

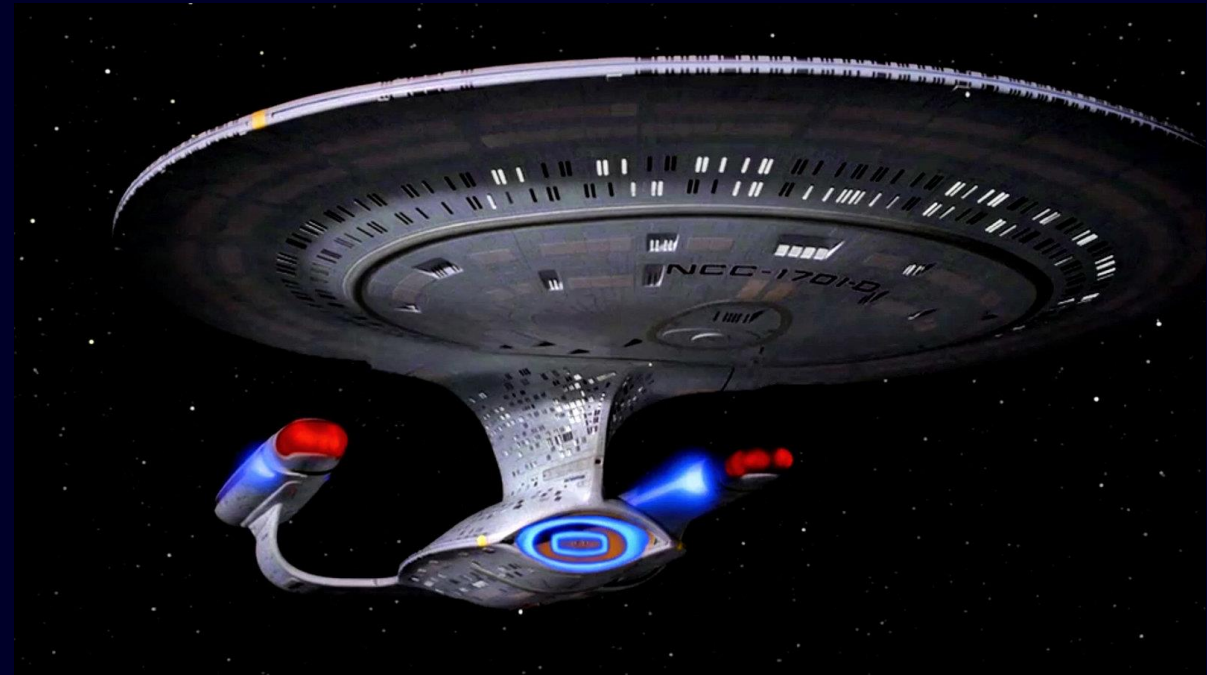


Chesapeake Bay Watershed Land Use: the Next Generation

Peter Claggett, Coordinator
CBP Land Use Workgroup

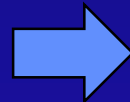
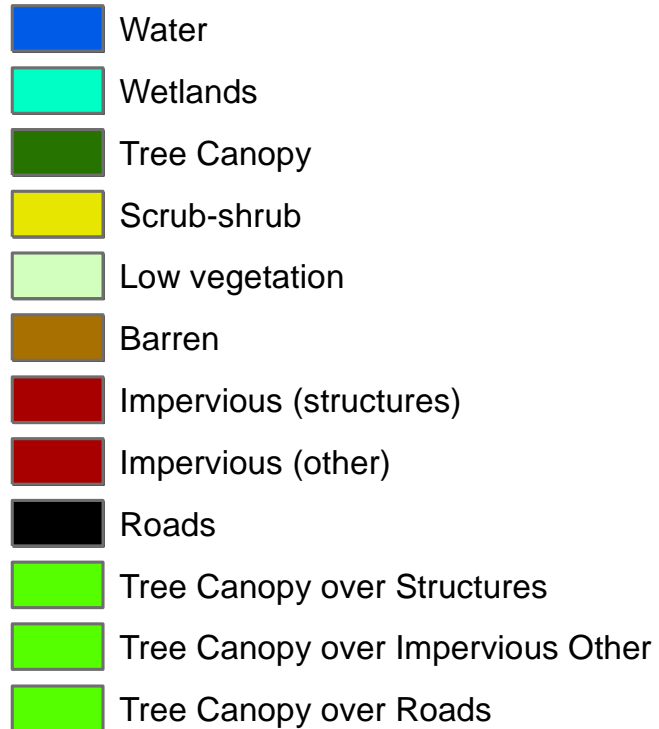
February 5, 2020
Joint Land Use and Forestry Workgroup
Meeting

