



NOAA
FISHERIES

Atlantic Highly Migratory Species Draft Amendment 10 Essential Fish Habitat

Outline

- Introduction to Essential Fish Habitat (EFH)
- Timeline of HMS EFH Actions
- Draft Amendment 10 Alternatives
- Important Reminders and Timeline

HMS EFH... What Is It?

Magnuson-Stevens Act (MSA) identifies EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity”

- Sustainable Fisheries Act of 1996
- Federally managed species only
- May or may not include state waters
- Must be periodically reviewed and revised
- Cannot be designated in international waters

Timeline of HMS EFH Actions

- 1999:** EFH is first designated for Atlantic HMS
- 2003:** EFH updated for some species
- 2009:** Amendment 1 – 5-year review and update of EFH
- 2010:** Amendment 3 – Designated smoothhound EFH
Interpretive rule – Recognized roundscale spearfish, added it to the management unit, designated EFH
- 2014:** Atlantic HMS EFH 5-Year Review - Initiated
- 2015:** Atlantic HMS EFH 5-Year Review – Finalized; Notice Of Intent to prepare Amendment 10
- Sept 2016:** Draft Amendment 10 released

Draft Amendment 10 (EFH)

- Purpose:
 - Update EFH with recent information
 - Minimize to the extent practicable the adverse effects of fishing and non-fishing activities on EFH
 - Identify other actions to encourage the conservation and enhancement of EFH
- Need:
 - 5 Year Review Process and Public Consultation → new information
 - Revision of EFH is consistent with MSA requirements and National Standard 2 Guidelines

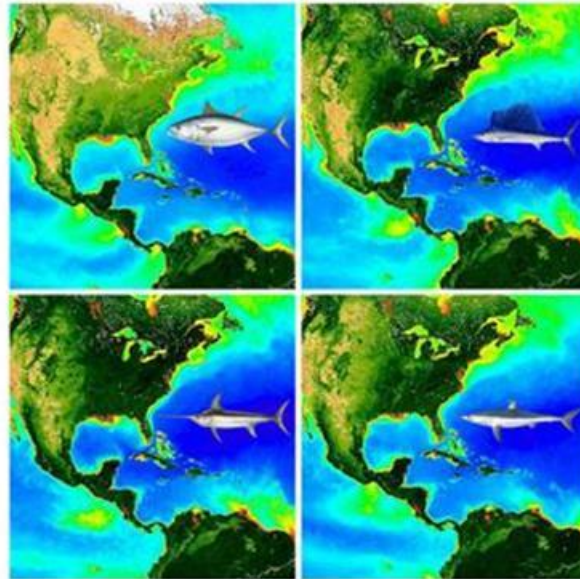
Draft Amendment 10 Alternatives

DRAFT

Amendment 10 to the 2006 Consolidated
Atlantic Highly Migratory Species Fishery
Management Plan:

