

# **HIGHLY MIGRATORY SPECIES ESSENTIAL FISH HABITAT REVIEW**

September 2023



# EFH REVIEW OVERVIEW

- Councils and NMFS periodically review EFH provisions and revise or amend EFH as warranted based on available information [50 CFR 600.815(a)(10)]
- Overall objective is to ensure EFH provisions are consistent with the best available information
- COP 22 describes a 2-phase process
  - Phase 1 - Evaluate available information and determine whether Phase 2 is warranted (Phase 1 Report)
  - Phase 2 - Develop proposed EFH modifications for consideration



# EFH REVIEW OVERVIEW

- EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity” (i.e., full life cycle) (50 CFR 600.10)
- “Necessary” means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem
- Guidance (NMFS Procedure 03-201-15) and EFH Regs encourage refinement of EFH designations
  - Explicitly discouraging the identification of broad geographic areas (such as the entire EEZ) as EFH for a single species or life stage
  - Emphasizing the need to distinguish EFH from all habitats potentially used by a species (50 CFR 600.815 (a)(1)(iv)(A))



# REVIEW TIMELINE

| Month/year     | Activity   |
|----------------|--|
| March 2020     | The Council considered <a href="#">Scoping</a> and adopted the <a href="#">Phase 1 Action Plan</a> |
| June 2020      | <a href="#">Call for data and information</a> issued   |
| Sept 2020      | Council considered <a href="#">Phase 1 report</a> , agreed to move to Phase 2                      |
| March 2021     | Council adopted the <a href="#">Phase 2 action plan</a>  |
| May 1-2, 2023  | HMSMT meeting with emphasis on EFH   |
| September 2023 | Council considers preliminary HMS EFH modifications; adopt for public review                       |
| November 2023  | Council considers final action on HMS EFH modifications (tentative)                                |



# HMS SPECIES

## Tunas:

- North Pacific albacore (*Thunnus alalunga*)
- bigeye (*T. obesus*)
- Pacific bluefin (*T. orientalis*)
- skipjack (*Katsuwonus pelamis*)
- yellowfin (*T. albacares*)

## Billfish/Swordfish:

- striped marlin (*Tetrapturus audax*)
- swordfish (*Xiphias gladius*)

## Sharks:

- common thresher (*Alopias vulpinus*)
- shortfin mako (*Isurus oxyrinchus*)
- blue (*Prionace glauca*)

## Other:

- dorado or dolphinfish (*Coryphaena hippurus*)



# EFH - WHERE IS IT?

| EFH component                                  | Current location                            |
|--|---|
| EFH description & i.d.                         | Appendix F (and in FMP, pending)            |
| Maps   | Appendix F (formerly in Appendix A to FEIS) |
| Life history summaries, including prey species | Appendix F                                  |
| Fishing impacts (MSA & non-MSA)                | FMP   |
| Non-fishing impacts                            | FMP   |
| Conservation & enhancement                     | FMP (with non-fishing impacts)              |
| HAPCs  | FMP   |
| Research and Information                       | FMP   |
| Review/revision process                        | N/A (will be in FMP)                        |



# MAJOR TOPICS AND DECISIONS

- Description and identification of EFH and associated maps:
  - Life stage habitat requirements and preferences
  - Spatial distribution (EFH and global distribution)
  - Relevant literature cited
- Habitat Areas of Particular Concern (HAPCs)
- Discuss/evaluate fishing impacts section
- Non-fishing impacts
- General organization
- Research and Information Needs



