

Sentinel Landscapes:

Where shared priorities for conservation and working lands converge to protect national defense.



Eastern North Carolina Sentinel Landscape

What are Sentinel Landscapes? Public and private landscapes...

.....that are often in rural areas and part of a working economy and/or contributing to ecosystem services.

Examples include managed forested land, small farms and large agribusinesses, ranches, mixed-used working lands, landscapes that are developing new and innovative ways to remain in a rural state while contributing to the economy.

Places where conserving those landscapes adds value....

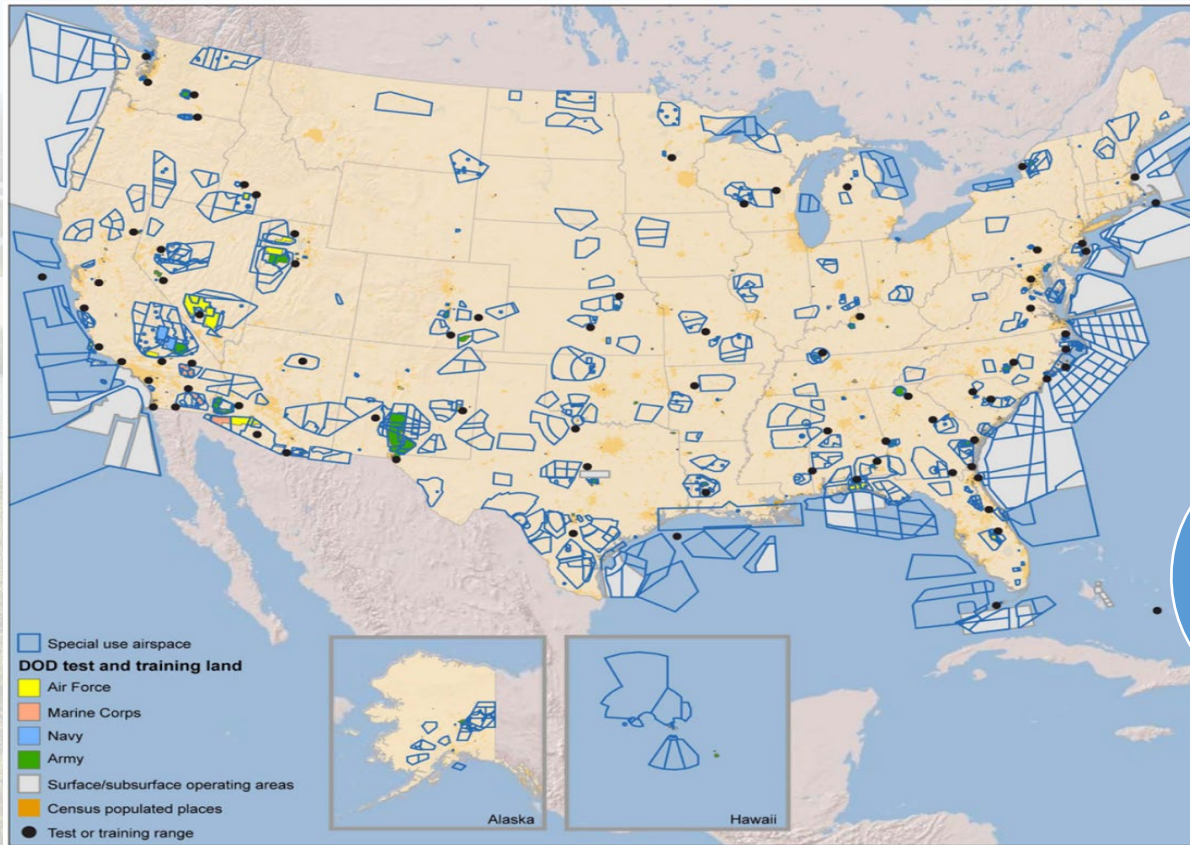
- Strengthens the economies of communities, forests, farms, and ranches
- Conserves habitat, flora, and fauna, and other natural resources
- Lands play a critical role in water, air, food, and energy sustainability, and national security
- Protects vital test and training missions to ensure military readiness where installations are anchored to such landscapes

A Sentinel Landscape Partnership ...

is a coalition of federal agencies, state and local governments, and non-governmental organizations that works with private landowners to advance sustainable land management practices around military installations and ranges. Founded in 2013 by the U.S. Department of Defense, Department of Agriculture, and Department of the Interior, the partnership's mission is to strengthen military readiness, conserve natural resources, bolster agricultural and forestry economies, and increase outdoor recreation and climate change resilience.

- Implement a **coordinated and comprehensive strategy** within a **defined landscape** to promote compatible land use.
- Coordinate **delivery of Federal, State, NGO and Local programs** to willing landowners whose working and natural lands support the military mission within designated Sentinel Landscapes
- Encourage state, local, and NGO/private **participation & use of multiple resources** to engage and reward voluntary landowner participation through recognition and monetary incentives.

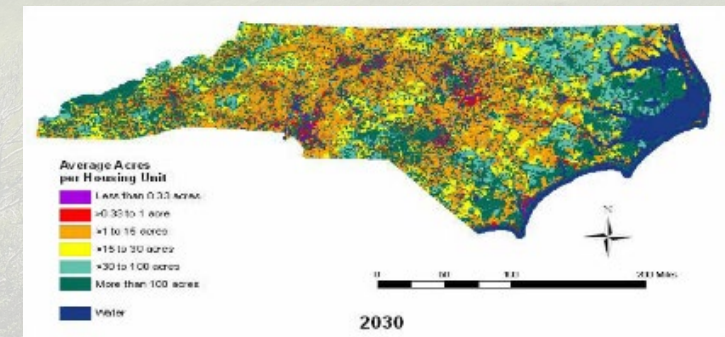
What Do We Wish We Would Have Done?



