



Executive Order 305 – DEQ Directives and Status

Jim Stanfill, Deputy Director, Division of Mitigation Services, NC DEQ



Governor Cooper's Executive Order 305

- State Goals
 - Protect, restore, and enhance natural and working lands
 - 2040 land protection and restoration goals:
 - a. Conserve one million new acres.
 - b. Restore or reforest one million new acres.
 - c. Plant one million trees in urban regions.
- Specific Directives
 - **Addressing Knowledge Gaps**
 - Protecting Vulnerable Wetlands and Other Critical Ecosystems
 - No-Net Loss and Lead-by-Example Policies
 - Native Plant Policy
 - Promoting Statewide Conservation and Resilience
 - Evaluation, Monitoring, and Reflexive Reform

State of North Carolina

ROY COOPER
GOVERNOR

February 12, 2024

EXECUTIVE ORDER NO. 305

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

WHEREAS, N.C. Const. Art. XIV, § 5 establishes that it is the policy of this State to conserve and protect its lands and waters for the benefit of all its people, that it is a proper function of the state to control and limit the pollution of our air and water and to preserve in every other appropriate way as a part of the common heritage its forests, wetlands, estuaries, beaches, historical sites, open lands, and places of beauty; and

WHEREAS, pursuant to N.C. Gen. Stat. § 113A-3 it is the "...policy of the State to seek, for all of its citizens, safe, healthful, productive and aesthetically pleasing surroundings; to attain the widest range of beneficial uses of the environment without degradation, risk to health or safety; and to preserve the important historic and cultural elements of our common inheritance" and

WHEREAS, the State acknowledges the intrinsic value of its natural lands in providing unparalleled opportunities for outdoor recreational activities, such as hunting, fishing, hiking, camping, and other nature-based pursuits, which foster a deep appreciation for the State's diverse ecosystems and abundant wildlife and supports billions of dollars of economic activity; and

WHEREAS, on May 25, 2023, the Supreme Court of the United States issued a decision in *Sackett v. EPA*, 143 S. Ct. 1322, 598 U.S. 651, that dramatically reduced federal protections for isolated wetlands, which will have permanent and significant consequences for the environment and people of the state; and

WHEREAS, on June 27, 2023, the General Assembly overrode Governor Roy Cooper's veto to enact the North Carolina Farm Act of 2023, which rolled back state protections for wetlands without first studying the environmental consequences of such an act for the people, environment, economy, and flood resiliency of the State of North Carolina; and

WHEREAS, the State recognizes the paramount importance of wetlands in providing flood control, water pollution filtration, aquifer regeneration, outdoor recreation, critical habitat, biodiversity; and reduction of wildfire risk to communities; and

WHEREAS, North Carolina is experiencing the impacts of climate change including more frequent and intense hurricanes, flooding, extreme temperatures, droughts, sea level rise, and saltwater intrusion, all of which are already imperiling the people and economy of North Carolina, and causing more than 250 billion dollars in damages in recent years; and

Background

- *Sackett v. EPA* U.S. Supreme Court decision reduced federal protections for wetlands and waterbodies with no surface connections to U.S. waters.
- 2023 NC Farm Bill mandated that state wetland protections can be no more stringent than those at the federal level.
- North Carolina resource-rich wetlands are impacted by these decisions.

2023 DEQ Initial Evaluations of Sackett Decision

DCM Wetland Types to Assess Risk

Total Acreage	Risk Levels	Percent
1,504,530	Low Risk	34.5%
367,672	Moderate Risk	8.4%
2,490,397	High Risk	57.1%
4,362,599	Total	100.0%

DCM HGM Classifications to Assess Risk

Total Acreage	Risk Levels	Percent
1,553,782	Low Risk	35.4%
40,653	Moderate Risk	0.9%
2,798,345	High Risk	63.7%
4,392,780	Total	100.0%

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Task 1. Feasibility of Obtaining High Resolution Remotely Sensed Land Cover Data

