



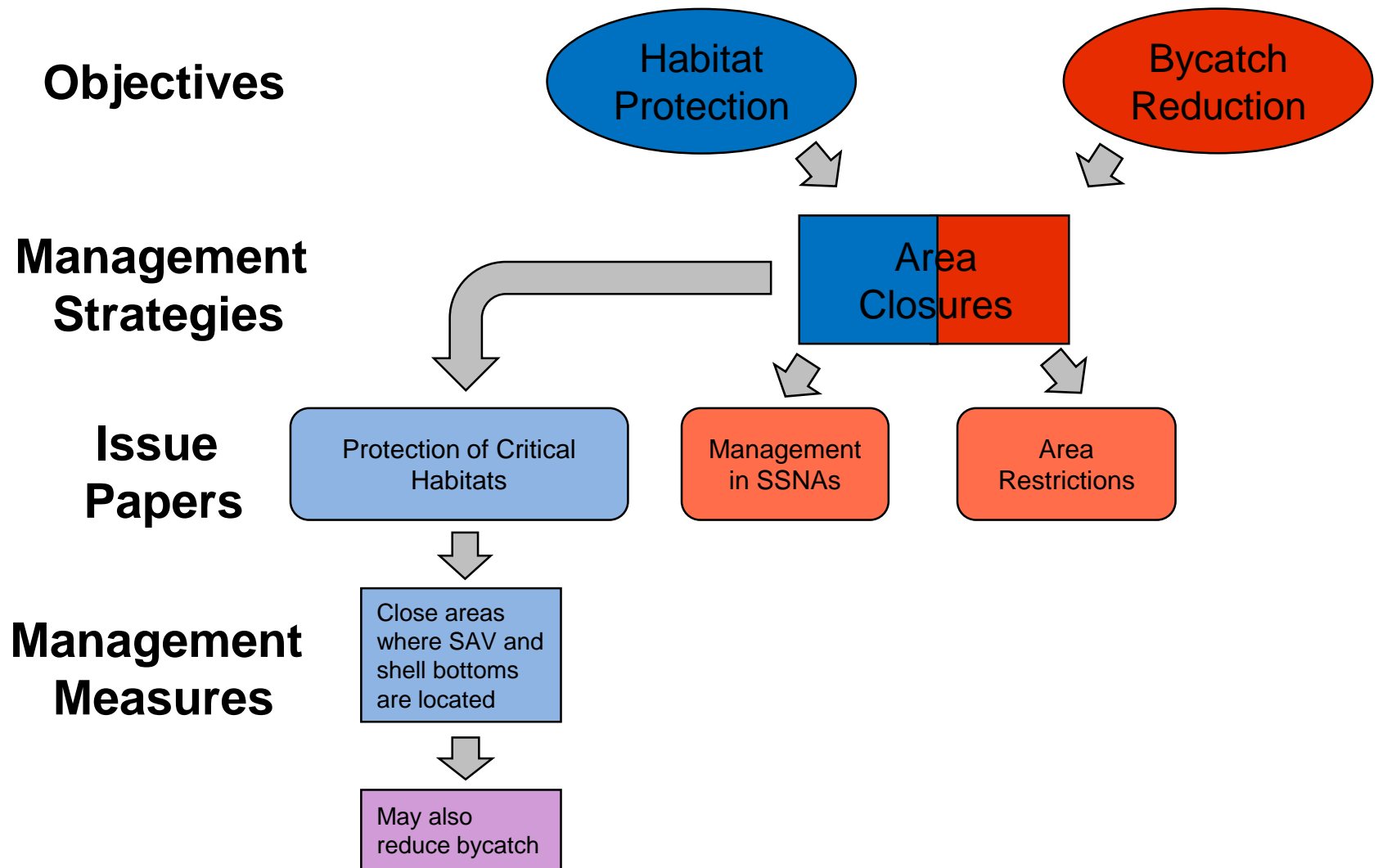
*Shrimp FMP Amendment 2  
Management of Shrimp Trawling for Protection of  
Critical Sea Grass and Shell Bottom Habitats*

*DEPARTMENT OF ENVIRONMENTAL QUALITY*

Marine Fisheries

Shrimp Advisory Committee | Daniel Zapf | March 4, 2021





# *Critical Habitat*

- Shell bottom and submerged aquatic vegetation (SAV)
  - Important habitat for many fish and invertebrates
- Critical Habitat Committee (1980s)
- Estuarine Benthic Mapping Program (1990)
- Critical habitat definitions (1994)



## *Strategic Habitat Areas (SHAs)*

- Coastal Habitat Protection Plan (CHPP)
  - Identify strategic habitat areas (SHAs)
  - Focus habitat and water quality protection
- SHA nominations have been completed
- Cannot influence management until designation
  - Based on verification
- Verification is underway but will take time
- Strategy here aligns with CHPP SAV priority



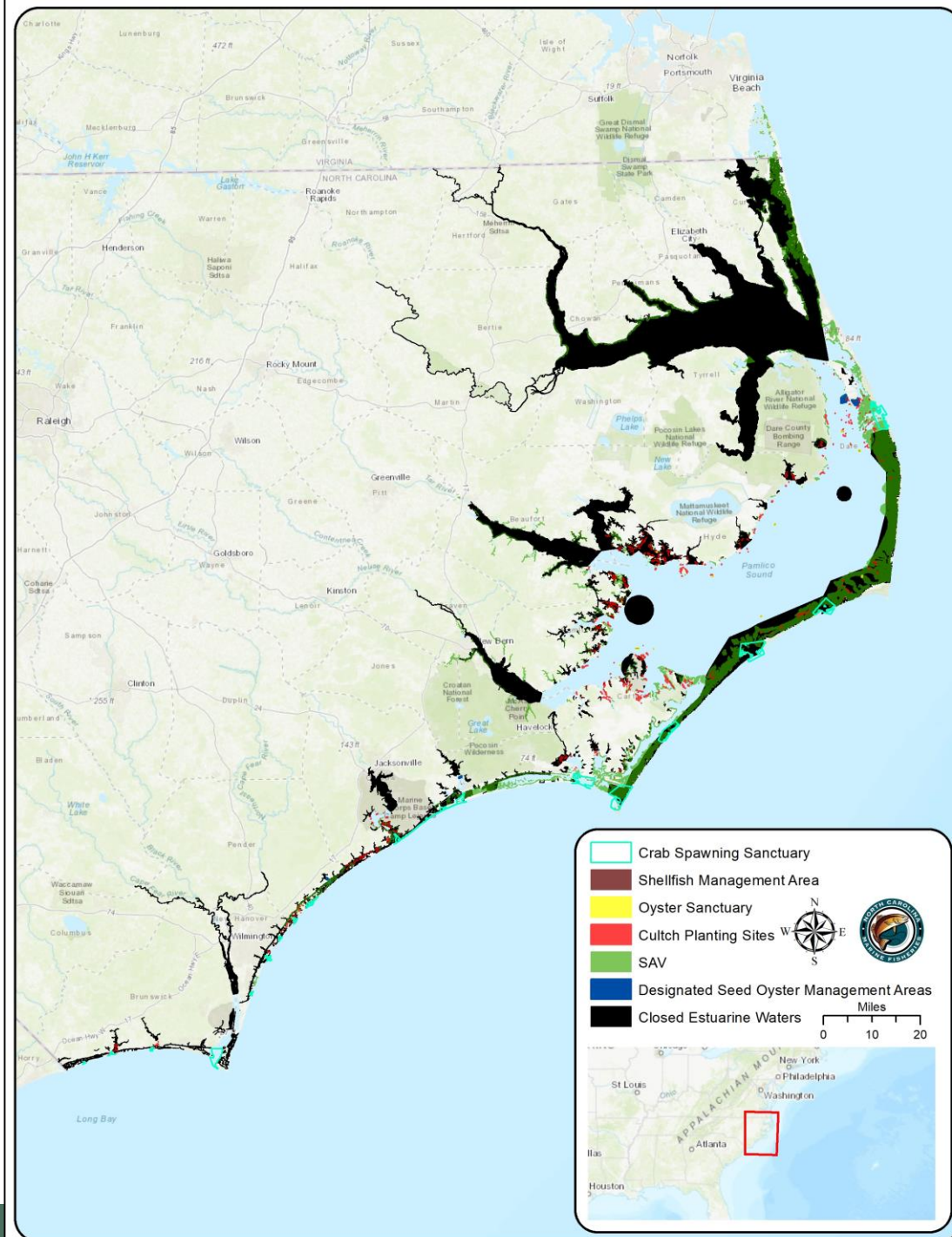
## *Data Sources*

- Estuarine Benthic Mapping Program
- Oyster sanctuary program
- Cultch plantings
- SAV habitat (1981-2009)
  - Mapping events vary in area and interval between mapping
  - Interagency effort



