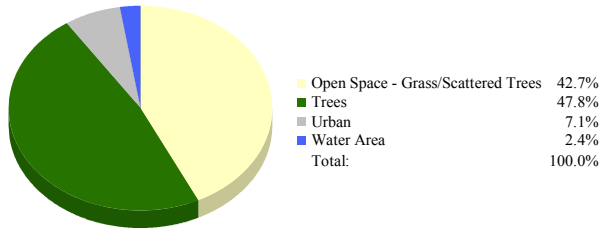
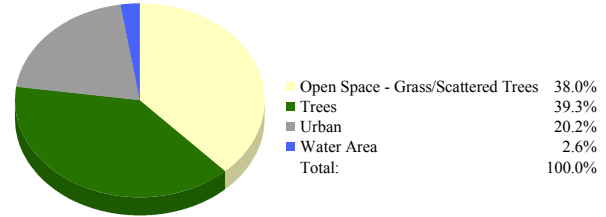


Rowan County 1984 Landcover



Rowan County 2003 Landcover



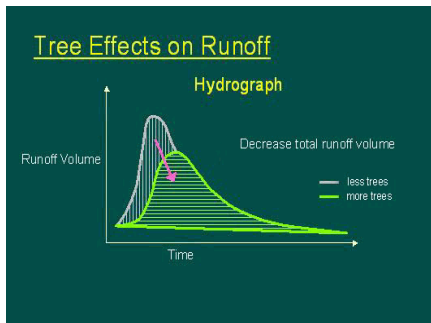
Air Quality Results

Pounds Removed per Year

Pollutant	1984	2003
Carbon Monoxide:	285,344	234,515
Nitrogen Dioxide:	1,426,718	1,172,577
Ozone:	6,562,903	5,393,855
Particulate Matter:	5,706,872	4,690,308
Sulfur Dioxide:	1,569,390	1,289,835
Total:	15,551,227	12,781,090

Stormwater Results

Storm Event Hydrograph



Stormwater Volume Change

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

*Curve Number reflecting conditions in 1984: 72

*Curve Number reflecting conditions in 2003: 76

Additional Storage volume of stormwater generated due to change in landcover from 1984 to 2003: 274,993,473 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: **\$549,986,946**

Benefits Summary

Landcover Change (acres)

Landcover	1984	2003	Change
Trees:	160,052	131,542	-17.8%
Grass, Crops w/ veg. & fallow:	143,106	127,203	-11.1%
Urban:	23,919	67,687	183.0
Water:	7,950	8,596	8.1%
Total Acres:	335,028		

Air Pollution Benefits

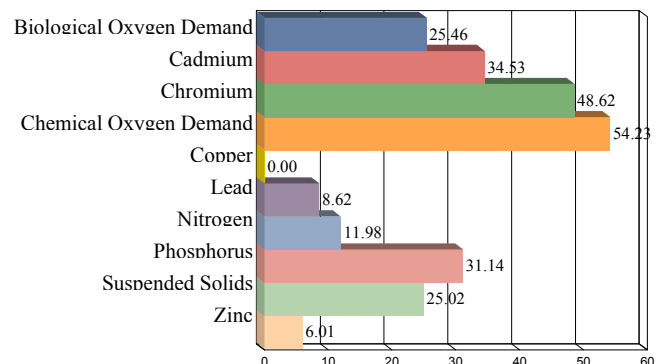
Pollutants Removed (lbs):	1984	2003	Change
Pollutants Removed (lbs):	15,551,227	12,781,090	-2,770,137
\$ Amount:	\$37,551,175	\$30,862,193	-\$6,688,982
Carbon Stored (tons):	6,887,270	5,660,442	-1,226,828
Carbon Sequestered (lbs):	53,619	44,068	-9,551

Stormwater Benefits

Additional Storage Volume Needed:	1984	2003	Change
Additional Storage Volume Needed:		939,146,524	274,993,473
Cost of Retaining Additional Volume of Runoff:		\$1,878,293,047	\$549,986,946

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.