

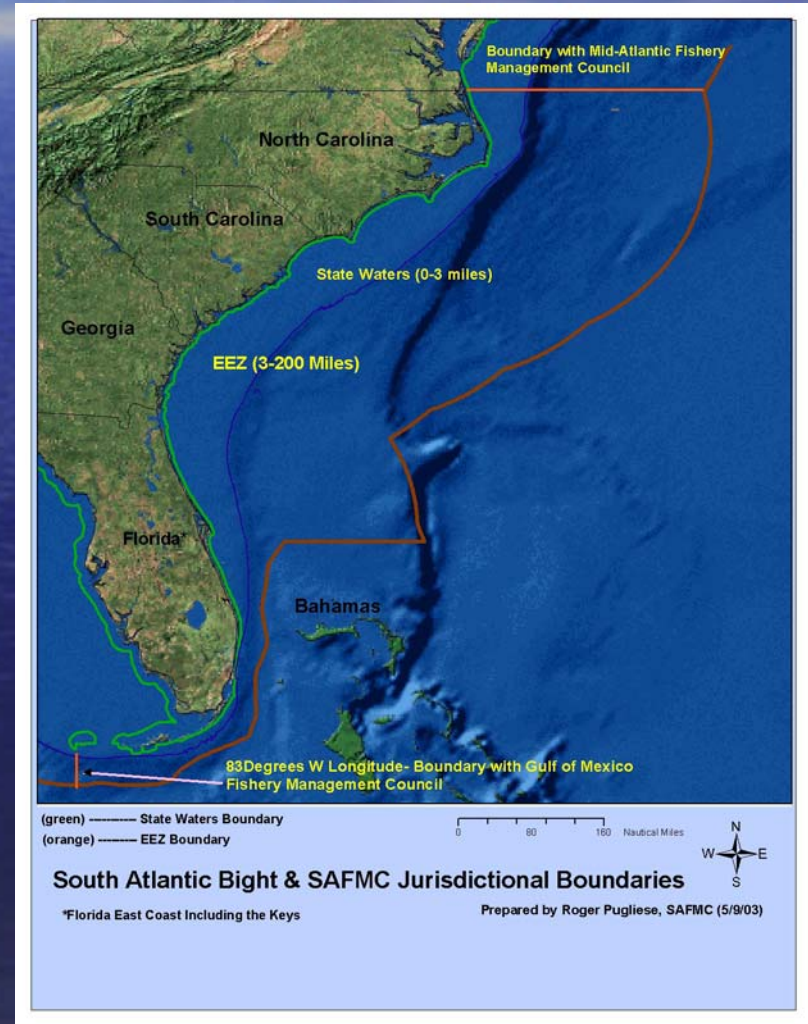


# Exploring the Use of Marine Protected Areas as a Fishery Management Tool

The Experience of the South Atlantic Fishery Management Council

# South Atlantic Fishery Management Council

- One of 8 regional FMCs
- Created in 1976 through the Magnuson Fishery Conservation and Management Act
- The Council's jurisdiction is from 3-200 miles offshore (EEZ)





# Who makes up the SAFMC?

- Council members are citizens from each state who are knowledgeable of or participate in some aspect of fisheries.
- Appointed by the Secretary of Commerce from a list provided by the Governors.
- SAFMC has 13 voting members and 4 non-voting members

# Advisory Panels

- The Council has 15 advisory panels
- 207 advisors
- Recreational and commercial fishermen, headboat and charter operators, seafood buyers and sellers, conservationists, consumers, and agency representatives.



# Time to dig into the toolbox...MPAs designed to protect reef fish



# SAFMC's MPA Definition:

Marine protected areas are specific areas of marine environments managed for the primary purpose of aiding in the recovery of overfished stocks and to insure the persistence of healthy fish stocks, fisheries and habitat.



# Types of MPAs in the toolbox:

- Permanent closure/ no-take
- **Permanent closure/ some take allowed**
- Limited duration closure/ no-take
  - Spawning area closure/ no-take
- Limited duration closure/ some take allowed
  - Spawning area closure/ some take allowed

# Development of MPAs to protect deep-water snapper grouper species

- What are the deepwater species?
  - Speckled hind, snowy grouper, warsaw grouper, misty grouper, yellowedge grouper, golden tilefish and blueline tilefish



# Why MPAs for this fishery?

- Lack of information
- Bycatch
- Life history of reef fish
- Large reductions of fishing mortality needed
- Demand and technology
- Targeting of spawning aggregations