# UPDATED EFH AND MAPS

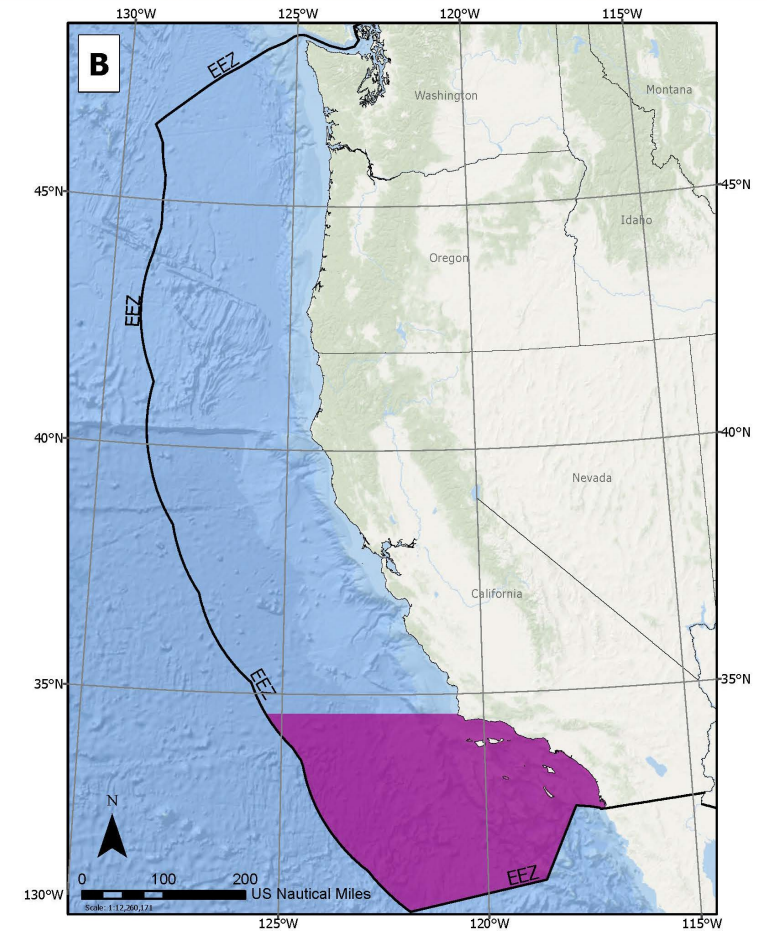
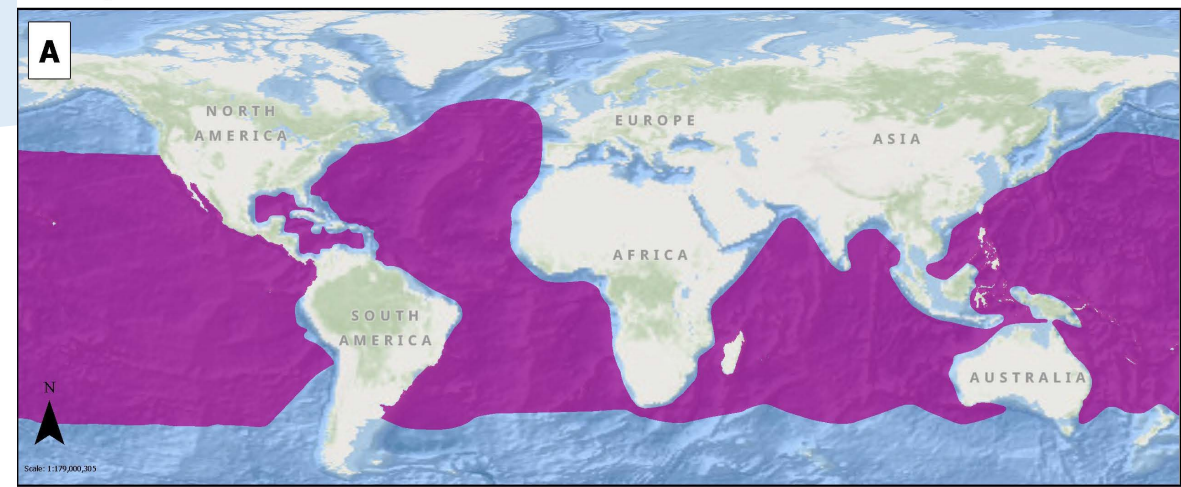
- FMPs must include maps of the geographic locations of EFH or the geographic boundaries within which EFH for each species and life stage is found [50 CFR 600.815(a)(1)(i)]
- Boundaries of EFH should be static [50 CFR 600.815(a)(1)(iv)(B)]
- EFH designations must be constrained to the EEZ
- Species' full range can be included as supporting information
- NMFS GIS Analyst on board recently