Essential Fish Habitat

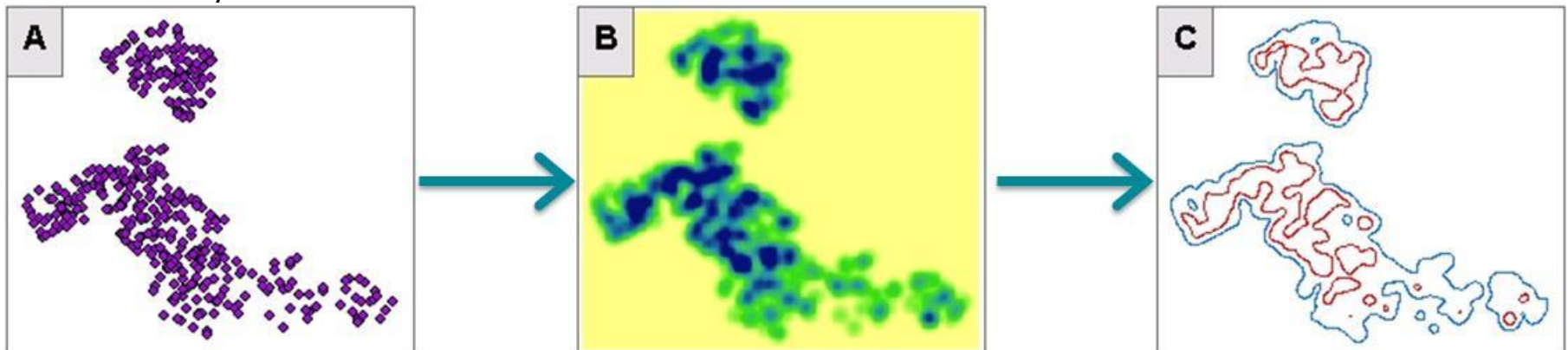
and Environmental Assessment



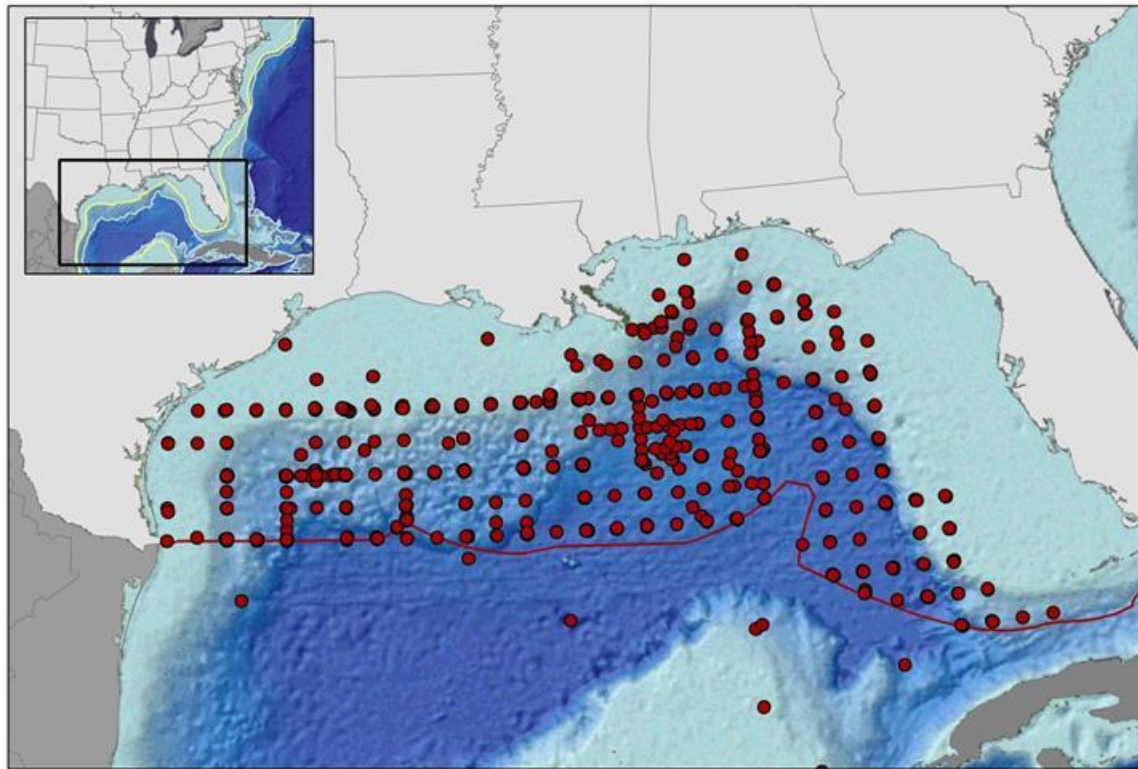
Draft Amendment Alternatives: EFH Delineation

- Alternative 1: No Action. Retain current EFH designations
- Alternative 2 (*preferred*): Update Atlantic HMS EFH with new data collected since 2009, using the protocols established under Amendment 1 (maps in Appendix E).

