



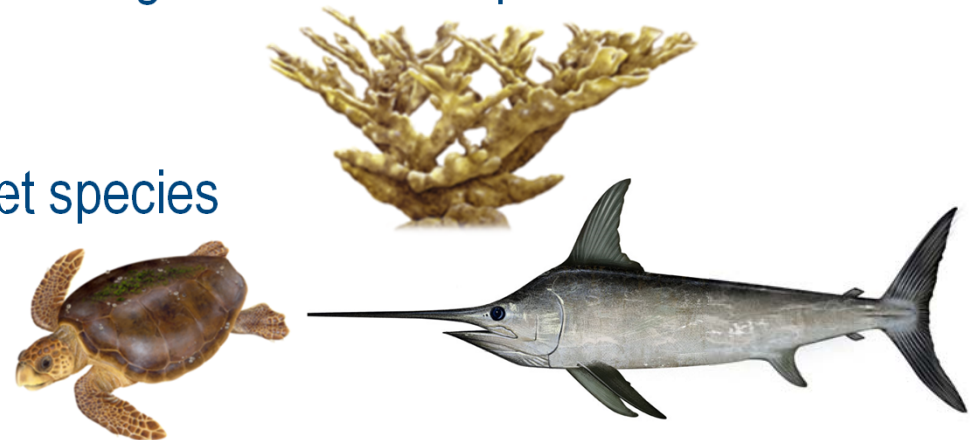
**NOAA
FISHERIES**

Options for Data Collection and Research to Support Spatial Fisheries Management

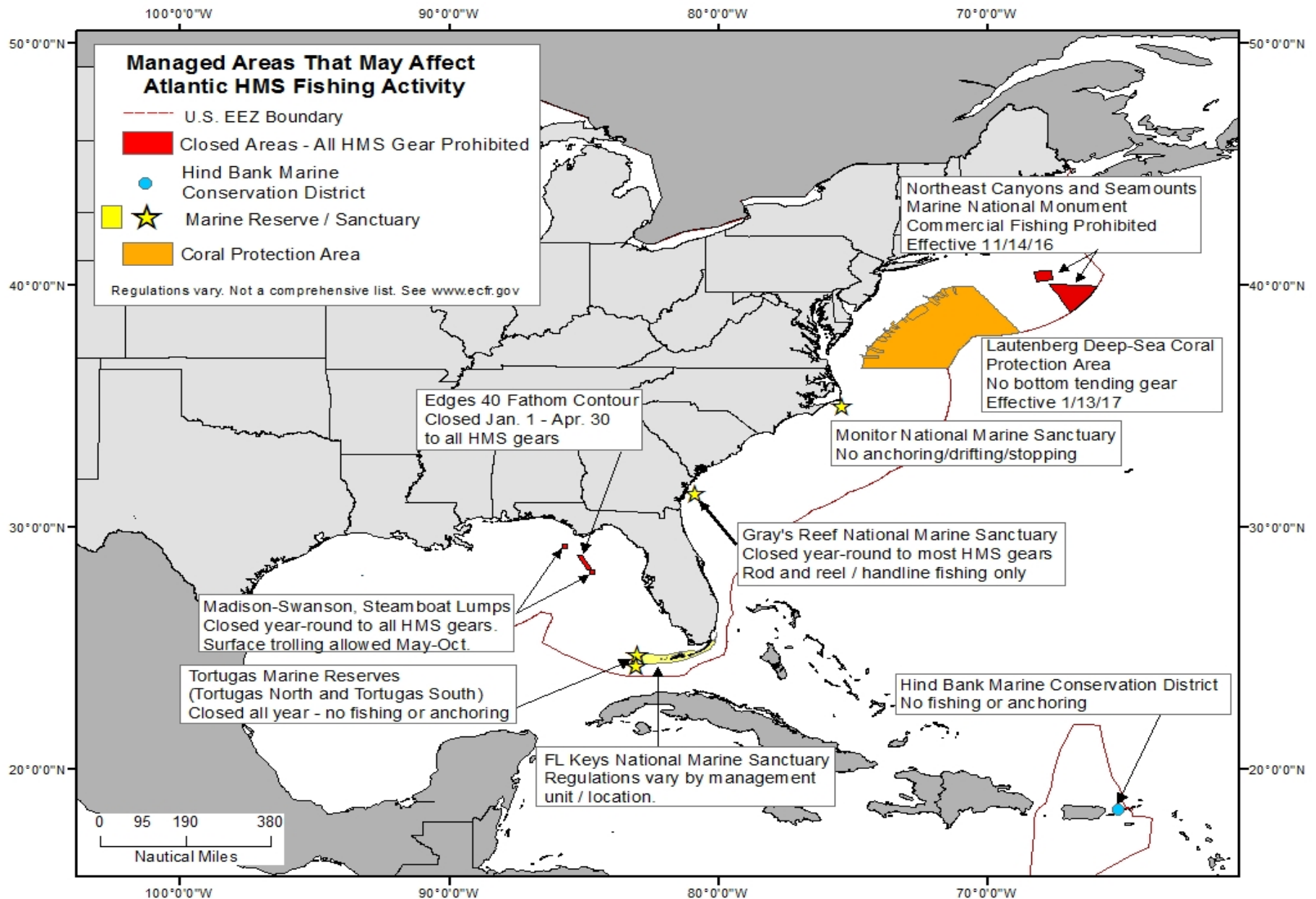
Atlantic HMS Advisory Panel Meeting
March 7, 2018

