

# Phase 7: Proposed Classification Changes

*FWG Follow-up to the December Joint Meeting*

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# Background:

**Action (From the December joint meeting):** Approval of the following change to the land use classification roll-up for Phase 7: The three “Natural Succession” classes will roll-up to the “Forest” class, rather than “Mixed Open”.

**Decision (From the December joint meeting):** The FWG agreed that the natural succession classes should roll up to Forest for Phase 7 of the watershed model in the rural context but wants to further evaluate whether natural succession barren and natural succession herbaceous should be classified as Compacted Pervious (also written Pervious, Compacted) in the urban context.

**Action (For today’s FWG meeting):** Evaluate whether natural succession barren and natural succession herbaceous should be moved from Compacted Pervious (also written Pervious, Compacted) in rural and urban contexts.

# Rollup of High-Res Land Use Classes for Phase 6

## 1. Impervious, Roads (1)

20 Roads

## 2. Impervious, Non-Roads (4)

21 Structures

22 Other Impervious (Parking lots, driveways)

31 Extractive Impervious

32 Solar Field Panel Arrays

## 3. Tree Canopy Over Impervious (3)

23 TC over Roads

24 TC over Structures

25 TC over Other Impervious

## 4. Turf Grass (1)

27 Turf Grass

## 5. Tree Canopy over Turf Grass (1)

26 Tree Canopy over Turf Grass

## 6. Forest (6)

40 Forest

41 Tree Canopy, Other

53 Riverine Wetlands Tree Canopy

54 Riverine Wetlands Forest

63 Terrene Wetlands Tree Canopy

64 Terrene Wetlands Forest

## 7. Mixed Open (14)

15 Bare Shore

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

42 Natural Succession Barren

43 Natural Succession Herbaceous

44 Natural Succession Shrubland

45 Harvested Forest Barren

46 Harvested Forest Herbaceous

## 8. Wetlands, Riverine Non-forested (4)

50 Riverine Wetlands Barren

51 Riverine Wetlands Herbaceous

52 Riverine Wetlands Shrubland

55 Riverine Wetlands Harvested Forest

## 9. Wetlands, Terrene Non-forested (4)

60 Terrene Wetlands Barren

61 Terrene Wetlands Herbaceous

62 Terrene Wetlands Shrubland

65 Terrene Wetlands Harvested Forest

## 10. Cropland (5)

80 Cropland Barren

81 Cropland Herbaceous

82 Orchards and Vineyards Barren

83 Orchards and Vineyards Herbaceous

84 Orchards and Vineyards Shrubland

## 11. Pasture and Hay (2)

85 Pasture and Hay Barren

86 Pasture and Hay Herbaceous

## 12. Water (4)

11 Lakes & Reservoirs

12 Riverine Ponds

13 Terrene Ponds

14 Streams and Rivers (visible water)

Blue = mapped 56-class schema

White = Phase 6 schema

# Proposed Rollup of High-Res Land Use Classes for Phase 7: December Meeting

## 1. Impervious, Roads (1)

20 Roads

## 2. Impervious, Non-Roads (3)

21 Structures

22 Other Impervious (Parking lots, driveways)

31 Extractive Impervious

## 3. Tree Canopy Over Impervious (3)

23 TC over Roads

24 TC over Structures

25 TC over Other Impervious

## 4. Turf Grass (1)

27 Turf Grass

## 5. Tree Canopy over Turf Grass (1)

26 Tree Canopy over Turf Grass

## 6. Solar Infrastructure (1)

32 Solar Field Panel Arrays

## 7. Solar Pervious (2)

34 Solar Field Herbaceous

35 Solar Field Shrubland

## 8. Compacted Pervious (4)

30 Extractive Barren

36 Suspended Succession Barren

37 Suspended Succession Herbaceous

38 Suspended Succession Shrubland

## 9. Forest (9)

40 Forest

41 Tree Canopy, Other

42 Natural Succession Barren

43 Natural Succession Herbaceous

44 Natural Succession Shrubland

53 Riverine Wetlands Tree Canopy

54 Riverine Wetlands Forest

63 Terrene Wetlands Tree Canopy

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## 10. Wetlands, Riverine Non-forested (4)