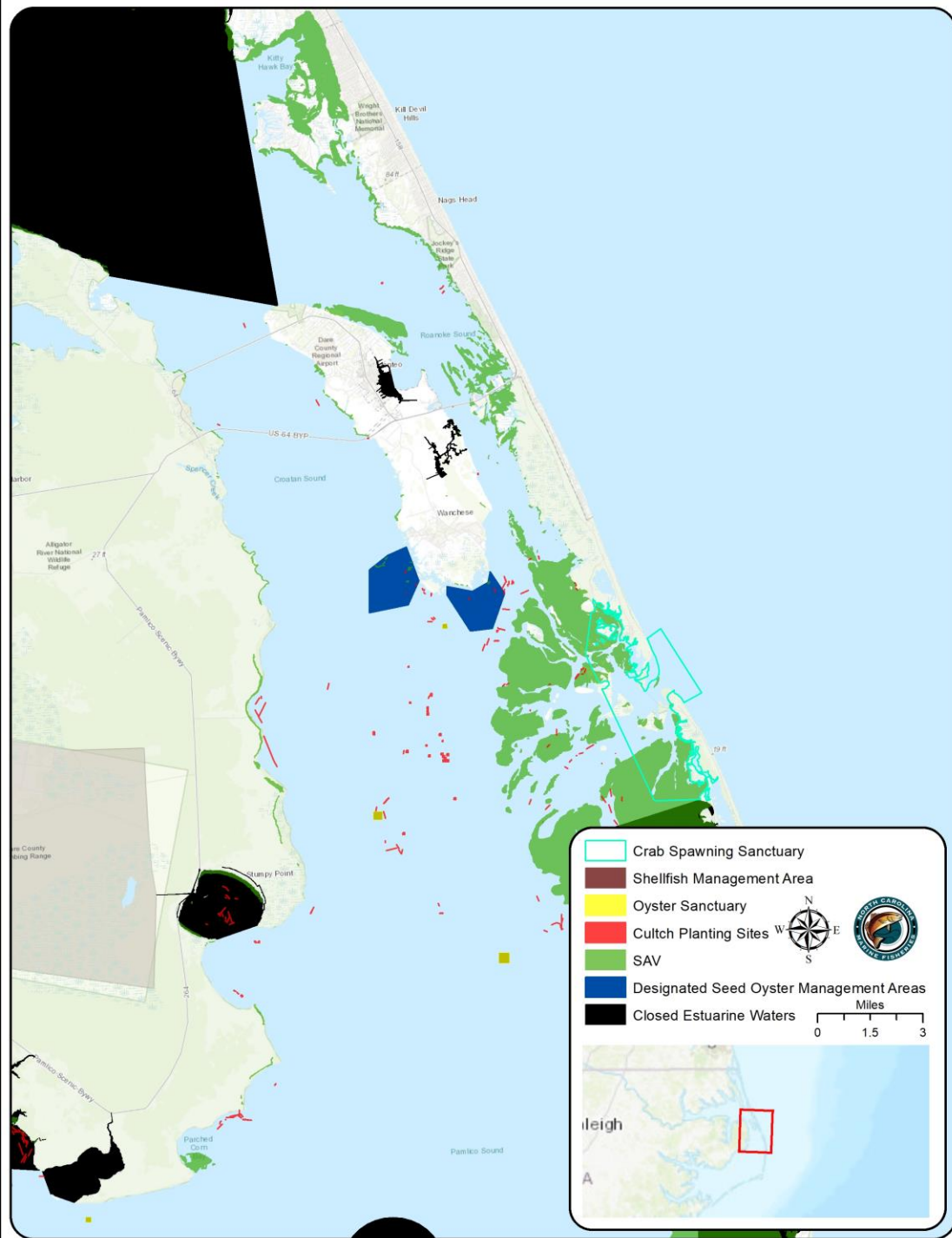
# Bottom Trawl Impacts

- Critical habitat found coastwide
- Impact varies by habitat
- Shell Bottom
  - Complex habitat
  - Susceptible to disturbance
  - Some existing protections
- SAV
  - Susceptible to disturbance
  - Some existing protections
- Soft Bottom
  - Minimal impacts
  - Commonly trawled



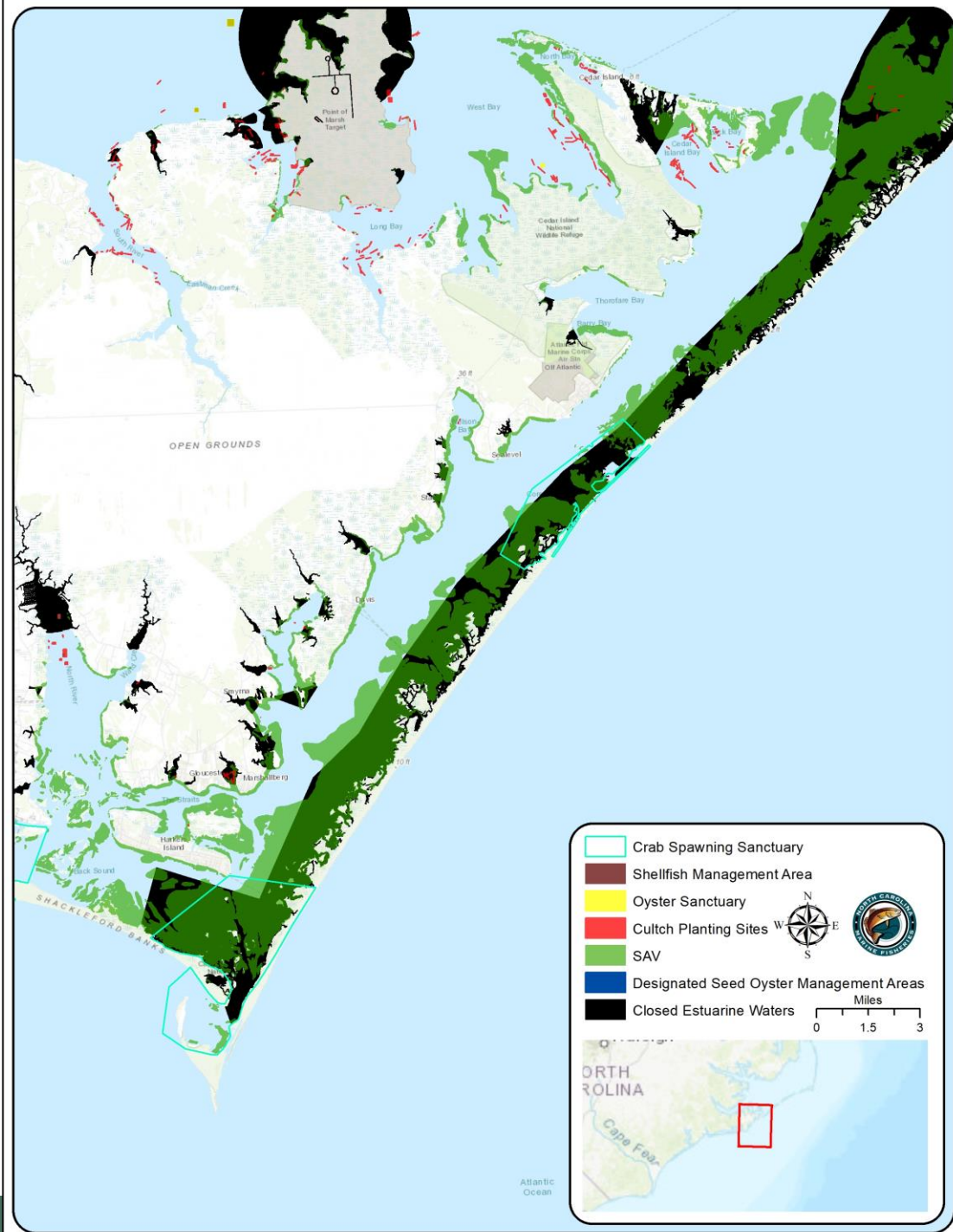
# Shell Bottom Protections

- Oyster Sanctuaries
  - Must be marked with signs or buoys
- Shellfish Management Area
  - Designated by proclamation
  - Includes shellfish enhancement projects
  - Must be marked with signs or buoys
- Seed Oyster Management Areas
  - Permit required to take oyster for transplant
- Bottom disturbing gear prohibited
- Protection from other closures



# *SAV Protections – Pamlico, Core, Back Sounds*

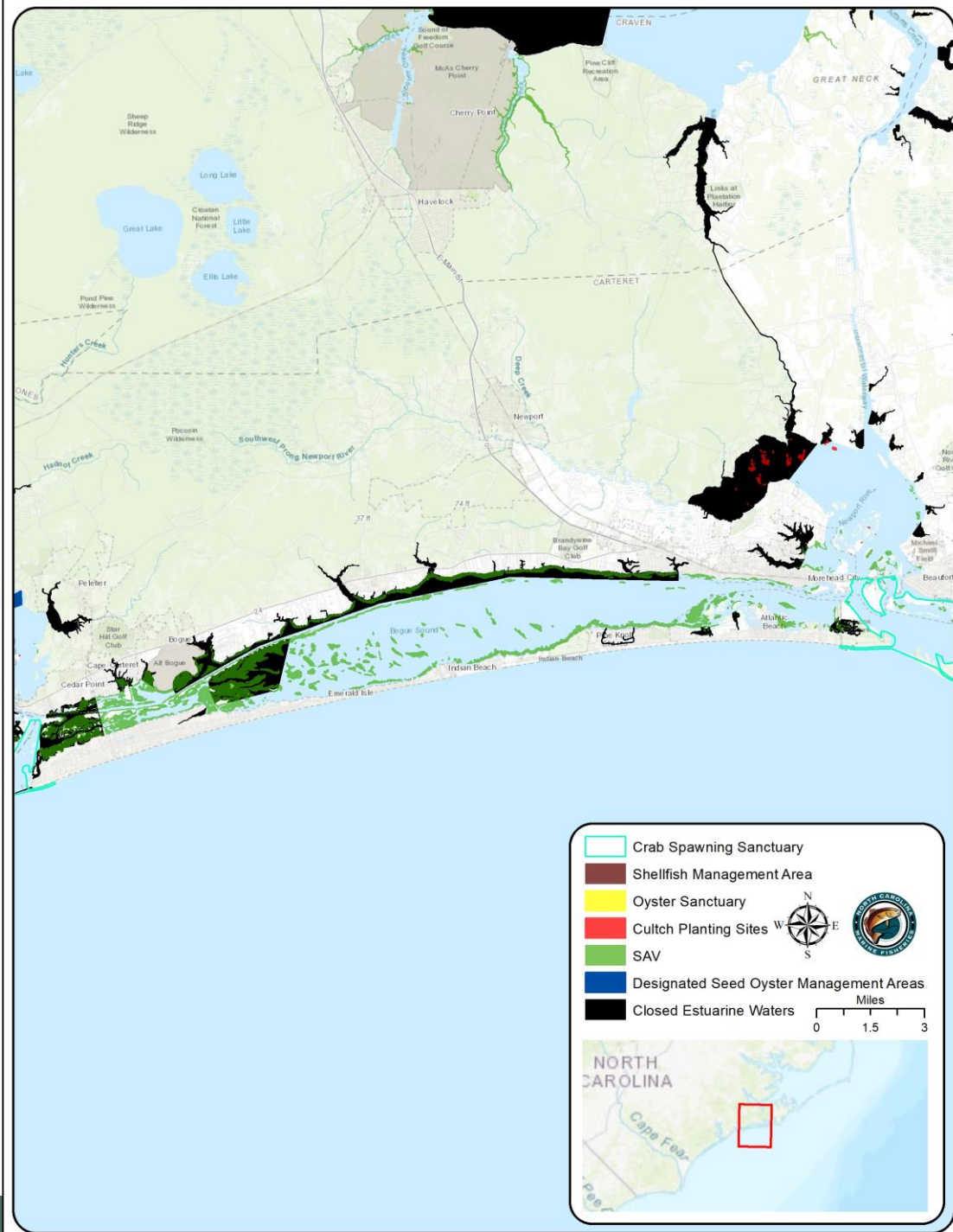
- Trawl net prohibited area
- Implemented by rule