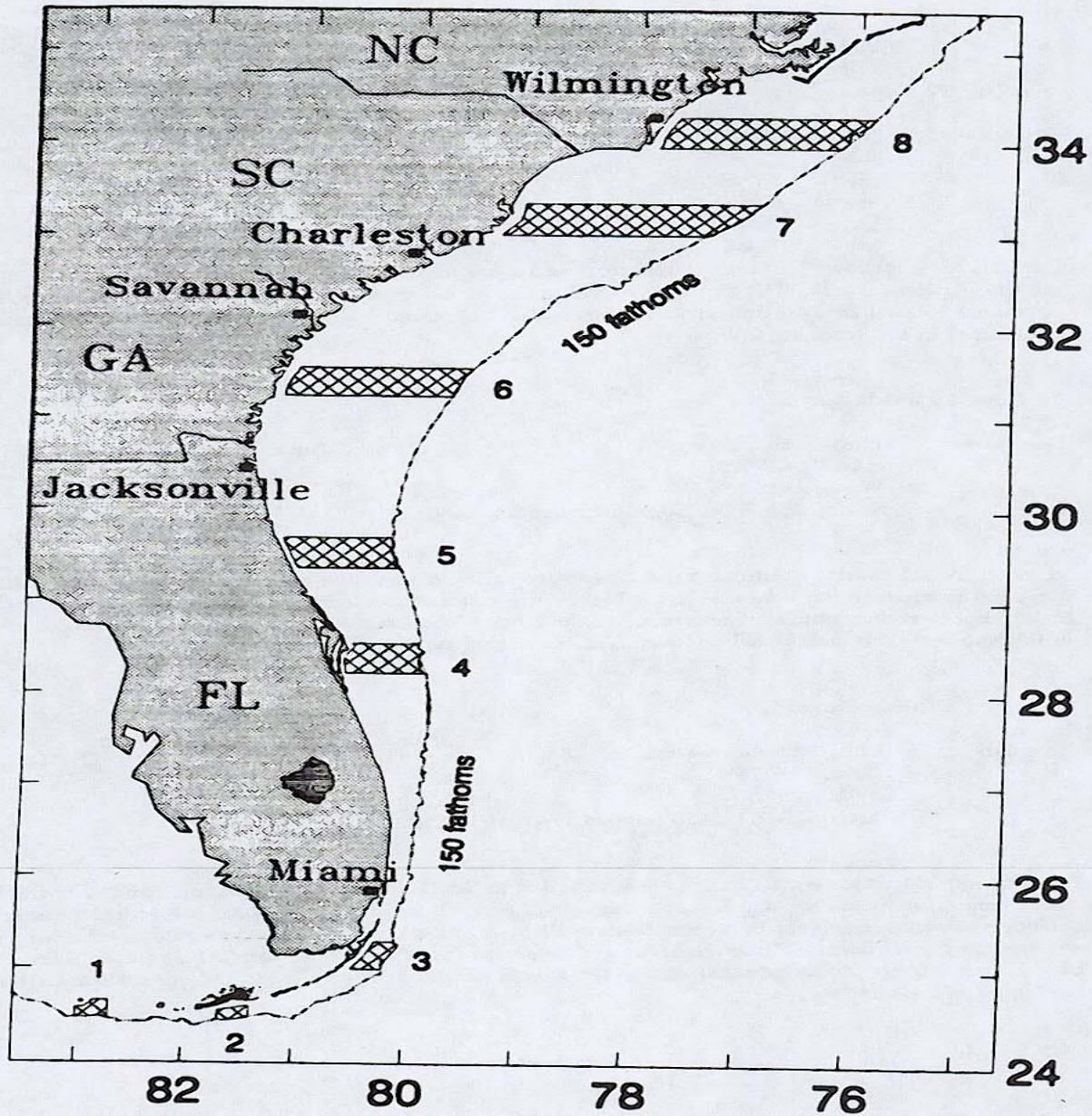
# Starting from the top down...

- Council needed another way to manage the snapper grouper fishery
- Reef fish scientists reported “no-take” marine reserves were only viable option to maintain population
- Scientist attached a proposed map of suggested sites
- Council went out to scoping with sites that came from scientists





Figure A1. Possible marine fishery reserve sites along the southeastern U.S.



# The Results...



- No support from local stakeholders
- Council unsure of science behind MPAs asks NMFS to study concept
- Council puts MPAs on back burner and continues with traditional management tools



# The Second Time Around

- The Council developed a slow and deliberative process to find out if MPAs would work - focused on species complex in the most need
- Council created MPA Advisory Panel with members from all stakeholder groups including all fishing sectors, environmental groups, Gray's Reef NMS and scientists.
- Intent that MPA process belonged with the Councils

# Before Areas Were Even Discussed

- Informal meetings
- First round of scoping - what should we do to re-build ?





# ... And Then Stakeholders Chose Potential Sites

Second round of scoping meetings - where should we put MPAs?



