

Region 4 Strategic Habitat Areas

North Carolina Division of Marine Fisheries

Casey Knight
Cape Fear River Partnership
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Coastal Habitat Protection Plan (CHPP)

- ♦ Goal 2 of the CHPP - Identify and delineate strategic habitat areas
- ♦ What are Strategic Habitat Areas (SHAs)?
 - ♦ subset of all coastal habitats
 - ♦ exceptional ecological functions, relatively unaltered or rare
 - ♦ Maintains biodiversity and ecological functions
 - ♦ Network of habitat connections

		Alteration Level	
		Low	Moderate
Ecological Function	High	SELECTED Exceptional Protect	SELECTED At Risk Restore/Enhance
	Low	NOT SELECTED Status Quo Rely on existing protections	

Ecological Value = level of service provided by a habitat to fish (e.g., marsh that is a nursery area)

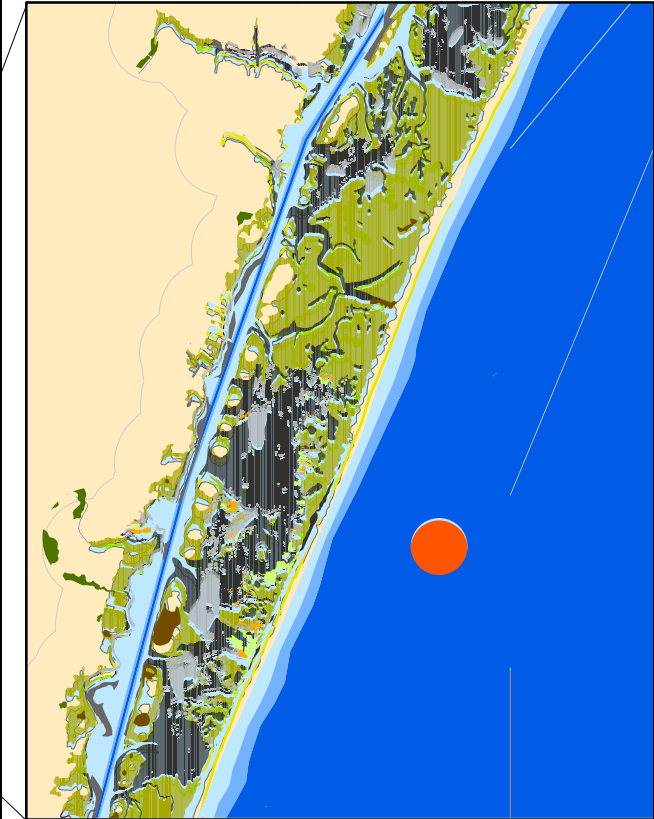
Alteration = Disturbance by human activity (e.g., marina)

Marxan Inputs

Priority Species

Shellfish/ Crustacean	Blue Crab
	Shrimp
	Oysters
	Clams
	Bay Scallop
Estuarine finfish	Spot
	Kingfishes
	Southern Flounder
	Spotted Seatrout
	Red Drum
Anadromous fish	Striped Bass
	Sturgeon
Reef fish and coastal pelagics	Grouper, Gag
	Black Sea Bass
	Sheepshead
	King mackerel
	Spanish mackerel

Habitats (Natural Resource Targets)

