



# Military Implementation of Green Infrastructure

## The Power of Partnerships

Mr. Paul Friday

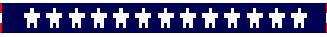
Deputy Assistant Chief of Staff G5

Marine Corps Installations East

14 November 2011



# MCIEAST INSTALLATIONS



MCIEAST controls seven of the nine Marine Corps installations on the East Coast, and is headquartered at Camp Lejeune, North Carolina

<u>Total Personnel (Region)</u>	~232,000
<u>North Carolina Personnel</u>	~190,500
Mil & Civ	~ 75,300
Family Members	~ 85,500
Retired	~ 29,700

FY10 Economic Impact:  
\$7,043,087,208

North Carolina Economic Impact:  
\$5,479,111,3888





# LOOKING TO THE FUTURE



## LANDSCAPE-LEVEL PLANNING ~ *THE POWER OF PARTNERSHIPS* ~

(LINKING CONSERVATION, WORKING LANDS AND  
NATIONAL DEFENSE)





# WHY PARTNER?



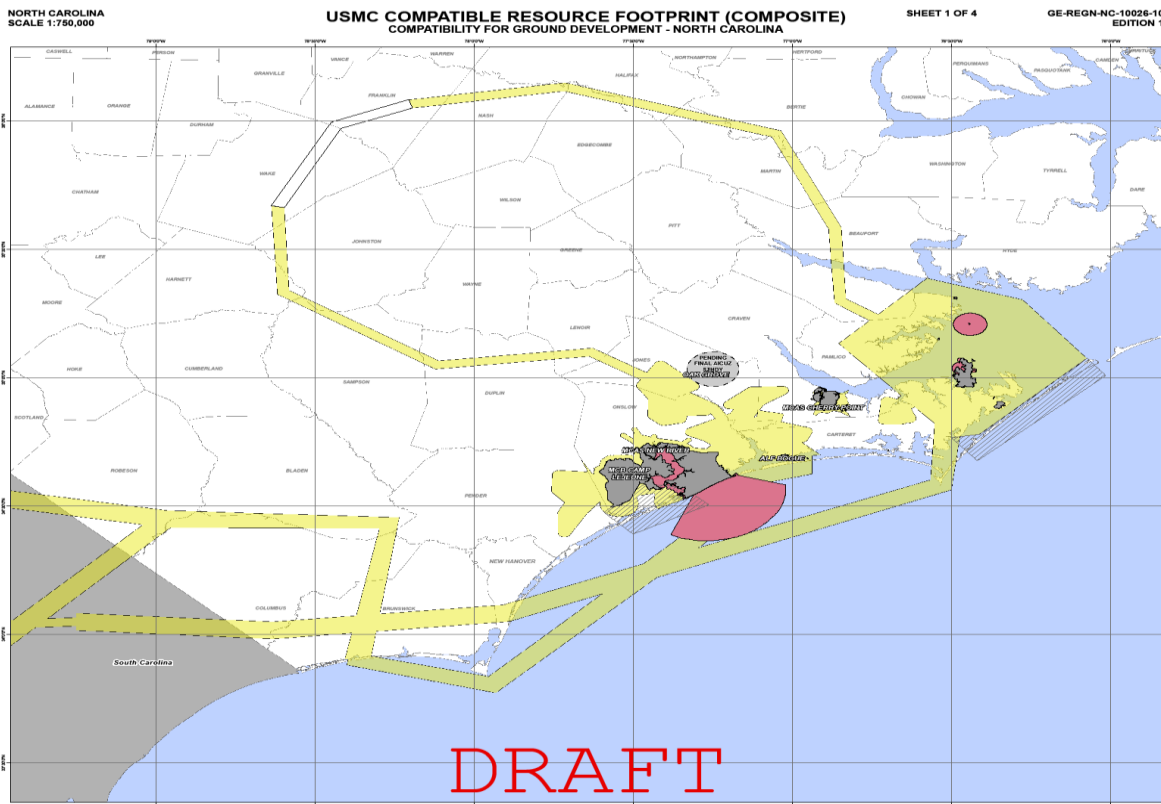
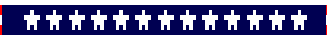
- Promotes long-term sustainable land use for both the military *and* civilian sector
- The military needs realistic (and enduring) training area/ranges
  - Encroachment degrades military testing and training capabilities
  - Areas of concern include “white space” (off-base air and land corridors) that connect military bases and airfields with remote training ranges
  - Preservation and restoration of off-base natural habitat to prevent or reduce training restrictions on base
- Develop regional land use plans with federal, regional, state, local and military agencies (together we’re stronger)





# MARINE CORPS

## Compatible Resource Use Footprint



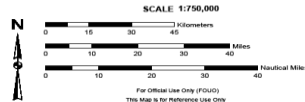
**MARINE CORPS INSTALLATIONS**  
MCIEAST



Map Author: East Coast Regional GEO/Info Center  
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THE NORTH AMERICAN DATUM 1983 (NAD 83)  
AND THE WORLD GEODETIC SYSTEM 1984  
DATUM (WGS 84) ARE EQUIVALENT FOR MAPPING,  
CHARTING AND NAVIGATION AT THIS SCALE.