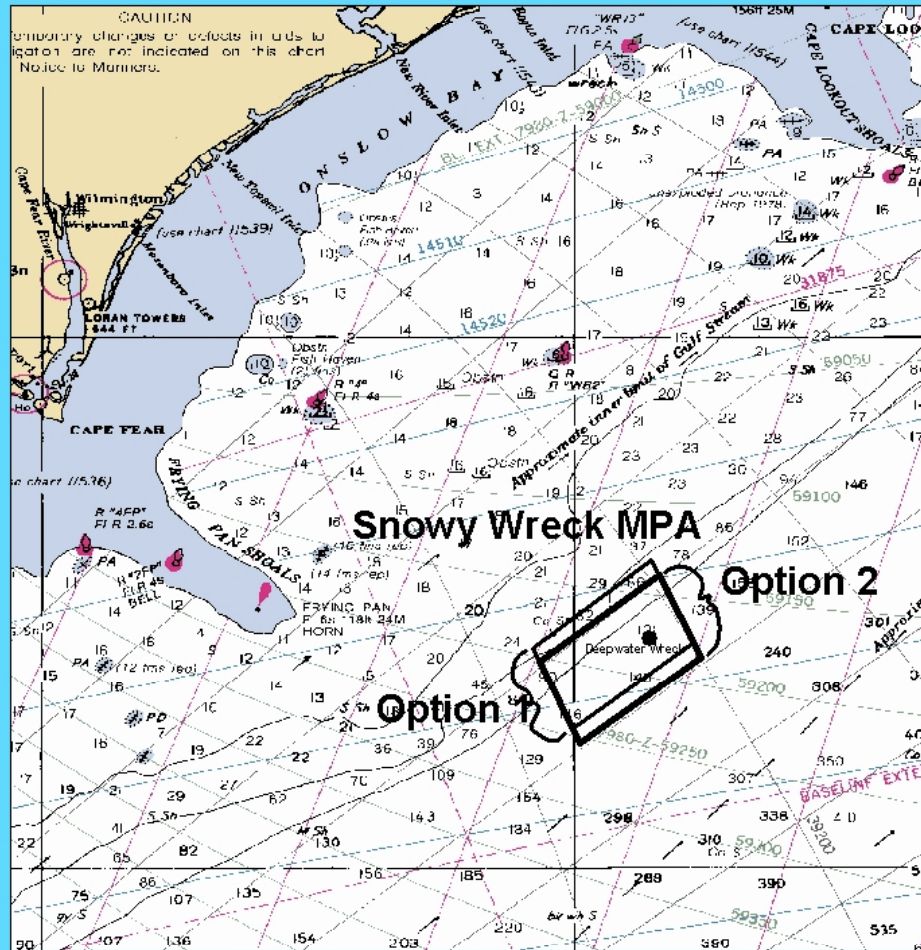
# The Results...



- Fishermen felt the process belonged to them
- All groups worked together
- Initially 32 sites were suggested, now 9 are on the table.



