



Landcover Working Group Update and Recommendations

Working Group History

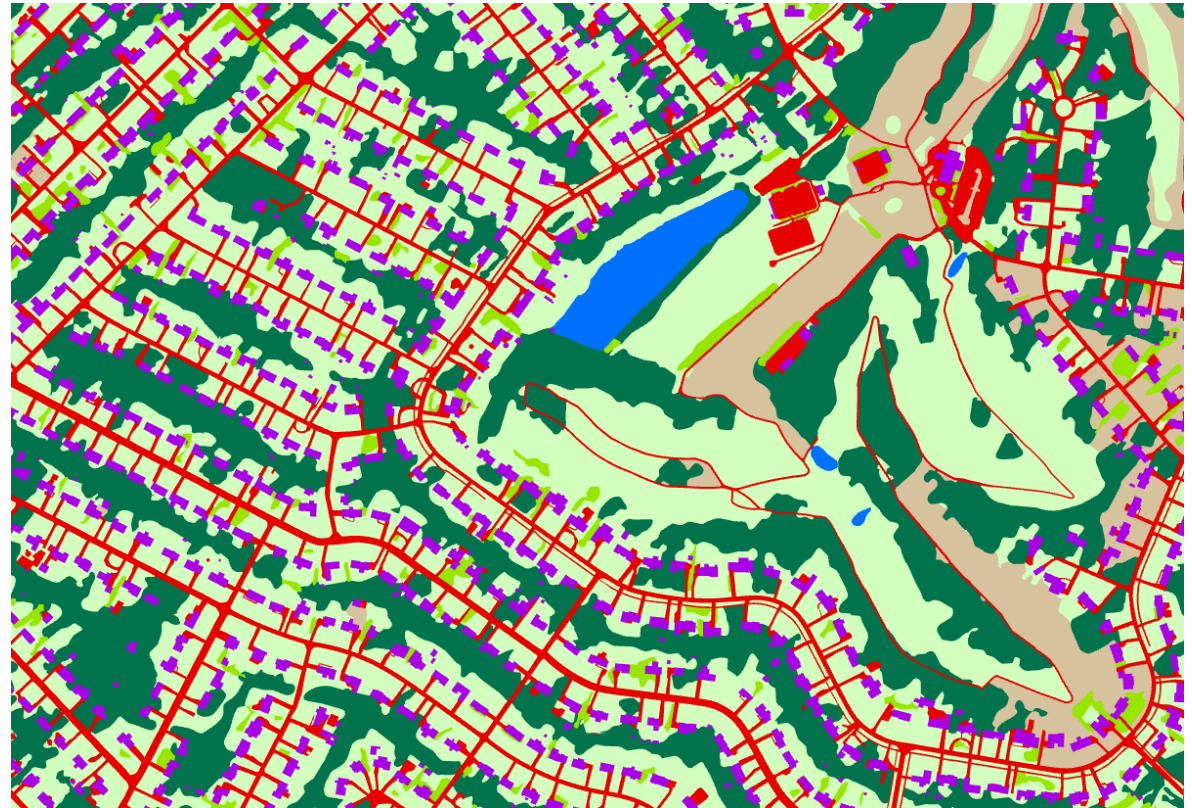


Landcover Uses

1. Apply land cover data to land use planning
2. Monitor changes in impervious surface that may affect stormwater flow and/or billing
2. Identify areas where forest cover has changed that may affect water quality
4. Monitor riparian buffers where forest cover is expected to be sustained
5. Identify areas that are clear cut or change from forested or cultivated to developed
6. Analyze water resources for watershed characterization
7. Identify areas where wetland cover has changed to inform floodplain management
8. Identify areas that are floodplains, small and isolated wetlands, longleaf pine forests, and rock outcrops to help identify priority lands for conservation
9. Predict wetland areas or stream locations using models
10. Monitor properties over time that qualify for “present use value” in county tax appraisal
11. Estimate the areas within property boundaries that are forested or cultivated for property tax appraisal purposes
12. Identify and/or analyze vegetation species related to wildlife habitat
13. Monitor terrestrial plant communities
14. Identify and/or analyze tree type for urban forestry planning
15. Assess timber condition and value in areas of interest