# BIGEYE TUNA

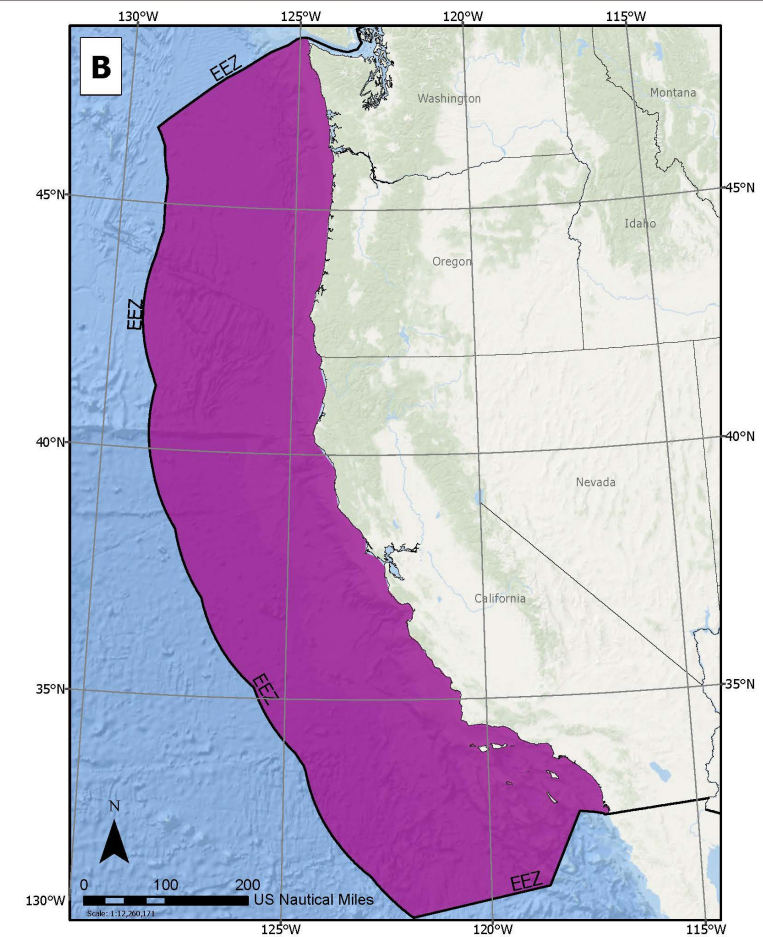
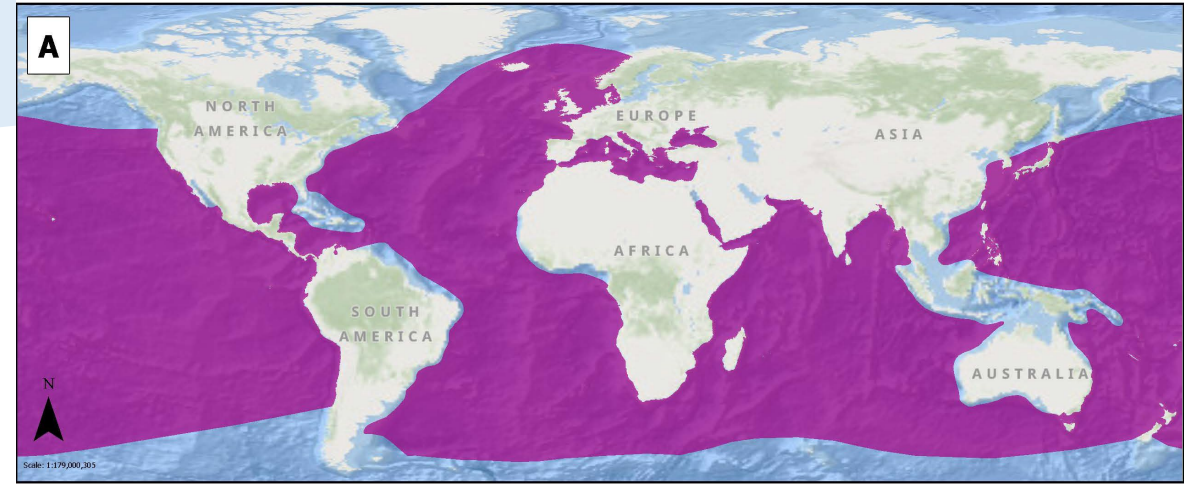
Draft map: IUCN (International Union for Conservation of Nature) 2021. *Thunnus obesus*. The IUCN Red List of Threatened Species. Version 2022-2



