

COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON COASTAL PELAGIC SPECIES ESSENTIAL FISH HABITAT AMENDMENT

Since the Pacific Fishery Management Council (Council) adopted the Phase 2 Action Plan for Coastal Pelagic Species (CPS) Essential Fish Habitat (EFH), the CPS Management Team (CPSMT) and a dedicated team comprised of Council, National Marine Fisheries Service (NMFS) West Coast Region, and NMFS Southwest Fisheries Science Center (SWFSC) staff have developed a draft EFH appendix and accompanying alternatives document for Council review. Specifically, the CPSMT would like to recognize and thank Dr. Emmanis Dorval (SWFSC), Mr. Kerry Griffin (Council staff), and Mr. Eric Chavez (NMFS West Coast Region), for taking on the bulk of investigation and new content creation. The CPSMT provided feedback and edited these documents over the last several months. The CPSMT offers the following comments on the Range of Alternatives being considered.

Alternative 1: New EFH Appendix

The CPSMT endorses Council adoption of Alternative 1b, the new EFH Appendix ([Agenda Item H.5, Supplemental Attachment 2, April 2023](#)) as the Preliminary Preferred Alternative with the following modifications:

1. The Habitat Committee's (HC) report ([Agenda Item H.5.a Supplemental HC Report 1, April 2023](#)) recommends including the Salish Sea as EFH for both market squid and krill. The CPSMT supports consideration of these modifications for final action.
2. Incorporate updated non-fishing impacts and conservation measures into the EFH Appendix.
3. Minor corrections as appropriate.

Alternative 2: Market Squid Habitat Areas of Particular Concern

At the CPSMT meeting in La Jolla, California (January 24-26, 2023), the team discussed potential Habitat Areas of Particular Concern (HAPC) for CPS and reviewed the four considerations described in 50 CFR 600.815(8) to guide identification of HAPCs:

1. The importance of the ecological function provided by the habitat.
2. The extent to which the habitat is sensitive to human-induced environmental degradation.
3. Whether, and to what extent, development activities are, or will be, stressing the habitat type.
4. The rarity of the habitat type.

Given that identification of HAPCs are based on one or more of these considerations, the CPSMT thought investigating HAPCs for market squid spawning adults in Monterey Bay and within the Southern California Bight (SCB) was worthwhile based on the importance of the ecological function provided by the habitat, the potential extent to which the habitat is sensitive to human-induced degradation, and the possibility and extent to which development activities are or will be stressing the habitat type. As such the CPSMT proposed as an alternative to “Designate a HAPC for squid spawning that would include areas within the SCB and possibly Monterey Bay with sand

or mud benthic habitat within a depth range of 13 – 93m”. The purpose of this potential HAPC designation would be to address non-fishing impacts on spawning habitat.

If the Council chooses to move forward with Alternative 2, the CPSMT provides the following points for Council consideration while evaluating whether these areas are appropriate to designate as HAPCs.

- Several peer reviewed publications either identify or refer to habitat in southern Monterey Bay as an important spawning area for market squid (Foote et al. 2006, Hanlon et al. 2004, Young et al. 2011, Zeidberg et al. 2012). The manuscript by Zeidberg et al. (2012) also identifies spawning grounds using a remotely operated vehicle around the Channel Islands in the SCB.
- Temperature and other environmental factors are important drivers of squid spawning distribution and success. The HC recommended adding temperature parameters in the HAPC description (Agenda Item H.5.a Supplemental [HC Report 1](#)). If the Council moves forward in considering HAPCs for market squid, the CPSMT supports this addition.
- Squid are dynamic in nature and will go where habitat is ideal, moving and adapting with changing temperature conditions. Much of the available data on squid spawning grounds are obtained from areas where significant fishing activity occurs, representing only grounds accessible to and favored by fishing boats. As such, other spawning grounds may exist and designating discrete spatial areas as HAPCs for squid may not be warranted.

PFMC
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