Spatial Fisheries Management

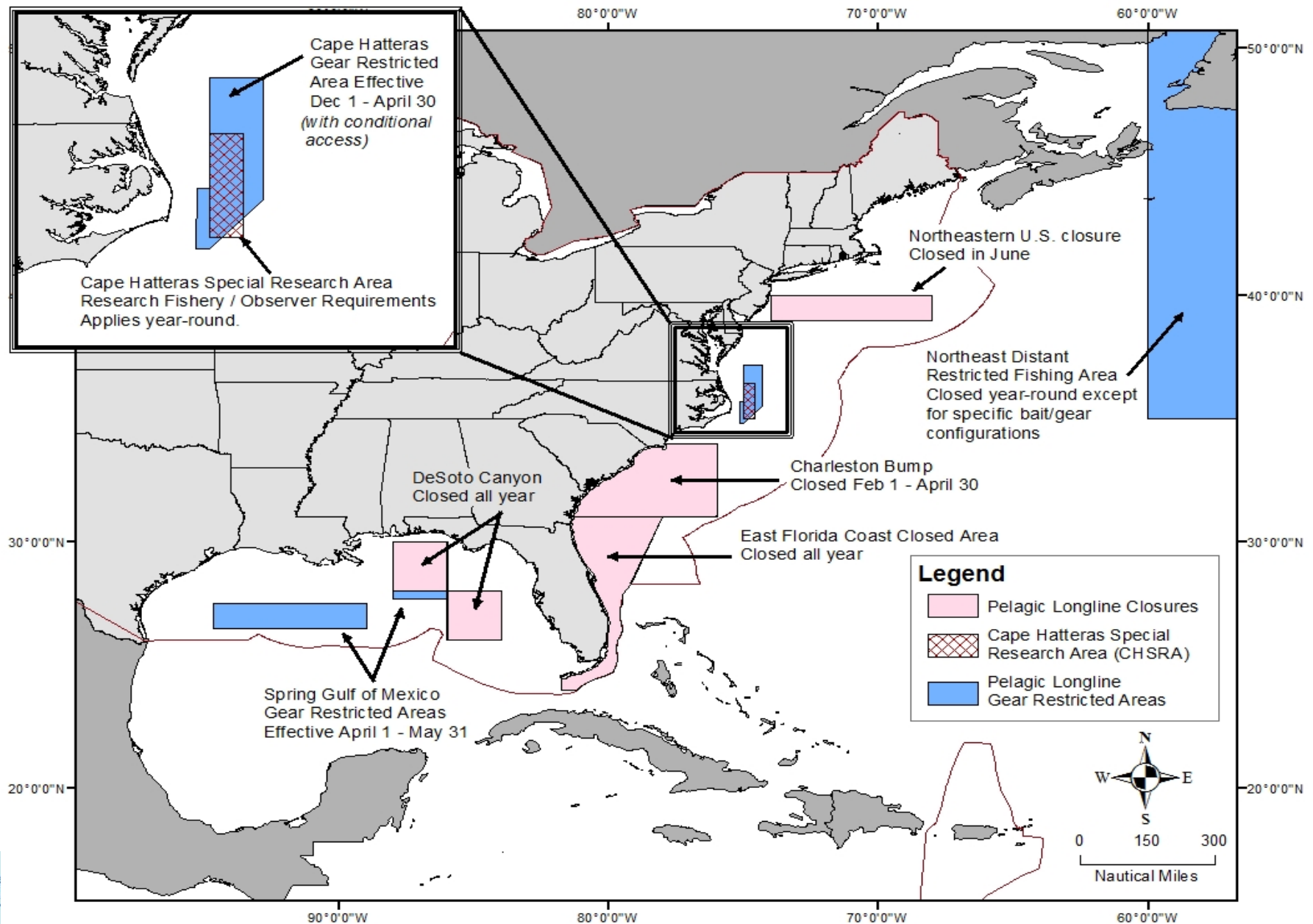
- Spatial fisheries management includes a range of management tools often designed to control adverse ecological fishing impacts
- Time/area closures, closed areas, controlled access areas, marine monuments, and gear restricted areas (GRAs) are all types of spatial fisheries management
- Commercial and recreational fishing and certain boating activities can be impacted
- Adverse ecological impacts can be controlled, mitigated, reduced, or eliminated using spatial fisheries management tools to protect:
 - Benthic habitat
 - Nursery grounds
 - Vulnerable life stages of target species
 - Bycatch and incidental catch



