

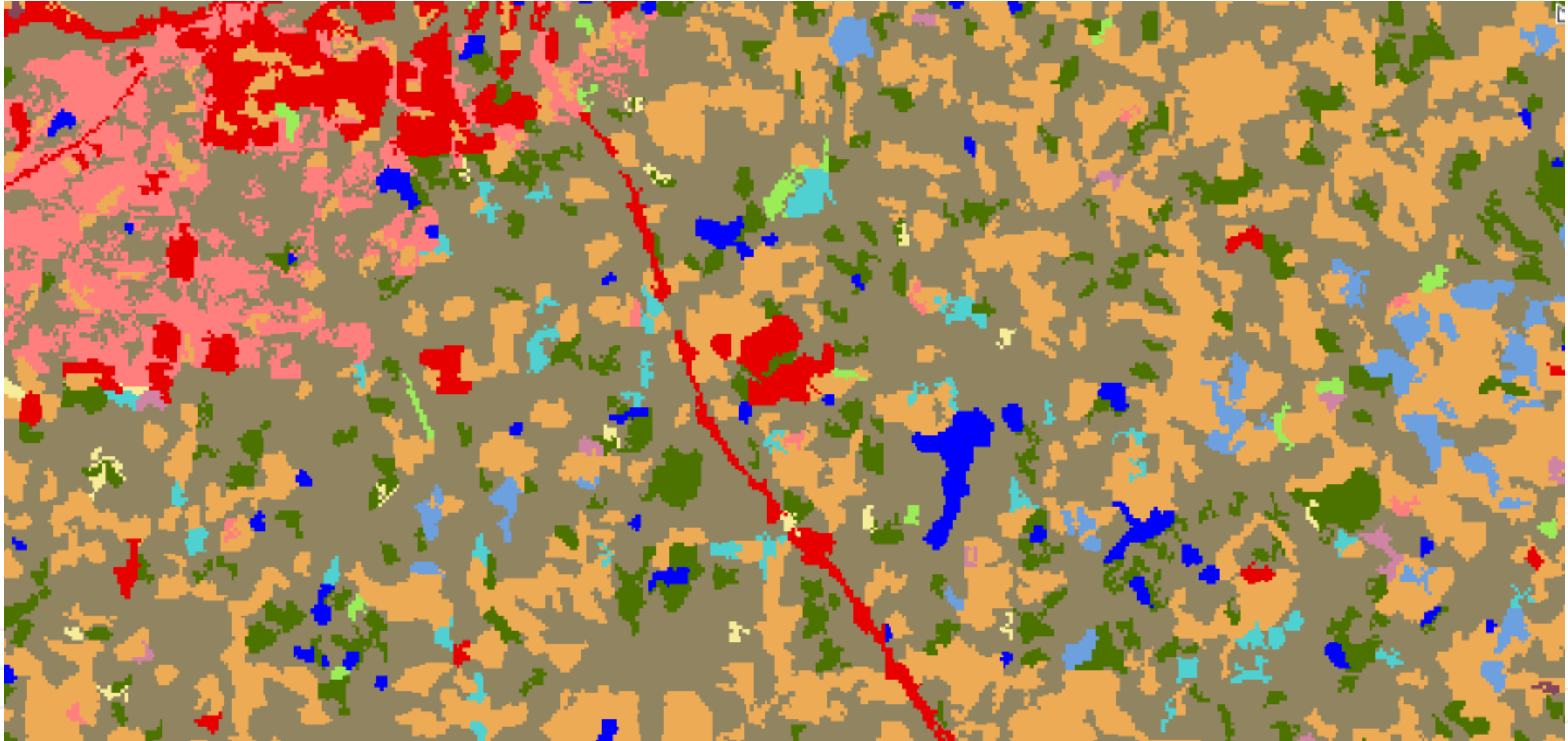
Landcover Working Group Update and Recommendations

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1996 NC Statewide Landcover



Working Group History



Landcover uses

- Land use planning:
 - agriculture, forestry, urban planning, property tax, change detection
- Impervious surfaces:
 - Monitor changes in impervious surfaces- stormwater flooding/billing programs/heat effects
- Trees and forestry:
 - Monitor forest health, changes, and urban canopy
- Riparian areas:
 - Buffers, wetlands, floodplains
- Water quality:
 - wetland health, buffer quality, watershed characterization, floodplain uses
- Conservation:
 - habitat assessment and protection, property acquisition

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



Source: NOAA C-CAP

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.

