# NORTH CAROLINA SENTINEL LANDSCAPE COMMITTEE




## 2021 ANNUAL LEGISLATIVE REPORT

September 1, 2021

Agriculture Commissioner – Steve Troxler – Chair
Chief Deputy Director of the Wildlife Resources Commission – Kyle Briggs – Vice Chair
Chief Deputy Secretary of Natural and Cultural Resources – Jeff Michael – Secretary
Assistant Secretary of Military and Veterans Affairs – Ariel Aponte
Dean of the College of Natural Resources at N.C. State University – Dr. Myron Floyd
Representative of the North Carolina Sentinel Landscape Partnership – Chester Lowder

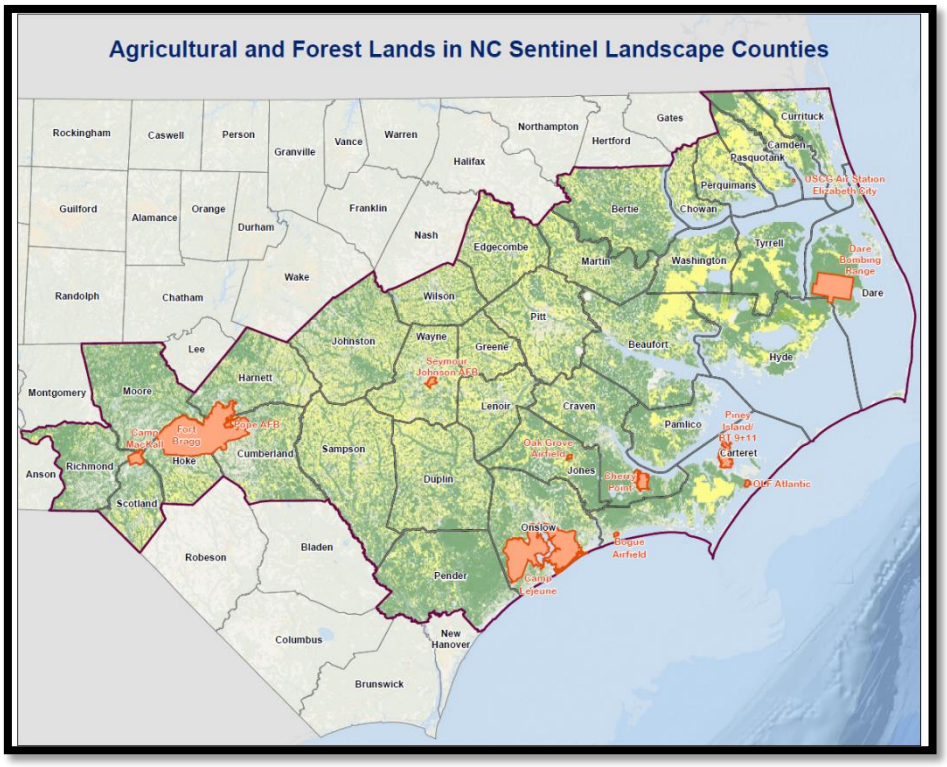
Pursuant to Section 3.19.(f) of Senate Bill 131 / S.L. 2017-10 … The Committee shall report on its activities conducted to implement this section, including any findings, recommendations, and legislative proposals, to the North Carolina Military Affairs Commission and the Agriculture and Forestry Awareness Study Commission beginning September 1, 2017, and annually thereafter, until such time as the Committee completes its work.

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# What are Sentinel Landscapes?

*The Eastern North Carolina Sentinel Landscape benefits agriculture, forestry, wildlife and the military*




- In 2016, the federal government designated 33 North Carolina counties as a Sentinel Landscape. The Eastern North Carolina Sentinel Landscape is one of seven Sentinel Landscapes designated by the U.S. Departments of Agriculture, Defense, and the Interior.

- The partnership aims to strengthen farms, ranches and forests, while conserving habitat and natural resources and protecting vital training grounds for military installations.

- North Carolina is the only state to have multiple military branches, military installations and counties named as part of the designation.

- Regions with increasing commercial and residential development affect agriculture, forestry, wildlife and the military in similar ways, as development limits training abilities for the military and reduces viable farmland, forests and natural areas.

- Agriculture and the military are the top two economic sectors in North Carolina. The Eastern North Carolina Sentinel Landscape leverages partnerships between military installations, federal departments, state agencies, local governments and nonprofit partners that support North Carolina's top two economic sectors.

# Purpose of the North Carolina Sentinel Landscape Committee



- Pursuant to state law, the North Carolina Sentinel Landscape Committee will:

- Coordinate the overlapping priority areas in the vicinity of and where testing and training occur near or adjacent to major military installations, as that term is defined in G.S. 143-215.115, or other areas of strategic benefit to national defense.

- Assist landowners in improving their land to benefit their operations and enhance wildlife habitats while furthering the State's vested economic interest in preserving, maintaining and sustaining land uses that are compatible with military activities at major military installations and National Guard facilities.

- Develop and implement programs and strategies that:
    - Protect working lands in the vicinity of and where testing and training occur near or adjacent to major military installations or other areas of strategic benefit to national defense,
    - Address restrictions that inhibit military testing and training, and
    - Forestall incompatible development in the vicinity of and where testing and training occur near or adjacent to military installations or other areas of strategic benefit to national defense.

# Committee Members

| North Carolina Sentinel Landscape Committee | |
|---|---|
| Chair – Steve Troxler | Commissioner of Agriculture |
| Vice Chair – Kyle Briggs | Chief Deputy Director of the Wildlife Resources Commission |
| Secretary – Jeff Michael | Chief Deputy Secretary of Natural and Cultural Resources |
| Ariel Aponte | Assistant Secretary of the Department of Military and Veteran Affairs |
| Dr. Myron Floyd | Dean of the College of Natural Resources at N.C. State University |
| Chester Lowder | Representative of the North Carolina Sentinel Landscape Partnership |

| North Carolina Sentinel Landscape Support Staff from NCDA&CS | |
|---|---|
| David Smith | Chief Deputy Commissioner |
| Dewitt Hardee | Farmland Preservation Program Director |
| Evan Davis | Farmland Preservation Assistant Director |
| Tina Hlabse | General Counsel |
| Veronica Jamison | Farmland Preservation Office Manager |
| Jonathan Lanier | Assistant General Counsel |
| Weston McCorkle | Agricultural Programs Specialist |
| Janine McLawhorn | Paralegal |
| Sabrina Shaffer | Farmland Preservation Specialist |
| Coleman Simpson | Farmland Preservation Document Specialist |

# N.C. Department of Agriculture and Consumer Services Report

### NCDA&CS Partners with U.S. Air Force on Two Conservation Easements in 2021

In April and August 2021, the NCDA&CS Agricultural Development and Farmland Preservation Trust Fund (ADFPTF) and the U.S. Air Force provided funds for easement purchases and transactional costs to permanently conserve 519 acres of farm and forestland in priority zones for Seymour Johnson Air Force Base (SJAFB).

| County | Grant Recipient | Acres | SJAFB Funds | ADFPTF Funds | Landowner Donation | Total Project Value |
|---|---|---|---|---|---|---|
| Bertie | WLT | 124.605 | $60,278.42 | $60,278.42 | - | $120,559.84 |
| Tyrrell | WLT | 395.050 | $328,110.19 | $328,110.19 | $5,522.00 | $656,220.38 |

The Working Lands Trust (WLT) worked with landowners, private partners, contractors, along with local, state, and federal staff to complete the projects. WLT is the easement holder for these conservation easements.

