

COASTAL PELAGIC SPECIES ESSENTIAL FISH HABITAT REVIEW: RANGE OF ALTERNATIVES / PRELIMINARY PREFERRED ALTERNATIVE

April 5, 2023



EFH REVIEWS - 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 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))



EFH REVIEWS - OVERVIEW

- Councils and NMFS should periodically review the EFH provisions of FMPs and revise or amend EFH provisions as warranted based on available information...A complete review of all EFH information should be conducted as recommended by the Secretary, but at least once every 5 years [50 CFR 600.815(a)(10)]
- Overall objective is to ensure EFH provisions are consistent with 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 - Use that information to consider changes to those EFH provisions, if warranted



EFH REVIEWS - OVERVIEW

Timeline

- April 2021: Phase 1 Report; move to Phase 2
- June 2022: Council adopted Phase 2 Action Plan
- September 2022 & January 2023: CPSMT Mtgs. Followed by additional evaluation
- April 2023: Range of Alternatives/Preliminary Preferred
- June 2023: Final Preferred Alternatives
 - Alternatives doc
 - EFH Appendix
 - Proposed FMP language



Key Issues and Decisions

- New Species/Assemblage Groupings
- New Maps
- New EFH Appendix
 - Substantial amount of new scientific information
 - Compiles EFH info into one EFH Appendix
- HAPCs Considered
 - Krill “Hotspots” (not included in Alts)
 - Market Squid spawning areas (included as Alt 2b)
- Fishing Impacts
- Non-Fishing Impacts



Range of Alternatives

Alternative 1: New EFH Appendix

Alternative 1a: No Action

Alternative 1b: Adopt New EFH Appendix

- Three species/assemblage groups (see Table 1)
- Identification and Description, spatial extent, and maps
- Fishing impacts
- Non-fishing impacts and associated conservation recommendations
- Life history summaries, including prey species
- Research and Data Needs



Range of Alternatives

Alternative 2: Habitat Areas of Particular Concern for Market Squid

Alternative 2a: No Action

Alternative 2b: Adopt HAPC for market squid spawning habitat



Proposed New Species Groupings

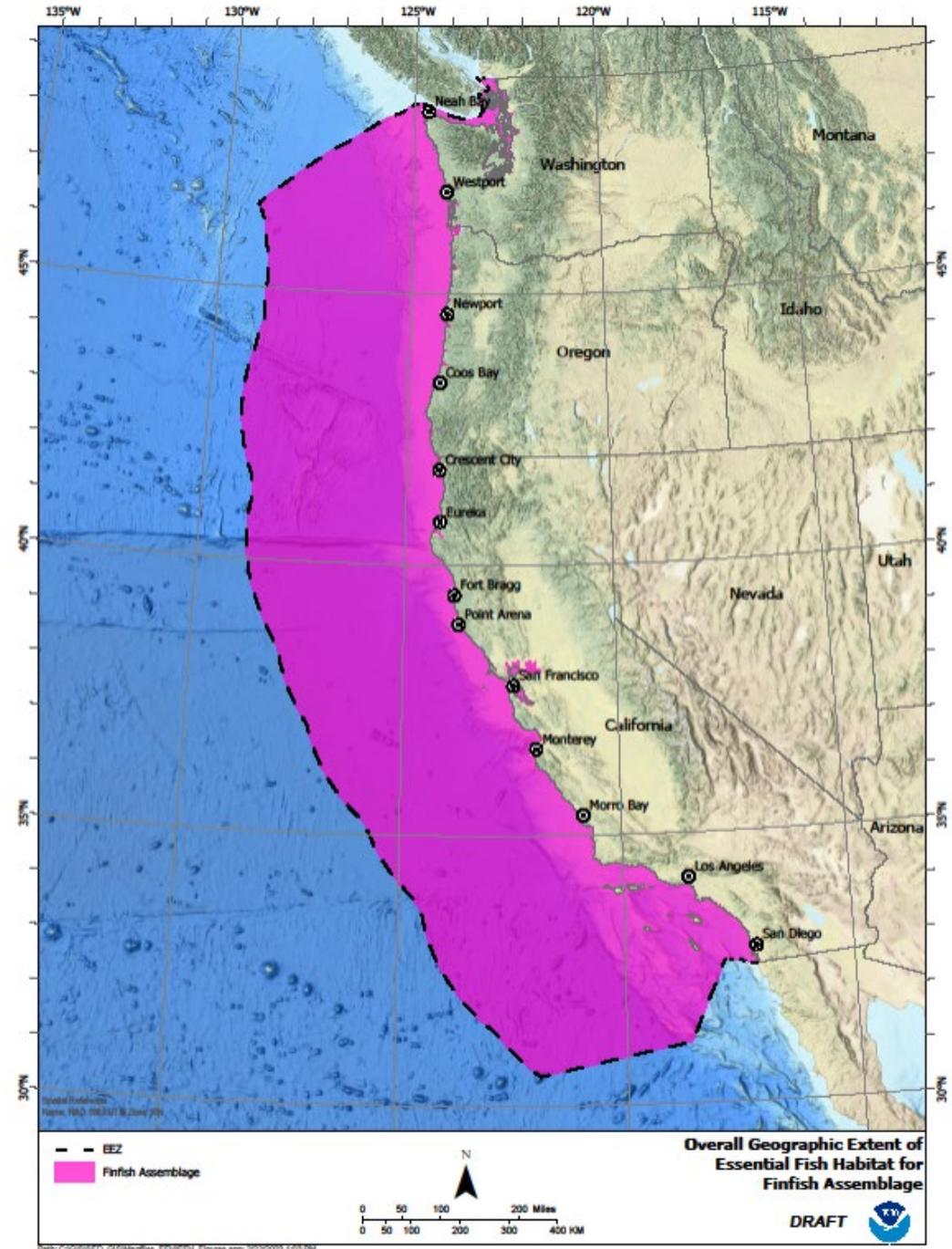
<u>Species Groupings</u>
Finfish
Sardine, P. mackerel, N. anchovy, J. mackerel
Market squid
Krill or Euphausiids (Including all species in West Coast EEZ)
<i>Euphausia pacifica</i>
<i>Thysanoessa spinifera</i>
Other krill (all krill in West Coast EEZ other than <i>E. pacifica</i> and <i>T. spinifera</i>)