GCS NAD 1983



**Legend**

	USMC Installation Area
	No Development is Compatible with USMC Mission
	USMC Consultation Recommended
	No USMC Consultation Required

**NOTES**

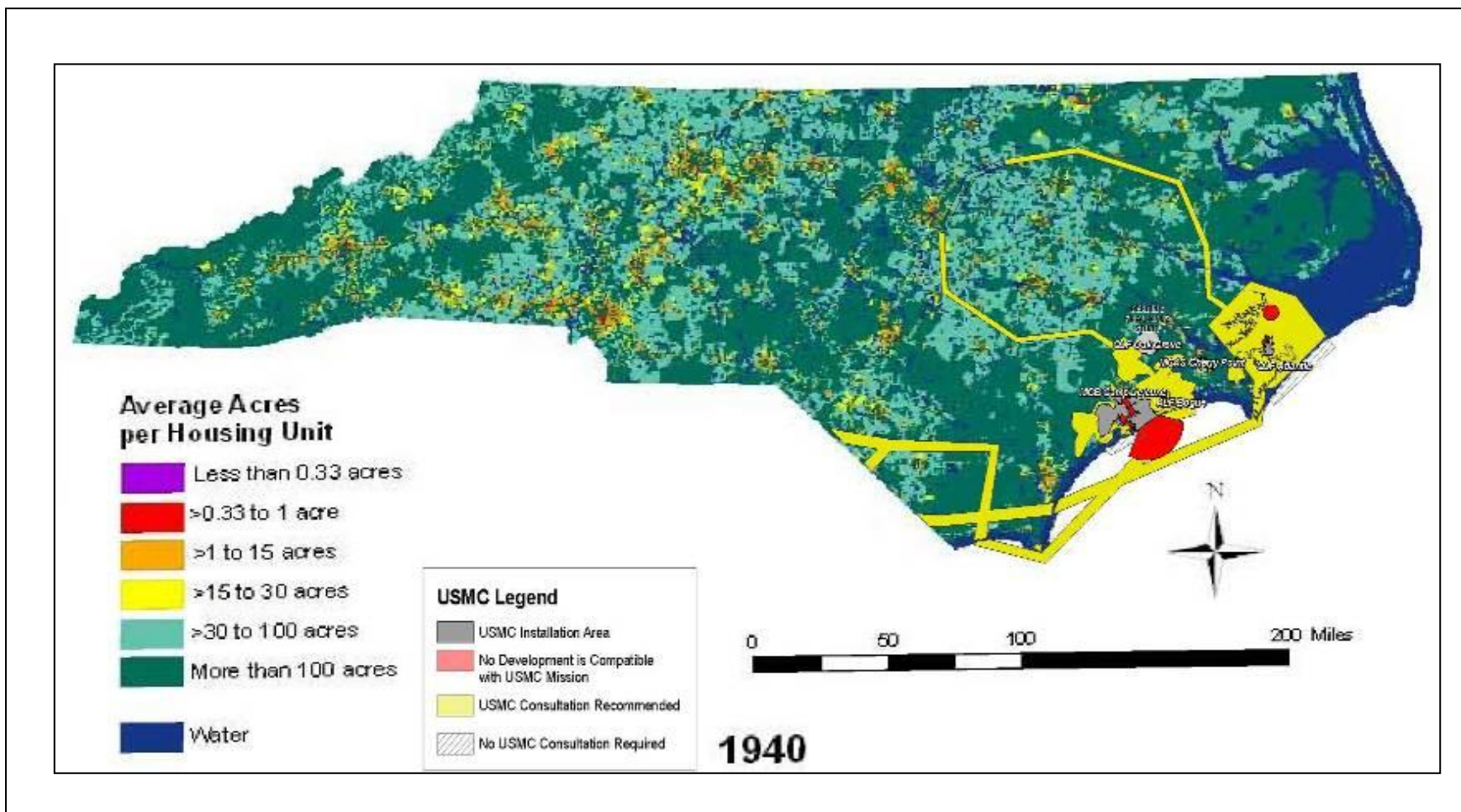
1. This map is a composite of all USMC installations in the East Coast region. It is not intended to be used for individual installations. For more information on the USMC mission and the impact of development on the USMC mission, please contact the USMC External Relations Specialist at the address above.

2. This map is for reference use only. It is not intended to be used for navigation or other purposes. For more information on the USMC mission and the impact of development on the USMC mission, please contact the USMC External Relations Specialist at the address above.

