

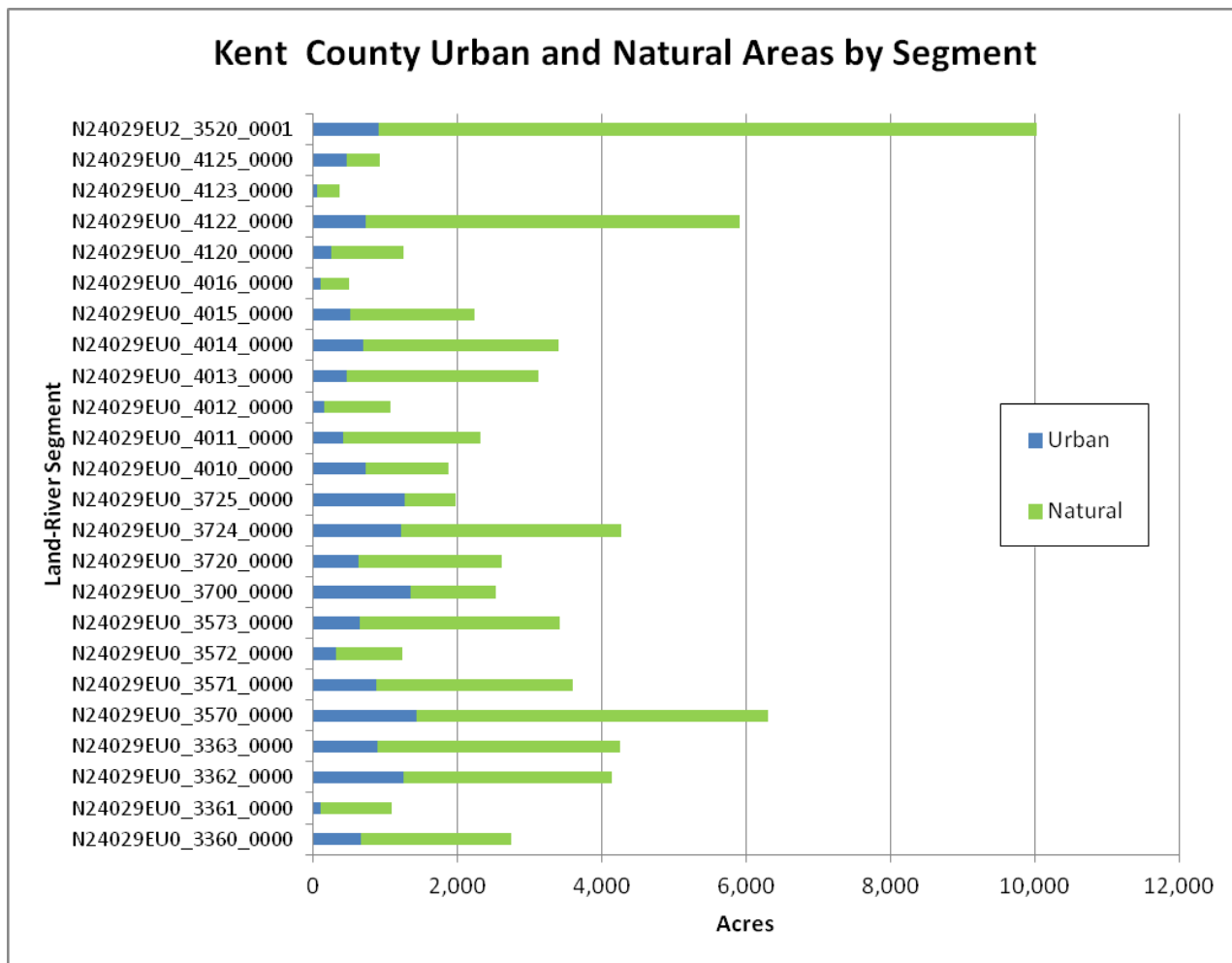
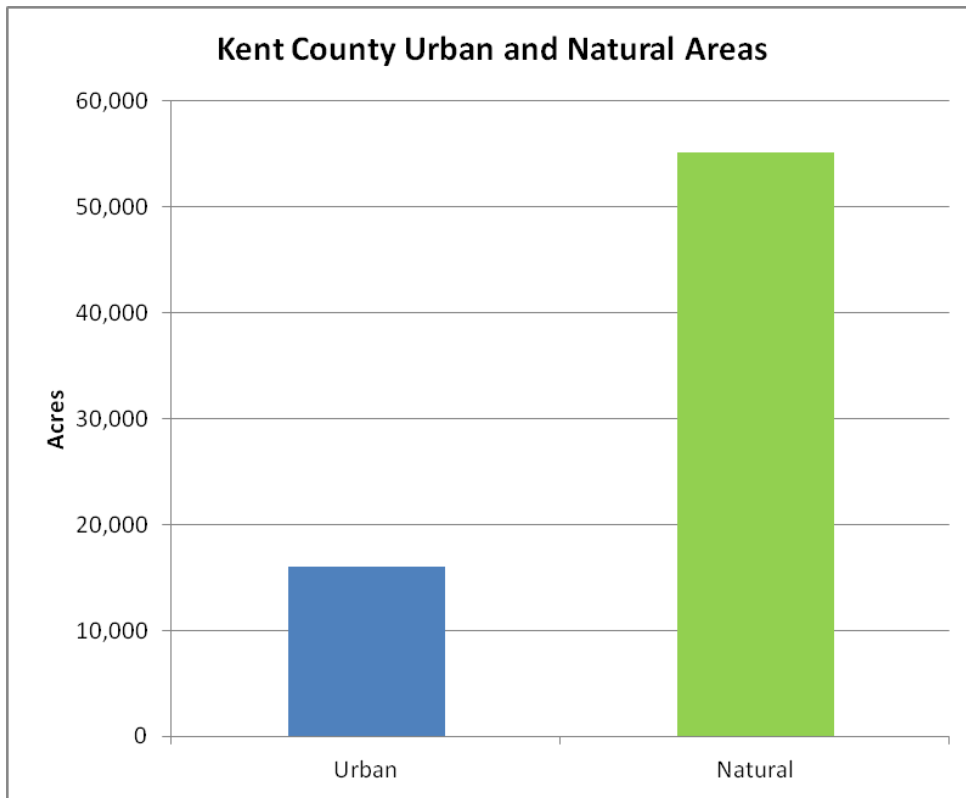
MD Estimates for the Chesapeake Bay Phase 6 Watershed Model

