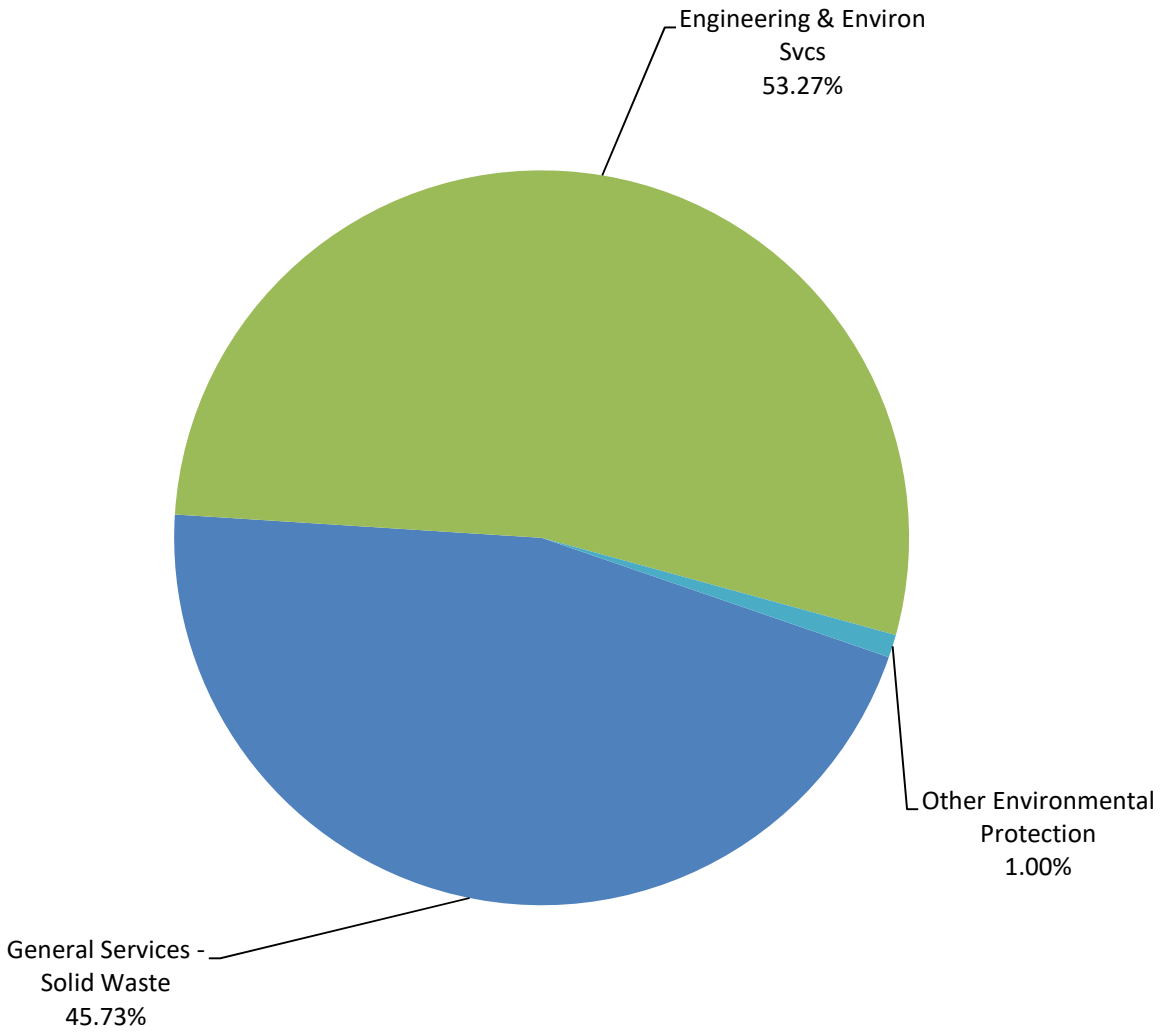




Environmental Protection

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

Environmental Protection Approved Budget



Business area	FY2017-18 Actual	FY2018-19 Original	FY2018-19 Estimate	FY2019-20 Requested	FY2019-20 Approved
General Services	\$2,163,084	\$2,299,042	\$2,176,359	\$2,284,593	\$2,302,690
Engineering & Environ Svcs	\$2,201,992	\$2,704,855	\$2,549,210	\$2,726,847	\$2,682,367
Other Environmental Protection	\$44,494	\$50,589	\$57,437	\$50,506	\$50,506
Grand Total	\$4,409,570	\$5,054,486	\$4,783,006	\$5,061,946	\$5,035,563

GENERAL SERVICES – SOLID WASTE



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 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.

