Analysis Report

Site Statistics

Analysis Area: **Washington**

Scenario: Current Conditions

Area:

68.33	sq. miles
43,732.18	acres
17,698.41	hectares

Landcover Distribution:

		Acres
0%	Cropland	0.00
41%	Impervious	18,095.51
19%	Open Space/Pasture/Meadow	8,328.95
0%	Shrubs	0.00
28%	Tree Canopy	12,305.18
2%	Urban Land Use	812.14
10%	Water	4,190.39

Ecological Benefits

Air Pollution Removal

Air Quality Reference City: Baltimore

	lbs Removed	Dollar Value
Ozone:	472,888.17	$1,451,273.24
Sulfur Dioxide:	136,464.48	$102,502.17
Nitrogen Dioxide:	299,508.14	$919,197.14
Particulate Matter:	379,491.83	$777,810.59
Carbon Monoxide:	35,069.77	$15,258.43
Total:	**1,323,422.39**	**$3,266,041.57**

Residential Cooling Effects

Average Annual Cooling Cost per Home:		$0.00
Number of Homes:	0	
Savings from Trees:		$0.00
Savings from Roofs:		$0.00
Total Savings:		**$0.00**
Savings per Home:		$0.00
Kilowatt-hours Saved:	0.00	
KWHs saved per Home:	0.00	
Carbon Generation Avoided:	0.00 lbs.	
Carbon Generation Avoided per Home:	0.00 lbs.	

Carbon Storage and Sequestration

Age Distribution of Trees:	Average or Unknown	
Carbon Storage:	5,294.92	tons
Carbon Sequestration:	41.22	tons/year

Stormwater Control

Average 2-yr, 24-hour Rainfall:	3.25	in.
Rainfall Distribution Type:	II	
Hydrologic Soil Group:	C	
Average Slope:	13	%

	Conditions: Current	w/o trees*
Curve Number:	88	93
Runoff (in.):	2.04	2.49
Time of Concentration (hrs.):	5.44	4.41
Peak Flow (cu ft/s.):	14,345.33	20,894.33

Storage volume needed to mitigate the change in peak flow:	84,348,169.00	cu. ft.
Construction cost:	$2.00	per cu. ft.
Total	**$168,696,338.00**	

*Replaced by default landcover: Urban

Economic Benefit Summary

Annual Air Pollution Removal Savings:	**$3,266,041.57**
Annual Energy Savings:	**$0.00**
Annual Stormwater Savings*:	**$14,707,715.49**
Total Annual Savings:	**$17,973,757.06**

*Annual Stormwater savings is based on payments financed over 20 years at 6%