Land-Use, Version 1: Kent 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.

Kent County Urban and Natural Areas by Segment

Land-River Segment	Urban (Acres)	Natural (Acres)
N24029EU0_3360_0000	660.5	2,087.8
N24029EU0_3361_0000	106.4	977.3
N24029EU0_3362_0000	1,251.0	2,893.8
N24029EU0_3363_0000	885.3	3,361.6
N24029EU0_3570_0000	1,426.0	4,886.0
N24029EU0_3571_0000	875.6	2,720.0
N24029EU0_3572_0000	310.1	919.1
N24029EU0_3573_0000	643.9	2,780.5
N24029EU0_3700_0000	1,354.5	1,183.1
N24029EU0_3720_0000	624.9	1,995.1
N24029EU0_3724_0000	1,216.5	3,050.1
N24029EU0_3725_0000	1,267.1	709.2
N24029EU0_4010_0000	725.3	1,157.5
N24029EU0_4011_0000	406.8	1,919.0
N24029EU0_4012_0000	147.6	917.2
N24029EU0_4013_0000	461.9	2,662.5
N24029EU0_4014_0000	685.4	2,713.7
N24029EU0_4015_0000	508.7	1,725.8
N24029EU0_4016_0000	110.7	389.8
N24029EU0_4120_0000	254.9	996.9
N24029EU0_4122_0000	721.3	5,183.4
N24029EU0_4123_0000	48.6	310.2
N24029EU0_4125_0000	461.3	467.5
N24029EU2_3520_0001	902.3	9,119.9
	16,057.0	55,126.9