CPS Finfish

West Coast U.S. EEZ including estuaries and Puget Sound

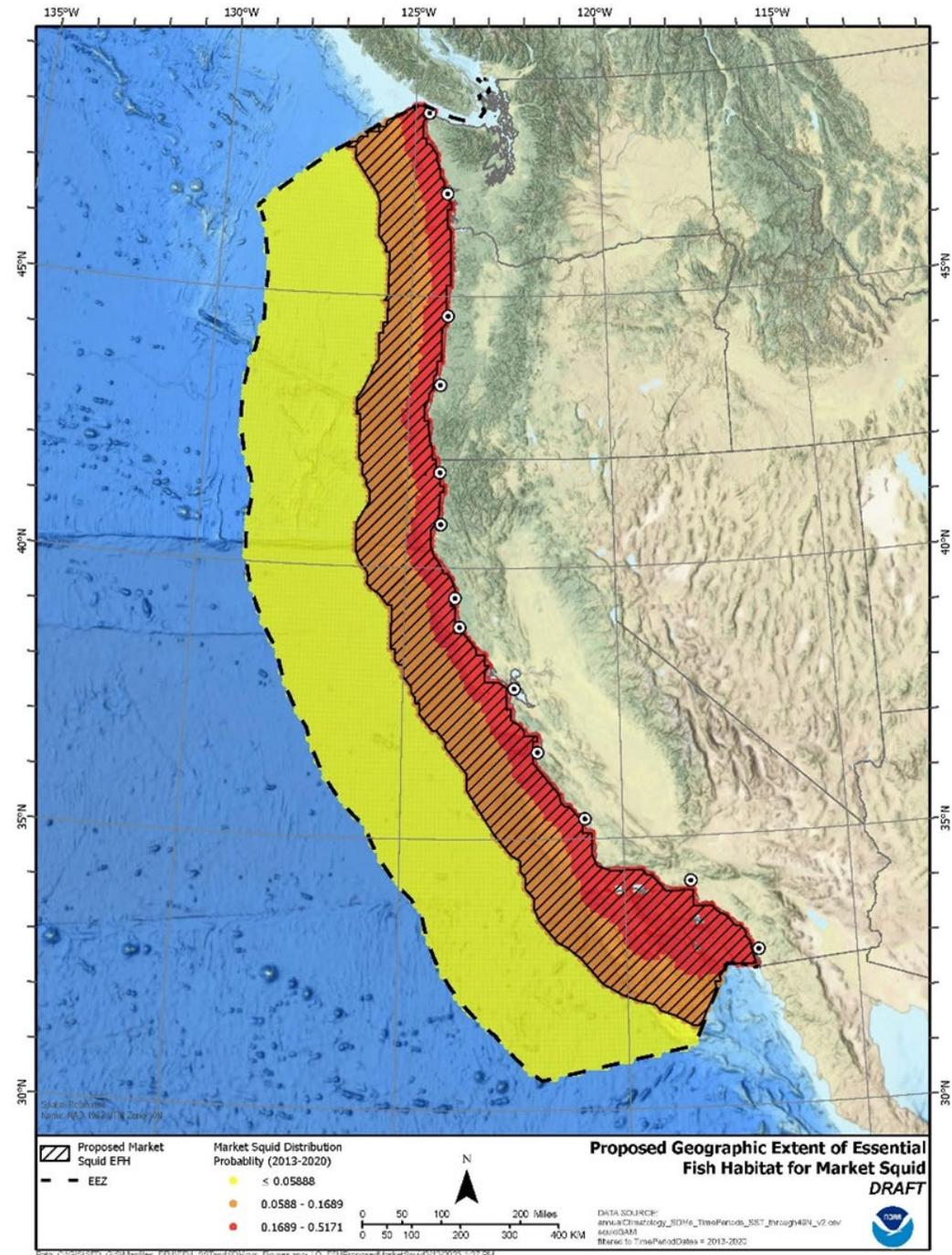
- Above the thermocline where SST is 10°C– 26°C