Kernal Density Estimation / 95% Volume Contour



Draft Amendment Alternatives: EFH Delineation

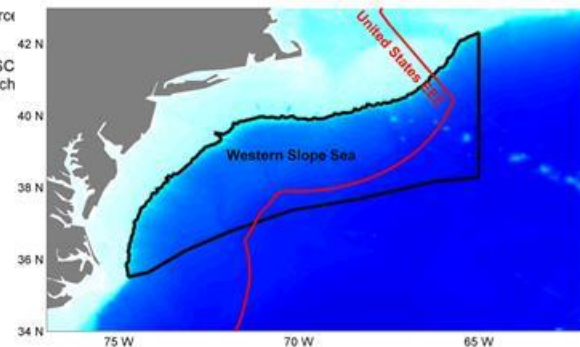


**Bluefin Tuna - Spawning,
Eggs, Larvae**

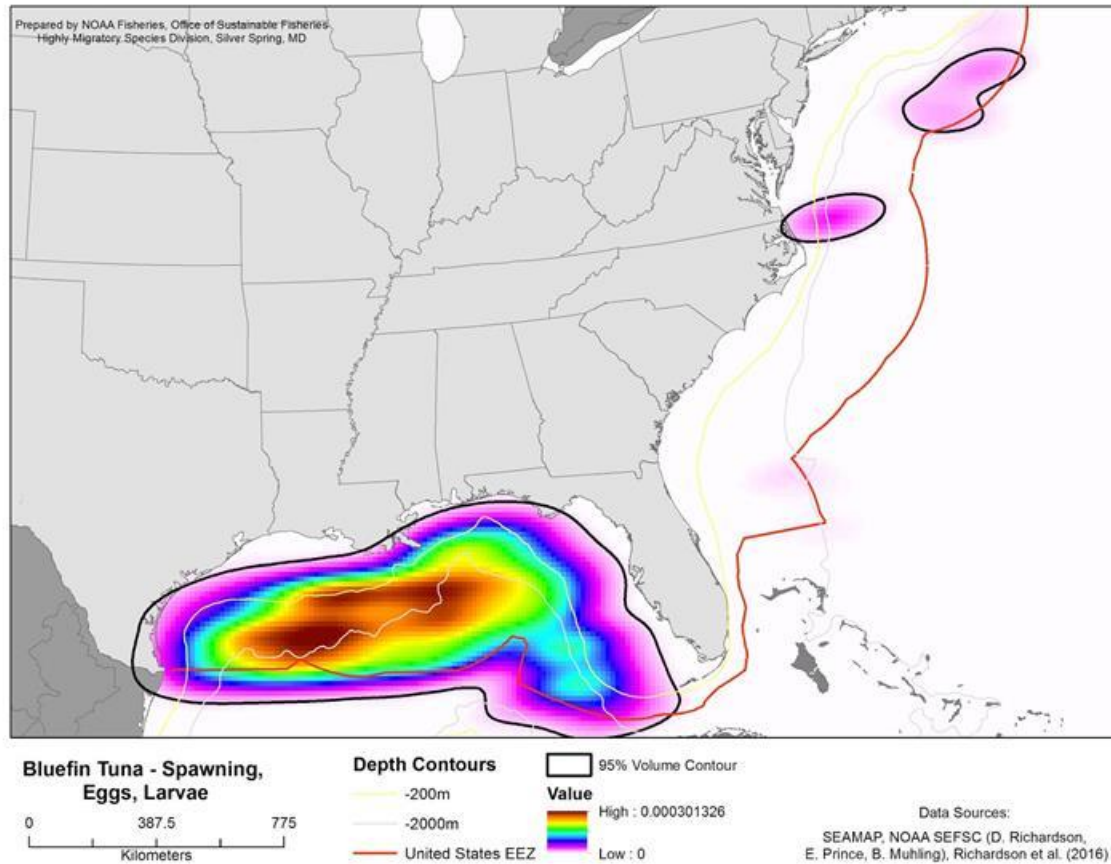
0 230 460
Kilometers

— United States EEZ
● BFT Data Points

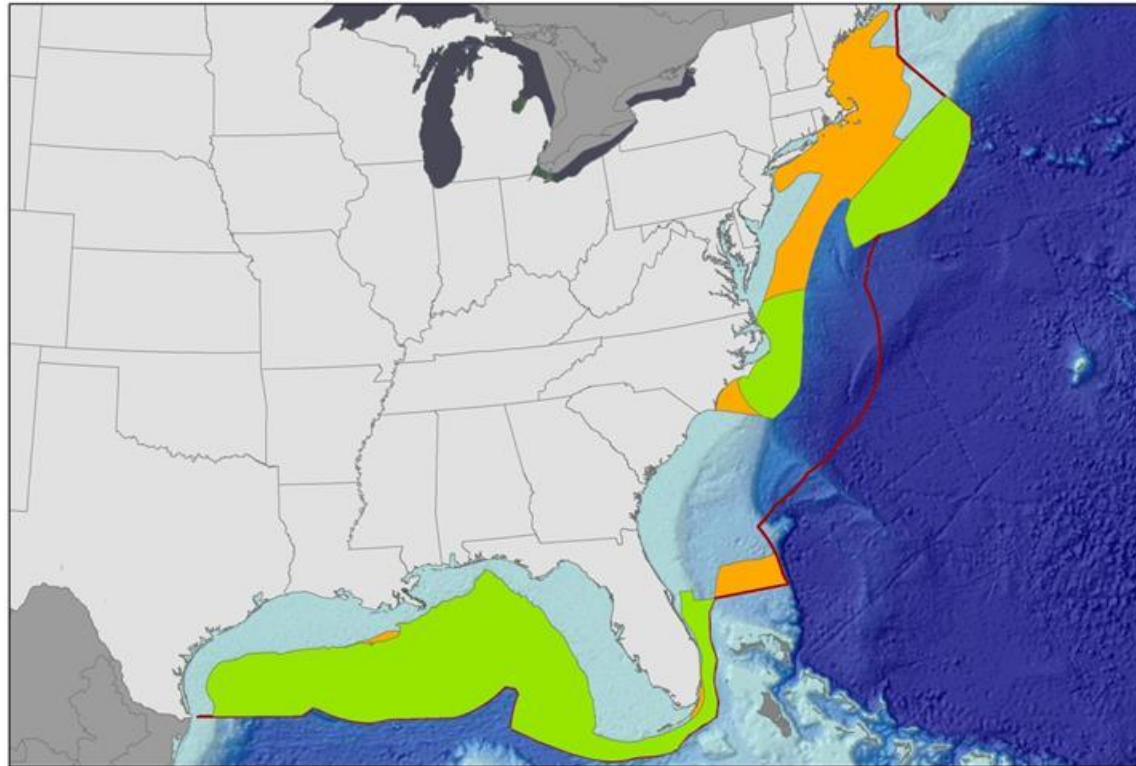
Data Source
SEAMAP, NOAA SEFSC
E. Prince, B. Muhling, Rich



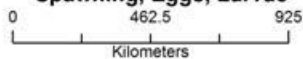
Draft Amendment Alternatives: EFH Delineation



Draft Amendment Alternatives: EFH Delineation



**Bluefin Tuna EFH -
Adult (> 185 cm FL) and
Spawning, Eggs, Larvae**



- Bluefin Tuna Spawning, Eggs, and Larval Updated EFH
- United States EEZ
- Bluefin Tuna ADU Updated EFH