Proposed Snowy Wreck MPA Option 1 and Option 2

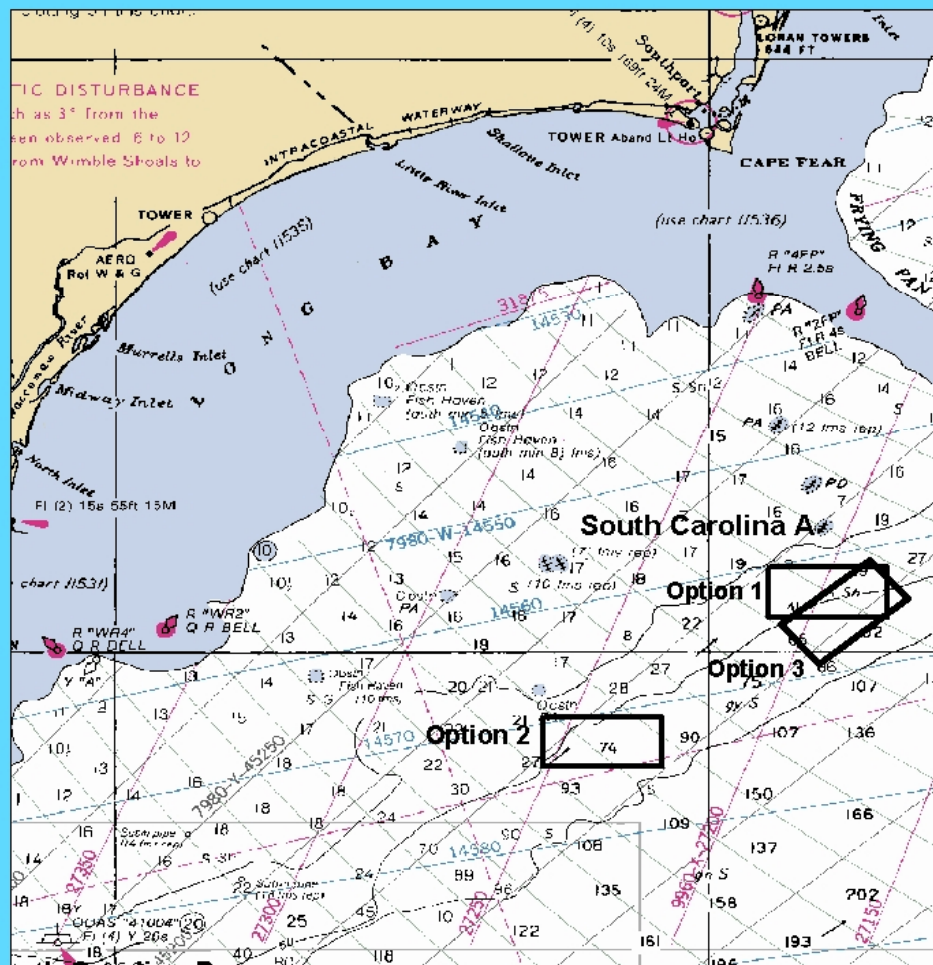


Approximate Corner Points



|          |                                  |                                  |                             |
|----------|----------------------------------|----------------------------------|-----------------------------|
| Option 1 | NW 33Deg 25'N<br>77Deg 4.75'W    | NE 33Deg 34.75'N<br>76Deg 51.3'W | Approx. 55m SE of Southport |
|          | SW 33Deg 15.75'N<br>77Deg 0'W    | SE 33Deg 25.5'N<br>76Deg 46.5'W  |                             |
| Option 2 | NW 33Deg 23.35'N<br>77Deg 4'W    | NE 33Deg 33.25'N<br>76Deg 50.5'W | Approx. 57m SE of Southport |
|          | SW 33Deg 14.1'N<br>76Deg 59.35'W | SE 33Deg 24'N<br>76Deg 45.75'W   |                             |





**Approximate Corner Points**

| Option   | SW Corner   | SE Corner  | Approx. Distance from Murrells Inlet |
|----------|---|--|--------------------------------------|
| Option 1 | MW 33Deg 8.5'N<br>77D eg 54W<br>SW 33Deg 3.5'N<br>77D eg 54W            | NE 33Deg 8.5'N<br>77D eg 42'W<br>SE 33Deg 3.5'N<br>77D eg 42'W       | Approx. 61nm from Murrells Inlet     |
| Option 2 | MW 32Deg 53.5'N<br>78D eg 16.75'W<br>SW 32Deg 48.5'N<br>78D eg 16.75'W  | NE 32Deg 53.5'N<br>78D eg 4.75'W<br>SE 32Deg 48.5'N<br>78D eg 4.75'W | Approx. 54nm from Murrells Inlet     |
| Option 3 | MW 33Deg 2.75'N<br>79D eg 52.75'W<br>SW 32Deg 58.83'N<br>77D eg 48.83'W | NE 33Deg 9.25'N<br>77D eg 43.5'W<br>SE 33Deg 5.3'N<br>77D eg 39.9'W  | Approx. 65nm from Murrells Inlet     |

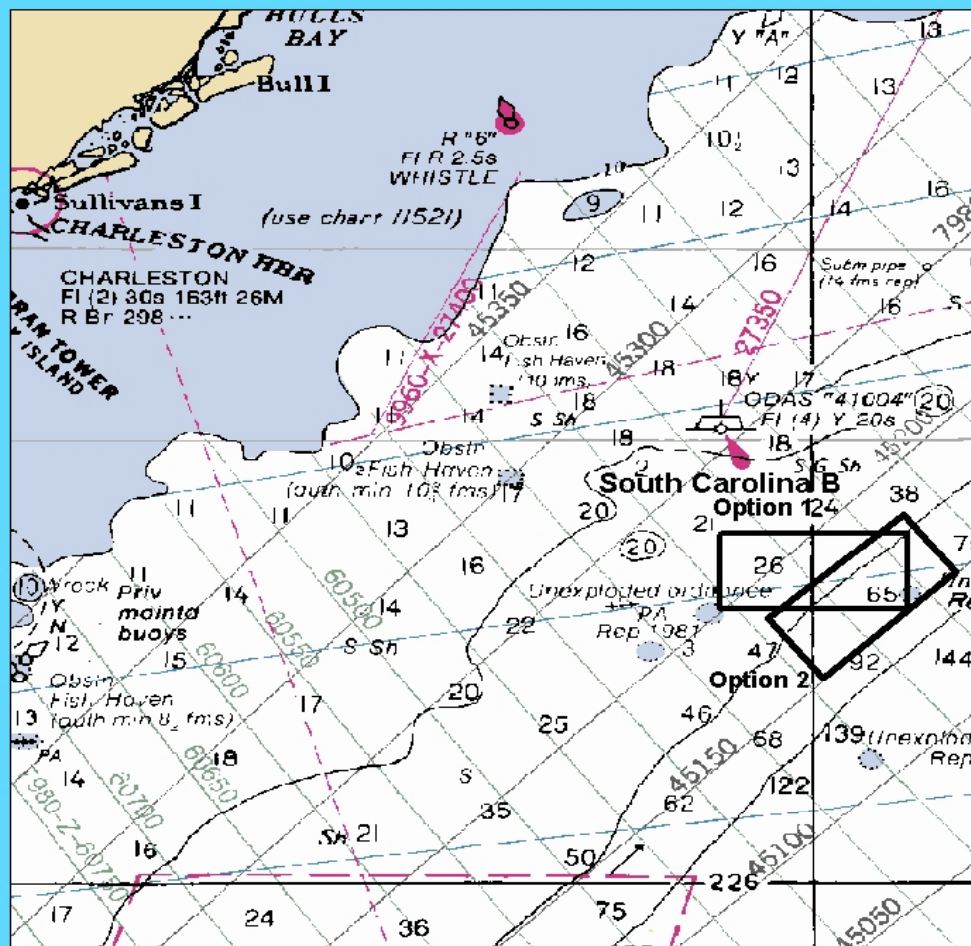
0 5 10 Nautical Miles (nm)