### N.C. Military Affairs Commission Memorandum of Understanding

In a Memorandum of Understanding (MOU) with the N.C. Military Affairs Commission, the N.C. Department of Agriculture and Consumer Services is contracted to use a portion of the funds and will subcontract the remainder to the College of Natural Resources at N.C. State University and the North Carolina Foundation for Soil and Water Conservation to support activities in the Eastern North Carolina Sentinel Landscape (ENCSL). The total funding amount is $450,000 over four years.

Below is a general description of the activities and current expenditures and balances:

| Purpose | Expenditures | Balance |
|---|---|---|
| Three positions within the NCDA&CS dedicated to outreach, technical assistance, legal services, and administrative support for Sentinel Landscape programs. | $78,698.65 | $146,301.35 |
| NCSU will expand coordination and improve shared communication to sustain linking military readiness, inclusion of working lands, and conservation through publications and landowner outreach. | $72,415.54 | $32,584.46 |
| North Carolina Foundation for Soil and Water Conservation will expand outreach efforts at the community level in the 33-county area of ENCSL. | $69,996.45 | $50,003.55 |
| **Total** | $221,110.64 | $228,889.36 |

**Priority Parcels in the ENCSL**

The ADFPTF has been working extensively to engage willing landowners to place farms and forests under option for conservation easements and move priority parcels under contract. After contracting, funding partners work with qualified easement-holding entities, such as county governments and nonprofit land trusts, to record conservation easements.

To date, the ADFPTF has recorded **3,396 acres** of conservation easements in military priority zones with funding from the armed services.

Beyond these recorded conservation easements, the ADFPTF is currently working with landowners to conserve and preserve **58,509 acres** in the ENCSL.

The ADFPTF has contracted **15,014 acres** of privately-owned farms and forests determined by military partners to be in areas vital to the training mission of the armed services. The total project value for these conservation easement contracts total over $28 million. The ADFPTF leveraged nearly $17 million in federal funds for these projects.

Through the work of ADFPTF field staff, the N.C. Foundation for Soil and Water Conservation, and other partners, there are **43,495 acres** of privately-owned farms and forests under option for conservation easements in the ENCSL.

**North Carolina Sentinel Landscapes High Priority Protect Program (NCSLHPPP) for 2018**

The state was awarded $5.6 million through the USDA NRCS RCPP. In the first round of projects, these conservation easement projects **4,594 acres** and are funded through the ADFPTF, SJAFB, Marine Corps Installations East (MCIEAST), and USDA.

SJAFB Priority Area

| County | Grant Recipient | Acres | SJAFB Funds | ADFPTF Funds | USDA Funds | Total Project Value |
|---|---|---|---|---|---|---|
| Tyrrell | WLT | 694.50 | $232,853.12 | $232,853.12 | $416,700.00 | $882,406.24 |
| Tyrrell | WLT | 505.10 | $172,507.44 | $172,507.44 | $303,060.00 | $648,074.87 |
| Tyrrell | WLT | 637.70 | $214,755.79 | $214,755.79 | $382,620.00 | $812,131.57 |
| Tyrrell | WLT | 2,530.43 | $2,371,475.82 | $2,371,475.82 | $3,680,591.04 | $8,432,542.69 |
| **Totals** | | **4,367.73** | **$2,991,592.17** | **$2,991,592.17** | **$4,782,971.04** | **$10,775,155.37** |

MCIEAST Priority Area

| County | Grant Recipient | Acres | MCIEAST Funds | ADFPTF Funds | USDA Funds | Total Project Value |
|---|---|---|---|---|---|---|
| Jones | WLT | 162.78 | $78,957.54 | $78,957.54 | $126,891.46 | $284,806.54 |
| Jones | WLT | 63.10 | $31,679.61 | $31,679.61 | $37,860.00 | $101,219.21 |
| **Totals** | | **225.88** | **$110,637.15** | **$110,637.15** | **$164,751.46** | **$386,025.75** |

**Military Partnership Contracts**

The following contracts are funded through the military services and the ADFPTF. These conservation easement projects total **10,421 acres**.

SJAFB Priority Area

| County | Grant Recipient | Acres | SJAFB Funds | ADFPTF Funds | Landowner Donation | Total Project Value |
|---|---|---|---|---|---|---|
| Tyrrell | WLT | 2,530.43 | $2,371,475.82 | $2,371,475.82 | - | $4,742,951.65 |
| Hyde | WLT | 291.60 | $191,963.13 | $191,963.13 | - | $383,926.27 |
| Washington | WLT | 408.00 | $418,573.42 | $418,573.42 | - | $837,146.84 |
| Washington | WLT | 405.00 | $383,814.15 | $383,814.15 | - | $767,628.29 |
| Washington | WLT | 737.24 | $1,018,489.00 | $1,018,489.00 | - | $2,036,978.00 |
| Washington | WLT | 679.17 | $719,209.00 | $719,209.00 | - | $1,438,418.00 |
| Tyrrell | WLT | 1,865.00 | $1,165,291.98 | $46,291.98 | $1,119,000.00 | $2,330,583.95 |
| **Totals** | | **6,916.44** | **$6,268,816.50** | **$5,149,816.50** | **$1,119,000.00** | **$12,537,633.00** |

MCIEAST Priority Area

| County | Grant Recipient | Acres | MCIEAST Funds | ADFPTF Funds | Landowner Donation | Total Project Value |
|---|---|---|---|---|---|---|
| Pamlico | WLT | 1,030.50 | $649,348.37 | $649,348.37 | - | $1,298,696.75 |
| Pamlico | WLT | 552.00 | $353,050.00 | $353,050.00 | - | $706,100.00 |
| Pamlico | WLT | 599.00 | $382,125.00 | $382,125.00 | - | $764,250.00 |
| Pamlico | WLT | 14.58 | $20,594.00 | $20,594.00 | - | $41,188.00 |
| Pamlico | WLT | 1,308.00 | $820,723.00 | $820,723.00 | - | $1,641,446.00 |
| **Totals** | | **3,504.08** | **$2,225,840.37** | **$2,225,840.37** | **-** | **$4,451,680.75** |

# N.C. Wildlife Resources Commission Report

**Recovery and Sustainment Program (RASP)**

The Red-Cockaded Woodpecker (RCW) Recovery and Sustainment Program (RASP) partnership has continued, promoting multi-agency collaboration. Along with the N.C. Wildlife Resources Commission, which leads the management effort, the partnership includes the U.S. Fish and Wildlife Service, the National Fish and Wildlife Foundation, Marine Corps Installations East at Marine Corps Base Camp Lejeune, the U.S. Department of the Navy and the Naval Facilities Engineering Command, Mid-Atlantic.

