







## 2024 Edition Land Use/Land Cover Revision Updates

Steven Guinn, Chesapeake Conservancy
Joint Land Use and Forestry Workgroup | 1 December 2023



#### 1-meter Land Use/Land Cover Data Project Overall timeline - 2024 edition



QA Testing/ Draft Production

Tweaking major rule revisions, testing workflow and environments, and implementing OC checks for new errors



Manual Corrections/ LULC Production

Finalizing LC corrections and implementing QC protocols, LULC production



Stakeholder Review/ Minor Revisions

Share preliminary data with stakeholders for review, perform QA checks, revise model based on feedback and internal review



**Data Release** 

Complete final production, compile metadata and complete model documentation, package data for delivery

#### Tree Canopy in Developed Areas







2024 Edition



#### Tree Canopy in Developed Areas







#### 2024 Edition



#### Tree Canopy in Developed Areas



#### 2022 Edition

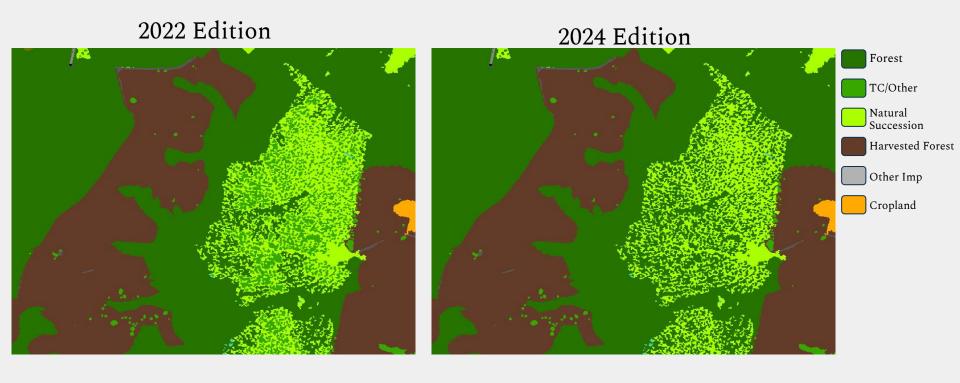


#### 2024 Edition



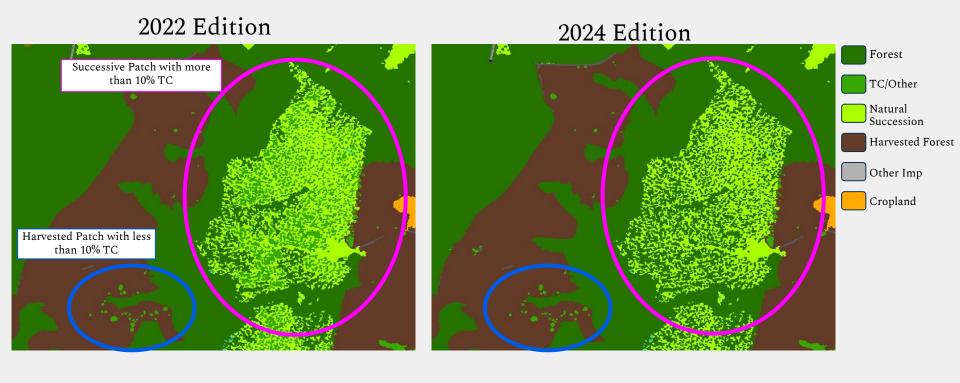
### Mixed Successional Tree Canopy as Forest