2018 Priority Requirements

- Ground resolution of 1-meter or better in a raster product
- Reliable distinction between what is classified as impervious surface, tree cover, farm fields, and wet areas at a minimum
- Frequency of at least annual classification to detect land cover change



2018 Recommendations

- The Working Group for Land Cover recommends that the Statewide Mapping Advisory Committee recognize significant business needs for land cover data, and pursue research on sources of imagery to be classified, tools and techniques, and strategies for targeting land cover classification and products to satisfy business needs.
- North Carolina should not “go it alone” and collaborate with national efforts including GAP Analysis/LandFire, NOAA land cover mapping, and US EPA land cover mapping.
- The most valuable land cover dataset for the most business needs may be statewide, NLCD level-2 classification, 1-meter ground resolution, annual, produced within 12 months, and easily accessible as a raster dataset.

Current Review of Recommendations

- North Carolina should not “go it alone” and collaborate with national efforts including GAP Analysis/LandFire, NOAA land cover mapping, and US EPA land cover mapping.

NOAA C-CAP data provides a cost-effective partnership for obtaining landcover.

- The most valuable land cover dataset for the most business needs may be statewide, NLCD level-2 classification, 1-meter ground resolution, annual, produced within 12 months, and easily accessible as a raster dataset.

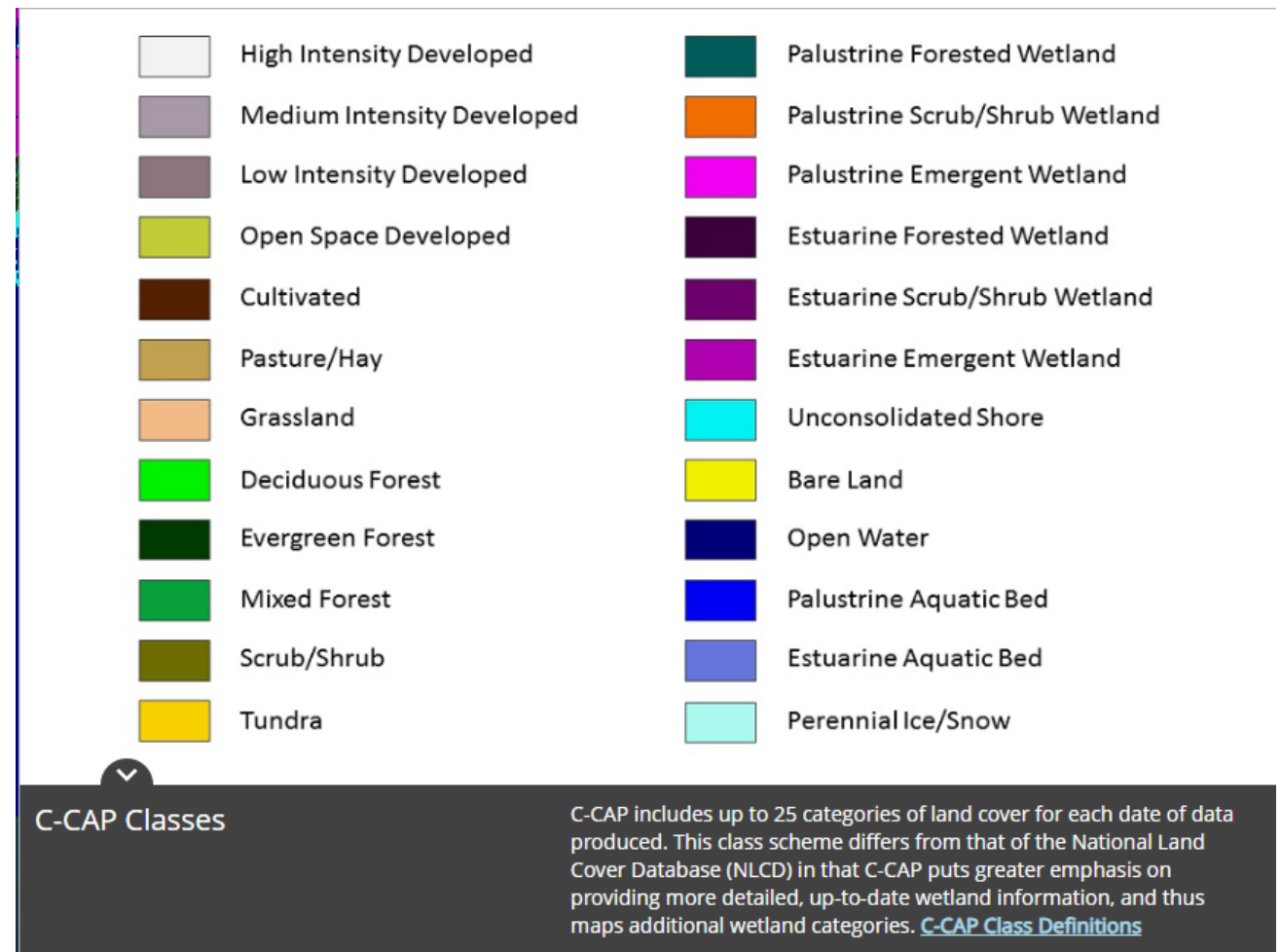
NOAA C-CAP data is 1-meter, 4-6 year, and contains multiple wetland categories.

