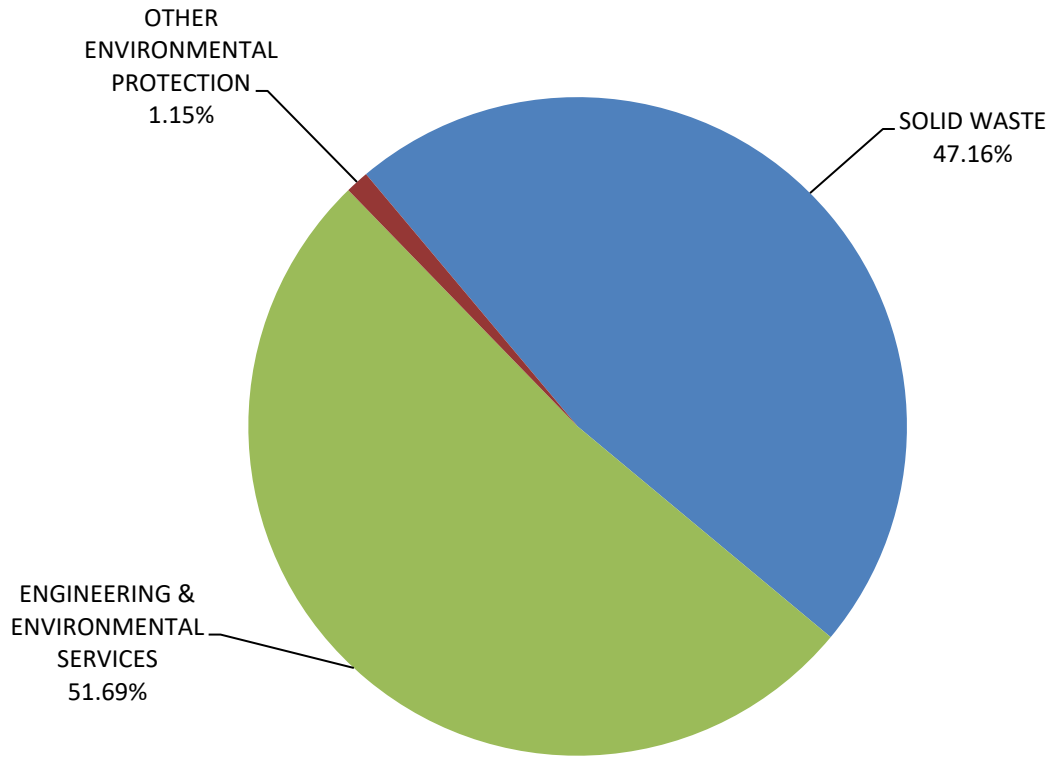




## **Environmental Protection**

A function of government which includes conservation and development of natural resources.

## Environmental Protection Approved Budget



Business area	2015-2016 Actual Expenditures	2016-2017 Original Budget	2016-2017 12 Month Estimate	2017-2018 Department Requested	2017-2018 Commissioner Approved
SOLID WASTE	\$ 1,966,068	\$ 2,263,072	\$ 2,136,491	\$ 2,102,681	\$ 2,102,681
ENGINEERING & ENVIRONMENTAL SERVICES	\$ 2,407,295	\$ 1,998,866	\$ 1,769,639	\$ 2,219,183	\$ 2,304,519
OTHER ENVIRONMENTAL PROTECTION	\$ 36,395	\$ 50,193	\$ 50,193	\$ 51,342	\$ 51,342
<b>Overall Result</b>	<b>\$ 4,409,758</b>	<b>\$ 4,312,131</b>	<b>\$ 3,956,323</b>	<b>\$ 4,373,206</b>	<b>\$ 4,458,542</b>

# GENERAL SERVICES - SOLID WASTE

## MISSION

The mission of the General Services' Solid Waste Management Division is to provide safe, efficient and effective waste collection, disposal, litter control and waste reduction outreach and educational services to the citizens of Durham County that protect and maintain the natural environment while supporting Goal 4 – Environmental Stewardship of the Strategic Plan.

## GENERAL SERVICES – SOLID WASTE

**Program Purpose:** The purpose of the Solid Waste Management Program is to provide residents living in the unincorporated areas of Durham County with an efficient and cost-effective means of properly disposing municipal solid waste (MSW), recyclable materials and special wastes.