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85 Pasture and Hay Barren

86 Pasture and Hay Herbaceous

## 14. Water (5)

11 Lakes & Reservoirs

12 Riverine Ponds

13 Terrene Ponds

14 Streams and Rivers (visible water)

15 Bare Shore- adjacent to lakes

## 15. Harvested Forest (2)

45 Harvested Forest Barren

46 Harvested Forest Herbaceous

Reported Data from States

## 16. Construction (2)

28 Bare Developed

33 Solar Field Barren

Reported Data from States

Blue = mapped 56-class schema

Yellow = class moved from mixed open to be discussed today

Orange = class moved from mixed open

White = Phase 7 schema

# Proposed Rollup of High-Res Land Use Classes for Phase 7: February Meeting

## 1. Impervious, Roads (1)

20 Roads

## 2. Impervious, Non-Roads (3)

21 Structures

22 Other Impervious (Parking lots, driveways)

31 Extractive Impervious

## 3. Tree Canopy Over Impervious (3)

23 TC over Roads

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25 TC over Other Impervious

## 4. Turf Grass (1)

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## 5. Tree Canopy over Turf Grass (1)

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## 6. Solar Infrastructure (1)

32 Solar Field Panel Arrays

## 7. Solar Pervious (2)

34 Solar Field Herbaceous

35 Solar Field Shrubland

## 8. Compacted Pervious (4)

30 Extractive Barren

36 Suspended Succession Barren

37 Suspended Succession Herbaceous

38 Suspended Succession Shrubland

43 Natural Succession Herbaceous (urban areas)

## 9. Forest (9)

40 Forest

41 Tree Canopy, Other

43 Natural Succession Herbaceous (rural areas)

44 Natural Succession Shrubland

53 Riverine Wetlands Tree Canopy

54 Riverine Wetlands Forest

63 Terrene Wetlands Tree Canopy

64 Terrene Wetlands Forest

## 10. Wetlands, Riverine Non-forested (4)

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52 Riverine Wetlands Shrubland

