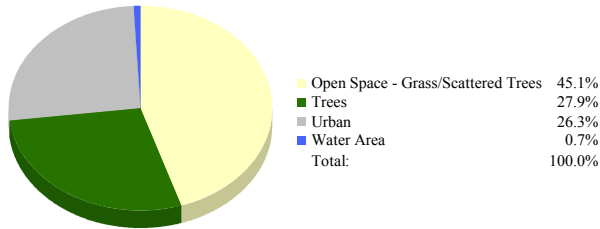
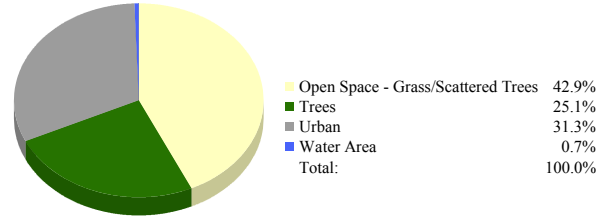


## Albemarle, NC 1984 Landcover



## Albemarle, NC 2003 Landcover



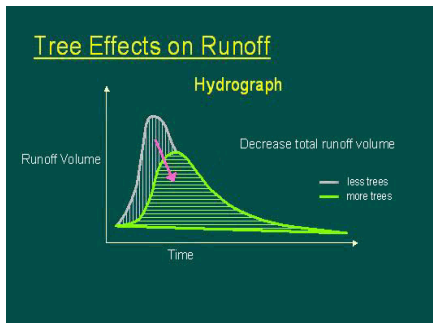
### Air Quality Results

#### Pounds Removed per Year

Pollutant	1984	2003
Carbon Monoxide:	9,941	8,937
Nitrogen Dioxide:	17,397	15,639
Ozone:	101,896	91,599
Particulate Matter:	74,558	67,024
Sulfur Dioxide:	32,309	29,044
<b>Total:</b>	<b>236,101</b>	<b>212,242</b>

### Stormwater Results

#### Storm Event Hydrograph



#### Stormwater Volume Change

2-yr, 24-hr Rainfall: 3.75 in.

\*Curve Number reflecting conditions in 1984: 75

\*Curve Number reflecting conditions in 2003: 76

Additional Storage volume of stormwater generated due to change in landcover from 1984 to 2003: 2,459,074 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: **\$4,918,148**

### Benefits Summary

#### Landcover Change (acres)

Landcover	1984	2003	Change
Trees:	2,788	2,506	-10.1%
Open Space:	4,503	4,291	-4.7%
Urban:	2,627	3,126	19.0%
Water:	73	68	-6.8%
Total Acres:	9,991		

#### Air Pollution Benefits

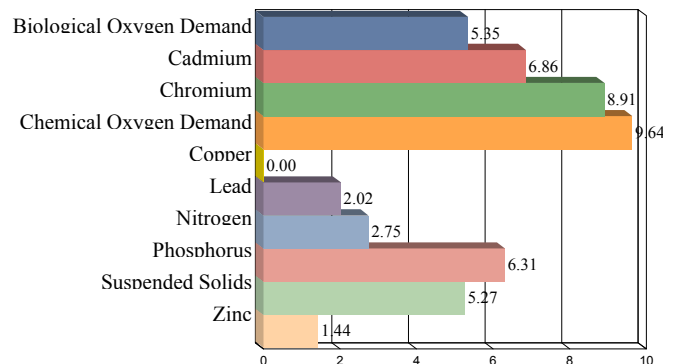
Pollutants Removed (lbs):	236,101	212,242	-23,858
\$ Amount:	\$547,914	\$492,547	-\$55,368
Carbon Stored (tons):	119,973	107,849	-12,123
Carbon Sequestered (lbs):	934	840	-94

#### Stormwater Benefits

Additional Storage Volume Needed:		21,863,632	2,459,074
Cost of Retaining Additional Volume of Runoff:		\$43,727,264	\$4,918,148

#### 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.