Market Squid

U.S. EEZ areas >5.8% probability (not estuaries or Puget Sound) - crosshatch

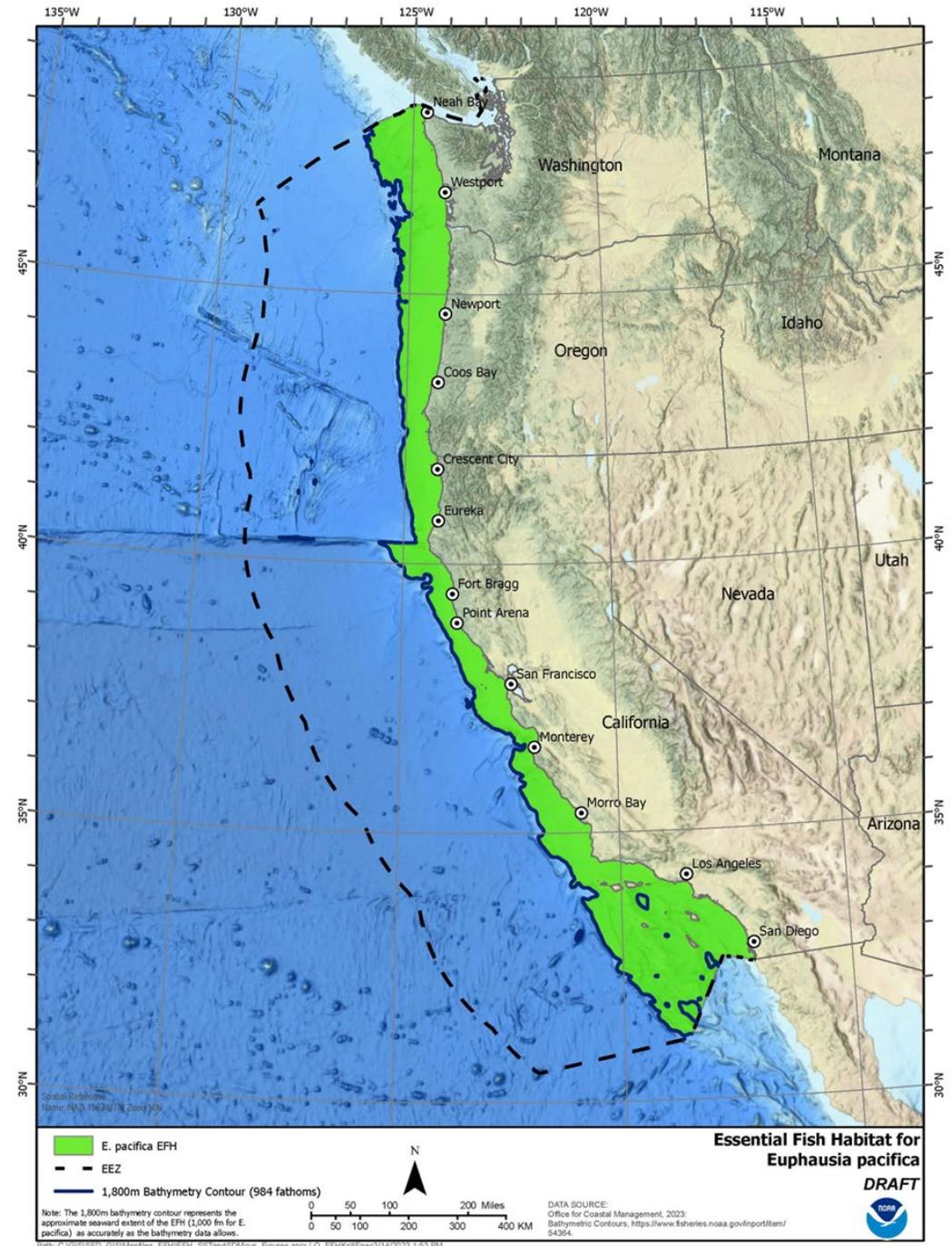
- Water column to 300m depth
- Where SST is 7°C – 24°C
- Includes soft/sandy substrates to 93m depth