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# SWORDFISH

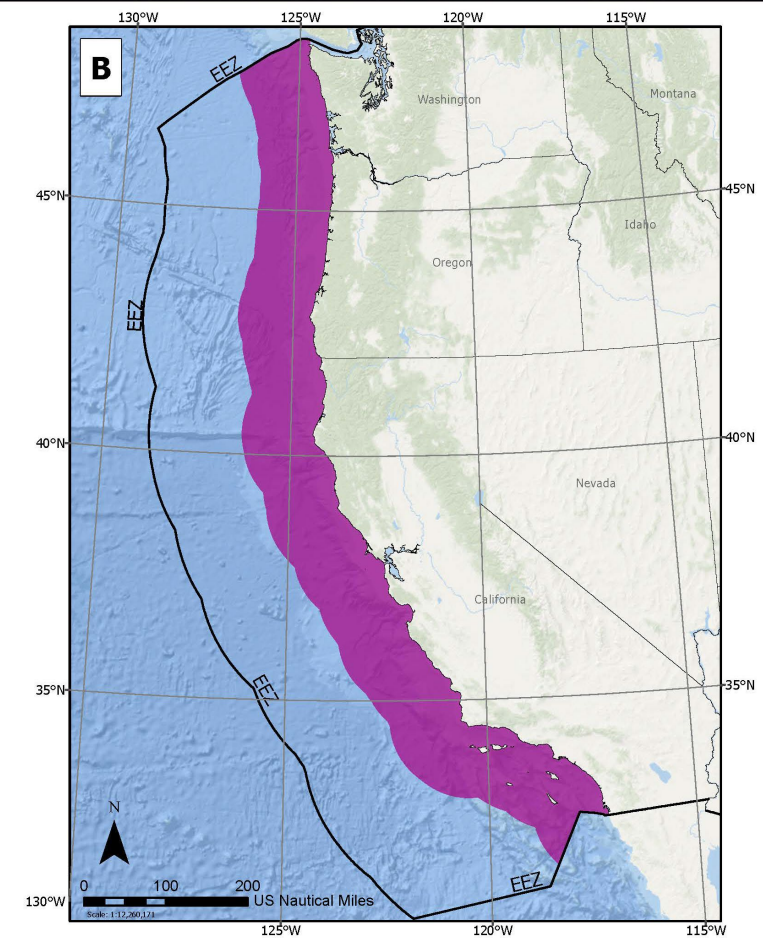
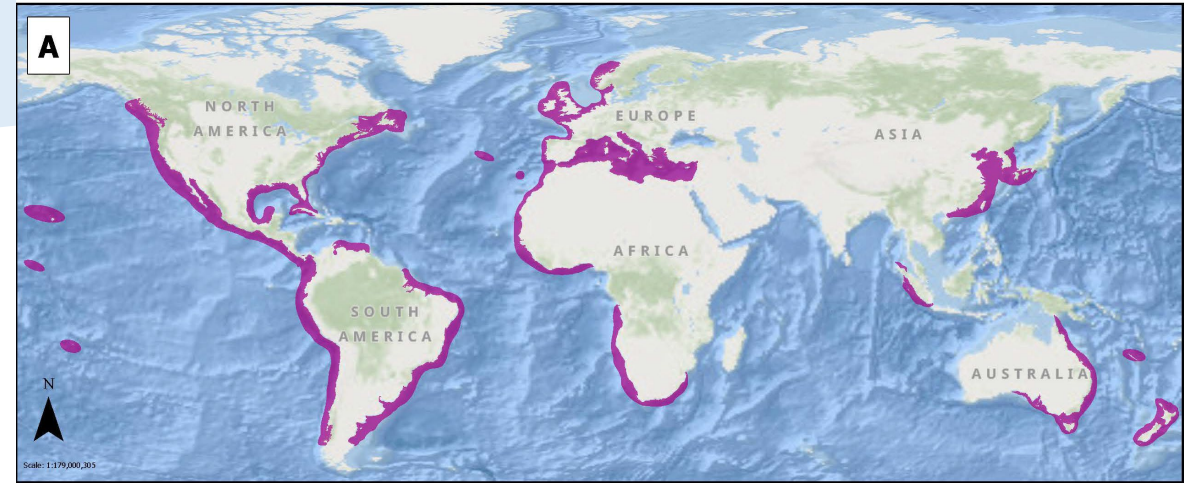
Draft map: IUCN (International Union for Conservation of Nature) 2021. *Xiphias gladius*. The IUCN Red List of Threatened Species. Version 2022-2





