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# Atlantic Large Whale Take Reduction Plan

## Proposed Vertical Line Rule

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SAFMC Snapper-Grouper Committee  
Sept. 19, 2013

# Agenda

- Introduction to Atlantic Large Whale Take Reduction Plan and Team
- Proposed Vertical Line Rule Development
- Overview of Co-Occurrence Model
- Overview of Southeast Proposal
- Overview Mid-Atlantic and Northeast Proposal



# Understanding the Atlantic Large Whale Take Reduction Team

- Take Reduction Teams are established under the Marine Mammal Protection Act
- The Atlantic Large Whale Take Reduction Team (ALWTRT) was established in 1996
- Team is a multi-stakeholder group, composed of fishermen, scientists, conservationists, and state and federal officials

# Understanding the Atlantic Large Whale Take Reduction Plan

- Goal of Atlantic Large Whale Take Reduction Plan (ALWTRP):
  - reduce injuries and deaths of large whales due to incidental entanglement in fishing gear
  - specific short and long term goals mandated per MMPA
- Plan evolves as new information becomes available
- Plan components:
  - restrictions on where and how gear can be set
  - research into whale populations and behavior, & fishing gear interactions and modifications
  - outreach to inform & collaborate with fishermen & other stakeholders
  - large whale disentanglement program

# Development of Vertical Line Rule

- In 2003, the Team agreed to two overarching principles:
  - Reducing entanglement risks associated with groundlines in commercial trap/pot gear
  - Reducing entanglement risks associated with vertical lines (endlines or buoy lines)
- The Team agreed to focus first on addressing the groundline entanglement risk, then on vertical lines.
  - In 2009, NMFS implemented sinking groundline requirements for all trap/pot fisheries throughout the east coast.
  - In 2013, NMFS published a proposed rule to address the vertical line entanglement risk

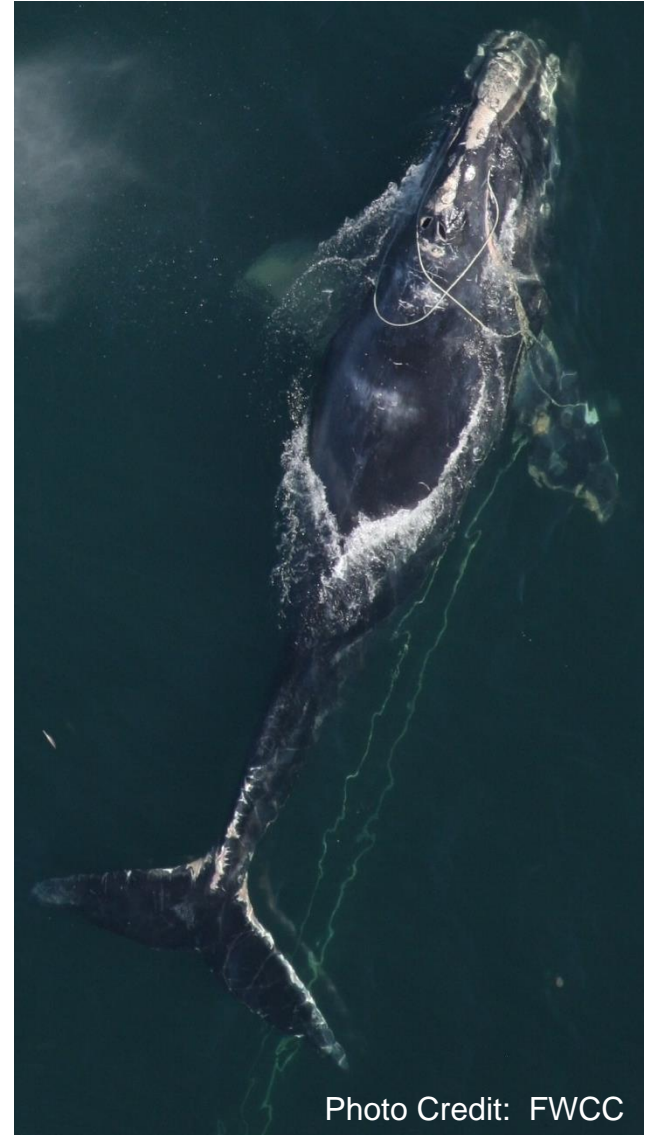


Photo Credit: FWCC

# Why Action is Still Needed

- Marine Mammal Protection Act:
  - Mortalities and serious injuries due to commercial fishing activities must not affect a species ability to reach or maintain its optimum sustainable population
- Despite previous efforts under the ALWTRP, the number of serious injuries and mortalities for right whales and humpback whales remain too high.



Photo Credit: NOAA Fisheries

# Development of Vertical Line Rule

## Objectives:

- Focus the vertical line management scheme on *customized, high priority areas* versus wide-scale, broad management.

## Goals:

- Develop management options to reduce the risk of vertical line entanglements in places where it will have the most conservation value.
- Solicit public input early on in the process.

## Analytical Approach:

- Look at overlap of whale sightings and gear *and* sensitive conservation areas (i.e., grounds used for calving, nursing, breeding, or feeding)
- This approach allowed consideration of several vertical line management strategies (gear density, whale density, co-occurrence, whale life history).



# Where are we headed?

## Summer 2011

- Scoping Meetings
- Stakeholders work on Proposals

## 2012

- Analyze alternatives developed by ALWTRT to address vertical line entanglement

## 2014

- Publish Final Rule

## January 2012

- Full ALWTRT Meeting
  - Review stakeholder proposals
  - Review draft Monitoring Plan