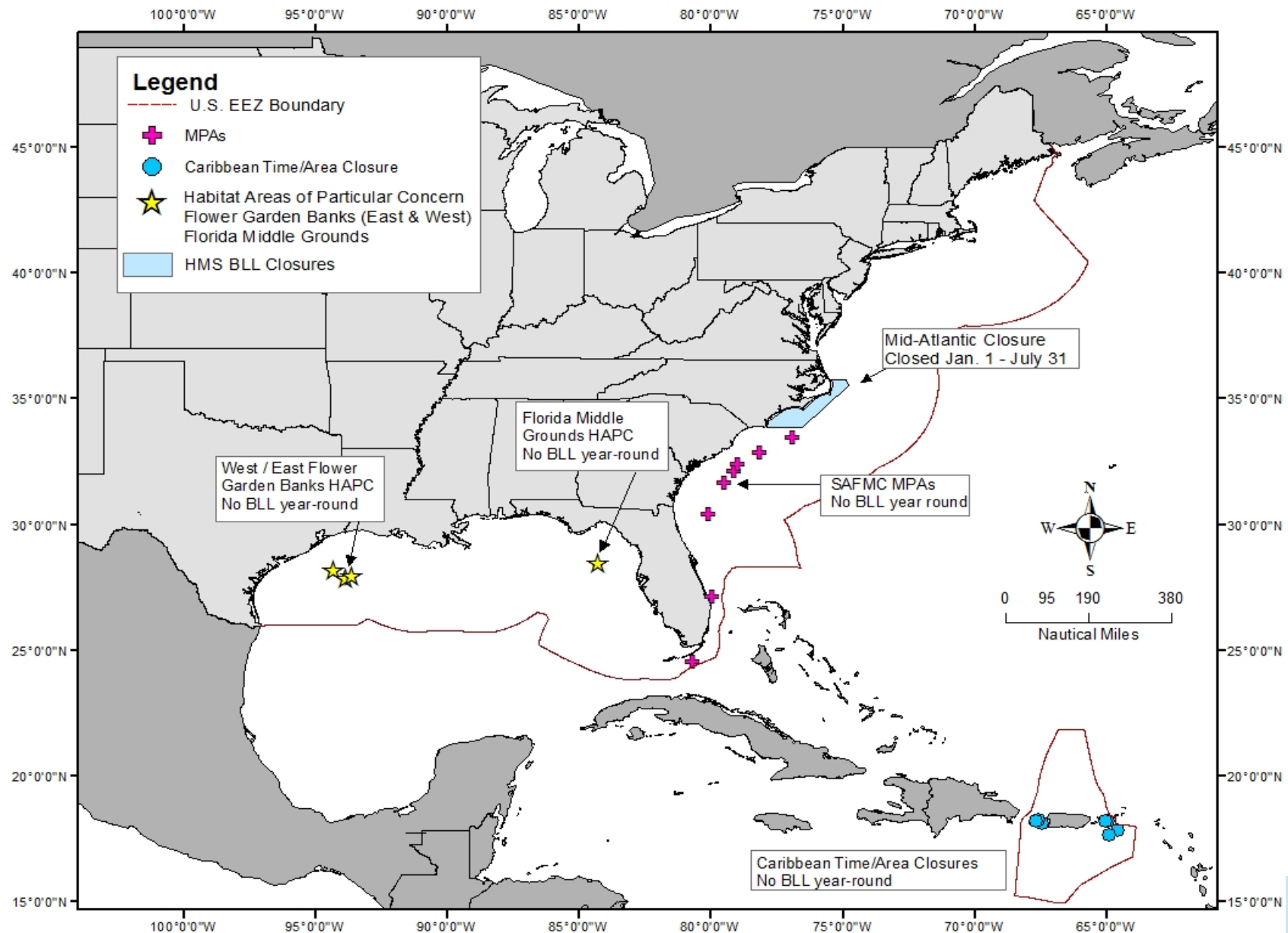
Closures that Restrict Use of Some HMS Gears