**Program Description:** Solid Waste Management Program provides residents living in the unincorporated areas of Durham County means of properly disposing solid waste, recyclable materials and special wastes such as white goods and used motor oil at 4 local convenience sites, contracted roadside recycling collection, litter control investigations and educational waste reduction outreach efforts to all Durham County residents.

The County's Solid Waste Management Program is administered by the Department of General Services' Solid Waste Management Division whose office is located at 4527 Hillsborough Road. The program consists of the maintenance and operation of the County's four residential solid waste and recycling convenience sites (Bahama, Parkwood, Redwood and Rougemont); roadside recycling collection services; litter control cleanup and investigation program; maintenance and monitoring of the closed landfills formerly operated by the County; and the enforcement of the Solid Waste and Junked and Abandoned Vehicles ordinances. Additional services provided by the Division include County Government building recycling collection. Staff consists of a total of 17 FTEs.

Summary	2015-2016 Actual Exp/Rev	2016-2017 Original Budget	2016-2017 12 Month Estimate	2017-2018 Department Requested	2017-2018 Commissioner Approved
<b>Expenditures</b>					
Personnel	\$594,249	\$708,858	\$607,145	\$723,292	\$723,292
Operating	\$1,230,823	\$1,554,214	\$1,529,346	\$1,379,389	\$1,379,389
Capital	\$140,996	\$0	\$0	\$0	\$0
<b>Total Expenditures</b>	<b>\$1,966,068</b>	<b>\$2,263,072</b>	<b>\$2,136,491</b>	<b>\$2,102,681</b>	<b>\$2,102,681</b>
<b>Revenues</b>					
Taxes	\$48,528	\$39,000	\$47,330	\$44,000	\$44,000
Intergovernmental	\$114,400	\$9,625	\$0	\$0	\$0
Service Charges	\$2,027,099	\$2,214,447	\$2,172,589	\$2,215,131	\$2,215,131
<b>Total Revenues</b>	<b>\$2,190,027</b>	<b>\$2,263,072</b>	<b>\$2,219,919</b>	<b>\$2,259,131</b>	<b>\$2,259,131</b>
<b>Net Expenditures</b>	<b>(\$223,959)</b>	<b>\$0</b>	<b>(\$83,428)</b>	<b>(\$156,450)</b>	<b>(\$156,450)</b>
FTEs	15.00	17.00	17.00	17.00	17.00

\* Expense of \$156,450 for roll off truck was placed in non-departmental vehicles for consistency across the County.

## 2017-18 BUDGET HIGHLIGHTS

- The solid waste sticker fee is being maintained at FY2016-17's level to continue to account for the nationwide changes in recycling environment that now cost the County to process recyclable goods.
- Funding is included in this year's budget (from reallocated funds, no new funding requested) for a yearlong pilot program where Solid Waste Division employees would haul a portion of the containers and compactors of trash, cardboard, recyclables and yard waste currently collected under contracted services.
  - The Pilot Program will cover two of the four convenience sites (Redwood and Parkwood) and provide container hauling services for the Hillsborough Warehouse, Health and Human Services Complex, Courthouse and the Detention Facility.
  - The new program will allow the County to own and operate solid waste equipment and to perform nearly 90 percent of its function, thereby reducing cost and dependency on contractors.
- The costs for this roll off truck are included in the Non-Departmental Vehicle expenses line (\$156,450)

PERFORMANCE MEASURES	FY2014-15 Annual	FY2015-16 Annual	FY2016-17 Annual	FY2017-18 Estimated
<b>Solid Waste Management</b>				
No. of Visitors	Not Available	199,731.00	187,467.00	187,000.00
Participation Percentage	Not Available	46.25%	47.35%	50.00%
Pounds of Recyclables per Site Visitor	Not Available	154.00	619.00	650.00
Pounds of Trash per Site Visitor	Not Available	1,409.75	3,006.00	2,800.00
Tons of Household Recyclables Collected	Not Available	1,985.00	1,952.00	1,950.00
Tons of Litter/Debris	Not Available	3.63	39.00	48.00

\* Measures here are consolidated for all Durham County Convenience sites (Bahama, Parkwood, Redwood, and Rougemont)

**Measure:** No. of Visitors

**Description:** Identifies the number of visitors that have entered the site. Monitors usage of the site in order to better manage and improve the convenience site program.

