

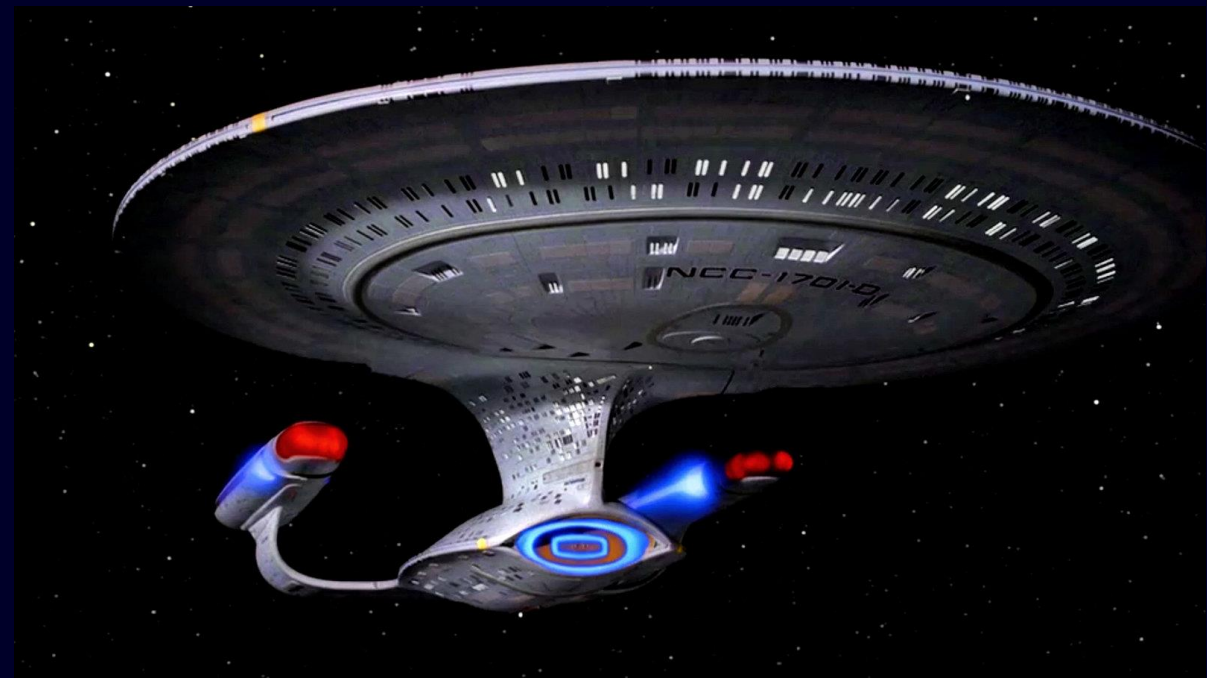


CHESAPEAKE BAY WATERSHED LAND USE: THE NEXT GENERATION

Peter Claggett, Coordinator
CBP Land Use Workgroup

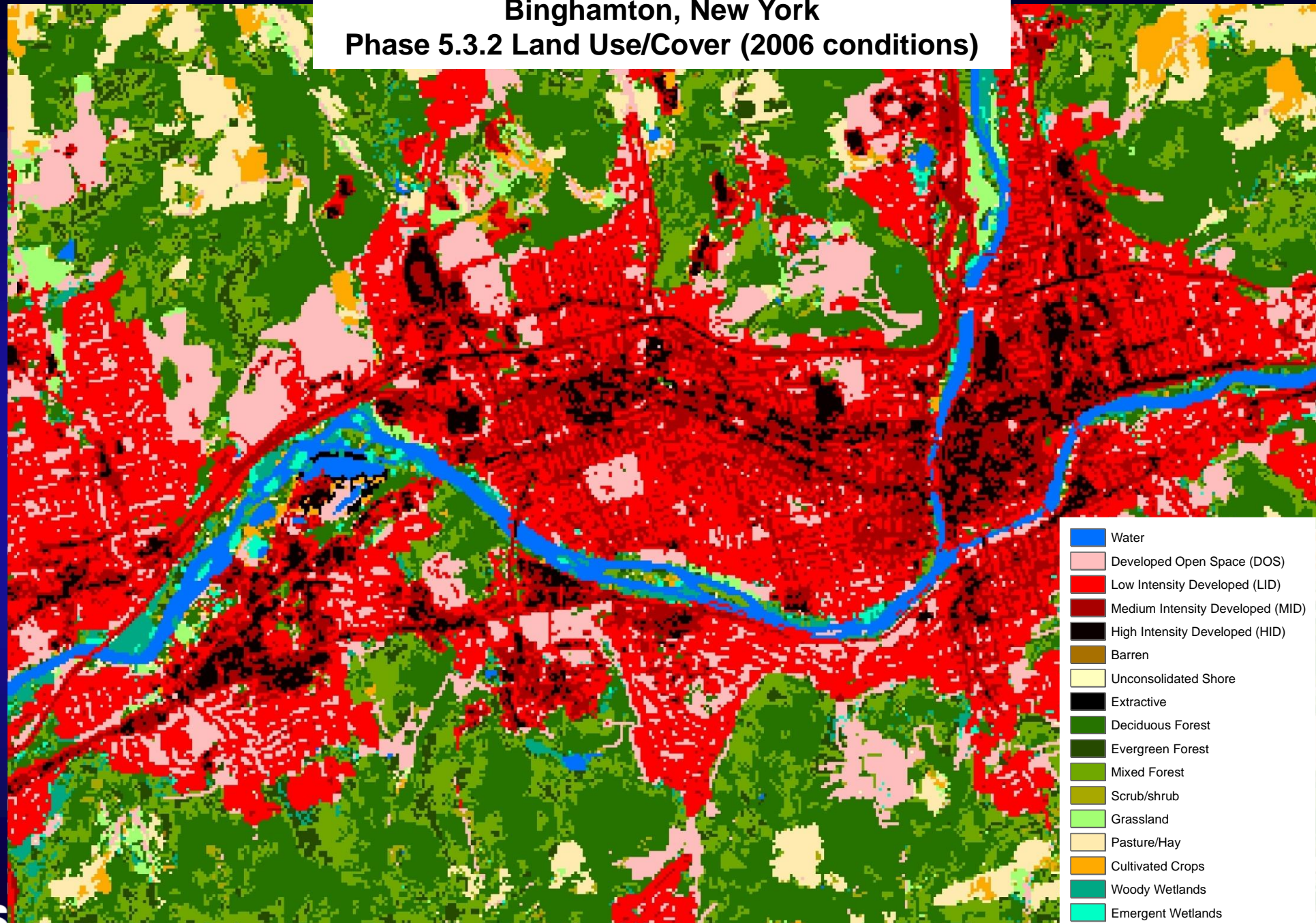
