

PHASE 7 Land Use: CONSTRUCTION

Peter Claggett, Research Geographer U.S. Geological Survey

August 6, 2025 Forestry Workgroup Meeting



Proposed Rollup of High-Res Land Use Classes for Phase 7

1. Impervious, Roads

20 Roads

2. Impervious, Non-Roads

21 Structures

22 Other Impervious (Parking lots, driveways)

31 Extractive Impervious

3. Tree Canopy Over Impervious

23 TC over Roads

24 TC over Structures

25 TC over Other Impervious

4. Turf Grass

27 Turf Grass

5. Tree Canopy over Turf Grass

26 Tree Canopy over Turf Grass

6. Solar Infrastructure

32 Solar Field Panel Arrays

7. Solar Pervious

34 Solar Field Herbaceous 35 Solar Field Shrubland

Blue = mapped 56-class schema White = Phase 7 schema

8. Compacted Pervious

30 Extractive Barren

36 Suspended Succession Barren

37 Suspended Succession Herbaceous

38 Suspended Succession Shrubland

43 Natural Succession Herbaceous (urban areas)

9. Construction

28 Bare Developed (Urban areas?)

33 Solar Field Barren

42 Natural Succession Barren (Urban areas

Reported Data from States

9. Forest

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

15. Harvested Forest (2)

45 Harvested Forest Barren

46 Harvested Forest Herbaceous

42 Natural Succession Barren (Rural areas)

Reported Data from States

10. Wetlands, Riverine Non-forested

50 Riverine Wetlands Barren

51 Riverine Wetlands Herbaceous

52 Riverine Wetlands Shrubland

55 Riverine Wetlands Harvested Forest

11. Wetlands, Terrene Non-forested

60 Terrene Wetlands Barren

61 Terrene Wetlands Herbaceous

62 Terrene Wetlands Shrubland

65 Terrene Wetlands Harvested Forest

12. Cropland

80 Cropland Barren

81 Cropland Herbaceous

82 Orchards and Vineyards Barren

83 Orchards and Vineyards Herbaceous

84 Orchards and Vineyards Shrubland

13. Pasture and Hay

85 Pasture and Hay Barren

86 Pasture and Hay Herbaceous

14. Water

11 Lakes & Reservoirs

12 Riverine Ponds

13 Terrene Ponds

14 Streams and Rivers (visible water)

15 Bare Shore- adjacent to lakes

Phase 7 Construction (what's different)

Option 2: Mapped by CBPO

Backcast Period (1985-2012)

Construction Acres (Year X) = NLCD development change (from Year X to X+1) * scaling factor

Develop a scaling factor that relates mapped construction in 2013/14, 2017/18, and 2021/22 high-res LULC with annual change in developed land uses from NLCD for the periods: 2013/14, 2017/2018, and 2021/22.

High-res Mapping Period (2013-2022)

Reclass all high-res patches of barren land uses (except "bare shore" and "extractive barren") that became at least 20% developed within 3-5 years as "regulated construction".

Construction acres (Year X) = annual proportion of NLCD development change over each interim period (e.g., 2013-2017) * acres of high-res LULC development change over each interim period.

Future Period (2022/23 – 2040)

Construction Acres = projected annual change in development (Ches. Bay Land Change Model)

Note: a scaling factor may not be needed for this period because the CBLCM forecasts growth for both impervious and pervious portions of development.



Phase 7 Construction – impacts to "Harvested Forest"

- New methodology maps 106,683 acres of "construction", including 5,519 acres of mapped harvested forest reclassed as construction
- This represents 0.8% of all mapped harvested forest

FWG Decisions

Are you okay with construction mapping rules over-riding timber harvest mapping rules?