55 Riverine Wetlands Harvested Forest

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45 Harvested Forest Barren

46 Harvested Forest Herbaceous

42 Natural Succession Barren (Rural areas)

Reported Data from States

## 16. Construction (2)

28 Bare Developed

33 Solar Field Barren

42 Natural Succession Barren (Urban areas)

Reported Data from States

Blue = mapped 56-class schema

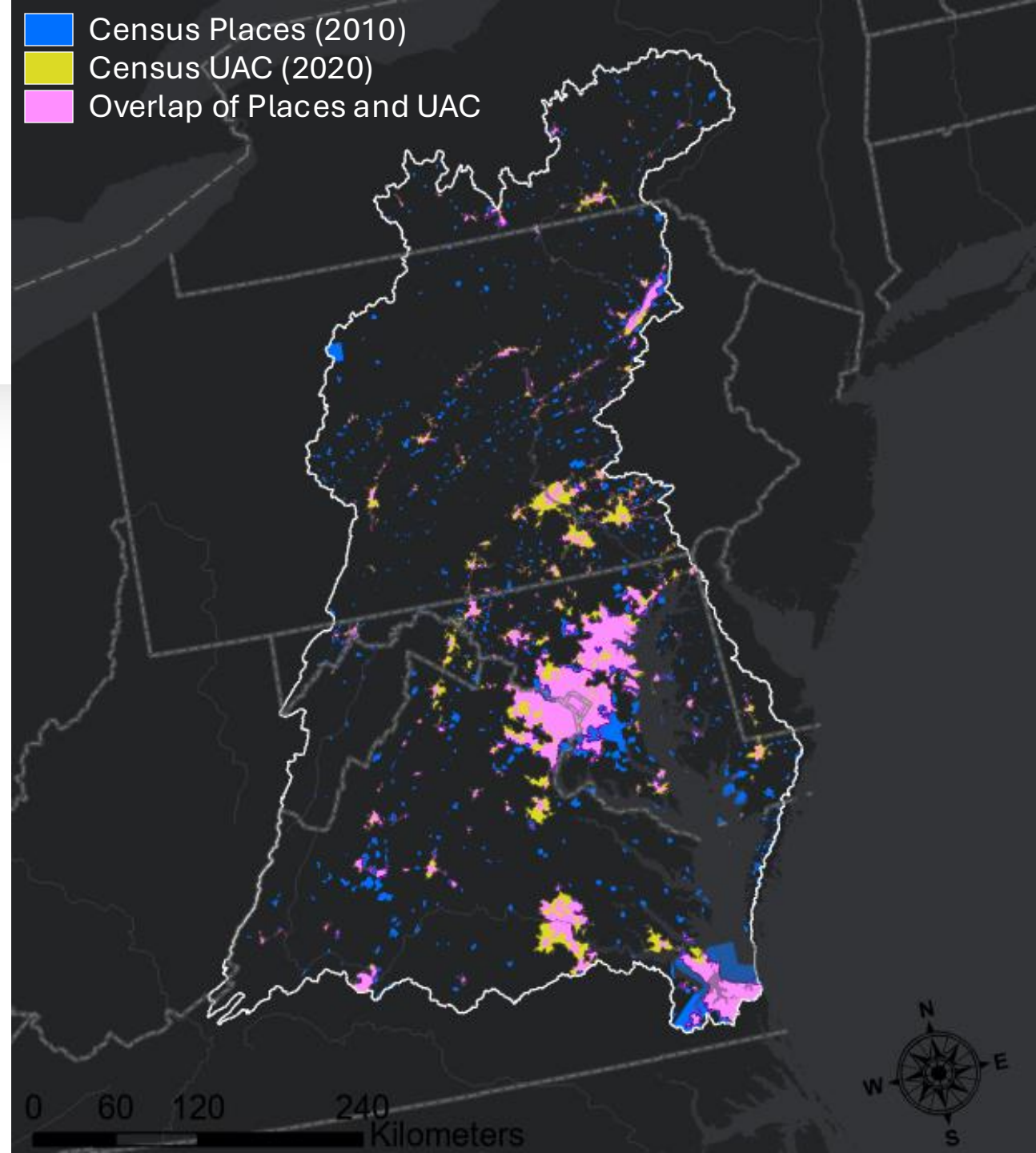
Yellow = class moved from mixed open to be discussed today

Orange = class moved from mixed open

White = Phase 7 schema

# Where is Urban?

- Census Urban Areas and Clusters (UAC) represent densely populated areas.
- Census Places – settled, named places (e.g. municipality, city, town, village, borough).



## Natural Succession- By the Numbers

- In the Chesapeake Bay Watershed, **Natural Succession Barren** makes up only **0.07%** of total land area.
- In the Chesapeake Bay Watershed, **Natural Succession Herbaceous** makes up only **3.15%** of total land area.

Region	Natural Succession Barren		Natural Succession Herbaceous	
	Acres	% CBW Acres	Acres	% CBW Acres
<b>CBW</b>	28,542		1,278,867	
<b>Urban (UAC)</b>	6,814	24%	91,970	7%
<b>Rural (Outside UAC)</b>	21,729	76%	1,186,897	93%
<b>Urban (Places)</b>	5,897	21%	108,271	8%
<b>Rural (Outside Places)</b>	22,646	79%	1,170,596	92%

CBW = Chesapeake Bay Watershed

Urban (UAC) = Census Urban Areas and Clusters 2020

Rural (Outside UAC) = Land Area in the watershed outside of Census Urban Areas and Clusters 2020

Urban (Places) = Census Places 2010

Rural (Outside Places) = Land Area in the watershed outside of Census Places 2010



# Urban: Natural Succession Barren

- Urban Areas and Clusters
- Natural Succession Barren
- Natural Succession Herbaceous



