

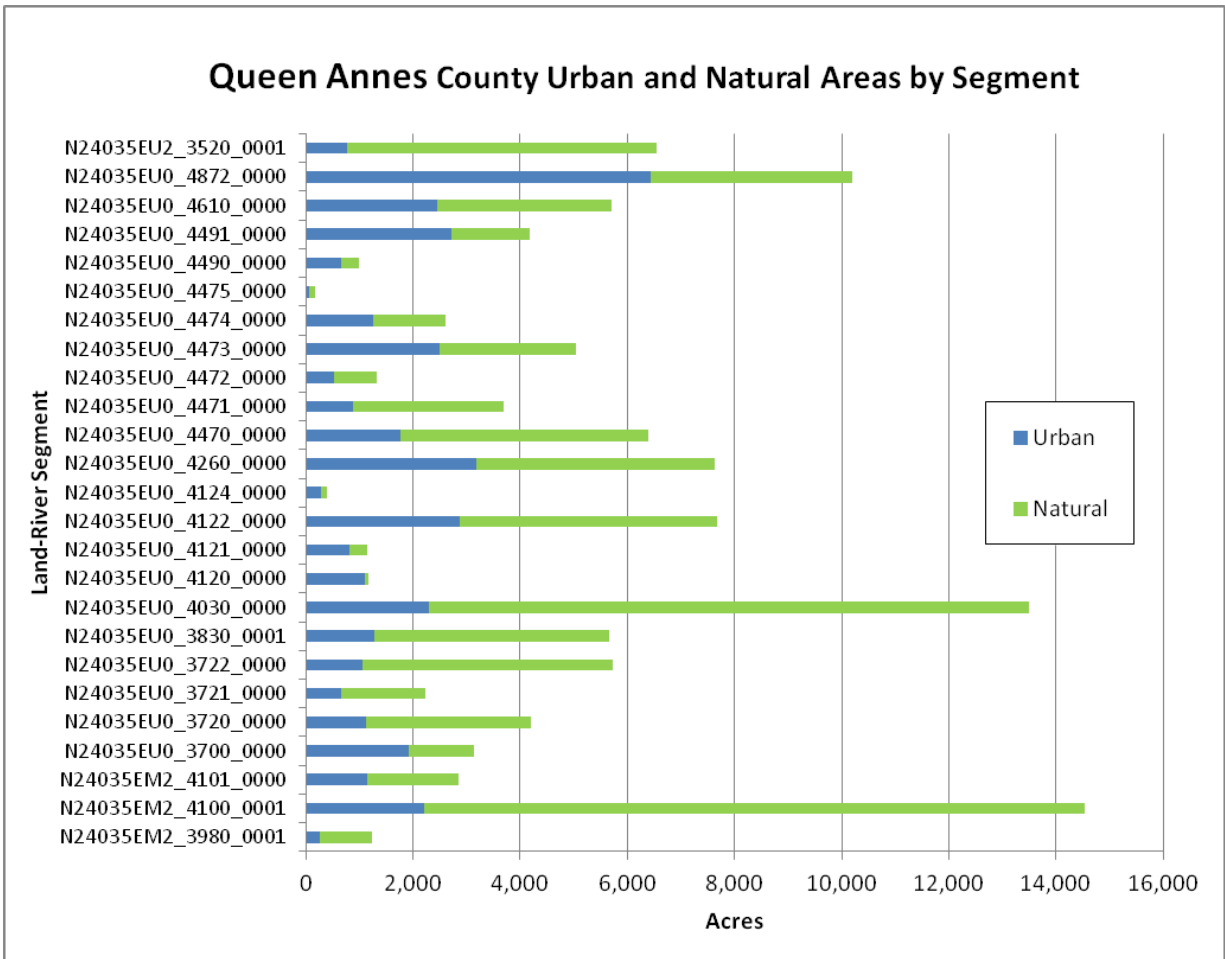
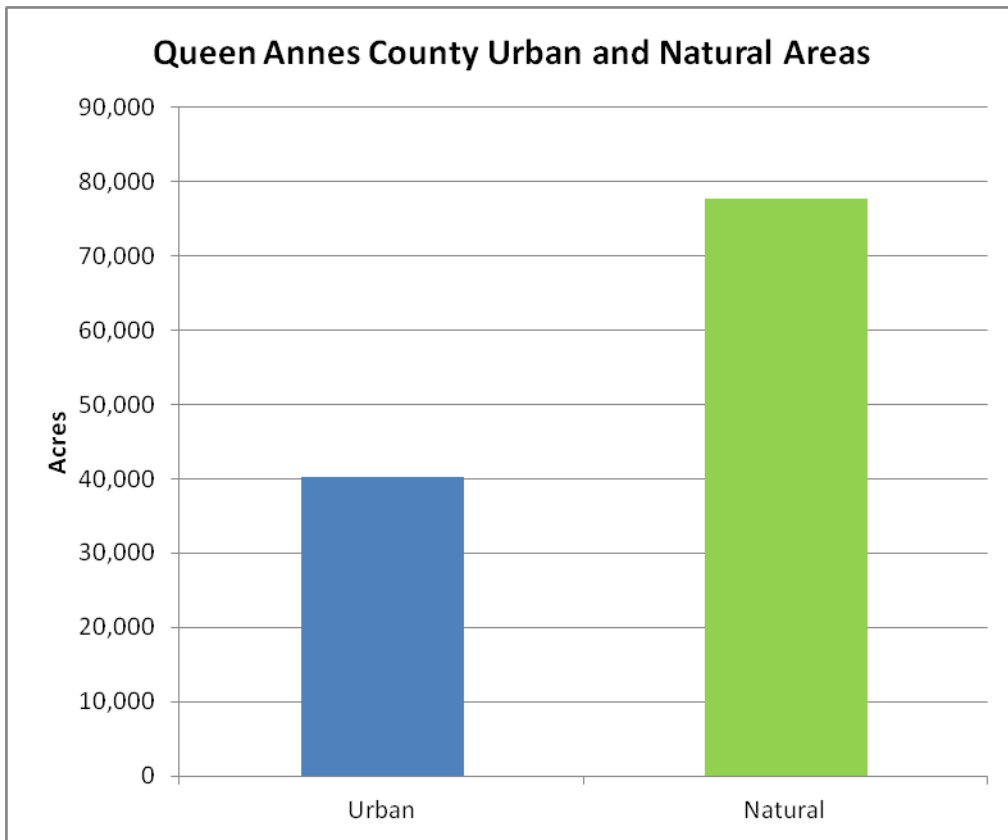
MD Estimates for the Chesapeake Bay Phase 6 Watershed Model