October 24, 2019
STAR Workgroup

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

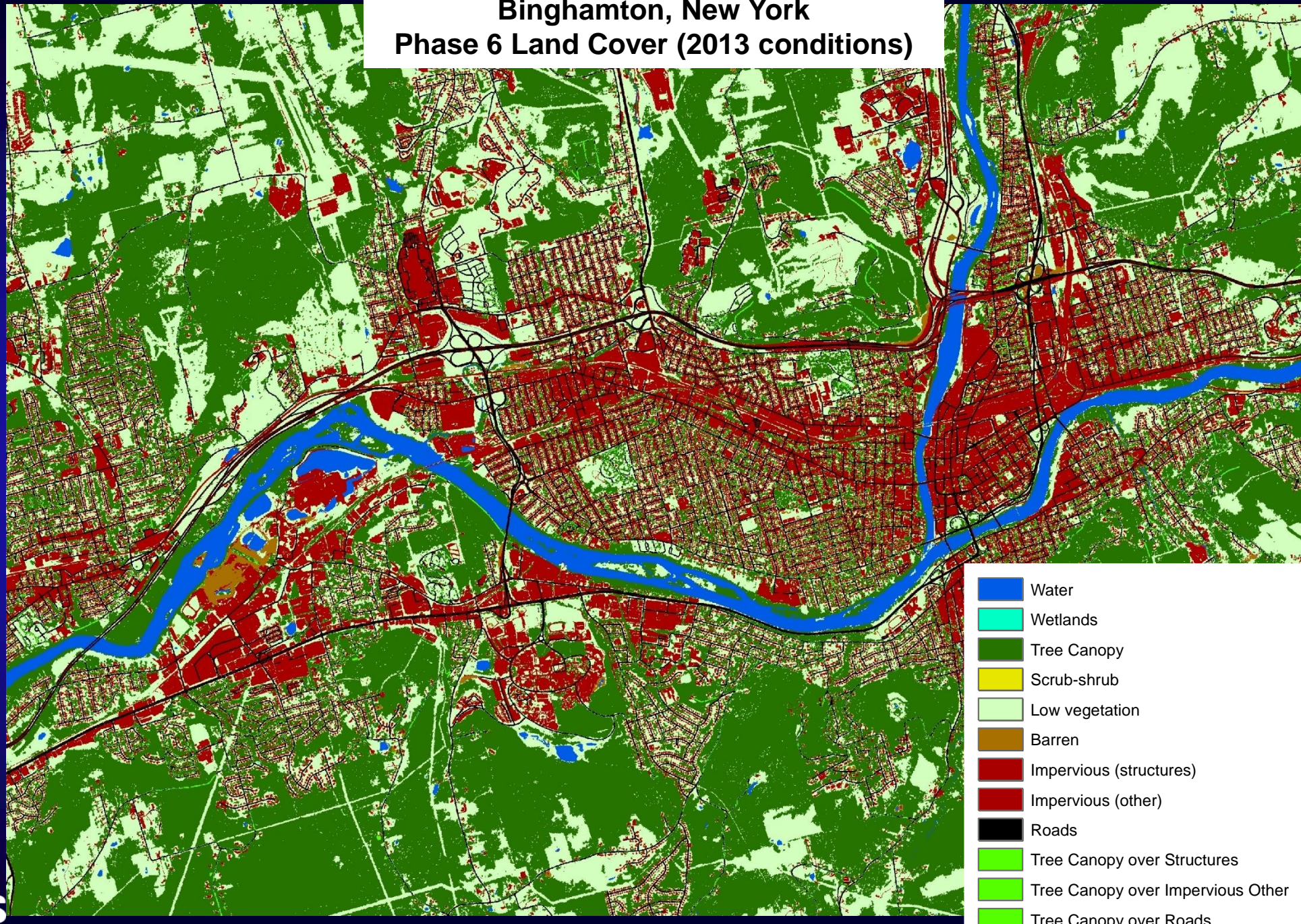


Binghamton, New York

Phase 5.3.2 Land Use/Cover (2006 conditions)