- State-wide data set
- Full 20-class high resolution land cover map
- Assist in the assessment of type and extent of natural and working lands, including wetlands.
- Support other planning initiatives such as
 - community resilience
 - prioritizing habitat and wetland conservation
 - Foundation to assess land use change over time

EO 305 – DEQ Directives

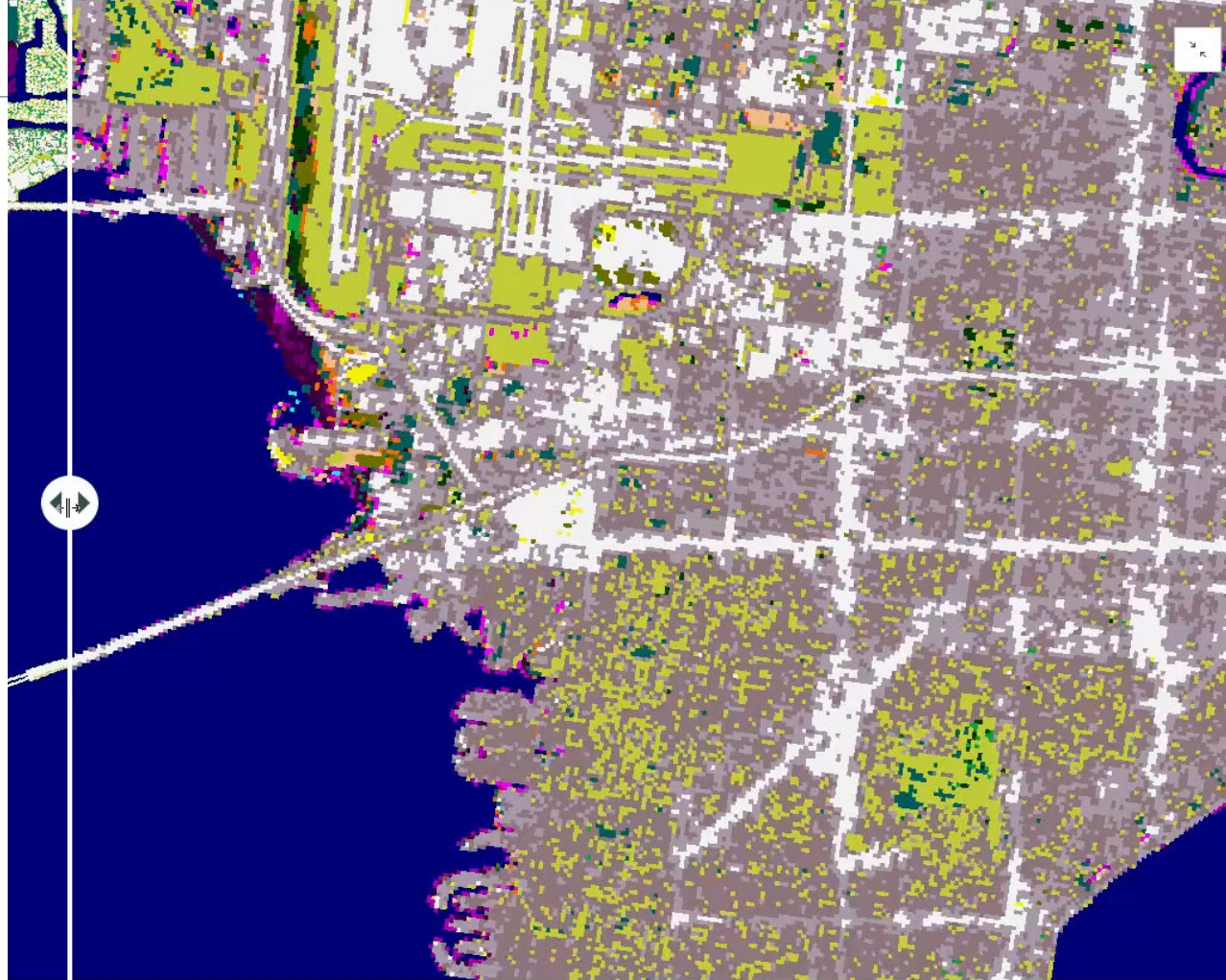
Task 1. Feasibility of Obtaining High Resolution Remotely Sensed Land Cover Data