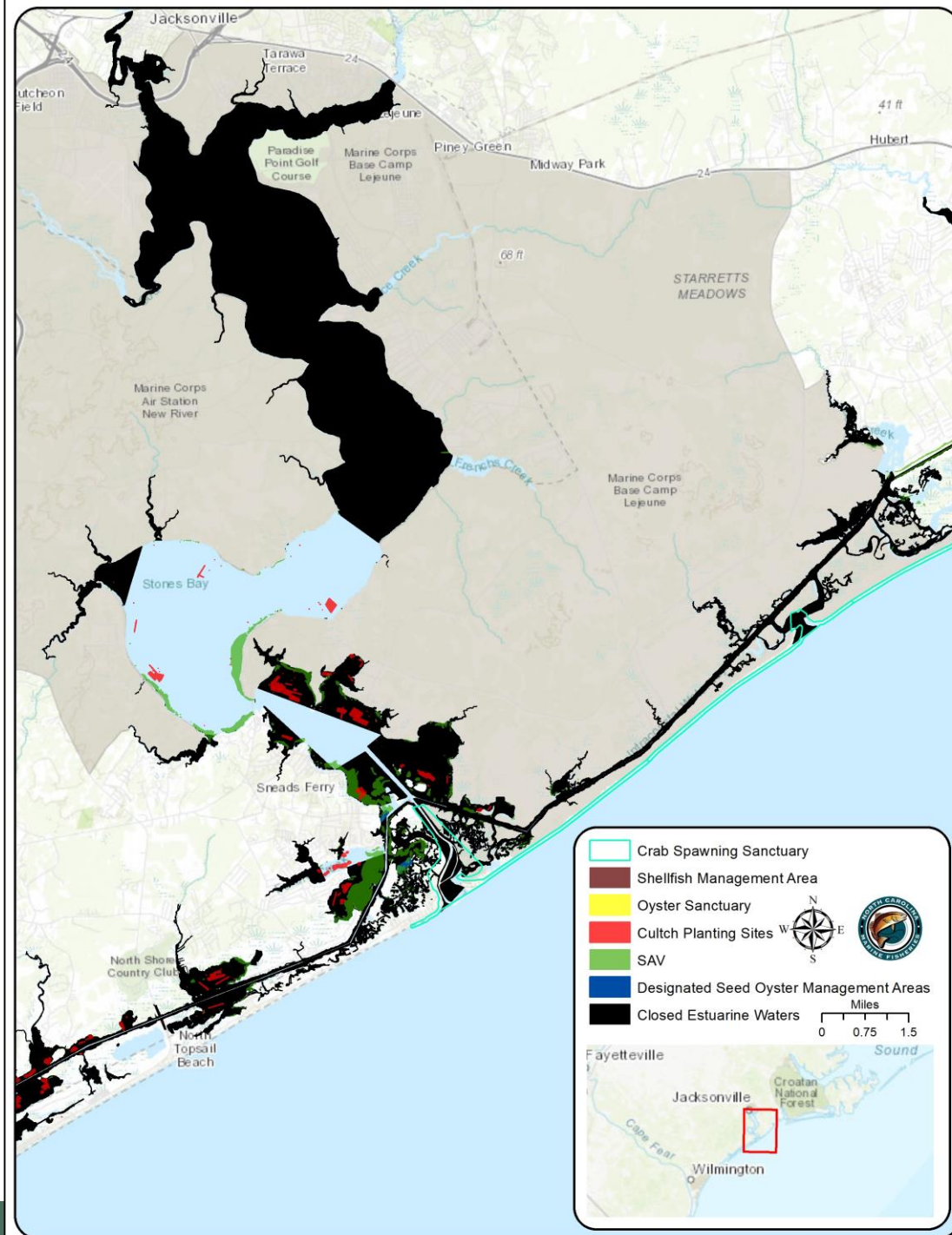
# SAV Protections - Bogue Sound

Implemented by  
proclamation



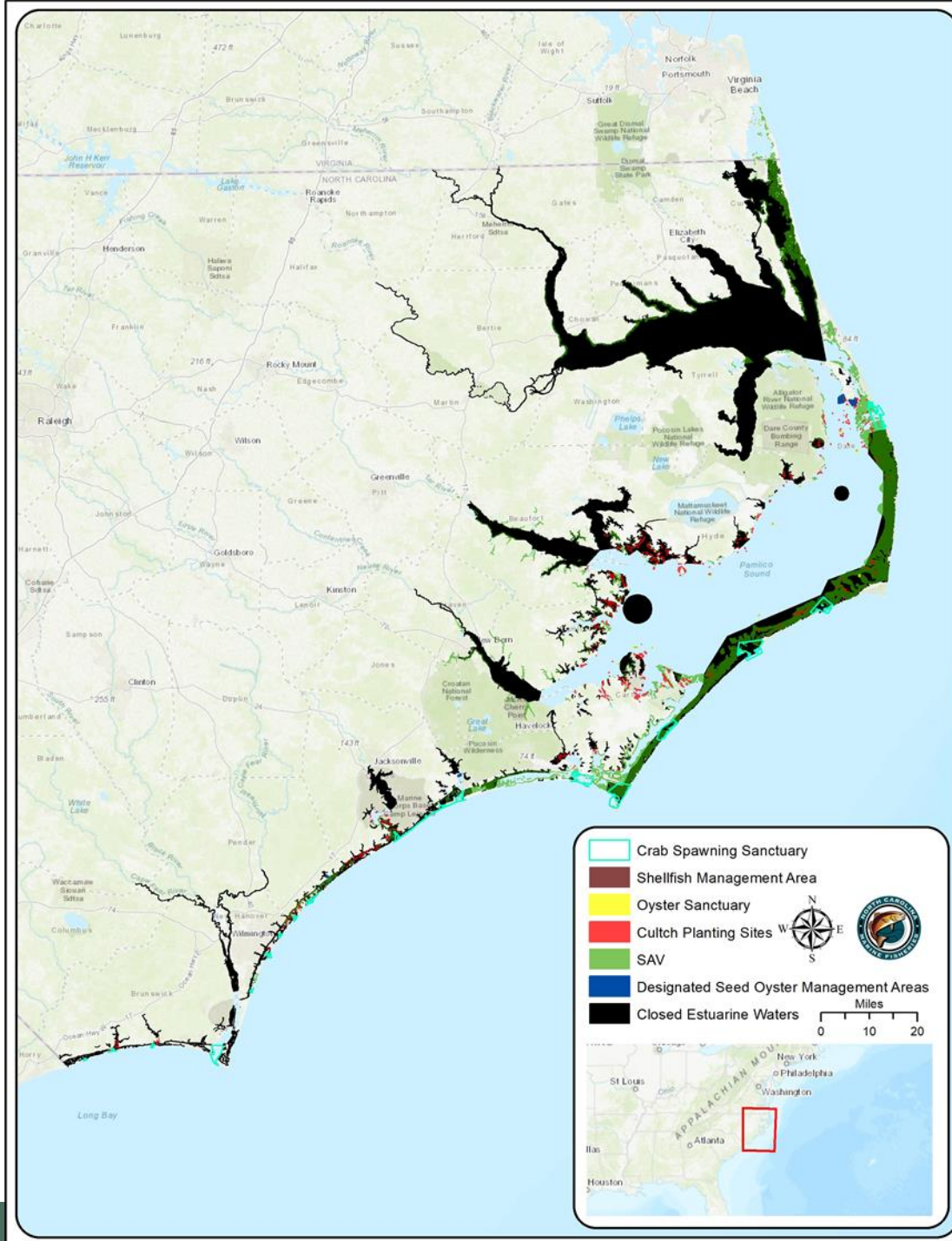
# *SAV Protections – New River*

Implemented by  
proclamation



# *Additional Protections*

- Albemarle Sound
- Currituck Sound
- Neuse, Pamlico and Pungo rivers
- Nursery Areas
- Crab Spawning Sanctuaries
- Military restricted areas

