



Enterprise Fund

A fund established to account for operations that are financed and operated in a manner similar to private business where the services provided are funded directly through user charges.

SEWER UTILITY FUND



GOAL 4 ENVIRONMENTAL STEWARDSHIP AND COMMUNITY PROSPERITY: Protect natural resources and support and promote community and economic vitality for all residents of Durham County.

Description

The Utility Division is responsible for the operation of the County-Owned Triangle Wastewater Treatment Plant (TWWTP) and reclaimed water system, associated collection system, Wexford subdivision collection system, and the Rougemont Water System. The Utility Division's primary purpose is to provide wastewater services to Research Triangle Park and surrounding areas to support the Durham County portion of the Research Triangle Park Economic Engine. The Utility Division provides water service to a portion of Rougemont. Support for these services is provided through utility charges to users of the system. The Utility Division Office is located at 5926 NC Hwy 55 East, Durham, North Carolina, 27713. Office hours are Monday – Friday, 8:00 AM – 5:00 PM, Telephone: 919-560-9033; Fax: 919-544-8590.

Budget

Category	FY 2020-21 Actual	FY 2021-22 Original	FY 2021-22 Estimated	FY 2022-23 Requested	FY 2022-23 Approved	% Change Orig. v. Appr.
Expenditure	\$15,749,470	\$11,994,081	\$11,623,390	\$12,874,580	\$12,874,580	7.34%
Personnel	\$2,249,133	\$2,681,236	\$2,547,087	\$3,041,378	\$3,134,904	16.92%
Operating	\$3,744,968	\$4,294,514	\$4,591,572	\$4,667,785	\$4,667,785	8.69%
Capital	\$159,130	\$615,000	\$831,400	\$660,000	\$660,000	7.32%
Other Expenditure	\$1,795,231	\$1,778,970	\$1,778,970	\$1,764,151	\$1,764,151	-0.83%
Transfers Out	\$7,801,008	\$2,624,361	\$1,874,361	\$2,741,266	\$2,647,740	0.89%
Revenue	\$13,903,562	\$11,994,081	\$13,082,873	\$12,874,580	\$12,874,580	7.34%
Licenses and Permits	\$178,688	\$22,000	\$230,817	\$43,000	\$43,000	95.45%
Contributions and Donations	\$5,805					
Investment Income	(\$43,220)	\$300,000				-100.00%
Sewer Connection Fees	\$2,928,508	\$795,500	\$1,707,999	\$895,000	\$895,000	12.51%
Service Charges	\$196		\$21,040	\$10,000	\$10,000	
Enterprise Charges	\$10,820,608	\$10,876,581	\$11,123,017	\$11,926,580	\$11,926,580	9.65%
Other Revenues	\$12,976					

FY 2020-21 Actual FTE	FY 2021-22 Original FTE	FY 2021-22 Estimated FTE	FY 2022-23 Requested FTE	FY 2022-23 Approved FTE
29.00	32.00	32.00	34.00	35.00

Payments for Sewer Utility Debt Service		
	FY 2021-22	FY 2022-23
PRINCIPAL	\$1,471,146	\$1,491,146
INTEREST	\$302,824	\$268,005
Bond Agency Fees	\$5,000	\$5,000
TOTAL	\$1,778,970	\$1,764,151