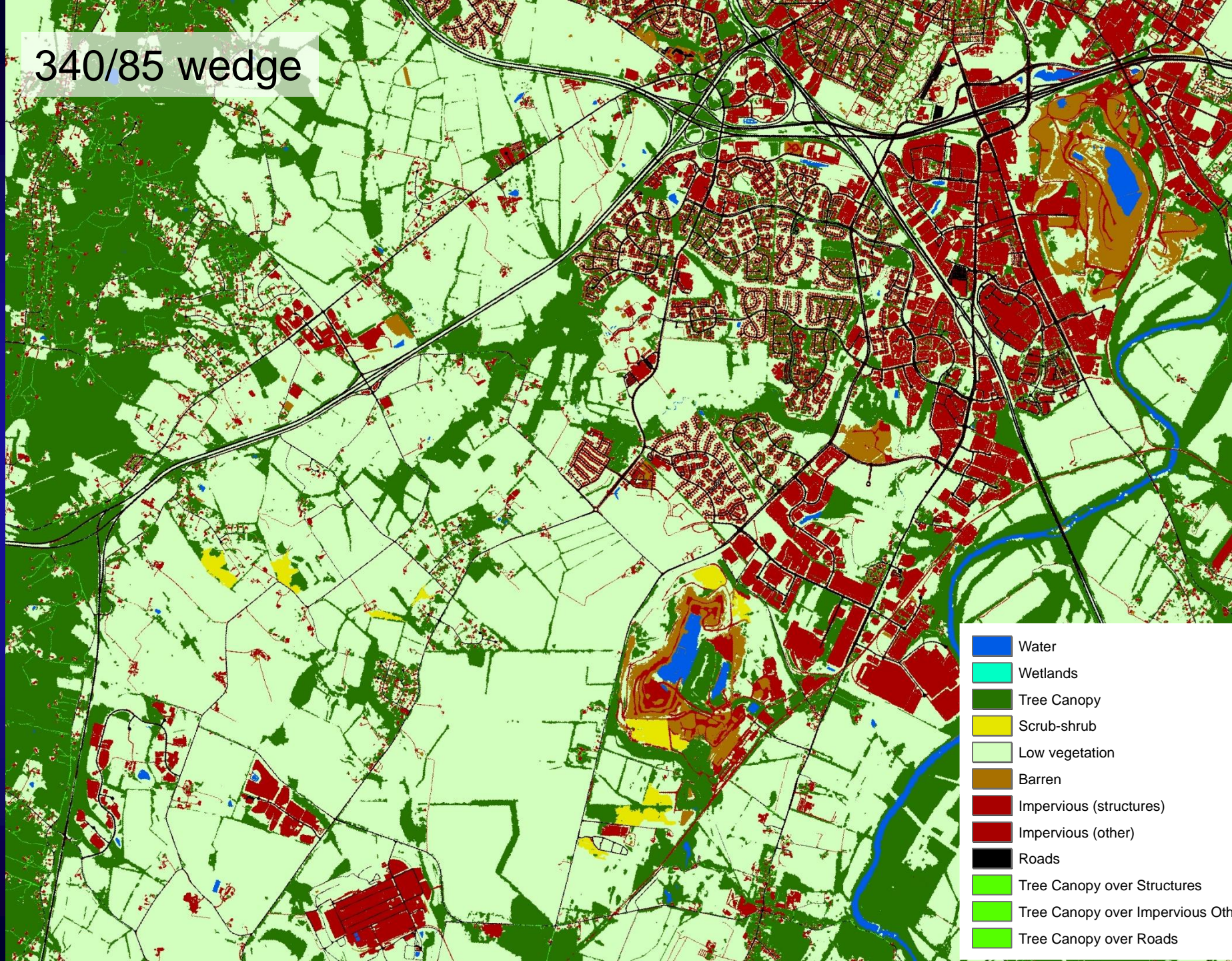
Binghamton, New York Phase 6 Land Cover (2013 conditions)