Charles County, Maryland  
76.9255897°W 38.5547414°N

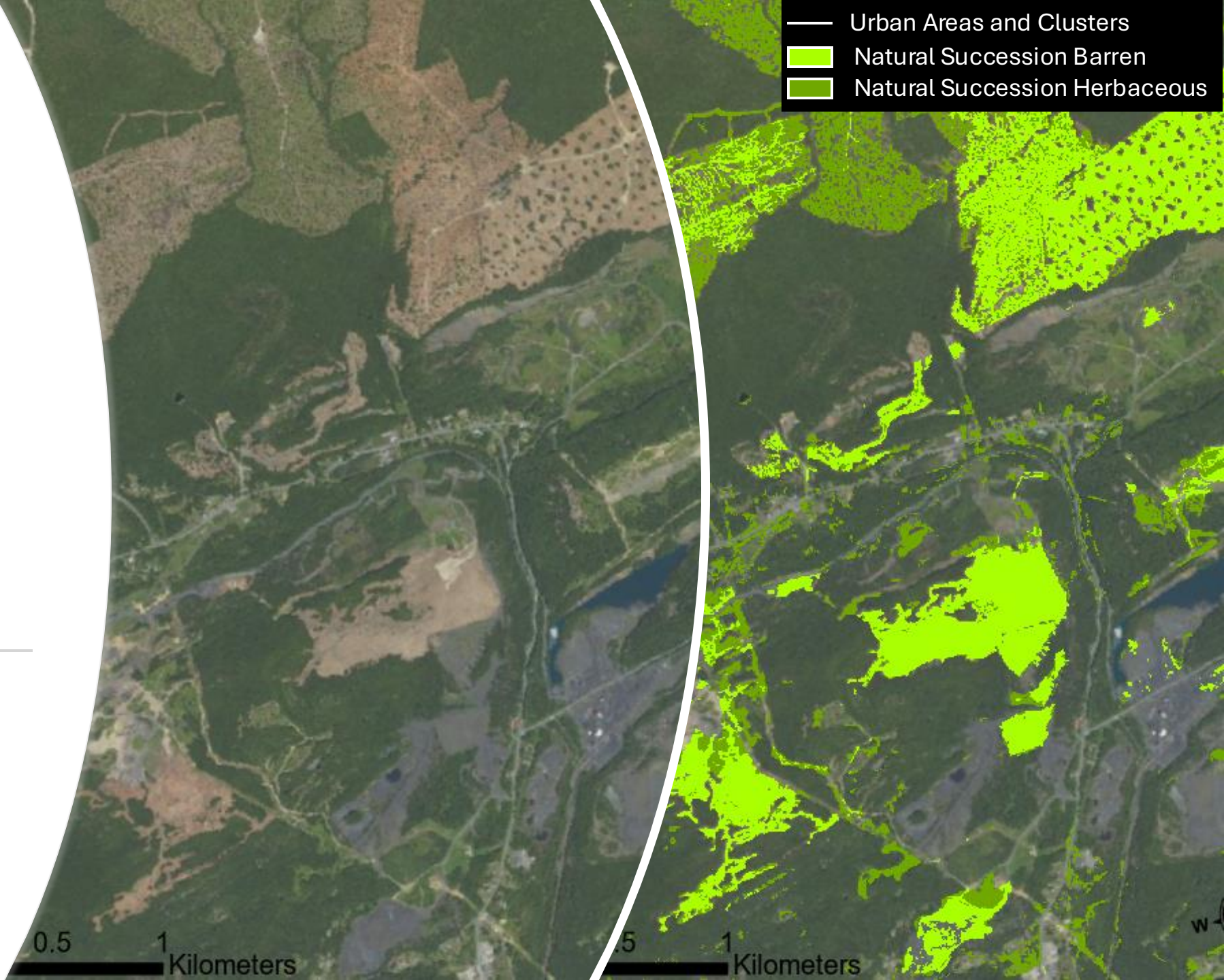




# Rural: Natural Succession Barren

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- Urban Areas and Clusters
- Natural Succession Barren
- Natural Succession Herbaceous