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 four local convenience sites, contracted roadside recycling collection, litter control investigations and educational waste reduction outreach efforts. 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; 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.

Budget

	FY2017-18 Actual	FY2018-19 Original	FY2018-19 Estimate	FY2019-20 Requested	FY2019-20 Approved
Expenditure					
Personnel	\$723,565	\$749,389	\$796,075	\$822,592	\$822,592
Operating	\$1,282,347	\$1,430,653	\$1,371,135	\$1,462,001	\$1,480,098
Capital	\$157,172	\$119,000	\$9,149	\$0	\$0
Expenditure Total	\$2,163,084	\$2,299,042	\$2,176,359	\$2,284,593	\$2,302,690
Revenue					
Taxes	\$72,912	\$44,000	\$25,711	\$44,000	\$44,000
Intergovernmental	\$20,963	\$5,313	\$0	\$0	\$0
Service Charges	\$2,275,476	\$2,192,129	\$2,207,895	\$2,187,175	\$2,203,690
Revenue Total	\$2,369,351	\$2,241,442	\$2,233,606	\$2,231,175	\$2,247,690
Net Total	\$206,267	\$57,600	\$57,247	\$53,418	\$55,000
FTEs	17.00	17.00	17.00	18.00	18.00

Budget Highlights

- The Sticker Fee will remain at \$158.81, which is the same level as the prior 3 fiscal years.
- The Pilot Program for Durham County hauling of its containers has been evaluated and this budget includes 1 FTE for a Roll-off Truck Driver. The addition of this dedicated personnel will allow Durham County to eliminate a \$110,000 contract with the City of Durham (Total increase related to position \$49,308).
- As a result of changes in recycling policy and demand for recyclable materials there has been a significant increase in processing/tipping fees to the county. The majority of this increase has been absorbed by the elimination of the contract with the City of Durham.

Performance Measures

Measure: NUMBER OF DURHAM COUNTY SOLID WASTE CONVENIENCE CENTER VISITORS



Measure description: This measure shows the total number of visitors at the four Solid Waste Convenience Centers: Bahama, Rougemont, Redwood, and Parkwood. This measure helps the department know how well the Convenience Centers are used.
Note: The above chart shows data through Q2 (December) of FY2018-19.

Trend explanation: The department saw an increase in visitors in FY2018-19. Staff are projecting a year-end total of around 217,708 for all four sites in FY2018-19, up from 192,923 in FY2017-18 (Bahama year-end estimate = 54,825; Rougemont year-end estimate = 72,171; Redwood year-end estimate = 64,526; Parkwood year-end estimate = 26,186). Residents who desire curbside trash service must pay for that option. As other costs rise, that may be one expense residents choose to eliminate, thereby increasing their visits to Durham County Convenience Centers. The active use of Bahama and Rougemont has spurred Solid Waste staff to look at a larger consolidated site for the northern customers that will service the community needs.

FY2019-20 target: This measure does not have a true target. The department does not anticipate any service changes, and therefore without substantial weather closings, the FY2019-20 visitor projection is 215,000.

Measure: PERCENT OF WASTE STREAM DIVERTED THROUGH RECYCLING (DURHAM COUNTY CONVENIENCE CENTERS)



Measure description: This measures the percent of waste diverted from the landfill to recycling at the Durham County Convenience Centers. Recycling saves the County money through hauling and disposal fees and is better for the environment. The diversion rate is calculated by dividing recyclables tonnage by total recyclables tonnage and trash tonnage. The recycling tonnage only includes single stream recycling; it does not include scrap metals and textiles.

Trend explanation: The goal for this year was 15%. However, at this point staff anticipate coming in lower than that at 13%. Staff have noticed an increase in total garbage tonnage, which could be due to residents eliminating private curbside garbage service. Recycling tonnage has decreased overall. Some of that decrease is due to an issue with the data collection on the side of the vendor which caused underreporting of tonnage. An increase in garbage tonnage and a decrease in recycling tonnage therefore caused the percent of waste diversion to be lower.

FY2019-20 target: While the issues with the vendor underreporting recycling tonnage should be improved next year, staff anticipate a continued increase in garbage tonnage as more residents turn to Durham County sites for trash disposal.