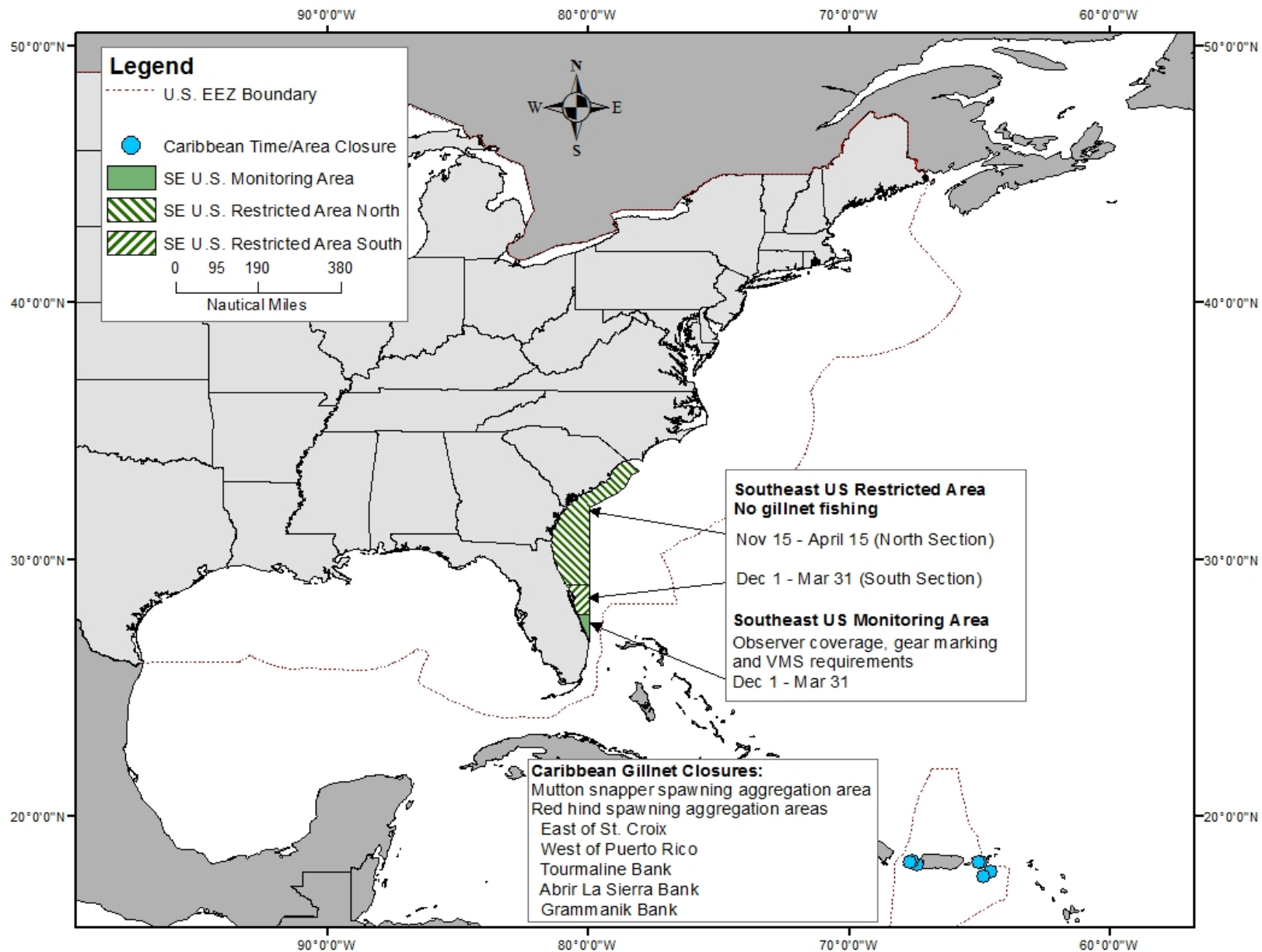
Pelagic Longline Closed Areas and GRAs



Closures that Restrict Bottom Longline



Time/Area Closures that Restrict Gillnet Gear



Data Collection and Research in Closed Areas

- Closed areas can be effective at reducing fishing mortality by curtailing or eliminating certain fishing activities
- However, closed areas can also proportionally reduce fishery-dependent data collection and research
- In some cases, fishery-dependent data collection is the most cost effective method and most applicable to the gear-specific research questions



Data Collection and Research in Closed Areas

- Why is data collection and research so important in closed areas?
 - Fisheries management is most effective when it is based on sound, scientifically rigorous, and up-to-date research
 - Ensures that original goals of the closure are still being met
 - Magnuson-Stevens Act mandates using best available science and closed areas can compromise collection of supporting data
 - Closures affecting HMS are geographically stationary in a changing ocean with migratory species
 - Are fish, protected resources, and other species still where we think they are?

Regular monitoring of closed areas can help ensure that the intended species are protected in the appropriate areas while maximizing U.S. fishermen's access to target resources

Data Collection and Research in Closed Areas

- Sound, scientifically rigorous, and up-to-date closed area research is important
- So how do we get it?



8 Possible Options to Collect Data and Perform Research in HMS Closed Areas

Data Collection and Research Options

- Option 1 – No action. Continue to authorize any closed area research through the current HMS exempted fishing permit (EFP) program
 - NMFS would continue to consider authorizing closed area research as applications/requests are submitted
 - Closed area research generally has been outside the scope of the anticipated range of EFP requests annually noticed
 - Each EFP application for closed area research during normal fishing operations would need to undergo NEPA analyses and public comment
 - With this option, NOAA Fisheries has some control over the type of research, timing, and management applicability, although projects would not be designed and carried out by the Agency but by the permit applicant.