Land-Use, Version 1: Queen Anne's 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.

Queen Anne's County Urban and Natural Areas by Segment

Land-River Segment	Urban (Acres)	Natural (Acres)
N24035EM2_3980_0001	265.4	977.3
N24035EM2_4100_0001	2,217.5	12,317.8
N24035EM2_4101_0000	1,150.9	1,707.1
N24035EU0_3700_0000	1,910.7	1,227.8
N24035EU0_3720_0000	1,130.3	3,080.9
N24035EU0_3721_0000	651.9	1,571.4
N24035EU0_3722_0000	1,059.8	4,673.2
N24035EU0_3830_0001	1,286.3	4,379.7
N24035EU0_4030_0000	2,297.1	11,204.4
N24035EU0_4120_0000	1,112.5	64.5
N24035EU0_4121_0000	818.4	325.6
N24035EU0_4122_0000	2,870.8	4,811.0
N24035EU0_4124_0000	289.5	102.0
N24035EU0_4260_0000	3,176.7	4,448.1
N24035EU0_4470_0000	1,776.8	4,611.5
N24035EU0_4471_0000	885.7	2,813.7
N24035EU0_4472_0000	518.3	815.3
N24035EU0_4473_0000	2,491.6	2,549.5
N24035EU0_4474_0000	1,250.9	1,367.0
N24035EU0_4475_0000	70.2	95.0
N24035EU0_4490_0000	658.6	335.8
N24035EU0_4491_0000	2,720.3	1,451.5
N24035EU0_4610_0000	2,459.0	3,251.1
N24035EU0_4872_0000	6,428.1	3,762.5
N24035EU2_3520_0001	765.7	5,785.6
	40,263.1	77,729.4



