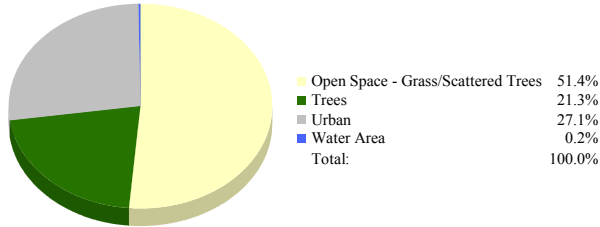
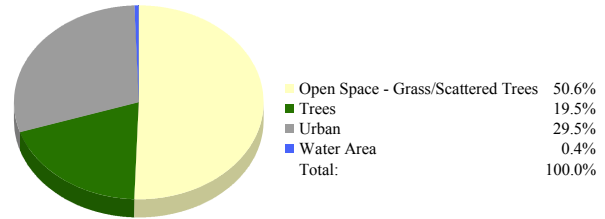


Shelby, NC 1984 Landcover



Shelby, NC 2003 Landcover



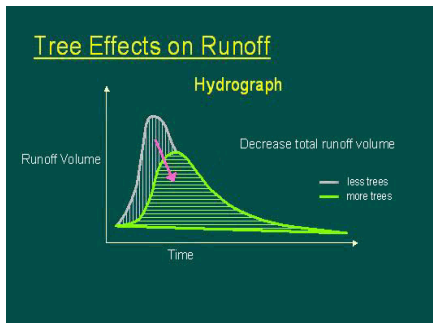
Air Quality Results

Pounds Removed per Year

Pollutant	1984	2003
Carbon Monoxide:	8,816	8,084
Nitrogen Dioxide:	15,427	14,146
Ozone:	90,360	82,856
Particulate Matter:	66,117	60,627
Sulfur Dioxide:	28,651	26,272
Total:	209,371	191,984

Stormwater Results

Storm Event Hydrograph



Stormwater Volume Change

2-yr, 24-hr Rainfall: 3.25 in.

*Curve Number reflecting conditions in 1984: 74

*Curve Number reflecting conditions in 2003: 75

Additional Storage volume of stormwater generated due to change in landcover from 1984 to 2003: 2,414,850 cu. ft.

Construction cost of retention facilities per cu. ft. of stormwater: \$2.00

Cost of the construction of retention facilities to store excess volume of stormwater: **\$4,829,700**

Benefits Summary

Landcover Change (acres)

Landcover	1984	2003	Change
Trees:	2,472	2,267	-8.3%
Open Space:	5,966	5,868	-1.6%
Urban:	3,140	3,418	8.9%
Water:	25	51	104.0%
Total Acres:	11,604		

Air Pollution Benefits

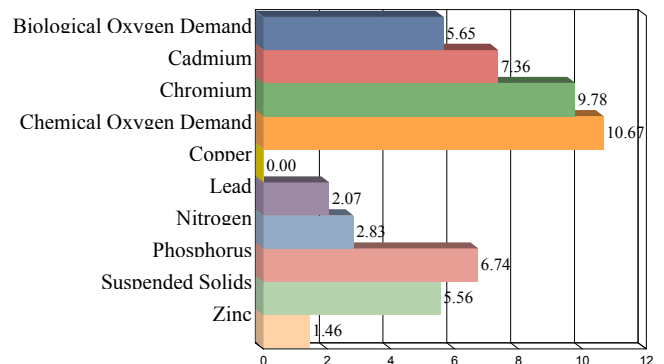
Pollutants Removed (lbs):	209,371	191,984	-17,387
\$ Amount:	\$485,883	\$445,534	-\$40,349
Carbon Stored (tons):	106,390	97,555	-8,835
Carbon Sequestered (lbs):	828	759	-69

Stormwater Benefits

Additional Storage Volume Needed:		16,028,347	2,414,850
Cost of Retaining Additional Volume of Runoff:		\$32,056,695	\$4,829,700

Water Quality (Contaminant Loading)

Percent Change in Contaminant Loadings from 1984 to 2003 due to land cover change



*The stormwater calculations are based on curve number which is an index developed by the NRCS, to represent the potential for storm water runoff within a drainage area. Curve numbers range from 30 to 100. The higher the curve number the more runoff will occur. The change in curve number reflects the increase in the volume of stormwater runoff.