

DRAFT UNDERLINE/STRIKETHOUGH OF COASTAL PELAGIC SPECIES
FISHERY MANAGEMENT PLAN

LIST OF ACRONYMS AND ABBREVIATIONS

<u>ABC</u>	<u>Acceptable Biological Catch</u>
<u>ACL</u>	<u>Annual Catch Limit</u>
<u>ACT</u>	<u>Annual Catch Target</u>
<u>AM</u>	<u>Accountability Measure</u>
<u>CalCOFI</u>	<u>California Cooperative Oceanic Fisheries Investigations</u>
<u>CDFG</u>	<u>California Department of Fish and Game</u>
<u>CDFW</u>	<u>California Department of Fish and Wildlife</u>
<u>CFR</u>	<u>Code of Federal Regulations</u>
<u>COP</u>	<u>Council Operating Procedure</u>
<u>CPS</u>	<u>Coastal Pelagic Species</u>
<u>CPSAS</u>	<u>Coastal Pelagic Species Advisory Subpanel</u>
<u>CPSMT</u>	<u>CPS Management Team</u>
<u>CPSPDT</u>	<u>CPS Plan Development Team</u>
<u>DAH</u>	<u>Domestic Annual Harvest</u>
<u>DAP</u>	<u>Domestic Annual Processing</u>
<u>EC</u>	<u>Ecosystem Component</u>
<u>EEZ</u>	<u>Exclusive Economic Zone</u>
<u>EFH</u>	<u>Essential Fish Habitat</u>
<u>EFP</u>	<u>Exempted Fishing Permit</u>
<u>Emsy</u>	<u>Fishing exploitation rate that can produce MSY</u>
<u>ESA</u>	<u>Endangered Species Act</u>
<u>F</u>	<u>Fishing Mortality</u>
<u>FMP</u>	<u>Fishery Management Plan</u>
<u>Fmsy</u>	<u>Fishing mortality rate that results in MSY</u>
<u>GT</u>	<u>Gross Tonnage</u>
<u>H</u>	<u>Harvest Target Level</u>
<u>HG</u>	<u>Harvest Guideline</u>
<u>JVP</u>	<u>Joint Venture Processing</u>
<u>LE</u>	<u>Limited Entry</u>
<u>MAXCAT</u>	<u>Maximum Harvest Level Parameter</u>
<u>MMPA</u>	<u>Marine Mammal Protection Act</u>
<u>MSA</u>	<u>Magnuson Stevens Act</u>
<u>MSST</u>	<u>Minimum Stock Size Threshold</u>
<u>MSY</u>	<u>Maximum Sustainable Yield</u>
<u>NMFS</u>	<u>National Marine Fisheries Service</u>
<u>NOAA</u>	<u>National Oceanic and Atmospheric Administration</u>
<u>NS</u>	<u>National Standards</u>
<u>OFL</u>	<u>Overfishing Limit</u>
<u>OY</u>	<u>Optimum Yield</u>
<u>P*</u>	<u>Probability of Overfishing</u>
<u>SAFE</u>	<u>Stock Assessment and Fishery Evaluation</u>
<u>SBRM</u>	<u>Standardized Bycatch Reporting Methodology</u>
<u>SDC</u>	<u>Status Determination Criteria</u>
<u>SSC</u>	<u>Scientific and Statistical Committee</u>
<u>TALFF</u>	<u>Total Allowable Level of Foreign Fishing</u>

1.0 INTRODUCTION

1.1 History of the Fishery Management Plan

The [Pacific Fishery Management Council](#) (hereafter Council) initiated the development of the Fishery Management Plan (FMP) for northern anchovy in January of 1977. A final draft of the plan was approved and submitted to the U.S. Secretary of Commerce (Secretary) in June of 1978. Regulations implementing the FMP for northern anchovy were published in the *Federal Register* on September 13, 1978.

The first amendment changed the method of specifying the domestic annual harvest for northern anchovy and added a requirement for an estimate of domestic processing capacity and expected annual level of domestic processing. Approval for this amendment was published in the *Federal Register* on July 18, 1979.

The second amendment, which became effective on February 5, 1982, was published in the *Federal Register* on January 6, 1982. The purpose of this amendment was to increase the domestic fishing fleet's opportunity to harvest the entire optimum yield (OY) of northern anchovy from the U.S. exclusive economic zone (EEZ).

During the spring of 1982, the Council considered a third amendment that divided the quota for northern anchovy into two halves and made release of the second half conditional on the results of a mid-season review of the status of the stock. The methods proposed for the mid-season assessment were considered too complex to implement, and the amendment was not approved.

The fourth amendment, which had two parts, was published in the *Federal Register* on August 2, 1983 and became effective on August 13, 1983. The first part abolished the five-inch size limit in the commercial fishery and established a minimum mesh size of 5/8 inch for northern anchovy. The mesh size requirement did not become effective until April 1986 in order to give the fleet additional time to comply without undue economic hardship. The second part established a mid-season quota evaluation that was simpler in design than the method proposed in Amendment 3.

The fifth amendment, in 1983, incorporated advances in scientific information concerning the size and potential yield of the central subpopulation of northern anchovy. In addition, the fifth amendment included changes to a variety of other management measures. Two or more alternative actions were considered in each of seven general categories (1) OY and harvest quotas; (2) season closures; (3) area closures; (4) quota allocation between areas; (5) the reduction quota reserve; (6) minimum fish size or mesh size; and (7) foreign fishing and joint venture regulations. The alternatives for the fifth amendment were reviewed by the Council during 1983. The final rule on the fifth amendment measures was published in the *Federal Register* on March 14, 1984.

The sixth amendment in 1990 implemented a definition of overfishing for northern anchovy consistent with National Standard 7 of the [Magnuson-Stevens Fishery Conservation and Management Act \(MSA\)](#). The Council began developing the seventh amendment as a new FMP for Coastal Pelagic Species (CPS) in 1990. A complete draft was available in November of 1993, but the Council suspended further work, because [the National Marine Fisheries Service \(NMFS\)](#) withdrew support due to budget constraints. In July of 1994, the Council decided to proceed with the plan through the public comment period. NMFS agreed with the decision on the condition that the Council also consider the options of dropping or amending the anchovy FMP. Thus, four principal options were considered for managing CPS (1) drop the anchovy FMP (no Federal or Council involvement in CPS); (2) continue with the existing FMP for anchovy (status quo); (3) amend the FMP for northern anchovy; and (4) implement an FMP for the entire CPS fishery. In March of 1995, after considering all four principal options, the Council decided to proceed with the FMP for CPS. Final action was postponed until June 1995 when the Council adopted a draft plan that had been

revised to address comments provided by NMFS and the Scientific and Statistical Committee (SSC). Amendment 7 was submitted to the Secretary, but rejected by NMFS Southwest Region as being inconsistent with National Standard 7 of the MSA. NMFS announced its intention to drop the FMP for northern anchovy (in addition to FMPs for other species) in the *Federal Register* on March 26, 1996, but the action was never completed.

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) is described in Appendix D. 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 ([64 FR 69888](#)). The FMP was implemented on January 1, 2000.

[Amendment 9](#) was originally intended to address the development of maximum sustainable yield (MSY) for market squid as well as bycatch and treaty Indian fishing rights. The Council distributed Amendment 9 for public review on July 27, 2000. At its September 2000 meeting, the Council reviewed written comments, received comments from its advisory bodies, and heard public comments, and decided to submit only two provisions for Secretarial review. Based on testimony concerning MSY for squid, the Council decided to include in Amendment 9 only the bycatch provision and a provision providing a framework to ensure that Indian fishing rights are implemented according to treaties between the U.S. and the specific tribes. Since implementation of the FMP, the CPS fishery has expanded to Oregon and Washington. As a result, the FMP must discuss Indian fishing rights in these areas. These rights were not included in the FMP, and the Council decided to address this issue in Amendment 9. The Council decided to conduct further analysis of the squid resource under a separate amendment that addresses OY and MSY for squid. The U.S. Secretary of Commerce approved Amendment 9 on March 22, 2001 ([66 FR 44986](#)).

In April 2001, the Council adopted the capacity goal and transferability provisions recommended by the CPS Management Team (CPSMT) for inclusion in [Amendment 10](#). The Council directed the CPSMT to develop an amendment to the CPS FMP that includes the capacity goal, provisions for permit transferability, a process for monitoring fleet capacity relative to the goal, and a framework for modifying transferability provisions as warranted by increases or decreases in fleet capacity. The amendment also addressed determination of OY and MSY for market squid. In June 2002, the Council adopted Amendment 10 to the CPS FMP. Relative to the limited entry (LE) fishery, the amendment established a capacity goal, provided for LE permit transferability to achieve and maintain the capacity goal, and established a process for considering new LE permits. The purpose of this action was to ensure fishing capacity in the CPS LE fishery is in balance with resource availability. Relative to market squid, Amendment 10 established an MSY (or proxy) for market squid to bring the FMP into compliance with the MSA. The purpose of this action was to minimize the likelihood of overfishing the market squid resource. On December 30, 2002, the Secretary approved Amendment 10. On January 27, 2003, NMFS issued the final rule and regulations implementing Amendment 10 ([68 FR 3819](#)).

[Amendment 11](#) to the FMP addressed long-term allocation of Pacific sardine. While Amendment 11 was in development, the Council recommended a regulatory amendment that implemented an interim revision to the allocation framework for the 2003 and 2004 seasons. The interim allocation regime was extended to 2005. The interim regime (1) changed the [boundary between the northern subarea definition of \("Ssubarea](#)

A”) and ~~the southern subarea (“Subarea B”) by moving the geographic boundary between the two areas~~ from 35° 40' N latitude to 39° N latitude, (2) moved the reallocation date for unharvested Pacific sardine to Subarea A and Subarea B from October 1 to September 1, (3) changed the percentage of the unharvested sardine reallocated to Subarea A and Subarea B from 50 percent to both subareas to 20 percent to Subarea A and 80 percent to Subarea B, and (4) reallocated all unharvested sardine that remains on December 1 coastwide. At the June 2005 Council meeting the interim allocation framework was replaced by Council final action on Amendment 11 which provided the following allocation formula for the non-tribal share of the Pacific sardine harvest guideline (HG):

1. A seasonal allocation structure with 35 percent of the HG to be allocated coastwide on January 1.
2. 40 percent of the HG, plus any portion not harvested from the initial allocation, to be reallocated coastwide on July 1.
3. On September 15 the remaining 25 percent of the HG, plus any portion not harvested from earlier allocations, to be reallocated coastwide.

On June 29, 2006, NMFS issued the final rule to implement Amendment 11 to the CPS FMP ([71 FR 36999](#)).

In March 2005, the Council took final action on [Amendment 12](#) to the FMP. Amendment 12 added all species of krill (euphausiids) that occur within the West Coast EEZ and placed them in a new management category, “Prohibited Harvest.” Amendment 12 is intended to ensure that, to the extent practicable, fisheries will not develop that could put at risk krill stocks and the other living marine resources that depend on krill. This means that OY for krill is zero, and the target, harvest and transshipment of krill is prohibited. Also, exempted fishing permits (EFPs) will not be issued under the EFP procedures of this FMP to allow individuals to harvest krill as an exception to the prohibition of harvest. These actions are not intended to account for the responses of krill and other resources to changes in environmental conditions. [Amendment 12 also described EFH for krill.](#) The final rule adopting Amendment 12 was published by NMFS in the Federal Register on July 9, 2009 ([74 FR 33372](#)).

[Amendment 13](#) was initiated in 2009 to incorporate new National Standard 1 (NS1) guidelines that were developed in response to the Magnuson-Stevens Reauthorization Act of 2006 to end and prevent overfishing. At its June 2010 meeting the Council reviewed a range of alternatives and analyses to implement new provisions of the reauthorized ~~Magnuson-Stevens Fishery Conservation and Management Act (MSA)~~ and the NS1 guidelines, and adopted the following as final action modifying the CPS FMP:

- All actively managed, monitored species, and prohibited harvest species (krill) in the FMP are to be categorized as “in the fishery.”
- Jacksmelt and Pacific herring are to be added to the FMP as ecosystem component (EC) species and monitor incidental catch in CPS fisheries.
- Modify the existing harvest control rules for actively managed species to include a buffer or reduction in acceptable biological catch (ABC) relative to overfishing limit (OFL) to account for scientific uncertainty. This buffer will be determined during the annual management cycle through a combination of scientific advice from the SSC and a policy determination of the Council.
- Maintain the default harvest control rules for monitored stocks as modified to specify the new management reference points. Annual catch limits (ACLs) would be specified for multiple years until such time as the species becomes actively managed or new scientific information becomes available. The value of 0.25 in the ABC control rule (a 75 percent buffer) will remain in use until recommended for modification by the SSC and approved by the Council.
- Add sector-specific ACLs, annual catch targets (ACTs), and accountability measures (AMs), to the CPS FMP management framework for use in the annual harvest and management specification

process.

- Add language to specify that the Council will include ecological considerations when reviewing and/or adopting status determination criteria (SDCs), ACLTs, and ACTs.
- While not a change to the FMP, the Council confirmed that SDC for CPS FMP are to remain as currently specified with the exception of the Northern subpopulation of Northern anchovy (for which no criteria currently exist).

The final rule adopting Amendment 13 was published on November 11, 2011 (76 FR 70362).

Amendment 14 was developed in order to establish a MSY for the northern subpopulation of northern anchovy. Although two options were considered during the Amendment 13 process, neither was subsequently adopted by the Council. The Council took action in November 2014, approving the MSY, and the Amendment was approved by NMFS on March 23, 2015 (80 FR 17352).

Amendment 15 was approved by the Council in 2015 and added a suite of lower trophic level species to the FMP's list of ~~ecosystem component (EC)~~ species. Consistent with the objectives of the Council's FMPs and its Fishery Ecosystem Plan, Amendment 15 prohibits future development of commercial fisheries for the suite of EC species shared between all four FMPs (Shared EC Species) until and unless the Council has had an adequate opportunity to both assess the scientific information relating to any proposed directed fishery and consider potential impacts to existing fisheries, fishing communities, and the greater marine ecosystem. Amendment 15 was published by NMFS on April 4, 2016 (81 FR 19054).

Amendment 16 was approved in January 2018 and published in the Federal Register by NMFS on February 14, 2018 (83 FR 6472). It allows for minor directed fishing on CPS finfish to continue, when the directed fishery is closed. This sector accounts for a very small portion of the overall catch of any particular CPS stock, and was determined to have not more than a negligible impact on the stock. However, for some small ports and producers, it can be an important source of income, especially when the directed fishery is closed. The amendment includes a maximum of one ton per vessel per day.

Amendment 17 addresses fishing on overfished stocks. It removes the pre-specified 15 percent incidental landing limit and the de facto prohibition on directed fishing for live bait fishing when a stock is overfished, and instead requires the Council to take appropriate action to minimize fishing mortality to the extent practicable. The Council may impose incidental landing limits, harvest caps, or other management measures on live bait fishing on overfished stocks. Amendment 17 was approved by the Council in November 2018 and by NMFS in June 2019 (84 FR 40296).

In July 2019, NMFS notified the Council that the Pacific sardine biomass estimate had fallen below the 50,000 mt minimum stock size threshold (MSST), which is also the overfished threshold, and the Council was obligated to develop a rebuilding plan. Amendment 18 documents the Pacific sardine rebuilding plan, which was approved by the Council in September 2020 and by NMFS in June 2021 (86 FR 33142). ~~In July 2019, NMFS notified the Council that the Pacific sardine biomass estimate had fallen below the 50,000 mt minimum stock size threshold (MSST), which is also the overfished threshold.~~

Amendment 19 added descriptions of Standardized Bycatch Reporting Methodology (SBRM), which is a consistent procedure or procedures used to collect, record, and report bycatch data in an FMP managed fishery. This amendment specifically added Section 2.76 to the FMP to describe SBRM for the CPS fisheries and how it meets the purpose of the SBRMs. It was approved by NMFS on July 5, 2022 (87 FR 40744).

Amendment 20 removes management categories for CPS, specifically the nomenclature of “active” and “monitored” and describes management for each management unit species or stock individually. It was intended to improve clarity regarding the management approaches for stocks or species in the CPS FMP, but not revise the manner in which stocks or species are managed. It was approved by the Council in April 2022 and by NMFS on XX, 2022.