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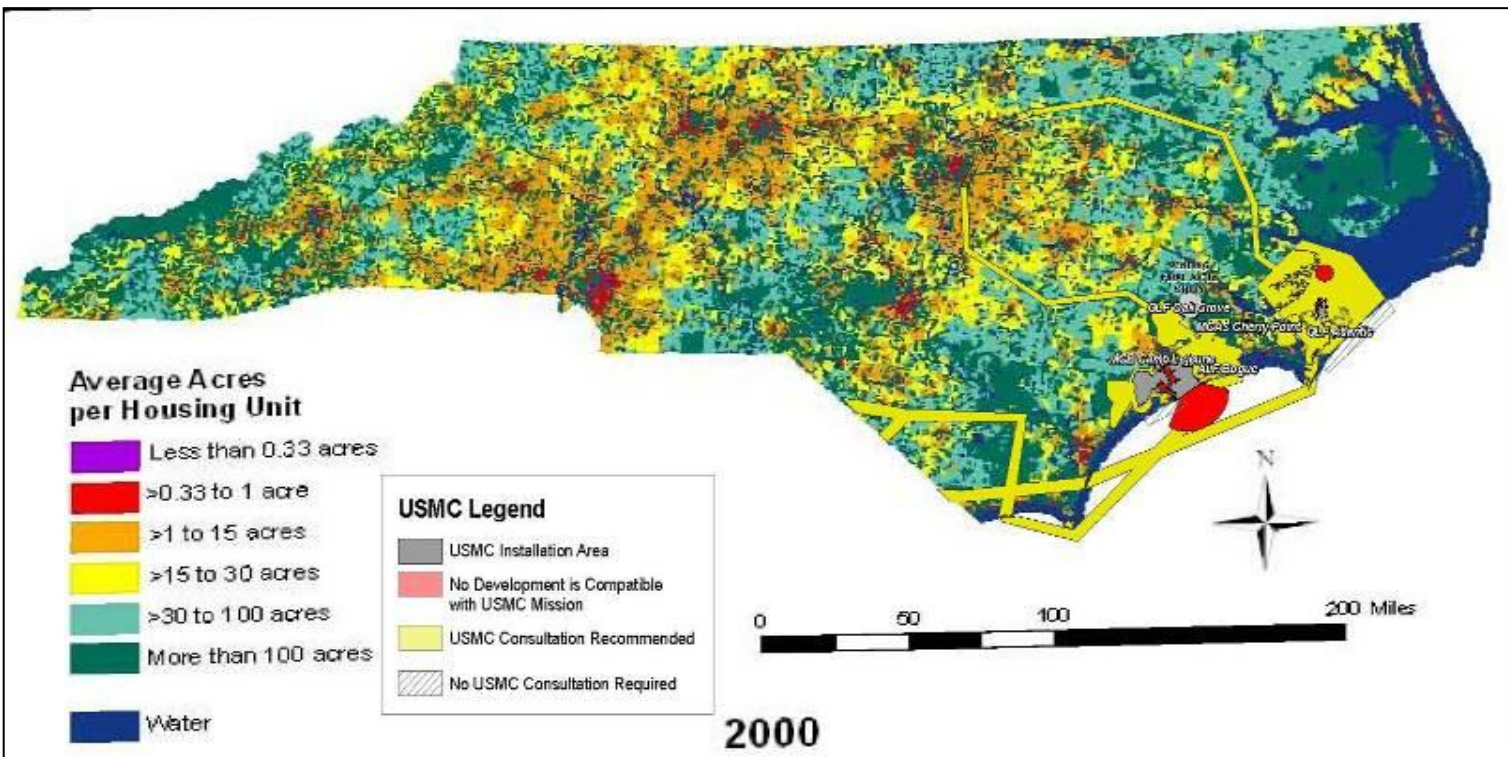
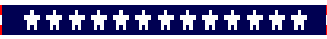


# MARINE CORPS MISSION FOOTPRINT 1940 HOUSING DENSITY



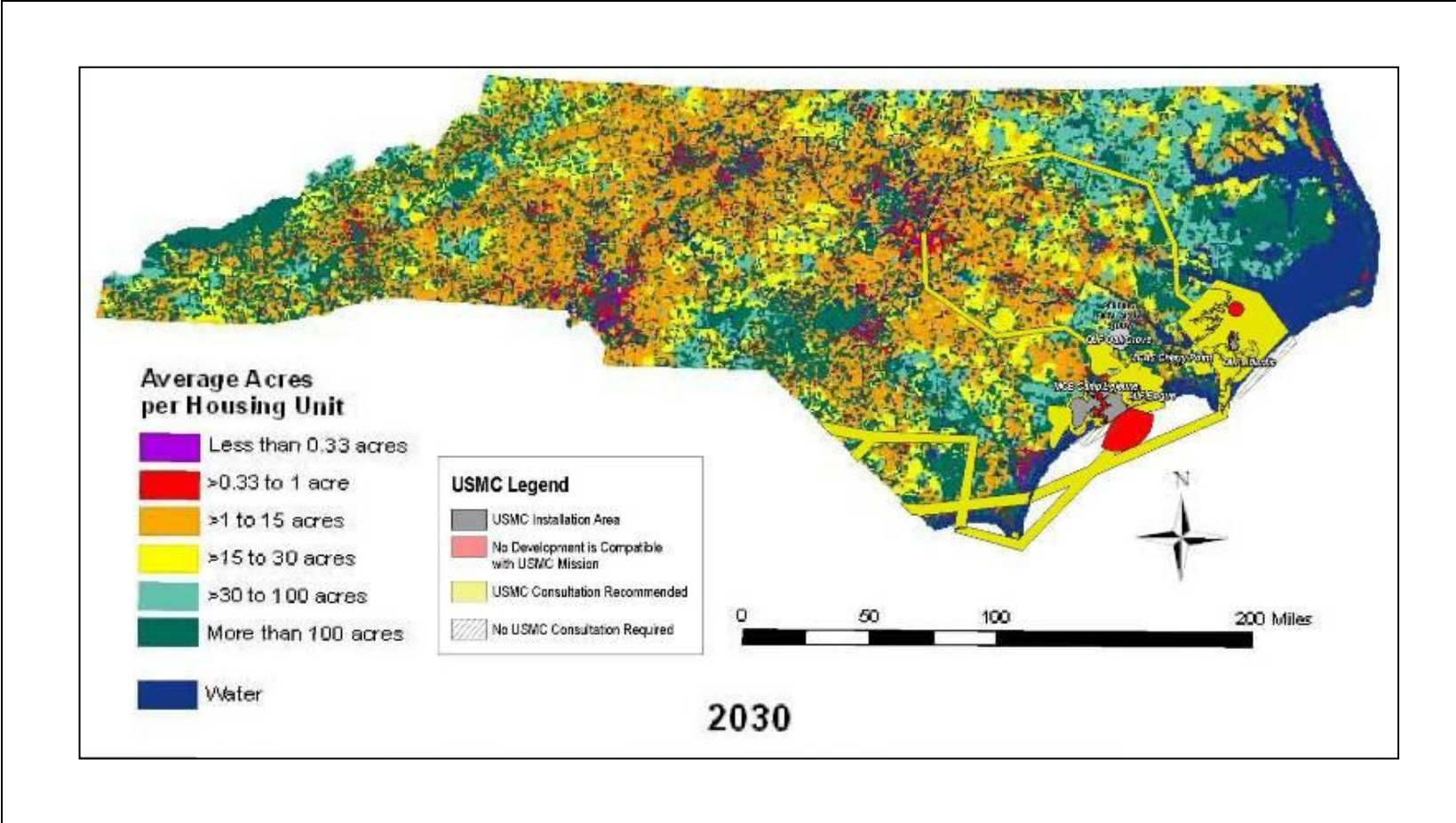
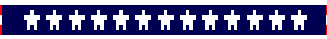