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

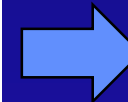


2013 Chesapeake Bay Watershed Land Cover/Use Data

1m Land Cover

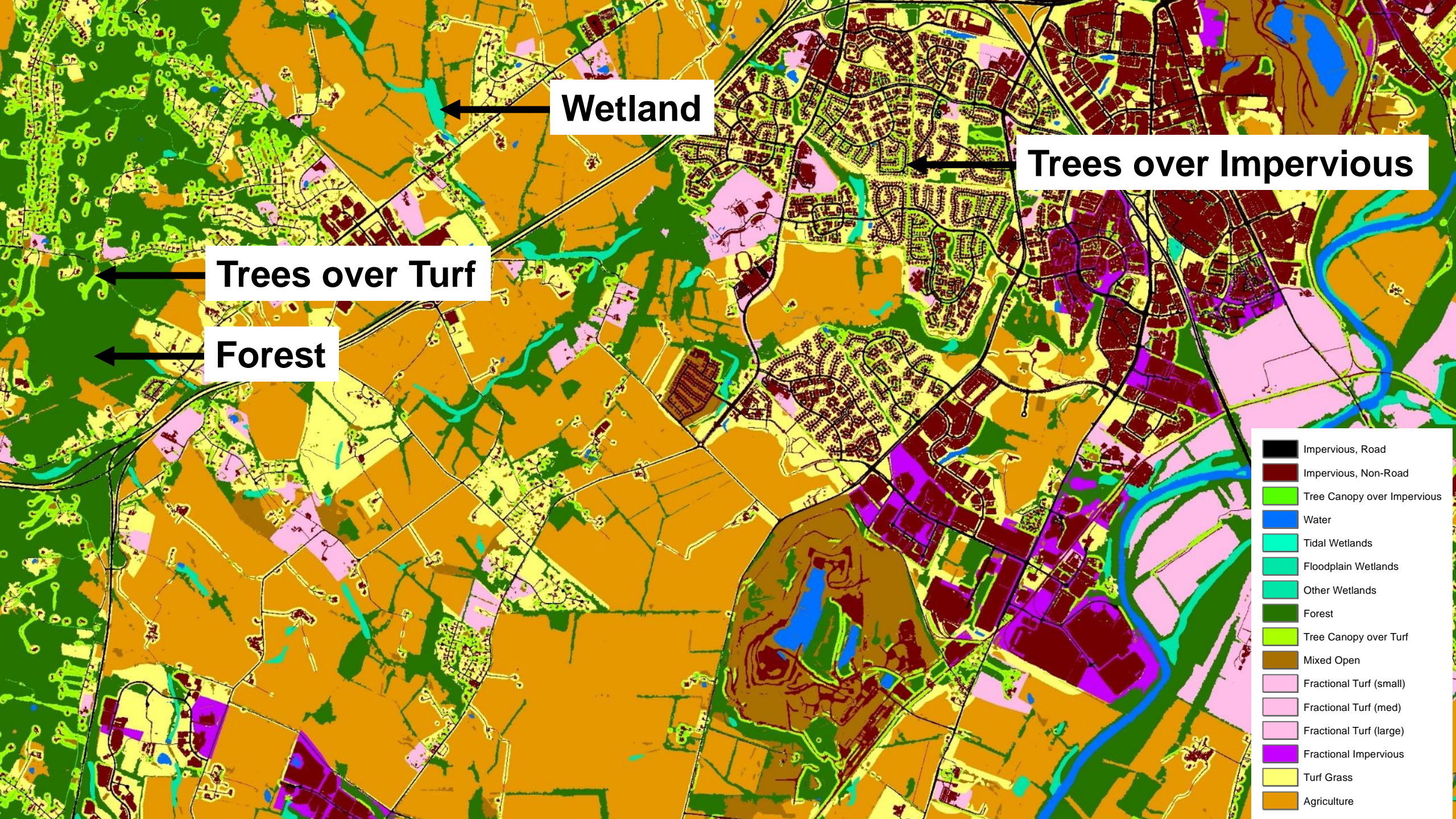


1m Land Use

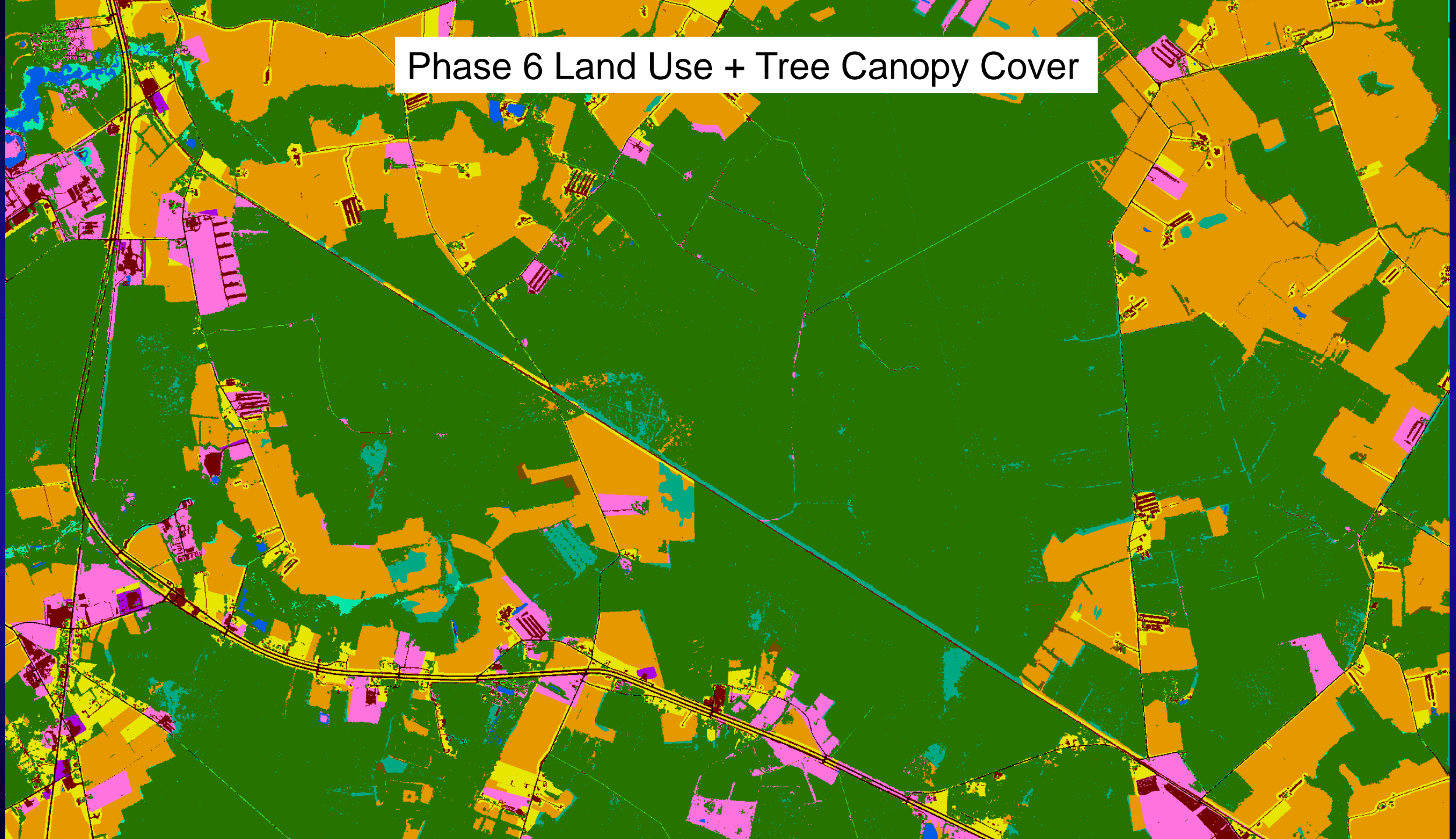


10m Land Cover/Use





Phase 6 Land Use + Tree Canopy Cover



Proposed Final Land Use Classification

1. Water (4)

1.1. Lotic

- 1.1.1. Estuary (WAT)
- 1.1.2. Lakes & Ponds (WAT)

1.2. Lentic

- 1.2.1. Streams (WAT)
- 1.2.2. Ditches (WAT)