1.2 Stocks in the Fishery Management Plan

1.2.1 *Management Unit Species*

Table 1-1 includes the fishery management unit species which are “in the fishery” and subject to provisions of the CPS FMP.

Table 1-1. Stocks managed under this FMP:

Common Name	Scientific Name
Pacific sardine	<i>Sardinops sagax</i>
<u>Northern subpopulation</u>	
Pacific (chub) mackerel	<i>Scomber japonicus</i>
Northern anchovy	<i>Engraulis mordax</i>
Central and northern subpopulations	
Market squid	<i>Doryteuthis opalescens</i>
Jack mackerel	<i>Trachurus symmetricus</i>
Krill or Euphausiids	<i>All Species in West Coast EEZ</i>
Including these eight dominant species.	<i>Euphausia pacifica</i>
First two species are common and are	<i>Thysanoessa spinifera</i>
<u>most likely to be targeted by fishing</u>	<i>Nyctiphanes simplex</i>
	<i>Nematocelis difficilis</i>
	<i>T. gregaria</i>
	<i>E. recurva</i>
	<i>E. gibboides</i>
	<i>E. eximia</i>

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

1.2.2 *Ecosystem Component Species*

Table 1-2 EC species under this FMP:

Common Name	Scientific Name
Pacific herring	<i>Clupea pallasii pallasii</i>
Jacksmelt	<i>Atherinopsis californiensis</i>

Table 1-3 EC species shared between all four of the Council’s FMPs, including the CPS FMP.

Common Name	Scientific Name
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Round herring	<i>Etrumeus teres</i>
Thread herring	<i>Opisthonema libertate</i> , <i>O. medirastre</i>
Mesopelagic fishes	Families: <i>Myctophidae</i> , <i>Bathylagidae</i> , <i>Paralepididae</i> , and <i>Gonostomatidae</i>
Pacific sand lance	<i>Ammodytes hexapterus</i>
Pacific saury	<i>Cololabis saira</i>
Silversides*	<i>Atherinopsidae</i>
Smelts	<i>Osmeridae</i>
Pelagic squids	Families: <i>Cranchiidae</i> , <i>Gonatidae</i> , <i>Histioteuthidae</i> , <i>Octopoteuthidae</i> , <i>Ommastrephidae</i> except Humboldt squid (<i>Dosidicus gigas</i>), <i>Onychoteuthidae</i> , and <i>Thysanoteuthidae</i>

*Silversides include jacksmelt, which is also listed in Table 1-2 as an EC species specific to the CPS FMP. Jacksmelt is subject to the same directed fishing prohibition as other Shared EC Species, but it may also be subject to additional management and monitoring requirements that the Council develops for the Table 1-2 EC species particular to this FMP.

1.3 CPS Management

The CPS FMP primarily utilizes two general management approaches for stocks subject to harvest, recognizing stocks may warrant either more or less intensive management, depending on harvest levels, biological, socio-economic factors, or other concerns. The purpose of different management approaches is to use available agency resources in the most efficient and effective manner while satisfying goals and objectives of the FMP. This enables managers and scientists to concentrate efforts on stocks and segments of the CPS fishery that need the greatest attention or where the most significant benefits might be expected.

CPS management may be characterized by periodic stock assessments, and/or periodic adjustments of target harvest levels based on MSY control rules or the tracking of trends in landings and qualitative comparison to available abundance data, but without periodic stock assessments, or periodic adjustments to target harvest levels. All species may be subject to management measures such as catch allocation, gear regulations, closed areas, closed seasons, or other forms of management.

The CPS FMP includes all species of euphausiids (krill) occurring in the West Coast EEZ as “Prohibited Harvest Species” and as such it is prohibited to fish for, harvest or land krill in any fishery in the West Coast EEZ. The prohibition is intended to ensure that, to the extent practicable, fisheries will not develop that could put at risk krill stocks and the other living marine resources that depend on krill. This means that OY for krill is zero, and the targeting, harvesting, and transshipping of krill is prohibited. Also, EFPs will not be issued under the EFP procedures of this FMP to allow individuals to harvest krill as an exception to the prohibition of harvest. These actions would fully achieve the objectives of the Amendment 12 to the extent practicable, but would not account for environmental conditions and the responses of krill and other resources to changes in environmental conditions. This prohibition recognizes that *de minimis* or trace amounts of krill may be retained by fishermen while targeting other species; such inadvertent action is not intended to be the subject of this prohibition.

~~Status determination criteria~~SDC and management reference points (i.e. ABC and ACLs) must be developed for all fishery management unit species, those species considered “in the fishery.” Market squid are exempt from ACL requirements because their life cycle is less than one year. CPS management may use generic or general definitions of overfishing and overfished for stocks that do not have specific fishing mortality or biomass cutoffs. EFH must be described for all stocks in the management unit.

The CPSMT will review all CPS stocks annually and make recommendations to the Council and agencies regarding appropriate management for each stock. Changes to the management for each species, with the exception of krill, can be made annually by the Council based on all available data, including ABC levels and MSY control rules, and the goals and objectives of this FMP. Changes in a management may be

accomplished according to any of the four procedures for establishing and adjusting management measures described below in Section 2.0.

1.4 Ecosystem Component Species

Several criteria should be met for a species to be included in the EC category (~~Section 660.310(d)(5)(i) defined at 50 CFR 600.305~~). These are: 1) Be a non-target stock/species; 2) Not be subject to overfishing, approaching overfished, or overfished and not likely to become subject to overfishing or overfished in the absence of conservation and management measures; and, 3) Not generally retained for sale or personal use, although “occasional” retention is not by itself a reason for excluding a species from the EC category. Identifying and including EC species in the CPS FMP is not mandatory but may be done for a variety of purposes: a) Data collection; b) For ecosystem considerations related to specification of OY for the associated fishery; c) As considerations in the development of conservation and management measures for the associated fishery; and/or d) to address other ecosystem issues.

A 2010 review of bycatch species in CPS fisheries confirmed that incidental catch and bycatch in CPS fisheries is dominated by other CPS and that bycatch/incidental catch of non-CPS is extremely low. However, two species, jacksmelt and Pacific herring, are infrequently caught with CPS gear and were therefore added to the FMP under Amendment 13 to ensure continued monitoring of incidental catch and bycatch of these species in CPS fisheries through sampling and logbook programs. This information will continue to be reported in the Stock Assessment and Fishery Evaluation (SAFE) report. In keeping with the NS1 guidelines, the Council recommended not developing SDCs or management measures for these stocks.

The Council intends to continue and expand its consideration of ecological factors when developing SDCs and management measures for CPS management unit species. These considerations are expected to evolve as improved information and modeling of ecological processes become available. These considerations will likely include predator-prey relationships and the overall status and role of forage species including the two EC species in Table 1-2.

1.4.1 Shared Ecosystem Component Species

No directed commercial fisheries may begin for any Shared EC Species (Table 1-3) until and unless the Council has had an adequate opportunity to both assess the scientific information relating to any proposed directed fishery and consider potential impacts to existing fisheries, fishing communities, and the greater marine ecosystem.

1.5 Operational Definitions of Terms

Acceptable Biological Catch (ABC) is a harvest specification of a stock or stock complex’s annual catch that accounts for the scientific uncertainty in the estimate of OFL and any other scientific uncertainty, and should be based on the ABC control rule. ABC control rule means a specified approach to setting ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL and any other scientific uncertainty.

Accountability Measures (AMs) are management controls to prevent ACLs from being exceeded and to correct or mitigate overages of the ACL if they occur. There are two categories: inseason AMs and AMs for when the ACL is exceeded.

Annual Catch Limit (ACL) is the level of annual catch of a stock or stock complex that serves as the basis

for invoking AMs. ACL cannot exceed ABC but may be divided into sector-specific ACLs.

Annual Catch Target (ACT) is an optional AM. An amount of annual catch that is the management target of the fishery, and accounts for management uncertainty in controlling catch at or below the ACL.

Bycatch is defined in the MSA as “fish which are harvested in a fishery, but not sold or kept for personal use and includes economic discards and regulatory discards.”

Biomass means the estimated amount, by weight, of a CPS population. The term biomass means total biomass (age one and above) unless stated otherwise.

Capacity goal means 5,650.9 metric tons (mt), which is the goal for the total gross tonnage (GT) of all vessels participating in the LE fishery established by Amendment 10 to the FMP.

Coastal Pelagic Species (CPS) means northern anchovy (*Engraulis mordax*), Pacific mackerel (*Scomber japonicus*), Pacific sardine (*Sardinops sagax*), jack mackerel (*Trachurus symmetricus*), market squid (*Doryteuthis opalescens*), and all species of the family *Euphausiidae* found in the west coast EEZ. Pacific herring (*Clupea pallasii pallasii*) and jacksmelt (*Atherinopsis californiensis*) are included in the FMP as EC species.

CPS Advisory Subpanel (CPSAS) is comprised of members of the fishing industry and public appointed by the Council to review proposed actions for managing the CPS fisheries.

CPS Management Team (CPSMT) means the individuals appointed by the Council to review, analyze, and develop management measures for the CPS fishery.

Comparable capacity means GT as determined by the formula in 46 CFR 69.209(a) for a vessel not designed for sailing plus 10 percent of the vessel’s calculated GT.

Council means the Pacific Fishery Management Council, including its CPSMT, CPSAS, SSC, and any other committee established by the Council.

Ecosystem Component (EC) species means species not generally targeted or retained for sale, but are infrequently encountered in CPS fisheries. EC species are monitored to ensure that these species are not likely to be subject to overfishing in the absence of CPS management measures.

Egg Escapement Approach means a market squid fishery management approach used to evaluate the effects of fishing mortality (F) on the spawning potential of the stock and in particular, to examine the relationship between the population’s reproductive output and candidate proxies for the fishing mortality that results in MSY (F_{MSY}).

Finfish means northern anchovy, Pacific (chub) mackerel, Pacific sardine, and jack mackerel.

Fishery Management Area means the EEZ off the coasts of Washington, Oregon, and California between three and 200 nautical miles offshore, bounded in the north by the Provisional International Boundary between the United States and Canada, and bounded in the south by the International Boundary between the United States and Mexico.

Gross tonnage (GT) means GT as determined by the formula in 46 CFR 69.209(a) for a vessel not designed for sailing ($.67 \times \text{length} \times \text{breadth} \times \text{depth}/100$). A vessel’s length, breadth, and depth are those specified on the vessel’s certificate of documentation issued by the U.S. Coast Guard or state.

Harvest guideline (HG) means a specified numerical harvest objective that may be specified as an ACT that is not a quota. Attainment of an HG does not require complete closure of a fishery.

Harvesting vessel means a vessel involved in the attempt or actual catching, taking or harvesting of fish, or any activity that can reasonably be expected to result in the catching, taking or harvesting of fish.

Krill means all species of euphausiids that occur in the EEZ off the west coast.

Limited entry (LE) fishery means the fishery comprised of vessels fishing for CPS in the CPS management zone under LE permits issued under this FMP.

Live bait fishery means fishing for CPS for use as live bait in other fisheries.

Nonreduction fishery means fishing for CPS for use as dead bait or for processing for direct human consumption.

Overfishing Limitevel (OFL) means an amount of catch that corresponds to the estimate of fishing mortality on an annual basis, above which overfishing is occurring applied to a stock or stock complex's abundance expressed in terms of numbers or weight of fish.

Owner, as used in this subpart, means a person who is identified as the current owner in the Certificate of Documentation (CG-1270) issued by the U.S. Coast Guard for a documented vessel, or in a registration certificate issued by a state or the U.S. Coast Guard for an undocumented vessel.

Person, as used in this subpart, means any individual, corporation, partnership, association or other entity (whether or not organized or existing under the laws of any state), and any Federal, state, or local government, or any entity of any such government that is eligible to own a documented vessel under the terms of 46 U.S.C. 12102(a).

Processing or to process means the preparation or packaging of CPS to render the fish suitable for human consumption, pet food, industrial uses or long-term storage, including; but not limited to, cooking, canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil, but does not mean heading and gutting unless there is additional preparation.

Prohibited Species means species that are subject to fishery controls under state or other Federal regulations and may not be taken, retained, or possessed incidentally by CPS fishery participants.

Prohibited Harvest Species is a category for species for which it is prohibited to fish for, harvest, or land in any fishery within the West Coast EEZ. All species of euphausiids (krill) that occur in the West Coast EEZ are Prohibited Harvest Species. This category recognizes that *de minimis* or trace amounts of krill may be retained by fishermen while targeting other species; such inadvertent action is not intended to be the subject of this prohibition.

Quota means a specified numerical harvest objective that may be specified as an ACT for a single species or stock of CPS, the attainment (or expected attainment) of which causes the complete closure of the fishery for that species.

Reduction fishery means fishing for CPS for the purposes of conversion into: fish flour; fish meal; fish scrap; fertilizer; fish oil; other fishery products; or byproducts for purposes other than direct human consumption.

Regional Administrator means the Administrator, Southwest Region, NMFS, or a designee.

Reserve means a portion of the HG or quota set aside at the beginning of the year for specific purposes, such as for individual harvesting groups to ensure equitable distribution of the resource.

Standard Bycatch Reporting Methodology (SBRM) means a consistent procedure or procedures used to collect, record, and report bycatch data in a fishery managed under an FMP.

Sustainable Fisheries Division (SFD) means the Assistant Regional Administrator for Sustainable Fisheries, West Coast~~Southwest~~ Region, NMFS, or a designee.

Threshold level of egg escapement means a level of reproductive (egg) escapement that is believed to be at or near a minimum level necessary to allow the population to maintain its level of abundance into the future (i.e., allow for "sustainable" reproduction year after year).

Totally lost means that the vessel being replaced no longer physically exists ~~in specie~~, or is absolutely and

irretrievably sunk or otherwise beyond the possible control of the owner, or the costs of repair (including recovery) would exceed the repaired value of the vessel.

1.6 Goals and Objectives

Goals and objectives for the CPS FMP (not listed in order of priority):

- Promote efficiency and profitability in the fishery, including stability of catch.
- Achieve OY.
- Encourage cooperative international and interstate management of CPS.
- Accommodate existing fishery segments.
- Avoid discard.
- Provide adequate forage for dependent species.
- Prevent overfishing.
- Acquire biological information and develop long-term research program.
- Foster effective monitoring and enforcement.
- Use resources spent on management of CPS efficiently.
- Minimize gear conflicts.

2.0 FRAMEWORK ESTABLISHING AND IMPLEMENTING MANAGEMENT MEASURES AND ADDITIONAL PROCEDURES

This FMP establishes and implements management measures and additional procedures. It includes framework management, types of actions and procedures, other management measures, scientific research, restrictions on other fisheries, review of state regulations, and the standardized bycatch reporting methodology.

2.1 Framework Management

The two framework approaches described below for the ~~to~~ management of CPS allows changes and modifications to management ~~procedures-measures~~ to be made in a timely and efficient manner without need to amend the FMP. The FMP establishes two framework procedures through which the Council is able to recommend establishment and adjustment of management measures. The "point-of-concern" framework allows the Council to develop management measures in response to resource conservation and ecological issues. The socioeconomic framework allows the Council to develop management measures in response to social and economic issues.

~~Management measures may be imposed, adjusted, or removed at any time during the year. Management measures may be imposed for resource conservation, social, or economic reasons consistent with FMP procedures, goals, and objectives.~~

~~Analyses of biological, ecological, social, and economic impacts will be considered when a particular change is proposed. As a result, time required to take action will vary depending on the type of action (see below), its impacts on the fishing industry, resource, and environment, as well as review of these impacts by interested parties. Satisfaction of legal requirements for other applicable laws (e.g., the Administrative Procedure Act, Regulatory Flexibility Act, Executive Order 12866, etc.) for actions taken under this framework requires analysis and public comment before measures may be implemented by the U.S. Secretary of Commerce (Secretary).~~

~~Management measures addressing resource conservation or ecological issues must be based on the point-of-concern framework consistent with procedures and criteria listed in Section 2.1.2.~~

~~Management measures addressing social or economic issues must be based on the socioeconomic framework consistent with procedures and criteria described in Section 2.1.3.~~

2.1.12 Point-of-Concern Framework

The point-of-concern process is the Council's primary tool (along with setting HGs, ACLs, ACTs, or harvest quotas) for exercising resource stewardship responsibilities. The process is intended to foster continuous and vigilant review of Pacific Coast CPS stocks and fisheries. The process is also to prevent overfishing or any other resource damages. The CPSMT will monitor the fishery throughout the year, and account for any new information on status of each species or species group to determine if a resource conservation or ecological issue exists. Point-of-concern criteria are intended to assist the Council in determining when a focused review on a particular species is warranted and may require implementation of specific management measures. This framework provides the Council authority to act based solely on a point-of-concern. Thus, the Council may act quickly and directly to address resource conservation or ecological issues. In conducting this review, the CPSMT will utilize the most current catch, effort, abundance and other relevant data from the fishery.

