North Carolina Sentinel Landscape Committee



December 11, 2023

Agenda

1:30 pm	Welcome and Introduction ➢ Committee Member Roll Call ➢ Steve Troxler, Commissioner, NC Department of Agriculture & Consumer Services ➢ Rick Long, Installation Coordinator, NC Department of Military and Veterans Affairs ➢ Jeff Michael, Deputy Secretary, NC Department of Natural and Cultural Resources ➢ Cameron Ingram, Executive Director, NC Wildlife Resources Commission ➢ Dr. Myron F. Floyd, Dean, College of Natural Resources, NCSU ➢ Chester Lowder, Sentinel Landscape Partnership Liaison	Steve Troxler Commissioner of Agriculture Veronica Jamison Farmland Preservation Office Manager
1:35 pm	Reading of Ethics Reminder ➢ <u>ETHICS REMINDER</u>: Under the State Government Ethics Act, the chairman is required to remind all members of their duty to avoid conflicts of interest or appearances of conflicts of interest. If you have any conflict or appearance of conflict of interest with respect to any item on the agenda, please state this for the record and refrain from inappropriate participation on that item.	Steve Troxler Commissioner of Agriculture
1:36 pm	Approval of Minutes for September 12, 2023	Steve Troxler Commissioner of Agriculture
1:40 pm	Addition of the North Carolina Department of Transportation to the North Carolina Sentinel Landscape Committee	Steve Troxler Commissioner of Agriculture
1:50 pm	Committee Member Reports on NC Sentinel Landscape Activities ➢ NCDA&CS Report ➢ NC Department of Military and Veterans Affairs Report ➢ NC Department of Natural and Cultural Resources Report ➢ NC Wildlife Resources Commission Report ➢ College of Natural Resources - NCSU Report ➢ Sentinel Landscape Partnership Report ➢ NC Department of Transportation	Evan Davis Farmland Preservation Director Rick Long Installation Coordinator Jeff Michael Deputy Secretary Cameron Ingram Executive Director Dr. Myron F. Floyd Dean Chester Lowder Sentinel Landscape Partnership Liaison David Harris State Roadside Environmental Engineer
2:20 pm	Update from Sentinel Landscapes Partnership Federal Coordinating Committee	Jaime Simon *External Affairs and Communication, REPI*
2:35 pm	Eastern North Carolina Sentinel Landscape Partnership Program Review	Chris Baillie ENCSL Resilience/Climate Adaptation Coordinator
2:55 pm	Eastern North Carolina Sentinel Landscape Mapping Tool	Corey Hoilman Farmland Preservation Assistant Director Christian Vose Emergency Programs ISS Manager
3:10 pm	Additional Sentinel Landscape Committee Business Items	Steve Troxler Commissioner of Agriculture
3:15 pm	Public Comments	Public Attendees
3:20 pm	Next Meeting, Assignments & Adjournment	Steve Troxler Commissioner of Agriculture

Committee Member Roll Call

- **Steve Troxler**, Commissioner, NC Department of Agriculture & Consumer Services
- **Rick Long**, Installation Coordinator, NC Department of Military and Veterans Affairs
- **Jeff Michael**, Deputy Secretary, NC Department of Natural and Cultural Resources
- **Cameron Ingram**, Executive Director, NC Wildlife Resources Commission
- **Dr. Myron F. Floyd**, Dean, College of Natural Resources-NCSU
- **Chester Lowder**, Sentinel Landscape Partnership Liaison

Ethics Reminder

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Approval of Minutes

- September 12, 2023

Addition of the North Carolina Department of Transportation to the North Carolina Sentinel Landscape Committee

NCDA&CS ENCSL Program Updates

Current Contracts

Farm Name	Military Partner	County	Grantee	Length	Acres
G&H Properties	USAF-SJAFB	Hyde	Working Lands Trust	Perpetual	291.60
Futral Farm	MCIEAST	Onslow	Working Lands Trust	Perpetual	485.01
Jenkins Farm	MCIEAST	Jones	Working Lands Trust	Perpetual	197.30
Small Farm I	MCIEAST	Jones	Working Lands Trust	Perpetual	138.68
Small Farm II	MCIEAST	Jones	Working Lands Trust	Perpetual	31.04
				Total Acres	1,146.63