Kent County Urban Area by Segment

Land-River Segment	Canopy Over Impervious (Acres)	Impervious - No Canopy (Acres)	Canopy Over Turf (Acres)	Turf - No Canopy (Acres)
N24029EU0_3360_0000	17	97	72	475
N24029EU0_3361_0000	7	29	13	57
N24029EU0_3362_0000	42	193	178	838
N24029EU0_3363_0000	33	101	124	627
N24029EU0_3570_0000	47	196	175	963
N24029EU0_3571_0000	31	97	110	523
N24029EU0_3572_0000	5	35	24	158
N24029EU0_3573_0000	27	113	87	517
N24029EU0_3700_0000	42	242	241	973
N24029EU0_3720_0000	11	99	27	314
N24029EU0_3724_0000	24	246	137	970
N24029EU0_3725_0000	11	240	109	887
N24029EU0_4010_0000	18	90	58	416
N24029EU0_4011_0000	24	51	37	261
N24029EU0_4012_0000	3	28	9	63
N24029EU0_4013_0000	30	75	46	385
N24029EU0_4014_0000	23	99	78	502
N24029EU0_4015_0000	25	54	62	325
N24029EU0_4016_0000	1	4	3	29
N24029EU0_4120_0000	6	15	6	88
N24029EU0_4122_0000	51	110	165	551
N24029EU0_4123_0000	0	2	28	0
N24029EU0_4125_0000	12	79	67	392
N24029EU2_3520_0001	42	245	111	700
	533	2,541	1,966	11,017

Method Summary

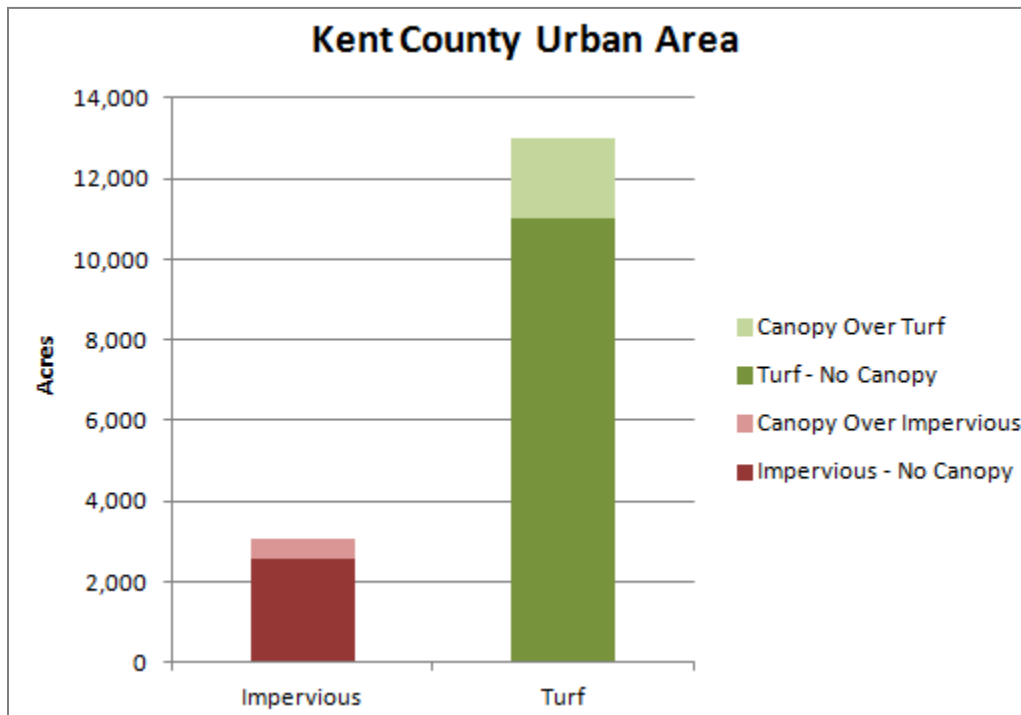
Turf: Calculated by applying the ratio of Chesapeake Bay Phase 5.3.2 Watershed Model urban pervious acres to impervious acres to the Phase 6 2012 impervious acres. MD acknowledges the inaccuracy of these turf acres. Turf estimates should be significantly improved upon in the final model Land Use, scheduled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