Queen Anne's County Urban Area by Segment

Land-River Segment	Canopy Over Impervious (Acres)	Impervious - No Canopy (Acres)	Canopy Over Turf (Acres)	Turf - No Canopy (Acres)
N24035EM2_3980_0001	2	22	7	49
N24035EM2_4100_0001	38	599	79	1,610
N24035EM2_4101_0000	6	110	22	427
N24035EU0_3700_0000	40	224	245	1,292
N24035EU0_3720_0000	37	216	142	807
N24035EU0_3721_0000	13	64	34	240
N24035EU0_3722_0000	18	310	76	874
N24035EU0_3830_0001	20	259	57	776
N24035EU0_4030_0000	62	639	159	1,736
N24035EU0_4120_0000	1	5	2	17
N24035EU0_4121_0000	12	198	51	744
N24035EU0_4122_0000	76	453	241	1,992
N24035EU0_4124_0000	3	28	10	163
N24035EU0_4260_0000	40	662	174	2,739
N24035EU0_4470_0000	26	347	81	1,443
N24035EU0_4471_0000	37	144	98	711
N24035EU0_4472_0000	6	49	14	176
N24035EU0_4473_0000	45	333	192	2,021
N24035EU0_4474_0000	21	81	179	371
N24035EU0_4475_0000	0	9	1	63
N24035EU0_4490_0000	8	102	50	577
N24035EU0_4491_0000	61	393	362	2,303
N24035EU0_4610_0000	75	328	287	2,070
N24035EU0_4872_0000	133	961	604	5,815
N24035EU2_3520_0001	23	163	37	542
	802	6,701	3,203	29,557