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.

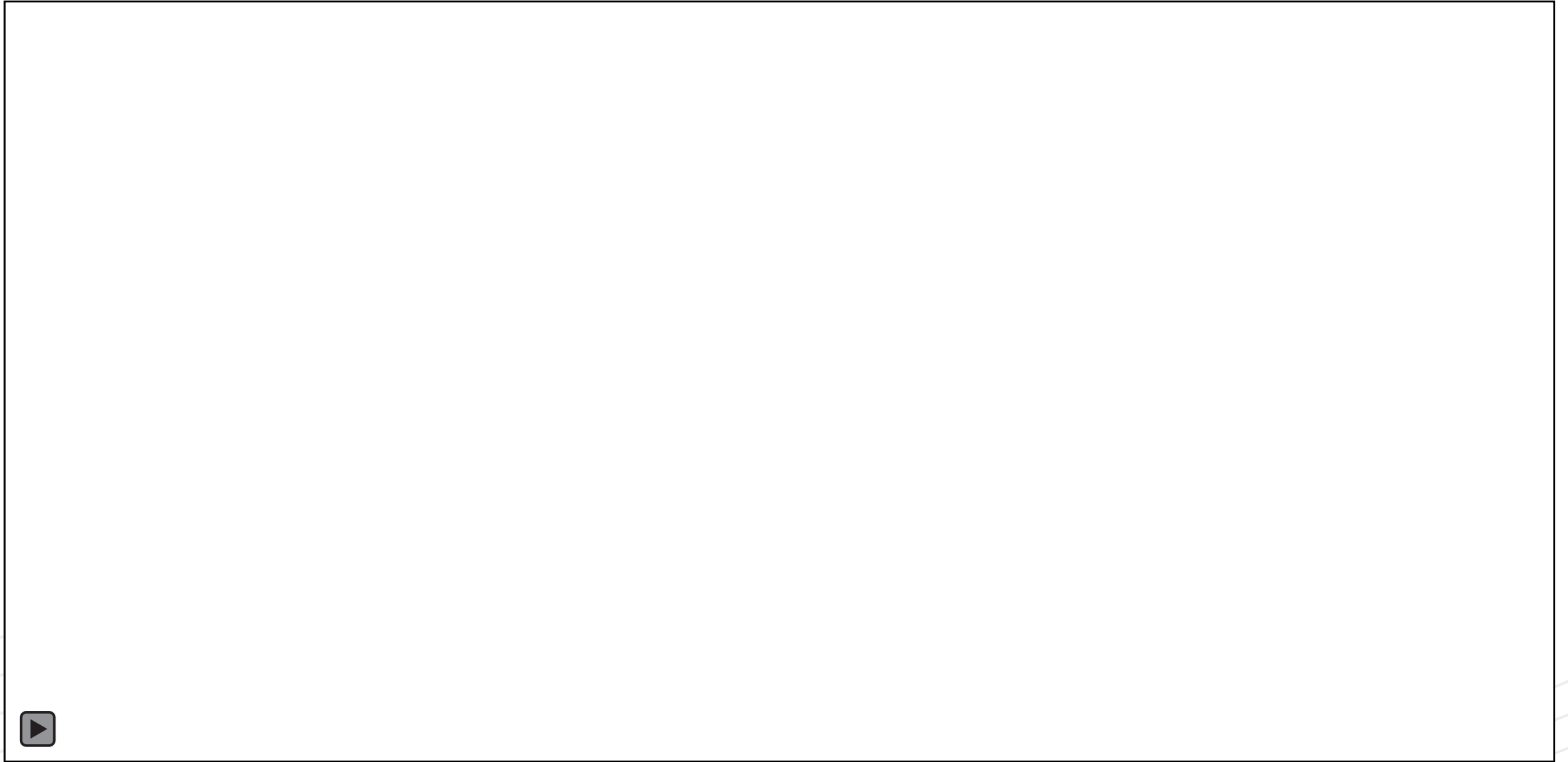
- The most valuable land cover dataset for the most business needs may be statewide, NLCD level-2 classification, 1-meter ground resolution, annual, produced within 12 months, and easily accessible as a raster dataset.