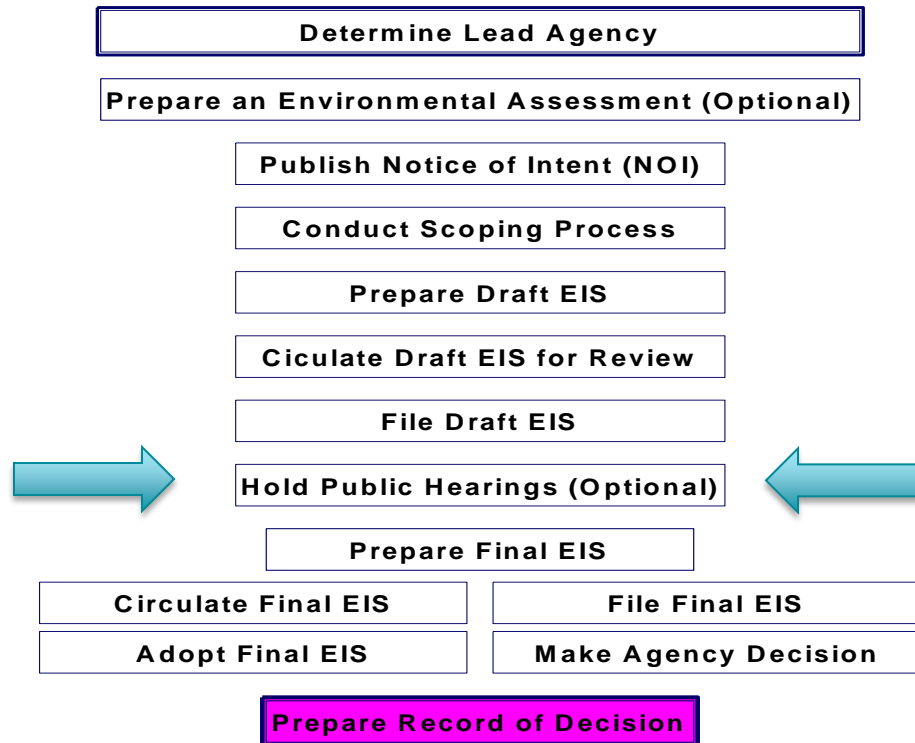
## 2013

- Publish Proposed Rule
- Public Hearings



# Where Are We in the Regulatory Process?

## FEDERAL REGULATORY PROCESS



# Co-Occurrence Model created for the ALWTRT

- Model was designed to help team analyze vertical line and whale overlap in order to prepare a rule strategy
- 2010/ 2011 Fisheries data (varies by state)
- Data from state/federal sources
- Whale sighting data is a compilation of various sources and years (1978-2010)



# Caveats for the Model used in the Southeast

- The model was not the sole driving force for Southeast Region Management
- Southeast is regarded as special conservation area, thus management was catered to the life history and density of specific age classes
  - High density of reproductive females
  - High density of neophyte calves
  - High density of juveniles

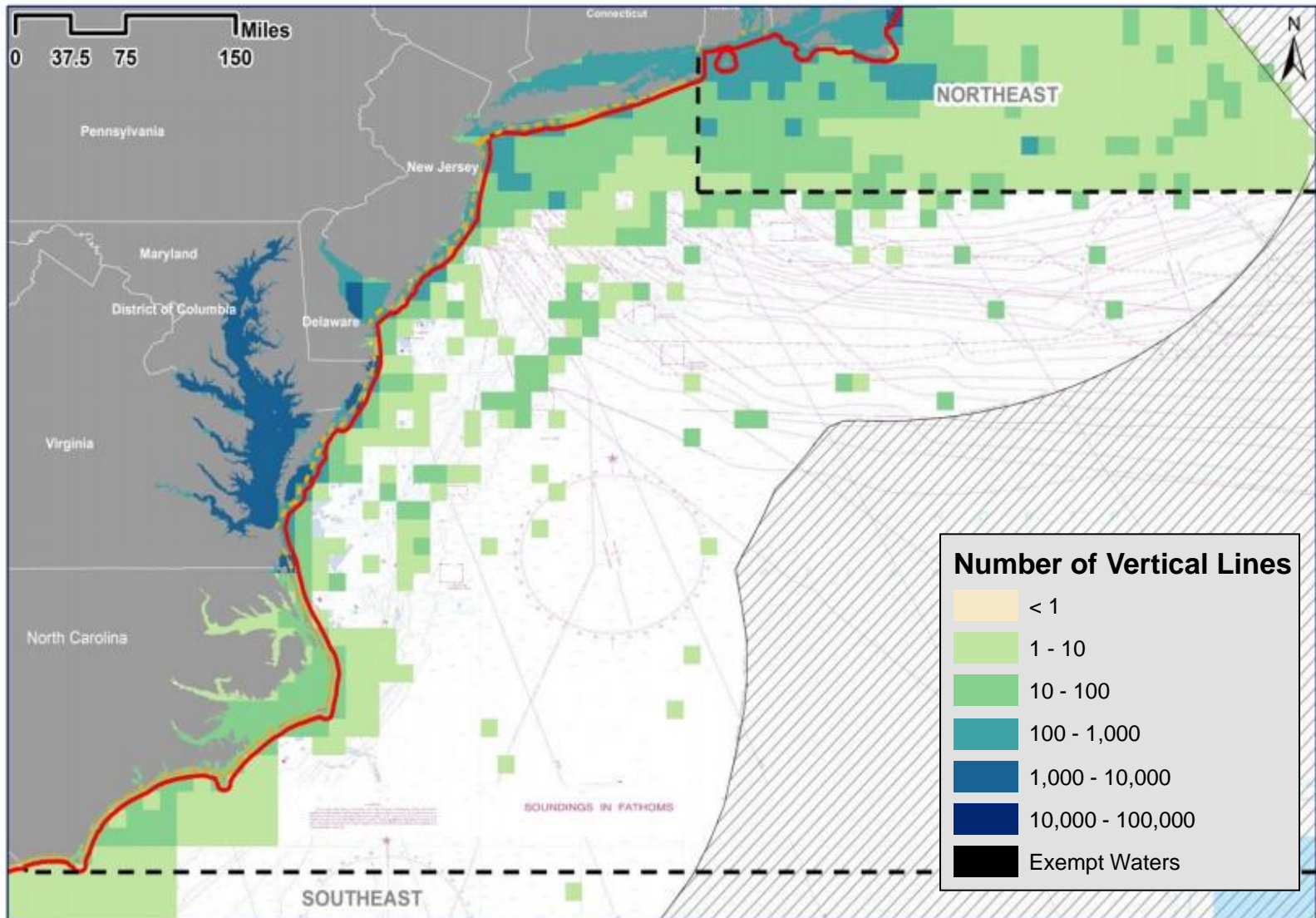
# Caveats for the Model used in the Southeast

- **There was no temporal overlap between SE Black Sea Bass trap pot vertical lines and large whales in winter months because no fishery effort at this time**