Impervious: Calculated using 2004 planimetric data (buildings and outbuildings) provided by the County along with NAVTEQ buffered roads. 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. Coefficients were applied to correct for the features missing from the planimetric dataset: patios, pools, recreational features, sidewalks, driveways, and parking

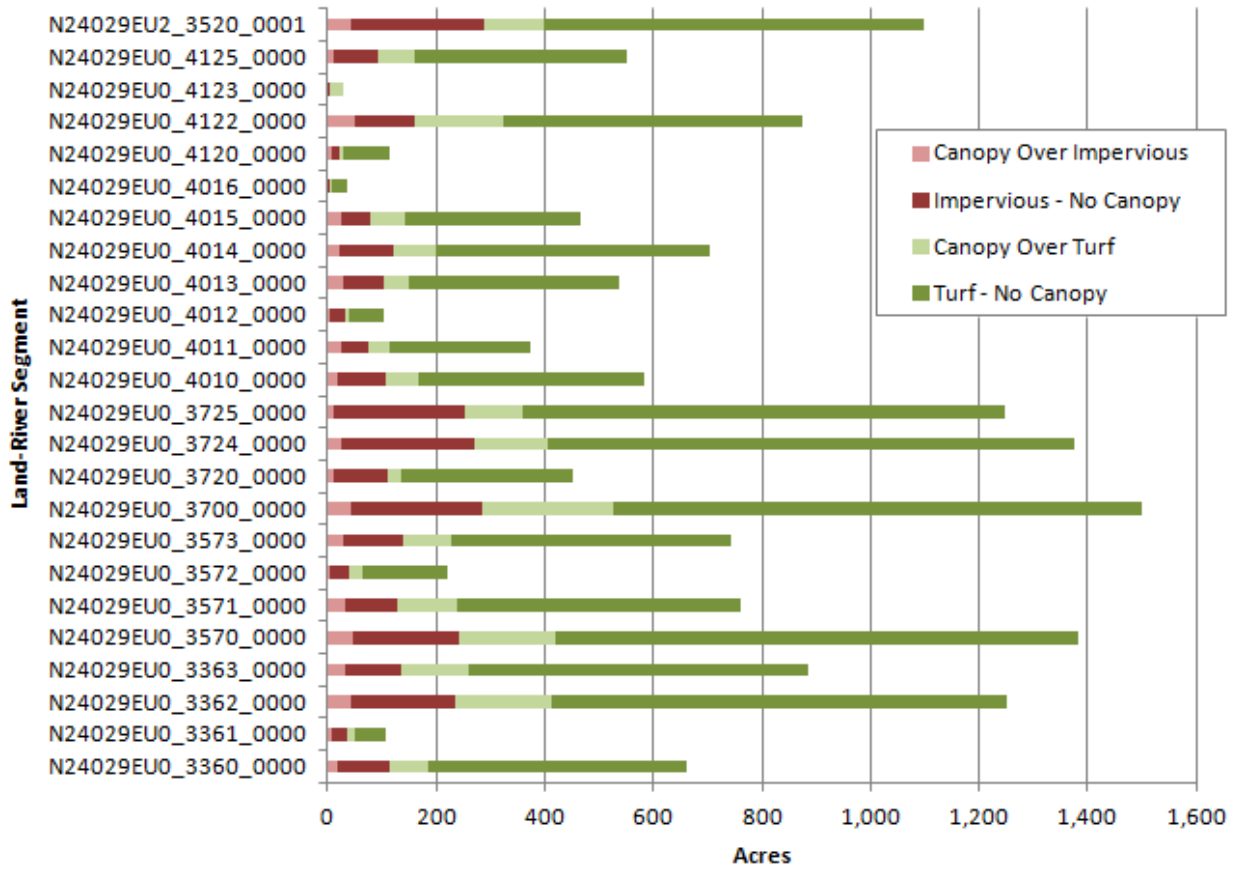
lots. Parking lots and driveways account for a significant portion of residential and non-residential impervious area, so the correction was significant - 21% of total impervious area. Lastly, estimates were adjusted down to account for tree canopy over impervious surface.