Depth in Fathoms





Proposed South Carolina B MPA Option 1 and Option 2



Approximate Corner Points

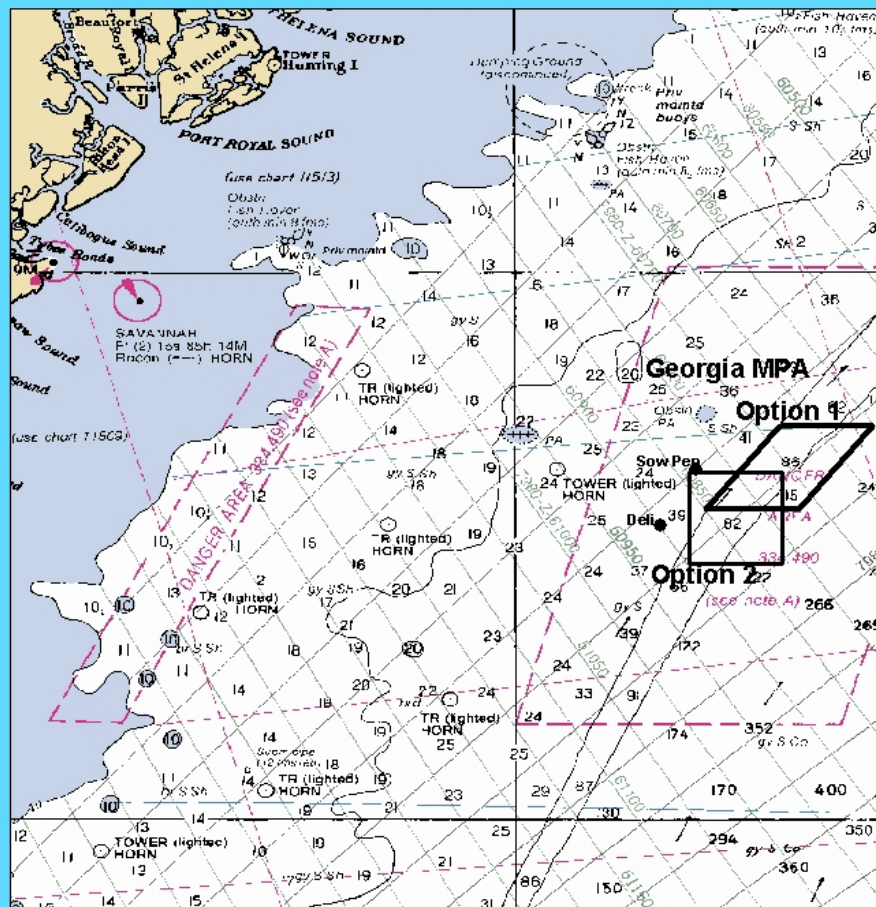
| Option   | NW Corner                        | NE Corner                        | Approx. Location                     |
|----------|----------------------------------|----------------------------------|--------------------------------------|
| Option 1 | NW 32Deg 24'N<br>79D eg 6'W      | NE 32Deg 24'N<br>78Deg 54'W      | Approx. 45nm SE of Charleston Harbor |
|          | SW 32Deg 18.5'N<br>79D eg 6'W    | SE 32Deg 18.5'N<br>78Deg 54'W    |                                      |
| Option 2 | NW 32Deg 17'N<br>79D eg 3'W      | NE 32Deg 24.75'N<br>78Deg 54.2'W | Approx. 50nm SE of Charleston Harbor |
|          | SW 32Deg 13.5'N<br>78D eg 59.5'W | SE 32Deg 21'N<br>78D eg 50.83'W  |                                      |

0 5 10 Nautical Miles (nm)