Method Summary

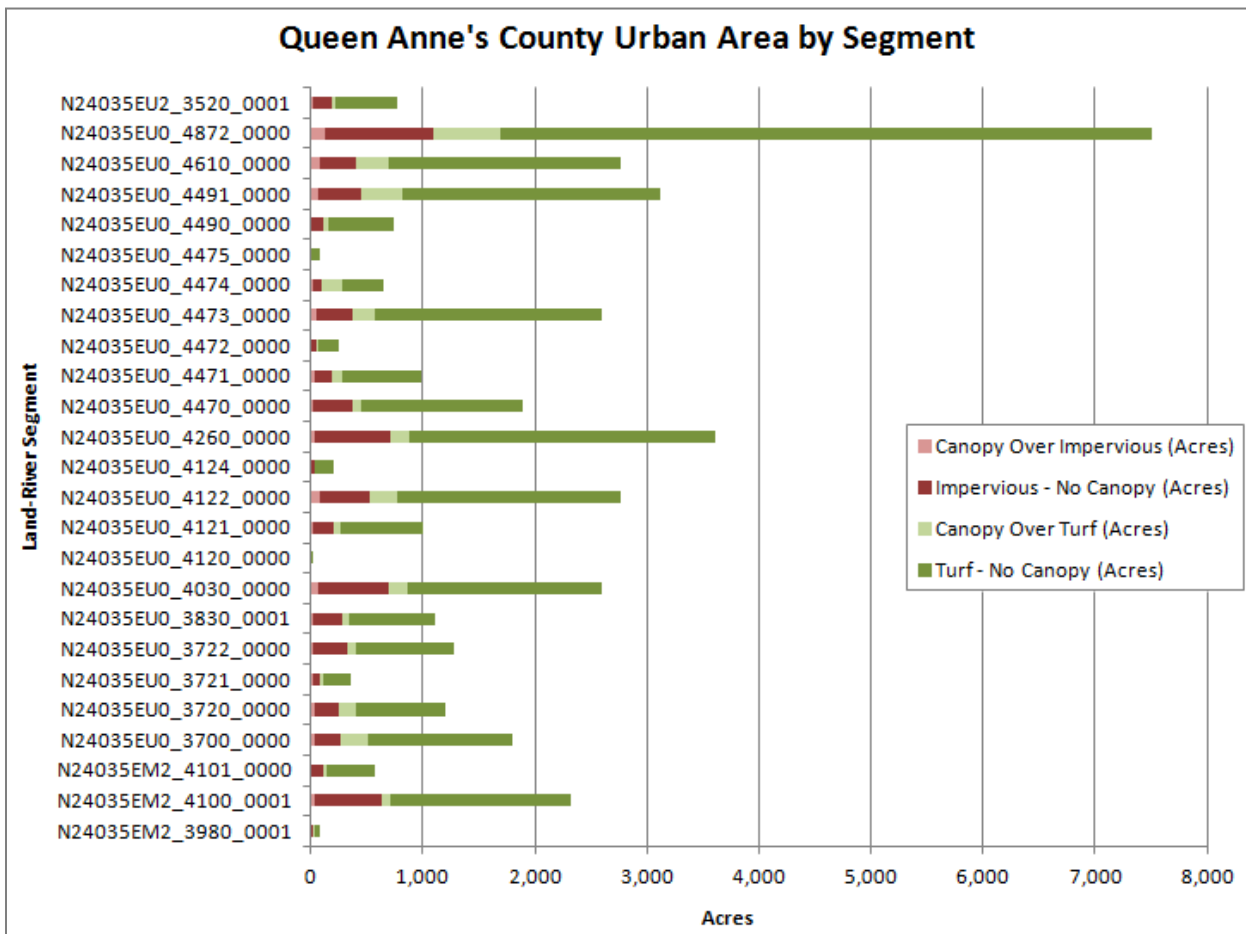
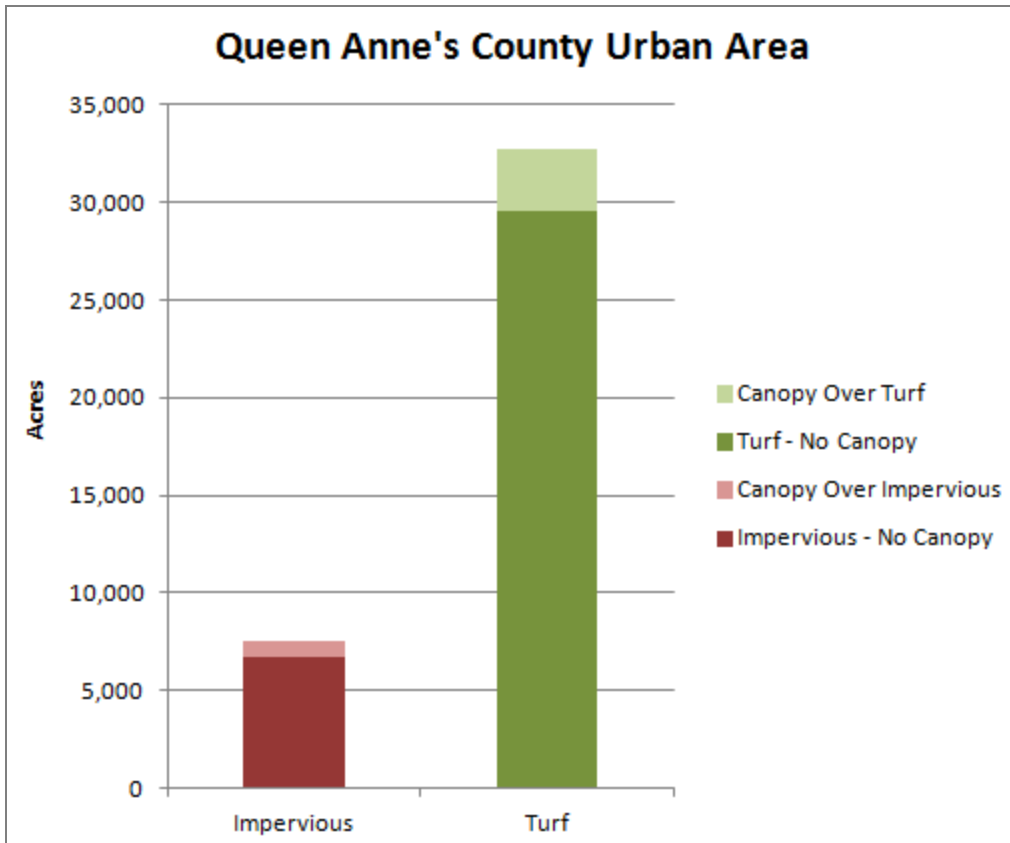
Turf: Calculated by applying the ratio of Chesapeake Bay Phase 5.3.2 Watershed Model urban pervious acres to impervious acres to the Phase 6 2012 impervious acres. MD acknowledges the inaccuracy of these turf acres. Turf estimates should be significantly improved upon in the final model Land Use, scheduled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