An aerial photograph of a residential neighborhood. The image shows several houses with varying roof colors (grey, brown, white) scattered among lush green trees. Winding asphalt roads and driveways connect the properties. The overall scene is a typical suburban or rural residential area.

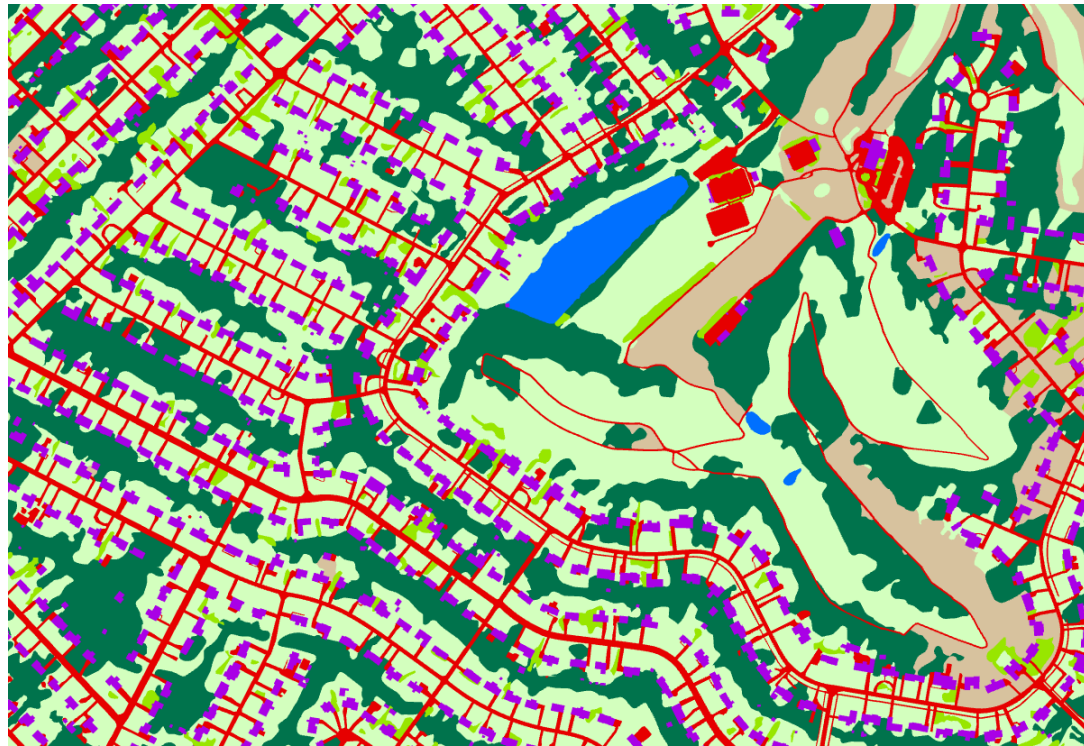
Current Status

C-CAP Status

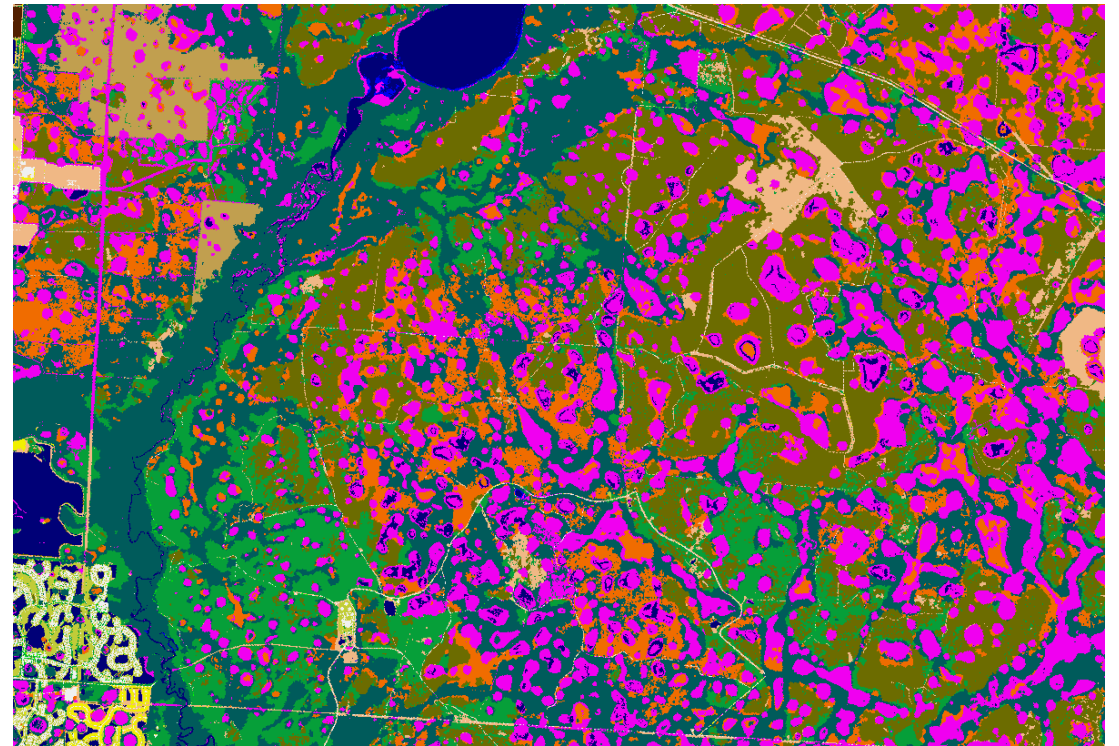
- Coastal County coverage of 3 categories:
 - Water
 - Impervious Surfaces
 - Canopy
- Opportunity for partnership to produce full classification statewide
- Expanded Wetland classifications available



