

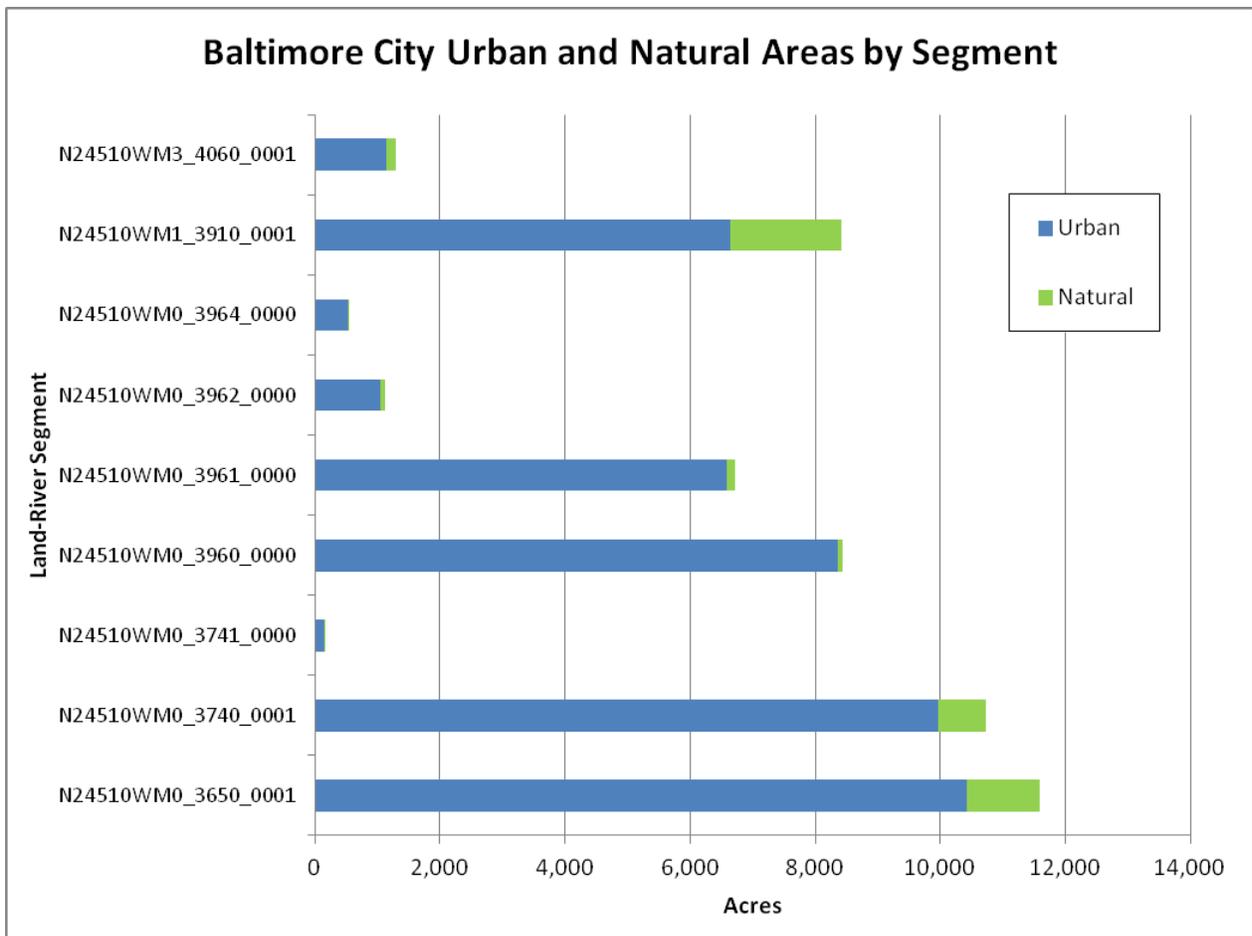
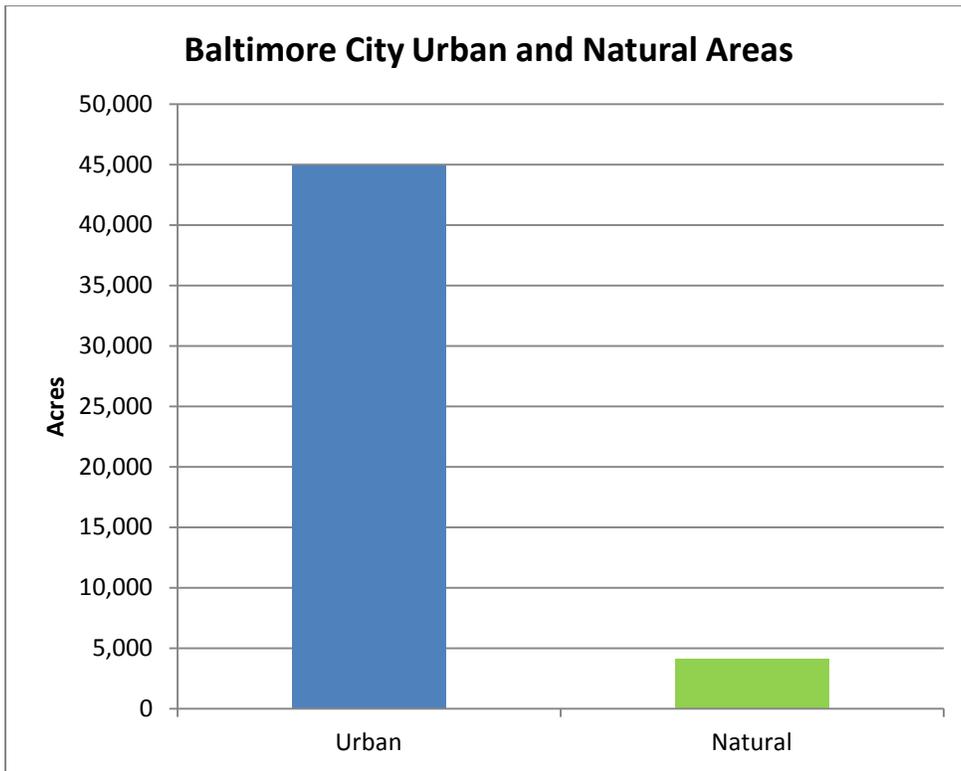
# MD Estimates for the Chesapeake Bay Phase 6 Watershed Model