Impervious: Calculated using 2008 planimetric data provided by the County. 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. Within designated growth areas a complete planimetric dataset was available. Outside of designated growth areas, small features were not captured consistently as they were based on 1:2,000-ft scale capture. Coefficients were applied to correct for the features missing from the planimetric dataset outside of growth areas: secondary sidewalks, driveways, and patios. Coefficients for driveways and patios were altered to reflect sampling that determined an area-weighted capture percentage for these features. 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 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, based on the average percent of mapped impervious cover covered by canopy in the county.



Queen Anne's County Natural Area by Segment

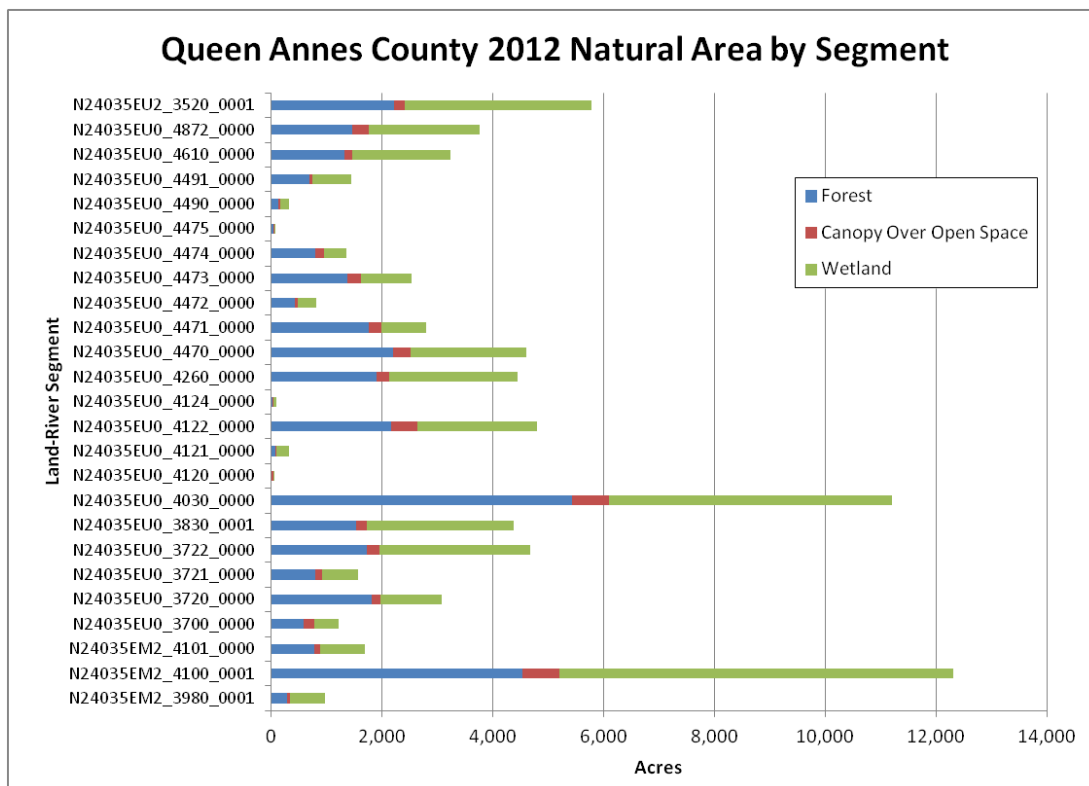
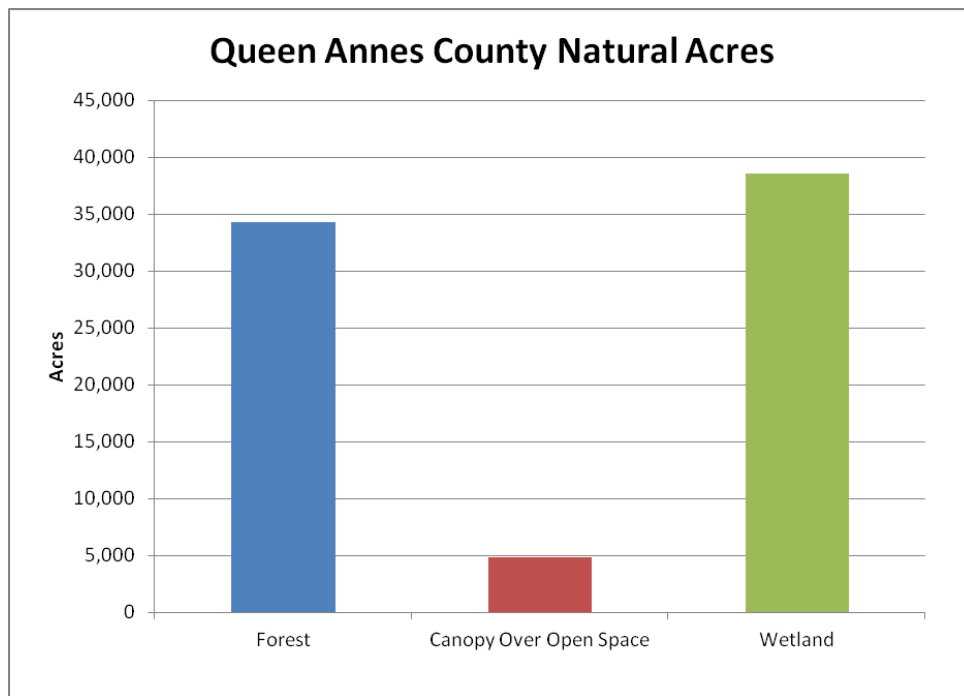
Land-River Segment	Forest (Acres)	Canopy over Open Space (Acres)	Wetland (Acres)
N24035EM2_3980_0001	303.6	47.5	626.1