COUNTY ENGINEERING & ENVIRONMENTAL SERVICES



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 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 consistent with the High-Performance Building policy; to protect and improve Durham’s environment through wise use of natural resources; and to preserve natural and scenic lands, farms, and forests. The department consists of the Stormwater and Erosion Control, Sustainability, Capital Project Development and Management, Open Space/Real Estate Management divisions, Economic Development, and Utility divisions. Budget information for the Utility Divisions and Economic Development can be found under the Enterprise Fund tab and Economic Development tab respectively in the budget document

Programs

Capital Project Development and Management–

The Capital Improvement Development and Management program is responsible for improving the functional operation and efficiency of County facilities for the benefit of staff and the citizens of Durham County. The 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 Silver or Gold level certification and major renovation projects to achieve LEED Certified level certification.

Erosion Control/Stormwater Management –

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 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 & inspects permitted projects for compliance. 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 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.

Program	Budget
Capital Project Development and Management	\$1,207,065
Erosion Control/Stormwater Management	\$804,710
Open Space Preservation	\$335,296
Real Estate	\$201,178
Sustainability	\$134,118
Grand Total	\$2,682,367

Open Space Preservation

The Durham County Open Space Program works to enhance the quality of life and sustainability of current and future generations by protecting scenic, natural and historic landscapes; conserving significant habitats, working lands, and cultural and natural resources; and by providing natural areas for public enjoyment. With specific guidance from adopted open space and farmland preservation plans and by leveraging county funds with outside funding sources, the Open Space Program works with landowners, farmers, non-profit groups, public groups and other stakeholders to identify and protect important lands. The program staff is responsible for easement stewardship and monitoring and management of the county’s open space lands, four of which are open to the public for low impact recreational use. Durham’s Open Space and Trails (DOST) Matching Grant Program is also administered by Open Space Division staff.

Real Estate

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. 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.

Sustainability

The Sustainability Office helps protect and improve Durham’s environment through wise use of natural resources by providing guidance and resources to county employees, businesses & residents. The 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. Since 2008, the Sustainability Office has been funded jointly with the City of Durham. In FY20, the Sustainability Office is split into a County-only division and a City-only division. This budget reflects this change with funding for a county-only Sustainability Manager.

Budget

	FY2017-18 Actual	FY2018-19 Original	FY2018-19 Estimate	FY2019-20 Requested	FY2019-20 Approved
Expenditure					
Personnel	\$1,696,166	\$2,043,836	\$1,842,276	\$2,097,040	\$2,032,502
Operating	\$408,836	\$661,019	\$706,933	\$629,807	\$649,865
Capital	\$96,989	\$0	\$0	\$0	\$0
Expenditure Total	\$2,201,992	\$2,704,855	\$2,549,210	\$2,726,847	\$2,682,367
Revenue					
Licenses and Permits	\$687,020	\$507,000	\$507,000	\$594,500	\$594,500
Intergovernmental	\$98,056	\$121,025	\$121,025	\$0	\$26,149
Rental Income	\$1	\$0	\$1	\$1	\$1
Sewer Connection Fees	\$3,780	\$5,000	\$5,000	\$5,000	\$5,000
Service Charges	\$2,570	\$60	\$8,412	\$2,255	\$2,255
Enterprise Charges	\$15,123	\$14,000	\$14,000	\$14,000	\$14,000
Other Revenues	\$2,375	\$850	\$850	\$850	\$850
Revenue Total	\$808,925	\$647,935	\$656,288	\$616,606	\$642,755
Net Total	\$1,393,066	\$2,056,920	\$1,892,922	\$2,110,241	\$2,039,612
FTEs	19.00	21.00	21.00	21.00	21.00