## Land-Use, Version 1: Baltimore City 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 City Urban and Natural Areas by Segment

Land-River Segment	Urban (Acres)	Natural (Acres)
N24510WM0_3650_0001	10,428.6	1,170.3
N24510WM0_3740_0001	9,973.0	755.5
N24510WM0_3741_0000	157.0	15.4
N24510WM0_3960_0000	8,367.9	68.5
N24510WM0_3961_0000	6,582.5	142.2
N24510WM0_3962_0000	1,056.6	71.9
N24510WM0_3964_0000	539.4	7.6
N24510WM1_3910_0001	6,652.3	1,773.9
N24510WM3_4060_0001	1,146.3	146.4
	<b>44,903.7</b>	<b>4,151.6</b>



### Baltimore City Urban Area by Segment

Land-River Segment	Canopy Over Impervious (Acres)	Impervious - No Canopy (Acres)	Canopy Over Turf (Acres)	Turf - No Canopy (Acres)
N24510WMO_3650_0001	903	4,238	2,484	2,804
N24510WMO_3740_0001	468	4,057	2,112	3,336
N24510WMO_3741_0000	6	35	33	83
N24510WMO_3960_0000	206	5,923	588	1,755
N24510WMO_3961_0000	13	905	126	328
N24510WMO_3962_0000	2	109	50	88
N24510WMO_3964_0000	14	910	102	328
N24510WM1_3910_0001	732	5,293	2,043	3,685
N24510WM3_4060_0001	36	469	172	470
	<b>2,379</b>	<b>21,938</b>	<b>7,711</b>	<b>12,876</b>