#### Mixed Successional Tree Canopy as Forest





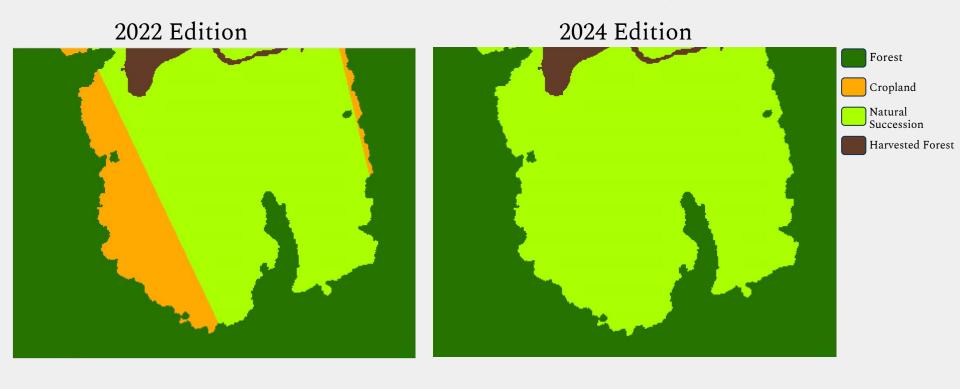
## Tree Canopy Rule change effects: Summary Tables



	Gloucester, VA			Botetourt, VA		
	2022 Ed.	2024 Ed.	Difference	2022 Ed.	2024 Ed.	Difference
Forest	87,023	87,583	561	257,263	257,477	214
Tree Canopy Other	1,366	4,128	2,763	5,154	8,148	2,994
Tree Canopy over Turf Grass	5,930	2,607	(3,323)	5,391	2,180	(3,211)

## Harvested Forest prioritized over ag





#### Harvested Forest Wetlands





### Solar Arrays





Chesapeake Bay Land	Use/Cover Classificat	ion (2024 edition, 56 planned)
Water and Water Margins	<u>Forest</u>	Agriculture
10 Tidal Waters Lentic  11 Lakes & Reservoirs 12 Riverine Ponds 13 Terrene Ponds Lotic 14 Streams and Rivers Water Margins 15 Bare Shore	Tree Canopy 40 Forest 41 Tree Canopy O Open Space (temporary) 42 Natural Succes 43 Natural Succes 44 Natural Succes 45 Harvested Fore 46 Harvested Fore	Productive Lands  80 Cropland Barren  ther  81 Cropland Herbaceous  82 Orchards and Vineyards Barren  sion Barren  83 Orchards and Vineyards Herbaceous  sion Herbaceous  84 Orchards and Vineyards Shrubland  sion Shrubland  85 Pasture and Hay Barren  86 Pasture and Hay Herbaceous
Development Impervious  20 Roads 21 Structures 22 Other Impervious (Parking lots, driv 23 TC over Roads 24 TC over Structures	54 Riverine Wetlar	nds Herbaceous nds Shrubland nds Tree Canopy  91 Animal Operation Impervious 92 Animal Operation Barren 93 Animal Operation Herbaceous

Terrene

Tidal

60 Terrene Wetlands Barren 61 Terrene Wetlands Herbaceous

62 Terrene Wetlands Shrubland

63 Terrene Wetlands Tree Canopy

64 Terrene Wetlands Forest

65 Terrene Wetlands Harvested Forest

Pervious

26 Tree Canopy over Turf Grass

32 Solar Field Panel Arrays (impervious)

25 TC over Other Impervious

31 Extractive Impervious

27 Turf Grass

28 Bare Developed

30 Extractive Barren

33 Solar Field Barren

34 Solar Field Herbaceous

35 Solar Field Shrubland

36 Suspended Succession Barren

37 Suspended Succession Herbaceous 38 Suspended Succession Shrubland

70 Tidal Wetlands Barren

71 Tidal Wetlands Herbaceous

72 Tidal Wetlands Shrubland

73 Tidal Wetlands Tree Canopy 74 Tidal Wetlands Forest

75 Tidal Wetlands Harvested Forest

\*are being mapped and identified, but are not currently intended for integrating into the final classification



Geospatial Modeler

Chesapeake Conservancy

sguinn@chesapeakeconservancy.org

Sarah McDonald (she/her)
Geographer
U. S. Geological Survey

smcdonald@chesapeakebay.net



# Questions? Feedback?