# MARINE CORPS MISSION FOOTPRINT 2000 HOUSING DENSITY





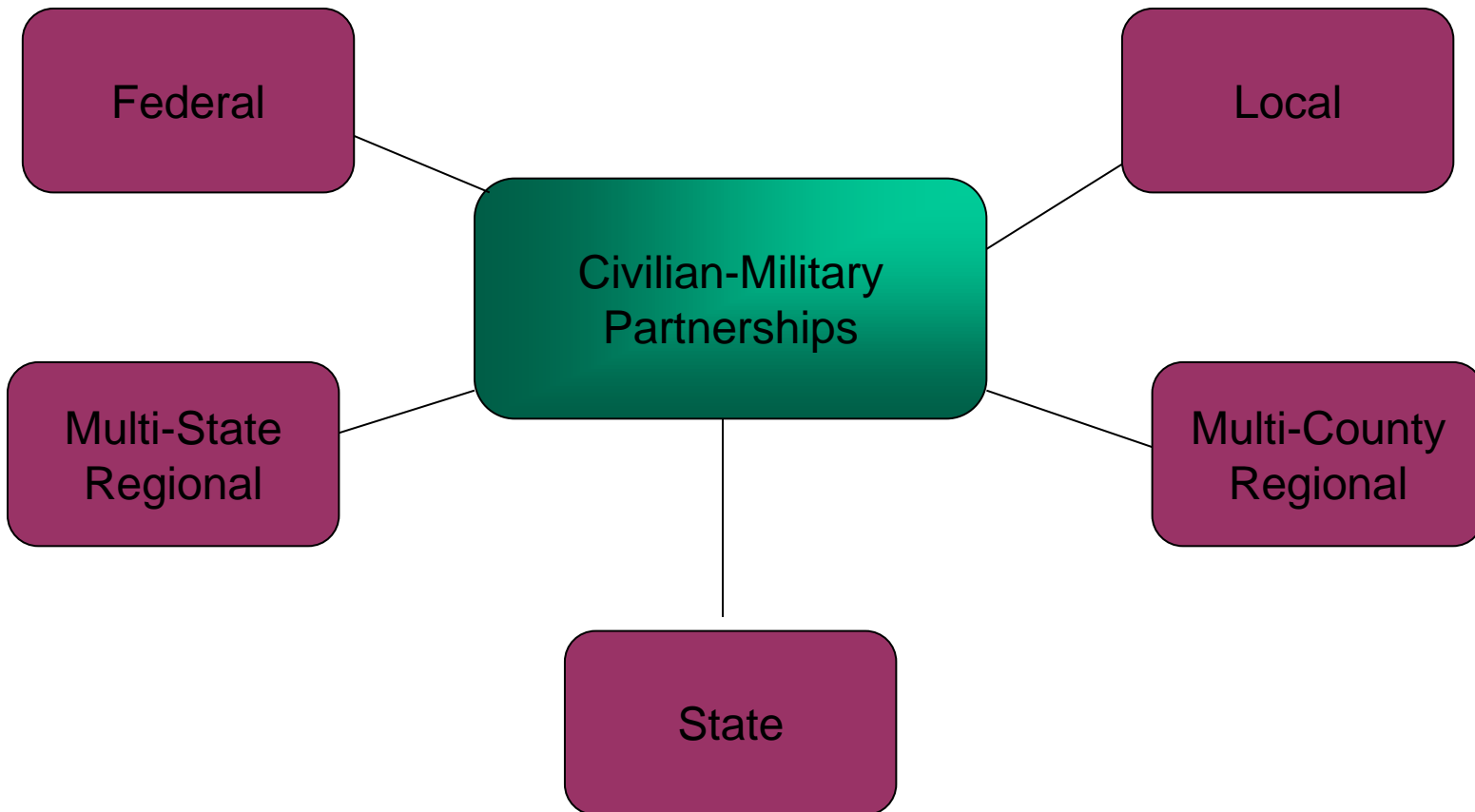
# MARINE CORPS MISSION FOOTPRINT 2030 HOUSING DENSITY