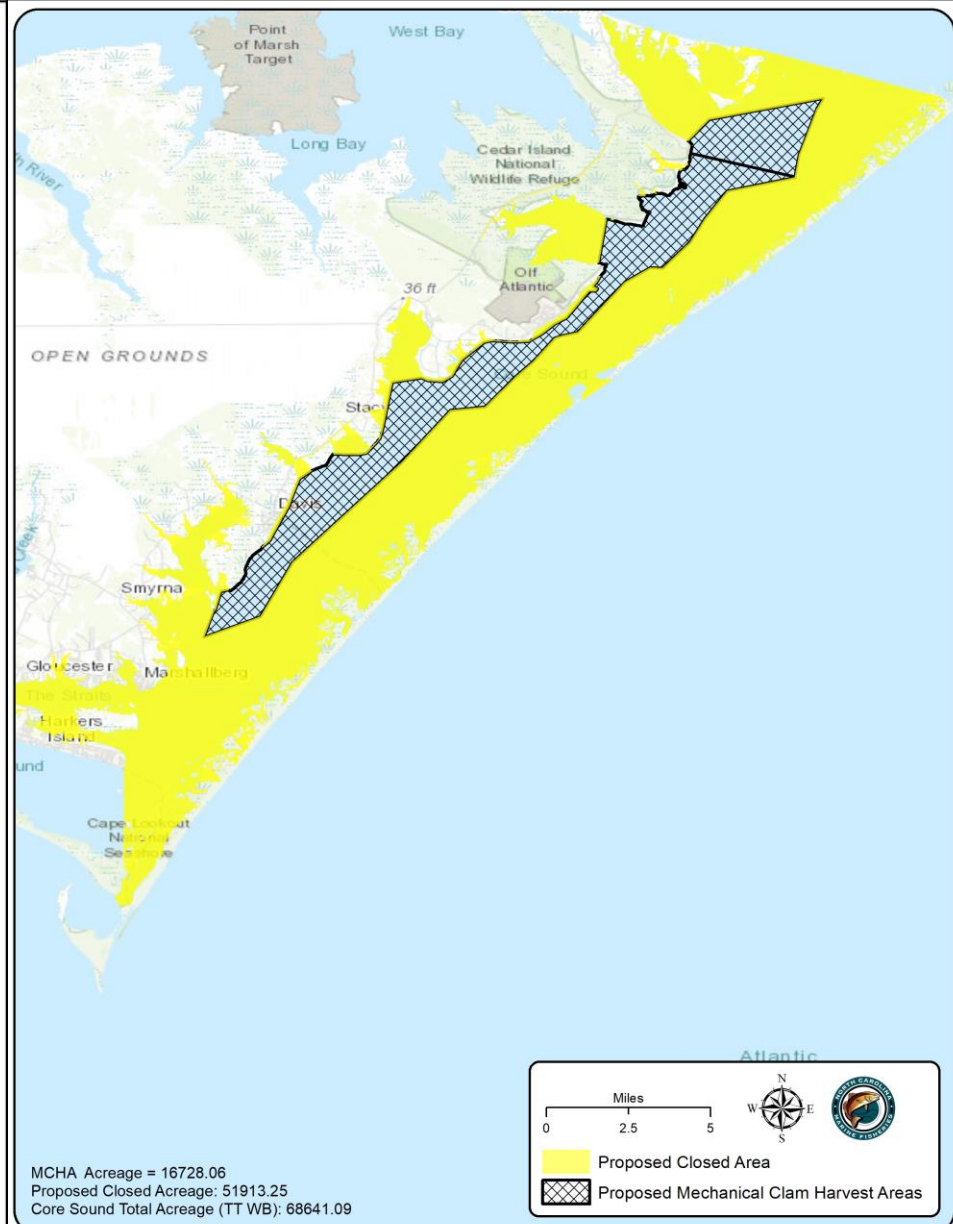
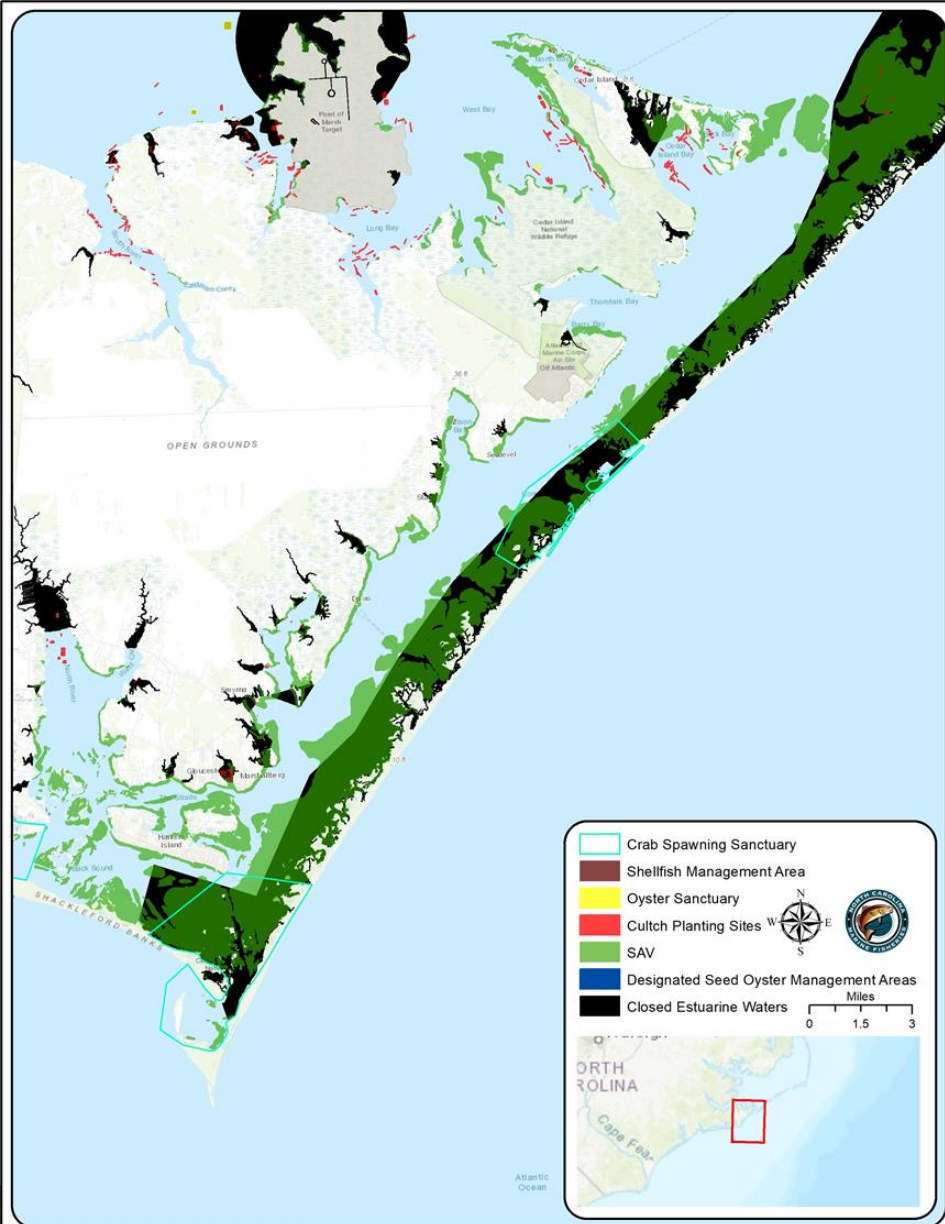


# *Expanding Protections*

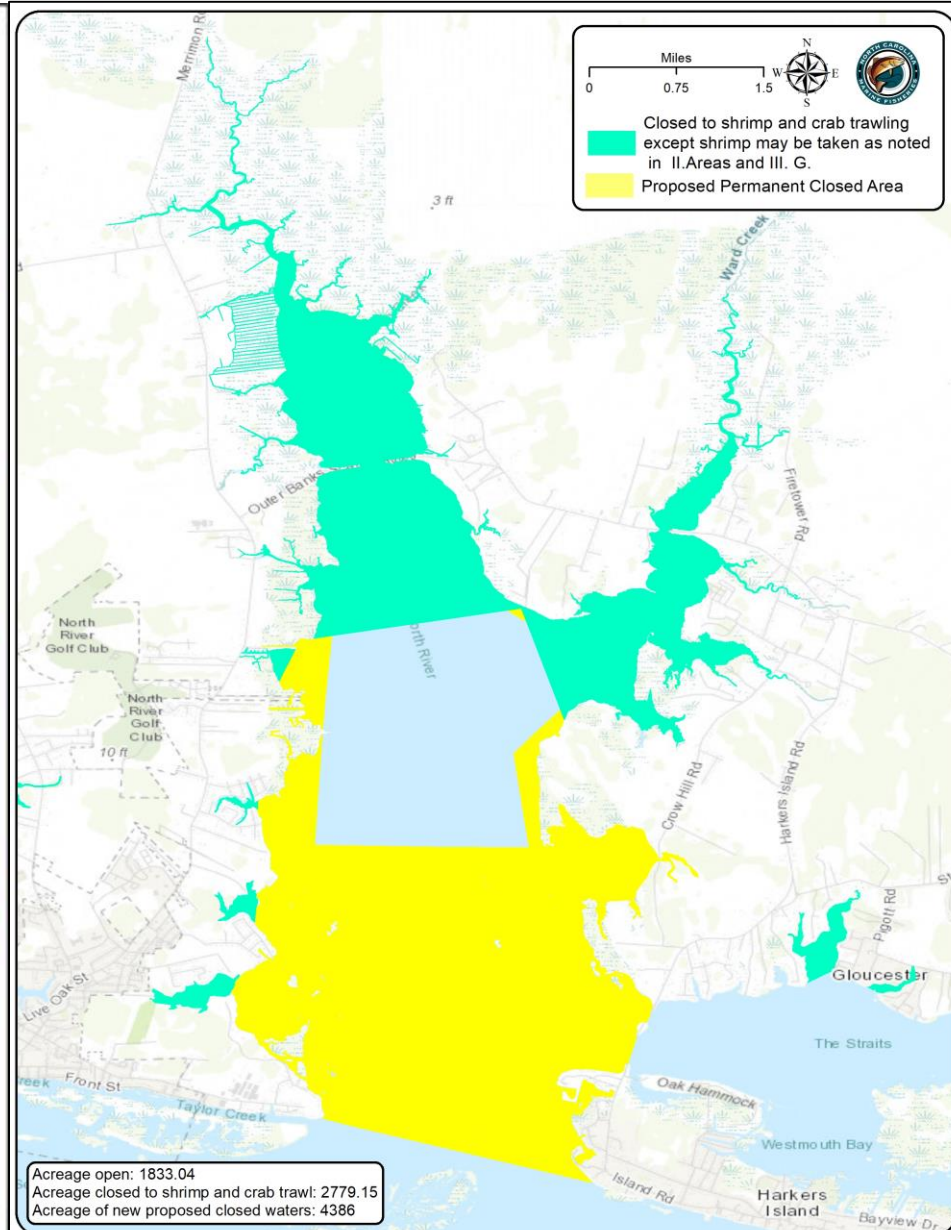
- Strategy to expand shell bottom and SAV protections
- Existing no trawl areas for SAV protection
- Trawl net prohibited or no shrimp trawl areas could be expanded or created to encompass additional shell bottom and SAV habitat
- Mechanical Clam Harvest Areas (MCHA)
  - SAV protection
  - Core Sound and North River (2020), New River (2017) reduced
  - Bogue Sound eliminated (2020)