# COMMON THRESHER SHARK

Draft map: IUCN SSC Shark Specialist Group 2018. *Alopias vulpinus*. The IUCN Red List of Threatened Species. Version 2022-2



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# PROPOSED CHANGES TO SPATIAL EXTENT

| Species         | Current  | Proposed                         |
|-----------------|--|----------------------------------|
| Common thresher | 6fm - 1900fm   | 12m - 100nm                      |
| Shortfin mako   | 100fm - EEZ  | 12m - EEZ                        |
| Blue shark      | 1000fm - EEZ (N. of Pt Conception)<br>100fm - EEZ (S. of Pt Conception)      | 12m - EEZ                        |
| Albacore tuna   | 100fm - EEZ  | 12m - EEZ                        |
| Bigeye tuna     | 100fm - EEZ (S. of Pt. Conception)   | 12m - EEZ (S. of Pt Conception)  |
| Bluefin Tuna    | 100fm - EEZ  | 12m - EEZ                        |
| Skipjack tuna   | 400fm - EEZ (S. of Pt. Conception)   | 12m - EEZ (S. of Pt. Conception) |
| Yellowfin tuna  | 100fm - EEZ (S. of Pt. Conception)   | 12m - EEZ (S. of Pt. Conception) |
| Striped marlin  | 200fm - EEZ (S. of Pt Hueneme)   | 12m - EEZ (S. of Pt. Conception) |
| Swordfish       | 400fm - EEZ (S. of Pt. Conception) and<br>1000fm - EEZ N. of Pt. Conception) | 12m - EEZ                        |
| Dorado          | 6fm - EEZ (S. of Pt. Conception)   | 12m - EEZ (S. of Pt. Conception) |