Data Sources:
CTS, CSTP, NEFSC observer program,
NEFSC, SEFSC pelagic observer program,
NMF EFP database

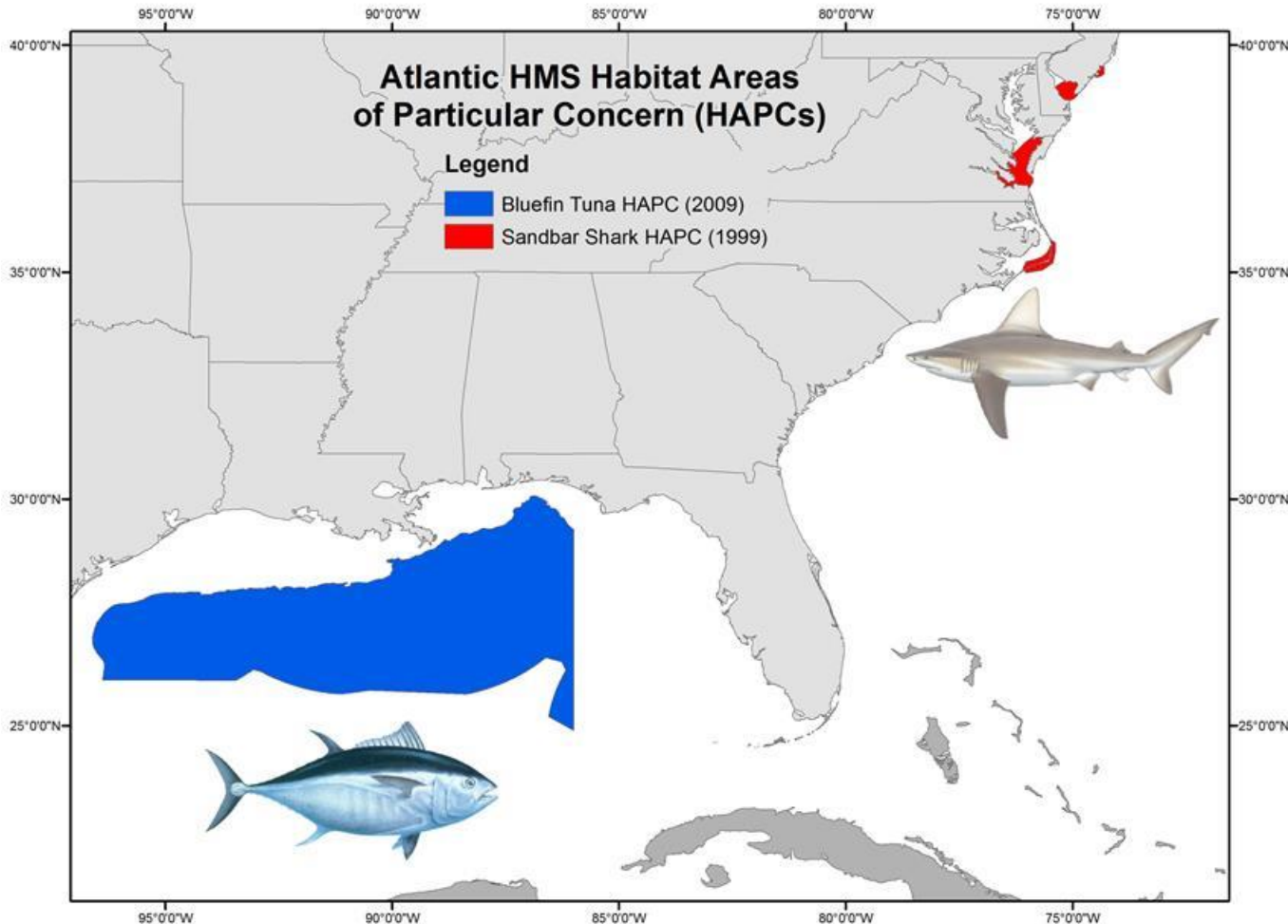
HAPC Alternatives

HAPCs are subsets of EFH that are one or more of the following:

- (i) The importance of the ecological function provided by the habitat.
- (ii) The extent to which the habitat is sensitive to human-induced environmental degradation.
- (iii) Whether, and to what extent, development activities are, or will be, stressing the habitat type.
- (iv) The rarity of the habitat type.