# NOTIONAL PARTNERING



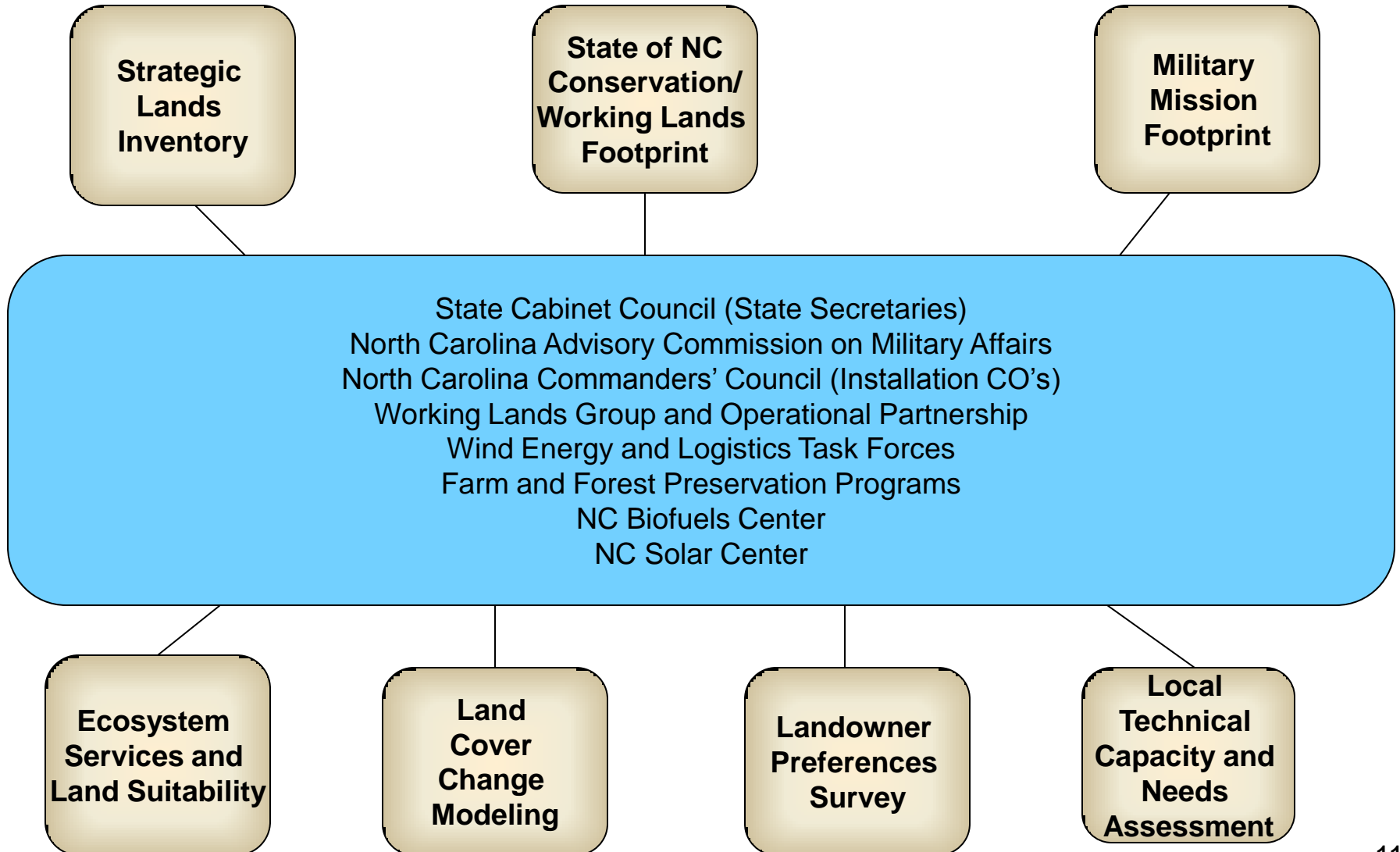


# Southeastern Regional Partnership for Planning and Sustainability (SERPPAS)

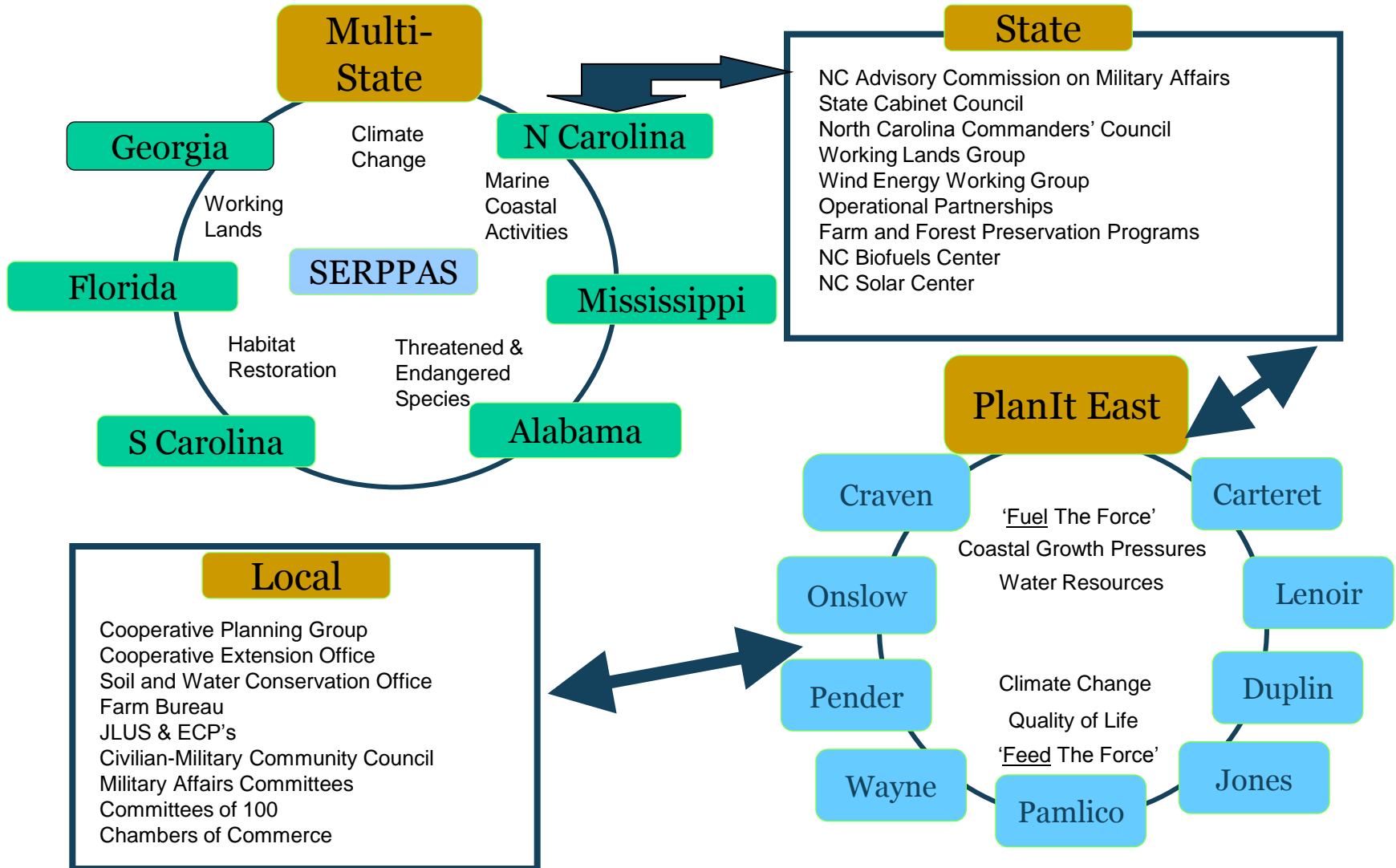


- Rapid growth projected throughout the Southeast United States
- First meeting in 2005 to determine if SE states/military were willing to form a partnership to address rapidly growing competition for scarce resources (land, air, water, frequency)
- Membership initially assembled with natural resource focus; has evolved to include all facets of regional planning
- Recognized early “the urgency of now” and that the partnership would require crossing organizational boundaries (horizontally and vertically)
- Principals include:
  - North Carolina, South Carolina, Georgia, Alabama, Florida and Mississippi
  - OSD and General Officers from each of the military services
  - NOAA, EPA, NRCS, USFWS, USFS and USGS

# STATE PARTNERSHIPS NORTH CAROLINA PROTOTYPE



# PARTNERSHIPS





# EVOLUTION OF LAND CONSERVATION & MILITARY MISSION PROTECTION



“Nevertheless, the record clearly shows that conservation can’t succeed by charity alone. It has a fighting chance, however, with well-designed appeals to self interest. The challenge now is to change the rules of the game so as to produce new incentives for environmental protection, geared to both society’s long-term well-being and individuals’ self-interest.”

*-The New Economy of Nature: The Quest to Make Conservation Profitable*

## 4 Stages of Conservation

1. Origin: Primary focus is a parcel-by-parcel approach to obtain permanent easements for protection of near-by training lands, involving key natural resource partners (states and NGOs) to achieve training buffer and wildlife protection goals
2. Now: Additional programs based on working lands conservation, the next step in protecting and enhancing the military mission footprint
3. Next: Key partners need to broaden their thinking to include both natural resource and working lands; a more streamlined philosophy and operation process will be necessary to enhance sharing/leveraging opportunities
4. Desired end state: The ability to deliver multiple mission benefits through the convergence of natural resource, working lands, and national defense interests; **connecting valuable landscapes at larger scales**