Data Collection and Research Options

- Option 2 – Authorize closed area research through a streamlined HMS EFP process
 - Streamline process of issuing HMS EFPs for closed area research
 - Analyze effects of a wide range of closed area research activities across multiple closed areas
 - Submit effects analyses for public comment
 - Analyzing the effects of research activities before the EFP closed area research application process begins could simplify EFP issuance
 - With this option, NOAA Fisheries has some control over the type of research, timing, and management applicability, although projects would not be designed and carried out by the Agency but by the permit applicant.
 - This option would not require large Agency investment as permittee would fund their own project

Data Collection and Research Options

- Option 3 – Collect data on closed area catch through an observed access program
 - If a vessel is chosen to carry an observer and an observer is on board, the vessel can enter and fish in the closed area
 - This option would allow minimal agency control since fishermen decide if, when, and where to fish rather than operating under a formal scientific plan
 - Would likely take more time to gather a sufficient amount of consistent data to analyze
 - This option would also require rulemaking, NEPA analyses, and public comment

Data Collection and Research Options

- Option 4 – Institute a closed area research program, similar to the current shark research fishery
 - In the shark research fishery, fishermen apply to be part of the program. If accepted, they are authorized to fish for and retain sandbar and other sharks
 - When a shark research fishery participant plans to fish for sandbar sharks, they must carry an observer and fish in a manner and location consistent with the scientific research plan developed by the SEFSC
 - Under this option, fishermen could apply to a closed area research project to fish in certain closed areas
 - NOAA Fisheries would create an overarching closed area research plan, setting requirements for closed area fishing, observer coverage, fishing location, and season
 - This option could provide for more formal data collection and more rigorous analysis
 - However, would require voluntary application and participation
 - This option would require a lot of Agency investment in time and personnel

Data Collection and Research Options

- Option 5 – Conduct closed area research through public/private partnerships, partially funded by NOAA Fisheries, similar to the 2003 NED research program
 - Under this option, fishermen would be authorized by EFP with terms and conditions to fish in certain closed areas under an Agency-developed research plan, provided they abide by Agency stipulations
 - To incentivize fishing in closed areas with unknown catch rates, Agency could consider compensation fishing arrangements or whether it could pay some portion of the vessel operating costs
 - This option could allow for a formalized research plan with more robust results
 - This option would be expensive for the Agency

Data Collection and Research Options

- Option 6 – Conduct closed area research through a research program led by NOAA Fisheries, using NOAA or contract vessels
 - Under this option, NOAA Fisheries would design, fund, and execute a formal research project to study closed areas
 - This option would likely provide the most temporally and geographically broad research plan resulting in scientifically-rigorous data and results
 - Results may or may not be applicable to normal fishing activities, depending on study design
 - This option is also the most expensive



Data Collection and Research Options

- Option 7 – Performance-based closed area access
 - Similar to the Cape Hatteras GRA to limit bluefin tuna interactions, this option would allow access to closed areas for fishermen that meet Agency-established criteria
 - Criteria would likely be different than those for the Cape Hatteras GRA, but could include observer and reporting requirement compliance
 - This option could provide a greater quantity of data than observed access or EFPs, but would not be organized under a formal research plan

Data Collection and Research Options

- Option 8 – Elevate visibility of closed areas research needs through existing grant programs and the Atlantic HMS Management-Based Research Needs and Priorities document
 - NOAA Fisheries administers a number of grant programs, including the Cooperative Research Program and the Bycatch Reduction Engineering Program, that may have goals consistent with closed area research
 - The HMS Management Division could work through these existing programs to spotlight the need for closed area research
 - The HMS Management Division could further highlight the need for closed area research through an updated Atlantic HMS Management-Based Research Needs and Priorities document
 - This document could help in researcher funding requests

Discussion Topics

- Do these 8 options cover the full range of possibilities to collect data in closed areas?
- Which of these options (or other options) provide the most useful information for sound HMS management?
- Are certain options more appropriate for some closed area research but not for others?

Next Steps

- Discuss these and other options to collect data and perform research in closed areas
- Consider publishing an Issues and Options paper or Scoping document to solicit feedback from the public on these options

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