Draft Amendment Alternatives: HAPCs

Current HMS HAPCs: Bluefin tuna and Sandbar shark



Draft Amendment Alternatives: HAPCs

- Alternative 3b
(preferred): Modify current HAPC for bluefin tuna

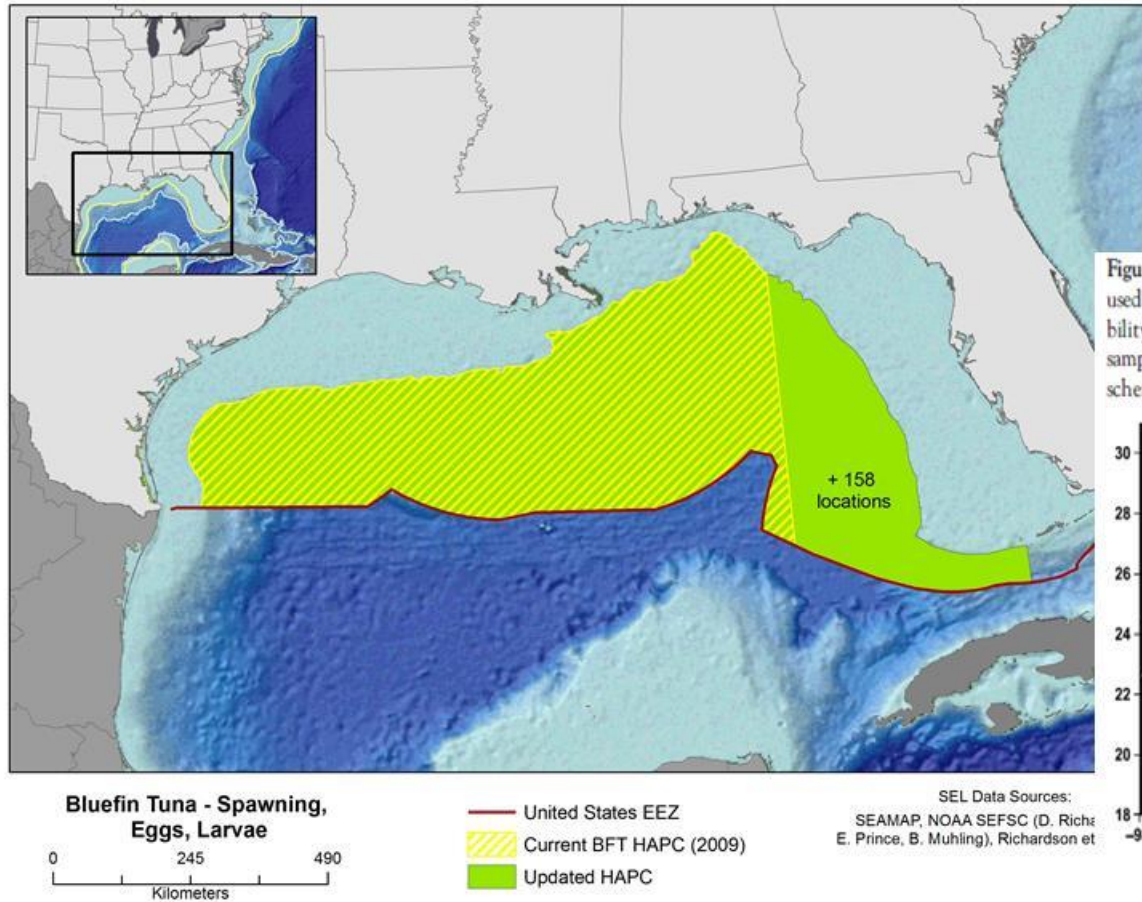
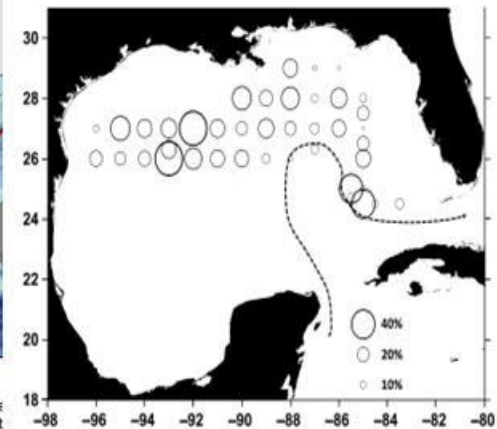


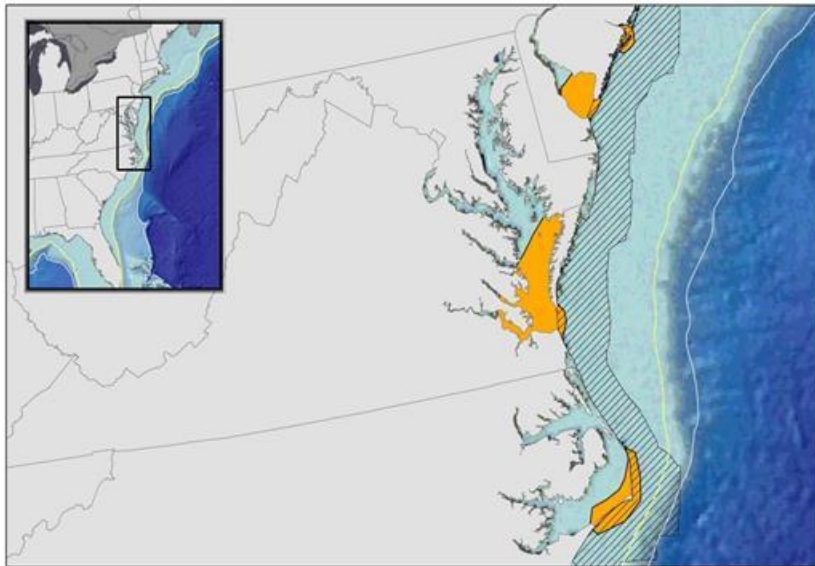
Figure 1. Locations of SEAMAP sampling stations for data used to construct the classification tree model. The probability of collecting at least one bluefin tuna larvae across all sampled years between 1982 and 2006 is shown, along with a schematic representation of the flow of the Loop Current.