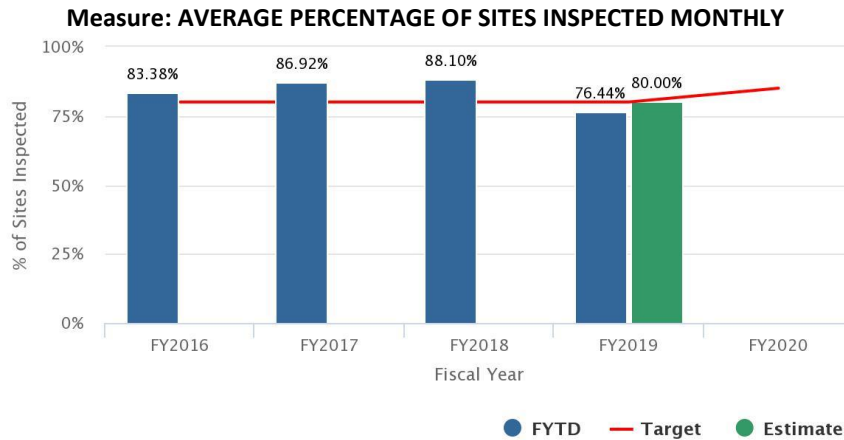
Budget Highlights

- A renewable energy plan at (\$50,000). Board of County Commissioners adopted a resolution in November 2018 to create a plan for County operations to run on 100% renewable energy by 2050. This request is to hire a consultant to help create that plan.
- This budget maintains current levels of services for Program Management, Open Space and Real Estate, Stormwater and Erosion Control, and Utilities. The Sustainability Office has lost funding for one FTE in this budget and impact on the level of service will be evaluated over FY20 to determine how this impacts the program.

*The County also funds a select group of community based non-profit organizations that support, directly or indirectly, various County department services. These County supported non-profit agencies are selected through a rigorous annual selection and certification process to ensure quality services and outcomes. The supported non-profits shown here are related to services provided by the department being described, however, the appendix of this document has more detail about all Durham County non-profit funding. \$10,000 in non-profit program funds to the Ellerbe Creek Watershed Association for the Smart Program to restore water quality in our streams, rivers and drinking water supplies. Listed in the Appendix under Goal 4.

Engineering Non-Profit Support	FY2019-20 Funding
Ellerbe Creek Watershed Association	\$10,000.00
	\$10,000.00

Performance Measures

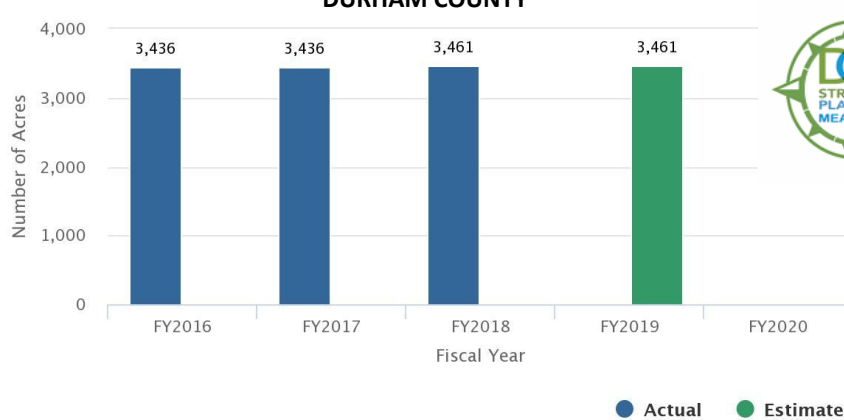


Measure description: This measure shows the percentage of permitted sites that are inspected monthly. Monthly inspections are critical in maintaining compliance with land disturbance permits and erosion control plans. Maintaining compliance is the best way to keep sediment out of Durham County streams and rivers, thus protecting the environment.

Trend explanation: Weather and staffing are the main factors in decreased inspections for FY2018-19. Increased wet weather creates unsafe conditions to complete inspections. Additionally, one technician was injured in a fall and unable to complete inspections for most of the fall. Staff are also at an all-time high number of permits and continue to be stretched in completing inspections. Overall compliance is being maintained on most sites.

FY2019-20 target: Full staffing and good weather should put the department back on track to meet the target for FY2019-20.

Measure: NUMBER OF TOTAL ACRES OF OPEN SPACE AND FARMLAND THAT HAVE BEEN PROTECTED/INFLUENCED BY DURHAM COUNTY

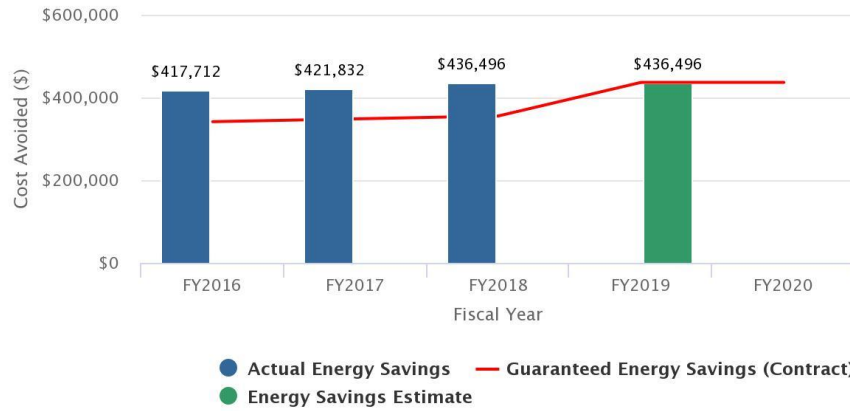


Measure description: Acres protected means the total acreage protected by Durham County, either through acquisition, or through other permanent means such as conservation easements. This is important because the amount of open space protected in a community helps with environmental protection, water quality and wildlife habitat maintenance, and quality of life in a growing community. Durham County has adopted four different open space plans prepared by the Durham City/County Planning department with citizen input, and these are used as implementation guides.