Euphausia pacifica

West Coast EEZ to 1000fm isobath, to 400m depth

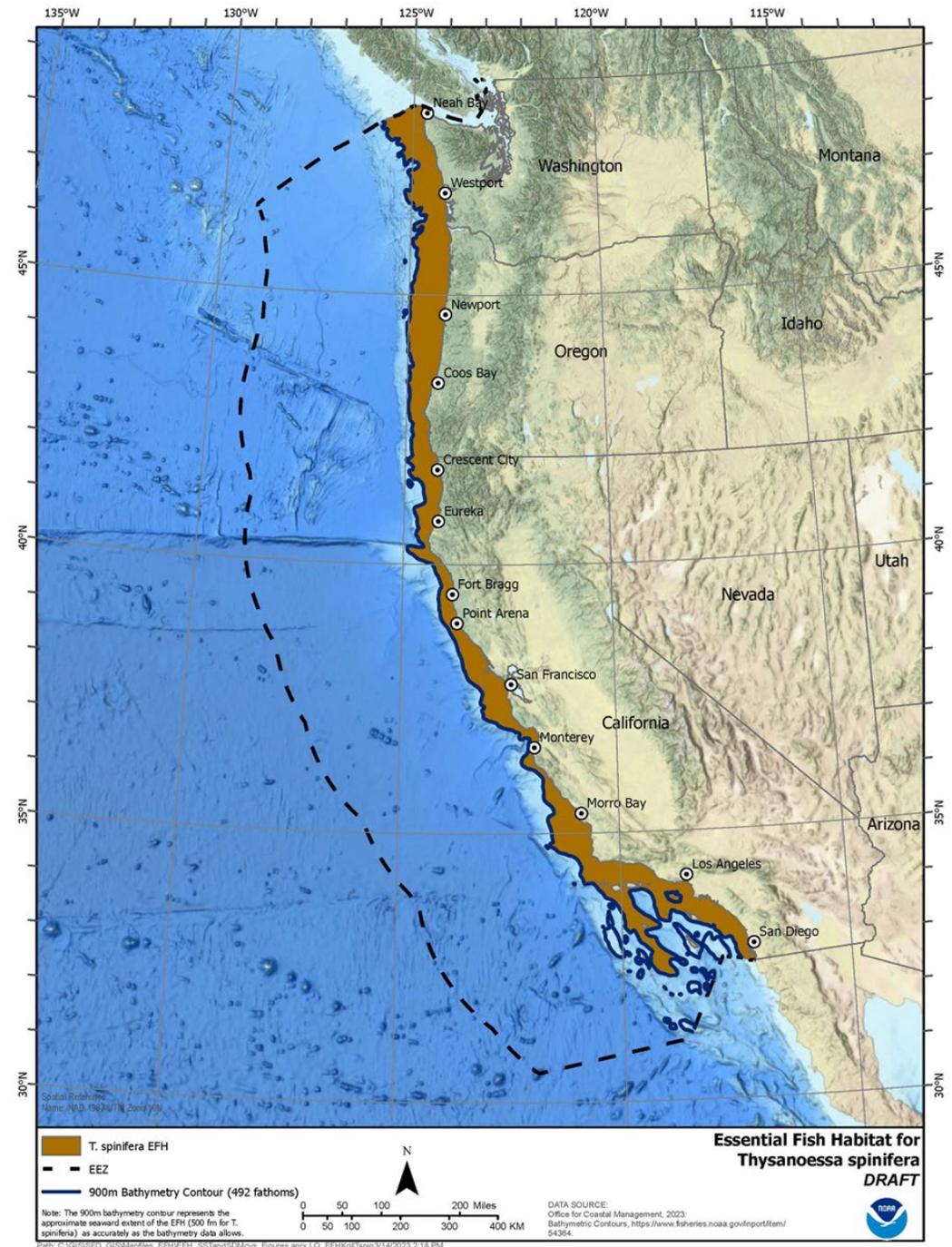
- Pelagic
- Associated with shelf break, canyons, seamounts