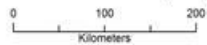
Muhling et al. 2010

Draft Amendment Alternatives: HAPCs

- Alternative 4b
(preferred): Modify current HAPC for sandbar shark



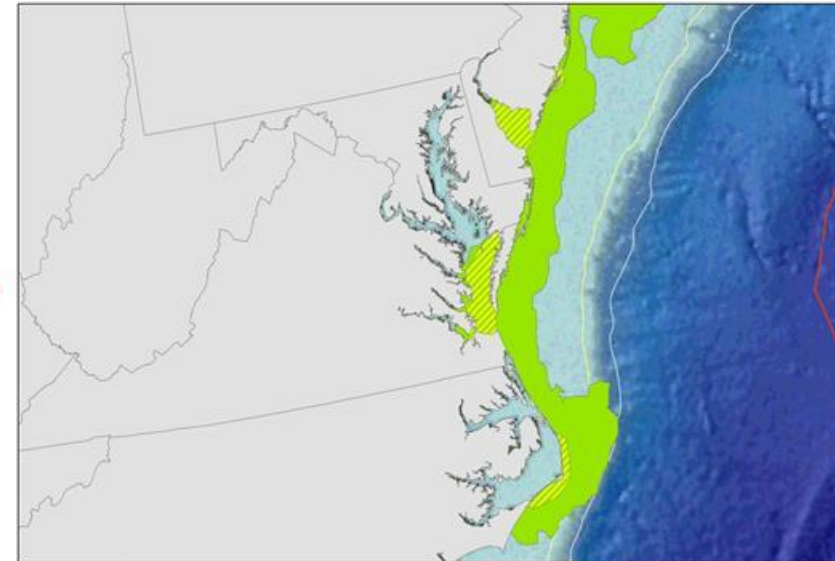
Sandbar Shark HAPC (1999) and Amendment 1 EFH (2009)



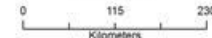
Depth Contours
-200m
-2000m
United States EEZ

Current Essential Fish Habitat (2009)
Current HAPC (1999)

*"Current" = previously established EFH and HAPC boundaries for sandbar shark. These do not reflect the new analyses completed for this Draft Amendment.