In the course of the continuing review, a "point-of-concern" occurs when one or more of the following is

found or expected:

1. Catch is projected to exceed the current ABC's, HGs, ACLs, ACTs, or the harvest quota.
2. Any adverse or significant change in the biological characteristics of a species (age composition, size composition, age at maturity, or recruitment) is discovered.
3. An overfishing condition appears to be imminent or likely within two years.
4. Any adverse or significant change in ecological factors such as the availability of CPS forage for dependent species or in the status of a dependent species is discovered.
5. Developments in a foreign fishery occur that affect the likelihood of overfishing of CPS.
6. An error in data or a stock assessment is detected that significantly changes estimates of impacts due to current management.
7. Control rule (harvest policy) parameters or approaches require modification.

Once a point-of-concern is identified, the CPSMT will evaluate current data to determine if a resource conservation or ecological issue exists and will provide its findings in writing at the next scheduled Council meeting. If the CPSMT determines a resource conservation or ecological issue exists, it will provide its recommendation, rationale, and analysis for appropriate management measures that will address the issue.

Direct allocation of a resource between different segments of a fishery is, in most cases, not the appropriate response to a resource conservation or ecological issue. Council recommendations to directly allocate the resource will be developed according to criteria and processes in the socioeconomic framework described in Section 2.1.23 and Section 2.2.21-4.

After receiving the CPSMT report, the Council will take public testimony and, if appropriate, recommend management measures to the NMFS Regional Administrator accompanied by supporting rationale and analysis of impacts. The Council analysis will include a description of (1) resource conservation or ecological issues consistent with FMP objectives; (2) likely impacts on other management measures and other fisheries; (3) socioeconomic impacts; and (4) costs and benefits to commercial and recreational segments of the CPS fishery. The recommendation will explain the urgency in implementation of the measure(s), if any.

The NMFS Regional Administrator will review the Council's recommendation and supporting information and will follow appropriate implementation processes described in this FMP, following public notice and comment. If the Council contemplates frequent adjustments to the recommended measures, it may classify them as "routine" through the appropriate process described in Section 2.21.1.

If the NMFS Regional Administrator does not concur with the Council's recommendation, he/she will notify the Council in writing of the reasons for rejection. Nothing prevents the Secretary from exercising authority to take emergency action under Section 305 (c) and (d) of the MSA. Nothing precludes or limits Council access to the point-of-concern framework.

2.1.23 The Socioeconomic Framework

Non-biological issues may arise which require the Council to recommend management actions to address certain social or economic conditions in the fishery or to achieve FMP objectives. Resource allocation,

fishing seasons, or landing limits based on market quality and timing, safety measures, and prevention of gear conflicts are examples of possible management issues with a social or economic basis. Management actions that are permitted under this framework include all categories of actions authorized under the point-of-concern framework with the addition of direct resource allocation and access-limitation measures.

If the Council concludes that management action is necessary to address a social or economic issue, it will prepare a report containing the rationale supporting its conclusion. The report will include proposed management measures, a description of viable alternatives, and analyses addressing (1) achievement of FMP goals and objectives, (2) likely impacts on other fisheries and other management measures, (3) sociobiological impacts, (4) socioeconomic impacts, and (5) costs and benefits to the CPS fishery.

The Council, following review of the report, supporting data, public comment and other relevant information, may recommend management measures to the NMFS Regional Administrator accompanied by relevant background data, information, and public comment. The recommendation will explain the urgency in implementation of the measure, if any.

The NMFS Regional Administrator will review the Council's recommendation, supporting rationale, public comments and other relevant information and, if it is approved, will undertake the appropriate method of implementation. Rejection of the recommendation will be explained in writing.

Procedures specified in this FMP do not affect authority of the Secretary to take emergency regulatory action under Section 305(c) or (d) of the MSA.

If conditions warrant, the Council may designate a management measure developed and recommended to address social and economic issues as a routine management measure, provided that the criteria and procedures in Section 2.24.1 are followed.

2.24 Types of Actions and Procedures

Management measures may be imposed, adjusted, or removed at any time during the year. Management measures may be imposed for resource conservation, social, or economic reasons consistent with FMP procedures, goals, and objectives.

Analyses of biological, ecological, social, and economic impacts will be considered when a particular change is proposed. As a result, time required to take action will vary depending on the type of action proposed (see below), its impacts on the fishing industry, resource, and environment, as well as review of these impacts by interested parties. Satisfaction of legal requirements for other applicable laws (e.g., the Administrative Procedure Act, Regulatory Flexibility Act, Executive Order 12866, etc.) for actions taken under this framework requires analysis and public comment before measures may be implemented by the U.S. Secretary of Commerce (Secretary).

Management measures addressing resource conservation or ecological issues must be based on the point-of-concern framework consistent with procedures and criteria listed in Section 2.1.12.

Management measures addressing social or economic issues must be based on the socioeconomic framework consistent with procedures and criteria described in Section 2.1.23.

Under the point-of-concern or the socioeconomic frameworks, there are four different types of management actions, requiring slightly different processes. Management measures may be established, adjusted, or removed using any of these four rulemaking actions:

1. **Automatic Actions** may be initiated by the ~~National Marine Fisheries Service (NMFS)~~ Regional Administrator without prior public notice, opportunity to comment, or a Council meeting. These actions are non-discretionary and the impacts must previously have been taken into account. Examples include closure of the directed fishery when the directed portion of the fishery is attained, an inseason release of allocations (all species and fishery segments), release of surplus incidental catch allowance to the directed fishery (if necessary), or closure of the directed fishery when the total HG, ACT, or ACL is attained. The Secretary will publish a single notice in the *Federal Register* making the action effective.
2. **"Notice" Actions** require at least one Council meeting and one *Federal Register* notice. These include all management actions other than automatic actions that are either non-discretionary or have probable impacts that have been previously analyzed.

Notice actions are intended to have temporary effect and the expectation is that they may need frequent adjustment. They may be recommended at a single Council meeting, although the Council will provide as much advance information to the public as possible concerning the issues it will be considering. The primary examples are management actions defined as routine in Section 2.24.1. Previous analysis must have been specific as to species and gear type before a management measure can be defined as routine and acted upon at a single Council meeting. If recommendations are approved, the Secretary may waive, for good cause, the requirement for prior notice and comment in the *Federal Register* and will publish a single notice in the *Federal Register* making the action effective. This category of actions presumes the Secretary will find that the extensive notice and opportunity for comment along with other information provided by the Council will serve as good cause to waive the need for additional prior notice and comment in the *Federal Register*.

3. **Abbreviated Rulemaking Actions** normally require at least two Council meetings and one *Federal Register* rule. These include all management actions intended to have permanent effect and be discretionary in nature with impacts that have not been previously analyzed. The Council will develop and analyze the proposed management actions over the span of at least two Council meetings and provide public advance notice and opportunity to comment on proposals and analysis prior to and at the second Council meeting. If the NMFS Regional Administrator approves the Council's recommendation, the Secretary may waive, for good cause, the requirement for prior notice and comment in the *Federal Register* and publish a final rule in the *Federal Register* which will remain in effect until amended. If a management measure is designated as routine by final rule under this procedure, specific adjustments of that measure can subsequently be announced in the *Federal Register* by notice as described in this FMP. The Secretary may waive the opportunity for prior notice and comment in the *Federal Register*.

The primary purposes of the previous two categories of notice and abbreviated rulemaking procedures are (1) to accommodate the Council's meeting schedule for developing annual management recommendations; (2) to satisfy the Secretary's responsibilities under the Administrative Procedures Act; and (3) to address the need to implement management measures by a specified date each fishing year.

The two-Council meeting process refers to two decision meetings; the first meeting to develop proposed management measures and their alternatives, and the second meeting to make a final recommendation to the Secretary. Identification of issues and the development of proposals normally will begin at a Council meeting prior to the first decision meeting.

4. **Full Rulemaking Actions** normally require at least two Council meetings and two *Federal Register* rules notices. These include any highly controversial management measure. The Council will follow

the two meeting procedures described for the abbreviated rulemaking category. The Secretary will publish a proposed rule in the *Federal Register* with an appropriate period for public comment followed by publication of a final rule in the *Federal Register*.

2.24.1 Routine Management Measures

Routine management measures are those the Council determines likely to be adjusted annually or more frequently. Measures are classified as routine by the Council through either full or abbreviated rulemaking process. In order for a measure to be classified as routine, the Council will determine that the measure addresses an issue at hand and may, in the near future, require further adjustment to achieve its purpose.

Once a management measure has been classified as routine through the abbreviated or full rulemaking procedures, it may be modified thereafter through the single meeting notice procedure if (1) modification is proposed for the same purpose as the original measure; and (2) impacts of the modification are within the scope of the impacts analyzed when the measure was originally classified as routine. Analysis need not be repeated when the measure is subsequently modified if the Council determines impacts do not differ substantially from original analysis. The Council may change a routine classification for an action without following any pre-specified procedure.

Any measure designated as routine for one specific species, species group, or gear type may not be treated as routine for a different species, species group, or gear type without first having been classified as routine through the rulemaking process.

To facilitate this process, the CPSMT will make recommendations to the Council and agencies regarding assessment or management needs.

The following measures are classified as routine measures at the outset of this FMP:

1. Reallocation of surplus incidental HG to the directed fishery (all species and fishery segments).
2. Inseason changes in the incidental catch allowance.
3. Specification of annual HGs, ACLs, ACTs, or quotas.

~~2.1.2 Point of Concern Framework~~

~~The point of concern process is the Council's primary tool (along with setting HGs, ACLs, ACTs, or harvest quotas) for exercising resource stewardship responsibilities. The process is intended to foster continuous and vigilant review of Pacific Coast CPS stocks and fisheries. The process is also to prevent overfishing or any other resource damages. The CPSMT will monitor the fishery throughout the year, and account for any new information on status of each species or species group to determine if a resource conservation or ecological issue exists. Point of concern criteria are intended to assist the Council in determining when a focused review on a particular species is warranted and may require implementation of specific management measures. This framework provides the Council authority to act based solely on a point of concern. Thus, the Council may act quickly and directly to address resource conservation or ecological issues. In conducting this review, the CPSMT will utilize the most current catch, effort, abundance and other relevant data from the fishery.~~

~~In the course of the continuing review, a "point of concern" occurs when one or more of the following is found or expected:~~

- ~~1. Catch is projected to exceed the current ABC's, HGs, ACLs, ACTs, or the harvest quota.~~
- ~~2.1. Any adverse or significant change in the biological characteristics of a species (age composition, size composition, age at maturity, or recruitment) is discovered.~~
- ~~3.1. An overfishing condition appears to be imminent or likely within two years.~~
- ~~4.1. Any adverse or significant change in ecological factors such as the availability of CPS forage for dependent species or in the status of a dependent species is discovered.~~
- ~~5.1. Developments in a foreign fishery occur that affect the likelihood of overfishing of CPS.~~
- ~~6.1. An error in data or a stock assessment is detected that significantly changes estimates of impacts due to current management.~~
- ~~7.1. Control rule (harvest policy) parameters or approaches require modification.~~

~~Once a point of concern is identified, the CPSMT will evaluate current data to determine if a resource conservation or ecological issue exists and will provide its findings in writing at the next scheduled Council meeting. If the CPSMT determines a resource conservation or ecological issue exists, it will provide its recommendation, rationale, and analysis for appropriate management measures that will address the issue.~~

~~Direct allocation of a resource between different segments of a fishery is, in most cases, not the appropriate response to a resource conservation or ecological issue. Council recommendations to directly allocate the resource will be developed according to criteria and processes in the socioeconomic framework described in Section 2.1.3 and Section 2.1.4.~~

~~After receiving the CPSMT report, the Council will take public testimony and, if appropriate, recommend management measures to the NMFS Regional Administrator accompanied by supporting rationale and analysis of impacts. The Council analysis will include a description of (1) resource conservation or ecological issues consistent with FMP objectives; (2) likely impacts on other management measures and other fisheries; (3) socioeconomic impacts; and (4) costs and benefits to commercial and recreational segments of the CPS fishery. The recommendation will explain the urgency in implementation of the measure(s), if any.~~

~~The NMFS Regional Administrator will review the Council's recommendation and supporting information and will follow appropriate implementation processes described in this FMP, following public notice and comment. If the Council contemplates frequent adjustments to the recommended measures, it may classify them as "routine" through the appropriate process described in Section 2.1.1.~~

~~If the NMFS Regional Administrator does not concur with the Council's recommendation, he/she will notify the Council in writing of the reasons for rejection. Nothing prevents the Secretary from exercising authority to take emergency action under Section 305 (e) and (d) of the MSA. Nothing precludes or limits Council access to the point-of-concern framework.~~

~~2.1.3 The Socioeconomic Framework~~

~~Non-biological issues may arise which require the Council to recommend management actions to address certain social or economic conditions in the fishery or to achieve FMP objectives. Resource allocation, fishing seasons, or landing limits based on market quality and timing, safety measures, and prevention of gear conflicts are examples of possible management issues with a social or economic basis. Actions that~~

~~are permitted under this framework include all categories of actions authorized under the point-of-concern framework with the addition of direct resource allocation and access limitation measures.~~

~~If the Council concludes that management action is necessary to address a social or economic issue, it will prepare a report containing the rationale supporting its conclusion. The report will include proposed management measures, a description of viable alternatives, and analyses addressing (1) achievement of FMP goals and objectives, (2) likely impacts on other fisheries and other management measures, (3) sociobiological impacts, (4) socioeconomic impacts, and (5) costs and benefits to the CPS fishery.~~

~~The Council, following review of the report, supporting data, public comment and other relevant information, may recommend management measures to the NMFS Regional Administrator accompanied by relevant background data, information, and public comment. The recommendation will explain the urgency in implementation of the measure, if any.~~

~~The NMFS Regional Administrator will review the Council's recommendation, supporting rationale, public comments and other relevant information and, if it is approved, will undertake the appropriate method of implementation. Rejection of the recommendation will be explained in writing.~~

~~Procedures specified in this FMP do not affect authority of the Secretary to take emergency regulatory action under Section 305(e) or (d) of the MSA.~~

~~If conditions warrant, the Council may designate a management measure developed and recommended to address social and economic issues as a routine management measure, provided that the criteria and procedures in Section 2.1.1 are followed.~~

2.2.21.4 *Allocation*

In addition to other requirements in this FMP, the Council will consider the following factors when considering direct allocation of the resource:

1. Present participation in and dependence on the fishery, including alternative fisheries.
2. Historical fishing practices in, and historical dependence on, the fishery.
3. Economics of the fishery.
4. Agreements or negotiated settlements between the affected participants in the fishery.
5. Potential biological impacts on any species affected by the allocation.
6. Consistency with the MSA national standards.
7. Consistency with the goals and objectives of this FMP.

Modification of a direct allocation cannot be designated as "routine" unless the specific criteria for the modification has been established in the regulations.

2.2.31.5 *Procedures for Specifying OFL, MSY, ABC, and Optimum Yield*

As data become available, improve, or are updated, OFL or MSY, ABC control rules, and OY specifications or procedures for setting OFL or MSY, ABC control rules or OY specifications may need to be modified. Changes and additions to these formulas are authorized by the FMP and may be accomplished through the

point-of-concern mechanism or the socioeconomic mechanism.

2.2.41.6 *Management Agreements with Other Nations*

In the event that a management agreement between the U.S. and a foreign nation concerning CPS occurs, this FMP authorizes changes or modifications to any management measure through Council processes described herein.

2.2.51.7 *Management Measures to Protect Non-coastal Pelagic Species*

CPS fishing activities may directly impact certain non-CPS species including birds, marine mammals, and other fishes. This FMP authorizes implementation of measures to control CPS fishing to support conservation objectives identified under overfishing definitions adopted by the Council, the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), or other applicable law, while minimizing disruption of the CPS fishery. Any measures described in this FMP may be employed to control fishing impacts on non-CPS species. However, allocation may not be the primary intention of any such regulation.