Thysanoessa spinifera

West Coast EEZ to 500fm isobath; to 100m depth

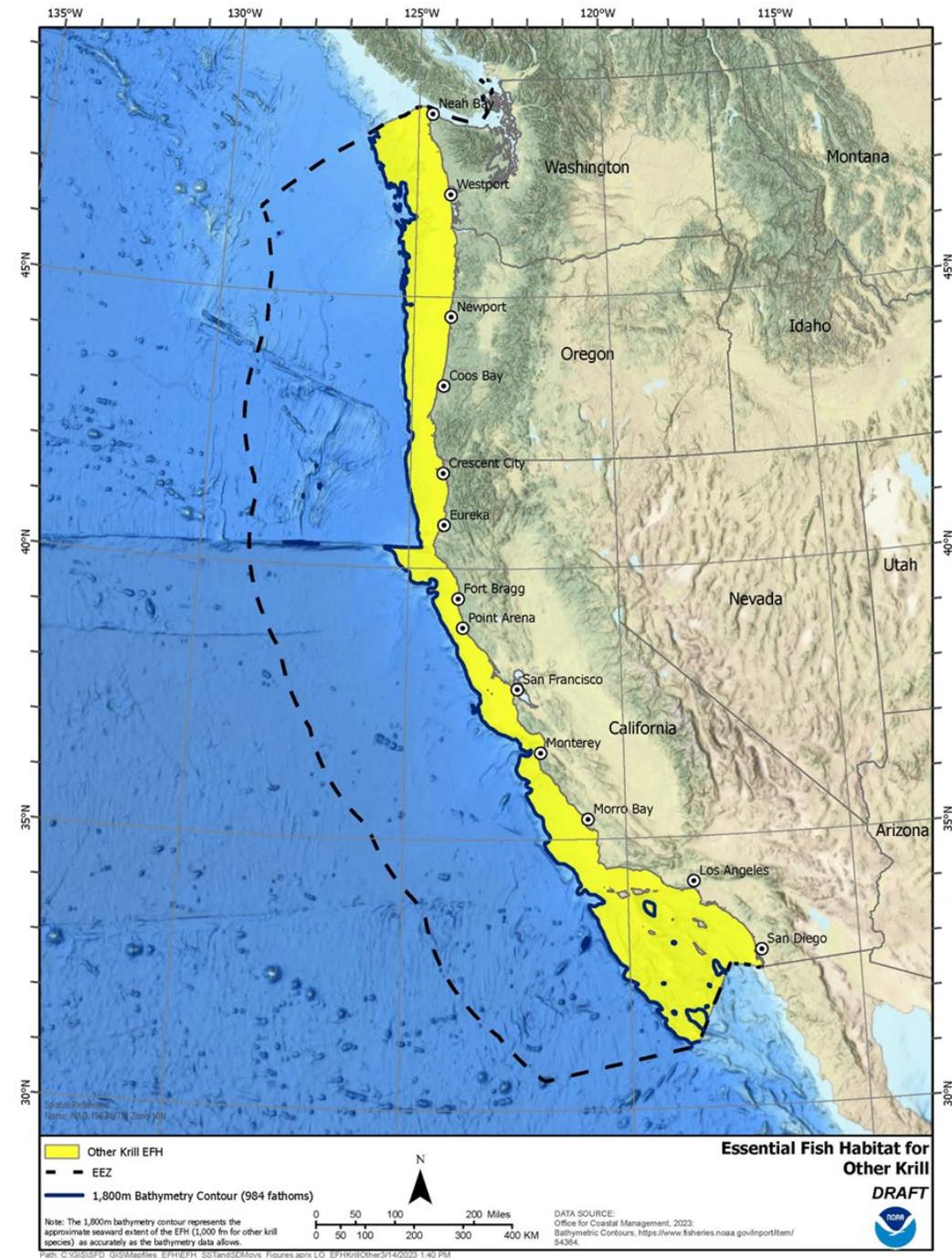
- Pelagic
- Associated with shelf break, canyons, seamounts



Other Krill

West Coast EEZ to 1000fm isobath, to 400m depth

- Pelagic
- Associated with shelf break, canyons, seamounts
- Limited information on individual krill species