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

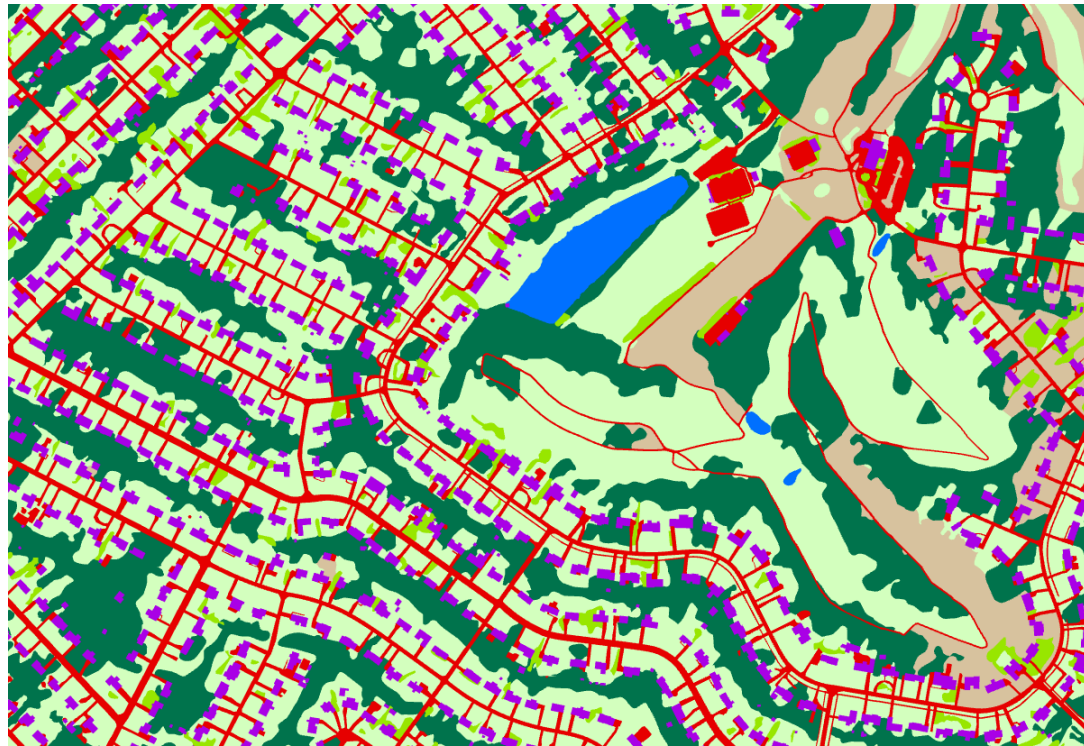


NOAA Coastal Change Analysis Program C-CAP

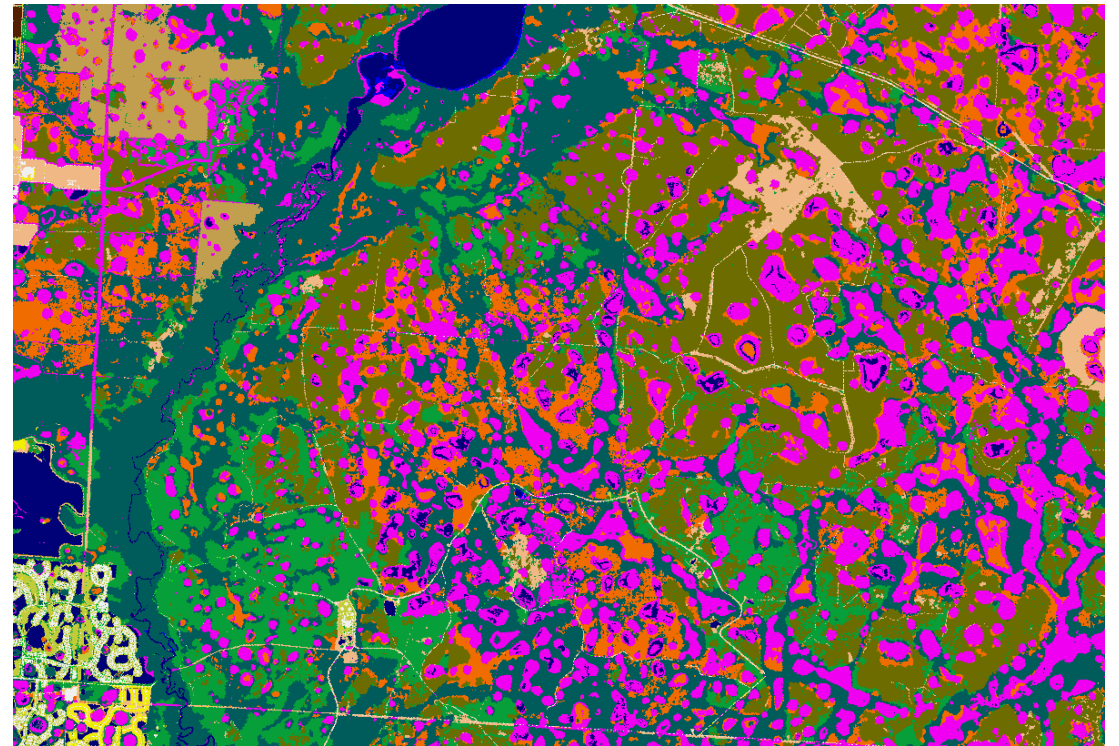
Landcover: Change Detection



C-CAP Products



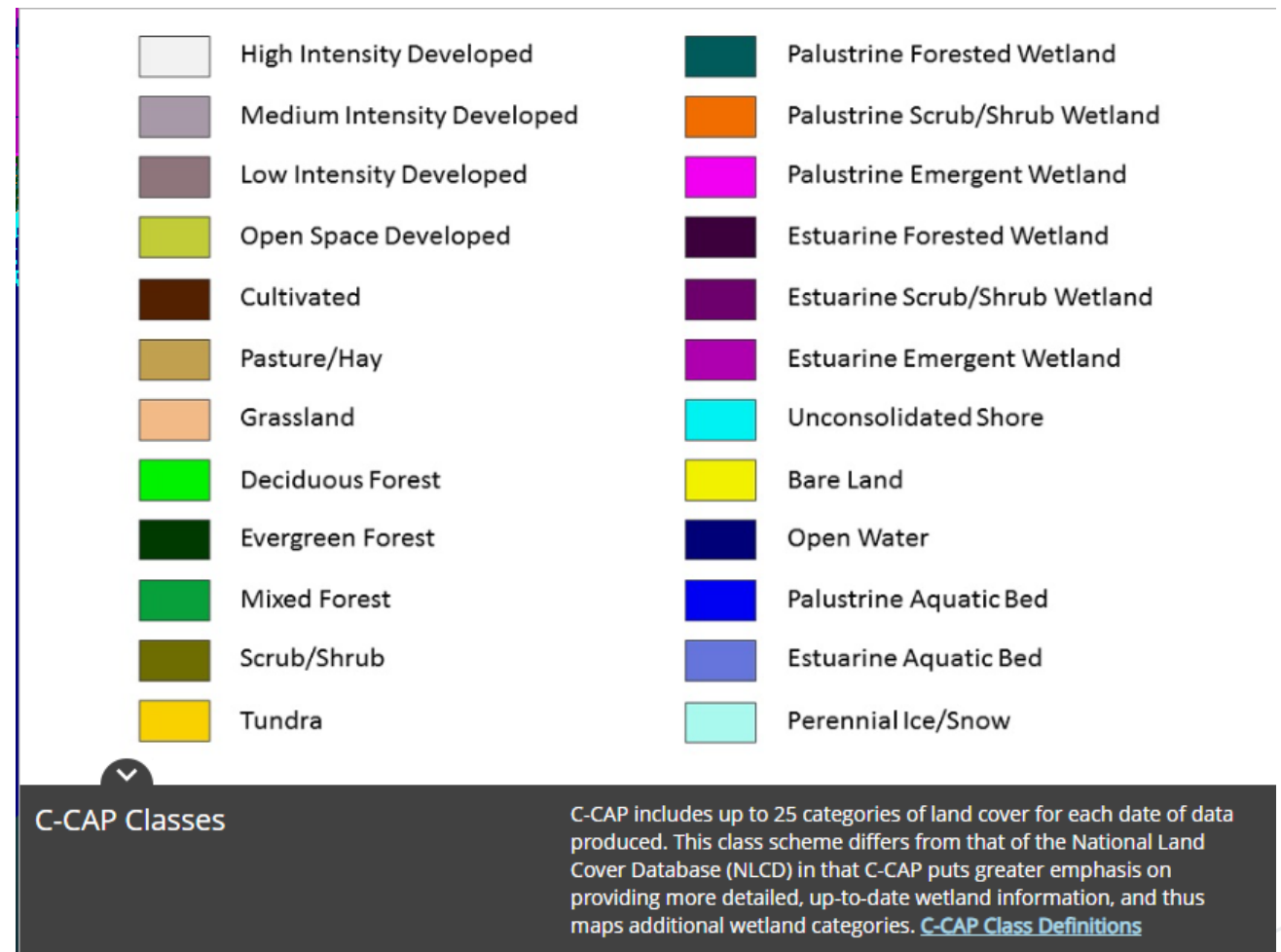
New Hanover County Pilot



Tampa Enhanced Wetland Pilot

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



NC DEQ and APNEP Partnership Status

DEQ Working Group Needs

APNEP- Wetland monitoring and assessment

DEQ – Coastal Habitat Protection Plan 2021 Amendment

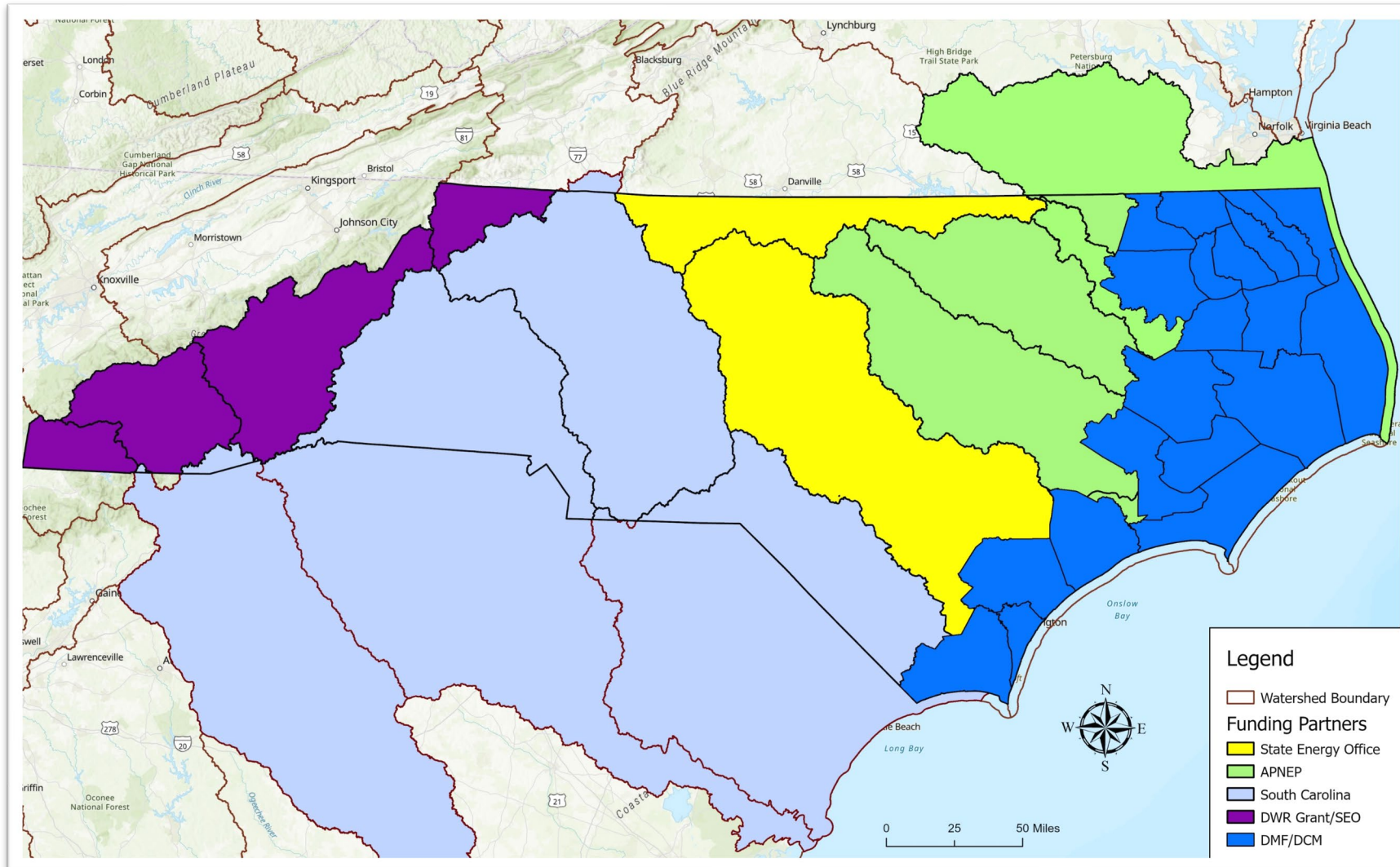
- *Protection and Restoration of Wetlands through Nature-based Solutions*
