The following are proposed changes, in <u>double underline</u> and <u>strikethrough</u> to the Coastal Pelagic Species (CPS) Fishery Management Plan (FMP), reflecting the essential fish habitat (EFH) review completed in 2023. *** indicates no proposed changes to the FMP text.

1.0 INTRODUCTION

1.1 History of the Fishery Management Plan

Development of Amendment 8 began during a June 23-25, 1997 Council meeting where the Council directed the CPS Plan Development Team (CPSPDT) to amend the FMP for northern anchovy to conform to the recently revised MSA and to expand the scope of the FMP to include the entire CPS fishery. Amendment 8 updates the FMP for northern anchovy to manage the entire CPS fishery along the West Coast of the United States, including Pacific sardine, northern anchovy, Pacific (chub) mackerel, jack mackerel, and market squid. The amendment also changes the name of the plan from the *Northern Anchovy Fishery Management Plan* to the *Coastal Pelagic Species Fishery Management Plan*. Stocks and fisheries are described in Appendix A. All options considered by the Council and analysis of those options are in Appendix B. Costs involved in this FMP are estimated in Appendix C. Essential fish habitat (EFH) was originally is described in Appendix D to Amendment 8. The CPS EFH review completed in 2023 consolidated EFH information into a single new Appendix to the FMP as Amended document. References are included in Appendix E. Amendment 8 was partially approved by the Secretary on June 10, 1999, and final regulations were published on December 15, 1999 (64FR69888). The FMP was implemented on January 1, 2000.

Amendment 22 incorporated information from the CPS EFH periodic review completed in 2023. Market squid EFH was defined separately from the CPS finfish complex, additional nonfishing activities, effects, and conservation measures were added, Research and Information Needs were updated, new information on CPS distribution and life histories was added, and information on three additional species of krill was added. CPS EFH was consolidated into a new FMP Appendix.

1.2 Stocks in the Fishery Management Plan

1.2.1 Management Unit

<u>Table 1-1 includes the fishery management unit species which are "in the fishery" and subject to provisions of the CPS FMP.</u>

Table 1-1. Stocks managed under this FMP:

Common Name	Scientific Name
Pacific sardine, northern subpopulation	Sardinops sagax
Pacific (chub) mackerel	Scomber japonicus

Northern anchovy Engraulis mordax

Central and northern subpopulations

Market squidDoryteuthis opalescensJack mackerelTrachurus symmetricus

Krill or Euphausiids All Species in West Coast EEZ

Including these eight dominant species. Euphausia pacifica
First two species are common and are most likely to be targeted by fishing

Euphausia pacifica
Thysanoessa spinifera
Nyctiphanes simplex

Nematocelis difficilis T. gregaria E. recurva E. gibboides

E. eximia

T. inspinata

Stylocheiron affine

E. hemigibba

Stocks may be added or removed from the management unit through the framework process described in Section 2.0.

2.3.1.2 Essential Fish Habitat

The MSA requires councils to include descriptions of EFH in all Federal FMPs. In addition, the MSA requires Federal agencies to consult with NMFS on activities that may adversely affect EFH. Appendix D of Amendment 8 to this FMP includes a description of EFH for the CPS included in the plan at that time, fishing effects on EFH, non-fishing effects on EFH, and options to avoid or minimize adverse effects on EFH or promote conservation and enhancement of EFH. This definition was reviewed and reaffirmed by the Council in 2005. Amendment 12 to the CPS FMP defined EFH for prohibited harvest species (Euphausiids). The CPS EFH review completed in 2023 consolidated EFH information into a single new Appendix to the FMP.

Magnuson-Stevens Act Directives Relating to EFH

MSA directives and NMFS guidance on implementation are addressed in greater detail in Appendix D. The MSA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." To clarify this definition, the following interpretations are made: "waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers the full life cycle of a species. The definition of EFH may include habitat for an individual species or an assemblage of species, whichever is appropriate to the FMP.

The MSA requires councils to describe in FMPs any fishing activities that may adversely affect EFH. The MSA also requires FMPs to include management measures that minimize adverse effects on EFH from fishing, to the extent practicable.

In addition, the EFH regulations require identification of non-fishing adverse impacts on EFH. The MSA specifies that councils may comment on and make recommendations to the Secretary and any Federal or state agency concerning any activity authorized, funded, or undertaken, or proposed to be authorized, funded or undertaken, by any state or Federal agency that, in the view of the Council, may affect the habitat, including EFH, of a fishery resource under its authority. If the Secretary receives information that an activity of a state or Federal agency would adversely affect EFH, the Secretary shall recommend to such agency measures that can be taken by such agency to conserve such habitat. Nonfishing impacts on EFH and corresponding potential conservation measures are included in Appendix $\frac{1}{1}$.