# Core Sound

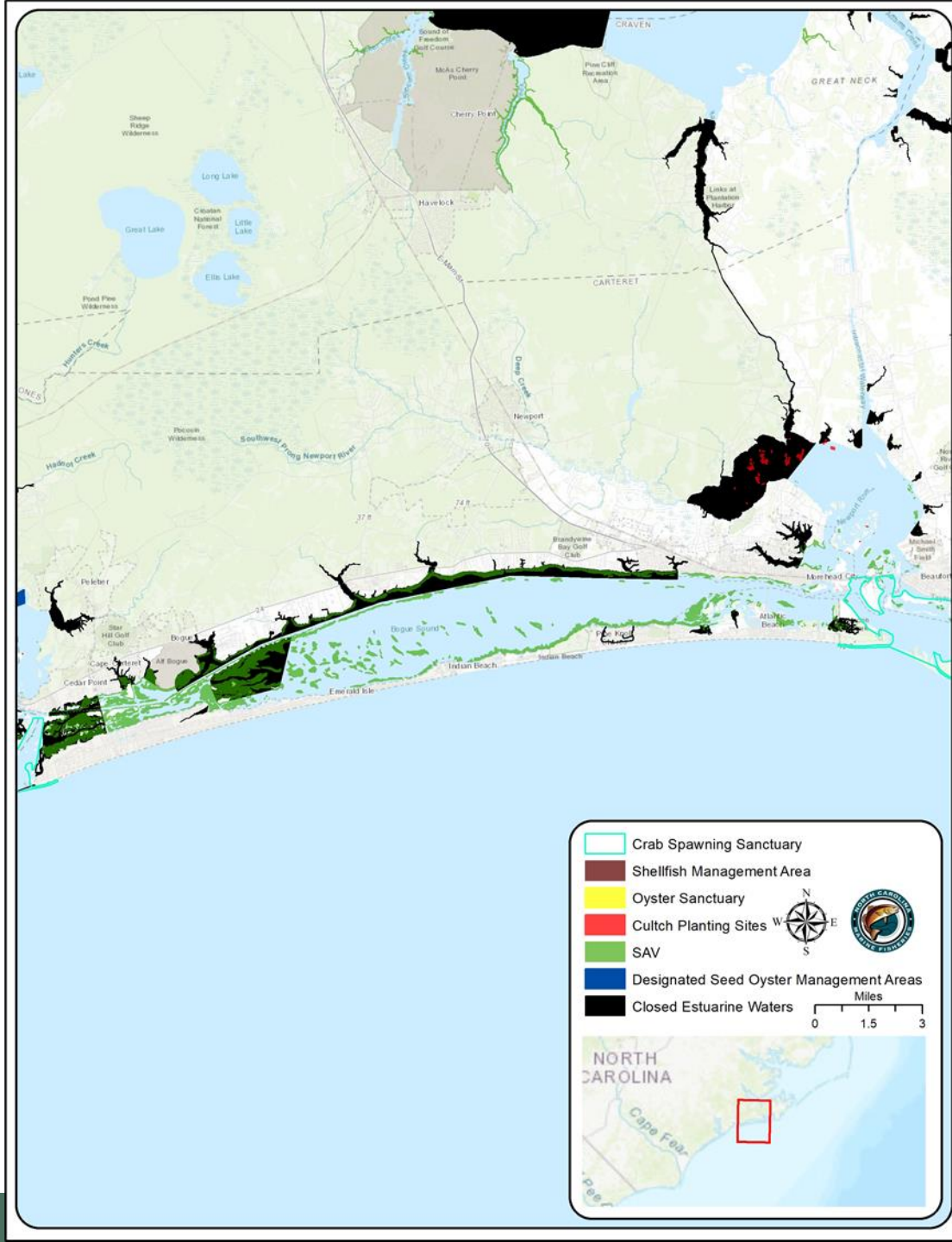


# North River

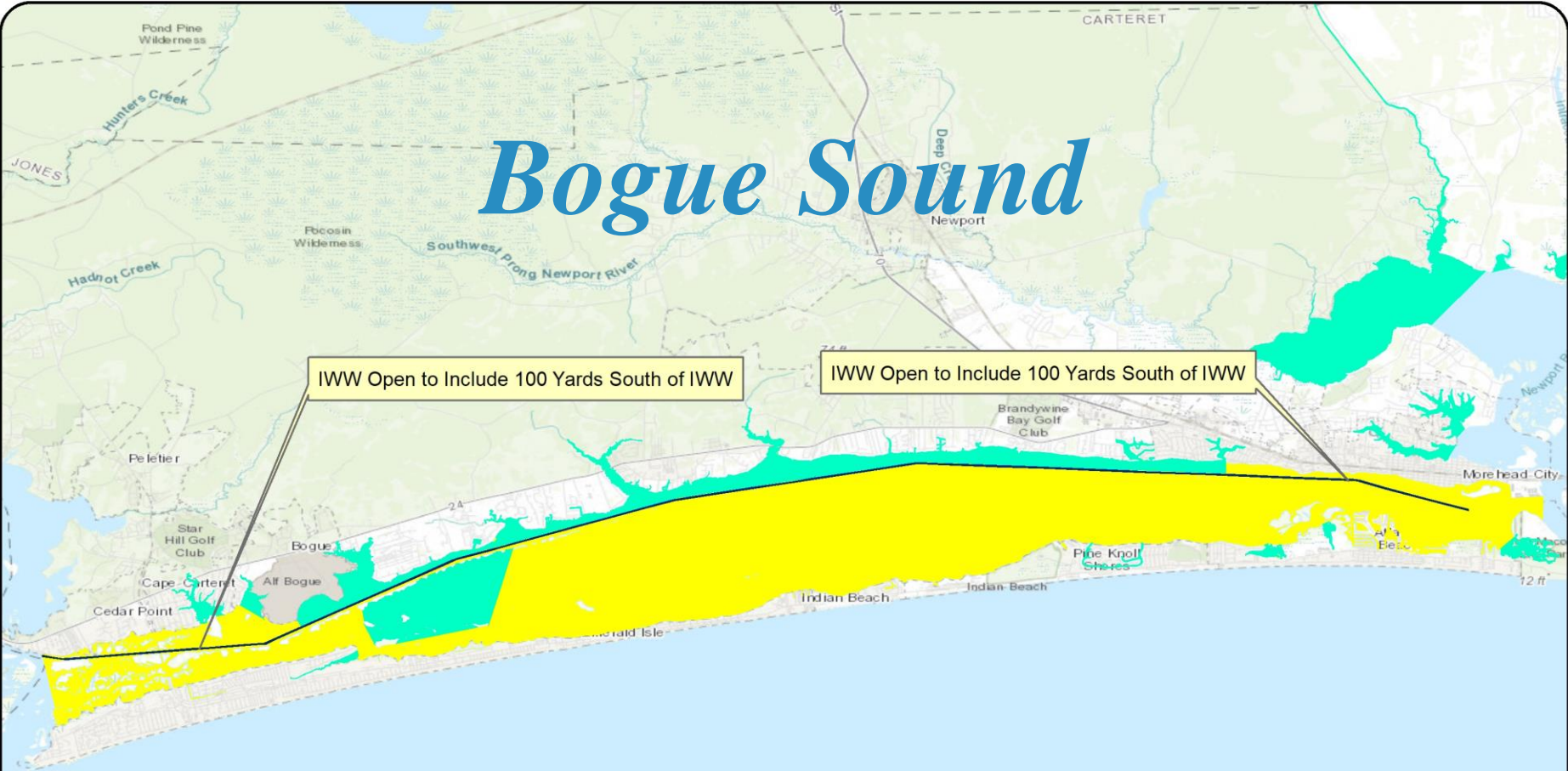


Acreage open: 1833.04  
 Acreage closed to shrimp and crab trawl: 2779.15  
 Acreage of new proposed closed waters: 4386

# Bogue Sound



# Bogue Sound



IWW Open to Include 100 Yards South of IWW

IWW Open to Include 100 Yards South of IWW

Acreage open: 279.58  
Acreage closed to shrimp and crab trawl: 4217.1  
Acreage of new proposed closed waters: 19427

Miles  
0 2 4

Closed to shrimp and crab trawling  
except shrimp may be taken as noted  
in II.Areas and III. G.