Depth in Fathoms



Proposed Georgia MPA Option 1 and Option 2



Approximate Corner Points

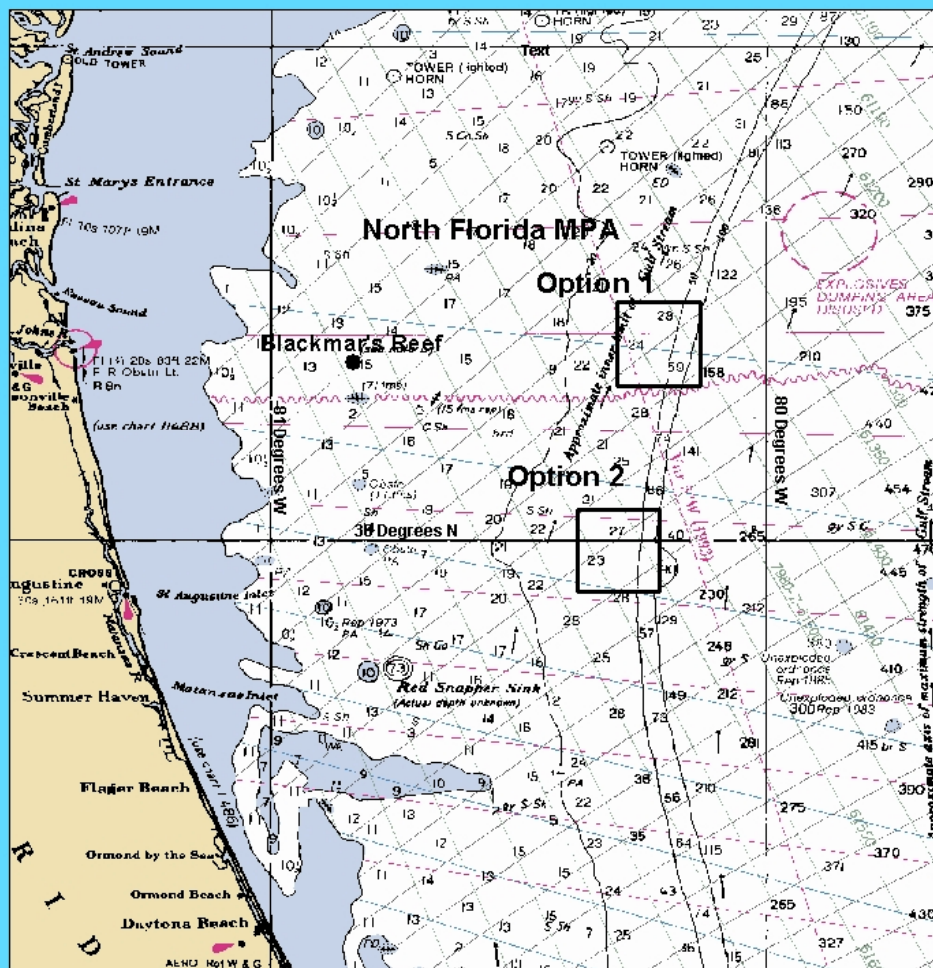
0 5 10 Nautical Miles (nm)

| Option 1      |               | Option 2      |               |  |
|---------------|---------------|---------------|---------------|--|
| NW 31Deg 43'N | NE 31Deg 43'N | NW 31Deg 38'N | NE 31Deg 38'N | Approx. 69nm SE of the Mouth of Wassaw Sound |
| 79Deg 31'W    | 79Deg 21'W    | 79Deg 41'W    | 79Deg 31'W    |  |
| SW 31Deg 34'N | SE 31Deg 34'N | SW 31Deg 28'N | SE 31Deg 28'N | Approx. 65nm SE of the Mouth of Wassaw Sound |
| 79Deg 39'W    | 79Deg 29'W    | 79Deg 41'W    | 79Deg 31'W    |  |





