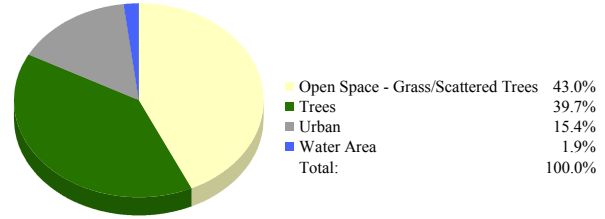
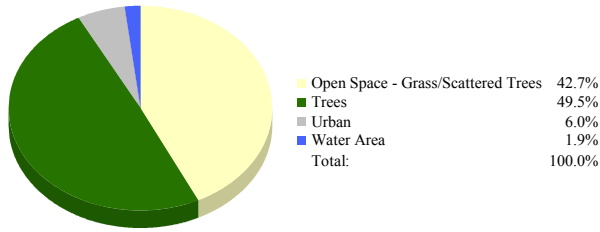


Piedmont Green Study Area 1984 Landcover Piedmont Green Study Area 2003 Landcover



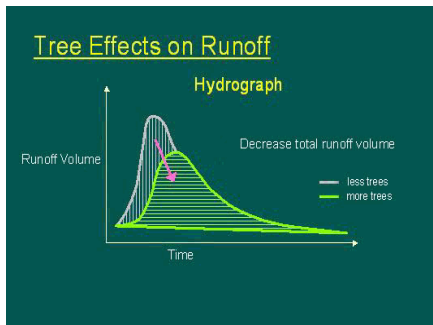
Air Quality Results

Pounds Removed per Year

Pollutant	1984	2003
Carbon Monoxide:	7,975,419	6,404,229
Nitrogen Dioxide:	13,956,982	11,207,401
Ozone:	81,748,040	65,643,348
Particulate Matter:	59,815,639	48,031,718
Sulfur Dioxide:	25,920,110	20,813,744
Total:	189,416,189	152,100,441

Stormwater Results

Storm Event Hydrograph



Stormwater Volume Change

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

*Curve Number reflecting conditions in 1984: 71

*Curve Number reflecting conditions in 2003: 74

Additional Storage volume of stormwater generated due to change in landcover from 1984 to 2003: 2,664,063,559 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: \$5,328,127,117

Benefits Summary

Landcover Change (acres)

Landcover	1984	2003	Change
Trees:	2,236,743	1,796,096	-19.7%
Open Space:	1,931,011	1,943,662	0.6%
Urban:	270,027	694,687	157.2%
Water:	84,131	87,643	4.1%
Total Acres:	4,521,913		

Air Pollution Benefits

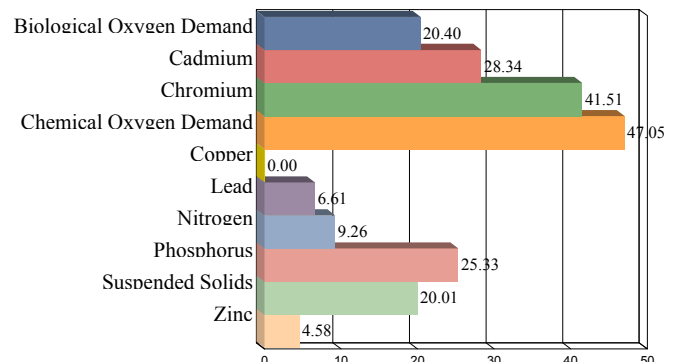
Pollutants Removed (lbs):	189,416,189	152,100,441	-37,315,749
\$ Amount:	\$439,574,502	\$352,976,562	-\$86,597,940
Carbon Stored (tons):	96,250,378	77,288,668	-18,961,710
Carbon Sequestered (lbs):	749,335	601,713	-147,622

Stormwater Benefits

Additional Storage Volume Needed:		13,264,224,709	2,664,063,559
Cost of Retaining Additional Volume of Runoff:		\$26,528,449,417	\$5,328,127,117

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.