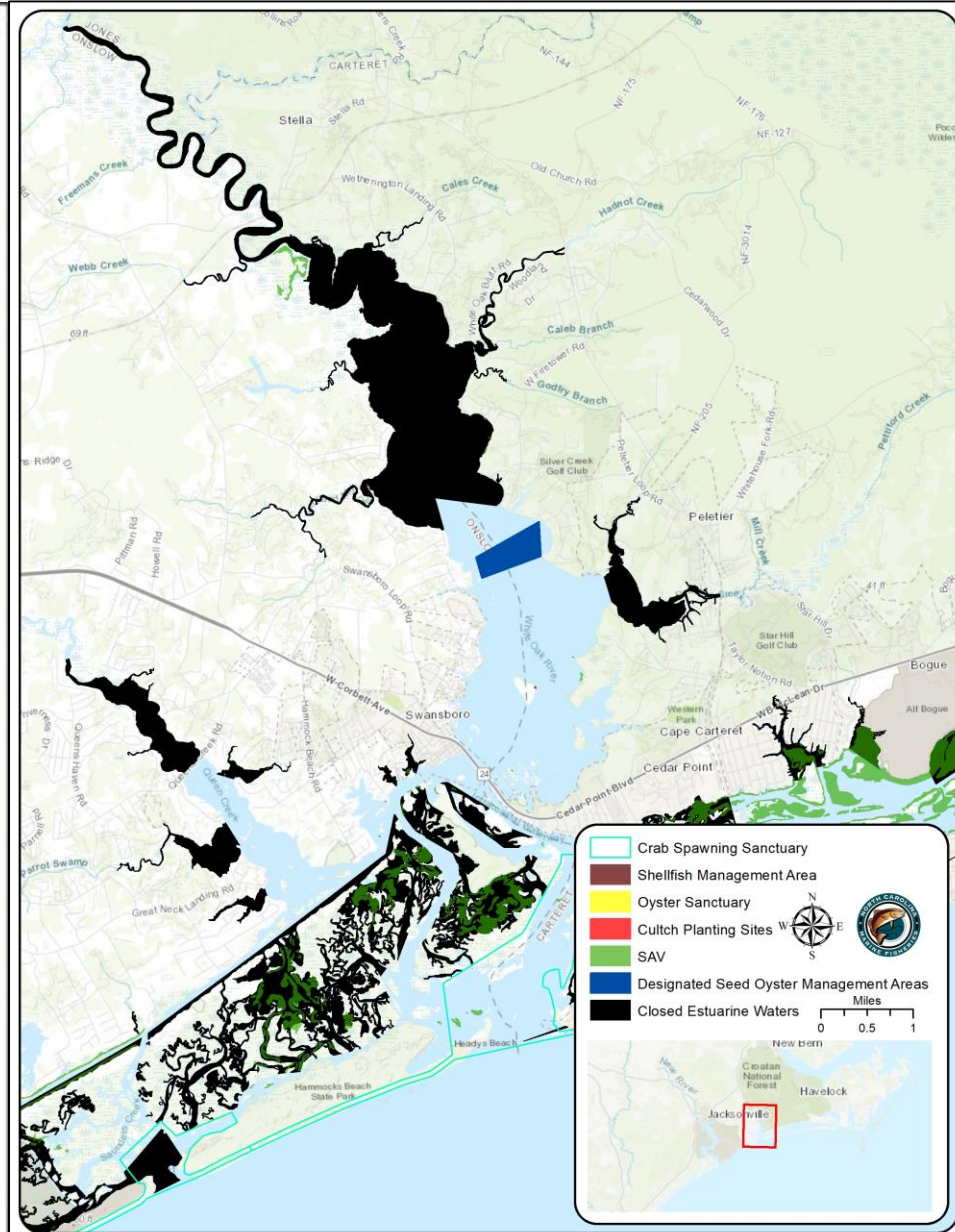
Proposed Permanent Closed Area

Bogue IWW Including 100 Yards South of IWW - Open

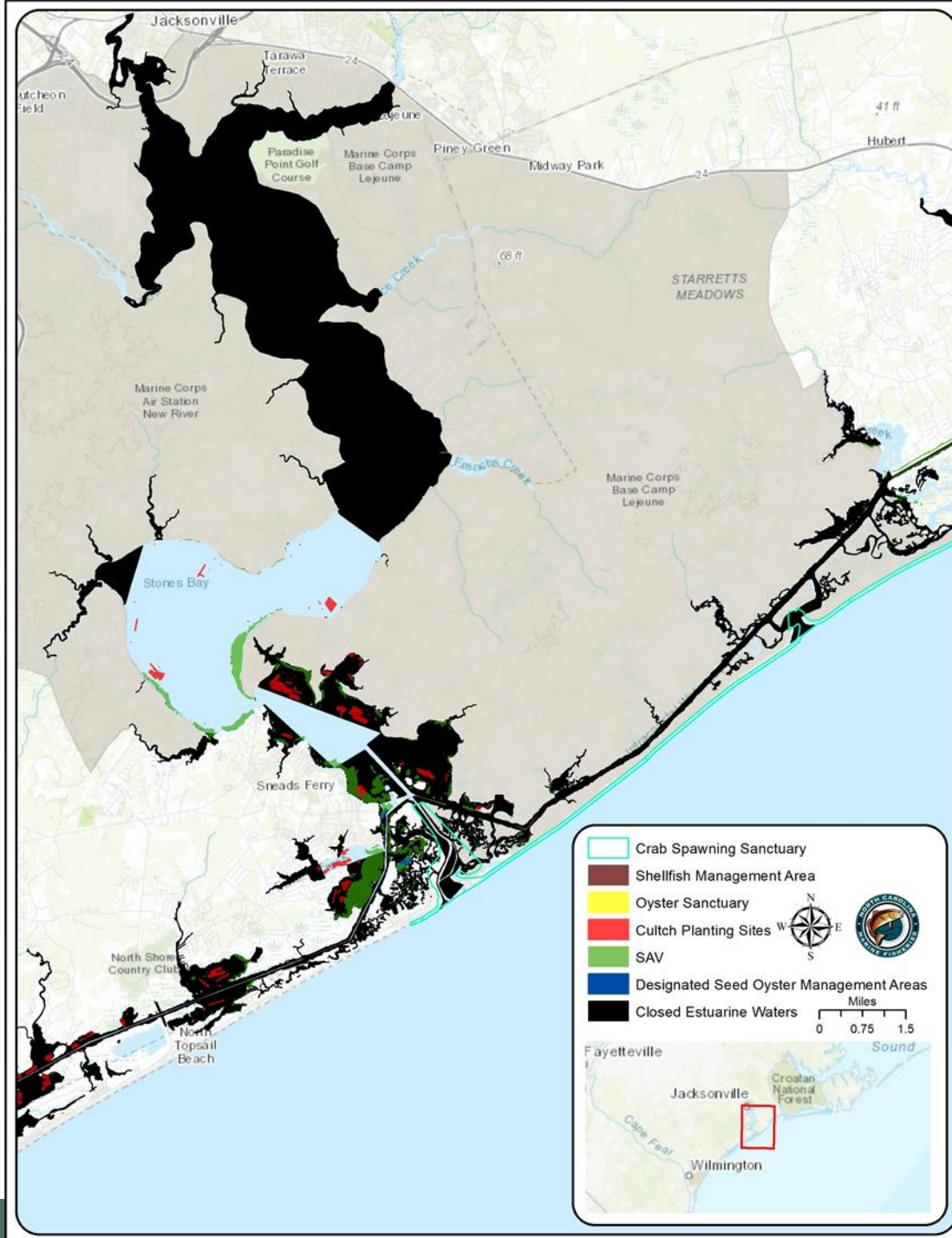


# Newport River

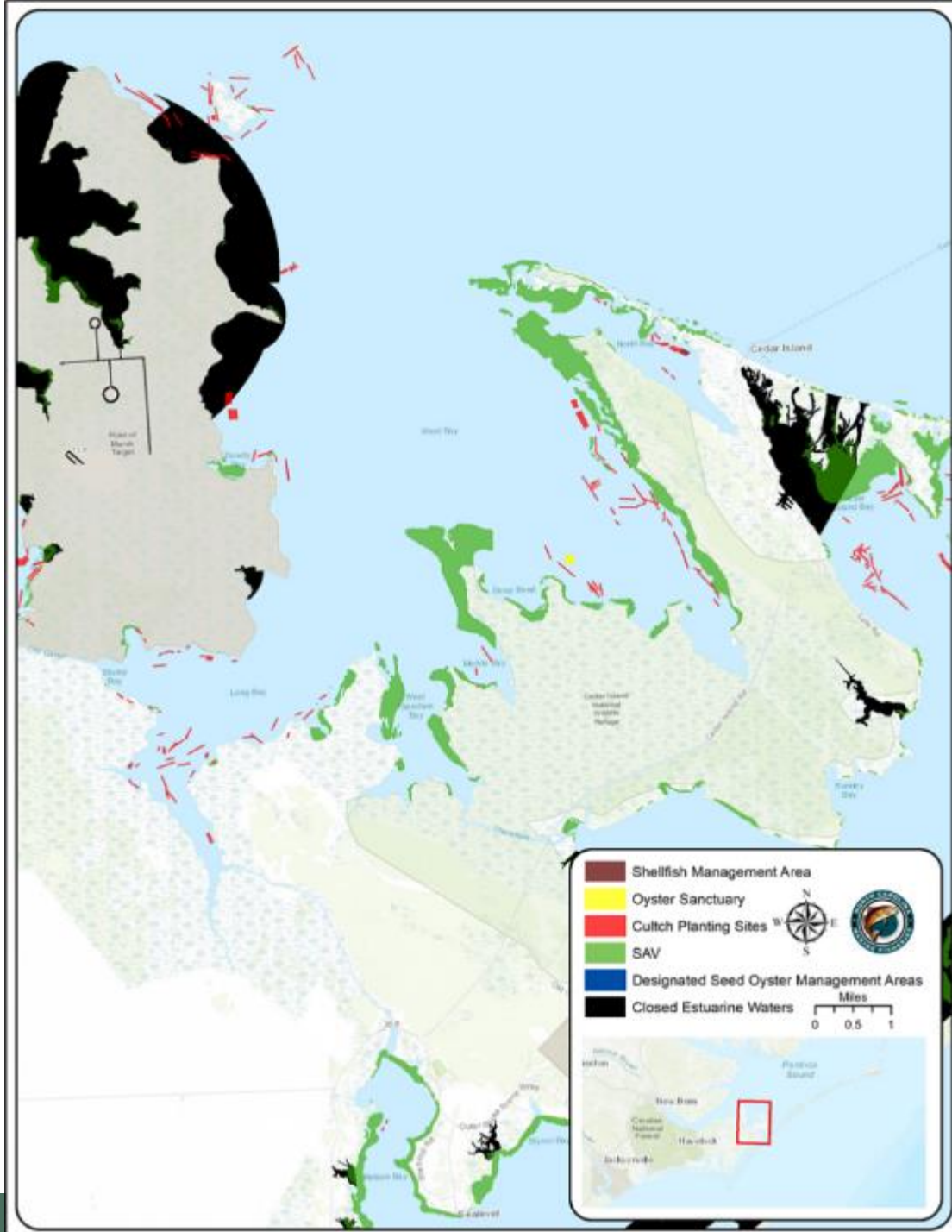
# White Oak River



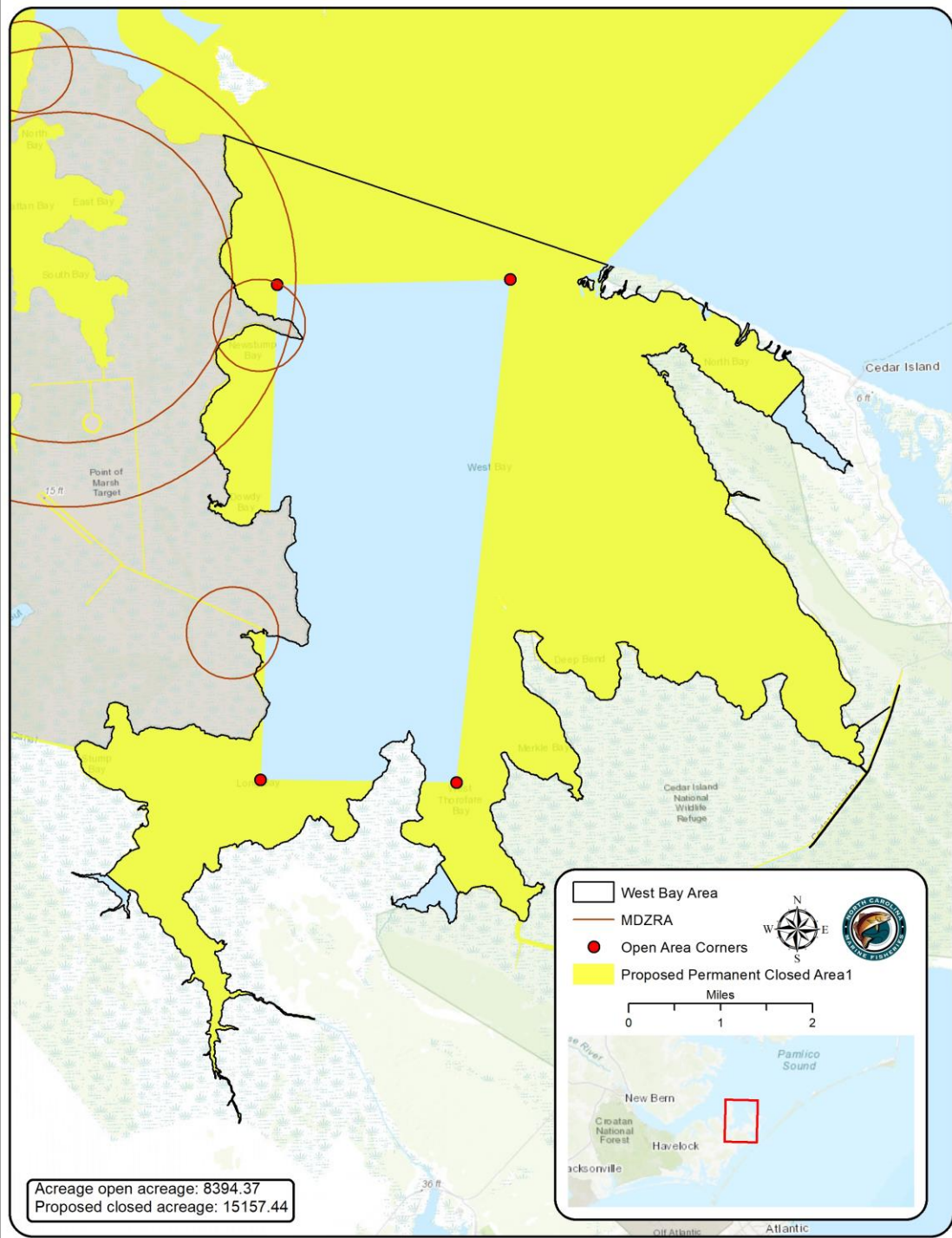
# New River

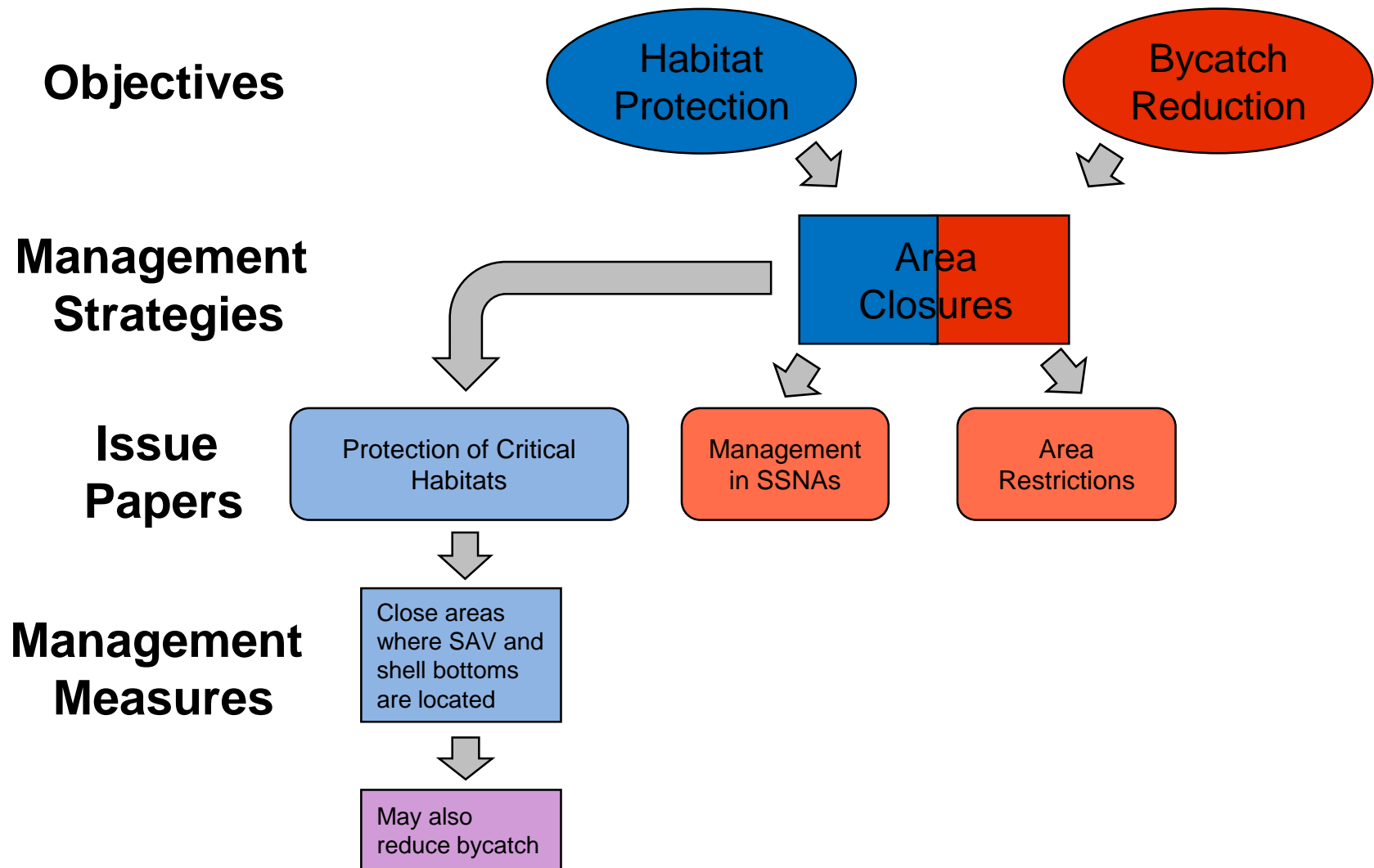


# West Bay



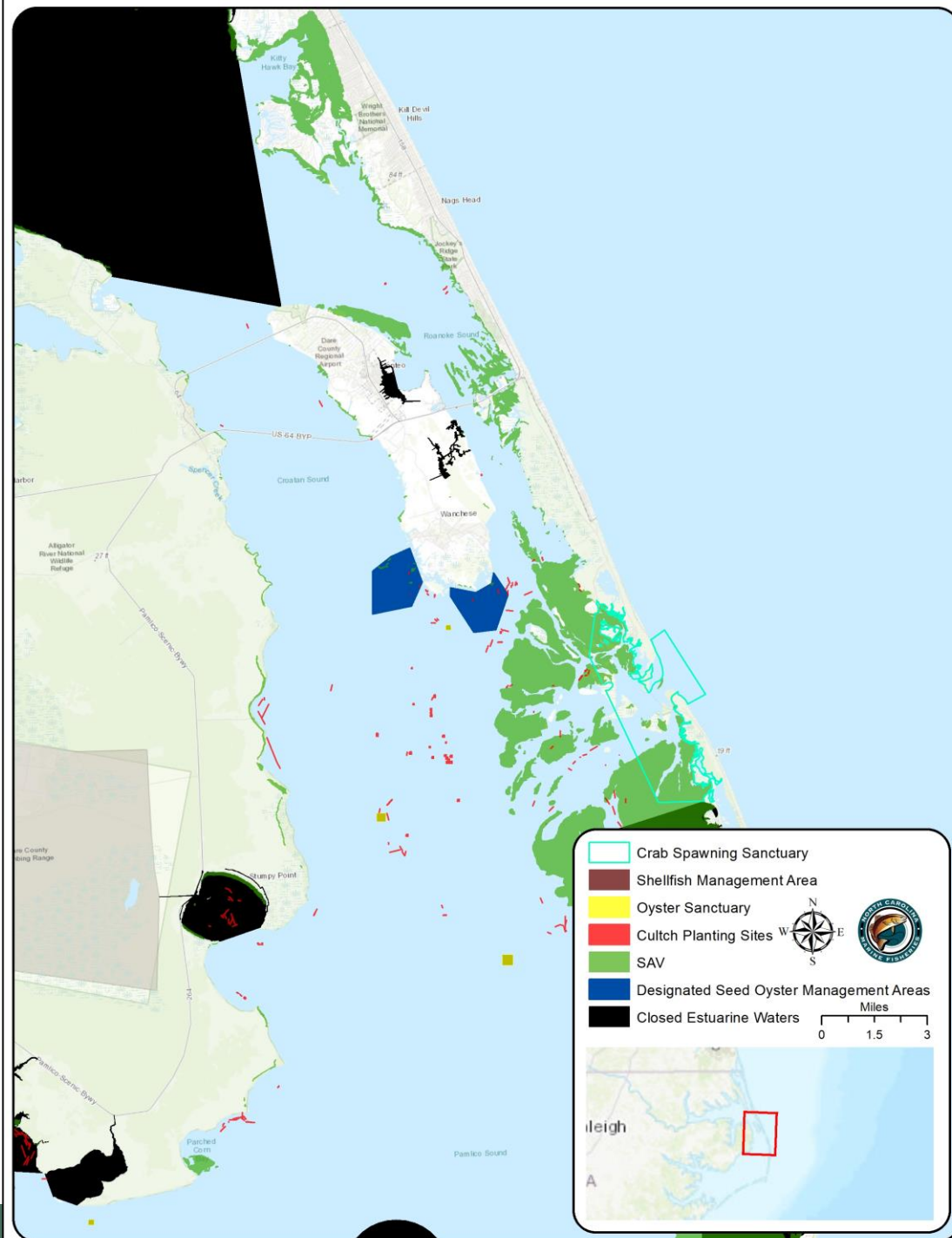
# West Bay – Example Closure





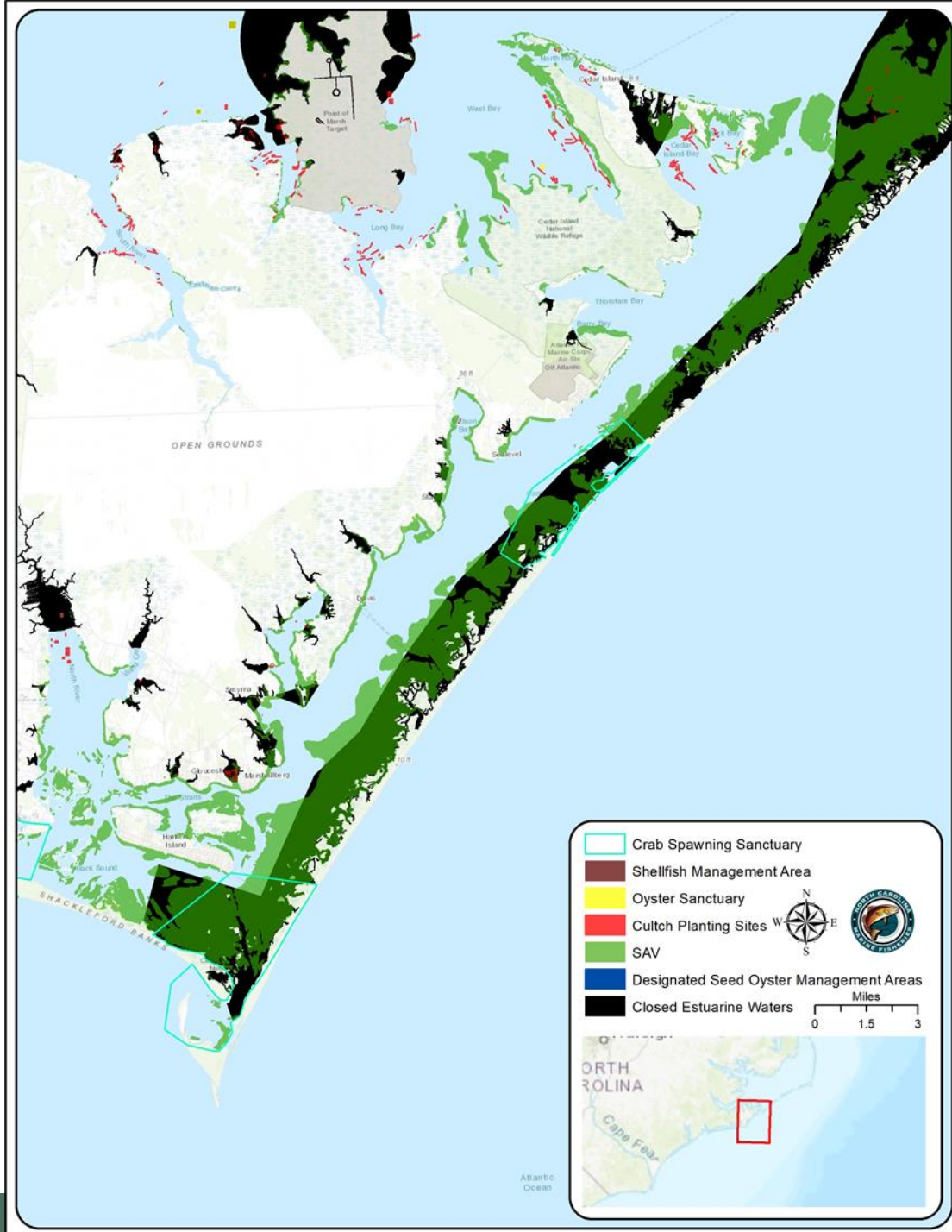
# *Additional Area Closure Considerations*

Additional protections may be needed in Croatan and Roanoke Sound area