Trend explanation: Conservation easements on important farmlands have been a core part of the program for over a decade. The average size of participating farms has dropped significantly, and the work to complete a farm easement is roughly the same regardless of size. So, the number of farms may be staying consistent while the total acreage protected each year is going down. While several new areas were identified during FY2018-19, no additional acres were added.

FY2019-20 target: There is no target for this measure due to the inability to project availability of land donated or for purchase; however, new areas identified in FY2018-19 are expected to be added in FY2019-20, which should increase the number of total acres to 3,581.

Measure: COST AVOIDED THROUGH SUSTAINABILITY ENERGY SAVINGS PERFORMANCE CONTRACTING

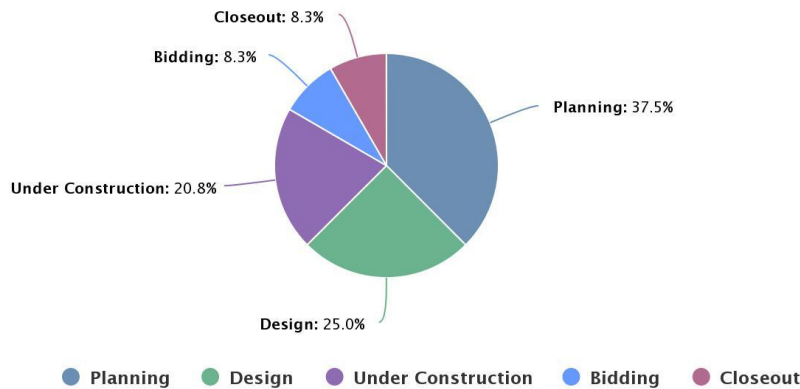


Measure description: This measure quantifies the amount of money saved by conserving energy and water in Durham County facilities through the Performance Contracting program. Performance Contracting is a way of implementing energy and water saving measures quickly and paying off the cost through guaranteed utility savings over time. This is important because Durham County is saving taxpayer dollars that can be used for other important County functions rather than sending those dollars to utility companies. In addition, staff is reducing Durham County’s greenhouse gas emissions and conserving natural resources through energy and water savings. Data for this measure is collected through a third party verified process to calculate how much energy, water, and money Durham County is saving due to the retrofits completed on Durham County buildings. Some of the savings are calculated while others are based on the actual utility bills.

Trend explanation: This measure is trending in a positive direction (more costs avoided) because Durham County continues to save energy and water in facilities and because energy costs are increasing. As energy costs increase over time, the amount of money saved also goes up. To improve this measure, staff can continue to improve the way Durham County facilities function, so they waste less energy and water. Staff can also continue to work with employees to improve conservation practices.

FY2019-20 target: This target is the amount of savings the contractor has guaranteed Durham County would see per the Energy Savings Performance Contract (\$436,496).

Measure: CAPITAL PROJECTS ACTIVE PROJECT PORTFOLIO: PERCENT OF TOTAL PROJECT PORTFOLIO IN EACH PHASE



Measure description: This is a measure of the activity level of projects throughout the Capital Improvement Plan (CIP) process. This measure provides insight into staffing requirements for the division. The number and scheduling of projects undertaken is based on decisions made by the Board of County Commissioners and County Management. Typical construction processes also factor into timelines for projects.

Trend explanation: Trending for CIP projects is determined by economic forces and the County’s CIP planning process. County Management will fund projects based on these factors, and the Project Management division is tasked with managing the projects within the allocated funding.

FY2019-20 target: The number of projects undertaken is based on decisions made by County Management and are beyond the division’s control.

FOREST PROTECTION



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

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. 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, a Water Quality Forester, a 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.

Budget

	FY2017-18 Actual	FY2018-19 Original	FY2018-19 Estimate	FY2019-20 Requested	FY2019-20 Approved
Expenditure					
Operating	\$44,494	\$50,589	\$57,437	\$50,506	\$50,506
Expenditure Total	\$44,494	\$50,589	\$57,437	\$50,506	\$50,506
Grand Total	\$44,494	\$50,589	\$57,437	\$50,506	\$50,506