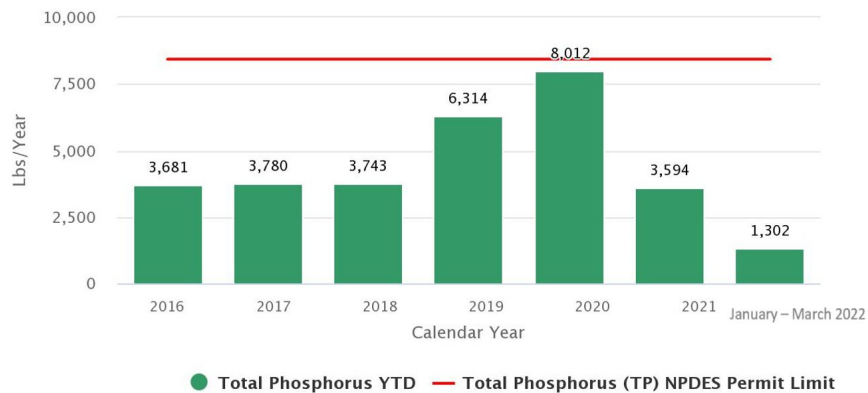
Budget Highlights

- The budget supports a grant administrator/writer who will work with both the Stormwater and Sewer Utility Enterprise funds. The position would be responsible for all phases of grant development, evaluation, and compliance, including research, pre-award grant writing, the coordination of grant applications, post-award support for grant-funded projects, managing the grant reporting process and successfully closing out grant projects with final budget. The Federal and State governments have reserved funding for water, wastewater, and stormwater infrastructure, but current staff do not have the time to complete applications. Grant funding could support large capital projects, such as the Chin Page Pump Station and Phase IV of the Triangle Wastewater Treatment Plan upgrade. (\$103,849)

- The budget supports a Pretreatment Technician who would monitor, evaluate, and enforce all aspects of the county's Pretreatment Program. The position would also be responsible for, but not limited to, reviewing Industrial Waste Surveys, conducting inspections and compliance tracking. (\$64,945)
- The budget supports an Engineering Technician position that will assist with timely processing and bolster development services efficiency. (\$93,526)
- The Sewer Utility monthly consumption rate will increase from \$5.25/hundred cubic feet to \$5.78/hundred cubic feet, which is projected to bring in an additional revenue of \$1M, almost a 10 percent increase from the previous fiscal year. The funding will be used to support new positions, capital costs and annual capital debt.

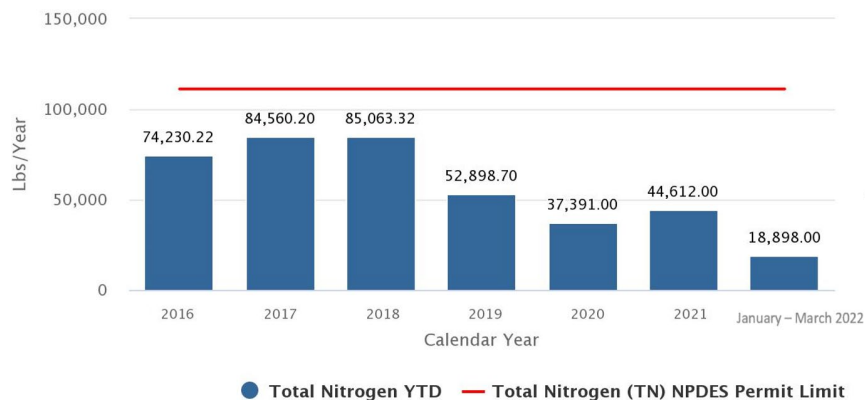
Performance Measures

Measure: ANNUAL POUNDS OF TOTAL PHOSPHORUS (TP) DISCHARGED FROM TRIANGLE WWTP



Measure description: This measure shows the amount of total phosphorus being discharged into Northeast Creek from the Triangle Wastewater Treatment Plant (WWTP). Per the National Pollutant Discharge Elimination System (NPDES) permit, the WWTP can discharge a certain quantity of phosphorus per year. The limits are strict and were incorporated into the NPDES permit to fulfill the Jordan Lake Nutrient Rules requirements. Phosphorus in the right amount is needed to sustain life but too much can make water harmful. Levels fluctuate based on concentrations discharged by users, concentrations discharged by the POTW from chemical use in the system to reduce odor complaints, types and population of organisms at that time, and temperature changes. Total phosphorus removal occurs through some biological treatment, but the biggest reduction is through chemical treatment. A larger reduction can occur, but the WWTP must account for higher chemical cost. For 2021, the TWWTW was below the permit limit. For 2022, the target is to be below 8,432 lbs./year, which is the current NPDES permit limit.