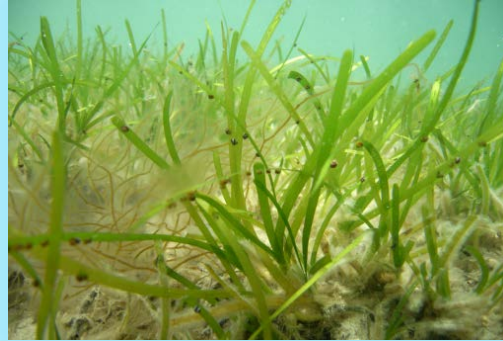


Natural Resource Target GIS Layers

Hard Bottom



SAV



Shell Bottom



Low-Elevation Uplands



Wetlands



Wetland Edge



Streams



Soft Bottom



Alteration Factors GIS Layers

Culverts



Bulkheads



Ditching and Draining



Marinas



Development



Agriculture



Shellfish Closures

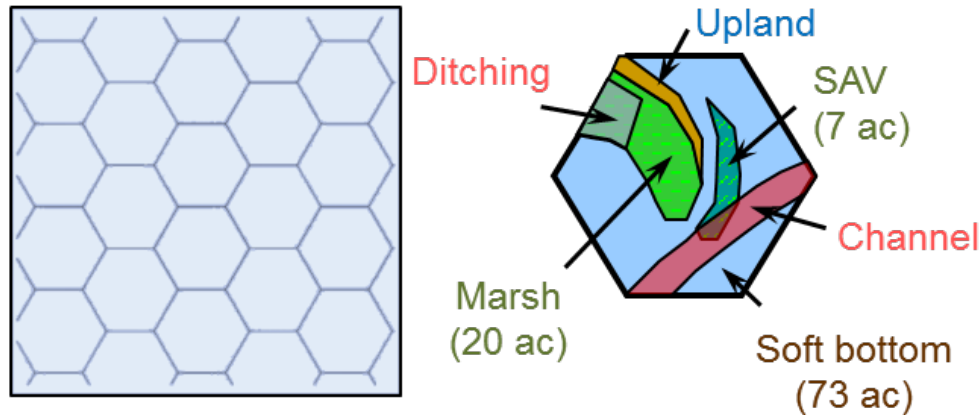


Trawling

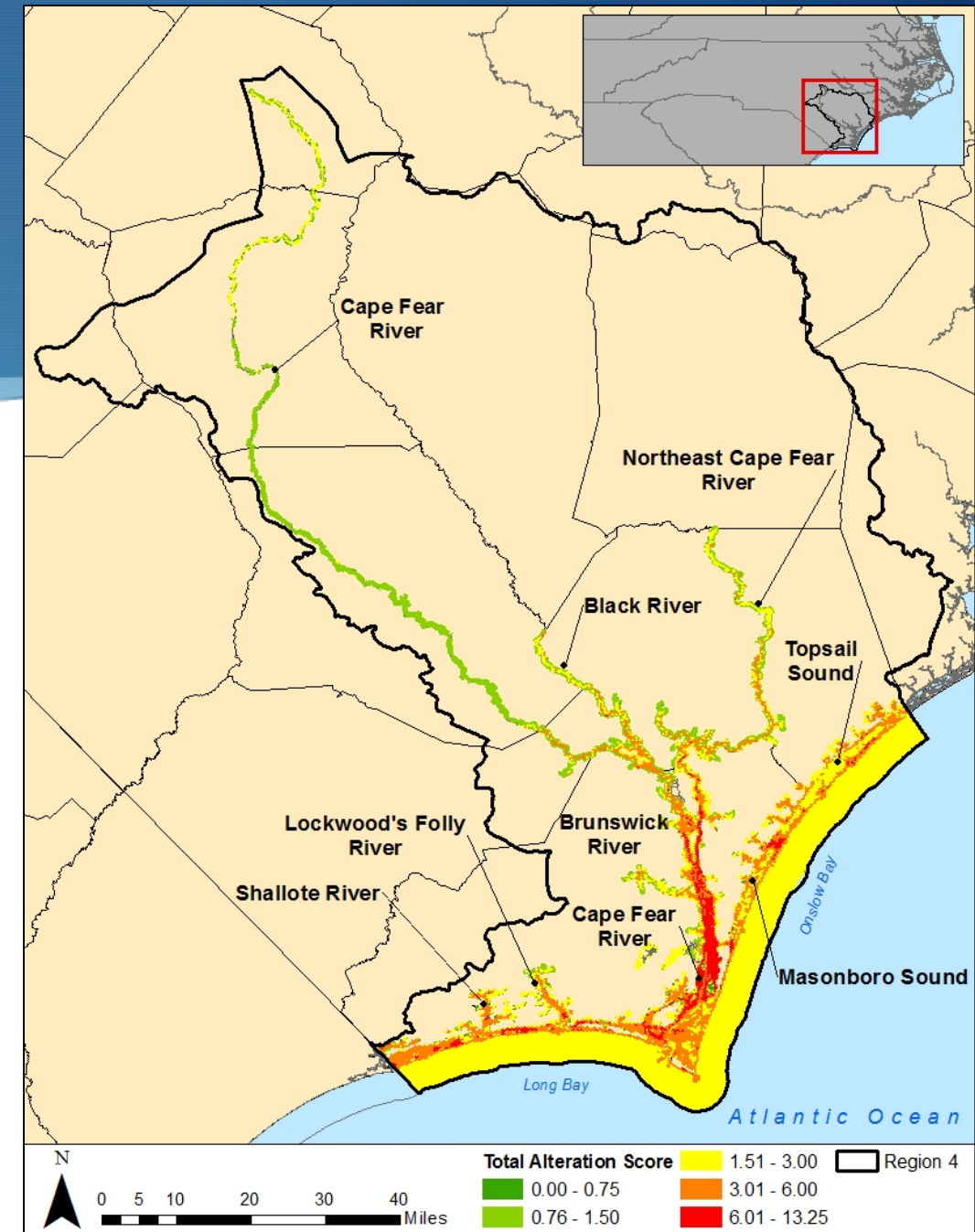


Marxan Software

- ◆ Total alteration of each habitat per hexagon is the sum of **Severity** X **Extent** X **Portion** ratings for each alteration.