Fishing Impacts

Few potential impacts:

- Prey removal
- Potential impacts benthic habitats
- Conclusion: no more than minimal or temporary impacts to CPS EFH from fishing activities or gear



Non-Fishing Impacts

Currently in CPS FMP

- Dredging
- Dredge material disposal/fill
- Oil and gas exploration
- Water intake
- Aquaculture
- Wastewater discharge
- Discharge of oil/hazardous substances
- 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



Habitat Areas of Particular Concern

HAPCs are subsets of EFH intended to focus conservation efforts

No additional regulatory requirements, but additional attention in consultations

NMFS Procedure (03-201-15): “*HAPCs should be discrete areas with clearly defined geographic boundaries.*”

Per 50 CFR 600.815(a)(8)(i), HAPCs should be based on one or more of the following considerations:

- (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



Alternative 2: Market Squid Spawning HAPC

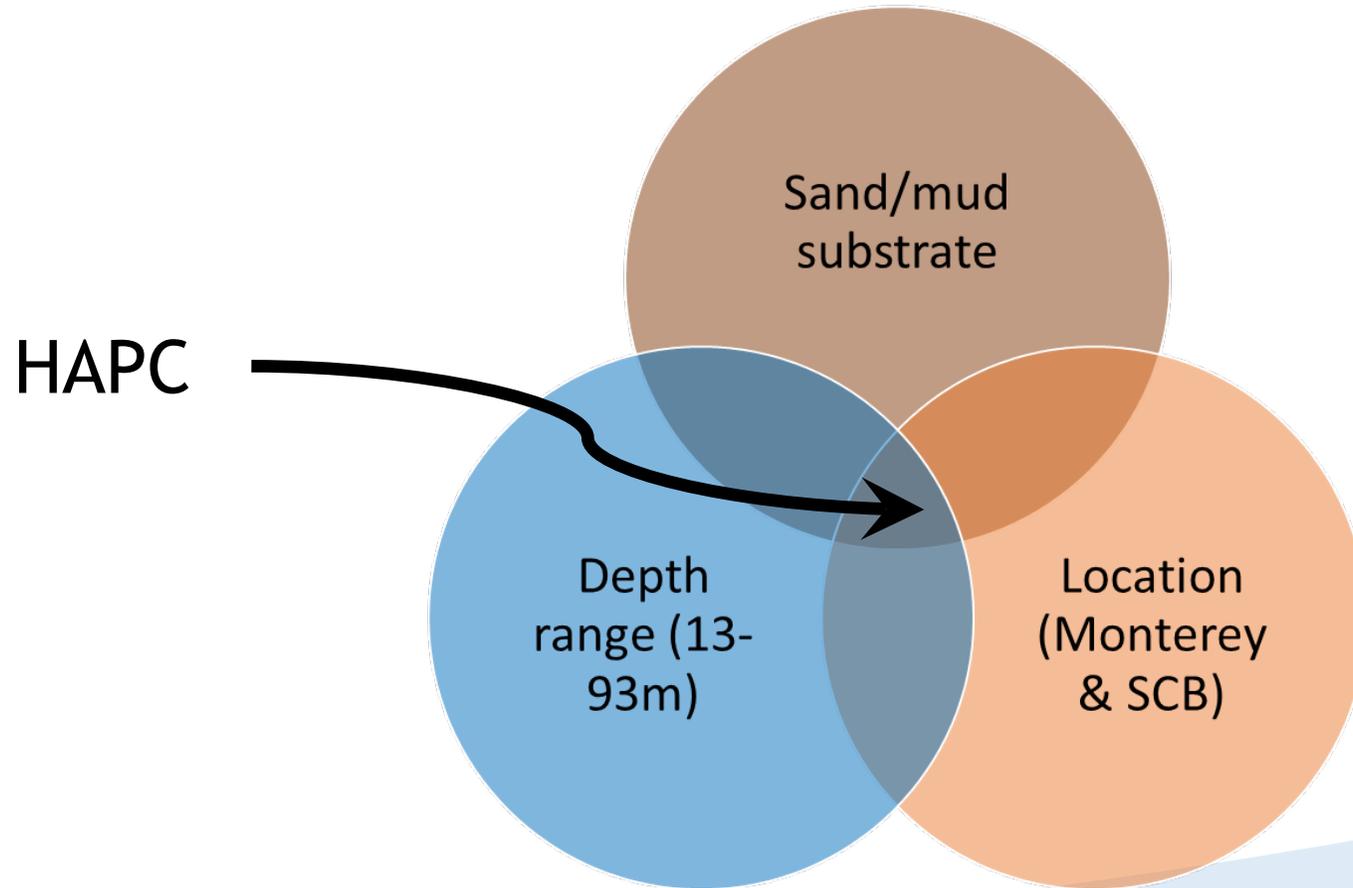
Alternative 2a: No Action

Alternative 2b: Adopt HAPC for market squid spawning habitat based on:

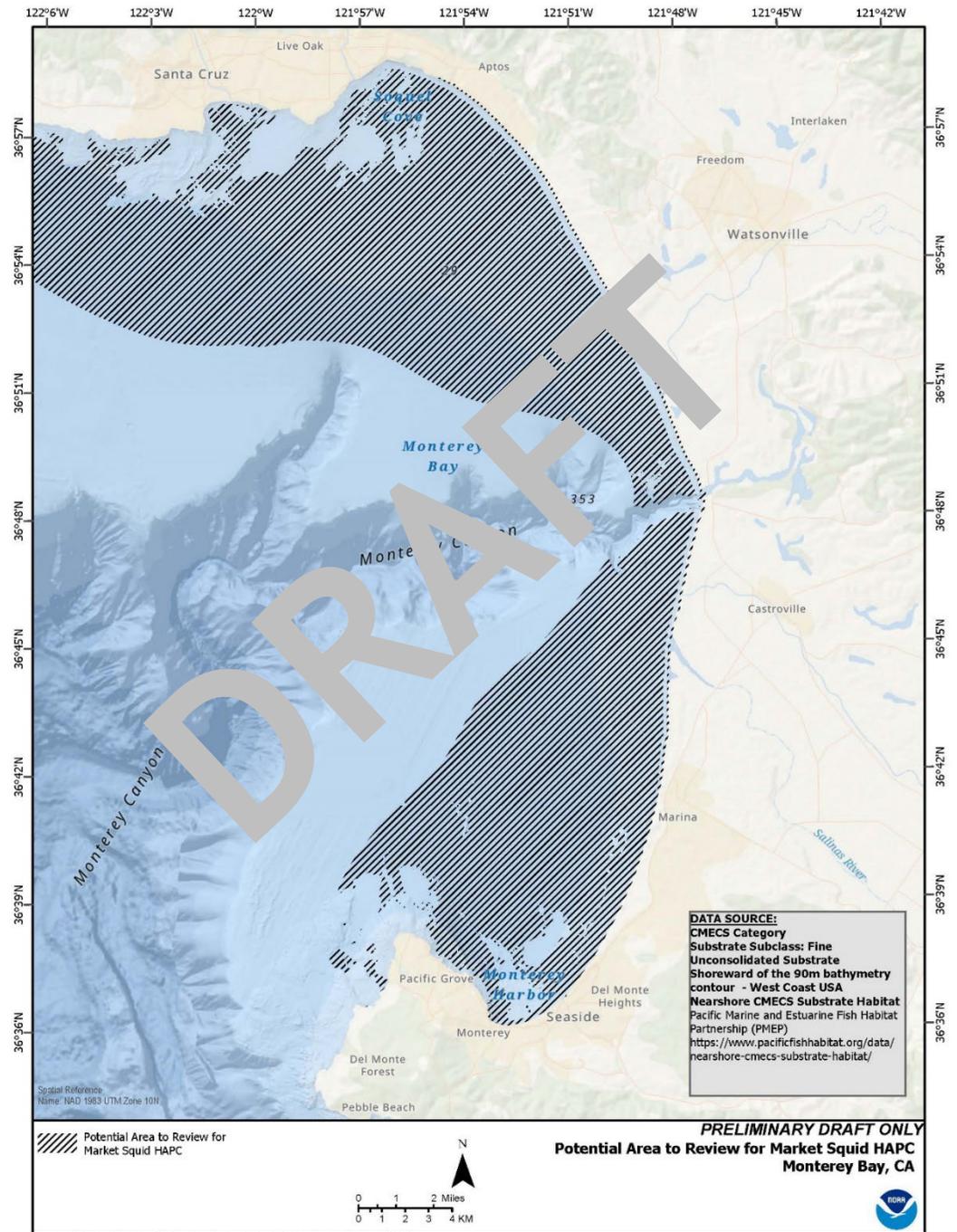
- Geographic area (Monterey & So. Cal. Bight)
- Sand/mud substrate
- 13-93m depth