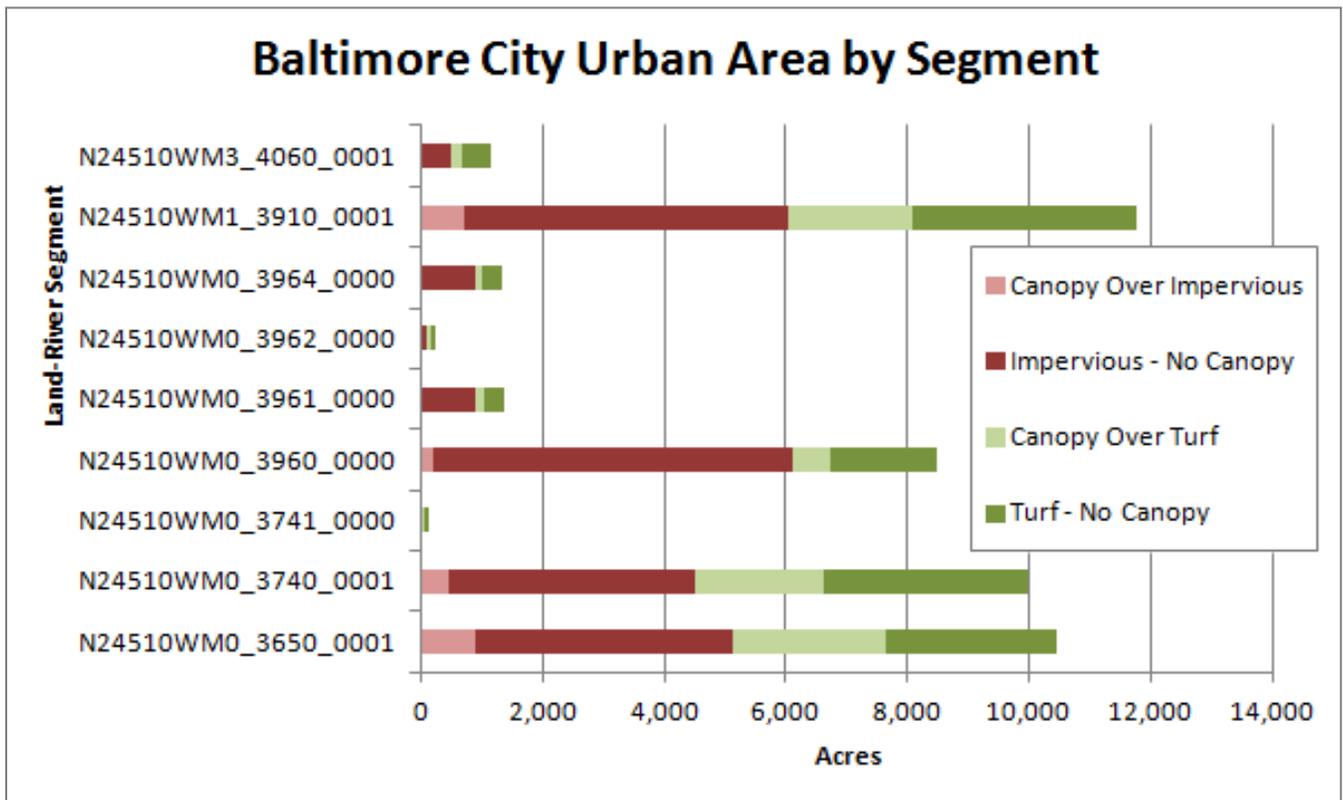
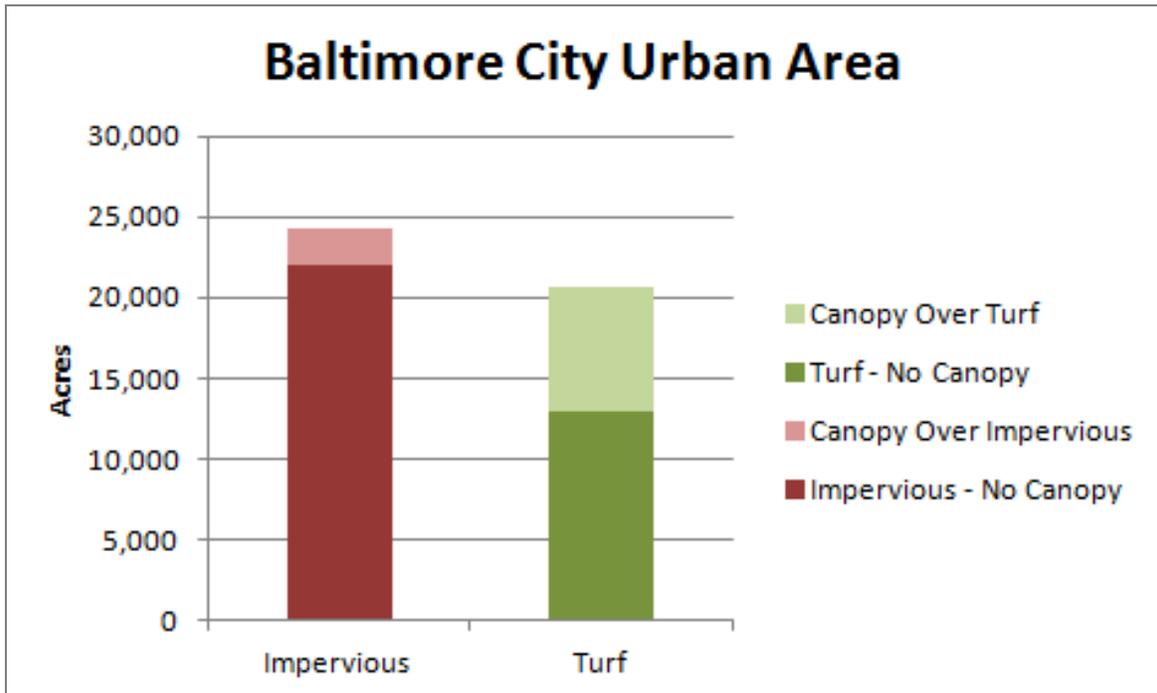
#### **Method Summary**