Definition of Essential Fish Habitat for CPS

The CPS fishery includes four finfish (Pacific sardine, Pacific mackerel, northern anchovy, and jack mackerel) the invertebrate, market squid, and all euphausiid (krill) species that occur in the West Coast EEZ. CPS finfish are pelagic (in the water column near the surface and not associated with substrate), because they generally occur or are harvested above the thermocline in the upper mixed layer. For the purposes of EFH, the four CPS finfish are treated as a complex because of similarities in their life histories and similarities in their habitat requirements. Market squid are also treated in this same complex because they are similarly fished above spawning aggregations treated separately primarily because their life history includes dependence on benthic habitats.

The definition of EFH for CPS finfish is based on a thermal range bordered by the geographic area where CPS occur at any life stage, where CPS have occurred historically during periods of similar environmental conditions, or where environmental conditions do not preclude colonization by CPS. The identification of EFH for CPS accommodates the fact that the geographic range of CPS varies widely over time in response to the temperature of the upper mixed layer of the ocean.

The east-west geographic boundary of EFH for CPS finfish is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon, and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10°C to 26°C. The southern boundary is the United States Mexico maritime boundary. The northern boundary is more dynamic, and is defined as the position of the 10°C isotherm, which varies seasonally and annually. The east-west geographic boundary of EFH for the finfish assemblage is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon, and Washington (including U.S. waters of the Salish Sea and Puget Sound) offshore to the limits of the EEZ and above the thermocline where SST range between 10° to 26°C. The northern distributional range of CPS finfish is dynamic and variable due to the seasonal cooling of the sea surface temperature, hence in some seasons the 10°C isotherm can be north of the U.S. EEZ. Similarly, the southern distributional range can extend south of the U.S. EEZ where sea surface temperatures are consistently below 26°C. Therefore, the southern extent of EFH for CPS finfish is the U.S.-Mexico maritime boundary, whereas the northern EFH boundary is the U.S.-Canada maritime boundary. The EFH Appendix D provides a more detailed description of this variability.

The east-west geographic boundary of Market Squid EFH is defined to be from the shoreline seaward to the extent of the 5.8 percent market squid distribution probability, including waters to a depth of 300 meters, and where the sea surface temperature is between 7° and 24°C along the coasts of California, Oregon, and Washington. This definition includes U.S. waters of Puget Sound and the Salish Sea and excludes other estuarine waters on the Pacific Coast. Market squid EFH also includes soft, sandy substrates 13 m to 93 m of depth for spawning adults and the egg capsule stage. The southern extent of EFH for Market Squid is the U.S.-Mexico maritime boundary, and the northern extent of Market Squid EFH is the U.S.-Canada maritime boundary.

Because more information is known about two krill species (Euphausia pacifica and Thysanoessa

<u>spinifera</u>), they are treated separately from the rest of the krill complex. EFH for the three groupings of krill species are *E. pacifica*, *T. spinifera*, and other krill:

The east-west geographic boundary for *E. pacifica* EFH, including larvae, juveniles and adults, is defined as U.S. West Coast EEZ waters from the shoreline, excluding estuaries except for the Salish Sea and Puget Sound, to the 1000 fm (1,829 m) isobath, from the surface to 400 m deep. The north-south geographic boundary extends from the U.S. – Canada maritime boundary to the U.S. – Mexico maritime boundary.

The east-west geographic boundary for T. spinifera EFH, including larvae, juveniles and adults, is defined as the U.S. West Coast EEZ from the shoreline, excluding estuaries except for the Salish Sea and Puget Sound, to the 500 fm (914 m) isobath, from the surface to 100 m deep. The north-south geographic boundary extends from the U.S.- Canada maritime boundary to the U.S.-Mexico maritime boundary.

The east-west geographic boundary for other krill species EFH, including larvae, juveniles and adults, is defined as the U.S. West Coast EEZ waters from the shoreline, excluding estuaries except for the Salish Sea and Puget Sound, to the 1000 fm (1,829 m) isobath, from the surface to 400 m deep. The north-south geographic boundary extends from the U.S. – Canada maritime boundary to the U.S. - Mexico maritime boundary.

The EFH designation for all species of krill extends the length of the West Coast from the shoreline to the 1,000 fm isobath and to a depth of 400 meters. The designation of essential habitat for krill is based on information about EFH for the two principal species, Euphausia pacifica and Thysanoessa spinifera. It was not possible at the time of Amendment 12 to discern consistent differences in distribution of the various life stages, other than coastwide, the larvae of both species tend to occur closer to shore, often over the shelf. Isobaths (depth contours) are used as outer boundaries of EFH, but only because they roughly approximate the outer bounds of reported densest concentrations of the populations, and because static boundaries are preferred for the legal definition of EFH. These contours also roughly form the outer boundaries of some of the major upwelling areas (though perhaps not some of the larger offshore jets), within which consistently high concentrations of phytoplankton occur. The boundaries are not meant to imply the strict association of these highly dynamic macroplanktonic species with fixed bottom topography. No habitat areas of particular concern were identified.