# Mid-Atlantic Data

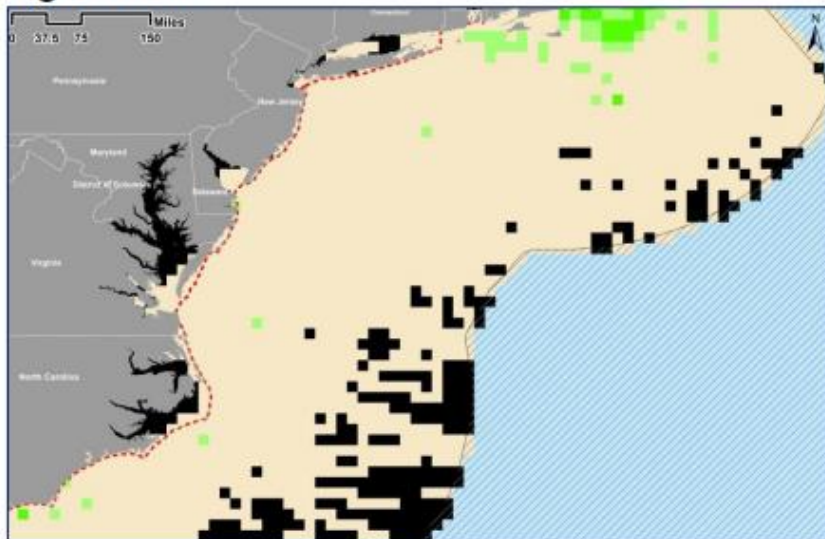
MID-ATLANTIC:

VERTICAL LINE – MONTHLY AVERAGE

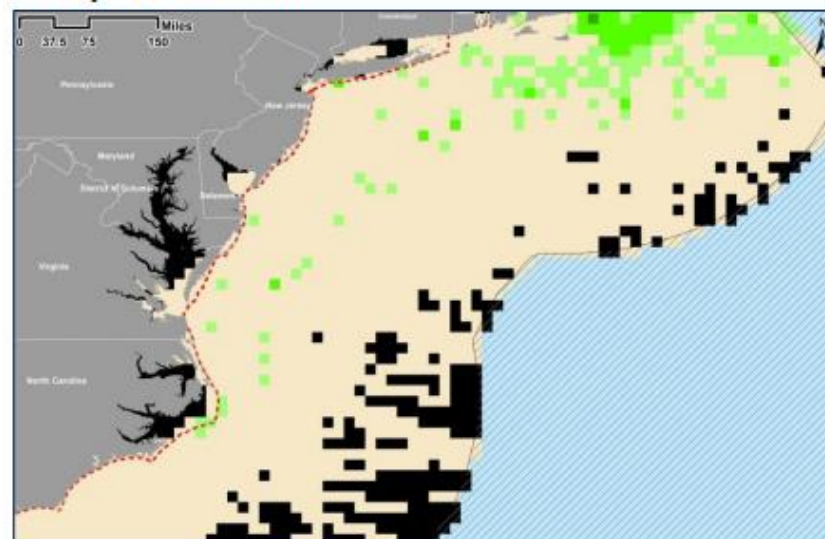


# MID-ATLANTIC - MONTHLY AVERAGE (JANUARY - DECEMBER)

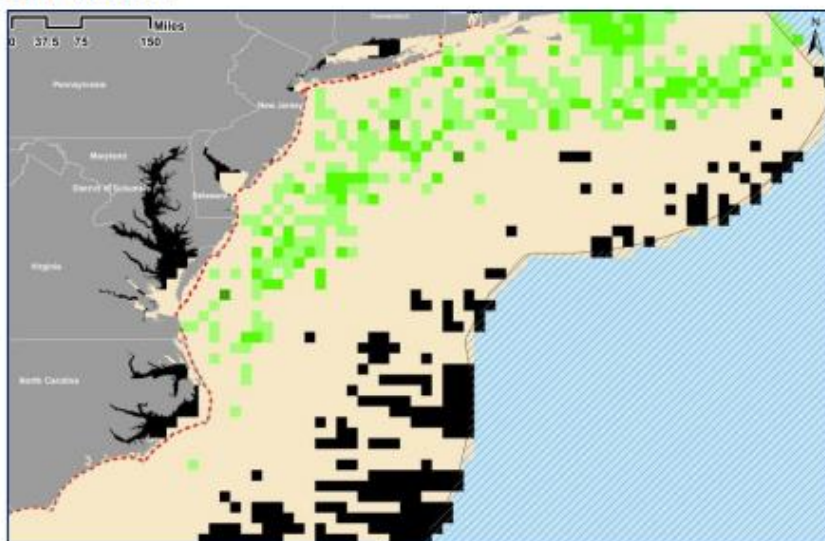
## Right Whale



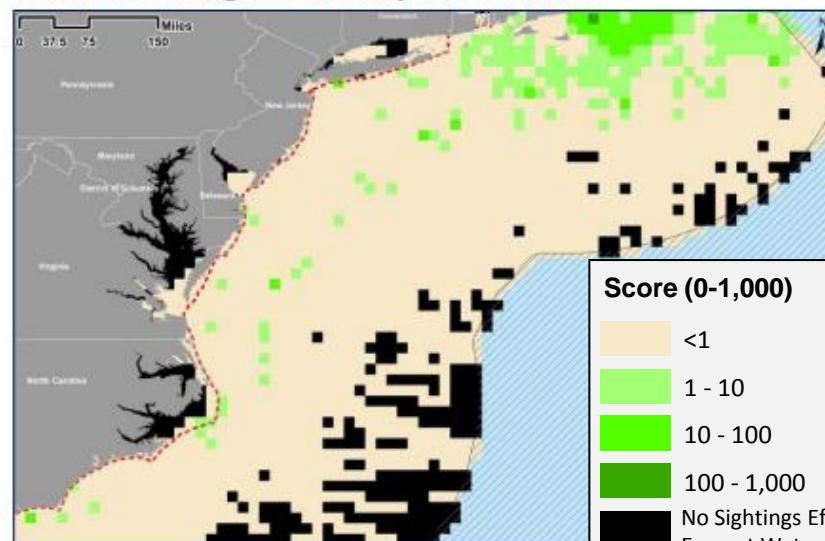
## Humpback Whale



## Fin Whale



## Combined Right & Humpback Whale

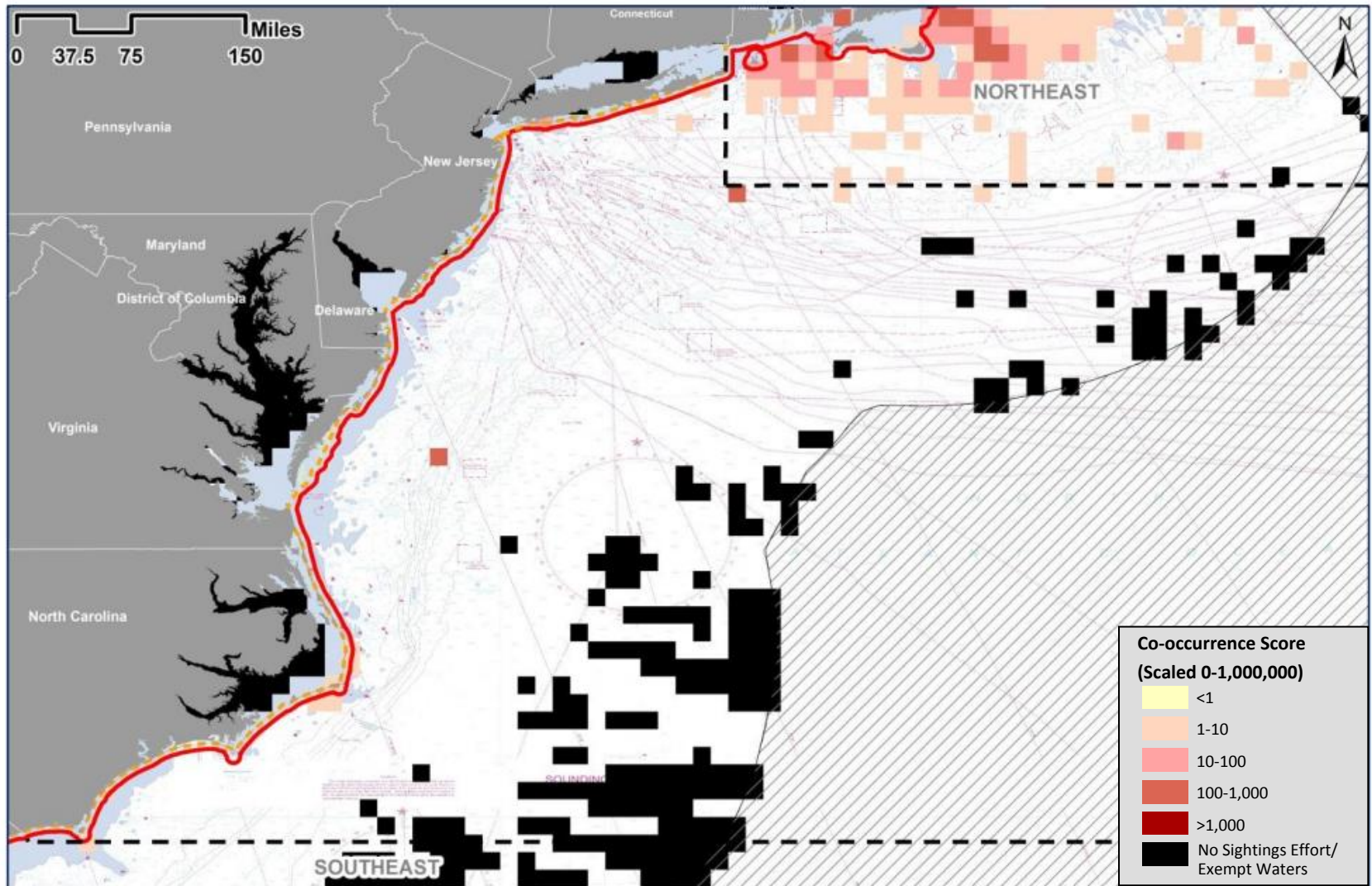


Score (0-1,000)