Military Partnership Agricultural Conservation Easements Since July 2016

Military Partner	Acres Conserved	Easements Recorded	Counties
USAF-SJAFB	10,614.754	19	Bertie, Hyde, Tyrrell, Washington
Navy/MCIEAST	2,214.591	3	Jones, Pamlico
TOTAL	**13,393.735**	**22**	**6**

MOU with NC MAC

Project	Award	Expenses thru October 2023	Balance
NCDA&CS Project	$375,000	$234,917.29	$140,082.71
NCSU Project	$200,000	$94,983.23	$105,016.77
NCFSWC Project	$175,000	$93,553.18	$81,446.82
TOTAL	**$750,000**	**$423,453.70**	**$326,546.30**

NC Department of Military and Veterans Affairs Report

NC Department of Natural and Cultural Resources Report

North Carolina Department of Natural and Cultural Resources

North Carolina Land and Water Fund (NCLWF)

Since the last update, the NCLWF Board has awarded $48.9 million in 2023 grants:

- **17,656 acres protected**
  - **2,100 acres to be added to NC Wildlife Resources Commission game lands**
  - **4,300 acres to NC State Parks**
  - **6,000 acres in local parks and preserves**

- **$10.1 million on over 5,000 acres protecting the military mission near MCAS New River Air Station, Military Ocean Terminal Sunny Point, MCAS Cherry Point, US Army Fort Liberty, USAF Seymour Johnson, and USMC Camp Lejeune.**

North Carolina Department of Natural and Cultural Resources

NCLWF 2023 projects funded in ENCSL Counties

Application Number	Project Name	Amount Funded	Area (acres)	County
2023-026	Johnston County - Kat Property - Neuse River	$1,113,900	72	Johnston
2023-033	NC Coastal Federation - Trail Extension Tract - North River Wetlands Preserve	$964,691	786	Carteret
2023-034	NC Coastal Land Trust - Point Comfort Tract - Chowan River	$200,750	17	Bertie
2023-036	NC Coastal Land Trust - Weyerhaeuser Tract Phase 2 - Newport River	$1,054,730	587	Carteret
2023-047	NC Wildlife Resources Commission - Jordan Timber Tracts - Sandhills Game Land	$1,000,000	2,021	Scotland
2023-066	The Conservation Fund - North River Tract - Thomas Creek	$265,690	158	Carteret
2023-082	Triangle Land Conservancy - Rogerson Tract - Little River Galax Bluffs NA	$637,640	99	Johnston
2023-085	The Nature Conservancy - Beasley Tract - Holly Shelter Game Land NA	$1,676,985	462	Pender
2023-095	Three Rivers Land Trust - Linderman Tract - Cape Fear River	$314,130	86	Harnett
2023-097	Three Rivers Land Trust - Sharpe Tract - Grassy Island	$565,100	205	Richmond
	Total	**$7,793,616**	**4,493**	

NC Wildlife Resources Commission Report

NC State College of Natural Resources Report

Research of Interest

AI-Powered Waste Management System to Revolutionize Recycling

Researcher, Lokendra Pal (College of Natural Resources, NC State University), has partnered with the National Renewable Energy Laboratory, IBM and the Town of Cary with support from the US Department of Energy to generate a process that reduces the 290 million tons of municipal solid waste generated each year. Approximately 50% of this generated waste decomposes in landfills emitting greenhouse gases that account for 25% of today's global warming. The collaborators are developing a "smart waste management system" to identify non-recyclable waste items that can be converted into renewable products, and perhaps energy and fuel.