The process for implementing and adjusting such measures may be initiated at any time under the point of concern or socioeconomic frameworks. In addition, measures to protect non-CPS may be designated as routine as described in Section 2.24.1, which will allow adjustment at a single meeting based on relevant information available at the time if (1) modification is proposed for the same purpose as the original measure, and (2) impacts of the modification are within the scope of the impacts analyzed when the measure was originally classified as routine.

Generally, the Council will initiate the process of establishing or adjusting management measures when a non-CPS resource problem is identified, and it has been determined that CPS fishing regulations will reduce the total impact on that species or stock. It is anticipated this will generally occur when a state or Federal resource management agency (such as the U.S. Department of the Interior, NMFS, or a state fishery agency) presents the Council with information substantiating its concern for a particular species. The Council will review the information and refer it to the SSC, CPSMT or other appropriate technical advisory group for evaluation. If the Council determines that management measures may be necessary to address requirements of the ESA, MMPA, international agreements, or other relevant Federal law or policy, it may implement appropriate management measures in accordance with the procedures identified in Section 2.1. The intention of the measures may be to share conservation burdens while minimizing disruption of the CPS fishery, but under no circumstances may the intention be simply to provide more fish to a different user group or to achieve other allocation objectives.

2.32 *Other Management Measures*

2.32.1 *Generic*

These management measures apply to all vessels participating in the CPS fishery.

2.32.1.1 *Observers*

All fishing vessels operating in this management unit, including catcher/processors, at-sea processors, and vessels that harvest in Washington, Oregon, or California and land catch in another area, may be required to accommodate NMFS certified observers on board to collect scientific data. An observer program will be considered only for circumstances where other data collection methods are deemed insufficient for management of the fishery. Implementation of any observer program will be in accordance with

appropriate procedures outlined under this framework.

As determined by the NMFS Regional Administrator, there may be a need for observers on at-sea processing vessels to collect data normally collected at shore-based processing plants. Processing vessels must accommodate on-board observers and may be required to provide the NMFS certified observers prior to issuance of any required Federal permits. Observers are required on foreign vessels operating in U.S. waters.

2.32.1.2 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).

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 D.

Definition of Essential Fish Habitat for CPS

The CPS fishery includes four finfish (Pacific sardine, Pacific ~~chub~~-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.

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 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. Appendix D provides a more detailed description of this variability.

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 ~~below~~ 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.

Management Measures to Minimize Adverse Impacts on EFH from Fishing

The Council may use any of the following management measures to minimize adverse effects on EFH from fishing, if there is evidence that a fishing activity is having an identifiable adverse effect on EFH. Currently, there is not evidence that a fishing activity is having an identifiable adverse effect on CPS EFH. Such management measures shall be implemented under the point-of-concern framework as described in Section 2.1.12.

- Fishing Gear Restrictions
- Time/Area Closures
- Harvest Limits, or other applicable measures

In determining whether it is practicable to minimize an adverse effect from fishing, the Council should consider whether, and to what extent, the fishing activity is adversely impacting EFH, including the fishery; the nature and extent of the adverse effect on EFH; and whether management measures are practicable. This determination should take into consideration the long- and short-term costs and benefits to the fishery and EFH, along with other appropriate factors, consistent with National Standard 7 (conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication).

2.32.1.3 Vessel Safety Considerations

The Council will consider and may provide, after consultation with the U.S. Coast Guard and persons utilizing the fishery, temporary adjustments for access to the fishery by vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of the vessels.

2.32.1.4 Limited Entry

This FMP authorizes changes and modifications to any effort limitation programs established herein and development of additional effort limitation programs. Changes may include, but are not limited to, requirements for obtaining, maintaining, and renewing permits in any effort limitation system.

2.32.2 Domestic Commercial Management Measures

All measures, unless otherwise specified, apply to all domestic vessels.

2.32.2.1 Permits

Federal permits may be required for individuals or vessels that harvest CPS, and for individuals or facilities (including vessels) that process CPS or purchase live CPS. In determining whether to require a harvesting or processing permit, and in establishing the terms and conditions for issuing a permit, the Council may consider any relevant factors including whether a permit:

1. Will enhance the collection of biological, economic, or social data.
2. Will provide better enforcement of laws and regulations, including those designed to ensure conservation and management and those designed to protect consumer health and safety.
3. Will help achieve the goals and objectives of the FMP.
4. Will help prevent or reduce overcapacity in the fishery.
5. May be transferred, and under what conditions.

Separate permits or endorsements may be required for harvesting and processing, or for vessels or facilities based on size, type of fishing gear used, species harvested or processed, or such other factors that may be appropriate. The permits and endorsements are also subject to sanctions, including revocation, as provided by Section 308 of the MSA.

In establishing a permit requirement, the Council will follow the rulemaking procedures as described in Section 2.24.

2.32.2.2 Permit Revocation and Reinstatement

This FMP allows National Oceanic and Atmospheric Administration (NOAA), under procedures of 15 CFR Part 904, to revoke or suspend any Federal LE permit issued under authority of the CPS FMP.

2.32.2.3 Catch Restrictions

This FMP authorizes the commercial and recreational harvest of CPS and provides for limiting the harvest of CPS managed under this plan. Catch restrictions may be modified under the framework provisions.

2.32.2.4 Prohibited Species

This FMP does not authorize the taking, retaining, or possessing of any species by CPS gears, if such taking or possessing is prohibited by other state or Federal regulations. Species identified as prohibited must be returned to the sea as soon as practical with a minimum of injury after allowing for sampling by an observer, if any. Exceptions may be made for recovery of tagged fish.

This FMP authorizes the designation of other prohibited species in the future, or the removal of a species from this classification, consistent with other applicable law for that species.

2.32.2.5 Gear Restrictions

This FMP authorizes the use of net gear, hook-and-line, pots (traps), longlines, and any other type of gear as legal gear for the commercial harvest of CPS, unless such gear is specifically prohibited by state law.

Implementation and modification of specific management measures regarding gear, such as definitions of legal gear, mesh size restrictions, gear marking, or other gear restrictions are authorized by this FMP. Gear restrictions may be established, modified, or removed under the point-of-concern or socioeconomic frameworks. Any changes in gear regulations should be scheduled to minimize costs to the fishing industry, insofar as this is consistent with achieving the goals of the change.

2.32.2.6 Closed Fishing Areas

Currently, there are certain areas closed to commercial round-haul fishing or fishing for reduction processing. Those areas were originally closed by the State of California to avoid commercial fishing conflicts with sport fisheries and reduce potential impacts on sport fish and salmon. This FMP authorizes the issuance of EFPs in Section 2.32.8 for fishing in closed areas consistent with the goals and objectives of the FMP.

Closed areas shall be implemented or changed through the procedures described in Section 2.1 and 2.2.

2.32.2.7 Reporting Requirements

This FMP authorizes domestic annual harvest (DAH) survey, EFP application, and foreign vessel reporting and records keeping requirements. This FMP authorizes other domestic vessel permit applications and reporting requirements in the future.

Other Reporting and Record Keeping Requirements

Catch, effort, biological, and other data necessary for implementation of this FMP will continue to be collected by the states of Washington, Oregon, and California under existing state data collection provisions. Federal reporting requirements, such as logbooks, will be implemented only when data collection and reporting systems operated by state agencies fail to provide the Secretary with statistical information for adequate management. Any special reporting requirement should be imposed only if it is expected to enhance the Council's and NMFS' ability to manage the CPS fishery more effectively.

Conditions may develop in the CPS fishery that make current state reporting requirements insufficient. It is possible that delays in obtaining catch data or missing catch data could affect stock assessments or other management efforts. To address these potential future problems, the FMP authorizes implementation of Federal reporting requirements in addition to those of the various states. The purpose of these measures would be to enhance the Council's ability to manage CPS stocks effectively. Additional reporting

requirements would be developed under framework management procedures and announced in the *Federal Register*.

2.32.2.8 Vessel Identification

The FMP authorizes vessel identification requirements which may be modified as necessary to facilitate enforcement and vessel recognition.

2.32.3 Domestic Recreational

Measures described in this section apply to domestic recreational fisheries only, although most measures could be used to manage foreign recreational fisheries as well.

2.32.3.1 Permits

Washington, Oregon, and California have state laws concerning recreational licenses and permits. In the event that Federal licenses or permits become necessary, they may be required under this FMP.

2.32.3.2 Catch Restrictions

This FMP authorizes establishment of catch restrictions on the recreational fishery consistent with FMP goals and objectives and national standards established by the MSA.

2.32.3.3 Gear Restrictions

There are no Federal restrictions on legal recreational gear for CPS. Existing state regulations apply in Washington, Oregon, and California. This FMP authorizes Federal recreational regulations for CPS.

2.32.4 Domestic Vessels in a Joint Venture

U.S. vessels operating in joint ventures on the west coast are domestic vessels and traditionally have been treated the same as U.S. vessels delivering to shore facilities. However, conditions in the fishery could warrant separate treatment in the future. Although all U.S. vessels have been subject to the same regulations, joint venture catcher operations may be affected indirectly by restrictions (such as closed areas) placed on the foreign processing vessels that receive U.S. catch at sea.

2.32.5 Foreign Vessels in a Joint Venture or Foreign Fishery

These measures apply to foreign vessels that process fish taken by U.S. catcher-boats under joint venture processing (JVP) or to foreign vessels that operate in a fishery directed at a species for which there is a total allowable level of foreign fishing (TALFF). The CPS FMP provides authority to establish, modify or remove future regulations including, but not limited to, HGs, harvest quotas, seasons, area closures, incidental harvest restrictions, trip and landing limits, and gear restrictions.

2.32.5.1 Permits

All foreign vessels operating in this management area shall have on board a permit issued by the Secretary pursuant to the MSA.

2.32.5.2 Target Species

A foreign nation may conduct joint venture operations only for species for which there is a JVP and only

using boats with appropriate permits. Directed fishing is allowed only for species for which the foreign nation has received an allocation of TALFF.

2.32.5.3 Incidental Catch

Incidental catch refers to CPS which are unavoidably caught while fishing for another species. It is recognized that incidental harvest of domestically fully utilized CPS is unavoidable in joint venture and foreign fisheries. Minimal incidental allowances consistent with the status of the stocks and the efficiency of the joint venture or foreign fisheries will usually be allowed. These incidental allowances are not to be considered as surpluses to domestic processing needs and are allowed only to provide for full utilization of the species targeted in the joint venture or foreign fishery.

Allowances for incidental harvest in joint ventures or foreign fisheries may be percentages or some other quantity at the Council's discretion. Incidental allowances may be changed at any time during the year, but are published at least annually, concurrent with the annual specifications of JVP.

The Council may modify incidental catch allowances inseason to reflect changes in the condition of the resource and performance of the U.S. industry. The Council will consider public testimony and consider the following factors before establishing or changing incidental allowances: (1) observed catch rates in any previous joint venture or foreign fishery; (2) current estimates of relative abundance and availability of species caught incidentally; (3) ability of the foreign vessels to take the JVP or TALFF; (4) past and projected foreign and U.S. fishing effort; (5) status of stocks; (6) impacts on the domestic industry; and (7) other relevant information. Inseason changes will be made as a routine management measure.

2.32.5.4 Prohibited Species

Prohibited species means salmonids or any species of fish that a joint venture or foreign vessel is not authorized to retain. Prohibited includes fish received in excess of any authorization, landing limit, or HG. These species must be immediately returned to the sea with a minimum of injury after allowing for sampling by an observer, if any. This FMP authorizes the designation of other prohibited species in the future, or the removal of a species from this classification if consistent with the applicable law for that species.

2.32.5.5 Season and Area Restrictions

There is no season restriction unless otherwise specified according to this FMP. There is no area restriction, unless otherwise specified according to this FMP. Joint venture and foreign fisheries for CPS may not be conducted within the LE area south of 39° N latitude.

Season and area restrictions for foreign vessels operating in a joint venture or foreign fishery may be established, modified, or removed at any time during the year in accordance with the procedures in Sections 2.1.12 and 2.1.23 or by foreign vessel permit conditions.

2.32.5.6 Reporting and Record Keeping Requirements

Foreign nations receiving U.S. harvested fish in a joint venture or participating in a foreign fishery are required to submit detailed reports of fishing effort, location, amount, and disposition by species or species group, and transfer of fish or fish products, as needed for monitoring and management of the fishery. Reports may be required at specified time intervals. The NMFS Regional Administrator may require daily reports when a specified fraction of JVP, TALFF, or incidental allowance is reached. In addition, each country may be required to report arrival, departure, and positions of each of its vessels, as specified under the regulations and permit conditions, as needed for monitoring fleet deployment. Logbooks may be

required to fulfill fishery conservation, management, and enforcement purposes of the MSA. These logs may include, but are not limited to, communications logs, transfer logs, or daily joint venture logs with haul-by-haul and daily receipt data, effort, and production information.

2.32.5.7 Dumping

Foreign and other vessels are prohibited from dumping pollutants and fishing gear which would degrade the environment or interfere with domestic fishing operations.

2.32.5.8 Fishery Closure

A joint venture or directed foreign fishery shall cease each year when, (1) the JVP or TALFF is reached; (2) the maximum incidental catch allowance for that nation of any species or species group is reached; (3) the overall HG or harvest quota for the allocated species is reached; (4) the applicable open season is ended; or (5) as necessary for resource conservation reasons under the point-of-concern mechanism.

2.32.5.9 Observers

Observers shall be placed on each foreign vessel while it is operating in a foreign or joint venture fishery, as provided by Title II of the MSA. The law provides for the following exceptions to this requirement:

1. If observers are aboard motherships of a mothership/catcher vessel fleet.
2. If the vessel is in the EEZ for such a short time that an observer would be impractical.
3. If facilities for quartering an observer are inadequate or unsafe.
4. For reasons beyond the control of the Secretary, an observer is not available.

2.32.5.10 Other Restrictions

The Secretary may impose additional requirements for the conservation and management of fishery resources covered by the vessel permit or for national defense or security reasons. These restrictions include, but are not limited to, season, area, and reporting requirements.

The highest priority of this FMP is to provide for conservation of the resource. Any restriction on the joint venture fishery may be modified under the point-of-concern mechanism for resource conservation reasons.

2.32.6 Foreign Recreational

Foreign recreational fishing refers to any fishing from a foreign vessel not operated for profit or scientific research, and not involved in the sale, barter, or trade of any part of the catch. This FMP authorizes establishment of catch restrictions on the foreign recreational fishery which are consistent with the goals and objectives of this FMP and the national standards established by the MSA.

2.32.7 Limited Entry

Research and monitoring programs may need to be developed and implemented for the CPS fishery so that information required in an LE program is available. Such data should indicate the character and level of participation in the fishery, including but not limited to: (1) investment in vessel and gear; (2) the number and type of units of gear; (3) the distribution of catch; (4) the value of catch; (5) the economic returns to the participants; (6) mobility between fisheries; (7) purchase or sale prices of LE permits; and (8) various

social and community considerations.

2.32.8 Exempted Fishing

"Exempted fishing" is defined to be fishing practices that are new to the fishery or not allowed under the FMP. Under this FMP, the NMFS Regional Administrator may authorize the targeted or incidental harvest of CPS for experimental or exploratory fishing that would otherwise be prohibited. The NMFS Regional Administrator may restrict the number of experimental permits by total catch, time, or area. The NMFS Regional Administrator may also require any level of industry-funded observer coverage for these experimental permits. EFP proposals targeting management unit species or CPS EC species will be subject to the protocol for EFPs for CPS Fisheries (Council Operating Procedure 23). EFP proposals targeting EC species shared between all four FMPs, including the CPS FMP, will be subject to the protocol for Shared EC Species (Council Operating Procedure 24). Exempted fisheries for euphausiids (krill) will not be considered.

Exempted fisheries are expected to be of limited size and duration and must be authorized by an EFP issued for the participating vessel in accordance with the criteria and procedures specified in 50 CFR §600.745. The duration of EFPs will ordinarily be one year. Permits will not be renewed automatically. An application must be submitted to the Regional Administrator for each year. A fee sufficient to cover administrative expenses may be charged for EFPs. An applicant for an EFP need not be the owner or operator of the vessel(s) for which the EFP is requested as long as the proposed activity is compatible with LE and other management measures in the FMP.

This FMP authorizes mandatory data reporting and mandatory on-board observers with EFPs. Installation of vessel monitoring units aboard vessels with EFPs may be required.