C-CAP Products



New Hanover County Pilot



Tampa Enhanced Wetland Pilot

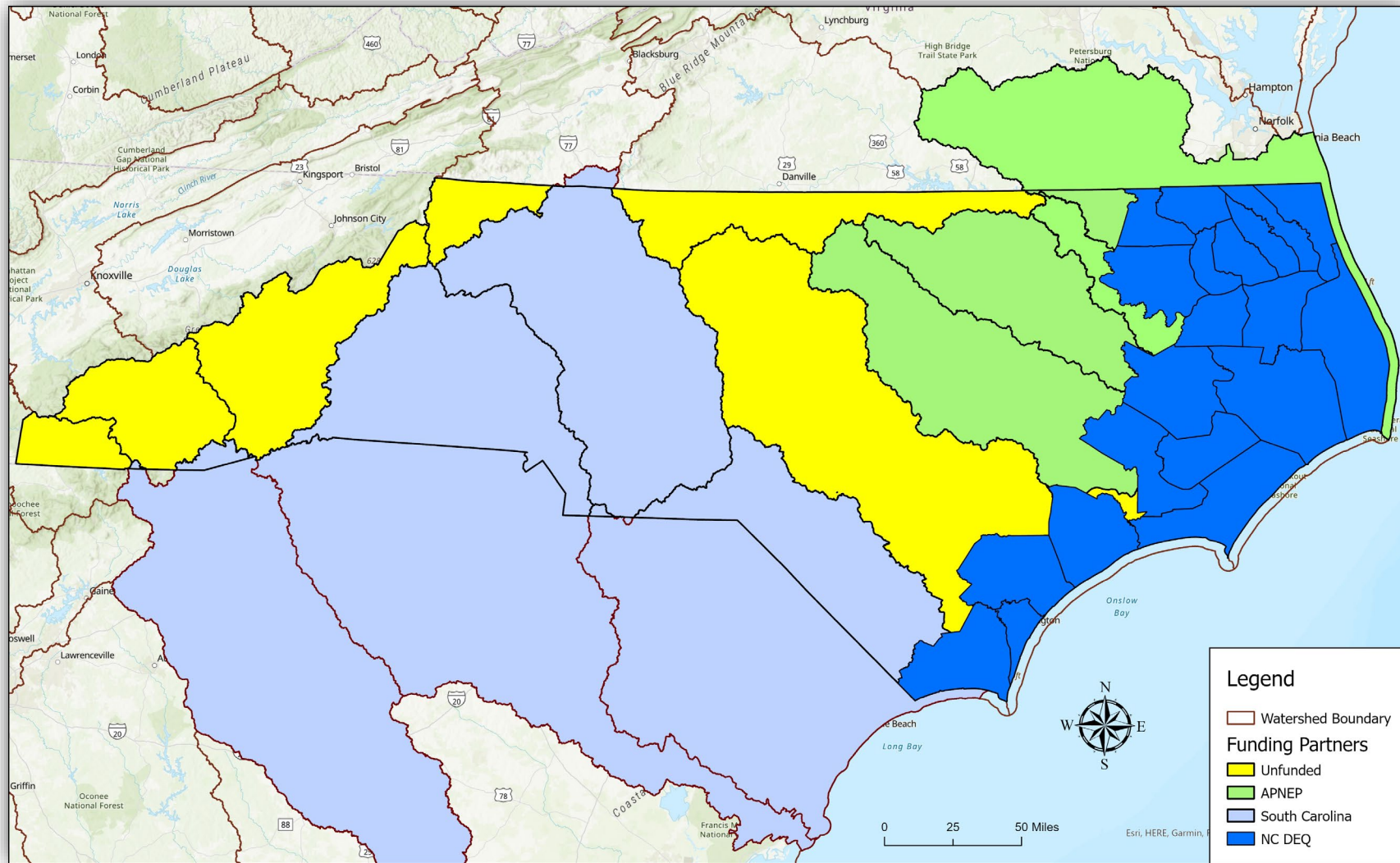
NC DEQ and APNEP Partnership Status

Wetlands Mapping Interagency Working Group

- NC Coastal Reserve
- NC Division of Marine Fisheries
- Albemarle Pamlico National Estuary Partnership
- NC Division of Coastal Management
- NC Division of Water Resources
- NC Natural Heritage Program
- NC Coastal Federation
- NC DOT-Ecosystem Planning and Restoration
- NOAA
- Duke University
- Wake Forest University
- Audobon
- Pew
- UNC Wilmington
- East Carolina University



Funding Status



Funding Status

| Area | Estimate | Funding partner | Funding Secured | Funding Needed |
|---------------------------------|---------------------|-------------------------------------|-----------------|----------------|
| CAMA Counties | \$400,000 | Division of Marine Fisheries | Yes | |
| APNEP watersheds (Outside CAMA) | \$400,000-\$425,000 | APNEP | Yes | |
| Upper Roanoke* | \$225,000-\$275,000 | Virginia DEQ | Partial | \$82,500* |
| Cape Fear (Outside CAMA) | \$225,000-\$275,000 | | | \$275,000 |
| Western NC | \$175,000-\$200,000 | | No | \$200,000 |
| Watersheds draining to SC | | South Carolina Office of Resilience | Yes | |
| Enhanced Wetland Mapping | \$100,000 | Division of Coastal Management | Yes | |

Recommendations



LWG Recommendations

- 1. Support development of statewide landcover dataset in partnership with NOAA C-CAP.*
- 2. The SMAC and GICC should provide assistance as needed to support partners as they pursue grants and funding to complete statewide mapping.*
- 3. Future work is needed to identify maintenance funding and frequency.*

Questions?