**Measure:** Participation Percentage

**Explanation:** The two percent increase in roadside recycling is due to the distribution of 2,600 additional curbside 96-gallon containers made available to unincorporated residents of the County.

**Description:** Percentage of the 13,753 households participating in the recycling process using 96-gallon containers.

**Measure:** Pounds of Recyclables per Site Visitor

**Description:** Identifies the average amount of household recyclables each site visitor delivered to the site. Evaluates disposal trends for better management of the site and programs. Tracking usage patterns across the various sites can help target future citizen education efforts.

**Measure:** Pounds of Trash per Site Visitor

**Description:** Identifies the average amount of solid waste each site visitor delivered to the site. Evaluates disposal trends for better management of the site and programs. Tracking usage patterns across the various sites can help target future citizen education efforts.

**Measure:** Tons of Household Recyclables Collected

**Description:** Identifies the amount, in tons, of household recyclables collected from residences located in the unincorporated areas of Durham County participating in the County's Roadside Recycling Program. Tracking this measure will allow the Solid Waste division to ensure they are staffed and situated over time to meet the use pattern of the citizens.

**Measure:** Tons of Litter/Debris

**Explanation:** The increase in the number of tons of debris that has been collected and removed is due to two new Solid Waste employees, recent changes to the County's Solid Waste Ordinance, and the acquisition of a Grappler Loader Truck that clears debris quickly and efficiently.

**Description:** Identifies the amount, in tons, of illegally dumped debris and roadside litter collected from properties and along roadsides located within the unincorporated areas of Durham County. This number will be used to better track and assign our personnel as needed to the varied duties of the Solid Waste division.

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# FOREST PROTECTION

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## MISSION

To protect, manage and promote forest resources for the citizens of North Carolina. The North Carolina Forest Service envisions a North Carolina with healthy trees and forests that provides essential environmental, economic and social benefits served by a professional workforce recognized as a leader in forest protection, emergency response, resource management and environmental education.

## PROGRAM DESCRIPTION

Durham County provides financial support for state-administered forest protection services under contract with the North Carolina Department of Agriculture and Consumer Services of N.C. Forest Service, which maintains field offices in all counties of the state. The County pays 40% of the cost of operations and the state pays 60%. One assistant ranger is assigned full time to Durham County and is stationed at the Cooperative Extension Building, 721 Foster Street. A second ranger is assigned equal time to Durham and Orange Counties as a supervisor over both regions. A Forest Fire Equipment Operator (shared with Wake County and stationed in Wake County), a Service Forester, Water Quality Forester, Forest Fire Equipment Operator, and various other District and administrative staff provide support as necessary in Durham County.

Serving all county residents, the Forest Protection Program provides services including, but not limited to forest fire suppression and prevention, forest management, financial assistance, urban and community forestry planning, and insect and disease protection. In addition, the program publicizes the importance of prevention and protection measures through ongoing information and educational programs. Approximately 100,000 acres of forest exist in Durham County.

Summary	2015-2016 Actual Exp/Rev	2016-2017 Original Budget	2016-2017 12 Month Estimate	2017-2018 Department Requested	2017-2018 Commissioner Approved
▼ <i>Expenditures</i>					
Operating	\$36,395	\$50,193	\$50,193	\$51,342	\$51,342
<b>Total Expenditures</b>	<b>\$36,395</b>	<b>\$50,193</b>	<b>\$50,193</b>	<b>\$51,342</b>	<b>\$51,342</b>
▼ <i>Revenues</i>					
<b>Total Revenues</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Expenditures</b>	<b>\$36,395</b>	<b>\$50,193</b>	<b>\$50,193</b>	<b>\$51,342</b>	<b>\$51,342</b>

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# COUNTY ENGINEERING & ENVIRONMENTAL SERVICES

## 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; to improve County facilities through the management of capital projects; and to preserve natural and scenic lands, farms, and forests.

## DEPARTMENT DESCRIPTION

The Engineering and Environmental Services Department includes the Stormwater and Erosion Control, Sustainability, Project Management, Open Space/Real Estate Management, and Utility divisions. The Sustainability division is funded by both Durham County and the City of Durham based on an inter-local agreement between the two governments. Budget information for the Utility Division can be found under the Enterprise Fund tab in the approved budget document.