Nothing in this FMP is intended to exclude or to limit use of CPS, markets, or processing methods as long as the process in question is compatible with measures and intentions of this FMP.

Priorities for issuing EFPs are as follows:

1. Domestic boats delivering to domestic processors and domestic factory trawlers (with equal priority).
2. Domestic catcher-boats delivering to a foreign offshore processor.

Boats already involved in developing a fishery for an underutilized species (i.e., boats with a catch history or previous EFP) should receive highest priority in applying for and renewing permits.

2.32.9 Other Fees and Permits

Nothing in this FMP is intended to exclude use of additional fees or permits in the future as long as the fee or permit is consistent with applicable law, management measures, and intent of this FMP. It may, for example, become desirable to issue permits for processing CPS in onshore plants or processing vessels offshore. It may be desirable to charge fees sufficient to cover administrative costs of issuing additional types of permits. Changes in requirements for obtaining, maintaining, and renewing permits are authorized.

2.43 Scientific Research

Nothing in this FMP is intended to inhibit or prevent any scientific research involving CPS which is acknowledged by the Secretary through procedures set out in 50 CFR §600.745.

Proposed activity is not scientific research unless it is submitted in writing to the Secretary in the form of a research proposal which addresses all of the factors below. An activity may be acknowledged as scientific research if its primary objective, purpose, or product is the acquisition of data, information, or knowledge as determined by consideration of all of the following factors:

1. The proposed program will result in information useful for scientific or management purposes.
2. The application of existing knowledge alone is insufficient to solve the scientific or management subject or problem presented by the scientific research proposal.
3. Facts/data/samples will be collected or observed and analyzed in a scientifically acceptable manner and the results will be formally prepared and available to the public.
4. Recognized scientific experts, organizations, or institutions with expertise in the field or subject matter area are conducting, sponsoring or are otherwise affiliated with the activity.

Secretarial Acknowledgment of Scientific Research

If the Secretary agrees that an activity constitutes scientific research involving CPS, a letter of acknowledgment should be issued to the applicant and operator or master of the vessel conducting the scientific research. The letter will include information on the purpose, scope, location, and schedule of the acknowledged activities. Any activities not in accordance with the letter of acknowledgment should be subject to all provisions of the MSA and its implementing regulations. The Secretary should transmit copies of letters of acknowledgment to the Council, state or Federal administrative and enforcement agencies to ensure they are aware of the research activities.

CPS taken under the scientific research exclusion may be sold to offset all or part of the cost of carrying out the research plan including costs associated with operating the research vessel.

2.54 Restrictions on Other Fisheries

For each non-CPS fishery, a reasonable limit on the incidental CPS catch may be established that is based on the best available information. The objectives of restrictions on other fisheries under this framework are to:

1. Minimize discards in the non-CPS fishery by allowing retention and sale, thereby increasing fishing income.
2. Discourage targeting on CPS by the non-CPS fleet.

Incidental limits may be imposed or adjusted in accordance with appropriate procedures described in this FMP. The Secretary may accept or reject but not substantially modify the Council's recommendations.

2.65 Procedures for Reviewing State Regulations

This FMP acknowledges that state regulations are a fundamental part of CPS management. All existing state regulations at the time of implementation of this plan are consistent with this FMP.

This FMP establishes a review process by which any state may obtain a determination that its regulations are consistent with the FMP and the national standards. As necessary, the Council may also recommend to NMFS that duplicate or different Federal regulations be implemented in the EEZ. While the Council retains the authority to recommend Federal regulations be implemented in the EEZ, the preference is to continue to rely on state regulations in that area as long as they are consistent with the FMP.

While states are not required to submit regulations which they wish to apply in the EEZ to the Council for a consistency determination, regulations which have not received a consistency determination run the risk of being declared inconsistent and invalid if challenged in a state law enforcement proceeding. The Council invites submission of all present and future state fishery regulations relating to the harvest of species managed under this FMP which are to apply in the EEZ.

Review Procedure

Any state may propose that the Council review a particular state regulation for the purpose of determining its consistency with the FMP and the need for complementary Federal regulations. Although this procedure is directed at the review of new regulations, existing regulations affecting the harvest of CPS managed by the FMP may also be reviewed under this process. The state making the proposal will include a summary of the regulation in question and concise arguments in support of consistency.

Upon receipt of a state's proposal, the Council may make an initial determination whether or not to proceed with the review. If the Council determines that the proposal has insufficient merit or little likelihood of being found consistent, it may terminate the process immediately and inform the petitioning state in writing of the reasons for its rejection.

If the Council determines sufficient merit exists to proceed with a determination, it will review the state's documentation or prepare an analysis considering, if relevant, the following factors:

1. How the proposal furthers or is not otherwise consistent with the objectives of the FMP, the MSA, and other applicable law.
2. Likely effect on or interaction with any other regulations in force for the fisheries in the area concerned.
3. Expected impacts on the species or species group taken in the fishery sector being affected by the regulation.
4. Economic impacts of the regulation, including changes in catch, effort, revenue, fishing costs, participation, and income to different sectors being regulated as well as to sectors which might be indirectly affected.
5. Any impacts in terms of achievement of HGs or harvest quotas, maintaining year-round fisheries, maintaining stability in fisheries, prices to consumers, improved product quality, discards, joint venture operations, gear conflicts, enforcement, data collection, or other factors.

The Council will inform the public of the proposal and supporting analysis and invite public comments before and at the next scheduled Council meeting. At its next scheduled meeting, the Council will consider public testimony, public comment, advisory reports, and any further state comments or reports, and determine whether or not the state regulation is consistent with the FMP and whether or not to recommend implementation of complementary Federal regulations or to endorse state regulations as consistent with the FMP without additional Federal regulations.

If the Council recommends the implementation of complementary Federal regulations, it will forward its recommendation to the NMFS Regional Administrator for review and approval. The NMFS Regional Administrator will publish the proposed regulation in the *Federal Register* for public comment, after which, if approved, he/she will publish final regulations as soon as practicable. If the Regional Administrator disapproves the proposed regulations, he/she will inform the Council in writing of the reasons for disapproval.

2.76 Standardized Bycatch Reporting Methodology

As required under ~~Magnuson-Stevens Act~~ MSA, all FMPs must “establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery” (16 U.S.C. § 1853(a)(11)). ~~Standardized bycatch reporting methodology (SBRM)~~ is an established, consistent procedure or procedures used to collect, record, and report bycatch data in a fishery, which may vary from one fishery to another. This section describes the SBRM for CPS fisheries and how it meets the purpose of SBRMs.

Characteristics of Bycatch

Bycatch in CPS fisheries is typically low due to the characteristics of the targeted species and the fishing gears. For example, CPS finfish typically school with similarly sized fish and are harvested above the thermocline (not associated with substrate). CPS vessels fish with roundhaul gear (purse seine or lampara nets). Roundhaul fishing tends to reduce unintentional catch, primarily because the fishermen target specific schools of CPS finfish and market squid, and the net can be adjusted when fishing in shallow water to reduce bycatch of benthic species. The most common catch of non-target species in a CPS fishery are other CPS species, which are typically sold and therefore are not bycatch. Various reviews of catch in CPS fisheries have confirmed that bycatch of non-CPS is extremely low.

The SBRM for CPS fisheries, as established under Amendment 9, is a reflection of the characteristics of bycatch in the fishery and findings from analyses during the development of Amendment 9 that showed bycatch was sufficiently minimized through existing management measures and regulations, and that SBRM could be accomplished cost-effectively through required state programs. The CPS SBRM consists of a suite of reporting and monitoring programs required by the states of California, Oregon, and Washington including logbooks, fish landing receipts, shorebased/dockside sampling, and observer programs for newly developing fisheries. Of these, fish landing receipts are mandated by all three states and apply uniformly to all CPS landings whereas the other programs may vary by fishery and state depending on need.

Data Uncertainty

Additionally, the CPS FMP authorizes federal observers as described in Section 2.32.1.1. This regulation was added to the FMP through Amendment 9 as part of the FMP’s SBRM. Based on the data collected through historical observing programs, bycatch in CPS fisheries is known with reasonable certainty to be low, with the majority of non-target species caught in CPS fisheries being other CPS that are incidental catch rather than bycatch. Hence, CPS fisheries are not currently subject to having mandatory observers aboard. In addition, Washington and Oregon state regulations authorize observers and states may conduct

observer programs.

Feasibility Check and Data Use

These reporting and monitoring programs have been operating efficiently for many years and have shown to be feasible over time, as evidenced by their continued operation and use of the resulting data. The data from these programs are used each year by the Council, usually in the annual SAFE document, to assess the type and amount of bycatch in CPS fisheries. There is relatively low uncertainty around the suite of data from these programs because they have been ground-truthed by other more intensive data collection methods, namely observer programs in the 1990s and early 2000s, that were discontinued due to findings that bycatch in CPS fisheries was indeed low.

3.0 LIMITED ENTRY

This FMP establishes an LE program for CPS finfish including northern anchovy, Pacific ~~(chub)~~ mackerel, jack mackerel, and Pacific sardine landed south of 39° N latitude. Details on the purpose and analysis of the LE capacity goal and permit transferability can be found in Amendment 10.

3.1 Problem Addressed by Limited Entry

Prior to implementation of the FMP, vessels participating in the CPS finfish fishery were capable of harvesting more CPS finfish than available under current or likely future biomass conditions. Fisheries characterized by excess harvesting capacity are described as overcapitalized in terms of the number of vessels, and the amount of gear and equipment devoted to harvesting. As fisheries become overcapitalized, harvesting costs increase while catches remain the same. This situation represents an economically inefficient use of society's productive resources, and causes several problems for managers and the fishing industry when abundance declines and catches are reduced. As harvest capacity in the fisheries increases, problems arising from the need for more restrictive management measures and resolution of allocation issues become more acute. No relief from these problems will occur if harvest capacity continues to rise.

It was estimated that 640 vessels landed CPS finfish during the period January 1, 1993 through November 5, 1997. Forty-one of these vessels, six percent, accounted for more than 95 percent of finfish landings for the five-year period (Amendment 8, Appendix B, Table 3.8.7-1). Available information at the time indicated that present participants could harvest at least as much CPS finfish as would be available under conditions of greater availability. ~~At the time, e~~Capacity during the 1993 to 1997 period was estimated to be as much as 20 percent greater than the combined MSY for anchovy, Pacific (chub) mackerel, and sardine (about 400,000 mt per year).^{1/} ~~At the time, E~~experience in the fishery and some crude calculations indicate that about 75 vessels would have sufficient harvesting capacity to take almost all of the CPS finfish likely to ever be available.

In addition to ~~current~~ CPS finfish participants, that were active during the 1993-1997 period, it was expected that newcomers awere likely to be attracted to the fishery, because of the expanding sardine biomass and squid fishery, and as competition in other Pacific Coast fisheries ~~becomes more intense~~intensified. In the latter instance, nearly all groundfish stocks ~~are now were then~~ fully harvested by domestic fishers in the Pacific Coast groundfish fishery. Potential participants in the CPS finfish fishery then consisted of fishers leaving other West Coast and North Pacific fisheries that had ~~ve~~ grown increasingly more restrictive and

^{1/} The estimate 400,000 mt per year is the sum of estimated MSY for each stock reduced by a crude estimate of the fraction of the stock in U.S. waters. It is unlikely that all stocks would be abundant at the same time and that 400,000 mt of catch would be available in any one year.

overcrowded relative to available CPS harvests.

In the Pacific Coast CPS finfish fishery, excess harvest capacity ~~was expected to~~ likely ~~to~~ result in an increasing number and complexity of regulations. ~~Accordingly, the Council will face~~ increased pressure to balance the conflicting need to protect the resource with the need to provide sufficient allowable catch to sustain the fishery.

~~It was recognized that~~ ~~an~~ increased number and complexity of regulations have many adverse impacts in such areas as fleet costs, resource utilization, safety, enforcement costs and effectiveness. ~~Moreover, there is a point beyond which additional regulations, which interfere with~~ ~~day-to-day~~ ~~day-to-day~~ vessel operations (e.g., trip limits or mesh size regulations), will not improve the Council's ability to accomplish its management goals. Pressures on industry arise not only from management measures which restrict operations, but also from increased competition for the allowable catches among larger numbers of vessels.

For these reasons, the FMP established an LE fishery south of 39° North latitude (as described at Section ~~3.45.2~~). ~~Operational aspects of the LE fishery are described in subsequent sections.~~

3.2 Goals and Objectives for Finfish Limited Entry

The goals and objectives for this FMP are presented in Section ~~1.65~~. The most important of these in the context of LE are:

- A. Promote efficiency and profitability in the fishery.
- B. Achieve OY.
- C. Accommodate existing fishery segments.
- D. Use resources spent on management of CPS efficiently.

Not all these objectives are complementary. ~~The challenge is to create an LE program which strikes a balance between increasing net returns from the fishery, achieving OY, accommodating participation by those with substantial investments in the fishery, and efficiently using management resources.~~

~~3.32.1~~ Capacity Goal

The purpose of the capacity goal is to ensure fishing capacity in the CPS LE fishery is in balance with resource availability. ~~The LE fleet capacity goal is 5,650.9 mt as represented by cumulative~~ ~~gross tonnage~~ ~~(GT)~~ of the LE fleet of vessels.

This level of capacity results in a larger, diverse CPS finfish fleet, which also relies on other fishing opportunities such as squid and tuna, with normal harvesting capacity equal to the long-term expected aggregate finfish target harvest level, approximately 110,000 mt, and with physical capacity available to harvest peak period amounts of finfish, 275,000 mt. ~~The~~ ~~current~~ ~~(June 2002)~~ fleet of 65 vessels satisfies this goal. ~~Estimated normal harvesting capacity for the~~ ~~current~~ ~~(June 2002)~~ fleet ranged from 60,000 mt to 111,000 mt per year; physical harvesting capacity ranged from 361,000 to 539,000 mt per year. ~~Total calculated GT for the~~ ~~current~~ ~~(June 2002)~~ fleet ~~was~~ 5,650.9 mt. ~~Therefore, 5,650.9 mt of GT represents the current fleet capacity goal.~~

~~3.3~~ ~~Achievement of Goals and Objectives and Need for Additional Measures to Reduce Capacity~~

The LE program for CPS finfish adopted under this amendment to the northern anchovy FMP will not in

itself immediately accomplish the goals and objectives the Council has established for the fishery. It is a first step that may slow or prevent the worsening of conditions which impede the Council from achieving the overall goals and objectives for the fishery. -The LE fleet size and transferability provisions represent a balance between the LE goals of accommodating existing fishery participants (goal C above) and promoting efficiency and profitability in the fishery (goal A). -Establishment of this LE system will provides a starting point for any future programs which may be necessary to further reduce harvest capacity.

3.3.1 *Maintaining the Capacity Goal*

Conditions and effects of transferability will be reevaluated periodically in conjunction with achievement of the capacity goal, and objectives of the FMP. -The Council established a trigger for reevaluation based on an overall change in fleet GT of 5 percent. -The CPSMT will evaluate capacity in the CPS finfish fishery relative to the capacity goal every two years and starting in 2003. In report in the annual CPS SAFE, (began in 2003) the CPSMT will include a report to the Council on the status of fleet capacity and, if necessary, make recommendations regarding the capacity goal and permit transferability.

~~3.4 Nature of the Interest Created~~

~~CPS LE permits confer a privilege to participate in the West Coast CPS finfish fishery in accordance with the LE system established under this FMP and implementing regulations, or any future amendment to the FMP and implementing regulations. Future amendments to the FMP may modify or even abolish the LE system. The permits are also subject to sanctions including revocation, as provided by the MSA, 16 USC 1858(g) and 15 CFR part 904.~~

3.45 Scope of Limited Entry

3.45.1 *Species within the Scope of Limited Entry*

The provisions of this chapter apply only to CPS finfish, including northern anchovy, Pacific ~~(chub)~~ mackerel, jack mackerel, and Pacific sardine.

3.45.2 *Geographic Scope of Limited Entry*

The provisions of this chapter establish a CPS finfish LE program for the fishery south of 39° N latitude (approximately Point Arena, California). -In the context of LE, fishing for and landing CPS finfish south of 39° N latitude is defined as landing CPS finfish. -Fishing for and landing of CPS finfish north of 39° N latitude is not affected by LE requirements. -CPS finfish fishing in the northern area is would be managed as an open access fishery. -This does not preclude effective management or future extension of LE in the north.

