

MD Estimates for the Chesapeake Bay Phase 6 Watershed Model

Land-Use, Version 1: Baltimore County Summary

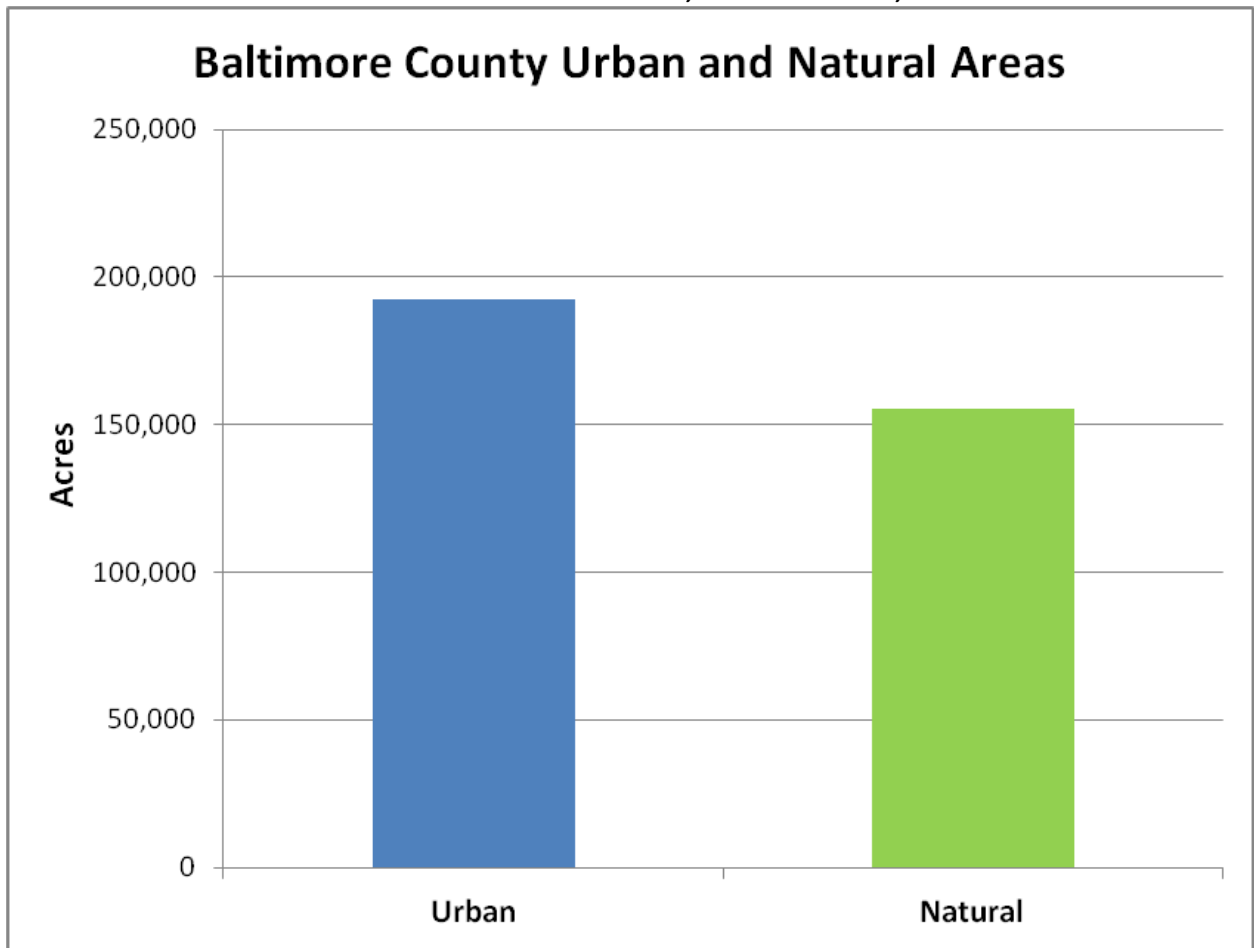
Note: The estimates presented in this summary were provided by Maryland for 2012 conditions to the Chesapeake Bay Program for input into the Phase 6 watershed model land-use. Estimates were provided for urban and natural land-uses only. Per Chesapeake Bay Program decision rules, agricultural land-use acres in the watershed model are based on the United States Department of Agriculture (USDA) census data. Therefore, there was no reason for Maryland to provide estimates for agricultural lands to the Chesapeake Bay Program.