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.



Kent County Urban Area by Segment



Kent County Natural Area by Segment

Land-River Segment	Forest (Acres)	Canopy over Open Space (Acres)	Wetland (Acres)
N24029EU0_3360_0000	1,451.8	220.1	415.9
N24029EU0_3361_0000	658.1	49.0	270.3
N24029EU0_3362_0000	1,952.0	250.1	691.7
N24029EU0_3363_0000	2,436.4	247.8	677.4
N24029EU0_3570_0000	3,498.6	457.3	930.1
N24029EU0_3571_0000	1,987.0	215.1	517.9
N24029EU0_3572_0000	489.0	66.0	364.1
N24029EU0_3573_0000	1,938.7	194.7	647.1
N24029EU0_3700_0000	683.1	121.4	378.6
N24029EU0_3720_0000	852.2	219.8	923.1
N24029EU0_3724_0000	1,298.2	447.3	1,304.6
N24029EU0_3725_0000	300.2	85.6	323.4
N24029EU0_4010_0000	576.4	200.9	380.3
N24029EU0_4011_0000	1,194.4	273.1	451.4
N24029EU0_4012_0000	637.1	89.2	190.9
N24029EU0_4013_0000	1,536.6	350.9	774.9
N24029EU0_4014_0000	1,205.3	197.5	1,310.8
N24029EU0_4015_0000	824.6	70.4	830.8
N24029EU0_4016_0000	164.8	51.1	173.9
N24029EU0_4120_0000	533.9	100.3	362.7
N24029EU0_4122_0000	2,384.3	284.9	2,514.2
N24029EU0_4123_0000	94.6	0.2	215.3
N24029EU0_4125_0000	124.5	41.4	301.6
N24029EU2_3520_0001	4,757.2	442.6	3,920.1
	31,578.9	4,676.8	18,871.3