N24035EM2_4100_0001	4,538.4	663.0	7,116.4
N24035EM2_4101_0000	786.3	103.2	817.6
N24035EU0_3700_0000	599.7	183.0	445.1
N24035EU0_3720_0000	1,819.8	157.8	1,103.3
N24035EU0_3721_0000	804.0	122.0	645.3
N24035EU0_3722_0000	1,739.1	230.6	2,703.5
N24035EU0_3830_0001	1,550.2	189.8	2,639.7
N24035EU0_4030_0000	5,438.3	667.7	5,098.4
N24035EU0_4120_0000	19.9	23.2	21.4
N24035EU0_4121_0000	81.7	26.9	217.0
N24035EU0_4122_0000	2,165.1	473.3	2,172.5
N24035EU0_4124_0000	25.8	31.6	44.6
N24035EU0_4260_0000	1,910.4	226.1	2,311.6
N24035EU0_4470_0000	2,215.0	311.8	2,084.7
N24035EU0_4471_0000	1,774.8	219.0	819.9
N24035EU0_4472_0000	440.4	57.1	317.8
N24035EU0_4473_0000	1,391.8	238.7	919.0
N24035EU0_4474_0000	798.3	157.7	411.0
N24035EU0_4475_0000	46.9	16.7	31.5
N24035EU0_4490_0000	137.9	31.0	166.9
N24035EU0_4491_0000	701.3	50.3	699.9
N24035EU0_4610_0000	1,332.0	132.9	1,786.2
N24035EU0_4872_0000	1,463.3	306.6	1,992.6
N24035EU2_3520_0001	2,219.2	203.8	3,362.7
	34,303.3	4,871.4	38,554.7

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.



Queen Anne's County Land-River Segments