Baltimore County Urban and Natural Areas by Segment

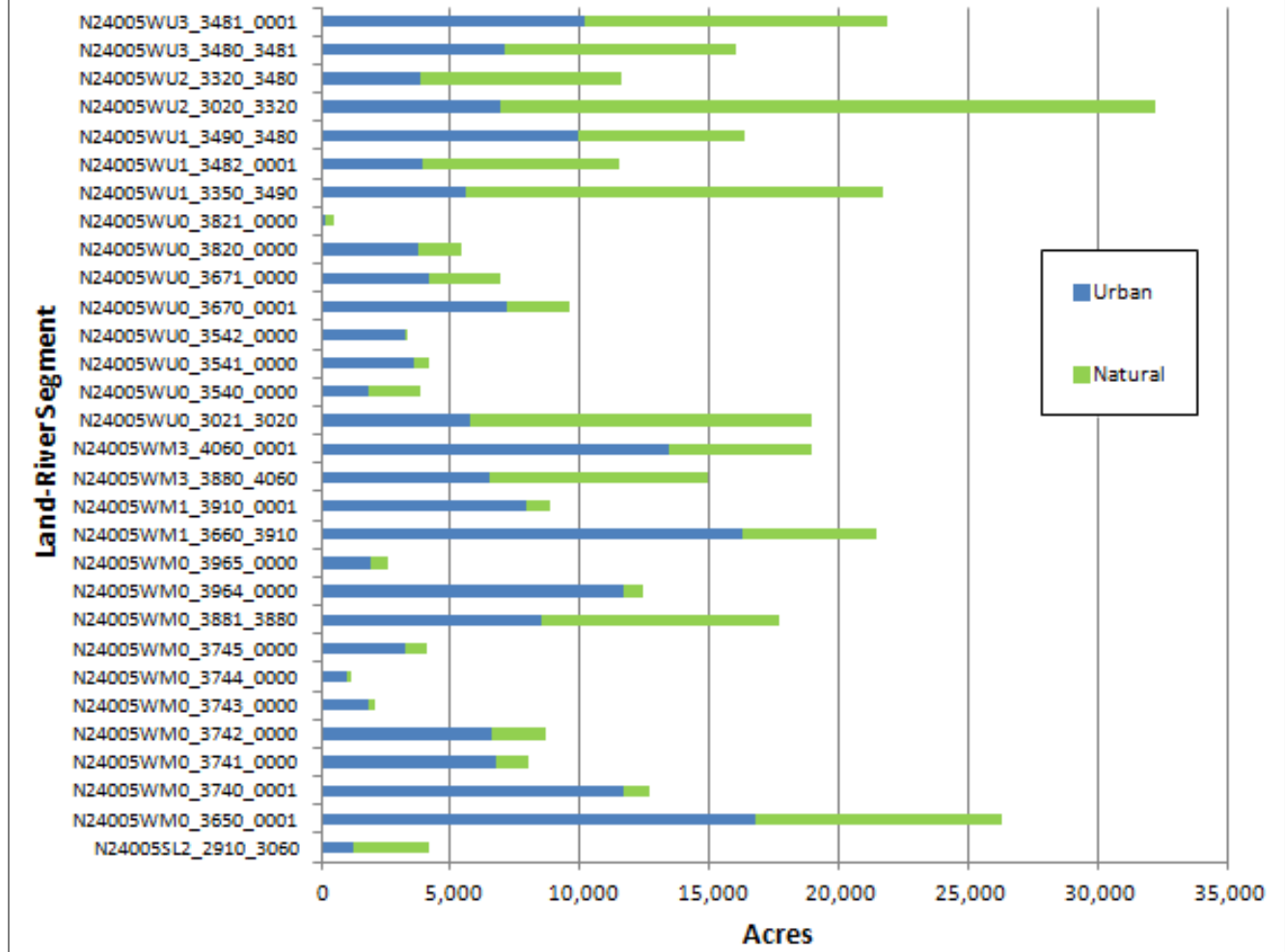
Land-River Segment	Urban (Acres)	Natural (Acres)
N24005SL2_2910_3060	1,273.5	2,882.5
N24005WM0_3650_0001	16,770.3	9,511.9
N24005WM0_3740_0001	11,701.9	986.1
N24005WM0_3741_0000	6,771.3	1,202.9
N24005WM0_3742_0000	6,564.2	2,122.2
N24005WM0_3743_0000	1,842.9	213.4
N24005WM0_3744_0000	1,017.0	107.6
N24005WM0_3745_0000	3,267.0	787.0
N24005WM0_3881_3880	8,542.7	9,141.2
N24005WM0_3964_0000	11,669.3	782.1
N24005WM0_3965_0000	1,952.3	640.0
N24005WM1_3660_3910	16,284.4	5,195.9
N24005WM1_3910_0001	7,932.4	937.2
N24005WM3_3880_4060	6,502.7	8,415.2
N24005WM3_4060_0001	13,406.9	5,514.1
N24005WU0_3021_3020	5,750.1	13,196.7
N24005WU0_3540_0000	1,799.0	2,035.6
N24005WU0_3541_0000	3,560.1	614.4
N24005WU0_3542_0000	3,261.1	22.1
N24005WU0_3670_0001	7,142.7	2,488.2
N24005WU0_3671_0000	4,138.3	2,801.0
N24005WU0_3820_0000	3,713.8	1,724.4
N24005WU0_3821_0000	122.6	404.1
N24005WU1_3350_3490	5,566.5	16,134.3
N24005WU1_3482_0001	3,899.3	7,584.7
N24005WU1_3490_3480	9,948.1	6,412.0
N24005WU2_3020_3320	6,940.6	25,271.4
N24005WU2_3320_3480	3,845.3	7,792.9
N24005WU3_3480_3481	7,103.3	8,968.4
N24005WU3_3481_0001	10,195.1	11,652.5