340/85 wedge

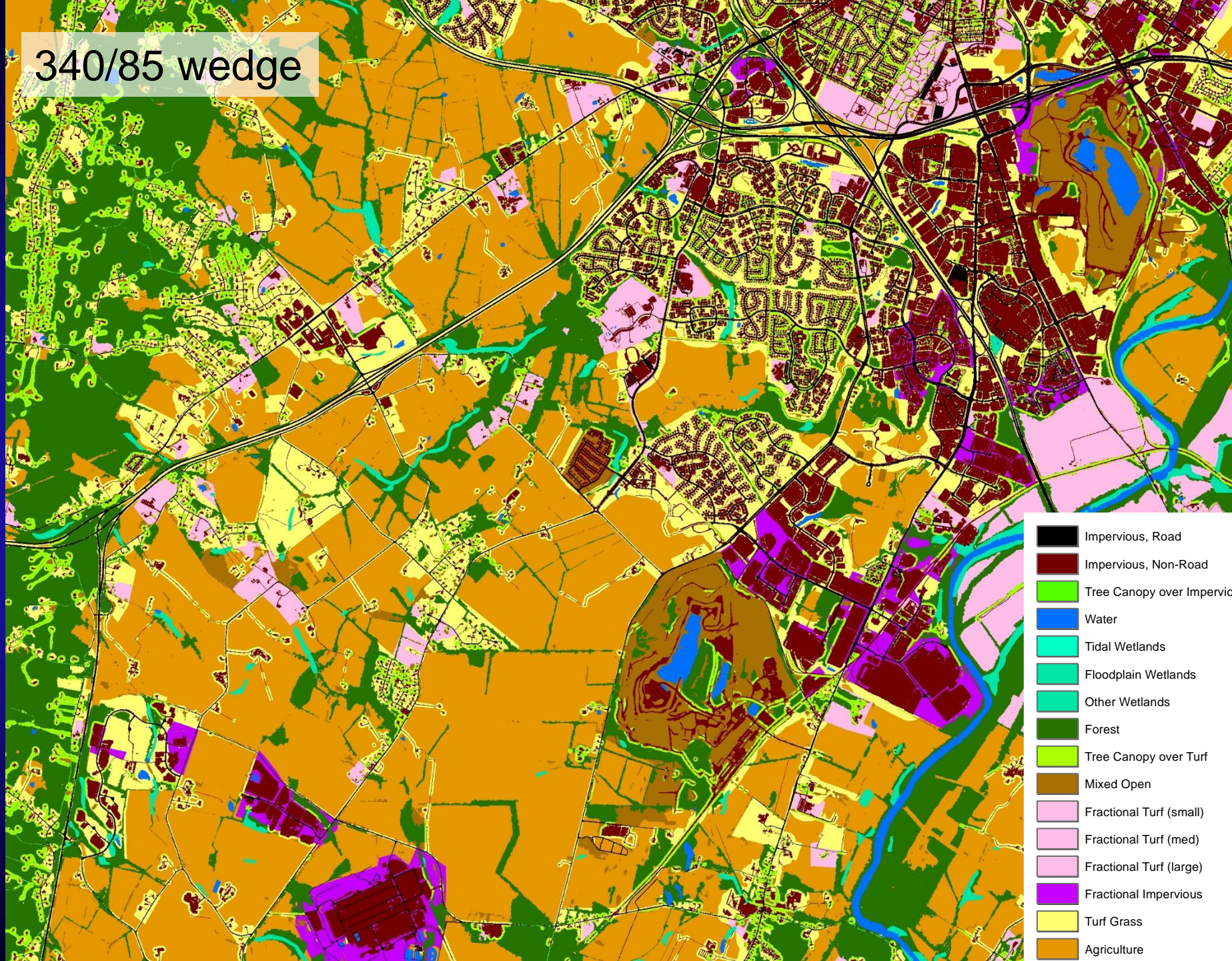


340/85 wedge



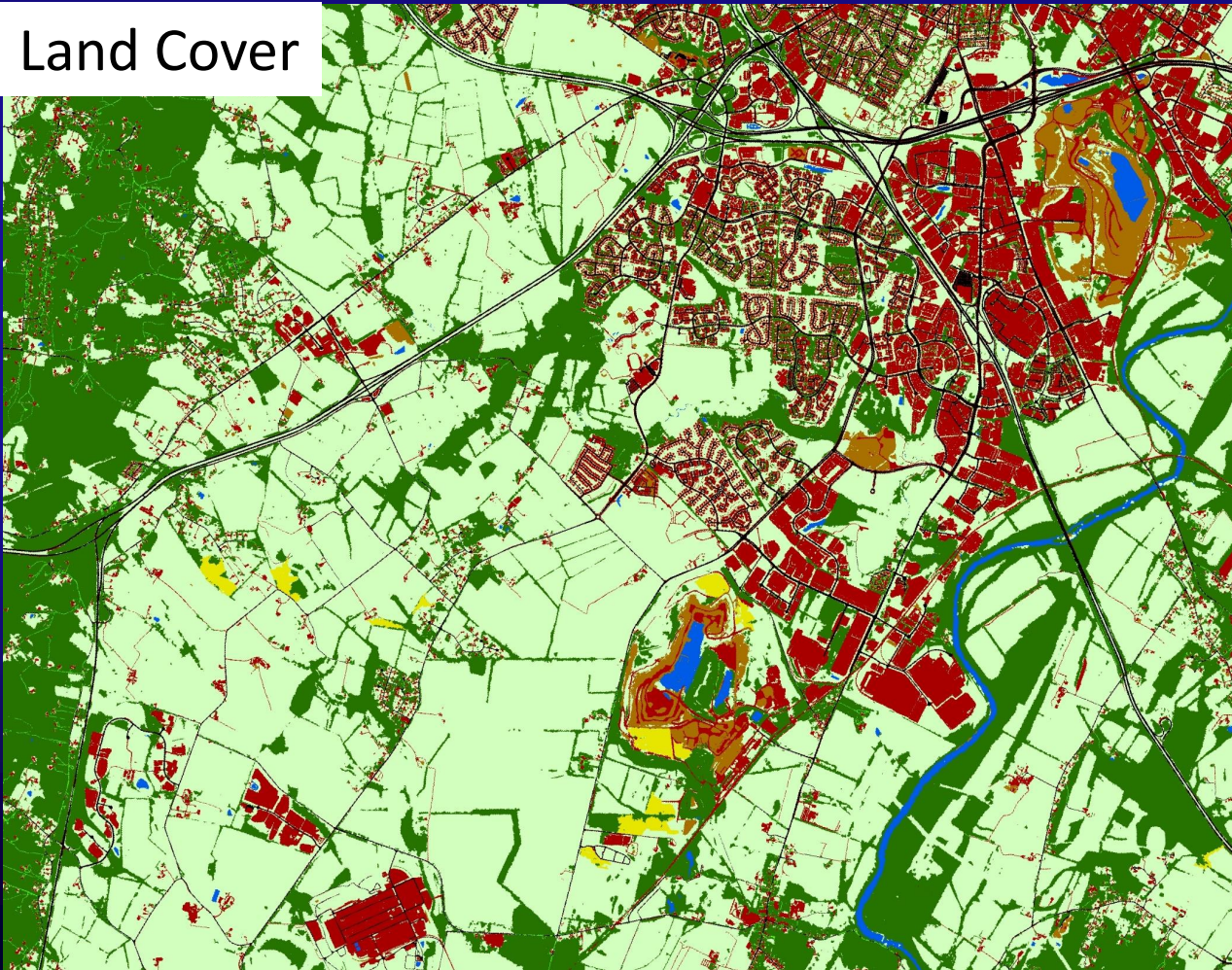
- Water
- Wetlands
- Tree Canopy
- Scrub-shrub
- Low vegetation
- Barren
- Impervious (structures)
- Impervious (other)
- Roads
- Tree Canopy over Structures
- Tree Canopy over Impervious Other
- Tree Canopy over Roads