Summary	2015-2016 Actual Exp/Rev	2016-2017 Original Budget	2016-2017 12 Month Estimate	2017-2018 Department Requested	2017-2018 Commissioner Approved
<b>Expenditures</b>					
Personnel	\$1,326,241	\$1,503,898	\$1,353,297	\$1,735,266	\$1,790,602
Operating	\$389,777	\$494,968	\$416,341	\$483,917	\$513,917
Capital	\$691,277	\$0	\$0	\$0	\$0
<b>Total Expenditures</b>	<b>\$2,407,295</b>	<b>\$1,998,866</b>	<b>\$1,769,639</b>	<b>\$2,219,183</b>	<b>\$2,304,519</b>
<b>Revenues</b>					
Licenses & Permits	\$989,241	\$834,250	\$704,814	\$632,500	\$632,500
Intergovernmental	\$55,238	\$92,999	\$83,352	\$96,247	\$96,247
Rental Income	\$1	\$0	\$6	\$0	\$0
Service Charges	\$1,693	\$0	\$637	\$0	\$0
Enterprise Charges	\$0	\$0	\$0	\$0	\$10,000
Sewer Connect. Fees	\$1,680	\$2,100	\$2,520	\$3,150	\$3,150
Other Revenues	\$445	\$0	\$3,409	\$0	\$0
<b>Total Revenues</b>	<b>\$1,048,298</b>	<b>\$929,349</b>	<b>\$794,738</b>	<b>\$731,897</b>	<b>\$741,897</b>
<b>Net Expenditures</b>	<b>\$1,358,997</b>	<b>\$1,069,517</b>	<b>\$974,901</b>	<b>\$1,487,286</b>	<b>\$1,562,622</b>
FTEs	16.00	17.00	18.00	19.00	19.00

## 2017-18 BUDGET HIGHLIGHTS

- 1 new FTE- Real Estate Specialist for the Open Space and Real Estate Division to better address increasing demands for county real estate needs. There are a number of critical real estate related needs over the coming several year that require dedicated real estate expertise including acquisition of multiple EMS station sites, public safety headquarters, land for the north Durham convenience center, leasing of the retail component of the Administrative Building 2, the Junction Road economic development project, and more.
- A refresh or update to the Durham County Space Needs Analysis and Facility Master Plan prior to the next upcoming CIP.
- Increased funding to continue current service levels for Little River Regional Park. Durham County pays ½ of the operating costs per an adopted Interlocal Agreement with Orange County. Orange County had increases in salaries for park staff last year due to reclassifications.
- Non-profit funding to the Ellerbe Creek Watershed Association for the Smart Program to restore water quality in our streams, rivers, and drinking water supplies.

<b>PROGRAM BUDGET</b>	<b>FY2016-17 Approved Budget</b>	<b>FY2016-17 Approved FTE</b>	<b>FY2017-18 Department Requested Budget</b>	<b>FY2017-18 Department Requested FTE</b>	<b>FY2017-18 Commissioner Approved Budget</b>	<b>FY2017-18 Commissioner Approved FTE</b>
<b>Engineering</b>						
Capital Project Development and Management	\$692,142	6.00	\$902,612	7.00	\$902,612	7.00
Erosion control	\$342,212	3.00	\$306,929	3.00	\$306,929	3.00
Open Space Preservation	\$201,545	1.50	\$238,842	1.50	\$231,510	1.50
Real Estate	\$201,544	1.50	\$238,843	2.50	\$231,511	2.50
Stormwater Management	\$342,212	3.00	\$306,928	3.00	\$316,928	3.00
Sustainability	\$219,211	2.00	\$225,029	2.00	\$225,029	2.00
Rougemont Community Water System	\$0	0.00	\$0	0.00	\$90,000	0.00
<b>Grand Total</b>	<b>\$1,998,866</b>	<b>17.00</b>	<b>\$2,219,183</b>	<b>19.00</b>	<b>\$2,304,519</b>	<b>19.00</b>

### **Capital Project Development and Management**

**Program Purpose:** The purpose of the Capital Improvement Development and Management program is to improve County facilities through the management of capital projects for functional operation for staff and the citizens of Durham County.