"The sustainable utilization of non-recyclable waste will empower businesses to utilize it as a renewable carbon resource and will support them in the journey toward a low-carbon economy," Pal said. A component of this work will be improving the recognition and classification of non-recyclable waste. "In sum, our approach supports the development of sustainable solutions for waste valorization, optimizing resource recovery, minimizing waste generation, reducing emissions, and mitigating environmental impacts while engaging municipalities and industries across the supply chain," Pal said. *Publication for the College of Natural Resources News, Andrew Moore, Nov 9, 2023.*

NC STATE UNIVERSITY College of Natural Resources

New Model Adds Human Reactions to Flood Risk Assessment

Researchers at the College of Natural Resources Center for Geospatial Analytics (NC State University) have created a land change model that simulates interactions between urban growth, increased flooding and how humans adapt in response. The new model is designed to offer a more realistic assessment of risk for urban planners, natural resource managers and other local government stakeholders.

Impacts of sea level rise will last for centuries; therefore, flood risk modeling must transition from identifying risky locations to assessing how populations can best adapt. A spatially interactive (i.e., what happens at one location affects another) land change model (FUTURES 3.0) is introduced that can probabilistically predict urban growth while simulating human migration and other responses to flooding, depicting the geography of impact and response.

Accounting for human migration reduced total amounts of projected developed land exposed to flooding by 2050 by 5%–24%, depending on flood hazard zone (50%–0.2% annual probability). The simulation of various “what-if” scenarios with managed retreat appears to be the only intervention with predicted exposure below baseline conditions. In the business-as-usual scenario, existing and future development must be either protected or abandoned to cope with future flooding.

The model, FUTURES 3.0 (FUTure Urban-Regional Environment Simulation), is an open-source, scalable model that includes three components of flood risk: exposure, which refers to urban development patterns; hazard, which includes increases in flooding due to climate change; and vulnerability, or the adaptive response of people living in the area. The model incorporates climate data as well as demographic, socio-economic and flood-damage data and can be applied to different regions and advances local to regional-scale efforts to evaluate potential risks and tradeoffs. For more information: https://cnr.ncsu.edu/2023/11/06/new-model-adds-human-reactions-to-flood-risk-assessment

Publications of Interest

Wildfire Resources In North Carolina

Wildfire risk is an important issue for North Carolina as our state experiences some of the greatest number wildfires in the country. North Carolina has a significant area of wildland urban interface (WUI). A WUI is the transition zone between unoccupied land and land occupied for human development, the zone where these two areas intermingle and can create a situation ripe for a wildfire that can damage homes and neighborhoods or wildfire smoke that can impact one's health. What do we need to know to help counter that risk? Know the resources available to help create fire-adapted communities in your area such as the role of the NC Forest Service as the state's fire management and suppression agency, or the value of fire resistant landscaping, or the availability of the interactive map to monitor the current wildfire danger rating in your area. For that and more resources visit: https://forestry.ces.ncsu.edu/2023/11/wildfire-resources-in-north-carolina

Workshop of Interest

Heir's Property

NC A& T State University and NC State Forestry Extension will offer six heirs property summits in 2024 across North Carolina. Heirs property is land that is jointly owned by descendants of a deceased person whose estate was never handled in probate court and is passed down from generation to generation. These joint owners (heirs) have the right to use the property though none have clear title. Without proper documentation or a court proceeding to clear the "cloudy" title, third parties (like banks, mortgage lending companies and others have no way of knowing who is really entitled to the property and whether any creditor claims apply and thus none of the heirs can sell, mortgage, or make any repairs to the real estate.

These training sessions will provide valuable materials and guidance to avoid involuntary property loss, and protect and preserve family land for generations to come. Learn about the origin and history of heirs property, estate planning, and legal strategies to secure one's property, including opportunities to listen from a panel who are dealing with heirs' issues. For more information: www.ncat.edu/caes/cooperative-extension/small-scale-agriculture-development/hpp.php

Eastern NC Sentinel Landscape Partnership Report



National Sentinel Landscape Partnership

- ***Nov 6-8, 2023 – Association of Defense Communities (ADC) Installation Innovation Forum (Orlando, FL).***

The Association for Defense Communities (ADC) is focused on building resilient communities that support America's military by representing every major defense community/state in the nation. The Association serves as a connection point for leaders from communities, states, the military and industry on community-military issues by enhancing knowledge, information sharing, and best practices. The Forum is a 3-day professional development opportunity designed to bring together installation leadership with their community counterparts and top industry experts to share ideas and learn about tangible ways to advance innovation at installations and communities. There are a number of resources available for review. Examples: Fort Liberty cases studies presented on how Utilities Privatization Can Reduce Costs. Another example- What does Installation Innovation Look Like? Lastly, of prime discussion and critical importance is the Defense Community Roadmap to Leverage Grants for Enhanced Infrastructure Cybersecurity (bringing cyber capabilities, collaboration, and training together for all defense community stakeholders (installations, utilities, emergency first responders, disaster recovery teams, local government, state and federal agencies).