The Marine Corps and the Office of the Secretary of Defense funded a perpetual endowment fund, which is managed by the National Fish and Wildlife Foundation, to cover the costs of RCW management on game lands. The Wildlife Commission is conducting short and long-term management activities to establish and conserve longleaf pine forest habitat essential for RCW recovery. Commission biologists are managing the properties to RCW habitat standards to establish 60 active RCW clusters off base. The Marine Corps will continue its RCW conservation and recovery efforts on base as well.

The RASP program is well underway, with several notable accomplishments between September 2020 and August 2021 contributing to habitat restoration:

- 1,813 acres of restoration timber harvests completed and/or in progress
- 655 acres of longleaf and native understory restoration
- 1,223 acres of prescribed fire conducted
- 7 miles of road upgrades were completed to facilitate access for future management projects

**Technical Guidance Spotlight: The Green Growth Toolbox**

WRC staff continue to work closely with private landowners and local governments to provide technical guidance for land management, wildlife conservation, and Green Growth. In particular staff are working on opportunities in the NCSL with the newly expanded Wildlife Conservation Lands Program to help additional landowners receive property tax benefits for conservation on their lands. And, as always, staff are working through the Green Growth Toolbox to support communities in the Sentinel Landscape with various planning efforts including engagement with Pender County, Moore County, Pinehurst, and Hope Mills to name a few.

- **Brunswick County** – County is using GGT in the development of the County Land Use Plan and Comprehensive Transportation Plan update. NCWRC is working with Southport for WRC purchase of town property next to Military Ocean Terminal Sunny Point that contains the last unprotected Carolina gopher frog isolated wetlands in the state.
- **Pender County** – Now require compliance with federal and state wetlands and coastal laws in order to obtain local development approval. The county's future Land Use Map incorporates the Biodiversity and Wildlife Habitat Assessment and a review of recent

developments appears to show development being guiding toward already impacted areas.

- **Wildlife Conservation Lands Program** - To date there have only been 2 participants in Pender and 3 in Moore in the Wildlife Conservation Lands Program. WRC strives to more effectively promote this program in this region.
- **Virtual GGT opportunities** – Staff has developed GGT webinars with scheduled Question and Answer sessions afterwards. We have hosted 4 Question and Answer sessions with planners.
- **GGT and Resiliency** – WRC is partnering with N.C. Coastal Reserve's Resiliency Community of Practice to incorporate resiliency recommendations into the GGT. This effort involves local governments and conservation programs to share resiliency initiatives.

**National Fish and Wildlife Foundation Coastal Resilience Grant**

The Commission and The Nature Conservancy have partnered on an Emergency Coastal Resilience Fund grant from the National Fish and Wildlife Foundation to complete 7,500 acres of hydrologic restoration on Angola Bay Game Land in Pender County. This project will not only enhance pocosin wetland habitat but will also provide important community flood resilience benefits to the downstream communities including Burgaw, Castle Hayne and Wilmington. This type of work could be replicated to provide resiliency benefits across the landscape and we look forward to sharing results and lessons learned from this project with all Sentinel Landscape partners.

**Recovering America's Wildlife Act**

Recovering America's Wildlife Act, currently being considered in Congress in HR2773 and S2372, is meant to keep "common species common" and off the federal Endangered Species list. This Act would provide annual federal funding to fully implement N.C. Wildlife Action Plan and could secure up to $26 million annually for North Carolina wildlife resource projects focused on species of greatest conservation need (SGCN) and their habitats. This funding would allow significant opportunities for the N.C. Sentinel Landscape region. Additionally, the Act allows for funding for projects related to plant conservation and restoration. WRC staff is working with staff in the Department of Agriculture and Consumer Services' Plant Conservation Program and Natural Heritage Program to incorporate a plant list of SGCN to be eligible for these funds. The Commission hosts a website with additional information about the Act (ncwildlife.org/RAWA).

**NC Wildlife Action Plan (WAP)**

The Commission is responsible for the 10-year comprehensive revision of the WAP due for submittal to the U.S. Fish and Wildlife Service in 2025. Early organization and initial planning activities have begun, starting with formation of a Steering Committee to oversee the revision process, convening a Technical Team to peer review the scientific rigor of Plan elements, and inviting a variety of partners and stakeholders to participate on an *ad hoc* committee to evaluate the effectiveness of the 2015 WAP.

- We are coordinating with SERPPAS and SECAS to identify ways to link WAP conservation efforts and opportunities with Sentinel Landscape conservation priorities.
- North Carolina has teamed with Arkansas and Georgia fish/wildlife agencies to apply for a SWG competitive grant to enhance and standardize our SGCN evaluation processes regionally and create a mapping tool to track implementation of conservation priorities identified in our plans. This tool will aid in larger regional approaches and collaboration.
- North Carolina is in the process of adding a plant SGCN list to the Wildlife Action Plan through coordination with the N.C. Department of Agriculture & Consumer Service's Plant Protection Program and Natural Heritage Program to be included in the 2025 NCWAP revision.

# N.C. Department of Natural and Cultural Resources Report

The Division of Land and Water Stewardship is part of the Department of Natural and Cultural Resources. The Division includes two programs focused on preserving North Carolina's unique environment – the Land and Water Fund (also known as the Clean Water Management Trust Fund) and the Natural Heritage Program. Both programs have contributed significantly to the Sentinel Landscape effort.

**North Carolina Land and Water Fund Sentinel Landscape (September 2020-August 2021)**

North Carolina's Land and Water Fund (NCLWF) was established by the General Assembly in 1996 as a non-regulatory organization with a focus on protecting and restoring the State's land and water resources. NCLWF awards grants to non-profit and governmental organizations to protect land for natural, historical and cultural benefit, limit encroachment on military installations and provide match for federal funds that buffer military installation, restore degraded streams, and develop and improve storm-water treatment technology.