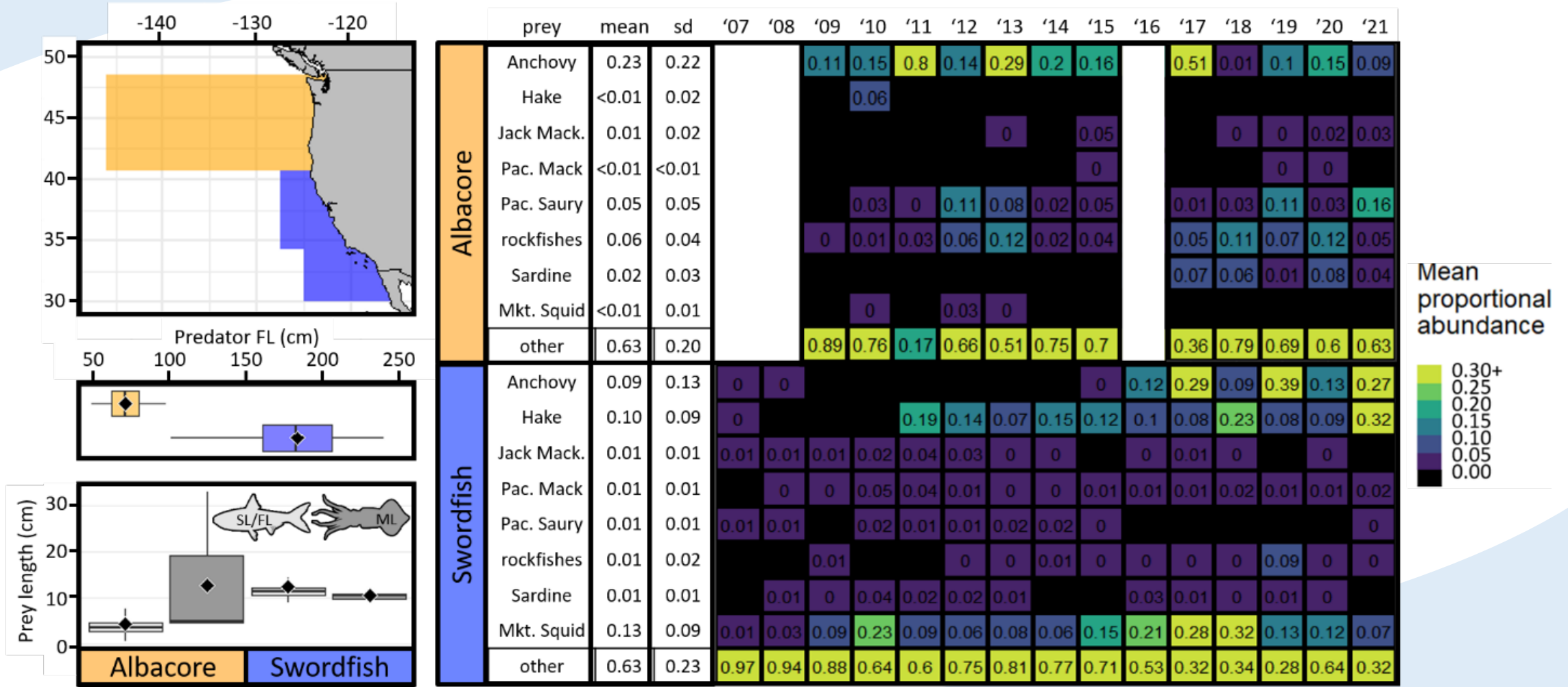


# POTENTIAL FISHING IMPACTS

- Few impacts from fishing gear identified
- Prey Removal
  - Reduction in prey can decrease the quality of EFH - prey itself is not EFH
  - Literature shows that HMS are generalists
- Derelict Gear
  - Potential impacts, likely minimal



# HMS ARE GENERALISTS



# NON-FISHING IMPACTS

## Currently in HMS FMP

- Dredging
- Dredge Material Disposal/Fills
- Oil/gas exploration & production
- Water intake structures
- Aquaculture
- Wastewater discharge
- Oil discharge/hazardous substances release
- Coastal development impacts

## Kiffney, et al. 2022

- Climate change
- Upland and urban development
- Road construction and operation
- Stormwater and urban runoff
- Silviculture
- Dam operations and removal
- Mineral mining
- Oil extraction, shipping, and production
- Energy-related activities (wave/tidal, OSW, cables & pipelines, LNG)
- Agriculture and grazing
- Shoreline and bank stabilization
- Marine and freshwater transportation
- Coastal development
- Dredging
- Aquaculture
- Overwater structures
- Water intake and discharge facilities
- Pile driving and removal
- Noise pollution



# RESEARCH AND INFORMATION NEEDS

- Support efforts to better understand and describe the dynamic nature of HMS habitats; HMS and prey shifts in response to changing climate and oceanic conditions
- Identify important shark habitats such as pupping grounds, key migratory routes, feeding areas, prey species, and areas of concentration of large adult female sharks
- Better understand the migratory corridors and habitat dependency of HMS fishes; age and season distribution
- identify and evaluate impacts to HMS EFH from fishing activities





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HMSMT



# QUESTIONS?

