value

Wealth Indicator	R ² value
Total Tax Value (Land and Building)	0.327
Building Tax Value	0.315
Census Tract MHI	0.008
Census Block Group MHI	0.005



Credit Program Assessment

- At a national level:
 - 52% of stormwater utilities have a credit program
 - 54% of stormwater utilities with credit programs offer credits to residential and non-residential customers
 - For 85% of utilities with credit programs, only 1%-5% of parcels receive credits
 - 97% of utilities with a credit program, have a credit cap

Utility	Credit program
City of Durham	Non-residential
City of Raleigh	Non-residential
Granville County	Non-residential
Person County	Non-residential
City of Greensboro	Non-residential
City of Winston-Salem	Non-residential
City of Fayetteville	Non-residential
City of Greenville	None
City of Wilmington	None
City of Charlotte	Residential and Non-residential



Agriculture/Silviculture Credits

- Agriculture and Silviculture credits are not common
- The Northeast Ohio Regional Sewer District offers a credit for agricultural conservation planning.
- The maximum credit amount for this type of credit is 25%.
- The credit is only good for 1 year and customers must reapply annually.
- Less than 0.1% of customers apply for and receive this credit

Conservation Plan Type	Submittal Criteria	Credit Available
Comprehensive Nutrient Management Plan	A Comprehensive Nutrient Management Plan (CNMP) certified by the Natural Resources Conservation Service (NRCS) District Conservationist.	25%
Prescriptive Grazing Plan	A Prescriptive Grazing Plan certified by the NRCS District Conservationist.	25%
Forest Management Plan	A Forest Management Plan certified by a Professional Forester	15%
Conservation Plan	A Conservation Plan addressing a specific need certified by the NRCS District Conservationist	15%



Public Education Monthly Outline

- February
 - Coordination with County staff
 - Finalize Public Education and Engagement Plan
 - Set Up Project web page on County site
 - Durham County TV Show discussions
 - Fact Sheet/FAQs (Frequently Asked Questions) - Distribute
- March
 - Public Meetings (4)
 - Schedule Dates and Locations
 - Advertise (County tools, meeting flyer)
 - Conduct and Document Feedback



Public Education Monthly Outline

- April
 - Targeted Rate Payer Meetings
 - Briefings for County Officials
- May
 - Public Open House Events (4)
 - Schedule Dates and Locations
 - Advertise (County tools, meeting flyer)
 - Conduct and Document Feedback
- June
 - Prepare Fact Sheet (Frequently Asked Questions)
 - Durham County TV Show Discussions



Recommendations

- Update the Equivalent Residential Unit (ERU) based on the expanded residential sample
 - ERU = 4,500 square feet
- Tiered Residential Rate structure with 3 flat rates
 - Non-single family residential properties will be charged based on number of ERUs
 - Define agricultural uses which include dwellings as single family residential
 - Fairest to the agricultural community
 - Consistent with goals related to low intensity development



Feedback

- BOCC weigh-in on credit program interest



Next Steps

- Measure remaining residential properties
 - Allows tiered residential rate structure with multiple flat rates
 - Identify agricultural uses which include dwellings as single family residential
- Consideration of credit program based on BOCC feedback
- Move ahead with expanded public outreach program



Thank you!