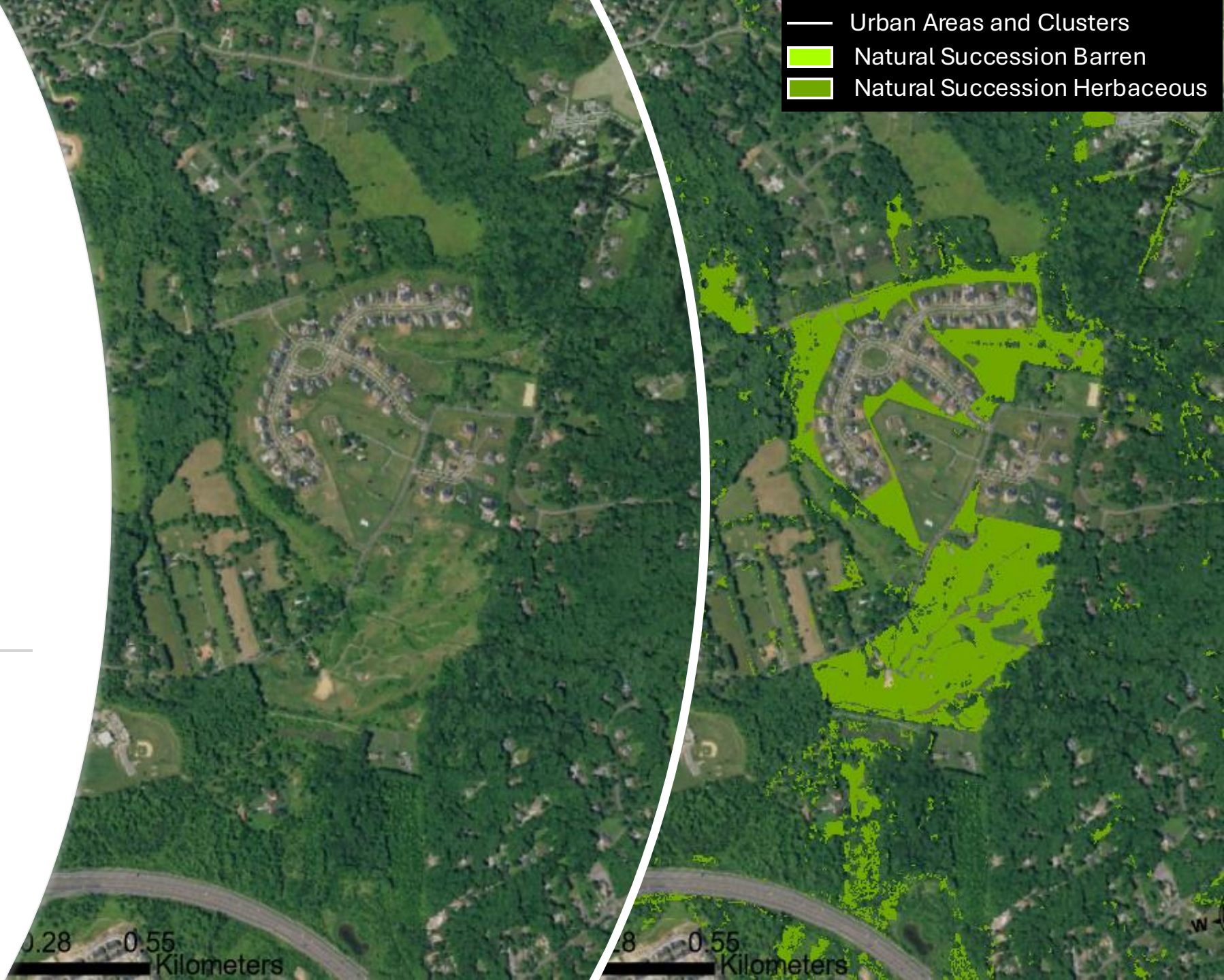
Schuylkill County, Pennsylvania  
76.2540783°W 40.7244783°N



# Urban: Natural Succession Herbaceous

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- Urban Areas and Clusters
- Natural Succession Barren
- Natural Succession Herbaceous





# Rural: Natural Succession Herbaceous

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- Urban Areas and Clusters
- Natural Succession Barren
- Natural Succession Herbaceous