Sandbar Shark- Neonate/YOY Updated Essential Fish Habitat < 66 cm FL

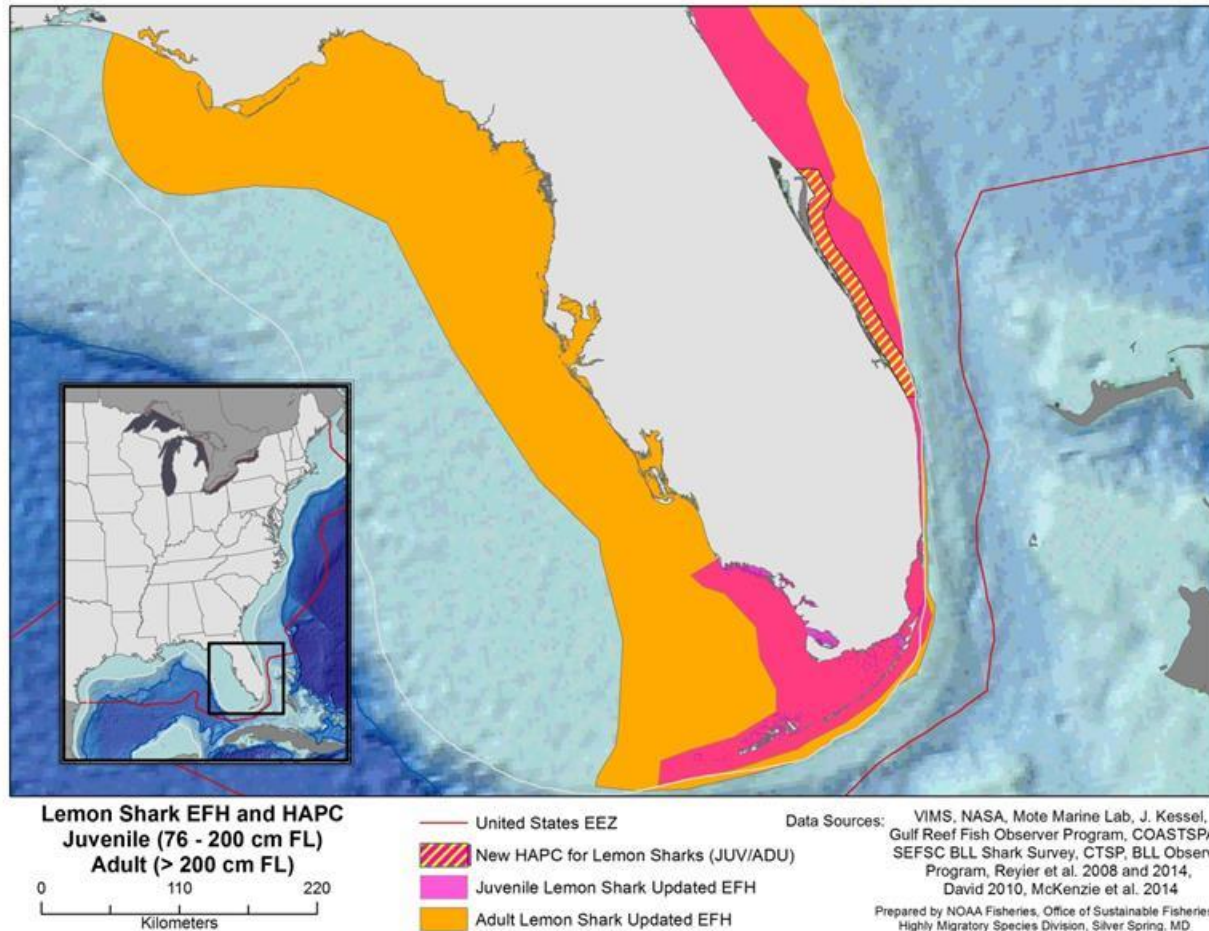


United States EEZ
Updated Sandbar HAPC
Sandbar Shark NEO/YOY Updated EFH

Data Sources: VIMS, CSTEP, NEAMAP, COASTSPAN, NMFS EFP Database, Gilnet Observer Program, NEFSC, Shark BLL Survey, BLL Observer Program, TXPWD, GULFSPAN, Mote Marine Lab
Prepared by NOAA Fisheries, Office of Sustainable Fisheries High Migratory Species Division, Silver Spring, MD