3.56 Limited Entry Permits

3.56.1 *Initial Issuance of Limited Entry Permits*

1. Each qualifying vessel will entitle the current owner to one LE permit.
2. A vessel qualifies for an LE permit by meeting the initial issuance criteria in Section 3.5.26.1.1.
3. A given vessel cannot receive more than one LE permit.
4. Fees may be charged to cover ~~National Marine Fisheries Service (NMFS)~~ administrative costs

associated with issuance or transfer of permits.

5. Permits are assigned to one vessel at a time.
6. The vessel owner is responsible for maintaining the permit and any other documentation required on board each vessel with a permit to fish for CPS.
7. An LE permit may not be used with a vessel unless it is registered for use with that vessel.
8. LE permits will be registered for use with a vessel and a registered vessel may be changed only according to procedures outlined in the FMP and regulations.
9. If the permit will be used with a vessel other than the one registered on the permit, a registration for use with the new vessel must be obtained from the Regional Director and placed aboard the vessel before the vessel is used to fish for CPS.

3.5.26.1.1 Initial Issuance Criteria

The owner of a CPS vessel ~~will~~received an LE permit if, during the window period of January 1, 1993 to November 5, 1997, the vessel landed or delivered a cumulative total of 100 mt of CPS finfish. ~~No~~ more than one LE permit ~~was~~will be issued for each qualifying vessel. ~~The permit was~~will be issued only to the current owner of the vessel, unless (1) the previous owner of a vessel qualifying for a permit ~~has~~, by the express terms of a written contract, reserved the right to the permit, in which case the permit ~~was~~will be issued to the previous owner based on the catch history of the qualifying vessel; or (2) a vessel that would have qualified for an LE permit was totally lost before a permit was issued. ~~In~~ this case, the owner of the vessel at the time it was lost ~~retain~~eds the right to the permit, unless the owner conveyed the right to another person by the express terms of a written contract.

3.5.36.1.2 Ownership Restriction

Only entities (human beings, corporations, etc.) qualified to own a U.S. fishing vessel may be issued or may hold (by ownership or otherwise) an LE permit.

3.5.46.1.3 Limited Entry Permit Held by Owner of Record of the Vessel

1. The vessel owner is responsible for acquiring and holding an LE permit for each vessel that is required to have an LE permit to catch CPS finfish under this LE section.
2. The vessel owner is responsible for maintaining NMFS required documentation of the LE permit on board the vessel.
3. The LE permit will be used with one vessel only. That vessel must be declared and registered with the NMFS issuing authority. Registration is incomplete and LE permits may not be used until acknowledged in writing by NMFS.
4. A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed CPS finfish under the LE regulations unless the vessel owner holds an LE permit which explicitly allows such catch and the LE permit has been registered with NMFS for use with that vessel.

3.5.56-1.4 Loss of a Vessel Prior to Permit Issuance

1. An LE permit will be issued for a vessel which qualified for a permit but is lost before permits are issued. The vessel must be replaced within two years of the loss unless otherwise determined by the NMFS Regional Director. -The replacement vessel must be of equal or less GT.
2. For a vessel that would qualify an owner for an LE permit, in the case of a vessel's sinking or total loss, all rights to a permit from the fishing history of the vessel prior to the sinking or total loss remain with the owner unless specifically transferred.

3.5.66-1.5 Appeals Process

If an application for a permit is denied, the applicant may appeal the denial to the NMFS Regional Administrator. -The appeal must be in writing, state the action being appealed, and reasons. -The appellant may request an informal hearing before a hearing officer and the NMFS Regional Administrator will decide if a hearing is required. -If required, hearings will be carried out in a timely fashion (normally within 30 days of the receipt of sufficient information).

The NMFS Regional Administrator will decide the appeal in accordance with the criteria for LE permits specified in this FMP and implementing regulations. The NMFS Regional Administrator will consider the information submitted by the appellant, the summary record of the hearing and hearing officer's recommendation (if any) and other relevant information.

3.5.76-2 Permit Renewal Procedures

1. Permits must be renewed every two calendar years in order to remain valid for the following calendar year. -The renewal date for LE permits will be January 1 at two year intervals beginning in the year after implementation.
2. Notice of upcoming renewal periods will be sent at the appropriate time every two years to the most recent address as provided to the permit issuing authority by the permit holder. -It shall be the permit holder's responsibility to provide the permit issuing authority with address changes in a timely manner.
3. An annual fee will be charged which reflects the administrative costs of maintaining the permit system.
4. Failure to renew during this period will result in expiration of the permit at the end of the calendar year.
5. Once a permit has expired because of failure to renew during the renewal period, it may not subsequently be renewed or reissued, except through a process as specified in Section [3.5.66-1.5](#).

3.5.86-3 Conditions for Transfers of Existing Permits

CPS finfish LE permits may be transferred with restrictions on the harvesting capacity of the vessel to which it would be transferred. -These restrictions are as follows: 1) full transferability of permits to vessels of comparable capacity (vessel GT +10 percent allowance), and 2) allow permits to be combined up to a greater level of capacity in cases where the vessel to be transferred to is of greater harvesting capacity than the one from which the permit will be transferred.

Each LE permit will have an endorsement based on the currently permitted vessel's calculated GT as defined in 46 *CFR* 69.209 for ship-shaped hulls, where:

$$GT = 0.67(\text{Length} * \text{Breadth} * \text{Depth}) / 100.$$

The original permits and their respective endorsements will remain in effect for the lifetime of each permit, regardless of the GT of a vessel to which it may be transferred. -In cases where a permit is transferred to a vessel with smaller GT, the original GT endorsement will remain, and excess GT may not be split out from the original permit configuration and sold. -In cases where two or more permits are transferred to a larger vessel, the larger vessel will hold the original permits and may fish for CPS finfish as long as the aggregate GT endorsements, including the 10 percent allowances, add up to the new vessel's calculated GT. - In the event that a vessel with multiple permits wishes to leave the CPS LE program, those permits may be sold together or separately, but the original permit endorsement may not be altered.

To ensure manageability of the permit program and stability of the fleet, only one transfer per permit will be allowed in each calendar year. -Permits may only be used on the vessel to which they are registered, and permit leasing will not be allowed. -Catch history will be tied to the vessel, and not to the permits.

3.5.96-3-1 **Adjusting Permit Transferability to Maintain the Capacity Goal**

When the upper threshold of fleet GT (fleet GT plus 5 percent, or 5,933.5 mt) is reached, fleet capacity will be restored to the capacity goal (5,650.9 mt) by restricting conditions for permit transfer. -Under this mechanism, once the trigger point (5,933.5 mt) is met or exceeded, permits could only be transferred to vessels with equal or smaller GT and the 10 percent vessel allowance is removed. -The 10 percent allowance could be reconsidered once total fleet GT is reduced to the 5,650.9 mt target.

3.5.106-4 *Procedures for Issuing New Limited Entry Permits in the Future*

If, in response to positive changes in CPS finfish resources or market conditions, it is determined that new LE permits should be issued the qualifying criteria originally established in the FMP (Section 3.5.26.1-1) would be used for issuance of these new permits. -It is expected that this would entail continuing down the list of vessels having landings during the 1993-97 window period in order of decreasing window period landings. -For example, the next permit awarded would go to the 71st of the 640 vessels identified in the original analysis (Amendment 8) with window period finfish landings if this vessel were to apply for a new permit. -Each vessel on the list would need to have its harvest capacity evaluated so that in aggregate the new capacity target was not exceeded. -New permits could be issued on either a temporary or permanent basis, depending on the circumstances surrounding the need for additional fleet capacity. -Prior to issuance of new permits, the Council or the Regional Administrator would need to determine if the new permits would be either temporary or permanent.

3.6-5 *Coastal Pelagic Species Fishing Exempted from Limited Entry*

3.6.15-1 **Exempted Landings**

Vessels landing small quantities of CPS finfish on a per trip basis do not require an LE permit. The Council will set, by regulation, a level of landings per trip that is exempt from LE. -This level must be between 1 mt and 5 mt per trip. -The level specified by the Council will remain in place until changed by rulemaking.

3.6.25-2 **Recreational Fishing**

Recreational fishing for CPS finfish does not require an LE permit. -However, the Council may choose to

restrict recreational harvest quotas, implement area closures or impose any other type of management measure.

3.6.35.3 Live Bait Coastal Pelagic Species Fishing

Fishing CPS species for use as live bait does not require an LE permit. -This includes live bait harvested for use in recreational and commercial fisheries.

3.7.6.6 Additional Management of the Limited Entry Fishery

3.7.16.6.1 Trip Limit

The Council may set a trip limit, by regulation, of up to 125 mt on landings of CPS finfish. -In this context, a trip is defined as any activity (e.g., catching, landing, transporting or delivering) by a vessel that harvests CPS finfish with an LE permit (i.e., a possession limit that applies to harvesting operations only). -Also in this context, a trip limit should not be confused with trip limits used in other fisheries (e.g., groundfish) to lengthen the season without exceeding HGs or to manage bycatch.

3.84 Nature of the Interest Created

CPS LE permits confer a privilege to participate in the West Coast CPS finfish fishery in accordance with the LE system established under this FMP and implementing regulations, or any future amendment to the FMP and implementing regulations. Future amendments to the FMP may modify or even abolish the LE system. The permits are also subject to sanctions including revocation, as provided by the MSA, 16 USC 1858(g) and 15 CFR §part 904.

4.0 OPTIMUM YIELD, MAXIMUM SUSTAINABLE YIELD, ACCEPTABLE BIOLOGICAL CATCH, HARVEST CONTROL RULES, AND OVERFISHING DEFINITIONS FOR THE COASTAL PELAGIC SPECIES FISHERY

This FMP defines OY, MSY control rules, and defines overfishing and overfished stocks for CPS. All aspects of harvest policies for CPS, including the MSY control rule, definition of overfishing, definition of overfished stocks and rebuilding criteria, can be modified using framework procedures described in Chapter 2Section 2.0.

4.1 Definition of Optimum Yield

The MSA (50 CFR § 600.10Section 3(33)) defines the term "optimum yield," ~~with respect to the yield from a fishery,~~ as the amount of fish which:

- (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;
- (B) is prescribed on the basis of the MSY from the fishery, as reduced by any relevant social, economic, or ecological factor; and
- (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the MSY in such fishery.

OY for a CPS stock is defined to be the level of harvest which is less than or equal to ABC estimated using an ABC control rule, consistent with the goals and objectives of this FMP, and used by the Council to manage the stock. The ABC is a harvest specification of a stock or stock complex's annual catch that

accounts for the scientific uncertainty in the estimate of OFL (MSY or MSY proxy) and any other scientific uncertainty, and should be based on the ABC control rule. The ABC control rule specifies an approach to setting ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL and any other scientific uncertainty. In practice, OY will be determined with reference to ABC. Harvest control rules and other OY considerations (economic, social, and ecological) will be used to set ACLs, ACTs, and/or HGs on an annual or multi-year basis. In particular, OY will be set less than ABC to the degree required to prevent overfishing.

4.2 Definition of ~~Overfishing Limits~~OFL, of MSY, and ABC Control Rules

An OFL is an annual amount of catch that corresponds to the estimate of MSY fishing mortality on an annual basis (F_{msy}); above which overfishing is occurring applied to a stock or stock complex's abundance expressed in terms of numbers or weight of fish. In general, OFLs for CPS are based on MSY or MSY proxy harvest rates applied to the best available estimate of biomass. In cases where biomass estimates include portions of the population in foreign waters, a DISTRIBUTION term will be used to estimate the percentage of the population in U.S. EEZ.

The ABC is a harvest specification set below the OFL and is a threshold that incorporates a scientific uncertainty buffer against overfishing (i.e., exceeding the OFL). The ABC is decided by the Council based on its preferred level of overfishing risk aversion. The ABC is based on a percentage reduction of the OFL as determined by an SSC determination on scientific uncertainty and a risk policy determined by the Council. In cases where scientific uncertainty (σ) associated with estimating an OFL is quantified by the SSC, the percentage reduction that defines the scientific uncertainty buffer and the ABC can be determined by translating the estimated σ to a range of probability of overfishing (P^*) values. The Council then determines the preferred level of risk aversion by selecting an appropriate P^* value, accordingly. Each P^* value is then matched to its corresponding BUFFER fraction that is applied to the OFL according to the ABC control rule.

OFL	BIOMASS * F_{MSY} * DISTRIBUTION
ABC	BIOMASS * BUFFER * F_{MSY} * DISTRIBUTION

To some extent, the existing harvest control rules for some managed species merge scientific uncertainty and OY considerations thereby providing additional reductions from OFL levels, ~~particularly during warm temperature regimes~~. Therefore, harvest control rules will be considered in conjunction with ABC control rules to prevent overfishing (see Section 4.6).

4.3 Definition of Overfishing

By definition, overfishing occurs in a fishery whenever fishing occurs over a period of one year or more at a rate that is high enough to jeopardize the capacity of the stock to produce MSY on a continuing basis if applied in the long term. Overfishing in the CPS fishery is "approached" whenever projections indicate overfishing will occur within two years. The definition of overfishing is in terms of a fishing mortality or exploitation rate. Depending on the exploitation rate, overfishing can occur when CPS stocks are at either high or low abundance levels. The Council must take action to eliminate overfishing when it occurs and to avoid overfishing when exploitation rates approach the overfishing level.

In operational terms, overfishing occurs in the CPS fishery whenever catch exceeds ~~OFL~~, and overfishing is approached whenever projections indicate that fishing mortality or exploitation rates will exceed the OFL level within two years. The definition of an overfished stock is an explicit part of the harvest control rule for CPS stocks.

4.4 Definition of an Overfished Stock

By definition, an overfished stock in the CPS fishery is a stock at a biomass level low enough to jeopardize the capacity of the stock to produce MSY on a continuing basis. An overfished condition is approached when projections indicate that stock biomass will fall below the overfished level within two years. The Council must take action to rebuild overfished stocks and to avoid overfished conditions in stocks with biomass levels approaching an overfished condition.

4.5 Rebuilding Programs

Management of overfished CPS stocks must include a rebuilding program that can, on average, be expected to result in recovery of the stock to MSY levels in ten years. It is impossible to develop a rebuilding program that would be guaranteed to restore a stock to the MSY level in ten years, because CPS stocks may remain at low biomass levels for more than ten years even with no fishing. The focus for CPS is, therefore, on the average or expected time to recovery based on realistic projections. If the expected time to stock recovery ~~is associated with unfavorable ecosystem conditions and~~ is greater than ten years due to reasons environmental conditions as outlined in the MSA at 50 CFR § 600.310(j), ~~then~~ the Council and the ~~U.S. Secretary of Commerce (Secretary)~~ may consider extending the time period ~~as described at 50 CFR § 600.310(ej)~~.

Rebuilding programs for CPS may be an integral part of the harvest control rule or may be developed or refined further in the event that biomass of a CPS stock reaches the overfished level. If a stock is overfished, for the period between when it is determined to be overfished and the effective date of a rebuilding plan, the Council shall consider whether to allow any harvest of the overfished stock and what the appropriate interim harvest level should be.

4.5.1 Rebuilding Plan for Pacific Sardine

In July 2019, the National Marine Fisheries Service notified the Council that it had declared the Pacific sardine stock overfished. The declaration came as a result of the 2019 Pacific sardine stock assessment indicating that the stock had declined below its MSST of 50,000 mt. A rebuilding plan was adopted by the Council in September 2020. The rebuilding reference points for Pacific sardine are:

$T_{min} = 12$ years

$T_{max} = 24$ years

$T_{target} = 14$ years

Rebuilding target = 150,000 mt of age 1+ biomass

Total catch limits (i.e., OFL/ABC/ACL) will be set annually based on annual stock assessments and the control rules in the FMP and recommendations from the SSC regarding uncertainty in the assessment and OFL.

The management measures under the Pacific sardine Rebuilding Plan include the following:

- The primary directed fishery for Pacific sardine will be closed until the biomass reaches or exceeds 150,000 mt (i.e., the Rebuilding target and CUTOFF in the HG control rule);
- Incidental limits in other primary directed CPS fisheries are restricted to no more than 20 percent Pacific sardine per landing until the biomass reaches or exceeds 50,000 mt (i.e., the MSST for

Pacific sardine);

- The minor directed fisheries are limited to 1 mt of Pacific sardine per trip per day;
- Live bait harvest is not specifically constrained under the Rebuilding Plan but is subject to management measures that will be reviewed during the Council's annual specifications process; and
- Other management measures the Council may recommend (e.g., incidental catch limits in non-CPS fisheries)

The population dynamics of small coastal pelagic fish such as Pacific sardine are highly influenced by environmental conditions. Although fishing pressure can also impact the population dynamics of small pelagics, it is generally agreed that under current sardine management, harvest is a lesser factor in sardine population status than environmental factors. Historical analysis of marine sediment layers (Baumgartner et al, 1992) conclude that the sardine population is prone to long periods of decline even in the absence of fishing.