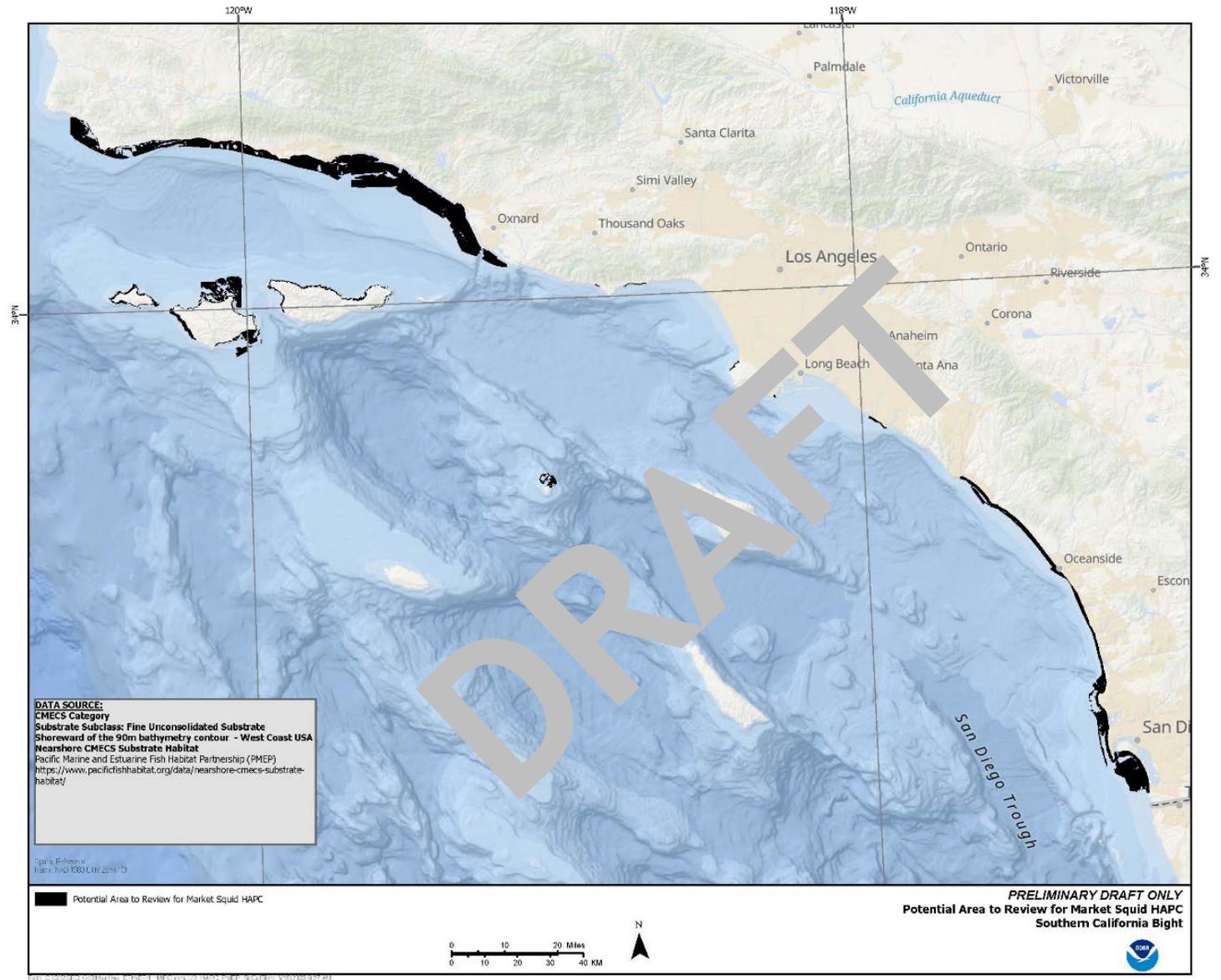
Alternative 2: Market Squid Spawning HAPC



Market Squid Spawning HAPC - Monterey Area



Market Squid Spawning HAPC - So. Cal. Bight



Summary of Potential Modifications

- Refined species/complexes
 - Market squid EFH pulled out of finfish complex
- Updated non-fishing impacts and conservation measures
- HAPC for market squid spawning
- Updated life history summaries and references
- Consolidate EFH info into new FMP Appendix
- *No substantial changes to Krill EFH, finfish EFH, fishing impacts and conservation measures*



Council Action

- 1) Adopt ROA
- 2) Adopt PPA (optional)
- 3) Add/modify alts (optional)
- 4) Provide additional guidance



Thank You:

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Questions?