For national security? Food security? Water Security? Ecosystems Security?



Envisioning future military and conservation landscapes: a core team of the NC Sentinel Landscapes Partnership has been guided through an adaptive, iterative process of geospatial participatory modeling and facilitation.



NC Department of Agriculture and Consumer Services (NCDA&CS)

- Preserving family farms is one of Agriculture Commissioner Steve Troxler's top priorities.
- According to a 2020 study by the American Farmland Trust, North Carolina is the second-most threatened state for farmland loss in the United States
- The primary program of the NCDA&CS Farmland Preservation Division is the Agricultural Development and Farmland Preservation (ADFP) Trust Fund.
- The mission of the ADFP Trust Fund: To encourage the preservation of qualifying agricultural, horticultural and forestlands to foster the growth, development and sustainability of family farms.



Farmland Preservation and the ENCSL

The top two economic sectors in North Carolina: agriculture and the military.

- Working lands are compatible with the interests of the armed services:
 - Working farms and forests are located under viable airspace training routes and provide buffers against the encroachment of development near military bases and training areas.
- The primary tool to preserve farmland: conservation easements.
 - An agricultural conservation easement is a legal tool that restricts residential, commercial, and industrial development of land to maintain its agricultural production capability.
 - The purpose of these easements is to ensure the land remains in agricultural, horticultural, or forestry production while limiting adverse impacts to military training and readiness.
- Both the military and the ADFP Trust Fund provide grants to remove the development rights off the property and for other costs associated with the recording of the conservation easement.

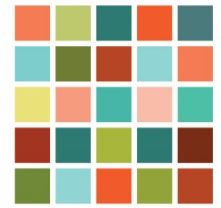
Since 2016

- Perpetually preserved **7,639 acres** of working farms and forests using military partnership funding.
- Another **3,608 acres** under contract to close before the end of 2022.



NC Department of Natural and Cultural Resources

- The North Carolina Department of Natural and Cultural Resources (DNCR) is the Department of things people love about North Carolina from Arts to the Zoo.
- As such, DNCR agencies hold land in the Eastern North Carolina Sentinel Landscape (ENCSL) counties (parks, historic sites, aquariums).
- The Natural Heritage Program maintains an inventory of the biodiversity and surveys natural areas in the ENCSL counties and on bases and establishes nature preserves to protect those resources for future generations.
- The North Carolina Land and Water Fund (NCLWF) is charged with 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, restore degraded streams and wetlands, and develop and improve stormwater treatment technology.



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NC Land and Water Fund and the Eastern North Carolina Sentinel Landscape



NCLWF has a long history of funding projects that protect the military mission:

- 2004 – the Board votes to add protection of military bases and flyways to the application scoring system
- 2011 – Legislature directs \$1.5 million of that year's NCLWF appropriation to be used as match for federal REPI funds
- 2013 - Legislature adds protection of military buffers as a Fund Purpose in our enabling statutes.
- 2015 - \$1 million in recurring funds is added for military buffer projects
- 2021 – NCLWF funds \$6 million in military buffer projects; \$20 million in ENCSL counties
- 2022 – NCLWF grant applications due February 1st. \$75 million is expected to be available.

NCLWF activity in the 33 ENCSL counties since 1997:

- Awarded over \$175 million in grants to land protection
- Over 200,000 acres
- Leveraged \$54 million in Federal funds (not all REPI)

NC Wildlife Resources Commission

Since 1947, the North Carolina Wildlife Resources Commission, a state government agency created by the General Assembly, has conserved and sustained North Carolina's fish and wildlife resources through research, scientific management, wise use, and public input.

The Commission is the regulatory agency responsible for the enforcement of N.C. fishing, hunting, trapping and boating laws.

The sale of hunting and fishing licenses, federal grants and other receipts provides financial support of the agency. The agency has an operational budget of approximately \$85 million and employs approximately 650 full-time staff and 100 seasonal temporary staff across the state, including wildlife and fisheries biologists and technicians, wildlife law enforcement officers, wildlife educators, communication specialists, customer service, information technology and administrative professionals.



NC Wildlife Resources Commission & the Eastern North Carolina Sentinel Landscape



NCWRC has a long history of providing training and technical assistance to North Carolina's military partners and the communities that surround them through implementation of the NC Wildlife Action Plan:

- The Red-Cockaded Woodpecker (RCW) Recovery & Sustainment Program (RASP) Marine Corps & the Office of the Secretary of Defense created a perpetual endowment fund, managed by the National Fish and Wildlife Foundation, to fund RCW management on game lands.
- Green Growth Toolbox (Counties using the GGT: Brunswick, Pender, Carteret, Craven, Moore). Training & technical assistance to land use planners & local governments on how to proactively reduce development impacts to priority wildlife habitats through land use planning methods.
- Emergency Coastal Resilience Fund, National Fish and Wildlife Foundation
The Commission and The Nature Conservancy have partnered to complete 7,500 acres of hydrologic restoration on Angola Bay Game Land in Pender County.

- Recovering America's Wildlife Act
- Wildlife Conservation Lands Program
Property tax reduction for private landowners that restore and manage priority wildlife habitats, up to 800 acres per landowner, per county

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