**MID-ATLANTIC:**

**CO-OCCURRENCE SCORE – MONTHLY AVERAGE (RIGHT & HUMPBACK WHALES, COMBINED)**

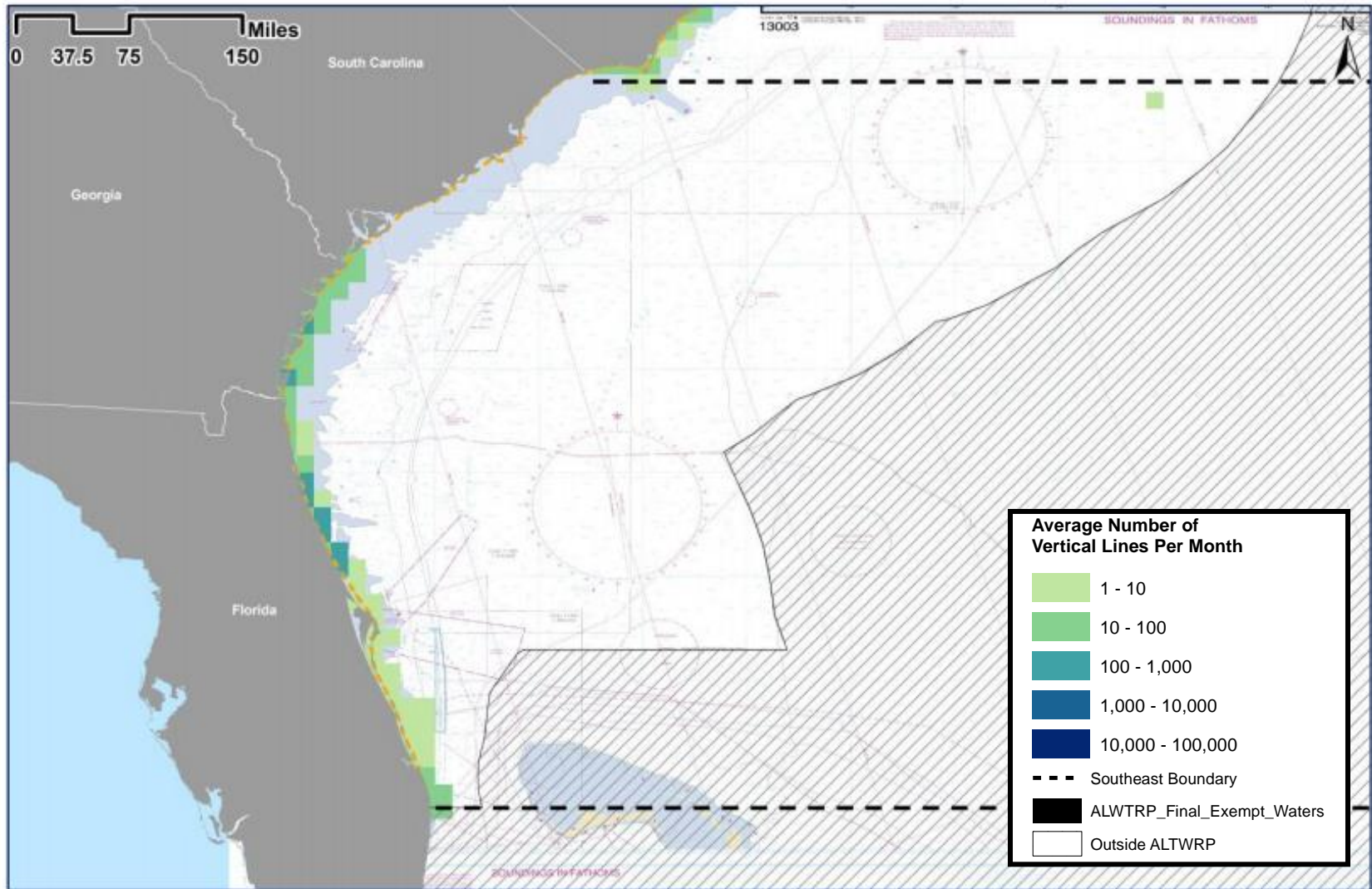




# Southeast Data

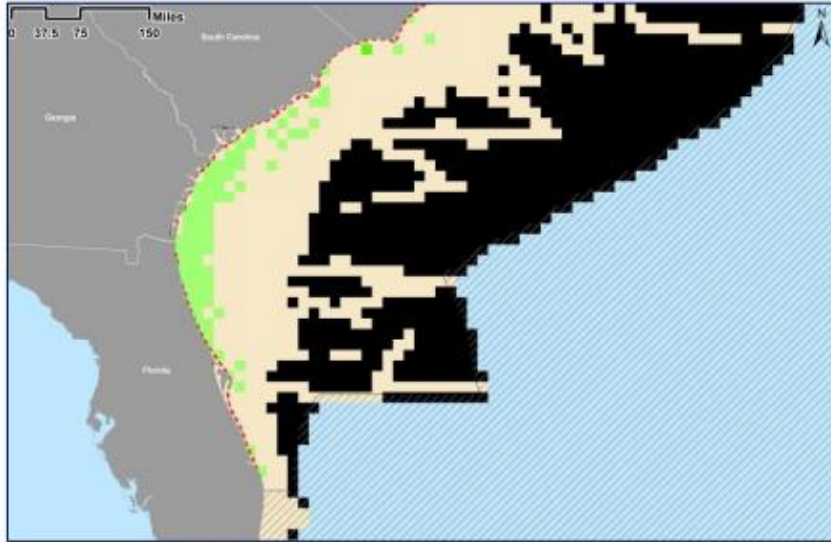
**SOUTHEAST:**

**VERTICAL LINE – MONTHLY AVERAGE (NOVEMBER – APRIL)**

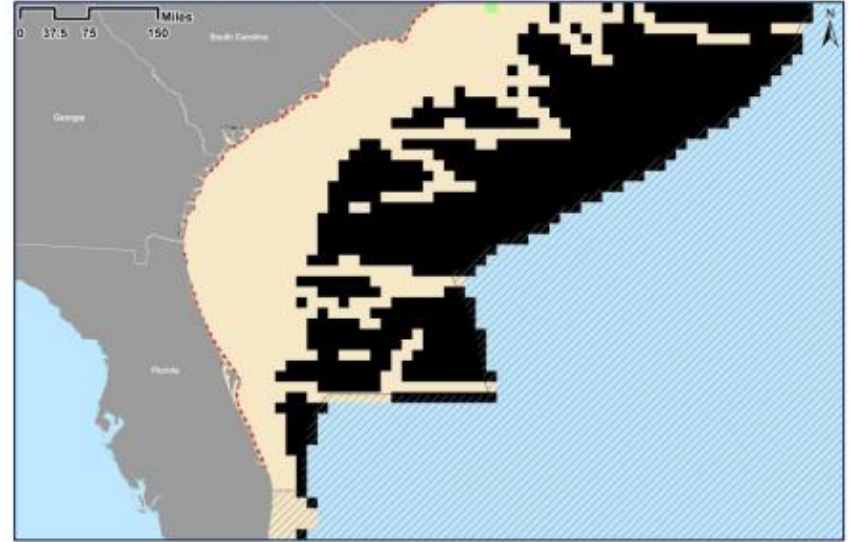


# SOUTHEAST - MONTHLY AVERAGE (NOVEMBER - APRIL)

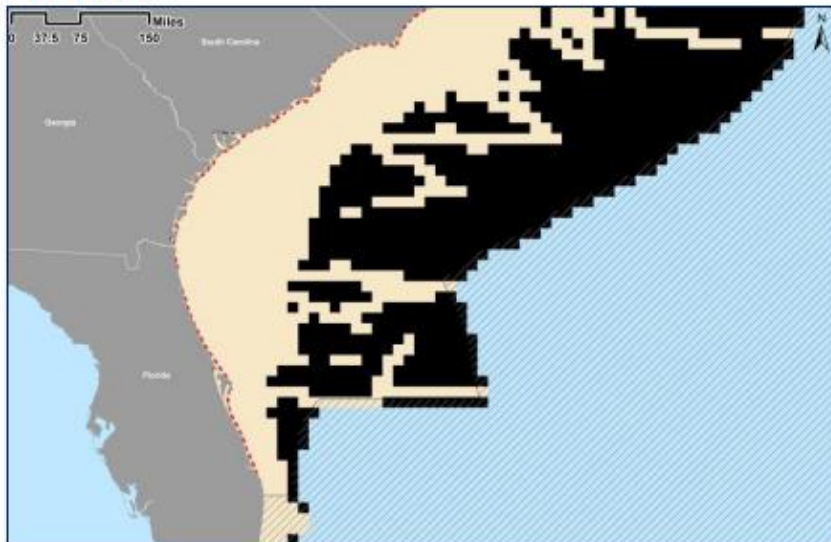