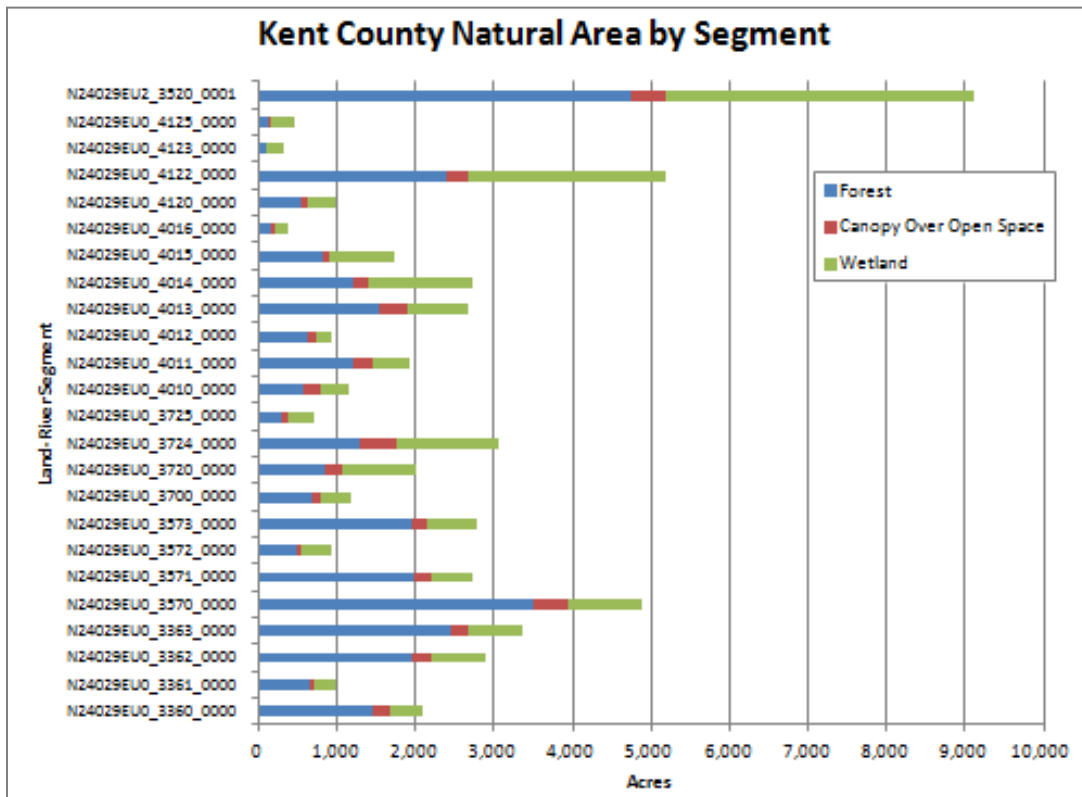
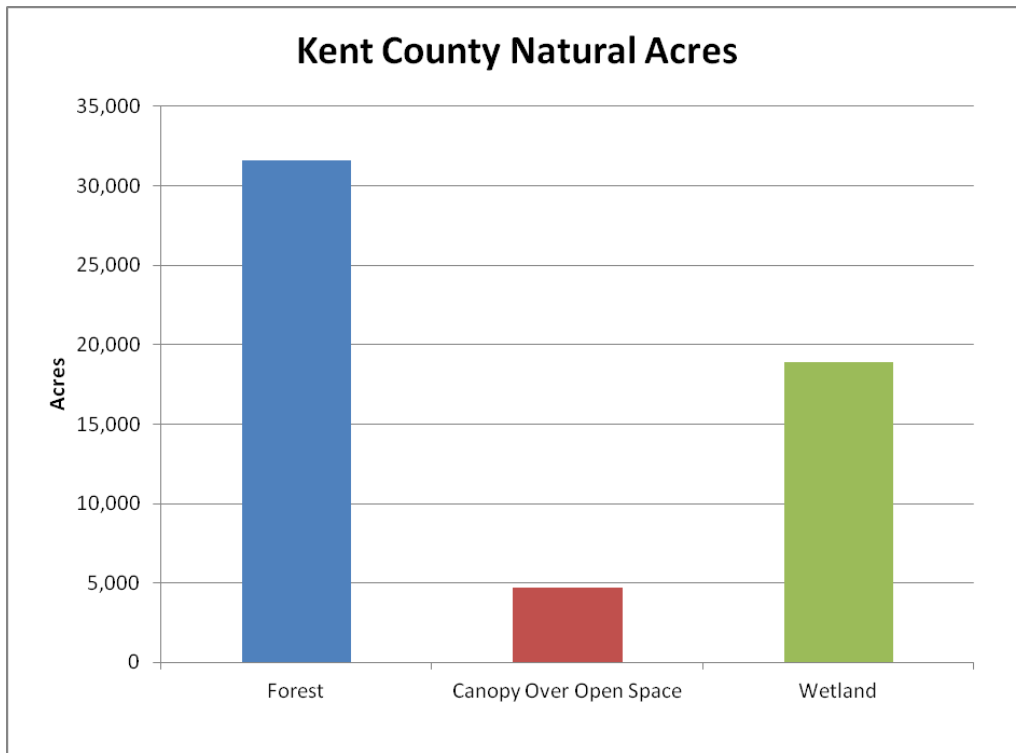
Method Summary

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.



Kent County Land-River Segments