- *Coastal Habitat Mapping and Monitoring to Assess Status and Trends*



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/ NC Energy Office	In progress	\$225,000*
Cape Fear (Outside CAMA)	\$225,000-\$275,000	NC Energy Office	In progress	\$275,000
Western NC	\$175,000-\$200,000	DEQ grant/Energy Office	In progress	\$200,000
Watersheds draining to SC		South Carolina Office of Resilience	Yes	
Enhanced Wetland Mapping	\$100,000	Division of Coastal Management	Yes	

New as of February 12: Executive Order 305

AN ORDER TO PROTECT AND RESTORE NORTH CAROLINA'S CRITICAL NATURAL AND WORKING LANDS

“A comprehensive understanding of natural and working lands is essential to inform the creation of environmental, conservation, climate, and resilience policies. To this end, specified Cabinet agencies shall undertake the following initiatives to close natural and working lands knowledge gaps:

- Within six (6) months of the signing of this Executive Order, DEQ shall develop a methodology to update existing wetland mapping data for North Carolina that may be employed to estimate the number acres of wetlands that may lose protections as a result of *Sackett v. EPA*, and the North Carolina Farm Act of 2023.
- Within four (4) months of the signing of this Executive Order, DEQ shall evaluate the feasibility of obtaining updated high-resolution remotely sensed land cover data state-wide to assist in the assessment of type and extent of natural and working lands, including wetlands. The outcome should provide a full 20-class high resolution land cover map. The map will support planning for community resilience to climate change, prioritizing habitat and wetland conservation and protection, and providing a foundation to assess land use change over time.”

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?

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