At its funding meeting in September 2020, NCLWF awarded $1,384,828 to purchase fee simple or conservation easements on 885 acres in the ENCSL that limit encroachment to training routes or directly buffer military installations. Project details are listed below.

| County | Installation | Grant Recipient | Acres | NCLWF Funds | REPI Funds |
|---|---|---|---|---|---|
| Bladen | USMC medium priority flight path | The Nature Conservancy | 17 | $43,111 | $0 |
| Hoke | Fort Bragg | The Nature Conservancy | 700 | $1,150,588 | $1,800,000 |
| Sampson | USMC medium priority flight path | The Nature Conservancy | 98 | $79,129 | $0 |
| Scotland | Fort Bragg | NC Wildlife Resources Commission | 70 | $112,000 | $0 |

**Natural Heritage Program Sentinel Landscapes Report (September 2020-August 2021)**

North Carolina's Natural Heritage Program (NCNHP) conducts biological surveys of natural lands and maintains an inventory of rare species and high-quality examples of natural communities. Many of these inventories are conducted in cooperation with partners who are interested in setting aside land for conservation, a land use which is compatible with maintaining the military mission footprint in North Carolina. The table below shows natural heritage surveys conducted by NCNHP to assist with land conservation activities in the Eastern North Carolina Sentinel Landscape during **September 2020-August 2021.** Natural areas are listed in alphabetical order by county. Permission to visit the sites was received from landowners and land managers.

| County | Natural Area | Partner Agency |
|---|---|---|
| Beaufort | Haw Creek Meanders | Weyerhaeuser |
| Bertie | Roquist Creek Swamp | Weyerhaeuser |
| Bertie | Wading Place Creek and Swamps | Weyerhaeuser |
| Bertie | Chowan River Aquatic Habitat | North Carolina Coastal Land Trust |
| Bladen | Bladen Lakes State Forest | N.C. Forest Service |
| Bladen | Upper Black River Bottomlands | The Nature Conservancy |
| Carteret | New Dump Island | N.C. Wildlife Resources Commission |
| Carteret | Croatan National Forest | U.S. Forest Service |
| Carteret | Salters Creek Landing | North Carolina Coastal Land Trust |
| Carteret | Lake Ellis Simon | North Carolina Coastal Land Trust |
| Harnett | Hector Creek Forests | The Conservation Fund |
| Onslow | Horse Swamp Savannas and Woodland | The Nature Conservancy |
| Pender | Juniper Swamp and Savannas | The Nature Conservancy |
| Pitt | Haw Creek Meanders | Weyerhaeuser |
| Sampson | Cutgrass Bay | Private Landowner |
| Washington | Bull Neck Swamp | N.C. State University Department of Forestry |

# College of Natural Resources at N.C. State University Report

**Research Efforts within the Sentinel Landscape.**

***Spaces Between the Bases:*** currently planning efforts are effectively focused on increasing compatible land use surrounding the bases through the utilization of conservation easements. The project, "spaces between the bases," is focused on areas with overlapping military and conservation interests that are not detailed in existing plans as part of regional and state conservation planning efforts and yet may serve future needs well into 2060.

Envisioning future military and conservation landscapes: a core team of the N.C. Sentinel Landscapes Partnership has been guided by College's Extension and Geospatial Team through an adaptive, iterative process of geospatial participatory modeling and facilitation. Using the FUTURES Urban Regional Environmental Simulation model, this project investigated the sensitivity of landscapes to support military readiness and conservation practices via alternative urbanization scenarios. To interpret findings and analyze trade-offs between scenarios, summary tables were created based on metrics (e.g., projected growth in priority areas, projected number of farm loss, projected growth in headwater catchments) metrics that were meaningful to participants. Stakeholders across the state are expected to be able to utilize both maps and summary tables as future decision-making and planning tools.

***NC State University Coastal Resilience and Sustainability Initiative.*** headed by Dr. Mary Watzin (former Dean, N.C. College of Natural Resources and N.C. Sentinel Landscape Committee Representative), the **Coastal Resilience and Sustainability Initiative**, is tasked by NC State's Provost to build multidisciplinary teams that can address pressing societal and ecological challenges facing coastal ecosystems and communities as generate actionable solutions. While geographically focused on the coastline (resiliency and climate change), there may be opportunities to focus on areas of military readiness given the location of MCIEAST and the DARE County Range. A list of forthcoming events and previous recordings are published on the website and available to the public.

*Military Installation Resilience" now carries a specific definition in the law:* "the capability of a military installation to avoid, prepare for, minimize the effect of, adapt to, and recover from extreme weather events, or from anticipated or unanticipated changes in environmental conditions, that do, or have the potential to, adversely affect the military installation or essential transportation, logistical, or other necessary resources outside of the military installation that are necessary in order to maintain, improve, or rapidly reestablish installation mission assurance and mission-essential functions." Anticipated or unanticipated changes in environmental conditions is a term that clearly encompasses climate change. Cited: 10 USC- Section 101 (e) (8). https://crsreports.congress.gov/product/pdf/IN/IN11566

***Resource Programming in Support of Military Readiness for Marine Corps Installations East (MCIEAST)***

Provide project administration. Provided pending proposal for virtual landowner outreach and engagement in a five-county area

***Facilitation and Coordination of the Sentinel Landscape Partnership***

- Developed a landowner outreach process that includes all of the Sentinel Landscape Partners who conduct outreach, provide technical and incentive programs, including innovative programming. Seeking funding for this initiative.
- Coordinated and convened 15 meetings dedicated to the development of the 2021 REPI Challenge that secured $1 million for the U.S. Air Force projects.
- Coordinated and convened 12 monthly calls for the Sentinel Landscape Coordinating Committee to share respective Partnership goals, update status of projects, introduction of new projects, and current events within the N.C. Sentinel Landscape.
- Developed and provided six presentations during the year regarding the purpose, authority, and impacts of the N.C. Sentinel Landscape Partnership and N.C. Sentinel Landscape Committee to interested parties (SERPPAS, REPI, Long-leaf Alliance, MCICOM-NAVFAC R/CPLO, Durham County Commissioners, Granville, Brunswick, New Hanover and Durham County) Presentations on the value of including MOTSU and Camp Butner into the N.C. Sentinel Landscape.
- Develop packet to support consideration to add Camp Butner and MOTSU into the Eastern NC Sentinel Landscape. Complete end of August, first week in September.
- Attended 10 Landowner Outreach Strategy Meetings for the development of a new plan for the state.
- Coordinated resources for WUNC Chapel Hill to develop a story on PineStraw Management
- Contributed knowledge to the publication of Conservation Funding in N.C. along with Jeff Marcus and Dewitt Hardee
- Coordinated with Partners to complete the 2021 Accomplishments Report (Oct 1, 2019- Sept 30, 2020) by gathering data and information that reflects the efforts of the Partners. Draft report has not been published for review. Currently working with counties to determine how many private lands are in PUV. Last year report (Oct 1, 2018 – Sept 30, 2019) included here: **https://sentinellandscapes.org/media/xxbcmxe5/accomplishments_report_2020.pdf**
- Develop award nominations, for a N.C. State University team award and one for an individual of the N.C. Sentinel Landscape Partnership.
- Attend/contribute to monthly calls of the Sentinel Landscape Coordinators. Attend meetings with the Federal Coordinating Committee and other Sentinel Landscape Coordinators to examine national and state level goals, and innovative strategies that link military readiness with working lands of farms and forests, and conservation efforts.
- Attend/contribute to quarterly calls of the Long-leaf Implementation Teams
- Provide support to the development of new programs such as Conservation Legacy's Building Capacity for Forest Management within the ECNSL.