# *Additional Area Closure Considerations*

Additional protections may be needed in Special Secondary Nursery Areas



# *Discussion Points*

Points to consider when discussing the questions below:

- The focus of this issue is from Core Sound and south
- Issue should be considered in conjunction with the Shrimp Management in Special Secondary Nursery Areas and Area Closure issues
- The goal is protecting SAV and shell bottom from damage by shrimp trawls by expanding or creating no trawl areas
- The benefits to SAV and shell bottom habitat are non-quantifiable
- Impacts to stakeholders if additional measures are implemented

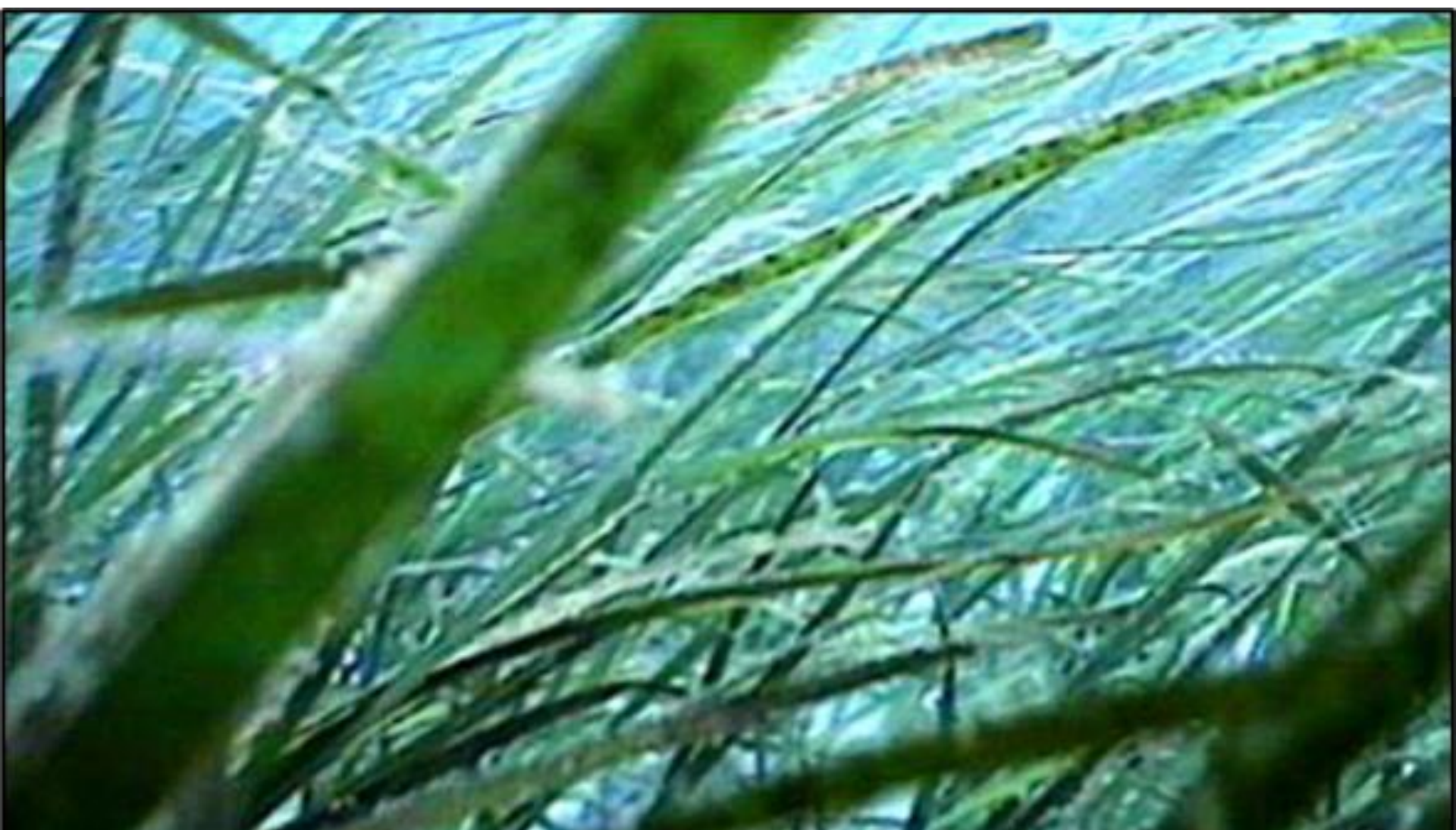




## *Discussion Points*

- Would the provided examples be effective in protecting SAV and shell bottom habitat?
- In comparison to the examples provided, should alternative areas open or closed to trawling be considered? We are particularly interested in feedback on protecting SAV habitat in Bogue Sound
- What approach should be taken in protecting critical habitat in areas like West Bay and Roanoke Sound?





*Questions?*