4.6 Harvest Control Rules

For CPS, a harvest control rule is defined to be a harvest strategy that provides biomass levels at least as high as the F_{MSY} approach while also providing relatively high and relatively consistent levels of catch. ~~According to Federal regulations (50 CFR '600.310(b)(1)(ii)), an MSY control rule is "a harvest strategy which, if implemented, would be expected to result in a long term average catch approximating MSY." Similarly, MSY stock size "means the long term average size of the stock or stock complex, measured in terms of spawning biomass or other appropriate units that would be achieved under an MSY control rule in which the fishing mortality rate is constant."~~ Harvest specifications as estimated by the harvest control rule shall not exceed ABC or the harvest recommendations of the SSC. Rather, harvest control rules will be considered in conjunction with ABC control rules to prevent overfishing. The CPS harvest control rules are more conservative than MSY-based management strategies, because the focus for CPS is oriented primarily towards stock biomass levels at least as high as the MSY stock size (defined at 50 CFR § 600.310(e)) while reducing harvest as biomass levels approach overfished levels. The primary focus is on biomass, rather than catch, because ~~most CPS (Pacific sardine, northern anchovy, and market squid)~~ are very important in the ecosystem for forage.

Harvest control rules in the CPS fishery may vary depending on the nature of the fishery, management goals, assessment and monitoring capabilities, and available information. Under the framework management approach used for CPS, it is not necessary to amend the CPS FMP in order to develop or modify harvest control rules or definitions of overfishing. The CPS FMP includes two primary forms of harvest control rules for CPS, the default control rule and the general control rule, described below.

~~CPS stocks and fisheries with biologically significant levels of catch, or biological, or socio-economic considerations requiring relatively intense harvest management procedures must have stock specific harvest control rules, a definition of overfishing and a definition of an overfished stock. The purpose of the general harvest control rule, described below, is to provide managers with a tool for setting and adjusting harvest levels on a periodic basis while preventing overfishing and overfished stock conditions.~~

CPS stocks and fisheries without biologically significant levels of catch or biological, or socio-economic considerations requiring relatively intense harvest management procedures do not require stock specific harvest control rules. For these ~~rules~~, the main use of harvest control rules is to help gauge the need for setting and adjusting harvest levels on a more frequent basis. These types of harvest control rules and harvest policies may be more generic and simple than those for stocks with significant fisheries. Any stock

supporting catches approaching the ABC or MSY levels should be managed with periodic adjustments unless there is too little information available or other practical problems.

CPS stocks and fisheries with biologically significant levels of catch, or biological, or socio-economic considerations requiring relatively intense harvest management procedures must have stock-specific harvest control rules, a definition of overfishing and a definition of an overfished stock. The purpose of the general harvest control rule, described below, is to provide managers with a tool for setting and adjusting harvest levels on a periodic basis while preventing overfishing and overfished stock conditions.

Transboundary Issues

Management of transboundary stocks is one of the most difficult problems in the management of CPS. Ideally, transboundary CPS stocks would be managed cooperatively by the U.S., Canada, and Mexico on the basis of common policy. At present, there are no cooperative management agreements with Mexico or Canada.

In the absence of a cooperative management agreement, the default approach in the CPS FMP sets harvest levels for U.S. fisheries by prorating the total target harvest level according to the portion of the stock resident in U.S. waters or estimating the biomass in U.S. waters only. In practice, this approach is similar to managing the U.S. and Mexican portions of a stock separately, since harvest for the U.S. fishery in a given year depends ultimately on the biomass in U.S. waters.

Other approaches that may be developed in the future are not precluded by this default. If the portion of the stock in U.S. waters cannot be estimated or is highly variable, then other approaches may be used.

Detailed management schedules and processes for CPS fisheries are found in COP 9, Schedule 3.

4.6.1 Default CPS Harvest Control Rule

The Council may use the default harvest control rule, defined below, for species where it has been determined that little need for intensive management exists unless a better species-specific rule is available. The default harvest control rule can be modified under framework management procedures.

The default harvest control rule sets ABC for the entire stock (U.S., Mexico, Canada, and international fisheries) equal to 25 percent of the best estimate of the MSY catch level. Overfishing occurs whenever the total catch ~~from~~ (U.S., Mexico, Canada, and international fisheries) exceeds ABC or whenever fishing occurs at a rate that is high enough to jeopardize the capacity of the stock to produce MSY. Overfishing of a CPS stock managed using the default control rule is "approached" whenever projections or estimates indicate that the overfishing will occur within two years.

In making decisions about using the general control rule or another stock-specific control rule, the Council may choose to consider ABC and catches in U.S. waters only. ABC in U.S. waters is the ABC for the entire stock prorated by an estimate of the fraction of the stock in U.S. waters. Management may not be effective if U.S. catches are small and overfishing is occurring in Mexico, Canada, or in international waters outside the jurisdiction of Federal authorities.

4.6.4 Harvest Control Rules for Northern Anchovy and Jack Mackerel and Market Squid

Management of northern anchovy (northern and central subpopulations) and jack mackerel and market squid will, at the outset of the CPS FMP, use the default control rules and overfishing specifications. Stock specific MSY proxies, ABC, and ACLs can be revised based on the best available science as recommended by the SSC and as adopted through the annual harvest specification process, and will be reported in the CPS SAFE.

The OFL will be based on species-specific MSY proxies. In general, the default ABC control rule consists of a 75 percent reduction from OFL to ABC until such time as the SSC recommends an alternate value based on the best available science. ACLs would be specified for multiple years until such time as the species becomes managed using the general harvest control rule or a new species-specific control rule, or new scientific information becomes available. ACLs may also be sector-specific.

<u>OFL</u>	<u>STOCK SPECIFIC MSY PROXY</u>
<u>ABC</u>	<u>OFL * 0.25</u>
<u>ACL</u>	<u>Equal to ABC or reduced by OY considerations.</u>

4.6.4.1 Northern Anchovy-Central Subpopulation

The central subpopulation of northern anchovy ranges from approximately San Francisco, California, to Punta Baja, Mexico. The ABC would then be prorated by the DISTRIBUTION of the stock in U.S. waters (82 percent) to arrive at ABC in U.S. waters.

4.6.4.2 Northern Anchovy-Northern Subpopulation

The northern subpopulation of northern anchovy ranges from San Francisco north to British Columbia, with a major spawning center off Oregon and Washington that is associated with the Columbia River plume. The northern subpopulation supports small but locally important bait and human consumption fisheries. Northern anchovy is an important source of forage to local predators, including depleted and endangered salmonid stocks.

Additionally, the portion of the northern subpopulation of northern anchovy resident in U.S. waters is unknown. It is likely that some biomass occurs in Canadian waters off British Columbia.

MSY for the northern subpopulation of northern anchovy is specified as an F_{MSY} of 0.3. This value (the default exploitation rate for Pacific mackerel) is considered the best available science and an appropriate specification of MSY, as northern anchovy are likely to be as productive and have a higher natural mortality than Pacific mackerel, for which there is much greater understanding of productivity and biology.

4.6.4.3 Jack Mackerel

The ABC level for jack mackerel is calculated by age/area from mid-range potential yield values. ABC in U.S. waters will be prorated according to the DISTRIBUTION of the stock in U.S. waters (65 percent). Since 1990, jack mackerel catches have generally been less than 2,000 mt per year. If jack mackerel catches increase and become significant, managers may decide to address management of different age groups and areas independently.

4.6.2 General Harvest Control Rules

The general form of the harvest control rule utilized for the ~~California~~-CPS fisheries ~~is was~~ designed to continuously reduce the exploitation rate as biomass declines. The general formula used is:

$$H = (\text{BIOMASS-CUTOFF}) \times \text{FRACTION} \times \text{DISTRIBUTION}$$

H is the harvest target level, CUTOFF is the lowest level of estimated biomass at which directed harvest is allowed and FRACTION is the fraction of the biomass above CUTOFF that can be taken by the fishery. BIOMASS is generally the estimated biomass of fish age 1+ at the beginning of the season. DISTRIBUTION is the average portion of biomass assumed in U.S. waters. The ~~purpose of~~-CUTOFF term is to protect the stock when biomass is low. The ~~purpose of~~-FRACTION term is to specify how much of the stock is available to the fishery when BIOMASS exceeds CUTOFF. It may be useful to define any of the parameters in this general harvest control rule so that they depend on environmental conditions or stock biomass. Thus, the harvest control rule could depend explicitly on the condition of the stock or environment.

The formula generally uses the estimated biomass for the whole stock in one year (BIOMASS) to set harvest for the whole stock in the following year (H) although projections or estimates of BIOMASS, abundance index values, or other data might be used instead. BIOMASS is an estimate only, it is never assumed that BIOMASS is a perfect measure of abundance. Efforts to develop a harvest formula must consider probable levels of measurement error in BIOMASS, which typically have CVs of about 50 percent for CPS.

The general harvest control rule for CPS (depending on parameter values) is compatible with the MSA and useful for CPS that are important as forage. If the CUTOFF is greater than zero, then the harvest rate (H/BIOMASS) declines as biomass declines. By the time BIOMASS falls as low as CUTOFF, the harvest rate is reduced to zero. The CUTOFF provides a buffer of spawning stock that is protected from fishing and available for use in rebuilding if a stock becomes overfished. The combination of a spawning biomass buffer equal to CUTOFF and reduced harvest rates at low biomass levels means that a rebuilding program for overfished stocks may be defined implicitly. Moreover, the harvest rate never increases above FRACTION. If FRACTION is approximately equal to F_{MSY} , then the harvest control rule harvest rate will not exceed F_{MSY} . In addition to the CUTOFF and FRACTION parameters, it may be advisable to define a maximum harvest level parameter (MAXCAT) so that total harvest specified by the harvest formula never exceeds MAXCAT. MAXCAT is used to guard against extremely high catch levels due to errors in estimating biomass, to reduce year-to-year variation in catch levels, and to avoid overcapitalization during short periods of high biomass and high harvest. MAXCAT also prevents the catch from exceeding MSY at high stock levels and spreads the catch from strong year classes over a wider range of fishing seasons.

ACLs will be set no higher than ABC and may be sector-specific. Harvest control rules and other OY considerations will be used to set an HG. The HG cannot exceed the ACL or ABC. In cases where the HG exceeds the ABC, the Council will set a lower ACL, HG, or ACT in response. An HG or ACT may be utilized below an ACL or sector-specific ACL to account for management uncertainty, discard or bycatch mortality, and research take. These provisions will be considered on an annual basis in response to changing

resource status and fishery dynamics.

<i>OFL</i>	<i>BIOMASS * F_{MSY} * DISTRIBUTION</i>
<i>ABC</i>	<i>BIOMASS * BUFFER * F_{MSY} * DISTRIBUTION</i>
<i>ACL</i>	<i>LESS THAN OR EQUAL TO ABC</i>
<i>HG</i>	<i>(BIOMASS - CUTOFF) * FRACTION * DISTRIBUTION.</i>
<i>ACT</i>	<i>EQUAL TO HG OR ACL, WHICHEVER VALUE IS LESS</i>

Other general types of control rules may be useful for CPS and this FMP does not preclude their use as long as they are compatible with National Standards and the MSA.

4.6.3 Transboundary Issues

~~Management of transboundary stocks is one of the most difficult problems in the management of CPS. Ideally, transboundary CPS stocks would be managed cooperatively by the U.S., Canada, and Mexico on the basis of common policy. At present, there are no cooperative management agreements with Mexico or Canada.~~

~~In the absence of a cooperative management agreement, the default approach in the CPS FMP sets harvest levels for U.S. fisheries by prorating the total target harvest level according to the portion of the stock resident in U.S. waters or estimating the biomass in U.S. waters only. In practice, this approach is similar to managing the U.S. and Mexican portions of a stock separately, since harvest for the U.S. fishery in a given year depends ultimately on the biomass in U.S. waters.~~

~~Other approaches that may be developed in the future are not precluded by this default. If the portion of the stock in U.S. waters cannot be estimated or is highly variable, then other approaches may be used. It may be more practical, for example, to use a high CUTOFF in the harvest control rule to compensate for stock biomass off Mexico or Canada.~~

4.6.32 Harvest Control Rule for Pacific Sardine²

The Harvest Control Rule for Pacific sardine includes OY considerations and will be used to calculate an HG or ACT for the entire sardine stock, but cannot exceed ABC. The harvest control rule is based on an estimate of biomass for the whole sardine stock, a CUTOFF equal to 150,000 mt, a FRACTION between five percent and 15 percent (depending on oceanographic conditions as described below), a U.S. DISTRIBUTION of 87 percent, and MAXCAT of 200,000 mt. The U.S. ABC is calculated from the target harvest for the whole stock by prorating the total ABC based on proportion of total biomass in U.S. waters.

² In November 2014, the Council adopted a revised temperature-recruitment relationship, established a new temperature index, and adopted a revised FRACTION range. The new temperature-recruitment relationship is $E_{MSY} = -18.46452 + 3.25209(T) - 0.19723(T^2) + 0.0041863(T^3)$. The new temperature index is the California Cooperative Oceanic Fisheries Investigations (CalCOFI) time series, and the revised harvest FRACTION range is 5-20%. These are described in the November 2014 Council briefing book materials.

FRACTION in the harvest control rule for Pacific sardine is a proxy for F_{MSY} (i.e., the fishing mortality rate for deterministic equilibrium MSY) that builds in OY considerations and other precautions to avoid overfishing. FRACTION depends on recent ocean temperatures because F_{MSY} and productivity of the sardine stock is higher under ocean conditions associated with warm water temperatures (Appendix B, Section 4.2.3.4). An estimate of the relationship between F_{MSY} for sardine and ocean temperatures is:

$$F_{MSY} = 0.248649805 T^2 - 8.190043975 T + 67.4558326^2$$

where T is the average three season sea surface temperature at Scripps Pier, California during the three preceding seasons. The harvest control rule for sardine sets the control rule parameter FRACTION equal to F_{MSY} except that FRACTION is never allowed to be higher than 15 percent or lower than 5 percent. OFL and ABC calculations may be limited to a range E_{MSY} of sea-surface temperatures dependent upon the recommendation of the SSC and based on the best available science. For example, under the analysis for Amendment 13, the CPSMT and the SSC recommended limiting OFL and ABC calculations by the interquartile range of SSTs, which span three-season averages from 1916-19 through 1994-97. The lower quartile SST for this period was 16.61 °C, with a corresponding F_{MSY} of 0.0200. The upper quartile SST was 17.33 °C, with an F_{MSY} of 0.1985.

Although F_{MSY} may be greater or lesser, FRACTION can never be greater than 15 percent or less than 5 percent unless the harvest control rule for sardine is revised, because 5 percent and 15 percent are policy decisions taken by Council based on social, economic, and biological criteria. In contrast, relationships between FRACTION, F_{MSY} , and environmental conditions are technical questions and estimates or approaches may be revised by technical teams to accommodate new ideas and data.

The temperature-dependent F_{MSY} for sardine is unique among F_{MSY} definitions for Council-managed species; to some extent, the existing sardine harvest control rule provides substantial reductions in harvest relative to F_{MSY} , particularly during warm temperature regimes.

4.6.2.1—Definition for Overfished Stock for Sardine

An overfished sardine population is one with a 1+ stock biomass on July 1 of 50,000 mt or less. The Council is required to minimize fishing mortality on an overfished stock to the extent practicable and to undertake a rebuilding program which may be implicit to the harvest control rule or explicit. See Section 4.5.1 for the Pacific sardine rebuilding plan.

4.6.32.12 Live Bait and Minor Directed Harvest between the ABC and CUTOFF

The live bait fishery ~~which supplies live sardines CPS to recreational and commercial fisheries, and the minor directed fishery~~ may be allowed to operate when estimated biomass falls below the CUTOFF, ~~which is currently set at 150,000 mt~~ and other directed fishing is precluded, but the estimated biomass is still above the definition of an overfished stock; and while live bait and minor directed harvests ~~are~~ not expected to exceed the ACL or ABC. This does not prevent the Council from undertaking any measure authorized under this FMP, including a sector-specific ACL, that may be necessary to manage ~~these fisheries—the live bait fishery~~ and the sardine stock. The live bait and/or minor directed fishery could, for example, be managed by HG or quota, season, or gear restrictions at any point under the framework management process.