Status

- Feasibility Completed
- Acquisition in Process
 - DMF, DCM, DWR and the APNEP coordinating with NOAA CCAP to produce a Level 2 (20-class) interpretation of the State at 1-meter resolution.
 - Data is 900 times more detailed than older 30-meter data sets
 - DCM provided additional funding to map high and low coastal marsh wetlands
 - APEP also coordinating with CHHP and (CHPP) and Statewide Mapping Advisory Committee (SMAC), a statutory committee of the N.C. Geographic Information Coordinating Council (GICC).
- Final Product expected mid to late 2025

High Resolution Remotely Sensed Land Cover Data

Comparison 30 meter to 1 meter



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Task 2. Develop Methodology to Update Wetland Maps

Status Complete

- Inventoried 18 wetland mapping efforts in NC
- Developed Several Methodologies for Updating NC Wetland Maps

Primary

- Coastal Plain: DCM Wetland Type Data as base layer and update using new 1-meter CCAP data
- Piedmont and Mountains – Utilize NWI as base layer and update using C-CAP canopy/impervious/water data layer and 1-meter CCAP data when available

Alternatives:

- NCDOT's new innovative machine learning and artificial intelligence model
- Update NWI
- Update using NWI +
 - Adds HGM, landscape position, landform, water flow path, and waterbody type features
 - \$4.1 million estimate for entire state

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Task 3. Develop Methodologies to Evaluate Sackett Effect

Status – Completed

- Approach I. Wetland Type
- Approach II. Hydrogeomorphic Classification
- Approach III. Hydrological Connectivity

Alternate Hydrological Connection Method

- Environmental Defense Fund Approach
- EDF found 50-70% at risk and up to 90% depending on federal interpretation

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Task 4. Publish Special Boundary Maps

- Mountain Bogs
- Pocosin Wetlands
- Carolina Bays
- Coastal Wetlands
- Sea Marsh Corridors

Status Complete.

[Sign In](#)

Executive Order 305 Hub

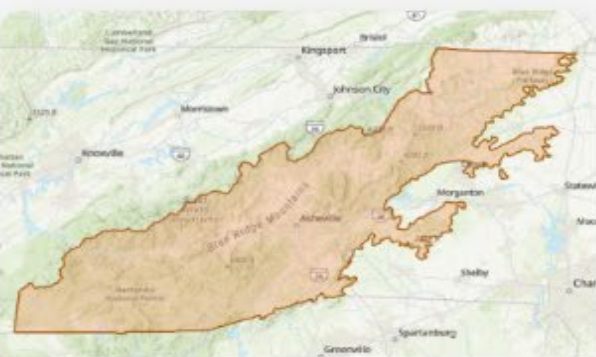
Executive Order 305 Hub

NC Department of Environmental Quality Executive Order 305 Workgroup

When the Sackett v. EPA Supreme Court Case narrowed definitions of protected wetlands at the federal jurisdictional level, North Carolina Governor Cooper passed Executive Order 305, tasking DEQ and other state departments with various initiatives to increase knowledge of natural and working lands with the overarching goal of ecosystem protection.

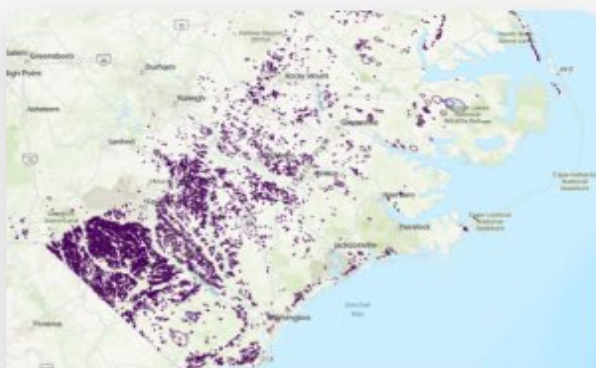
Our Mission

To address knowledge gaps about natural and working lands through efforts described in the order, including proposing a method to produce an updated wetland map for North Carolina, evaluating the potential effect of the Sackett decision on wetlands, and publishing geographic boundary maps for special wetlands of interest.



