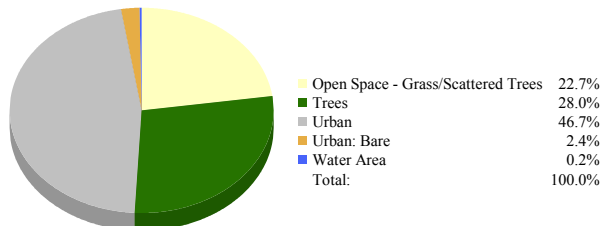


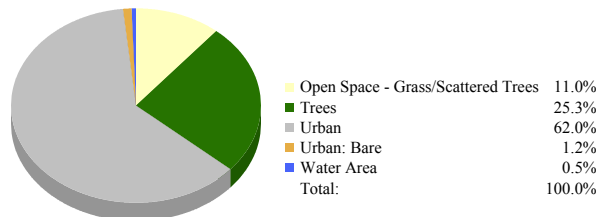
Landcover 1

1991 Upper SWMA Land Cover



Landcover 2

2002 Upper SWMA Land Cover



Air Quality Results

Pounds Removed per Year

Pollutant	1991 Landcover	2002 Landcover
Carbon Monoxide:	20,316	18,362
Nitrogen Dioxide:	111,740	100,988
Ozone:	314,904	284,604
Particulate Matter:	345,379	312,146
Sulfur Dioxide:	91,424	82,627
Total:	883,763	798,727

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:	11,396	10,299	-10%
Air Pollution Benefits			
Pollutants Removed (lbs):	883,763	798,727	-85,037
\$ Amount:	\$2,096,456	\$1,894,733	-\$201,723
Carbon Stored (tons):	490,372	443,188	-47,184
Carbon Sequestered (lbs):	3,818	3,450	-367

Stormwater Results

Stormwater Volume Change Summary

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

*Curve Number reflecting Landcover 1: 81

*Curve Number reflecting Landcover 2: 84

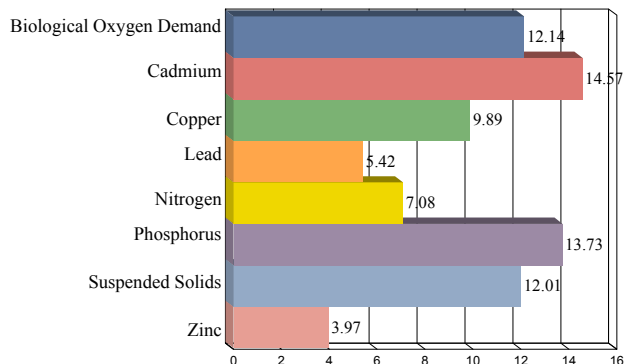
Change in stormwater volume due to landcover change: 23,237,700 cu. ft.

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

Cost of stormwater retention resulting from landcover change: **\$46,475,400**

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.