## Right Whale



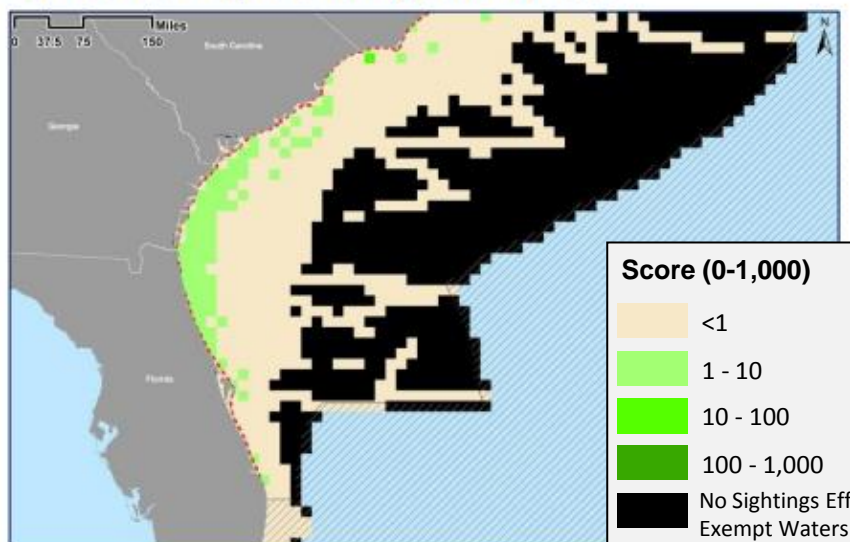
## Humpback Whale



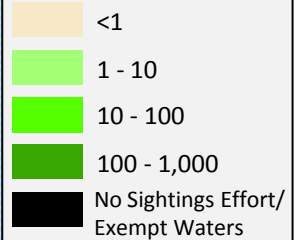
## Fin Whale



## Combined Right & Humpback Whale

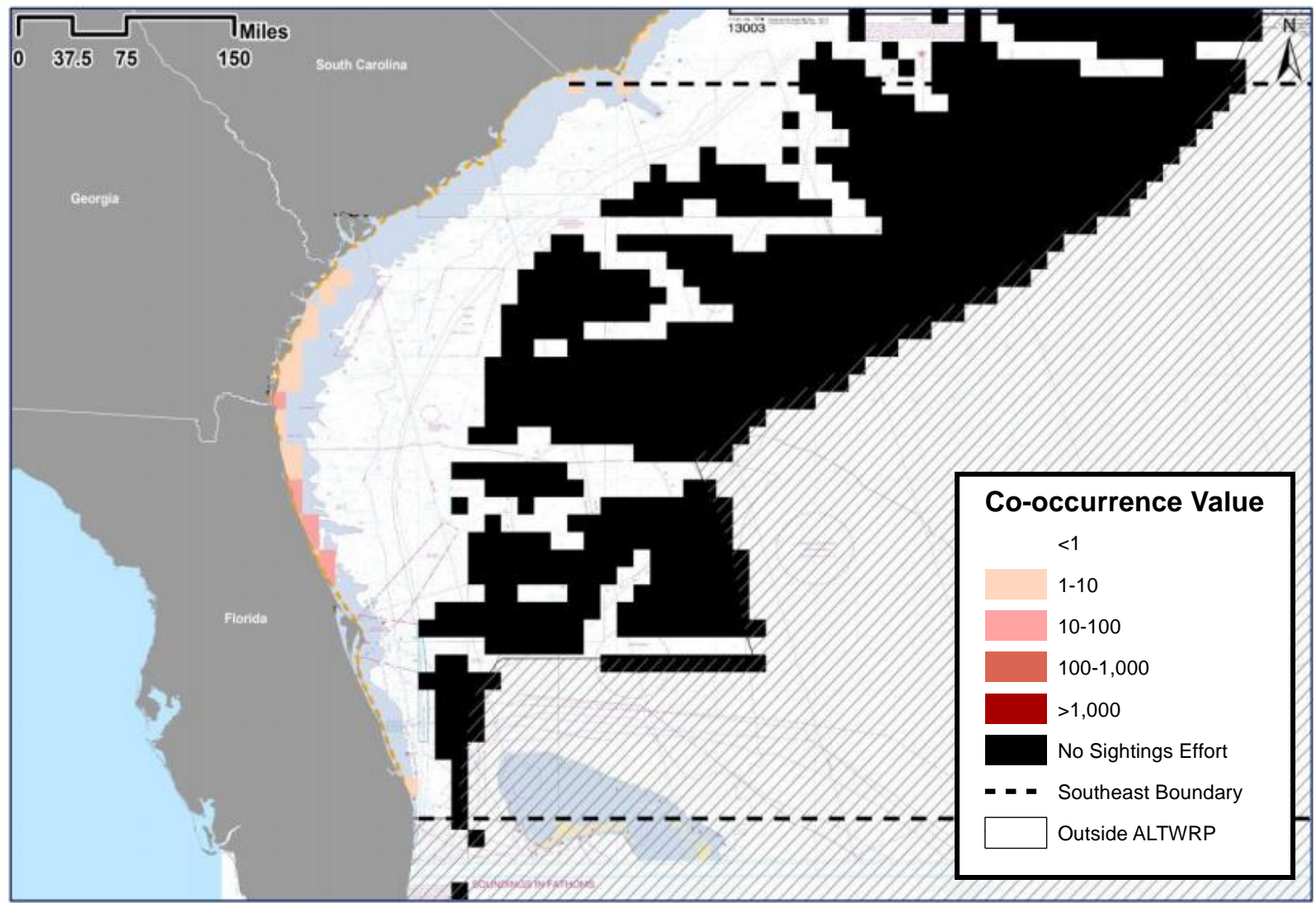


### Score (0-1,000)



**SOUTHEAST:**

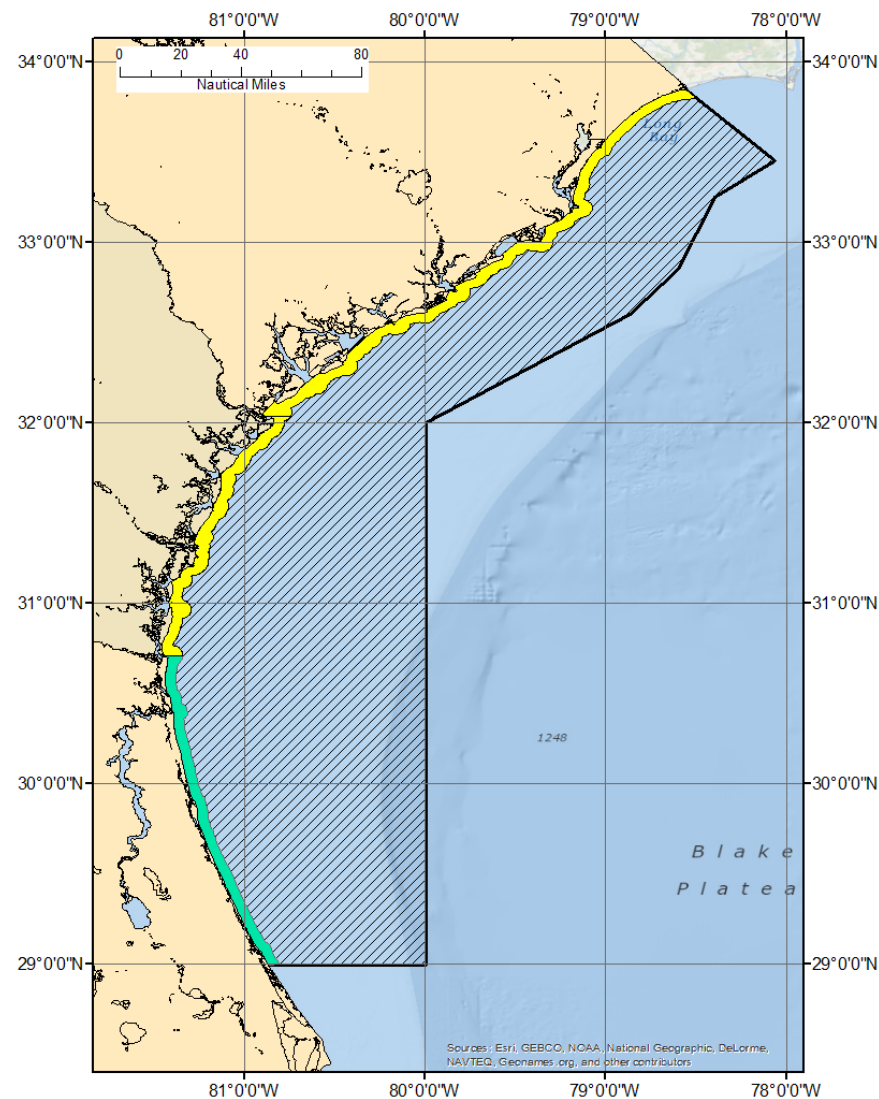
**CO-OCCURRENCE SCORE – MONTHLY AVERAGE (NOVEMBER – APRIL, RIGHT & HUMPBACK WHALES, COMBINED)**



# Southeast Proposed Measures

- Create a new trap/pot management area
- Restricted Period: Nov 15-Apr 15
- No trap/trawls
- Vertical line free of objects\*
- Area Subdivided
  - Federal waters
  - FL State waters
  - GA/SC State waters
- Gear marking
  - Mark 3 times, each mark equals 12"