[Currently exploring ways for how an entity, like a Partnership, can secure a membership for its partners].

SENTINEL LANDSCAPES

- ***Dec 6, 2023 (1PM-2:15PM) Conservation Finance Opportunities in Sentinel Landscapes Webinar***

Join the REPI Program and Sentinel Landscapes Partnerships from across the US discuss Conservation Finance Opportunities in Sentinel Landscapes webinar. The Sentinel Landscapes Partnership facilitates cross-agency collaboration and develops unique partnerships to implement innovative funding strategies within sentinel landscapes. During this webinar, participants will learn how the Conservation Finance Network and their key partners are helping sentinel landscapes access conservation finance technical assistance opportunities. The webinar will also feature case studies of sentinel landscapes tapping into new partnerships and sources of financing to conserve natural resources, promote economic sustainability, and enhance military missions.

- To access the webinar, go to: https://bah16f18.adobeconnect.com/rnml4cxhzlxo
- Select “Enter as a Guest”, type name and organization
- Upon entering, a prmpt will ask to join the audio conference.
- Select “Phone” and then “Receive a call.” Enter your phone number and you will be called automatically by the system into the audio conference.

If you miss the webinar, a recording will be posted at the REPI webinar page



Eastern NC Sentinel Landscape Partnership

ENCSL Program Highlight:

This quarter's highlight for the Eastern NC Sentinel Landscape (ENCSL) was the development of a DRAFT Strategic Plan, that received some feedback during the Fall Partnership meetings and through an assessment conducted by Legacy Works (provided early September). Several iterations were developed of a plan from late 2022 into 2023 based on two different frameworks introduced to the Coordinators; *now there is one framework to guide the planning work*. A draft plan is designed to carry forward the next Strategic Plan of the ENCSL beyond the 2014-2021 version. The development of this plan continues into 2024. All Sentinel Landscape Coordinators are developing their Strategic Plans – many efforts which began in 2023 and will continue into 2024. The ENCSL is the first landscape required to produce a plan based on the Legacy Work Group model.

While the initial ENCSL strategic plan served the Partnership, the new version will require investment from the Principals and those with interest from the broader Partnership. A small committee of the Principals is tasked with development of a proposed vision statement such that each subsequent 5-year plan contributes strategically to the overall long-term vision based on measurable goals of the ENCSL. That committee will work with the Principals and interested Partnership members to develop and refine the proposed vision statement (members of that committee include: Pete Benjamin, Dewitt Hardee, Will Summer, Bill Holman and Carmen Lombardo).

SENTINEL LANDSCAPES



Eastern NC Sentinel Landscape Partnership

ENCSL Progress Summary:

In addition to the program highlight, efforts this quarter focused on the development or completion of new projects while enhancing current efforts and deliverables to produce organizational or cross-sector results and outcomes. This quarter included the following:

1. *continued the design and presentation of the new ENCSL Partnership website to* improve coordination, communication, and provide access to archival information.
2. *ongoing administration and facilitation support of the* current landscape Partnership network and infrastructure which included 3 in-person meetings this Fall as well as a 3 virtual meetings to ensure discussion and engagement between members about specific topics while supporting collaborative decision- making.
3. *supported NCDA and NCDNCR in acquiring Partnership feedback on the purpose and utility of an integrated mapping tool.*
4. *efforts to support military readiness continues by securing options and* easements that expand a mosaic of working and natural lands (efforts occur through various partners including NCDA, NC DNCR Land and Water Fund, The Nature Conservancy, Three Rivers Land Trust, Coastal Land Trust, as well as others).
5. *continued work with installation points of contact to navigate internal processes that can support development of a* MIRR or off-base climate resilient plan.
6. revision and distribution of the *signed ENCSL Partnership Memorandum of Understanding (MOU)* operational through 2026 (final version labeled 11/30/2023).
7. distribution of a draft 2023-2028 ENCSL Strategic Plan (development of the plan continues into 2024 with the other sentinel landscapes in tandem with Legacy Works efforts).