340/85 wedge

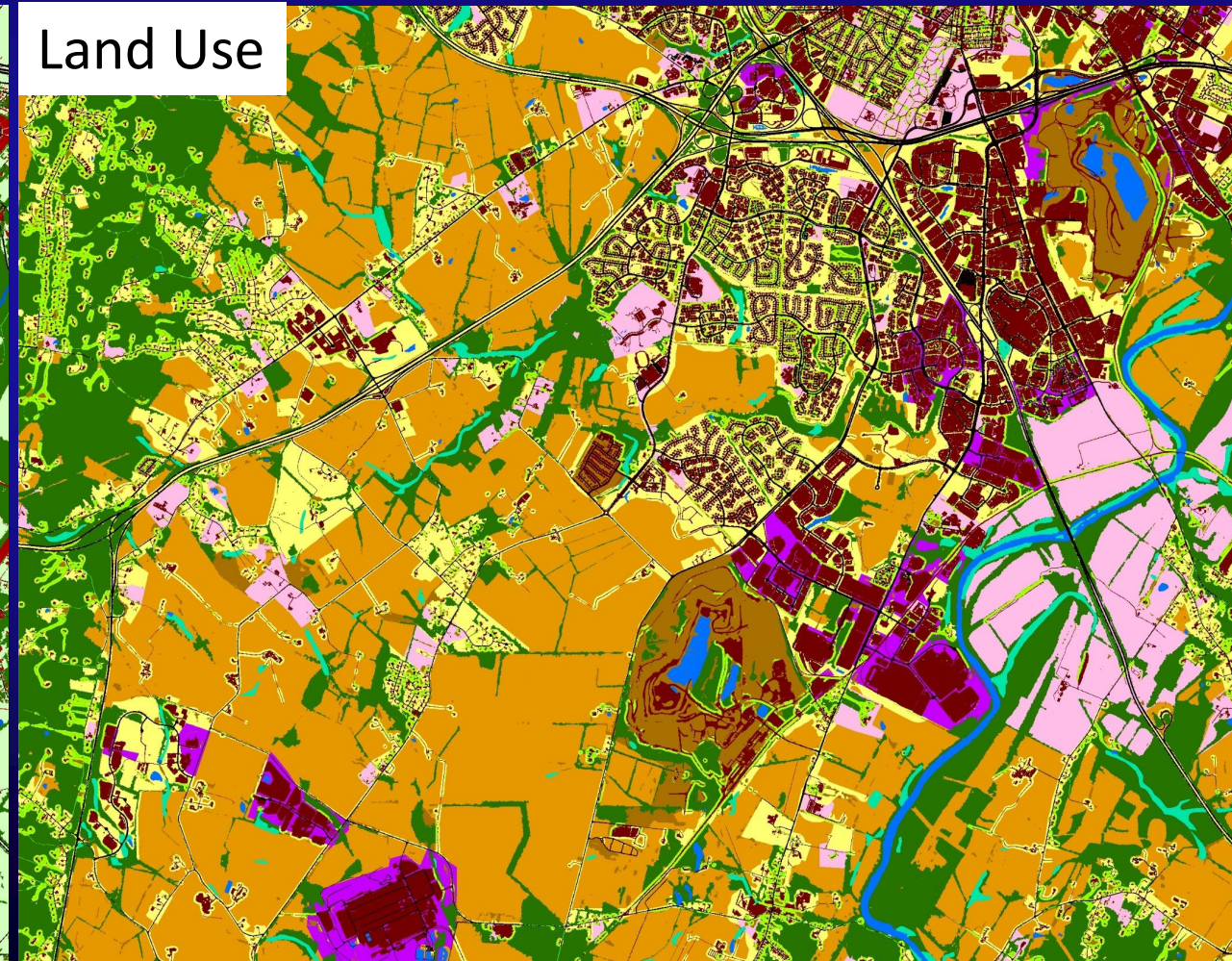


Establishment of a 2013 baseline for monitoring land cover and land use change

Land Cover



Land Use







10/2018

N

Google Earth



Local land use and parcel data



- Low-density Residential
- Recreation
- Agriculture
- Roads

High-resolution land cover data



- Impervious surfaces
- Tree canopy
- Low vegetation
- Water

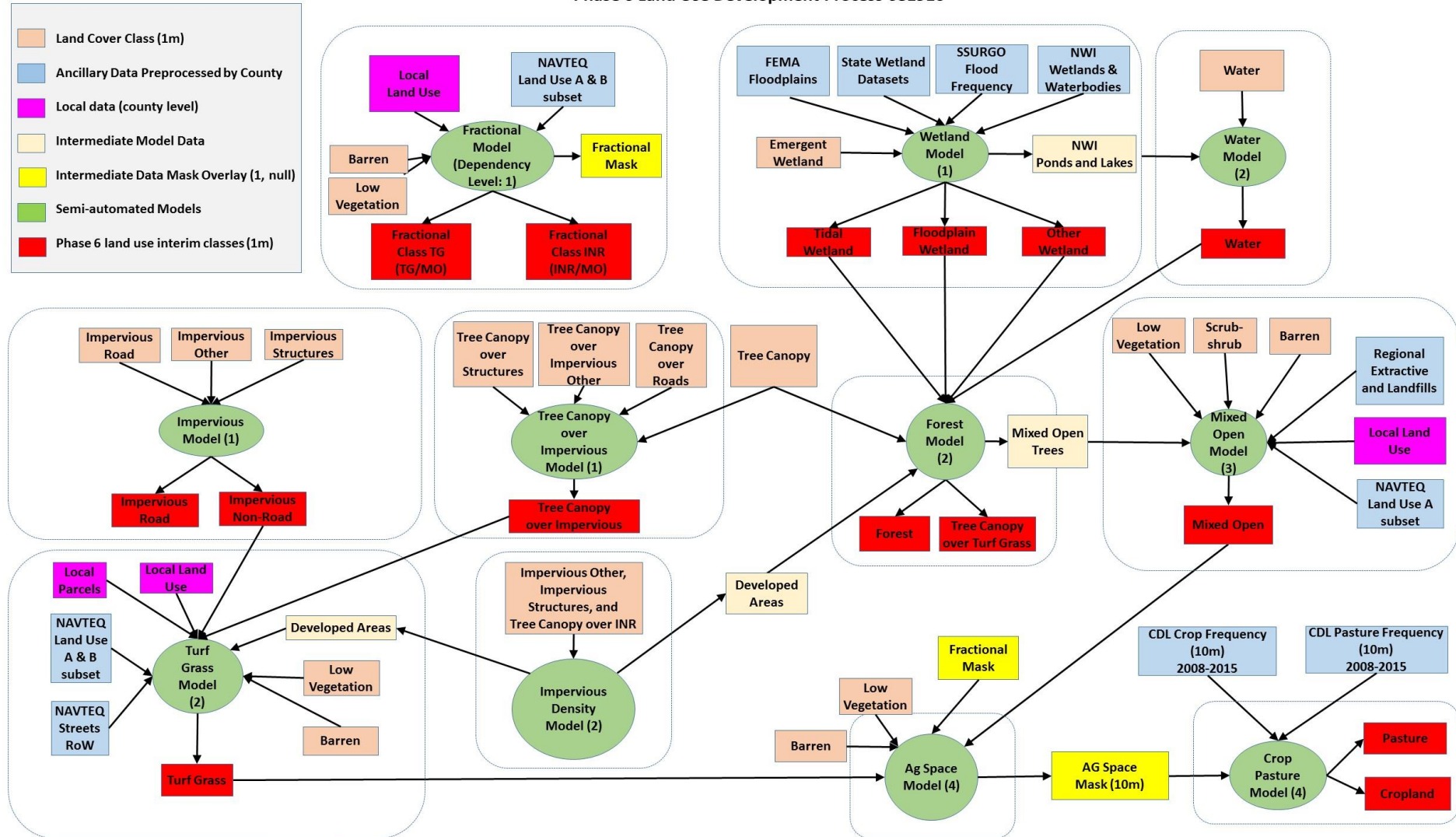


Phase 6 Land Uses

- Impervious-Roads
- Forests
- Turf Grass
- Open Space

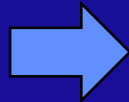