Proposed North Florida MPA Option 1 and Option 2



Approximate Corner Points

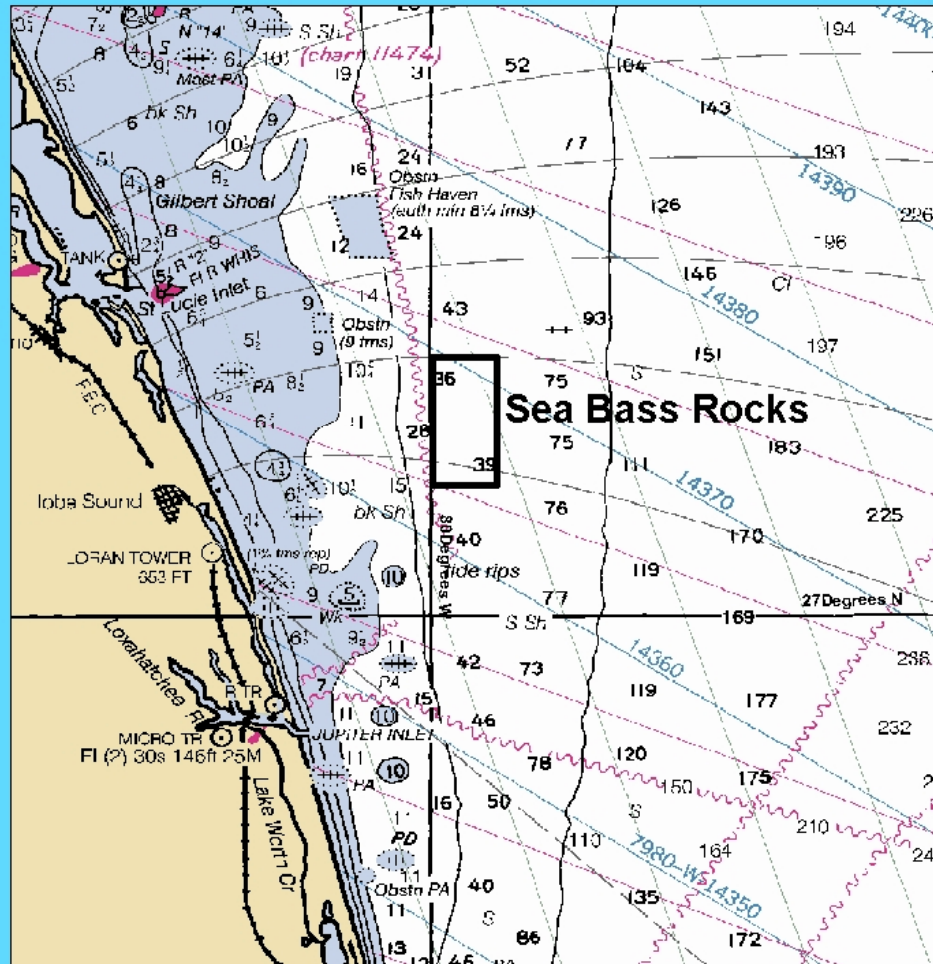
0 4.5 9 Nautical Miles (nm)

Depth in Fathoms

|          |               |               |  |
|----------|---------------|---------------|--|
| Option 1 | NW 30deg 29N  | NE 30deg 29N  |  |
|          | 80Deg 18"W    | 80deg 8'W     |  |
|          | SW 30deg 19'N | SE 30deg 19'N |  |
|          | 80Deg 18"W    | 80deg 8'W     | Approx. 57nm E of Mouth of St. Johns River |
| Option 2 | NW 30deg 4'N  | NE 30deg 4'N  |  |
|          | 80Deg 23'W    | 80deg 13'W    |  |
|          | SW 29deg 54'N | SE 29deg 54'N | Approx. 57nm E of St. Augustine Inlet      |
|          | 80Deg 23'W    | 80deg 13'W    |  |



Proposed MPA Option: Sea Bass Rocks



Approximate Corner Points

|  |                            |
|--|----------------------------|
| Sea Bass Rocks NW 27Deg 8'N<br>80Deg 0'W | NE 27Deg 8'N<br>79Deg 58'W |
| SW 27Deg 4'N<br>80Deg 0'W                | SE 27Deg 4'N<br>79Deg 58'W |