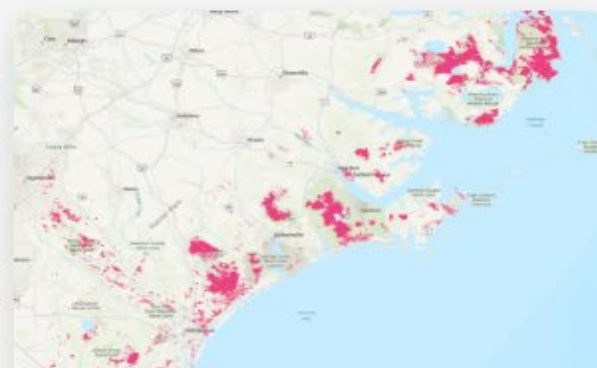
North Carolina Mountain Bogs

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NC Carolina Bays

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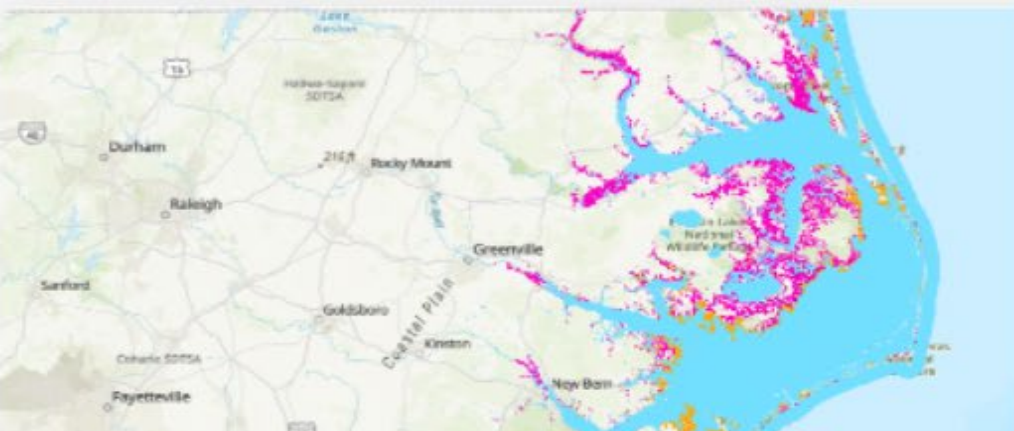
North Carolina Pocosins

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North Carolina Coastal Marshes

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North Carolina Saltmarsh Migration Corridors

This web application contains saltmarsh migration corridors for sea level rise scenarios up to five feet, in half foot increments, for North Carolina based on NOAA 2016 marsh...

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Task 5. Research Request to address knowledge gaps

DEQ shall make a research request through the NC Project Portal to investigate the social, economic, and environmental value and impacts to Natural Working Lands from the Sackett and Farm Bill decisions.

Research Questions

Historical Analysis

1. What are the estimated social, economic, and environmental value of conserving natural and working lands in North Carolina by land type, with a special focus on wetlands?
2. What are the estimated social, economic, and environmental impacts, including estimated flood risk, to the state associated with the degradation of wetlands that lost federal or state protections between 2022 and 2023?

Projected Impacts & Solutions

3. What would be the expected costs to the state associated with ongoing and projected wetlands loss over the next 5 and 10 years?
4. What regulatory and legislative policy options could be proposed by the research team for DEQ to address this issue? What are their estimated social, resilience, economic, and environmental benefits, with specific focus on conservation policies, such as the reinstitution of conservation tax credits?

Solicitation

- Responses can be submitted individually or as a team



*pending available resources and cost of implementation

Contacts

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Statement of Interest and SOW Submissions:

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Thank you!

DEQ 305 Portal

<https://nc-wetlands-data-hub-ncdenr.hub.arcgis.com/>

Executive Order 305 Workgroup

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