# **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.

## MISSION

The mission of the Durham County Engineering and Environmental Services Department is to protect regional water quality through the administration of the sewer use, storm water and erosion control ordinances; to improve County facilities through the management of capital projects; to improve the County's environmental management particularly related to greenhouse gas emissions; and to preserve natural and scenic lands, farms, and forests.

### UTILIES PROGRAM

**Program Purpose:** 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.

**Program Description:** The Utility Division is responsible for operation of the County Owned Triangle Wastewater Treatment Plant (TWWTP), associated collection system and reclaim water system, the operation of the Wexford subdivision collection system, and the Rougemont Water 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: 919-560-9035; Fax: 919-544-8590.

### 2018-19 BUDGET HIGHLIGHTS

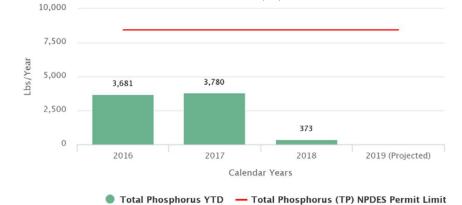
- Sewer consumption rates will be increased by 4.94% to address anticipated re-investments as well as costs related to operations to continue to ensure our high level of operational readiness and environmental protection. (listed in the fee schedule).
- 1 new FTE Utility Technician position will learn how to perform several duties as to be a backup during times of
  vacation, sickness, and during periods of vacancies as well as assist project management and the deputy director on
  special tasks and succession planning at \$43,279.
- Replace 1 vehicle that will allow for greater reliability when driving on rougher terrain during inspections of construction sites.
- Work Order and Inventory Software system to be upgraded so information can be easily tracked, and reports printed for the Triangle WWTP, collection system pump stations, and Rougemont Water System; This will help with efficiency and reduce redundant spending at \$20,000.

# Sewer Utility Fund Fund: 6006600000

	2010 2017	2017 2010	2017 2019	2010 2010	2010 2010
	2016-2017	2017-2018	2017-2018	2018-2019	2018-2019
Summary	Actual	Original	12 Month	Department	Commissioner
	Exp/Rev	Budget	Estimate	Requested	Approved
Expenditures					
Personnel	\$1,659,102	\$2,055,305	\$1,682,174	\$2,147,698	\$2,147,698
Operating	\$2,824,642	\$4,043,880	\$4,788,290	\$3,785,552	\$3,760,501
Capital	\$219,789	\$762,000	\$455,700	\$450 <i>,</i> 000	\$450,000
Transfers	\$650,000	\$1,918,929	\$500,000	\$2,171,016	\$2,196,067
Other	\$1,881,279	\$1,838,766	\$382,131	\$1,825 <i>,</i> 814	\$1,825,814
Total Expenditures	\$7,234,812	\$10,618,880	\$7,808,295	\$10,380,080	\$10,380,080
Revenues					
Licenses & Permits	\$18,450	\$10,000	\$13, <del>9</del> 50	\$10,000	\$10,000
Investment Income	\$106,034	\$35,000	\$142,317	\$35,000	\$35,000
Service Charges	\$0	\$0	\$820	\$0	\$0
Enterprise Charges	\$9,698,868	\$9,678,000	\$9,130,894	\$9,541,000	\$9,541,000
Sewer Connect. Fees	\$2,614,676	\$895,880	\$981,598	\$794,080	\$794,080
Total Revenues	\$12,438,028	\$10,618,880	\$10,269,579	\$10,380,080	\$10,380,080
Net Expenditures	(\$5,203,216)	\$0	(\$2,461,284)	\$0	\$0
FTEs	25.00	26.00	26.00	27.00	27.0

Payments for Enterprise Fund Debt Service						
	2017-2018	2018-2019	2018-2019			
	Approved	Requested	Approved			
PRINCIPAL	\$1,396,146	\$1,416,146	\$1,416,146			
INTEREST	\$437,620	\$404,688	\$404,688			
Bond Agency Fees	\$5,000	\$5,000	\$5,000			
TOTAL	\$1,838,766	\$1,825,814	\$1,825,814			

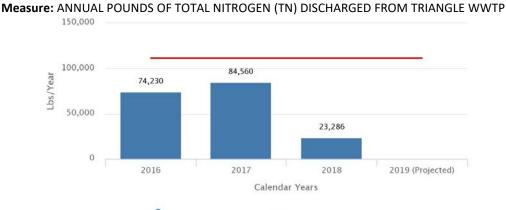
#### **PERFORMANCE MEASURES:**



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 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. The goal is to protect the valuable resource – water. This measure aligns with Objective 4.1 Natural Resource Stewardship and Protection; Strategy 4.1A: Water Quality – Maintain, protect, and improve water quality.

**Trend explanation:** 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 microorganisms 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 for total phosphorus but the WWTP must account for the higher chemical cost.



#### **FY2018-19 target projection:** The target is to be below 8,432 lbs./year, which is the current NPDES permit limit.

🔵 Total Nitrogen YTD 🛛 — Total Nitrogen (TN) NPDES Permit Limit

**Measure description:** This measure shows the amount of total nitrogen being discharged into Northeast Creek from the Triangle Wastewater Treatment Plant (WWTP). Per 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. The goal is to protect the valuable resource – water. This measure aligns with Objective 4.1 Natural Resource Stewardship and Protection; Strategy 4.1A: Water Quality – Maintain, protect, and improve water quality.

**Trend explanation:** 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 microorganisms at that time, and temperature changes. Total nitrogen removal occurs through biological treatment.

FY2018-19 target projection: The target is to be below 111,207 lbs./year, which is the current NPDES permit limit.