192,484.8

155,542.2



Baltimore County Urban and Natural Areas by Segment



Baltimore County Urban Area by Segment

Land-River Segment	Canopy Over Impervious (Acres)	Impervious - No Canopy (Acres)	Canopy Over Turf (Acres)	Turf - No Canopy (Acres)
N24005SL2_2910_3060	42	227	175	829
N24005WM0_3650_0001	608	4,325	4,420	7,418
N24005WM0_3740_0001	177	2,987	1,804	3,533
N24005WM0_3741_0000	66	2,246	942	2,665
N24005WM0_3742_0000	89	2,435	983	3,270
N24005WM0_3743_0000	7	126	66	144
N24005WM0_3744_0000	3	45	19	66
N24005WM0_3745_0000	6	19	50	37
N24005WM0_3881_3880	115	818	770	2,431
N24005WM0_3964_0000	101	5,241	1,318	4,882
N24005WM0_3965_0000	6	39	67	84
N24005WM1_3660_3910	289	6,075	3,882	11,723
N24005WM1_3910_0001	154	3,026	1,531	5,464
N24005WM3_3880_4060	138	1,495	1,206	4,130
N24005WM3_4060_0001	272	5,197	3,038	8,332
N24005WU0_3021_3020	120	559	518	1,911
N24005WU0_3540_0000	27	413	204	719
N24005WU0_3541_0000	15	203	118	375
N24005WU0_3542_0000	1	3	5	0
N24005WU0_3670_0001	88	3,168	1,471	4,874
N24005WU0_3671_0000	46	752	319	1,808
N24005WU0_3820_0000	95	1,917	765	2,731
N24005WU0_3821_0000	10	36	37	82
N24005WU1_3350_3490	224	943	896	4,230
N24005WU1_3482_0001	134	742	1,132	2,721
N24005WU1_3490_3480	178	2,889	2,071	5,353
N24005WU2_3020_3320	340	1,461	1,651	5,242
N24005WU2_3320_3480	134	804	965	2,835
N24005WU3_3480_3481	227	1,810	2,484	4,486
N24005WU3_3481_0001	265	3,057	2,811	7,359
	3,977	53,059	35,715	99,734