Severity x Extent x Habitat Portion



Strategic Habitat Areas

(post advisory committee modifications)

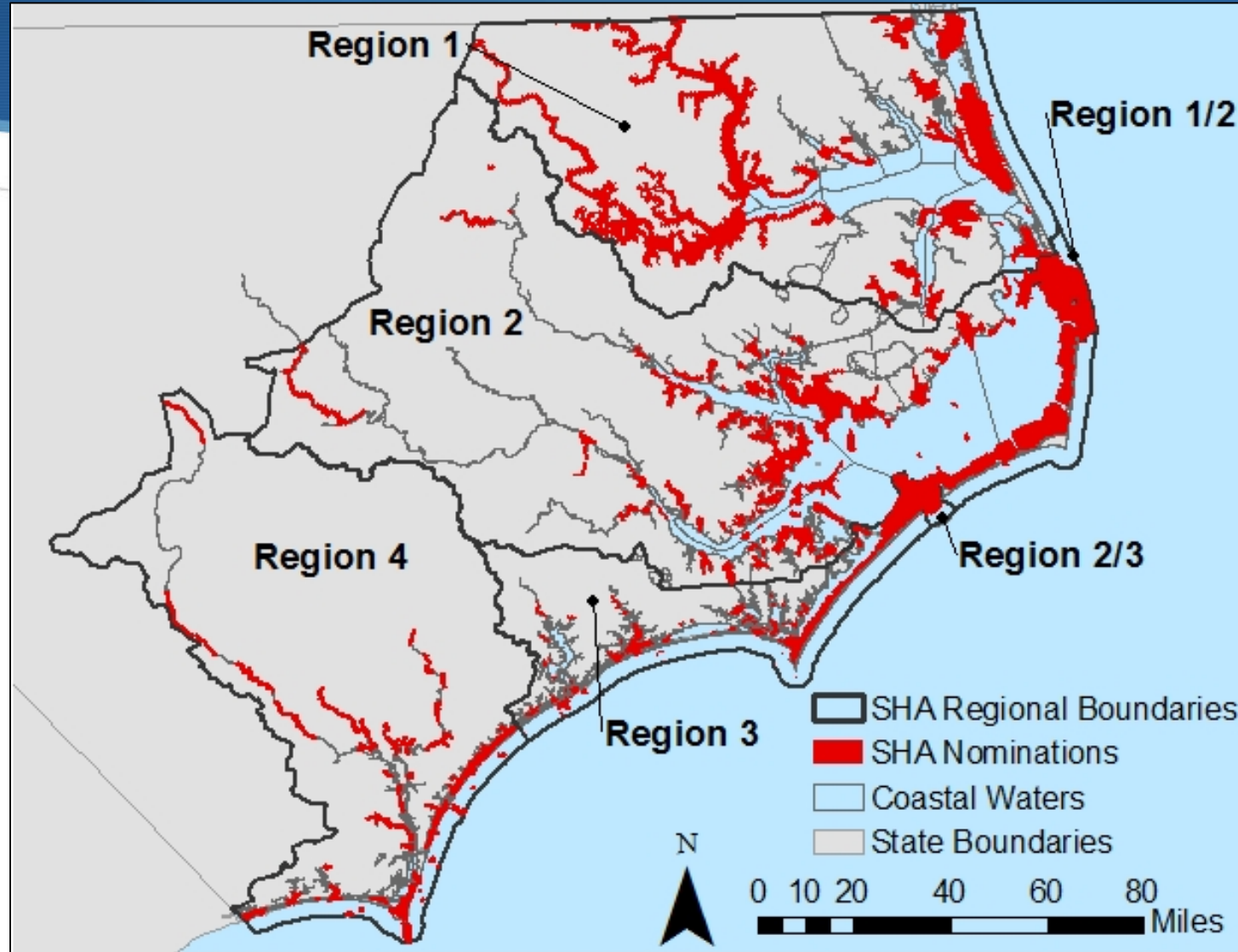
- Approved by the North Carolina Marine Fisheries Commission on May 17, 2018
- 43 discrete areas selected
- 21 percent (74,451 acres) of total focus area



Use and Integration of Strategic Habitat Areas

- ◆ Use in local land use planning and permit reviews
- ◆ Criteria for agriculture cost share projects
- ◆ Encourage Best Management Practices near Strategic Habitat Areas
- ◆ Pursue restoration projects that would benefit Strategic Habitat Areas
- ◆ Recommend some Strategic Habitat Areas for land acquisition

Coastwide Strategic Habitat Areas



Region 1
20 SHAs
490,315 acres
20% of focus area

Region 3
48 SHAs
134,547 acres
19% of focus area

Region 2
67 SHAs
322,843 acres
26% of focus area

Region 4
43 SHAs
74,451 acres
21% of focus area

Questions?

Casey Knight
Coastal Habitat Biologist
North Carolina Division of Marine Fisheries
casey.knight@ncdenr.gov