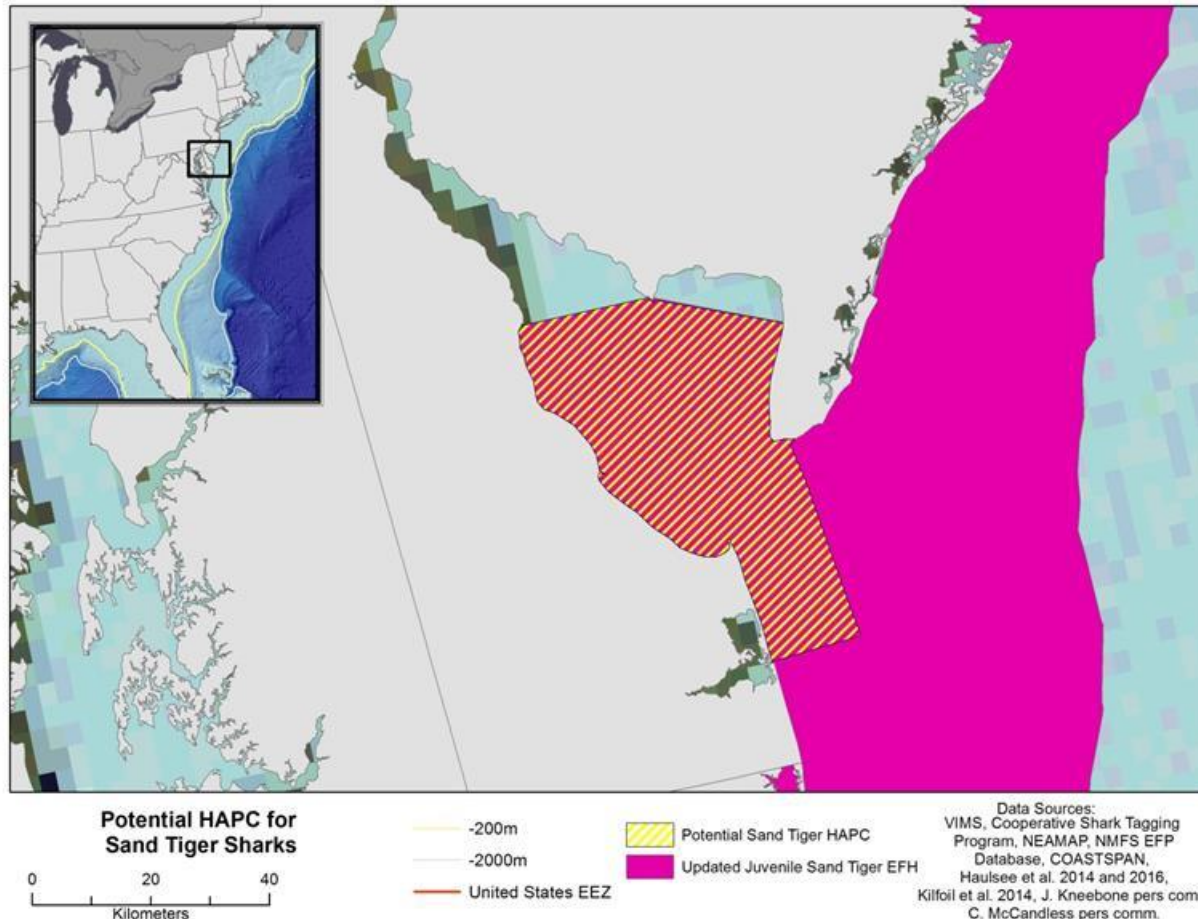
Draft Amendment Alternatives: HAPCs

- Alternative 5b
(*preferred*): Create a new HAPC for lemon sharks



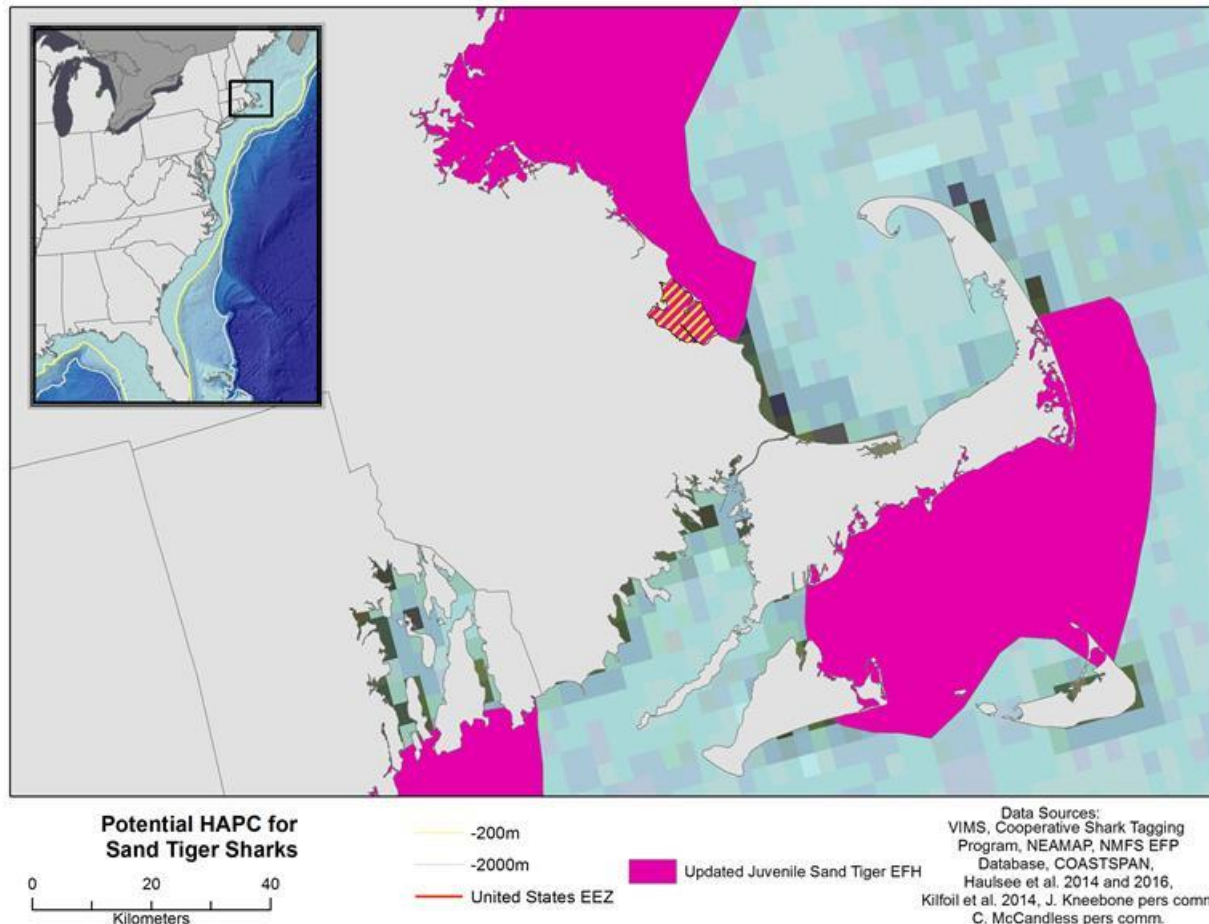
Draft Amendment Alternatives: HAPCs

- Alternative 6b
(*preferred*): Create new HAPCs for sand tiger shark



Draft Amendment Alternatives: HAPCs

- Alternative 6b (Continued)
(*preferred*): Create new HAPCs for sand tiger shark



Important to Note:

- EFH designations and Habitat Areas of Particular Concern (HAPCs) are NOT time/area closures
- Updating EFH boundaries in conjunction with implementing time/area closures would require notice and comment rulemaking and detailed ecological, economic, and social analyses.
- *There are no implementing regulations (i.e., restrictions on fishing and non-fishing activities) in the Draft Amendment.*
- EFH designations, when used as part of the habitat consultation process, enable NMFS to identify measures to avoid, minimize or mitigate for adverse impacts to EFH that may result from actions which are authorized, funded, or undertaken by federal agencies (including adjustments to FMPs).

Timeline

- Draft Amendment released September 2016
- Webinar/Public Conference Calls:
 - November and December 2016
- Additional Opportunities for Public Input:
 - Council and Commission meetings (September, October, December)
- Comment Period Ends – **December 22, 2016**

Questions?

Amendment 10 Team:

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Randy Blankinship	Branch Chief, SE HMS Branch

<http://www.nmfs.noaa.gov/sfa/hms/documents/fmp/am10/index.html>