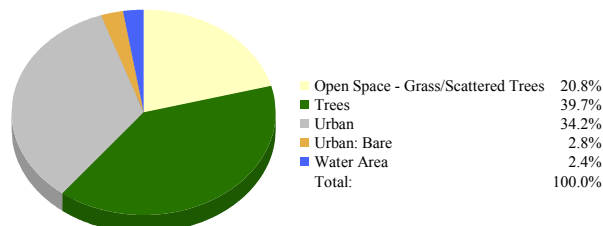


Analysis Report

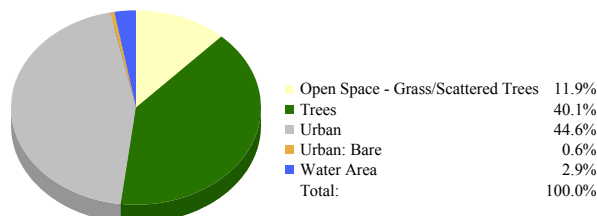
Landcover 1

1991 Main 1-2 SWMA Land Cover



Landcover 2

2002 Main 1-2 SWMA Land Cover



Air Quality Results

Pounds Removed per Year

Pollutant	1991 Landcover	2002 Landcover
Carbon Monoxide:	46,605	47,046
Nitrogen Dioxide:	256,330	258,752
Ozone:	722,383	729,210
Particulate Matter:	792,291	799,778
Sulfur Dioxide:	209,724	211,706
Total:	2,027,334	2,046,491

By absorbing and filtering out nitrogen dioxide (NO₂), sulfur dioxide (SO₂), ozone (O₃), carbon monoxide (CO), and particulate matter less than 10 microns (PM₁₀) in their leaves, urban trees perform a vital air cleaning service that directly affects the well-being of urban dwellers. This model, UFORE, developed by the US Forest Service, estimates the annual air pollution removal rate of trees within a defined study area for the pollutants listed below. To calculate the dollar value of these pollutants, economists use "externality" costs, or indirect costs borne by society such as rising health care expenditures and reduced tourism revenue. The actual externality costs used in the model is set by the each state, Public Services Commission.

Benefits Summary

Landcover Change (acres)			
Landcover	Landcover 1	Landcover 2	Change
Tree Canopy:	26,141	26,388	1%
Air Pollution Benefits			
Pollutants Removed (lbs):	2,027,334	2,046,491	19,158
\$ Amount:	\$4,809,224	\$4,854,670	\$45,446
Carbon Stored (tons):	1,124,903	1,135,533	10,630
Carbon Sequestered (lbs):	8,758	8,840	83

Stormwater Results

Stormwater Volume Change Summary

2-yr, 24-hr Rainfall: 2.25 in.

*Curve Number reflecting Landcover 1: 76

*Curve Number reflecting Landcover 2: 78

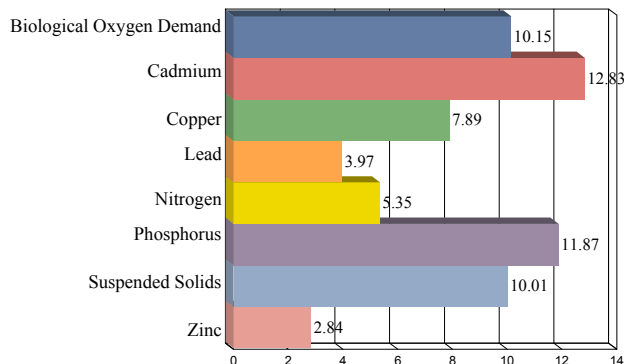
Change in stormwater volume due to landcover change: 19,653,636 cu. ft.

Construction cost, per cu. ft. of stormwater, to build retention facility: \$2.00

Cost of stormwater retention resulting from landcover change: **\$39,307,272**

Water Quality (Contaminant Loading)

Percent Change in Contaminant Loadings from Landcover 1 to Landcover 2



Notes: *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/decrease in the volume of stormwater runoff.