Method Summary

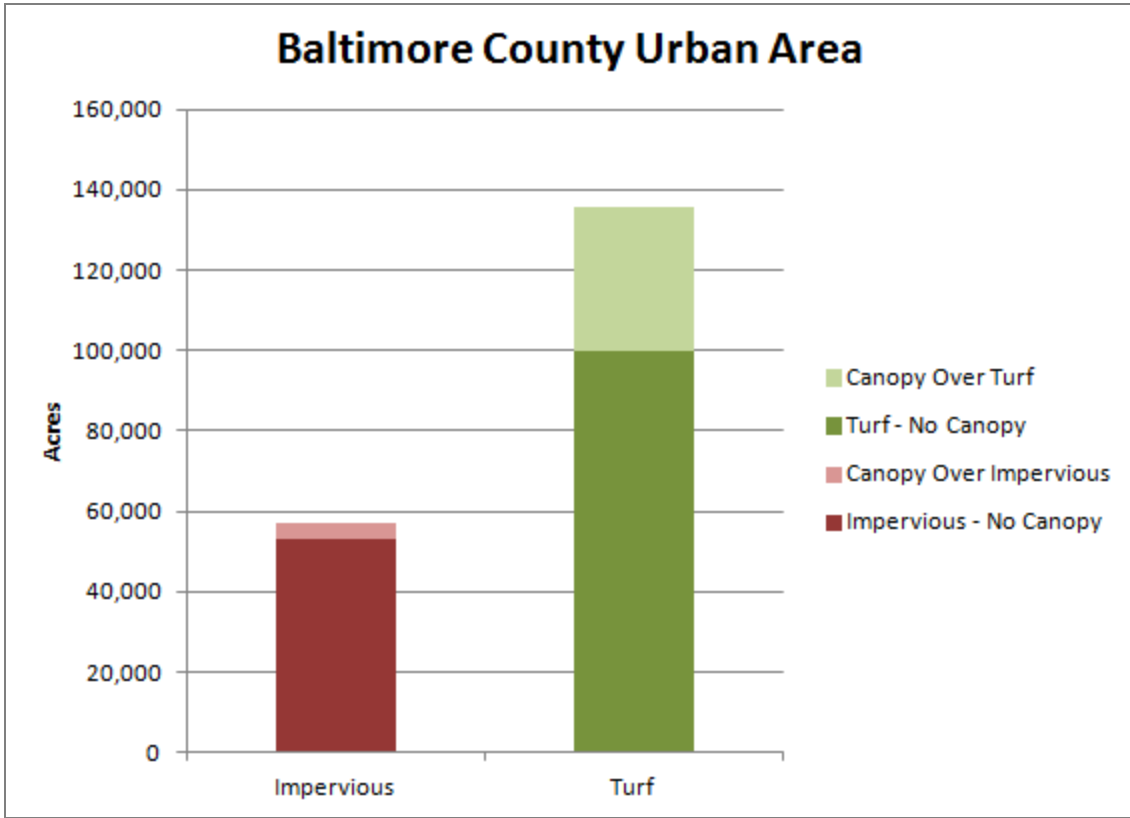
Turf: Calculated by applying the ratio of Chesapeake Bay Phase 5.3.2 Watershed Model urban pervious acres to impervious acres to the Phase 6 2012 impervious acres. MD acknowledges the inaccuracy of these turf acres. Turf estimates should be significantly improved upon in the final model Land Use, scheduled for completion in September 2016, and will utilize MD's sampling and statistical modeling approach.