- Attend/contribute to the Southeast Regional Partnership for Planning and Sustainability (SERPPAS) Principals and Steering Committee Meetings
    - Contributed to the implementation of the 2020-2025 SERPPAS Strategic Plan
    - Sentinel Landscape Working Group: Mary Lou Addor coordinates the N.C. Sentinel Landscape Partnership and along with the other two Sentinel Landscape Coordinators, contributes to the SERPPAS Sentinel Landscape Working Group and coordination of action items for implementation.
    - Prescribe Fire Working Group: Jen Fawcett coordinates the SERPPAS Prescribed Fire Working Group, and Laurel Kays helps with that regional effort. This team coordinates actions items for implementation to meet the goals of the SERPPAS Prescribed Fire Strategy and supports Learn & Burn field days for landowners through an online video course for prescribed burn training.
- Develop/Propose 2022 Celebration Event of the N.C. Sentinel Landscape. Invite Media, Landowner, and others as appropriate to view successes of the Partnership to date.

# N.C. Sentinel Landscape Partnership Report

*Sentinel Landscapes are landscape-scale areas; they are the working or natural lands that serve to protect and support the rural economy, the natural environment, outdoor recreation, and the national defense test and training mission of the military or state-owned National Guard installation or installations that anchor such landscapes. Sec.317. Sentinel Landscapes Partnership (US Department of Defense, US Department of the Interior, and the US Department of Agricultural).*

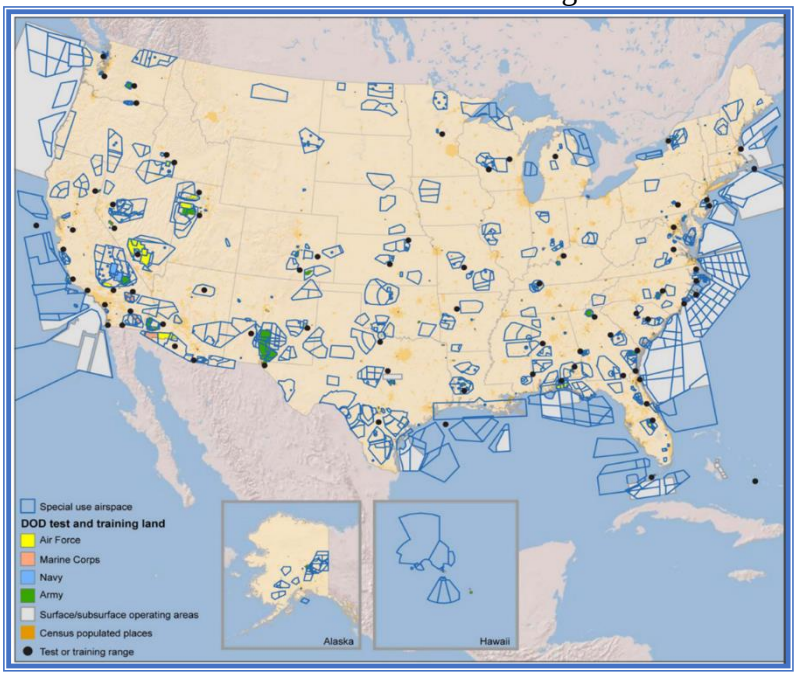
In an era of increasingly complex threats—both natural and man-made—the definition of national security has evolved to recognize the significance of not only military capability and readiness, but also food security, water security and environmental security. As a result, land-use challenges that defense, conservation and agricultural actors once addressed unilaterally—such as land-use conversion or natural resource degradation—now call for more holistic, integrated solutions. To encourage strategic collaboration regarding the challenges and opportunities these agencies face, the U.S. Department of Defense (DoD) partnered with the U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (DOI) to form the Sentinel Landscapes Partnership.

Founded in 2013, the Sentinel Landscapes Partnership is a coalition of federal agencies, state and local governments, and non-governmental organizations that work to advance common land-use objectives in high priority areas as well as the spaces between the bases. **The Partnership's overarching goals in North Carolina are to strengthen military readiness and testing, bolster agricultural and forestry economies through landowner outreach and building working relationships, conservation of natural lands and resources, innovative projects and landowner outreach, and by increasing outdoor recreation**. The Partnership carries out its mission by connecting private landowners around military installations as well within the spaces between the bases with technical and government assistance programs that offset the cost of implementing sustainable management practices and conservation projects. A similar broader mission is being carried out in the U.S. in six other Sentinel Landscapes.

The Eastern North Carolina Sentinel Landscape, the largest of the seven Sentinel Landscapes, is home to five key military installations and ranges: Fort Bragg, Seymour Johnson Air Force Base (AFB), Dare Bombing Range, Marine Corps Base (MCB) Camp Lejeune, and Marine Corps Air Stations (MCAS) Cherry Point New River. For years, North Carolinians from defense, agricultural, and conservation communities have carried out collaborative, projects to promote sustainable land management in North Carolina. In 2016, 33 counties or 11 million acres in North Carolina were formally designated as the Eastern North Carolina Sentinel Landscape given the advanced and sustained collaborative work that was being achieved by a cross-sector of partners.

**How is the Eastern NC Sentinel Landscape addressing its overarching goals to strengthen military readiness, bolster agricultural and forestry productivity, conserve natural resources, and increase access to recreation**? The Eastern North Carolina Sentinel Landscape Partnership collaborates to identify programs or projects that will support the achievement of its overarching goals.

The High Priority Protect Program is managed by Sentinel Landscape partners in North Carolina. The NCDA&CS and the Working Lands Trust secure term and perpetuity conservation easements from willing landowners identified by North Carolina's Defense partners to help obtain a land buffer between an installation and community. Agriculture-agribusiness and industries such as - food, fiber, and forestry -are North Carolina's primary industry at **$95.9 billion (17% of NC GDP).** The Nature Conservancy in partnership with other organizations, manages the High Priority Protect Program for the Army, also by working with willing landowners to secure conservation easements on working and natural lands. The N.C. Department of Natural and Cultural Resources's Land and Water Fund also aids management of securing conservation easements on natural and working lands near installations such as Camp Butner. Each of these efforts to secure easements, are a broad strategy to provide direct support to North Carolina's armed forces by ensuring a continuous opportunity for military readiness, training and testing through the expansion of compatible land use. Incompatible land use of land, air, water, and other resources typically results from the cumulative impact of urban and rural development that can hamper military readiness, by limiting the ability to carry out the testing and training mission.




