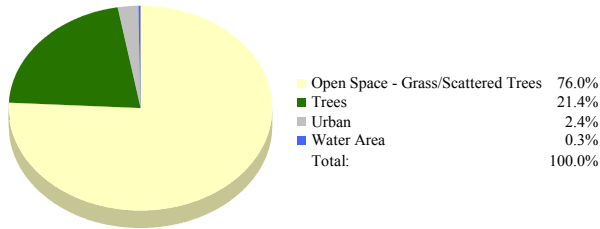
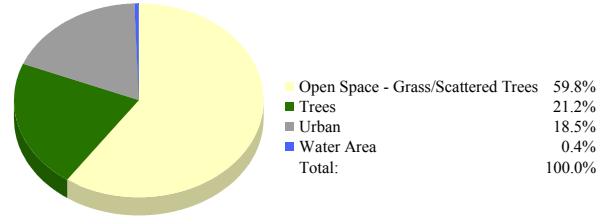


Unionville, NC 1984 Landcover



Unionville, NC 2003 Landcover



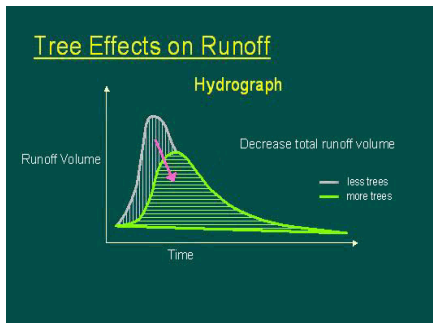
Air Quality Results

Pounds Removed per Year

Pollutant	1984	2003
Carbon Monoxide:	12,805	12,717
Nitrogen Dioxide:	22,409	22,254
Ozone:	131,252	130,348
Particulate Matter:	96,038	95,376
Sulfur Dioxide:	41,617	41,330
Total:	304,121	302,025

Stormwater Results

Storm Event Hydrograph



Stormwater Volume Change

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

*Curve Number reflecting conditions in 1984: 69

*Curve Number reflecting conditions in 2003: 72

Additional Storage volume of stormwater generated due to change in landcover from 1984 to 2003: 9,329,552 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: **\$18,659,105**

Benefits Summary

Landcover Change (acres)

Landcover	1984	2003	Change
Trees:	3,591	3,566	-0.7%
Open Space:	12,766	10,047	-21.3%
Urban:	404	3,117	672.0%
Water:	43	75	72.1%
Total Acres:	16,805		

Air Pollution Benefits

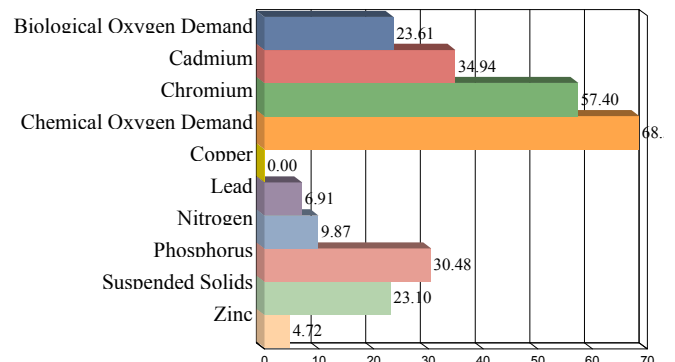
Pollutants Removed (lbs):	304,121	302,025	-2,096
\$ Amount:	\$705,768	\$700,903	-\$4,865
Carbon Stored (tons):	154,537	153,472	-1,065
Carbon Sequestered (lbs):	1,203	1,195	-8

Stormwater Benefits

Additional Storage Volume Needed:		25,228,010	9,329,552
Cost of Retaining Additional Volume of Runoff:		\$50,456,020	\$18,659,105

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.