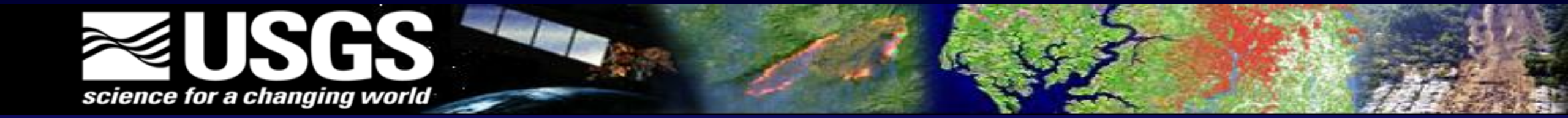

Chesapeake Bay Forestry Trends

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Forestry Workgroup Meeting

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U.S. Department of the Interior
U.S. Geological Survey

Chesapeake Conservancy

University of Vermont
Spatial Analysis Lab

Tree Canopy Trends: Chesapeake Bay Watershed Portion of States

Geography	2013/14		2017/18		2021/22	
	Acres	% Land Area	Acres	% Land Area	Acres	% Land Area
Delaware	199,337	44%	198,835	44%	196,719	44%
District of Columbia	13,662	35%	13,650	35%	13,694	35%
Maryland	2,888,760	50%	2,877,848	50%	2,867,882	49%
New York	2,510,600	63%	2,511,003	63%	2,488,079	63%
Pennsylvania	9,216,556	64%	9,162,949	64%	9,083,455	64%
Virginia	9,183,083	67%	8,998,907	65%	8,813,129	64%
West Virginia	1,719,765	75%	1,713,270	75%	1,700,853	75%
Watershed	25,731,762	63%	25,476,461	63%	25,163,810	62%

Tree Canopy = Forest (FORE), Forested, Other (FORO), Tree Canopy over Turf (TCTG), and Tree Canopy over Impervious (TCIS)

Forested Extent Trends: Chesapeake Bay Watershed Portion of States

Geography	2013/14		2017/18		2021/22	
	Acres	% Land Area	Acres	% Land Area	Acres	% Land Area
Delaware	207,957	46%	208,022	46%	207,245	46%
District of Columbia	9,157	23%	9,153	23%	9,170	23%
Maryland	2,922,943	50%	2,921,688	50%	2,913,594	50%
New York	2,693,610	68%	2,713,062	69%	2,703,147	68%
Pennsylvania	9,730,527	68%	9,732,586	68%	9,709,082	68%
Virginia	9,685,045	70%	9,675,521	70%	9,642,114	70%
West Virginia	1,803,436	79%	1,802,227	79%	1,800,209	79%
Watershed	27,052,674	67%	27,062,259	67%	26,984,561	66%

Forested Extent = Forest (FORE), Forested, Other (FORO), Natural Succession (NATS), and Harvested Forest (HARF)

Forest: Chesapeake Bay Watershed Portion of States

Geography	2013/14		2017/18		2021/22	
	Acres	% Land Area	Acres	% Land Area	Acres	% Land Area
Delaware	194,199	43%	193,555	43%	191,413	42%
District of Columbia	8,115	21%	8,070	21%	8,118	21%
Maryland	2,691,360	46%	2,682,700	46%	2,669,181	46%
New York	2,471,573	62%	2,471,607	62%	2,450,950	62%
Pennsylvania	9,056,719	63%	9,001,312	63%	8,921,709	62%
Virginia	8,905,465	65%	8,717,455	63%	8,534,798	62%
West Virginia	1,699,792	75%	1,693,052	74%	1,681,073	74%
Watershed	25,027,224	62%	24,767,751	61%	24,457,242	60%

Forest = Forest (FORE) and Forested, Other (FORO)

Change with Development

Geography	Tree Canopy		Forested Extent		Forest	
	Acres	% Land Area	Acres	% Land Area	Acres	% Land Area
Delaware	(511)	-0.11%	(1,079)	-0.24%	(677)	-0.15%
District of Columbia	(1)	0.00%	13	0.03%	(84)	-0.21%
Maryland	(18,550)	-0.32%	(20,255)	-0.35%	(19,471)	-0.34%
New York	(8,666)	-0.22%	(823)	-0.02%	(7,329)	-0.19%
Pennsylvania	(25,281)	-0.18%	(26,253)	-0.18%	(27,891)	-0.20%
Virginia	(46,547)	-0.34%	(48,283)	-0.35%	(48,435)	-0.35%
West Virginia	(3,537)	-0.16%	(3,676)	-0.16%	(3,617)	-0.16%
Watershed	(103,093)	-0.25%	(100,354)	-0.25%	(107,505)	-0.26%

*** Forested Extent and Forest include change with developed Tree Canopy classes (TC over Turf and over Impervious)**

Tree Canopy = Forest (FORE), Forested, Other (FORO), Tree Canopy over Turf (TCTG), and Tree Canopy over Impervious (TCIS)
Forested Extent = Forest (FORE), Forested, Other (FORO), Natural Succession (NATS), and Harvested Forest (HARF)
Forest = Forest (FORE) and Forested, Other (FORO)

Land Cover Accuracy

- The 2021/22 land cover overall accuracy is 95%

- Tree canopy has high accuracies:
  - Producer's Accuracy (how likely is trees in the imagery to be mapped as tree canopy?) : 97%
  - User's Accuracy (how likely is mapped tree canopy to be trees in the imagery?): 95%

- Change Accuracy
  - Very complicated – but overall tree canopy losses have higher accuracy than tree canopy gains

- More detailed accuracy assessment presentation at the March Land Use Work Group:

https://www.chesapeakebay.net/files/documents/LUWG_LCAccuracyAssessment_20250319.pdf

* All accuracies reported in this slide represent fuzzy accuracies within a 3x3-meter window for 5 aggregate land cover classes (Water, Tree Canopy, Herbaceous, Barren, Impervious)

Questions?

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