The military often requires open space and natural lands from which to conduct its mission. And installations for the most part, use to be out of the public's view. From a recent publication, Conservation for Defense; "The more that *non-military lands are managed for wilderness or other conservation uses, the better it is for the Department of Defense."*

North Carolina's current ranking as the 9th most populous state has resulted in an increase in development and a reduction in its forests and farms, open spaces, and the ecological habits that support fish and wildlife. When installations become natural resource islands for habitat, environmental and wildlife regulations can limit the military's mission for training on or near that installation, including the types of, the areas for, and the times training can be conducted.

Furthermore, testing and training may be perceived as a nuisance the closer developed areas and installations come in contact with each other. When training involves live-fire, smoke, other ordinance or live simulations, or generates noise or dust, there can be push back. Hence each armed service is developing planning efforts that can aid compatible use between installations and communities,

Other partners are working directly with our installations to secure large tracts of conservation lands that can serve to provide compatible land use near installations, and needed areas of training and habitat for wildlife. The Red-Cockaded Woodpecker (RCW) Recovery and Sustainment Program Partnership (RASP) lead by the N.C. Wildlife Resources Commission with other partners like the U.S. Fish and Wildlife Service is emblematic of the Sentinel Landscapes Partnership's mission as it expands the landscape that is devoted to endangered species recovery while simultaneously strengthening the military's mission at Camp Lejeune. Restoration of state lands to ensure suitable habitat continues on this project and therefore enhancing training flexibility at Camp Lejeune by conserving RCW habitats in the coastal region of North Carolina,

The Everett Creek Preserve, acquired through the N.C. Coastal Land Trust and the Partners for Fish and Wildlife Program of the U.S. Fish and Wildlife Service, continues to provide foraging and breeding habitat for red-cockaded woodpeckers while housing a healthy population of Venus flytraps and serving environmental education needs as the pandemic will allow. The area has beautiful long leaf habitat and a Magnolia Preserve that is actively being managed for long-leaf habitat. And the acquisition of the 5,493 acres Salters' Creek by the Coastal Land Trust adjoins the 14,494-acre Cedar Island National Wildlife Refuge, and is across Long Bay from the Marine Corps Air Station (MCAS) Cherry Point's 11,000-acre Piney Island Bombing Range (BT-11) in Carteret County, resulting in a significantly large, landscape-sized conservation area.

Lastly, in order to streamline the process to acquire a conservation easement, the Agricultural Development and Farmland Preservation Program Trust Fund continues to collaborate with defense partners to develop a single easement template for the Eastern North Carolina Sentinel Landscape that can streamline resources from multiple sentinel landscape partners. The partners designed the template to reduce the anticipated easement acquisition timeline from 3-4 years to 1-2 years by having legal and logistical negotiations pre-approved by all potential funding resources.

**Examples of Other Programs in Process include:**
*Awards & Recognition.* The Partnership is actively coordinating awards to provide recognitions of individuals who have gone the extra mile in working between military readiness, conservation and promoting working lands. N.C. State University continues to submit for a team award, and individuals have been nominated for organizational awards.

*N.C. Conservation Footprint.* A conservation footprint in North Carolina is being developed that will help identify lands that support wildlife, conservation and military compatibility in the sentinel landscape. Sentinel landscape partners are working with the Southeast Regional Partnership for Planning and Sustainability and partners from North Carolina to develop a geospatial map that identifies overlapping interests between the military, conservation and working lands in the Southeast region. The map will provide a visual model that enables sentinel landscape partners to prioritize resources in the region.

*N.C. Forest Management Capacity Building Program.* Another program with a year completed is the Forest Management Capacity Building Program of the Conservation Corps of North Carolina (CCNC). A pilot program of the ENCSL, it is designed to expand the ability of agencies such as

the Natural Resource Conservation Service in NC, U.S. National Forests in NC, N.C. Forest Service, N.C. State University Natural Resource Foundation, and N.C. State Parks to manage North Carolina's forests in the Sentinel Landscape area. Each of the partners has secured an agreement with CCNC to deliver forest management activities. For example, NRCS has prioritized prescribe fire management in response to expiring EQUIP contracts with private landowners while focusing on general forest management responsibilities the remainder of the season. The pilot is also designed to create a pipeline for emerging leaders to develop applicable natural resources management skills and thus expand the workforce for these agencies who are losing workforce capacity given retirements. In 2022, a goal is to assist with landowner outreach within the Sentinel Landscape of North Carolina.

*Restoration of a Community Forest in Hoke County.* The National Wildlife Federation (NWF) in partnership with the America's Longleaf Restoration Initiative's (ALRI), the Longleaf Partnership Council (LPC) and others will assist the Hoke County Board of Commissioners with the Hoke County Community Forest Restoration project. Hoke County has a significant minority population and is located on the border of Ft. Bragg. Hoke County contains what is thought to be the only community-owned forest in the southeastern United States. The restoration of this 500-acre forest will generate income for this underserved county while providing an outdoor classroom for its citizens who are forest landowners. This project directly ties in with the LPC's "Longleaf for All" goal to increase the participation of minority landowners and communities in the longleaf restoration efforts. The Hoke Community Forest Restoration will serve as an innovative model for communities struggling to balance conservation and economic goals. The Hoke County Community Forest site is an ideal habitat for Longleaf Pine but was established in Loblolly. Restoring the Community Forest to longleaf pine will help the forest to become more resilient to the threats of climate change because of longleaf pine's unique characteristics making it more resilient to wildfire, severe wind events, and insects/pests compared to many other tree species. The longleaf pine can also capture carbon pollution from the atmosphere.

*Prescribed Burn Associations.* These associations are generating alot of success in NC with private landowners interested in learning to use prescribed fire as a management tool for long-leaf habitat enhancement. The Sandhills PBA is a partner to the larger group called the N.C. Sandhills Conservation Partnership. Around 1,010 landowners have been reached through workshops/field days sponsored by the SPBA in the first two phases of the National Fish and Wildlife Foundation Grant. Of those, nearly 200 signed up for NRCS Farm Bill Programs which resulted in over 500 new acres of longleaf pine planted and over 11,000 acres of longleaf pine woodlands being burned. There are many additional landowners who have become engaged in longleaf restoration but have not specifically requested cost-share funds from NRCS Farm Bill programs. The SPBA will continue to build on this success as they continue to implement of phase 3 of their project. The successes of the SPBA have helped to promote the mission of the NC Longleaf Coalition by promoting the maintenance and restoration of North Carolina's longleaf pine ecosystem. In addition to the PBA work, leadership of the PBAs has contributed to the advancement of sustainable land management practices around military installations and ranges, specifically U.S. Army Ft. Bragg and the broader goals of the Sentinel Landscapes Partnership. The Partnership's mission is to strengthen military readiness, conserve natural resources, bolster agricultural and forestry economies, and increase climate change resilience.