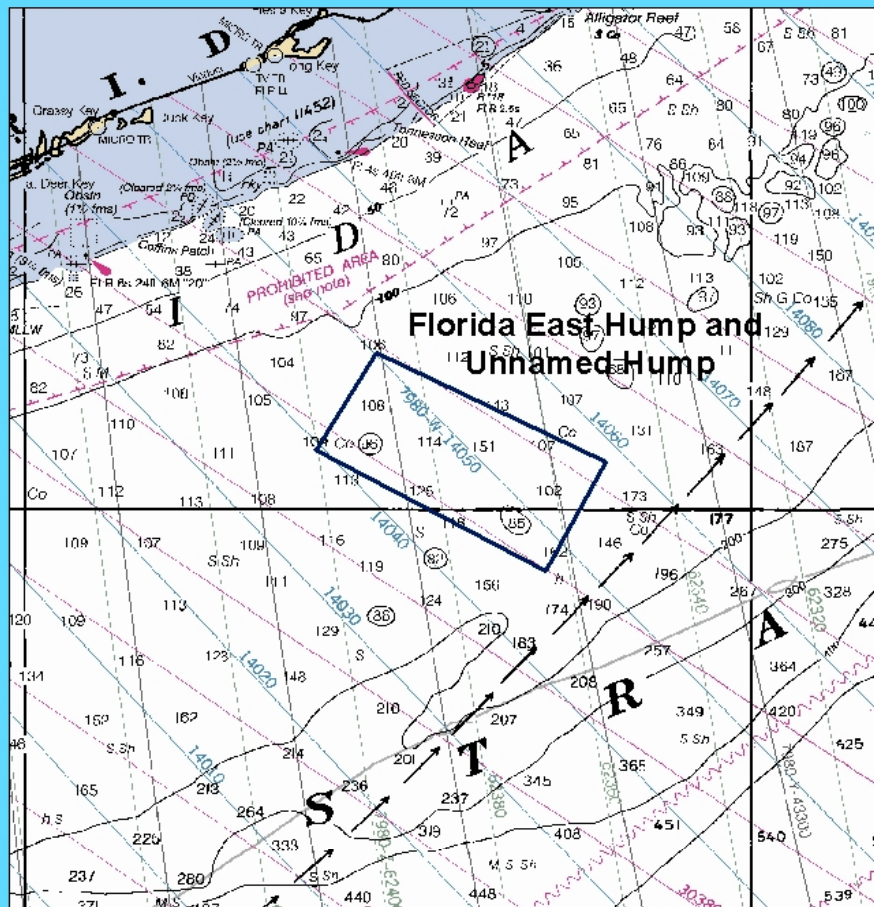
Approx. 9nm SE of St. Lucie Inlet

0 2 4 Nautical Miles (nm)  
Depth in Fathoms





Proposed MPA Option: Florida East Hump and Unnamed Hump



0 2.5 5 Nautical Miles (nm)

Approximate Corner Points

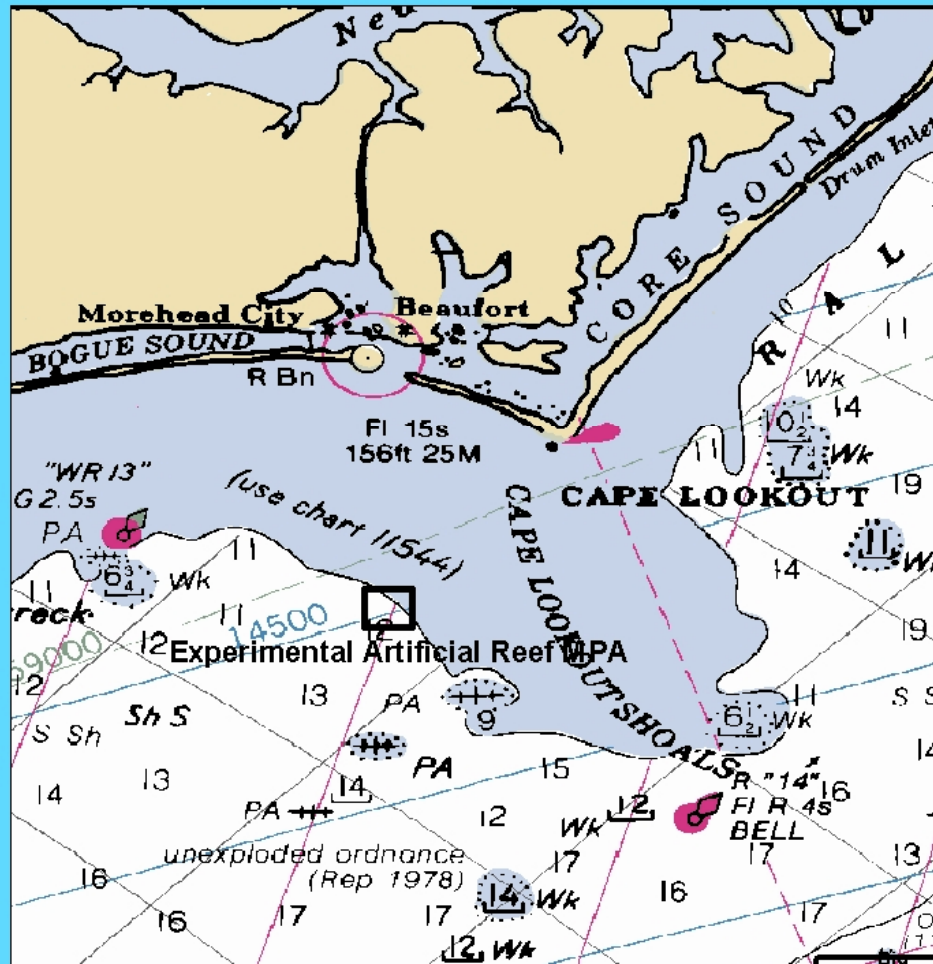
Depth in Fathoms

|                                    |                                   |                                   |
|------------------------------------|-----------------------------------|-----------------------------------|
| Florida East Hump and Unnamed Hump | NW 24deg 36.50'N<br>80deg 45.50'W | NE 24deg 32.00'N<br>80deg 36.00'W |
|                                    | SW 24deg 32.50'N<br>80deg 48'W    | SE 24deg 27.50'N<br>80deg 38.50'W |

Approx. 13nm SE of Long Key



# Experimental Artificial Reef MPA



## Approximate Corner Points

|                                     |                             |                                |
|-------------------------------------|-----------------------------|--------------------------------|
| Experimental<br>Artificial Reef MPA | NW 34Deg 30'N<br>76Deg 42'W | NE 34Deg 30'N<br>76Deg 38.75'W |
|                                     | SW 34deg 29'N<br>76Deg 42'W | SE 34deg 29'N<br>76Deg 38.75'W |

Approx. 12nm from Beaufort Inlet





# Now:

- The MPAs designed to protect deepwater snapper grouper species will be considered under the Council's upcoming Fishery Ecosystem Plan which is under development.