Impervious: Calculated using combined 2008 planimetric impervious surface data with 2007 high resolution land-cover data (Buildings, Transportation Surfaces, Other Paved Surfaces attributes) to account for missing features in the planimetric dataset: sidewalks, recreational features, driveways < 100 feet, patios, and pools. Projected to 2012 conditions using 1) MDP data for residential and non-residential parcels developed between the data imagery year and 2012, and 2) NAVTEQ roads data. Lastly, estimates were adjusted down to account for tree canopy over impervious surface.

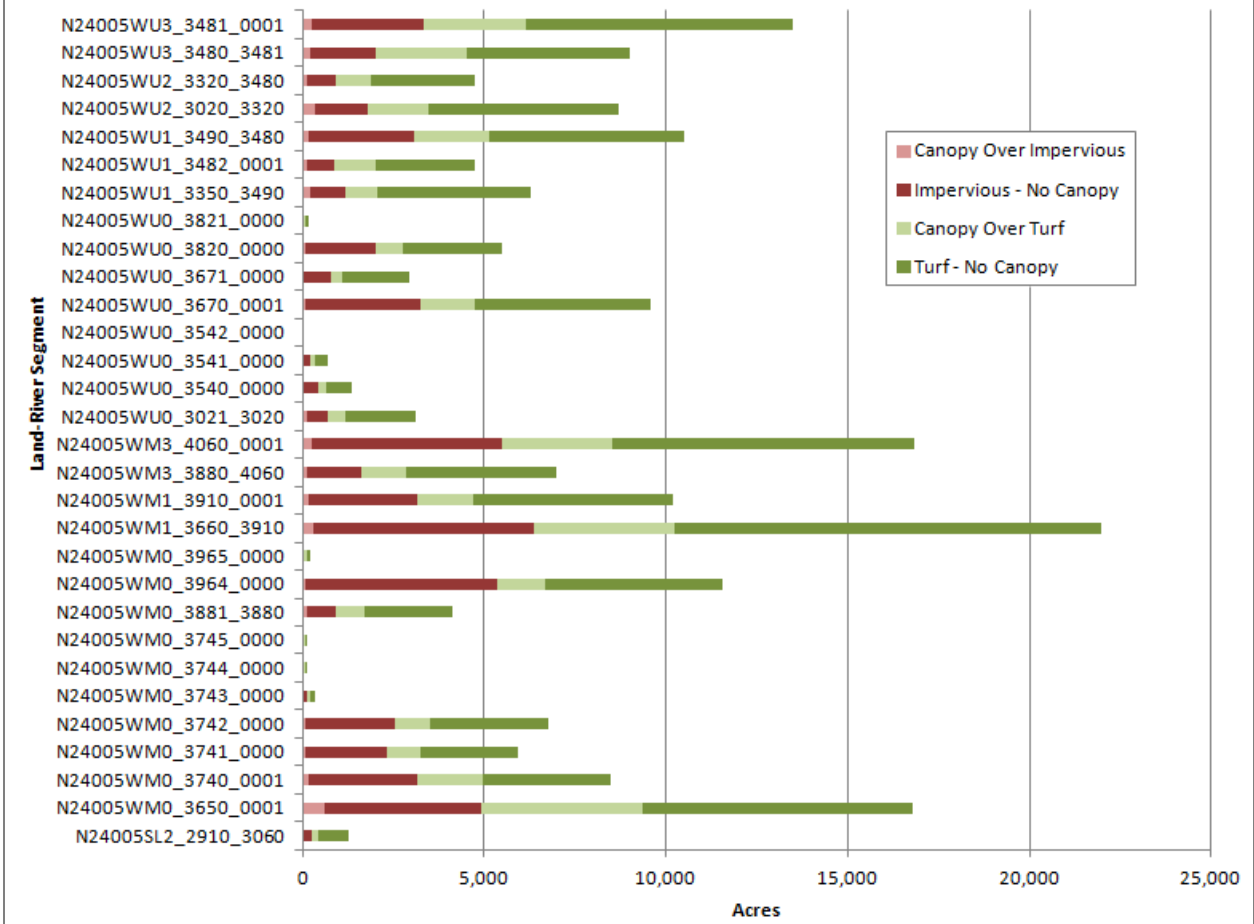
Canopy Over Turf: All mapped tree canopy (University of Maryland's 1 m resolution tree canopy cover data) that is not delineated as forest (> 1 acre of contiguous canopy cover and > 120 ft. wide) or associated with wetlands and is located within MD's urban mask. The urban mask contains Phase 5.3.2 model urban and suburban zones, all parcels that have a >\$10,000 improvement value and are not Agriculture or large-lot Residential development, and all road right-of-ways.

