Overall Principles Applied to Improve EFH Designations

Drafted by MAFMC FMAT in collaboration with selected Habitat PDT members, revised by NEFMC staff

1. Consider the needs of our NOAA EFH consultation partners and how EFH maps and text are used and understood by project developers.
   - Developers use EFH maps (often via the NOAA EFH mapper) as first check on whether EFH is present in their project area, then go to text, making coherence between map and text descriptions important.
   - Consider identification of HAPCs to be clear about what habitats are most important during consultation. This bolsters NOAA’s conservation recommendations in specific habitats and at specific sites.

2. Consider applying new model-based approaches where possible for juveniles and adults, to inform both maps and text.
   - Identify thresholds that can be used to delineate EFH maps from model outputs.
   - Consider whether important predictors should be incorporated into text descriptions.

3. Consider climate change and shifting distributions.
   - Where possible, utilize more recent data (2000-2019) unless it is not indicative of range.
   - Consider areas on the margins of what would be presently considered as habitat and make decision on inclusion/exclusion within the context of climate change.

4. Focus on bounding the spatial extent of EFH.
   - What is the southern to northern extent of the species distribution?

5. Provide details on where those life stages may be found and the specific habitat types being utilized. Use multiple data sources and primary and gray literature as appropriate.
   - Adopt common terminology for habitat types based on Climate Vulnerability Crosswalk Project.

   - Text descriptions should include information on movement/migration.
   - Text and maps should consolidate life stages that share similar distribution and habitat characteristics, or where needed due to lack of data for a life stage.

7. Be mindful of continuity of sampling and sampling effects that may appear in the data.
   - Spatial component - are some areas of the Northeast US shelf not sampled? For example, trawl survey tows have a maximum depth along shelf break of around 300 m.
   - Temporal component - given seasonal movements of some species, does spring and fall sampling miss locations where they are relatively abundant?

8. Methods should be clearly explained and replicable over time.