Measure: ANNUAL POUNDS OF TOTAL NITROGEN (TN) DISCHARGED FROM TRIANGLE WWTP



Measure description: This measure shows the amount of total nitrogen being discharged into Northeast Creek from the Triangle Wastewater Treatment Plant (WWTP). Per the NPDES permit, the WWTP can discharge a certain quantity of nitrogen per year. The limits are strict and were incorporated into the NPDES permit to fulfill the Jordan Lake Nutrient Rules requirements. Nitrogen in the right amount is needed to sustain life but too much can make water harmful. Levels fluctuate based on concentrations discharged by users, concentrations discharged by the POTW from chemical use in the system to reduce odor complaints, types and population of organisms at that time, and temperature changes. Total nitrogen removal occurs through biological treatment. TWWTW was below the permit limit and in compliance for 2021. The target is to be below 111,207 lbs./year for 2022, which is the current NPDES permit limit.

STORMWATER ENTERPRISE FUND



GOAL 4 ENVIRONMENTAL STEWARDSHIP AND COMMUNITY PROSPERITY: Protect natural resources and support and promote community and economic vitality for all residents of Durham County.

Description

The purpose of the Stormwater and Erosion Control program is to protect water quality through enforcing compliance for development activity with state regulations and County ordinances. The Stormwater Enterprise Fund consists of revenues from plans review and permitting fees as well as the Durham County Stormwater Utility Fee.

The Durham County Stormwater and Erosion Control Division is tasked with finding ways to manage the ongoing challenge of stormwater impacts to the unincorporated areas of the County and meet state requirements (Jordan Lake and Falls Lake Rules) to reduce pollutants, especially nutrients like phosphorous and nitrogen, in our waterways. As the County continues to grow, the need to address increasing stormwater runoff and the pollutants it carries is a necessity. Nutrient management for both existing and new development is mandated by the North Carolina Department of Environmental Quality.

In order to pay for the projects that will be needed to address nutrient loading from existing development and meet state stormwater requirements, Durham County implemented a Stormwater Utility Fee in FY2021. It is a fair, equitable, and stable way for Durham County to collect revenue to help fund the activities required to meet the nutrient rules. It is estimated that it may cost Durham County more than \$70 million dollars over the next 20 years to reduce pollutants in our waterways to meet the state requirements.

Previously, the Stormwater and Erosion Control Division were included as part of the General Fund in the Engineering and Environmental Services. However, with the adoption of the Durham County Stormwater Utility Fee, the entirety of the Division moved to its own Enterprise Fund. Revenues for existing activities including stormwater and erosion control plans reviews, land disturbance permits, stormwater permits and annual inspection fees, and reinspection fees associated with enforcement actions, are combined with revenues from the Stormwater Fee to fund water quality protection programs throughout the County.

Programs

Erosion Control

The Erosion Control Program administers and enforces the sedimentation and erosion control sections of the Durham City-County Unified Development Ordinance. A state-delegated local program, it includes all privately funded, non-agricultural land-disturbing activities of more than 12,000 square feet in both the City of Durham and the unincorporated areas of the County. The Program conducts plan reviews, issues land disturbance permits, and inspects permitted projects for compliance.

Stormwater

The Stormwater Program is responsible for administering the Durham County Stormwater Ordinance, which applies to all unincorporated areas of Durham County, and for enforcing the Neuse River, Falls Lake, and Jordan Lake nutrient management new development rules through development reviews including flood control, water quantity, and water quality control measures. It is also responsible for maintaining the County's compliance with the rules through stormwater retrofit identification, illicit discharge detection and elimination, and education and outreach activities.