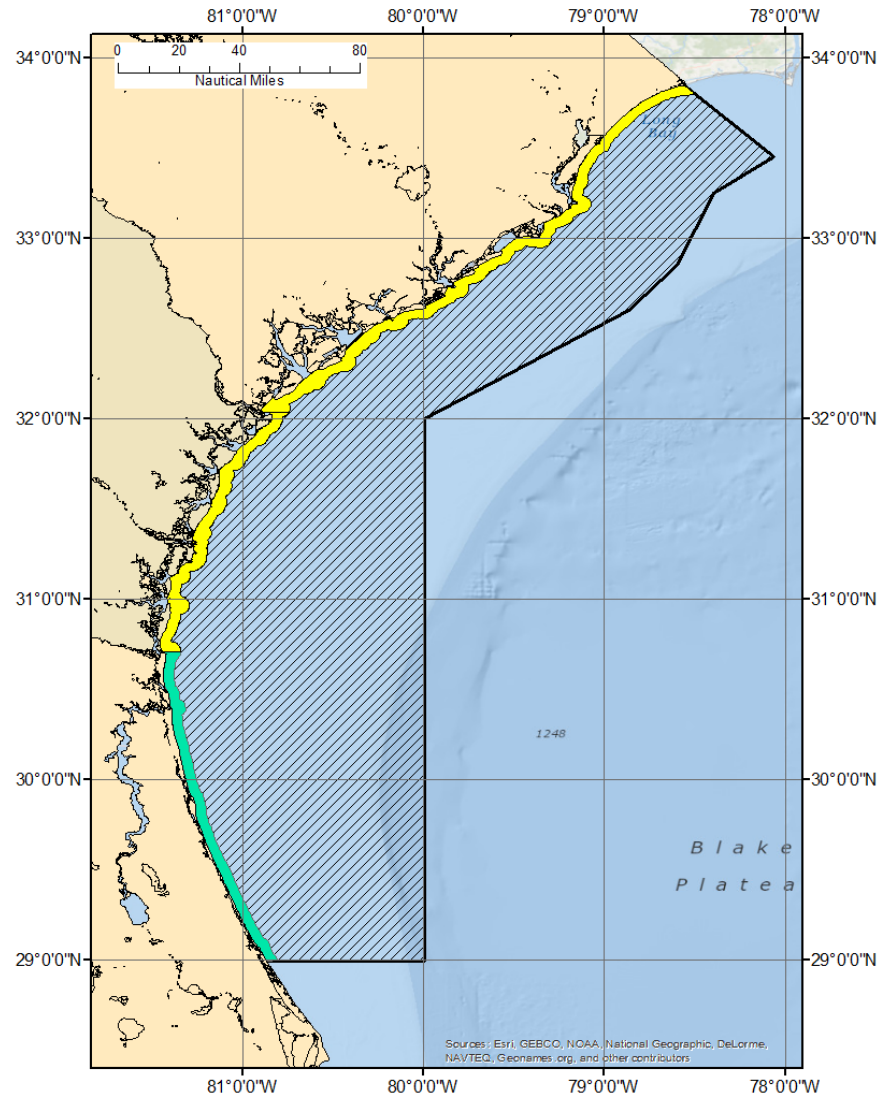
\*Knots/splices ok, but not preferred



# Southeast Proposed Measures

## Federal Waters

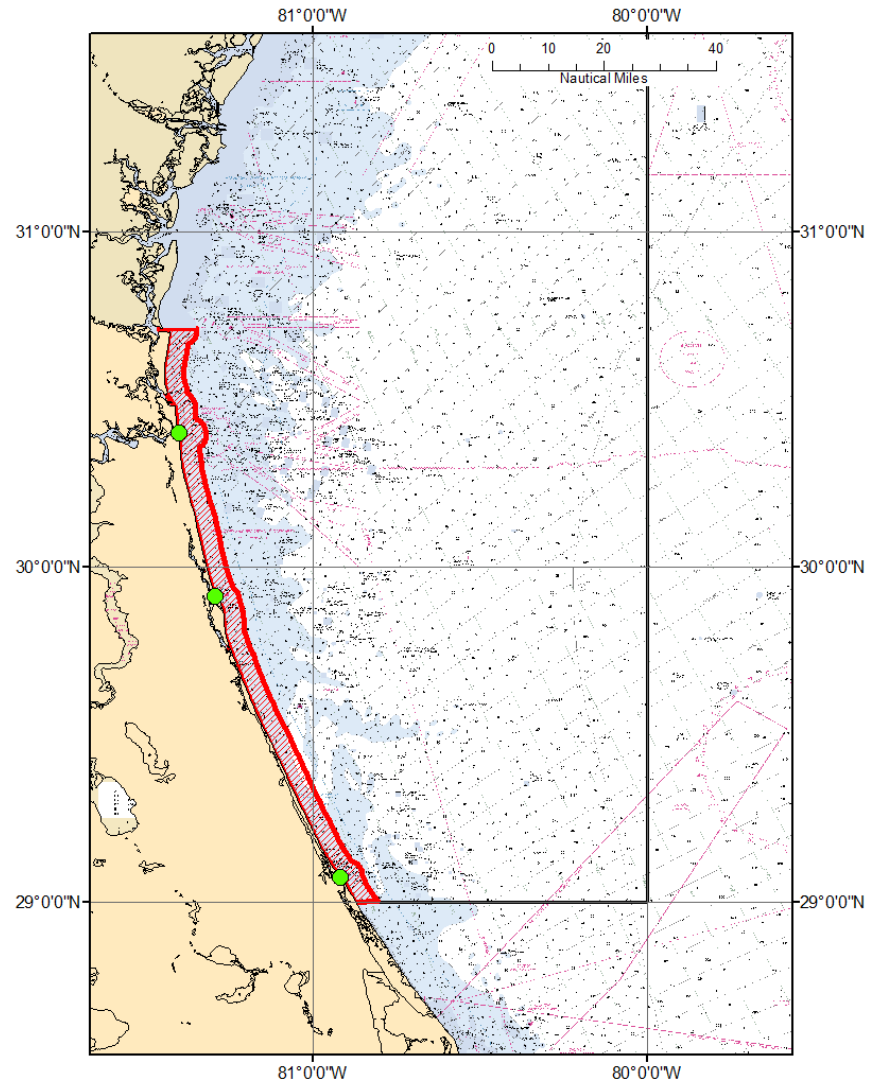
- Gear must be brought back to shore at the end of each trip
- VL breaking strength not to exceed 2,200lbs
- Weak links not to exceed 600 lbs
- Gear marking
  - Green and Orange



# Southeast Proposed Measures

## Florida State Waters

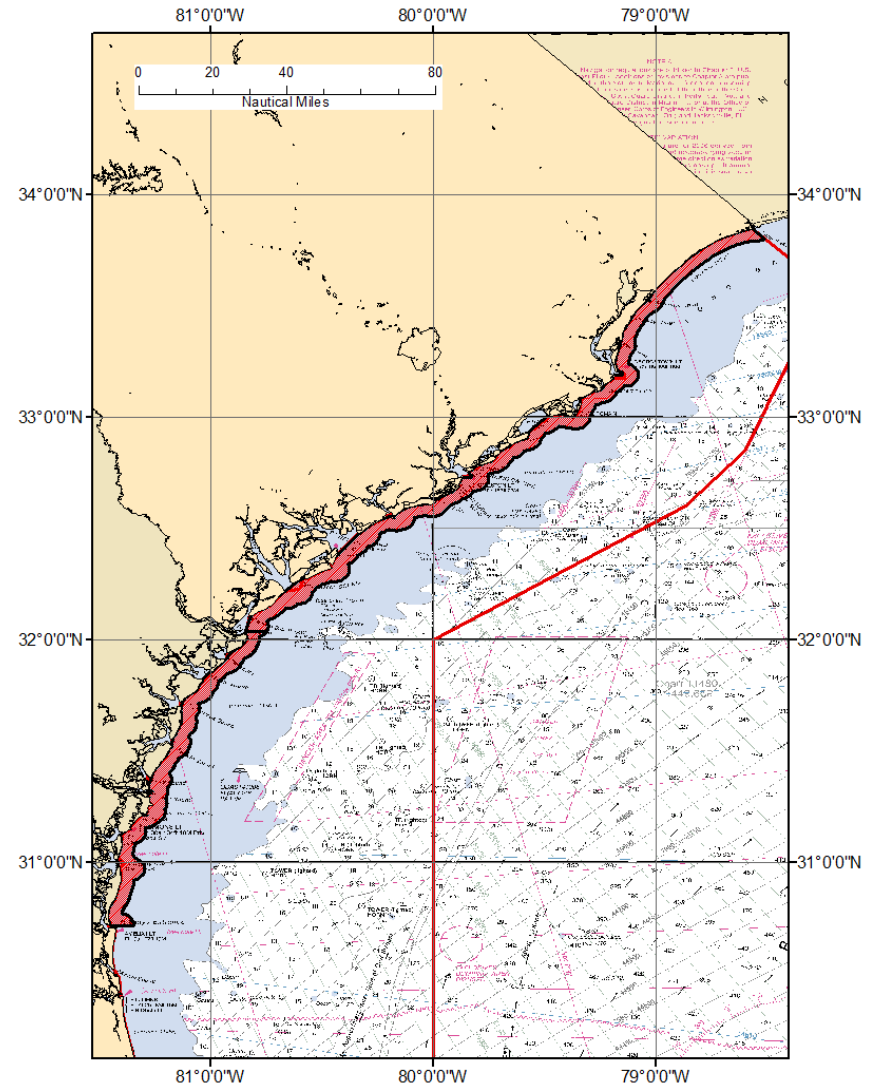
- VL breaking strength not to exceed 1,500lbs
- Weak links not to exceed 200 lbs
- Gear marking
  - Blue and Orange



# Southeast Proposed Measures

## Georgia/South Carolina State Waters

- VL breaking strength not to exceed 2,200lbs
- Weak links not to exceed 600 lbs
- Gear marking
  - Blue and Orange





# Mid-Atlantic and Northeast Proposed measures

- Mid-Atlantic
  - Continued Monitoring
  - Increased Gear Marking
- Northeast
  - Closures
  - Trawling up to reduce number of vertical lines



Photo Credit: NOAA Fisheries

# Conclusions

- Right whale and other large whale movements in the Mid-Atlantic (e.g. NC) are under-represented due to sampling bias
- Black sea bass trap pot effort not represented in co-occurrence model during winter months
- The southeast is a special conservation area given high density of reproductive females and young animals
- Rule (southeast portion) is designed to maintain light gear that young animals can break free from