**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 City. 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 and secondary sidewalks. 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 city 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 city's impervious surface data, based on the average percent of mapped impervious cover covered by canopy in the city.



### Baltimore City Natural Area by Segment

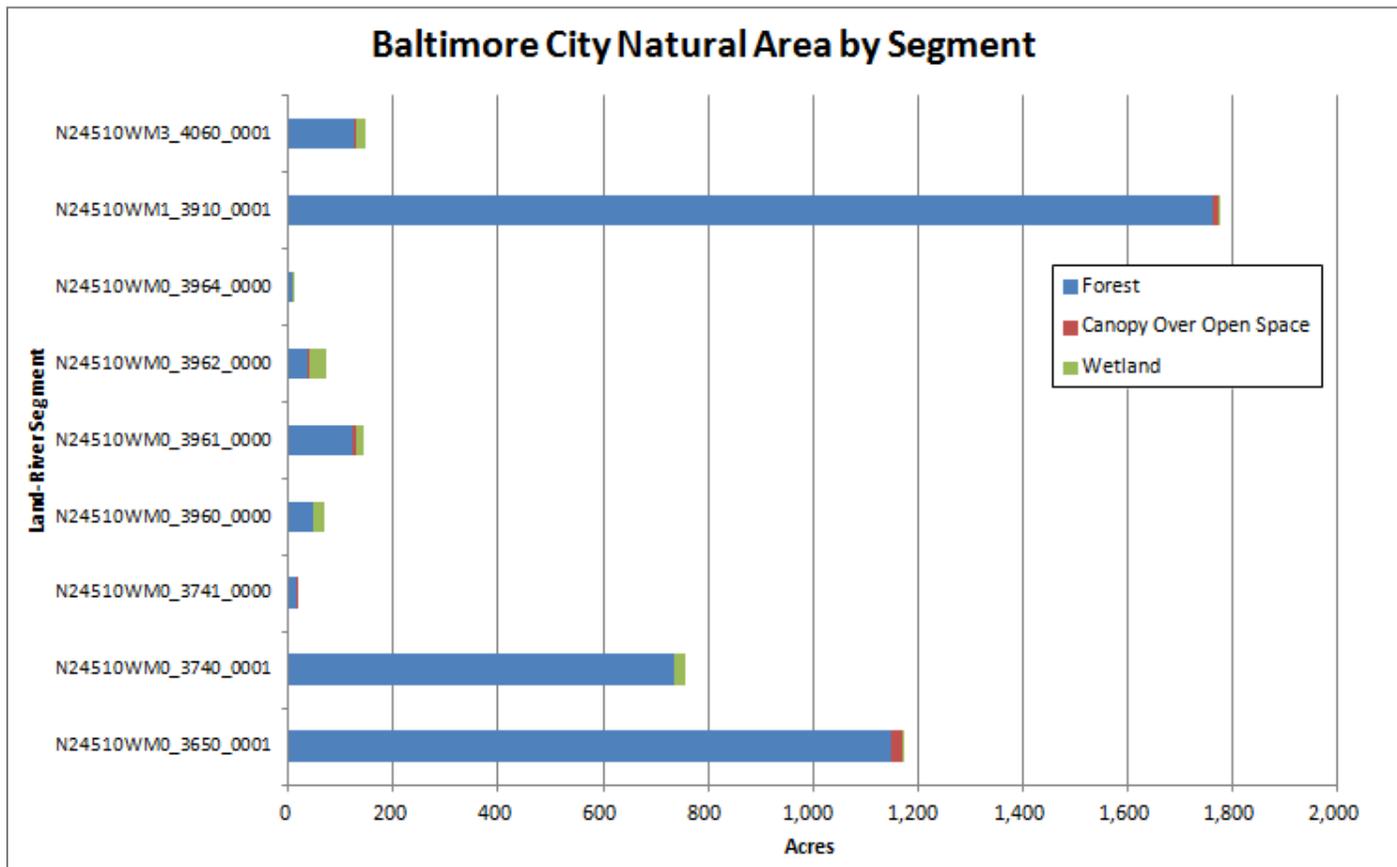
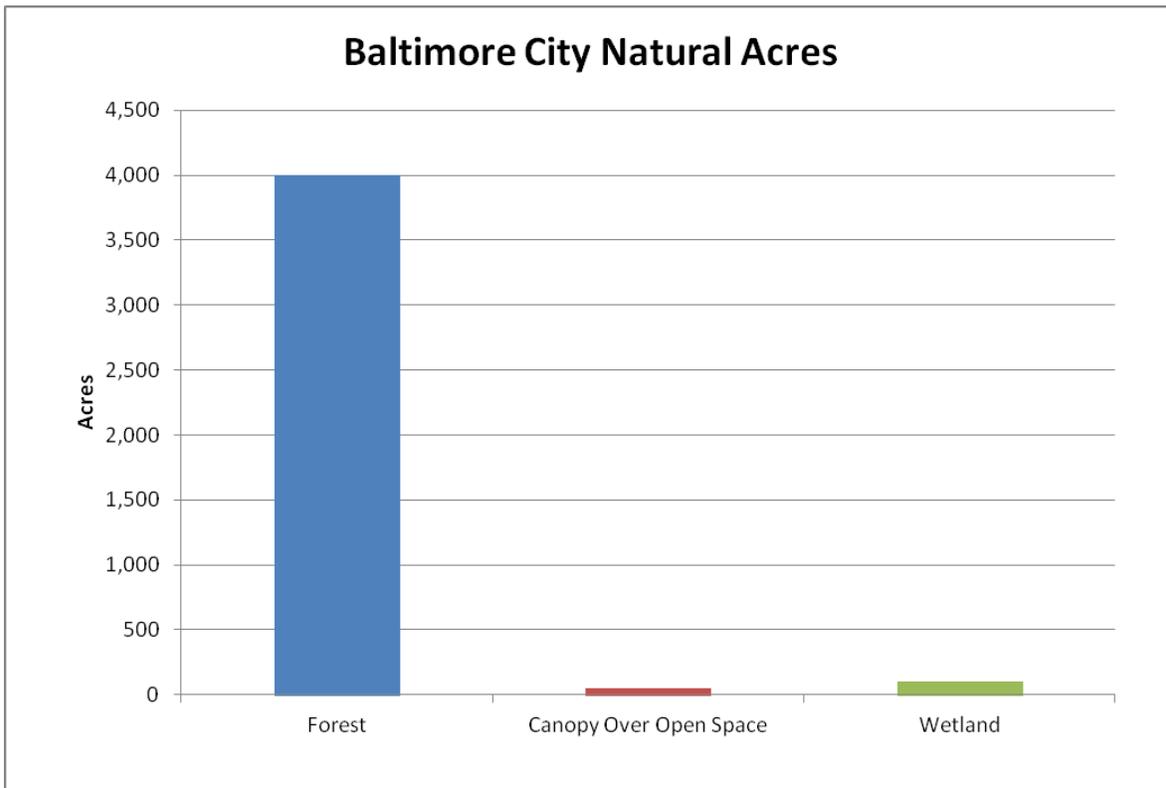
Land-River Segment	Forest (Acres)	Canopy Over Open Space (Acres)	Wetland (Acres)
N24510WM0_3650_0001	1,148.8	20.4	1.1
N24510WM0_3740_0001	733.8	2.9	18.8
N24510WM0_3741_0000	15.3	0.0	0.0
N24510WM0_3960_0000	47.3	1.6	19.5
N24510WM0_3961_0000	121.3	7.7	13.2
N24510WM0_3962_0000	37.7	3.1	31.0
N24510WM0_3964_0000	7.0	0.0	0.6
N24510WM1_3910_0001	1,760.2	12.1	1.6
N24510WM3_4060_0001	126.4	1.9	18.1
	<b>3,998.0</b>	<b>49.6</b>	<b>104.0</b>

#### **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 City Land-River Segments