Stormwater Utility

The Stormwater Utility Fee is charged to all properties in the unincorporated areas of Durham County with development. The fee is based on the amount of impervious surface area on a property. It is divided into residential and non-residential charges, with residential properties paying one of three flat rate tiers. Non-residential properties pay per the total amount of impervious area with no maximum charge. Revenues from the Stormwater Utility Fee fund compliance actions required by the Neuse River, Falls Lake, and Jordan Lake nutrient management strategies.

Budget

Category	FY 2020-21 Actual	FY 2021-22 Original	FY 2021-22 Estimated	FY 2022-23 Requested	FY 2022-23 Approved	% Change Orig. v. Appr.
Expenditure	\$855,332	\$1,413,936	\$1,249,149	\$2,230,824	\$2,230,824	57.77%
Personnel	\$579,527	\$758,460	\$581,848	\$894,032	\$894,032	17.87%
Operating	\$267,735	\$386,890	\$567,647	\$454,553	\$454,553	17.49%
Capital	\$8,070			\$24,166	\$24,166	
Transfers Out		\$268,586	\$99,654	\$858,073	\$858,073	219.48%
Revenue	\$1,640,990	\$1,413,936	\$1,453,936	\$2,230,824	\$2,230,824	57.77%
Licenses and Permits	\$828,333	\$594,500	\$594,500	\$594,500	\$594,500	0.00%
Intergovernmental			\$40,000			
Investment Income	\$1,320					
Sewer Connection Fees	\$7,000	\$5,000	\$5,000	\$5,000	\$5,000	0.00%
Enterprise Charges	\$804,336	\$813,936	\$813,936	\$1,630,824	\$1,630,824	100.36%
Other Revenues	\$1	\$500	\$500	\$500	\$500	0.00%
Net County Cost	(\$785,659)	\$0	(\$204,787)	\$0	\$0	

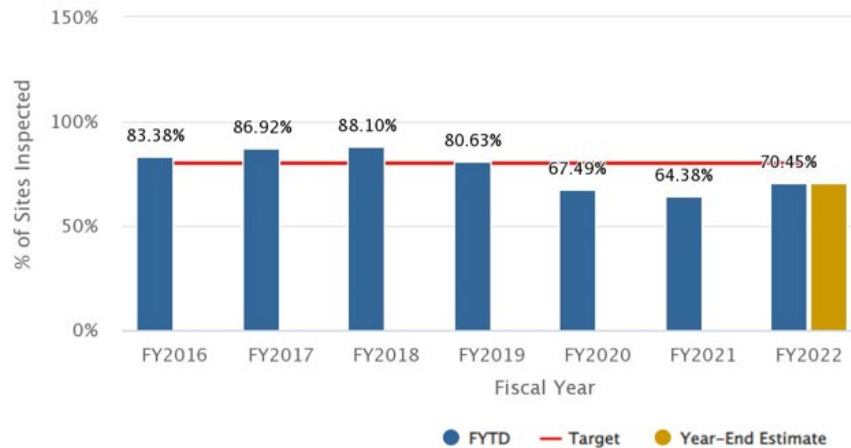
FY 2020-21 Actual FTE	FY 2021-22 Original FTE	FY 2021-22 Estimated FTE	FY 2022-23 Requested FTE	FY 2022-23 Approved FTE
8.00	8.00	8.00	9.00	9.00

Budget Highlights:

- The budget supports the addition of a third Stormwater and Erosion Control Technician to increase inspection frequency, improve compliance and complaint response, and reduce plan review workload on current staff. Stormwater's goal is to inspect 80 percent of all permitted sites per month, and currently are only able to inspect roughly 60 percent. Staff also have additional responsibilities such as investigating complaints, instigating enforcement actions, conducting between 15-20 plan reviews per month, conducting onsite meetings with contractors, and issuing new permits. Durham County currently has one of the highest Erosion Control workloads compared to surrounding counties. (\$126,581 - includes cost of a Ranger 4x4 vehicle)
- The budget also includes a recommendation to increase the Stormwater Utility fee from \$24 per Equivalent Residential Unit, or ERU, to \$48 per ERU in FY 2022-23. The rate increase is one step in a larger plan to eventually increase the Stormwater Utility fee to \$96 per ERU by FY 2025-26. The increased revenue will cover the cost of complying with the Falls Lake and Jordan Lake Rules, a nutrient management strategy designed to restore water quality in the lakes by reducing the amount of pollution entering upstream. The Stormwater Enterprise Fund expects that Stormwater Utility fee revenue will increase from \$813,936 to \$1,630,824 – a net increase of \$816K.