2. Developed (9)

2.1. Infrastructure

- 2.1.1. Roads (IR)
- 2.1.2. Tree Canopy over Roads (TCI)
- 2.1.3. Structures (INR)
- 2.1.4. Tree Canopy over Structures (TCI)
- 2.1.5. Other Impervious (INR)
- 2.1.6. Tree Canopy over Other Impervious (TCI)

2.2. Bare Construction (MO)

2.3. Turf Grass (TG)

2.4. Tree Canopy over Turf Grass (TCT)

3. Forest (2)

3.1. Contiguous (> 1 acre) (FORE)

3.2. Fragmented (< 1 acre) (MO)

4. Production (20)

4.1. Agricultural

- 4.1.1. Cropland (CRP)
 - 4.1.1.1. Barren
 - 4.1.1.2. Herbaceous
- 4.1.2. Pasture (PAS)
 - 4.1.2.1. Barren
 - 4.1.2.2. Herbaceous

4.2. Successional (MO)

- 4.2.1. Natural (e.g., Fallow)
 - 4.2.1.1. Barren (MO)
 - 4.2.1.2. Herbaceous (MO)
 - 4.2.1.3. Scrub-shrub (MO)
- 4.2.2. Managed (e.g., Timber harvest)
 - 4.2.2.1. Barren (MO)
 - 4.2.2.2. Herbaceous (MO)
 - 4.2.2.3. Scrub-shrub (MO)
- 4.2.3. Suspended (e.g., Rights-of-ways)
 - 4.2.3.1. Barren (MO)
 - 4.2.3.2. Herbaceous (MO)
 - 4.2.3.3. Scrub-shrub (MO)

4.3. Orchard/vineyard (CRP)

- 4.3.1. Barren
- 4.3.2. Herbaceous
- 4.3.3. Scrub-shrub

4.4. Solar fields (INR)

4.5. Extractive (MO)

- 4.5.1. Barren
- 4.5.2. Herbaceous
- 4.5.3. Scrub-shrub

5. Wetland (19)

5.1. Tidal (WLT)

- 5.1.1. Open water
- 5.1.2. Barren
- 5.1.3. Herbaceous
- 5.1.4. Scrub-shrub
- 5.1.5. Contiguous Forest
- 5.1.6. Fragmented Forest

5.2. Non-tidal

- 5.2.1. Floodplain/ Headwater (WLF)
 - 5.2.1.1. Open water
 - 5.2.1.2. Barren
 - 5.2.1.3. Herbaceous
 - 5.2.1.4. Scrub-shrub
 - 5.2.1.5. Contiguous Forest
 - 5.2.1.6. Fragmented Forest
- 5.2.2. Other (WLO)
 - 5.2.2.1. Open water
 - 5.2.2.2. Barren
 - 5.2.2.3. Herbaceous
 - 5.2.2.4. Scrub-shrub
 - 5.2.2.5. Contiguous Forest
 - 5.2.2.6. Fragmented Forest

5.3. Bare shore (MO)

Land Use Overlays*

Existing

- Federal Lands
- MS4 Areas
- Sewer Service Areas
- FEMA Floodplains (HAZUS)
- Frequently Flooded Soils (gSSURGO)
- National Wetlands Inventory
- State Wetlands Inventories
- Cropland (Cropland Data Layer)
- Pasture (Cropland Data Layer)
- Parcels
- Land Use (County/City/State)
- Tidal/Estuarine Zone
- Surface Mines
- Landfills
- Roads

Proposed (new)

- Deciduous Trees (from land cover)
- Evergreen Trees (from land cover)
- Ground Elevation (1m, LiDAR DEM)
- Ground Elevation (1m, LiDAR DTM)
- Surface Elevation (1m, LiDAR DSM)
- Classified Point Cloud (normalized to the ground)
- Height (normalized DSM to ground elevation)
- Intensity (1m, LiDAR)
- Compound Topographic Index (3m, LiDAR)
- Poultry Houses (USGS polygons- for DelMarVA)
- Solar fields (points from VA-DEQ, other?)
- Center-Pivot Irrigated Fields (DE)
- Historical Land Cover Change (1985 – 2017; USGS-LCMAP)
- Agricultural business addresses (ESRI)
- Transmission Lines (TBD)
- Buildings (Microsoft)
- Marine/ Lentic/ Lotic shore

Mapping Floodplains