Lands in the counties that surround and are near Ft. Bragg are predominantly owned by private landowners. With the establishment of the SPBA, landowners have been connected to the tools required to support the continued development of the longleaf ecosystem but encouraged development of a supportive and technical network that has enriched the capacity and confidence for the use of prescribed fire as another successful and critical management tool. Sustainable management practices such as forest management plans that offer strategic thinking toward long-term management, technical and fiscal assistance, and tools such as prescribed fire, allow landowners to manage their long-leaf forested property for today and into the future. Furthermore, in addition to the applied learn-and burn workshops including tools of the trade, additional PBAs are being developed in North Carolina given the success of this initial peer-supported model. The N.C. Forest Service is supporting development of a western county PBA and two other PBAs within the historic longleaf range in North Carolina.

*Outreach to Landowners.* Eastern North Carolina Sentinel Landscape partners have pursued opportunities to acknowledge private landowners for their stewardship practices and provided prescribed fire opportunities where landowners did not have the resources to implement these practices. Partners like the Tree Farm Program and the N.C. Forest Service through the N.C. Forest Service's Stewardship Incentives Program are providing $150 toward Tree Farm certification fees in the counties impacted by Hurricanes Michael and Florence until Sept. 30. By landowners voluntarily implementing practices related to prescribed fire, wildlife restoration, and recreational management, these landowners have directly contributed to the Sentinel Landscapes Partnership’s mission.

*REPI Challenge:* The Sentinel Landscape Partnership secured $1 million in 2020 to aid development of the living shoreline near MCIEAST. The living shoreline will protect the installation from the sharp erosion that is occurring in the area due extreme storm weather events. In 2021, another $1 million was awarded to the U.S. Air Force to meet its program needs in securing conservation easements.

The strategic priorities described in 2020, remain during the next two years within the Eastern NC Sentinel Landscape Partnership, and will focus on building resilience to climate change and extreme weather events. Climate challenges—such as recurrent flooding, droughts and extreme wildfires—are multifaceted and long term, and recognized as national security events. Collaboration among government agencies and between public and private entities is critical to building resilience to these risks. The partners will work to reduce the risk of extreme wildfires by implementing hazardous fuel treatments and the use of prescribed management, including the mitigation of coastal erosion and recurrent flooding by strengthening wetlands, beaches and coral reefs; and reduce vulnerabilities to droughts through water conservation projects and land as flood catchments, In doing so, the Sentinel Landscapes Partnership will strengthen military readiness by protecting against climate risks or extreme weather events that may negatively impact mission capabilities. These efforts will also support the long-term viability of agricultural and forestry operations and enhance wildlife habitat and public recreation opportunities. In addition to building resilience, the Partnership is ramping up and expanding its landowner engagement program by engaging ALL of its partners who work with landowners and have incentive programs. The Partnership is placing strong emphasis on educating and engaging landowners not simply about the resources available to them but the technical assistance that will

allow these landowners to develop the capacity for long-term management of their properties. Finally, while the Partnership will continue to secure easements, the new and innovative programs will be expanded – such as the N.C. Conservation Footprint- to continue to ensure the state is prepared for its future using compatible land use principles that protect military readiness, and provide a future for environmental, food and water security.

# Meeting Summaries

– **11-30-2020 meeting –** Commissioner Steve Troxler called to order the regular meeting of the North Carolina Sentinel Landscape Committee at 2:00 on November 30, 2020.
Veronica Jamison conducted a roll call. The following committee members were present: Commissioner Steve Troxler, Assistant Secretary Ariel Aponte, Deputy Secretary Reid Wilson, Executive Director Cameron Ingram, and Mr. Chester Lowder.
Others present were Dewitt Hardee, Veronica Jamison, Evan Davis, Laura Brookshire, David Smith, Jonathan Lanier, Will Best, Michelle Lovejoy, Robert Bardon, Rodney Woolard, Dick Fowler, Joe Austin, Mitchell Peele, Misty Buchanan, Janine McLawhorn and Stacey Sereno.
Ethics Reminder was read by Commissioner Steve Troxler.
Veronica Jamison presented the minutes from the June 10, 2020 meeting. Chester Lowder moved to approve the minutes, and Reid Wilson seconded the motion. The minutes were approved unanimously.
Committee Members Reports Pertaining to N.C. Sentinel Landscape Activities
Dewitt Hardee gave the report for the N.C. Department of Agriculture and Consumer Services.
Ariel Aponte gave the report for the N.C. Department of Military and Veteran and Affairs.
Reid Wilson gave the report for the N.C. Department of Natural and Cultural Resources.
Cameron Ingram gave the report for the N.C. Wildlife Resources Commission.
Robert Bardon gave the report for the N.C. State University College of Natural Resources.
Chester Lowder gave the report for the N.C. Sentinel Landscape Partnership.
Evan Davis reviewed the 2020 N.C. Sentinel Landscape Committee Annual Report.
Chester Lowder and Dr. Mary Lou Addor spoke on the Spaces Between the Bases Report. Misty Buchanan with the North Carolina Natural Heritage Program with N.C. Department of Natural and Cultural Resources spoke on the Natural and Working Lands Action Plan.
Chester Lowder spoke on the Camp Butner and Sentinel Landscape Recognition Update.
Commissioner Steve Troxler asked if there were any additional Sentinel Landscape Committee business items or public comments.
Commissioner Steve Troxler adjourned the meeting at 3:20 pm.