**Program Description:** The Capital Improvement Development and Management program is responsible for managing the planning, design and construction of capital improvement projects related to County owned facilities. Projects include major renovations and new construction. This includes meeting the Durham County High Performance Building Policy requiring all newly constructed facilities to achieve LEED Gold level certification and renovation projects to be LEED Certified.

### **Erosion control**

**Program Purpose:** As a state delegated local program, the purpose of the Erosion Control program is to perform plan reviews and enforce compliance for development activity throughout the County.

**Program Description:** 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 Durham County. The Program conducts plans reviews, issues land disturbance permits, and inspects all permitted projects for compliance.

### **Open Space Preservation**

**Program Purpose:** The purpose of the Open Space Preservation Program is to protect and improve Durham's environment and quality of life by preserving environmentally significant open space and important farmlands. and by providing recreational opportunities when feasible.

**Program Description:** The Open Space Preservation Program works with landowners, non-profit agencies, public agencies and other stakeholders in the protection of identified lands, natural resources, farms, and waterways to improve the quality of life for all Durham County citizens. The Program develops public recreation areas on County-owned open space properties that include major parks, natural areas, and nature trails.

### **Real Estate**

**Program Purpose:** The purpose of the Real Estate program is to guide the County as it acquires, leases and tracks real property so the County can optimize the use and value of those assets.

**Program Description:** The Real Estate Program is responsible for all County real property by identifying appropriate lands for County facilities, leased land and office space, and the sale/disposal of all County owned surplus properties.

### **Stormwater Management**

**Program Purpose:** The purpose of the Stormwater Management program is to protect water quality through implementation and compliance with the Neuse Rules, Jordan Lake Rules and Falls Lake Rules.

**Program Description:** The Stormwater Program is responsible for administering the Durham County Stormwater Ordinance, which applies to all unincorporated areas of Durham County. The Program is responsible for enforcing the Neuse River, Falls Lake, and Jordan Lake nutrient management 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.



## **Sustainability**

**Program Purpose:** The purpose of the City/County Sustainability Office is to help protect and improve Durham's environment through wise use of natural resources by providing guidance and resources to city and county employees, businesses, and residents.

**Program Description:** The City-County Sustainability Office implements Durham's Greenhouse Gas Emissions Reduction Plan. Adopted in 2007, the plan sets ambitious goals for reducing greenhouse gas emissions by government and the community by 2030. The Sustainability Office strives to help protect and improve Durham's environment through wise use of natural resources by providing guidance and resources to City and County employees, businesses, and citizens.

## **Rougemont Community Water System**

**Program Purpose:** The purpose of Rougemont Community Water System is to provide water services to the Rougemont Community in order to provide them safe drinking water so they no longer have to use private contaminated well water.

**Program Description:** The Utilities Division at the Triangle Waste Water Treatment Plant manages the system in that they are responsible for the operations and maintenance of the system. They onboard new users and manage the billing of current users.

<b>PERFORMANCE MEASURES</b>	<b>FY2014-15 Annual</b>	<b>FY2015-16 Annual</b>	<b>FY2016-17 Annual</b>	<b>FY2017-18 Estimated</b>
<b>Capital Project Development and Management</b>				
# of active projects in the design phase	not available	not available	12.00	14.00
<b>Erosion control</b>				
% of operating cost recovered through developers fee	187.00%	207.00%	134.91%	100.00%
<b>Open Space Preservation</b>				
Total # of acres protected	3,274.00	3,436.00	3,436.00	3,628.00
<b>Sustainability</b>				
cost avoided	\$330,382	\$479,599	\$417,712	\$373,586

## **Capital Project Development and Management**

**Measure:** # of active projects in the design phase

**Description:** Measures the number of projects which are currently in the design phase. The design phase is assumed to be the period between the signing of a design contract and the subsequent signing of a contract for construction.

## **Erosion control**

**Measure:** % of operating cost recovered through developers fee

**Explanation:** The % = Revenues/Total Budget, so % may or may not reach 100% before Q4.

**Description:** This measures whether the fees collected cover the cost of the erosion control program. It also serves as a surrogate measure of development activity in the County.

## **Open Space Preservation**

**Measure:** Total # of acres protected

**Description:** The total number of acres protected is the most important measure of progress for Durham County in open space protection

## **Sustainability**

**Measure:** cost avoided

**Description:** Measures utility expenditures avoided due to conservation measures in County facilities. Utilities include electricity, gas, and water.