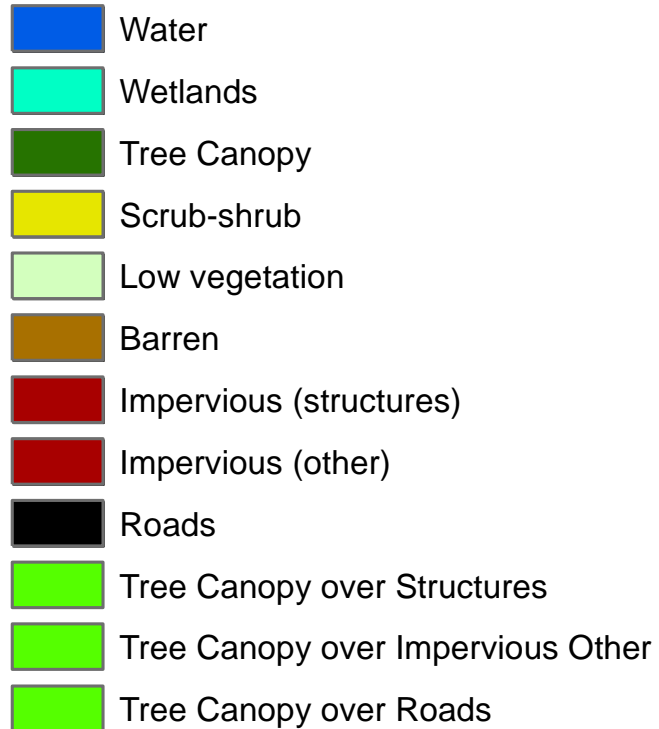
Phase 6 Land Use Model: translating land cover into land use

Phase 6 Land Use Development Process 081916

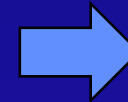


2013 Chesapeake Bay Watershed Land Cover/Use Data

1m Land Cover



1m Land Use



10m Land Cover/Use



Current vs Potential Land Use Classes

Tree Canopy/Scrub-shrub/Herbaceous

- Tree Canopy Over Impervious
- Tree Canopy Over Turf Grass
- Forest
 - Deciduous
 - Evergreen
 - Cultivated (orchards, vineyards)

Impervious

- Roads
- Non-Roads
 - Buildings
 - Resid/ Comm/ Indus.
 - Greenhouses
 - Poultry
 - Dairy
 - Solar fields
 - Other (driveways, parking lots)

Wetlands

- Tidal
- Floodplain
- Other
 - Headwater
 - Isolated

Herbaceous/Barren/Scrub-shrub

- Turf grass
- Pasture
- Cropland
 - Center Pivot
- Mixed Open
 - Harvested Forest (0-3 yrs)
 - Managed succession (post harvest)
 - Natural succession (fallow)
 - Suspended succession (right-of-ways)
 - Extractive (active)
 - Construction (bare pre-development)
 - Bare shore
 - Marine/Estuarine
 - Lotic
 - Lentic

* White classes are current.

* Yellow classes are proposed.