### **ENTERPRISE FUND**

### **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, stormwater and erosion control ordinances, improve County facilities through the management of capital projects, improve the County's environmental management particularly related to greenhouse gas emissions, and preserve natural and scenic lands, farms and forest.

#### PROGRAM DESCRIPTION

The Utility Division is responsible for the operation and maintenance of the County's Triangle Wastewater Treatment Plant, the County's Wastewater Collection System, the coordination of new connections (customers), and the County's Sewer System revenue collections. One of the major initiatives of this division has been the upgrade and expansion of the treatment plant to meet regulatory requirements and to provide adequate capacity for growth in the County's service area. The third phase of these improvements will provide new sludge handling facilities to produce a dewatered residual which can be transported to an off-site facility for Class A stabilization. The facility construction is underway and will be completed in Fiscal Year 2013.

The County's treatment of wastewater from the Town of Cary has been extended until at least June 31, 2014 under an Agreement between the County and the Town. Cary is currently sending approximately 2,500,000 gallons per day to the County's plant for treatment. The agreement between Durham County and Cary provides treatment of up to 6 million gallons per day.

The Utility Division Office is located at 5926 NC Hwy 55 East, Durham, North Carolina, 27713. Office hours are Monday – Friday, 8:30 AM – 5:00 PM, Telephone: 919-544-8280; Fax: 919-544-8590.

### **2011-12 ACCOMPLISHMENTS**

- NCDENR DWQ Laboratory certification was achieved for ammonia testing.
- Completed construction of the ReUse water project and on February 22, 2012 began supplying ReUse water.
- Began construction of the Phase III project, (sludge holding and dewatering facilities).
- Staff participated as a Board Member of the North Carolina Water Quality Association.
- Staff participated as the Chair of the Technical Advisory Committee to the Upper Cape Fear Basin Association.
- Staff participated as the Vice President of the North Carolina Pretreatment Consortium.

## **Sewer Utility Fund**

Fund: 6006600000

	2010-2011	2011-2012	2011-2012	2012-2013	2012-2013
Summary	Actual	Original	12 Month	Department	Commissioner
	Exp/Rev	Budget	Estimate	Requested	Approved
<b>T</b> Expenditures					
Personnel	\$1,362,481	\$1,535,543	\$1,403,142	\$1,539,666	\$1,539,666
Operating	\$2,169,856	\$2,621,273	\$2,294,760	\$3,301,265	\$3,301,265
Capital	\$19,754	\$219,000	\$182,330	\$121,415	\$121,415
Transfers	\$754,640	\$1,771,267	\$1,771,267	\$1,101,584	\$1,101,584
Other	\$2,910,252	\$2,140,947	\$2,140,947	\$3,200,000	\$3,200,000
Total Expenditures	\$7,216,983	\$8,288,030	\$7,792,446	\$9,263,930	\$9,263,930
<b>T</b> Revenues					
Licenses & Permits	\$11,408	\$2,300	\$5,000	\$3,000	\$3,000
Investment Income	(\$11,124)	\$25,000	\$14,630	\$15,000	\$15,000
Enterprise Charges	\$10,359,823	\$8,052,130	\$8,829,207	\$8,984,990	\$8,984,990
Sewer Connect. Fees	\$223,105	\$208,600	\$407,671	\$260,940	\$260,940
Other Revenues	\$940	\$0	\$0	\$0	\$0
Total Revenues	\$10,584,153	\$8,288,030	\$9,256,507	\$9,263,930	\$9,263,930
Net Expenditures	(\$3,367,170)	\$0	(\$1,464,061)	\$0	\$0
FTEs	22.00	23.00	23.00	23.00	23.00

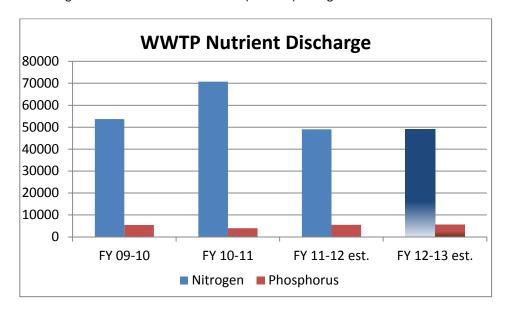
### **2012-13 HIGHLIGHTS**

- The operations expenditure request has increased from the budget approved for FY 2011-2012. The increase is primarily due to the transition from dewatering "aged" sludge from the lagoon to the new centrifuge system to dewater fresh sludge. A second significant operations request increase is for the purchase of chemicals for the control of sewer corrosion and collection system odors. The other increased costs are for items such as vacuum cleaning of the floatable debris in the influent pump station and sediment in the sand filter channels; the computer replacement cycle, and increased costs of maintaining the aging STEP systems in the Wexford subdivision.
- Two vehicles are budgeted for the Sewer Utility. A small van is to be used by the SCADA/Instrumentation technician for transport of his analytical equipment and tools. The second vehicle, a small truck, is to be shared by the maintenance staff.
- Service rates for users will be increased by 4.68% (listed in the fee schedule). The increase is due to higher costs for chemicals and electricity costs at the waste water treatment plant, and to minimize large rate increases in FY 2013-14 and 2014-15 as a result of loan repayments for Phase III and Reuse Water projects and the termination of Town of Cary wastewater service revenue. A new fee will be implemented in FY 2012-2013 for pollutant headworks analysis.

Payments for Enterprise Fund Debt Service						
	2011-2012	2012-2013	2012-2013			
	Commissioner	Department	Manager			
	Approved	Requested	Approved			
PRINCIPAL	\$1,319,831	\$2,050,000	\$2,050,000			
INTEREST	\$821,116	\$1,150,000	\$1,150,000			
TOTAL	\$2,140,947	\$3,200,000	\$3,200,000			

### 2012-13 PERFORMANCE MEASURE

Performance Measure: Triangle Wastewater Treatment Plant (TWWTP) Nitrogen Reduction



Why is this measure important to the overall goal or mission of the department? How does tracking this performance measure improve or help maintain a high level of service?

The Triangle Wastewater Treatment Plant discharges to Northeast Creek which then discharges into Jordan Lake. Jordan Lake has been identified as nutrient sensitive, and dischargers are being required to reduce their nutrient discharge to minimize the effects of the discharge. The Triangle Wastewater Treatment Plant is allowed to discharge up to 111,207 pounds per year of total nitrogen and 8,432 pounds per year of total phosphorus. The data indicates the facility is well below these limits.

# What initiatives or changes to programs in FY 2012-13 will the department take on in hopes to improve the overall performance of the related program or goal?

In FY 2012-13, the distribution of reuse water will reduce the effluent nutrient load discharged to the creek. Also, in January 2013, the sludge holding tanks and centrifuge project completion will reduce the summertime peak loads of nutrients associated with the existing sludge lagoon and improve nutrient treatment capacity.

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