SENTINEL LANDSCAPES

8. contributed to development of *USDA Forest Service grant to expand landowner outreach* and engagement effort within the ENCSL area.
9. continued development of the Neuse Urban and Rural Partnership for Seymour Johnson AFB with its leadership team.
10. convened *an Eastern NC Sentinel Landscape panel for the 2023 Association of Defense Communities* - North Carolina Defense Communities Summit (partners included NC State University; The Nature Conservancy; Regional Landuse Advisory Commission, and MCIEAST).
11. *provided presentations about the ENCSL* to the NC Military Affairs Commission, NC State University College of Education, NC State University Extension, and the Regional Landuse Advisory Commission.
12.*professional development through attendance* at the Landtrust Rally (Portland, ORE), SERPPAS Steering Committee Meeting (Atlanta, GA), National ADC Innovations Forum (Orlando, Fl), and online Extension Training in Justice, Equity, Diversity, and Inclusion in Outreach and Environmental Education.
13. *participated in monthly Sentinel Landscape Coordinator calls,* provided brief report of monthly activities.
14. *finalize second boundary adjustment request* with core planning team (initial request submitted to FCC in 2021 and tabled until June 2022 when the FCC determined that a format would be required for any submittals. The second boundary adjustment request uses the new format).
15. collecting and *reporting of acres acquired, acres enrolled, and state, local, and federal contributions has started*. This year allows **close to 3 months** to collect October 1, 2022 – September 30, 2023 data (due Feb 22, 2024). For Oct 1, 2021 – September 30, 2022 data, 1 month was provided given delays in the new portal setup.
16. funding awarded to various ENCSL partners includes **nearly $13.5M!!!**

SENTINEL LANDSCAPES

2023 NFWF America the Beautiful Challenge

- *Building Resiliency of Longleaf Pine Ecosystems in Southeastern Sentinel Landscapes (multi-state effort).* Sentinel Landscape Partnerships in Eastern NC, South Carolina Lowcountry, Georgia, Avon Park and Northwest Florida are recipients of an America Beautiful Challenge. Led by North Carolina's Wildlife Resources Commission - Shannon Deaton and Chris Wood, the award total is **$2,687,300** (Grant Amount: $2,500,000, Matching Funds: $187,300)
- *Establishing a Peatland Atlantic White Cedar Forest on Angola Bay Game Lands*. (led by the NC Wildlife Resources Commission) Grant Amount: $1,691,900 + Matching Funds: $188,000=Total Project Amount: **$1,879,900**

2023 NFWF National Coastal Resilience Fund projects

- *Advancing Community-Led Resilience Initiatives in a Sentinel Landscape (*NC Foundation for Soil and Water Conservation (lead), Working Lands Trust, Environmental Defense Fund).$ **$1,497,200**
- *Ecological, Community, and Military Resilience Through Spoil Island Restoration in Bogue Sound (NC Coastal Federation)* **$447,000**
- *Building Capacity to Conserve Salt Marsh Habitat within Coastal Communities (*LegacyWorks Group (lead) in coordination with 4 Southeast SASMI implementation teams). **$1,748,100**
- *Equity through Final Design and Permitting Technical Assistance for Coastal Communities* Project (NC DEQ). **$5,059,000**
- *Final Design and Planning to Install Living Shorelines and Stormwater Management (NC DMF)* **$95,200**

NC Department of Transportation Report

Update from Sentinel Landscapes Partnership Federal Coordinating Committee

Eastern North Carolina Sentinel Landscape Partnership Program Review

Sentinel Landscape Mapping Tool Updates

Additional Business Items



Public Comments



Next Meeting, Assignments, & Adjournment