Canopy Over Impervious: Calculated as the intersection of the impervious surface data (planimetric only) provided by the county and the University of Maryland's 1 m resolution tree canopy cover data. The intersect areas were adjusted up to account for any features missing from the county impervious surface data (planimetric), based on the average percent of mapped impervious cover covered by canopy in the county.

Baltimore County Urban Area



Baltimore County Urban Area by Segment



Baltimore County Natural Area by Segment

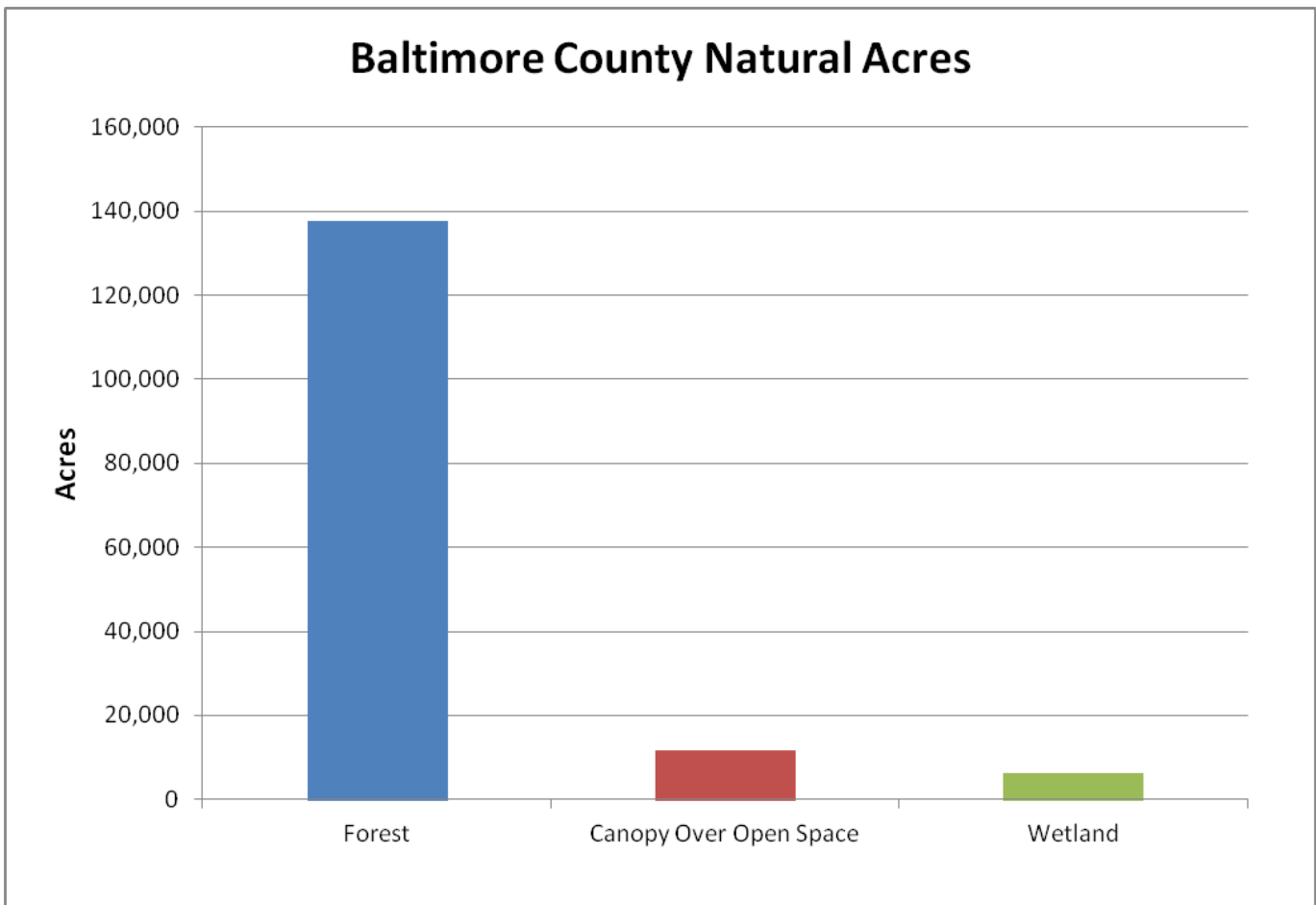
Land-River Segment	Forest (Acres)	Canopy Over Open Space (Acres)	Wetland (Acres)
N24005SL2_2910_3060	2,364.4	360.7	157.4
N24005WMO_3650_0001	8,680.7	683.9	147.3
N24005WMO_3740_0001	891.8	7.7	86.5
N24005WMO_3741_0000	1,136.8	14.5	51.7
N24005WMO_3742_0000	1,684.2	63.5	374.5
N24005WMO_3743_0000	166.2	11.8	35.4
N24005WMO_3744_0000	23.0	2.2	82.4