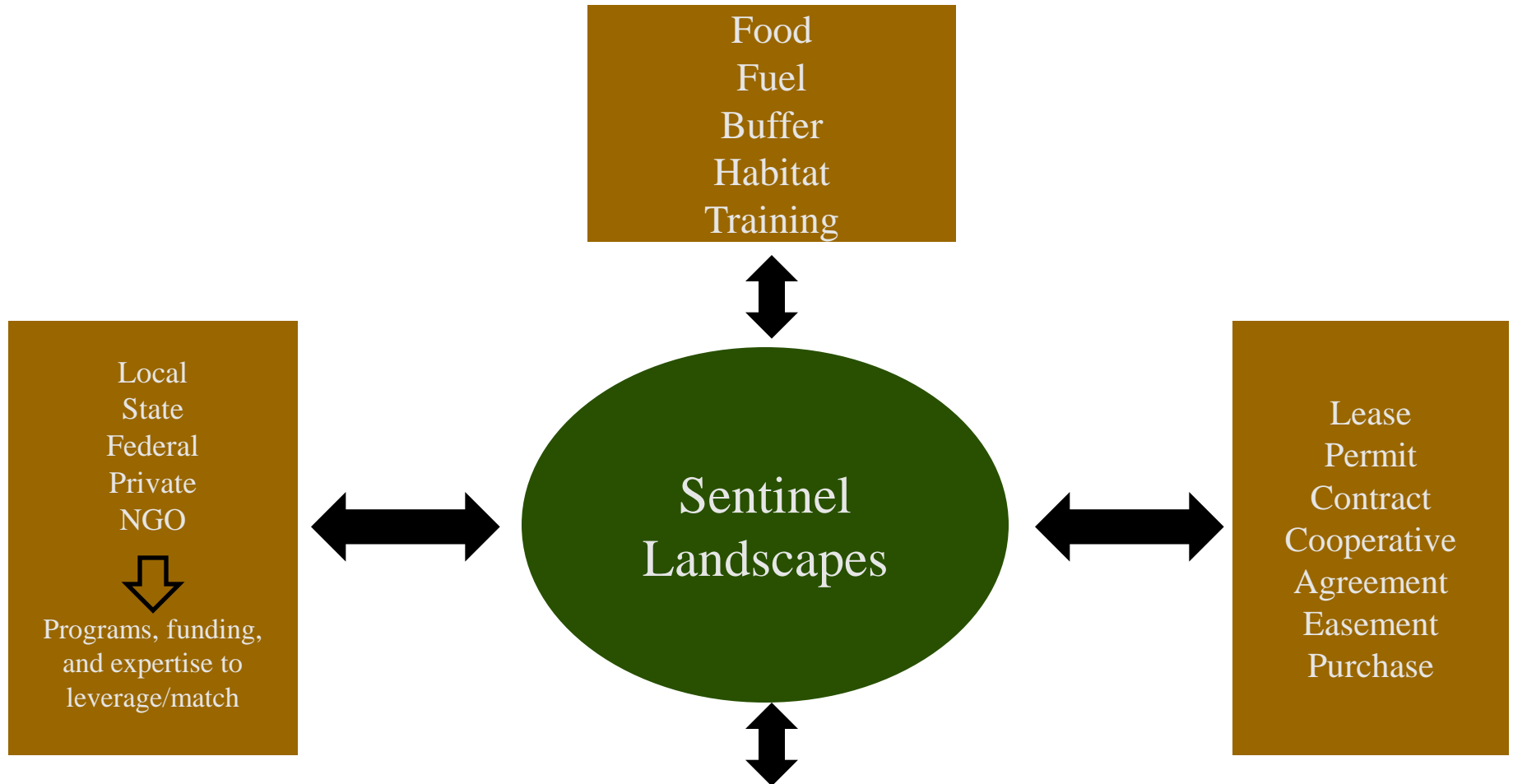
# SENTINEL LANDSCAPES

## LINKING CONSERVATION, WORKING LANDS, AND NATIONAL DEFENSE



- OSD Concept: *A coalition of partners forming a unit of conservation landscapes in association with the military*
- Private landowners, participating voluntarily, exist as the key unifying component. Private landowners would be recognized for the unique value their land and the associated land management practices provide – a significant benefit supporting national defense due to their location and relationship to an existing military readiness mission – essentially “**green readiness**”

# DESIRED END STATE



**Allows the characteristics of the land, military needs, landowner desires, the states, and program objectives to determine and define the players, outcomes, and duration of collaboration. This not only will buy us more time but will create flexibility down the road.**



# FOOD AND FUEL FOR THE FORCES (FF4F)



- Concept
  - Cornerstone for creating a lasting partnership with the working lands community (good neighbor)
  - Decrease the loss of working lands to incompatible use
  - Economics based and ties range/training sustainment to energy and food security





# FOOD AND FUEL FOR THE FORCES (FF4F)



- Current Efforts

- Assessing current level of “buying local” at commissaries, mess halls, clubs, hospitals, schools; good progress but needs more acknowledgement and marketing
- Conducting meetings with local/regional Defense Commissary Agency (DeCA) officials and scheduling meetings with HQ DeCA and prime vendor out of Norfolk re commissaries; then, will focus on Marine Corps Community Services managed food areas as well as hospitals/schools/mess halls
- DeCA agreed to increase signage on local products within MCIEAST NC commissaries
- Also receiving interest from communities concerning an Enhanced Use lease for distribution center

(Much more work to do here...)



# Food & Fuel For the Forces



- Next Steps

- Initial short term projects

- Eliminate/mitigate institutional barriers to local produce!

- GAP certification constraints

- Vague procurement directives for prime vendors

- Work with existing prime vendor produce providers to maximize local purchases

- On-base marketing of existing fresh food opportunities in the communities (farmers markets)

- Mid term projects

- Modify DoD contracting practices as necessary

- Explore potential use of DoD lands for distribution facility

- Identify products that provide best opportunity for integration into the industrial food service buying process



# Food & Fuel For the Forces



- Current Efforts

- Biofuels Center (funded through 2015 @ \$20M) is working on major initiative to provide enough biofuel to meet the North Carolina’s 10% renewable energy consumption goal by 2017 (based on current use)
- Project Eastern Gain
  - Partnership between the Military Growth Task Force and NC Biofuels Center
  - Objective is to build a robust and viable biofuels industry in eastern NC
    - 1-2 million gallons of biodiesel per year by 2012 (double NC’s current production)
- Economic Development organizations are working on attracting biomass plant investment in eastern NC



# AGRICULTURAL DEVELOPMENT AND FARMLAND PRESERVATION (ADFP)



- Concept

- Fund projects to **encourage the preservation** of qualifying agricultural, horticultural and forestland to foster the growth, development and sustainability of **family farms**
  - NC created ADFP Trust Fund in 2005
  - Over \$10M expended to date
  - Included in state's recurring budget
- Focus is to **keep farms in farming and forests in forestry!**
  - State has lost an average of 100,000 acres a year over last five years



# AGRICULTURAL DEVELOPMENT AND FARMLAND PRESERVATION (ADFP) (Con't)



- Current Efforts

- North Carolina's Eastern Region (NCER)

- North Carolina Department of Agriculture, Agricultural Development and Farmland Protection Plan

- \$100,000 grant – four counties – Greene, Jones, Lenoir, Onslow

- Financial/personnel support from NCER (\$5,000 cash, \$10,000 in kind), Mt Olive College (personnel) and NC DENR \$5,000 in kind

- Applied for second grant to develop FPPs for Carteret, Craven and Pamlico counties

- State has dedicated a portion of their effort to support military training mission

- Initial effort last year; Guthrie farm prototype

- Expanded announcement this year; working on term and perpetual easements and developing contracts process to cover entire USMC compatible resource use area

- Type of transaction used to be dependent on partners and location of parcels (easements inside range complex area and contracts in “away space”)



# LONGLEAF PINE (LLP)



- Concept

- Southern Regional Conservation Plan
  - Provides a road map, establishes goals, identifies Significant Geographic Areas, establishes strategies, approaches, objectives and key actions
- North Carolina Longleaf Coalition
  - Promote the maintenance and restoration of North Carolina’s longleaf pine ecosystem, including its cultural and economic values, by forming a collaborative network of diverse stakeholders to provide strategic leadership across the historical range while also supporting local restoration activities
- Restoration of LLP has numerous positive values including recovery of threatened/endangered species; important to mitigate LLP restoration’s affect on future military training



# MARKET-BASED CONSERVATION



- Concept

- Why Market-Based Conservation?