– **2-10-2021 meeting** – Committee members present: David Smith, Chief Deputy Commissioner of N.C. Department of Agriculture and Consumer Services (NCDA&CS), Dr. Myron F. Floyd, Dean N.C. State University College of Natural Resources (NCSUCNR), Kyle Briggs, Interim Executive Director of N.C. Wildlife Resources Commission (NCWRC), Walter Clark, Designee of N.C. Department of Natural and Cultural Resources (NCDCNR), Ariel Aponte, Designee of N.C. Department of Military and Veterans Affairs (NCDMVA), Chester Lowder, N.C. Sentinel Landscapes Partnership Representative
Other Attendees: Joe Austin, John Hammond, Stacy Serono, Robert Bardon, Tina Hlabse, Will Best, Jonathan Lanier, Janine McLawhorn, Dewitt Hardee, Evan Davis, Laura Brookshire, Mitch Peele, Phil Wallace, Joe Beckman, Rodney Woolard, Scott Shoulars, Pete Benjamin, Susan Miller, Peter Connelly, Sabrina Shaffer, Nancy Richardson, Bill Cary, Cavin Fitzsimons, Kyle Briggs, Nancy Guthrie and Veronica Jamison.
Mr. Smith called the meeting to order at 1:32 pm, and thanked everyone for attending. He let everyone know the Commissioner may call in. He asked Veronica Jamison to conduct a roll call. A quorum was present.
Mr. Smith welcomed Sabrina Shaffer to the NCDA&CS Farmland Preservation team.
Mr. Smith read the Ethics Reminder:

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.

Mr. Smith requested a motion to approve the minutes from the November 30, 2020 meeting. Mr. Lowder moved to approve the minutes for November 30, 2020. Dr. Floyd seconded the motion. The minutes were approved unanimously.

Dewitt Hardee provided the NCDA&CS report. There was $1.2 million reverted from the ADFP Trust Fund budget. Mr. Hardee reviewed the Partnership Funding Overview, 2016 RCPP Conservation Easement Projects. The conservation partnership with USDA, Air Force and NCDA&CS is the first with a single template easement. It totaled over 2,028 acres. The five easements are being held with Working Land Trust. Mr. Hardee reviewed the American Farmland Trust: New Farms Under Threat report. Since 2001-2016, over 11 million acres of agricultural lands were converted nationwide. He stated that North Carolina is the second-most threatened state in the nation, with 732,000 agricultural acres lost between 2001 and 2016.

Mr. Aponte provided the NCDMVA report. He stated that Military Ocean Terminal Sunny Point and Coast Guard Base in Elizabeth City had no significant impact to operation and readiness due to COVID-19. The Aviation Technical Training Center has seen some minor impacts, and some training has been delayed or rescheduled. Testing for COVID-19 is taking place at local sites. The U.S. Army Corps of Engineers - Wilmington Sector has started conducting hurricane season preparations. Mr. Aponte reported on the upcoming events for NCDMVA: May 25, 2021 - Memorial Day Tribute, June 6, 2021 - D-Day Tribute, June 14, 2021 - Army Birthday, July 2, 2021 - Independence Day Virtual Event, July 27, 2021 - Korean War Veteran Armistice Day , August 4, 2021 - Coast Guards Birthday

Walter Clark sat in for Reid Wilson. Mr. Clark stated there is $13.2 million in proposed recurring funding, and $5 million in proposed nonrecurring funding. There are 16 applications that were in military areas. There were over 145 total applications.

Kyle Briggs sat in for Gordon Meyers with NCWRC. There was over 680 acres of prescribed burns, and there were timber sales in the project area.

Dr. Floyd gave an update on the NCSUCNR. The university was working with the federal government and other partners on the mapping project “Spaces Between the Bases.” He provided updates on how to get more veterans involved with distance learning.

Mr. Lowder gave a update on the Sentinel Landscape Partnership. All the conferences in the past year have been cancelled or moved online. The Southeast Regional Partnership for Planning and Sustainability (SERPPAS) meeting will be rescheduled for September or October 2021.

Evan Davis with NCDA&CS Farmland Preservation reviewed the award of the USDA Natural Resources Conservation Service (NRCS) Regional Conservation Partnership Program (RCPP). The Preserving Upriver Farms to Reduce Flooding in N.C. proposal is a phased project that aims to reduce the negative impacts of soil erosion and runoff in the river basins in the Piedmont and Sandhills. Mr. Davis said Sentinel Landscape Partnership was on track to submit an application to the Readiness and Environmental Protection Integration (REPI) Challenge in March. Michelle Lovejoy with the N.C. Foundation for Soil and Water Conservation reported on outreach efforts to landowners in the Eastern NC Sentinel Landscape. Some of the outreach efforts have been delayed due to COVID-19.

Mr. Smith asked if there was any more comments or additional items to bring to the committee. Mr. Lowder moved to adjourn the meeting, while Mr. Clark seconded the motion.

Meeting Adjourned at 2:51 pm.

– **6-16-2021 meeting** – Commissioner Steve Troxler called to order a regular meeting of the North Carolina Sentinel Landscape Committee at 2:00 on June 16, 2021 as a Virtual Meeting.
Commissioner Steve Troxler introduced a new committee member Jeff Michael from the N.C. Department of Natural and Cultural Resources to the North Carolina Sentinel Landscape Committee.
Veronica Jamison conducted a roll call. The following committee members were present: Commissioner Steve Troxler, Ariel Aponte, Jeff Michael, Kyle Briggs, Dr. Myron Floyd and Chester Lowder.
Others present were Dewitt Hardee, Veronica Jamison, Evan Davis, David Smith, Jonathan Lanier, Will Best, Michelle Lovejoy, Robert Bardon, Rodney Woolard, Dick Fowler, Joe Austin, Mitchell Peele, Misty Buchanan, Janine McLawhorn, Sean Brogan, Coleman Simpson, Melissa Kennedy, Christy Agner, Thomas Potter, Malcolm Charles, Dennis Goodson, Brian Joyner, Phillip Wallace and Peter Connelly.
Ethics Reminder was read by Commissioner Steve Troxler.
Veronica Jamison presented the minutes from the February 10, 2021 meeting.
Commissioner Steve Troxler turned the meeting over to Weston McCorkle.
Chester Lowder moved to approve the minutes, and Dr. Myron Floyd seconded the motion. The minutes were approved unanimously.
Committee Members Reports Pertaining to N.C. Sentinel Landscape Activities
Dewitt Hardee provided the NCDA&CS report.
Ariel Aponte provided the NCDMVA report.
Jeff Michael provided the NCDNCR report.
Kyle Briggs provided the NCWRC report.
Dr. Myron Floyd provided the NCSU College of Natural Resource report.
Chester Lowder provided the Sentinel Landscape Partnership report.
Malcolm Charles, Installation Manager at Military Ocean Terminal Sunny Point presented on Military Ocean Terminal Sunny Point (MOTSU) and requested MOTSU to be a part of the ENCSL. Ariel Aponte moved to approve and Kyle Briggs seconded the motion. Motion was approved unanimously.
Dennis G. Goodson, Deputy Director 4th Mission Support Group at Seymour Johnson AFB, shared a presentation on Seymour Johnson AFB Lagoon Encroachment.
Weston McCorkle asked if there were any additional business items or public comments. Weston McCorkle adjourned the meeting at 3:48 pm.

This report was prepared by the North Carolina Department of Agriculture and Consumer Services on behalf of the North Carolina Sentinel Landscape Committee.