N24005WMO_3745_0000	610.8	15.7	160.5
N24005WMO_3881_3880	8,299.4	595.9	245.9
N24005WMO_3964_0000	584.9	10.1	187.1
N24005WMO_3965_0000	419.7	0.4	219.8
N24005WM1_3660_3910	4,679.6	279.4	237.0
N24005WM1_3910_0001	926.3	3.9	7.0
N24005WM3_3880_4060	7,704.4	684.0	26.8
N24005WM3_4060_0001	5,128.8	121.9	263.5
N24005WU0_3021_3020	12,094.5	904.4	197.7
N24005WU0_3540_0000	1,188.6	48.2	798.8
N24005WU0_3541_0000	273.6	13.3	327.4
N24005WU0_3542_0000	20.3	1.7	0.0
N24005WU0_3670_0001	2,260.7	60.5	167.0
N24005WU0_3671_0000	2,224.1	111.1	465.8
N24005WU0_3820_0000	1,489.0	44.5	190.9
N24005WU0_3821_0000	283.4	27.9	92.9
N24005WU1_3350_3490	13,567.3	2,338.2	228.8
N24005WU1_3482_0001	6,386.1	870.3	328.3
N24005WU1_3490_3480	6,001.0	303.4	107.6
N24005WU2_3020_3320	22,767.5	2,026.5	477.5
N24005WU2_3320_3480	6,715.7	901.5	175.6
N24005WU3_3480_3481	8,553.5	320.9	94.0
N24005WU3_3481_0001	10,423.4	940.2	288.9
	137,549.8	11,768.2	6,224.2