Performance Measures

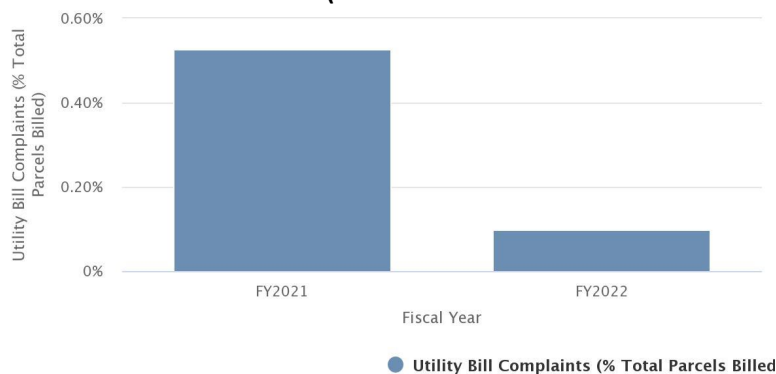
Measure: AVERAGE PERCENTAGE OF SITES INSPECTED MONTHLY



Measure description: This measure shows the average percentage of permitted sites inspected monthly. Monthly inspections are critical in maintaining compliance with land disturbance permits and erosion control plans. Maintaining compliance is the best way to keep sediment out of Durham County streams and rivers, thus protecting the environment. COVID-19 continued to limited staff time in the office and thus inspection time throughout much of FY22. A wet winter also hampered site accessibility, further limiting inspections. However, construction did not slow down and there are currently more permitted sites than ever before, at well over 200. With only 3.5 FTEs committed to site inspections, among other duties, staff were already stretched thin managing the all-time high number of permits, and that number dropped to 2.5 with the retirement of one Erosion Control Technician in October 2021. A new Technician was brought on in March 2022 to return to full staff.

Staff continue to focus on newer sites, larger sites, and those with a history of noncompliance, while smaller sites were inspected less frequently. Seventy percent (70%) of sites are still inspected monthly with over ninety percent (90%) being inspected at least every 6-8 weeks. Compliance remains high. The addition of an Erosion Control Supervisor in FY21 greatly improved the Division's ability to respond to complaints, continue to review plans in a timely fashion, while also increasing inspections. Staff will continue to prioritize new sites, larger sites, and those with a history of noncompliance in FY23. With the addition of the requested Erosion Control Technician, the Division will return to the previous goal of 80% of all sites inspected monthly.

Measure: UTILITY BILL COMPLAINTS (AS A PERCENTAGE OF TOTAL PARCELS BILLED)



Measure description: This measure shows the number of Stormwater Utility Bill complaints as a percentage of the total number of parcels billed. This gives an idea of the accuracy of billing as well as a general acceptance of the utility fee overall. With only two years of data, identifying trends is difficult. However, it is expected that acceptance of the utility will only increase, especially with continued education efforts. Additionally, better impervious surface data will further improve the accuracy of bills. As of April 2022, only 15 complaints were received by Stormwater staff from the over 15,000 properties billed. As the fee was billed on the tax bill, due in January, few new complaints are expected. Stormwater staff will continue education efforts to further acceptance of the Stormwater Utility Fee, but as with any fee, some complaints can be expected. With a planned increase to fees, it is likely that complaints will increase in FY23.