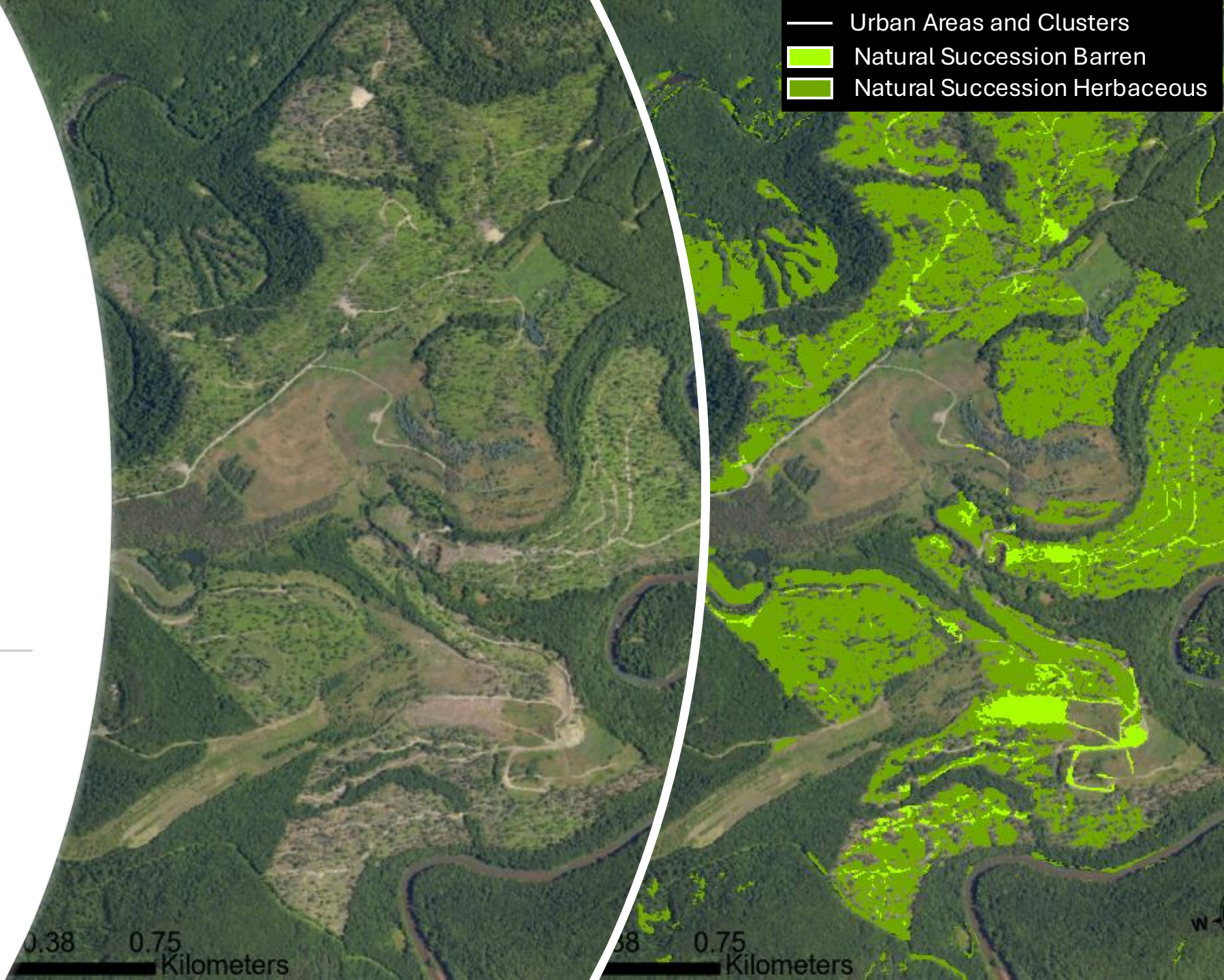




# Rural: Natural Succession Herbaceous

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- Urban Areas and Clusters
- Natural Succession Barren
- Natural Succession Herbaceous



Clearfield County, Pennsylvania  
78.4383212°W 40.9354262°N

0.38 0.75 Kilometers

0.38 0.75 Kilometers



# Natural Succession Barren

Only ~28,500 acres in the watershed, 0.07% of total land area.

## Recommendation

Natural Succession Barren rolls up to **Construction** in urban contexts and **Harvested Forest** in rural contexts.

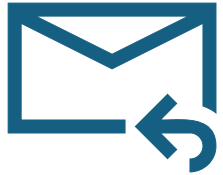


# Natural Succession Herbaceous

About 3.15% of the land area in the watershed.

## Recommendation

Natural Succession Herbaceous rolls up to **Compacted Pervious (previously Mixed Open)** in urban contexts and to **Forest** in rural contexts.



# Questions or Feedback?

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