Method Summary

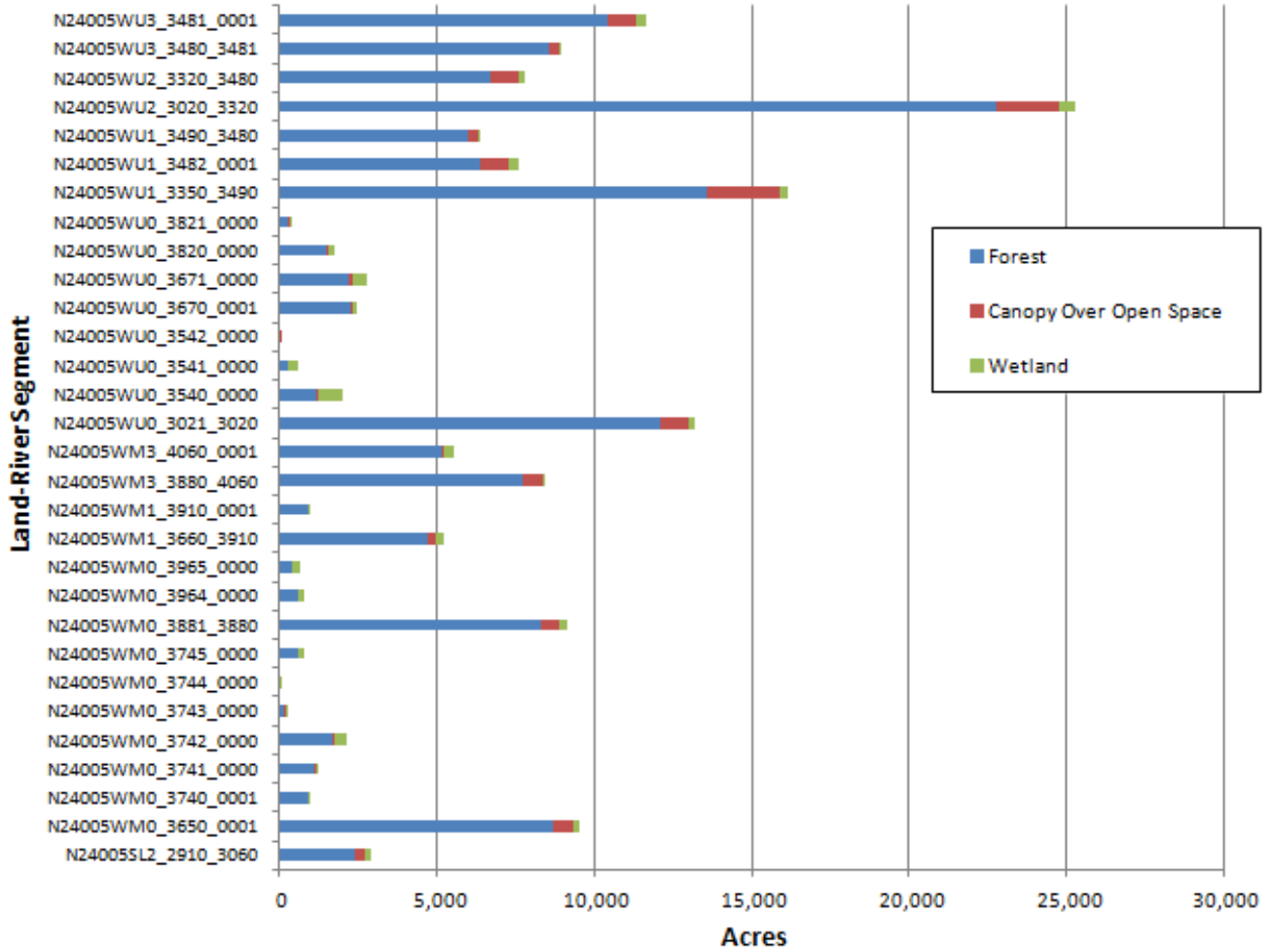
Forest: Contiguous tree canopy cover (University of Maryland’s 1 m resolution tree canopy cover data) that is greater than 1 acre in size and greater than 120 ft in width. This area excludes any canopy cover associated with wetlands.

Canopy over Open Space: All tree canopy cover that is not forest, is not associated with wetlands, and falls outside MD's urban mask. The urban mask contains Phase 5.3.2 model urban and suburban zones, all parcels that have a >\$10,000 improvement value and are not Agriculture or large-lot Residential development, and all road right-of-ways.

Wetlands: Estimated using NWI and DNR wetland delineations, with open water areas removed. The acres presented here include tidal wetlands, but it should be noted that the Chesapeake Bay Program Partnership recently decided to move tidal wetlands from the watershed model to the estuarine water quality model.



Baltimore County Natural Area by Segment



Baltimore County Land-River Segments