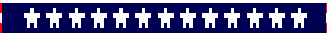
- North Carolina lost 1 million acres of forestland between 1990 and 2002 (three quarters to urban development)
    - Since 2002, North Carolina has lost more than 6,000 farms and 600,000 acres of farmland
    - Since 1957, USMC has lost approximately 85% of military-dedicated flight training area in eastern North Carolina

- Need to create a voluntary program that provides incentives for landowner commitment

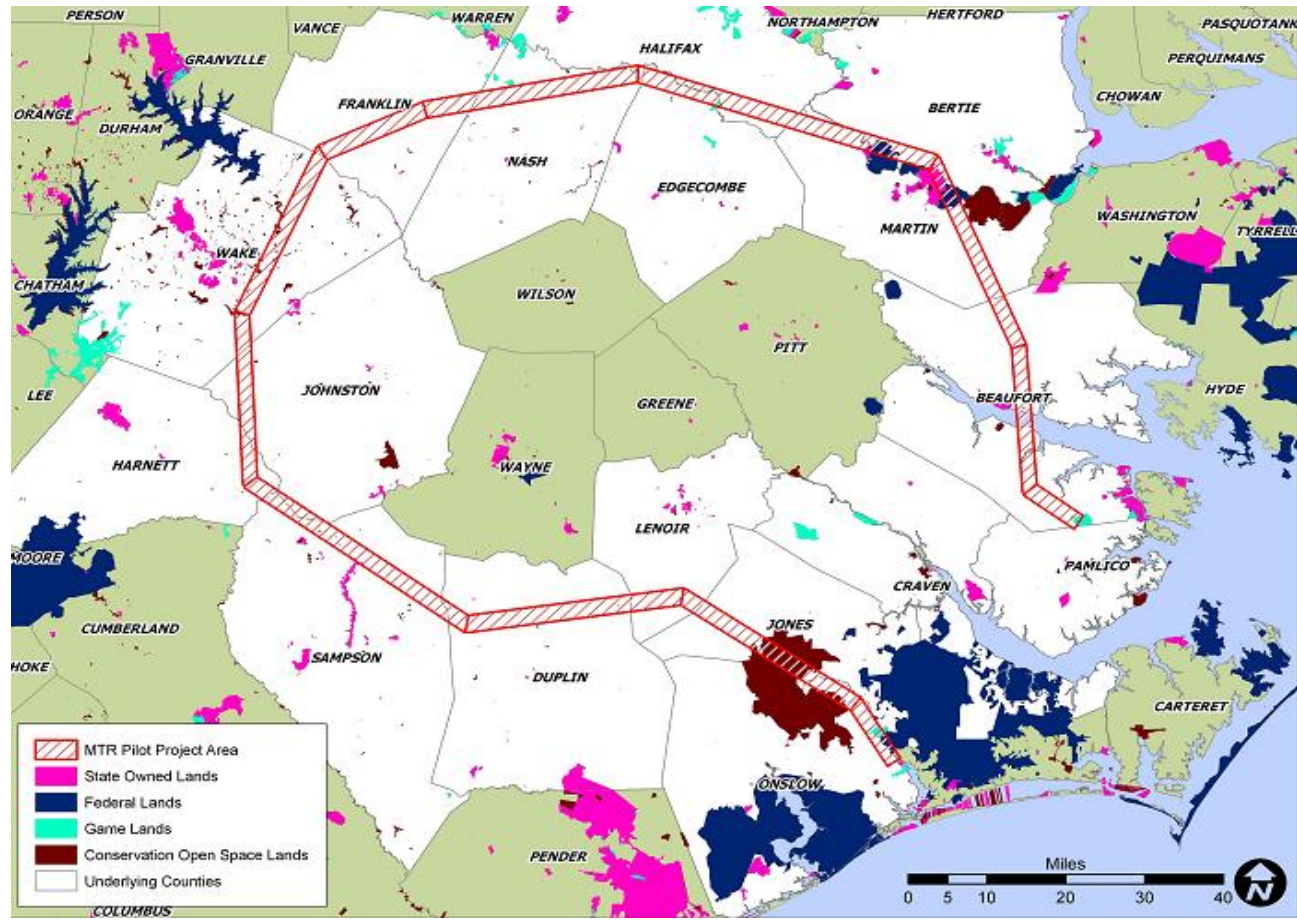
- Encourages private landowner participation in land conservation
    - Rewards landowners for their commitment
    - Currently planning to conserve rural working lands (farms and forests) underlying a major Military Training Route (MTR) in eastern North Carolina



# MARKET-BASED CONSERVATION (Con't)



~90 % of land underlying the MTR is in private ownership







# EAST COAST LOW LEVEL ROUTES





# Final Thoughts...



Bottom Line: If you feel strongly about *either* natural resources, working lands, connecting valuable landscapes at larger scales, or national defense. . .then. . .I believe we've got to work together, in a ***mutually beneficial partnership*** if we're ever to make significant conservation progress

*Or, as Ben Franklin observed at the signing of the Declaration of Independence: "We must all hang together, or assuredly we shall all hang separately"*



# ON THE HORIZON



- Sentinel Landscapes
  - SASDA/NASDA
- Sentinel Seascapes
- DON/USDA/DOE Biomass RFI/RFQ
- 10 Bubbles for UAS
- Water Security
- Climate Change
- USFWS Wildlife Reserves Utilization



# QUESTIONS