4.6.43 Harvest Control Rule for Pacific ~~(Chub)~~ Mackerel

The harvest control rule for Pacific mackerel sets the CUTOFF and the definition of an overfished stock at 18,200 mt, FRACTION at 30 percent, and a U.S. DISTRIBUTION of 70 percent. Overfishing is defined

as any fishing in excess of ABC calculated using the harvest control rule. No MAXCAT is defined because the U.S. fishery appears to be limited to about 40,000 mt per year by markets. The target harvest level is defined for the entire stock in Mexico, Canada, and U.S. waters (not just the U.S. portion), and the U.S. target harvest level is prorated based on relative abundance in U.S. waters.

~~4.6.4 Harvest Control Rules for Northern Anchovy, Jack Mackerel, and Market Squid~~

~~Management of northern anchovy (northern and central subpopulations), jack mackerel and market squid will, at the outset of the CPS FMP, use the default control rules and overfishing specifications. Stock specific MSY proxies, ABC, and ACLs can be revised based on the best available science as recommended by the SSC and as adopted through the annual harvest specification process, and will be reported in the CPS SAFE.~~

~~The OFL will be based on species specific MSY proxies. In general, the default ABC control rule consists of a 75 percent reduction from OFL to ABC until such time as the SSC recommends an alternate value based on the best available science. ACLs would be specified for multiple years until such time as the species becomes managed using the general harvest control rule or a new species specific control rule, or new scientific information becomes available. ACLs may also be sector specific.~~

OFL	STOCK SPECIFIC MSY PROXY
ABC	OFL * 0.25
ACL	Equal to ABC or reduced by OY considerations.

~~4.6.4.1 Northern Anchovy Central Subpopulation~~

~~The central subpopulation of northern anchovy ranges from approximately San Francisco, California, to Punta Baja, Mexico. The ABC would then be prorated by the DISTRIBUTION of the stock in U.S. waters (82 percent) to arrive at ABC in U.S. waters.~~

~~4.6.4.2 Northern Anchovy Northern Subpopulation~~

~~The northern subpopulation of northern anchovy ranges from San Francisco north to British Columbia, with a major spawning center off Oregon and Washington that is associated with the Columbia River plume. The northern subpopulation supports small but locally important bait and human consumption fisheries. Northern anchovy is an important source of forage to local predators, including depleted and endangered salmonid stocks.~~

~~Additionally, the portion of the northern subpopulation of northern anchovy resident in U.S. waters is unknown. It is likely that some biomass occurs in Canadian waters off British Columbia.~~

~~MSY for the northern subpopulation of northern anchovy is specified as an F_{MSY} of 0.3. This value (the default exploitation rate for Pacific mackerel) is considered the best available science and an appropriate specification of MSY, as northern anchovy are likely to be as productive and have a higher natural mortality than Pacific mackerel, for which there is much greater understanding of productivity and biology.~~

~~4.6.4.3 Jack Mackerel~~

~~The ABC level for jack mackerel is calculated by age/area from mid-range potential yield values. ABC in~~

~~U.S. waters will be prorated according to the DISTRIBUTION of the stock in U.S. waters (65 percent). If jack mackerel catches increase and become significant, managers may decide to address management of different age groups and areas independently. This question does not need to be addressed at this time because catches are low (generally less than 2,000 mt per year since 1990).~~

4.6.54.4 Harvest Control Rule for Market Squid

The MSY Control Rule for market squid is founded generally on conventional spawning biomass “per recruit” model theory. Specifically, the MSY Control Rule for market squid is based on evaluating (throughout a fishing season) levels of egg escapement associated with the exploited population. The estimates of egg escapement are evaluated in the context of a “threshold” that is believed to represent a minimum level that is considered necessary to allow the population to maintain its level of abundance into the future (i.e., allow for “sustainable” reproduction year after year). In practical terms, the Egg Escapement approach can be used to evaluate the effects of fishing mortality (F) on the spawning potential of the stock, and in particular, to examine the relation between the stock’s reproductive output and candidate proxies for the fishing mortality that results in MSY (F_{MSY}).

The fishing mortality (F_{MSY}) that results in a threshold level of egg escapement of at least 30 percent ~~will be is~~ used ~~initially~~ as a proxy for MSY. ~~However, it is important to note that the~~ The level of egg escapement ~~has will be~~ been reviewed on an intermittent basis in California as new information becomes available concerning the dynamics of the stock and fishery, to ensure that the proposed threshold meets its objective as a long-term, sustainable biological reference point for this marine resource. This is not a trivial exercise, given the need for ongoing research regarding the biology of this species, which may result in revised recommendations in the future. ~~Ultimately, Currently,~~ the market squid fishery ~~operatescan operate~~ freely, within the constraints of ~~currently adopted state~~ regulations as dictated by the statesCDFG and NMFS (e.g., annual landings cap, weekend closures, closed areas) and NMFS and potentially treaty tribes, and NMFS, as long as egg escapement is equal to, or greater than, the threshold value. Assessments will be conducted on a yearly basis for the first two years (2002–04) and on a multi-year basis beginning in 2005. In the event that egg escapement is determined to be below the 30 percent threshold for two successive years, then a point-of-concern would be triggered under the FMP’s management framework, and the Council could consider revising market squid management. ~~Current state~~ regulations for squid are not anticipated to change in the near future, however, should existing laws limiting effort or harvest be rescinded, further management actions by the Council could also be considered.

As noted, the Council and state authorities will continue to monitor squid landings. If landings increase or a biological risk to the stock develops, the Council can be expected to revise squid management quickly under the “point-of-concern” framework management procedures (Section 2.1.12).

4.6.65 Prohibited Harvest Species

Prohibited Harvest Species management includes all species of krill occurring in the West Coast EEZ and is intended to ensure that, to the extent practicable, fisheries will not develop that could put at risk krill stocks and the other living marine resources that depend on krill. This means that OY for krill is zero, and the target, harvest and trans~~s~~hipment of krill is prohibited. Also, EFPs will not be issued under the EFP procedures of this FMP to allow individuals to harvest krill as an exception to the prohibition of harvest. These actions would fully achieve the objectives of the Amendment 12 to the extent practicable, but would not account for environmental conditions and the responses of krill and other resources to changes in environmental conditions. Prohibited Harvest Species management recognizes that *de minimis* or trace amounts of krill may be retained by fishermen while targeting other species; such inadvertent action is not intended to be the subject of this prohibition.

4.7 Stock Assessment and Fishery Evaluation Report

The CPSMT will prepare an annual SAFE report describing the status of the CPS fishery. The SAFE report provides information to the councils for determining annual harvest levels for each stock, documenting significant trends or changes in the resource, marine ecosystems, and fishery over time, and assessing the relative success of existing state and Federal fishery management programs. This includes landings, prices, revenues, and economic, biological or environmental conditions not covered elsewhere in assessments for CPS species. In particular, the SAFE report shall include:

1. Current status of CPS resources.
2. A description of the maximum fishing mortality threshold and the ~~MSST minimum stock size threshold~~ for each stock or stock complex, along with information by which the Council may determine:
 - (a) Whether overfishing is occurring with respect to any stock or stock complex, whether any stock or stock complex is overfished, whether the rate or level of fishing mortality applied to any stock or stock complex is approaching the maximum fishing mortality threshold, and whether the size of any stock or stock complex is approaching the ~~MSST minimum stock size threshold~~.
 - (b) Any management measures necessary to provide for rebuilding an overfished stock or stock complex (if any) to a level consistent with producing the MSY in such fishery.
3. The total and U.S. target levels, if calculated, along with all available information about bycatch, DAH, domestic annual processing (DAP), JVP, and TALFF used to specify HGs or quotas.
4. Recent and historical catch statistics (landings and value).
5. Recommendations for use of HG or quotas by species.
6. A brief history of the harvesting sector for the fishery.
7. A brief history of CPS management.
8. A summary of recent economic conditions, including information such as status of fleet capacity, number of vessels and performance by gear type, including recreational and commercial fishing interests, fishing communities, and fish processing interests.
9. Safety considerations.
10. Ecosystem information including ecological factors that may inform decisions on SDCs, harvest specifications, and management measures.
11. Bycatch summary.
12. Any necessary expansions to previous environmental and regulatory impact documents, and ecosystem and habitat descriptions.
13. Other relevant biological, sociological, economic, and ecological information that may be useful to the Council.
14. Information on recent and upcoming assessments and reference to the assessment schedules and processes specified in COP 9, Schedule 3.

The Council will notice the availability of SAFE reports via mailing lists and the Council newsletter and will publish SAFE reports primarily via the Council web page. Paper copies will be provided on request.

The annual SAFE report prepared by the CPSMT will include all available information that may be used to determine if a point-of-concern exists (e.g., overfishing) or if a stock should be considered for changes in its management.

4.8 Annual Specifications and Announcement of Harvest Levels

Each year, the Secretary will publish in the *Federal Register* the final specifications for all CPS annually managed by the Council. The total U.S. harvest will be allocated to the various fisheries as ACLs, HGs or

ACTs, or as quotas.

In calculating ACLs, ACTs, HGs and quotas for each species, an estimate of the incidental catch of each species caught while fishermen are targeting other species will be taken into account. Therefore, the total HG will consist of an incidental catch portion and a directed fishery portion. In general, HGs or ACTs will be used to describe direct and incidental take, will set in accordance with harvest control rules, and will be below the ACL to take into account management uncertainty and additional known sources of mortality such as discards, bycatch, research take, and live bait fisheries. This will be done to minimize the chances of exceeding the target harvest levels and the ACL.

If the HG, ACL, or ACT for the directed fishery is reached the directed fishery will be closed by an automatic action and incidental catch will continue to be allowed under the incidental catch allowance, which is expressed in an amount of fish or a percentage of a load ([Chapter 5 Section 5.1](#)). Minor directed fishing will also be allowed to continue after a directed fishery is closed, unless otherwise specified by the Council, or an ACL is anticipated to be exceeded ([Chapter 5 Section 5.2](#)). If the estimated incidental catch portion of the HG, ACL, or ACT has been set too high, resulting in the probability of not attaining the target harvest level by the end of the fishing season, the remaining incidental catch portion may be allocated to the directed fishery through the "routine" management procedures. This reallocation of the remaining incidental catch portion of the HG to the directed fishery is not likely to be necessary unless substantial errors are discovered in calculations or estimates.

4.8.1 General Procedure for Setting Annual Specifications

The intent of the management approach under the FMP is to reassess the status of each species for which the Council has determined a need at frequent intervals and preferably every year (although a full analytic stock assessment may not be necessary or possible in some cases). The general procedure for making the annual specifications for CPS is as follows:

1. The ~~CPSMT will produce a SAFE report as specified in Section 4.7 that documents the current estimates of biomass for each CPS assessed and status of the fishery. In the report, the~~ CPSMT will recommend either HGs or quotas, including a directed portion and an incidental portion, an initial incidental catch allowance to be used when HGs are reached together with an estimate of total incidental catch, and will make all calculations of the specifications as required by this FMP.
2. Documents will be sent to the NMFS Regional Administrator, ~~WCR Southwest Region~~, the Council, members of the Council's SSC, members of the CPSAS, and all interested parties for review.
3. A public meeting or meetings will be announced in the *Federal Register* and held with the CPSMT and the CPSAS to discuss the proposed annual specifications and to obtain public comments.
4. At its first opportunity, the Council will review all information compiled for the annual specifications, consult with its SSC, CPSMT, CPSAS, and hear public comments. The Council also will review any important social and economic information at that time, then make a recommendation to the NMFS Regional Administrator on the final specifications, including OFL, ABC, OY levels, ACLs, ACTs, HGs, quotas, allocations, and other management measures for the fishing season.
5. Following the Council meeting, the NMFS Regional Administrator will consider all comments and make a determination of the final specifications. This determination will be published in the *Federal Register* with a request for additional public comment.
6. Alternate Procedure: If assessment and season schedules warrant, the NMFS Regional Administrator may make preliminary harvest specifications quickly (without prior discussion at a Council meeting) to allow fishing to begin without delay. As soon as practicable, the Council will review all background documents contributing to the determination of the biomass estimates and make a final recommendation for the resulting target harvest level, HGs and quotas. Following the meeting of the Council, the NMFS Regional Administrator will consider all comments and make a determination of whether any changes

in the final specifications are necessary. If such changes are warranted, they will be published in the *Federal Register*.

If assembling the data and producing a report would require enough time that permitting a complete public review before the beginning of the fishing season could reduce the season, then this alternate procedure should be used.

7. NMFS, the treaty tribes, and the west coast states will monitor the fishery throughout the year, tracking incidental catch, ACTs, and HGs and quotas. If an HG or quota for any species is or is likely to be reached prematurely, a "point of concern" will occur, triggering a mandatory review of the status of the stock. If the directed harvest portion of an ACT or ACL, HG, or quota is reached, then directed fishing will be prohibited and the pre-specified incidental trip limit will be imposed as an automatic action through publication of a notice in the *Federal Register*.

The NMFS Regional Administrator would be responsible for setting the HGs based on the estimated biomass and the standards set in the FMP. The formulas used to set HGs for CPS are straightforward and provide little latitude for judgment, therefore, there is less discretion involved in setting annual specifications for CPS than for other fisheries.

HGs for CPS are based on the current biomass estimate multiplied by a fixed harvest rate. The portion of the resource in U.S. waters may change over time, but in any one year is the best estimate available. The amount of the HG needed for incidental trip limits when the fishery is nearing closure will vary depending on when the HG is projected to be achieved, but the incidental amount and the amount harvested directly must equal the total HG.

Following the determination of the estimated biomass, a public meeting would be held between the CPSMT and CPSAS. The biomass estimate and resultant HG would be reviewed, public comments obtained, and all information forwarded to the Council. At its meeting, the Council, after hearing public comments, would either adopt the annual specifications or recommend changes, accompanied by a justification for why the change should be made.

The intention of the proposed regulations is to have public review of and a Council recommendation on the estimated biomass and HGs before the fishing season begins; however, the NMFS Regional Administrator is not precluded from announcing the HGs in the *Federal Register* before the process is completed so that fishermen can plan their activities and begin harvesting when the fishing season begins.

4.8.2 *Factors Considered*

The following factors will be considered when making the annual specifications:

1. The current estimated biomass and any other biological information.
2. The harvest control rule described in the FMP, which is specific for each annually managed species.
3. Results of comments of domestic processors and joint venture operations about processing capacity and planned utilization.
4. Results of an analysis of the fishing capacity and planned utilization of recent years modified by new information and comments by the fishing industry relating to intended use.
5. Information on ecological factors such as the status of the ecosystem, predator-prey interactions, or oceanographic conditions that may warrant additional ecosystem-based management considerations.
6. Any relevant historical information on the utilization of CPS resources.

All data used to make annual specifications will be available for public inspection on the Council's website (www.pcouncil.org). ~~during normal business hours at the Southwest Regional Office of NMFS.~~

4.8.3 Guidelines for Choosing Between a Harvest Guideline and Quota

HGs or quotas generally function as ACTs and can be specified as such. The maximum HG is derived by the harvest control rule in place for each stocks. The Council may adopt the maximum HG so long as it is below the established ACL. Additionally, the Council will consider potential factors that may contribute to exceeding an HG, quota, or other ACT to determine if the recommended harvest target is sufficiently low to avoid exceeding the ACL.

Quotas are specified numerical harvest objectives, the attainment of which results in automatic closure of the fishery for that species. Retention, possession, and landing of a species after attainment of its quota is prohibited. A quota is a single numerical value, not a range.

HGs are specified numerical harvest objectives that differ from quotas in that closure of a fishery (i.e., prohibition of retention, possession, and landing) is not automatically required upon attainment of the objective. An HG may be either a range or a point estimate.

The preferred approach for managing domestic coastal pelagic resources is by HG. Foreign fisheries will normally be managed by quotas. HGs are used for the domestic fishery because bycatch of one CPS is common when fishing for another, and curtailing the harvest of one species may limit the harvest of another and prevent achieving target harvest levels.

HGs and/or ACTs will be used as long as the following conditions are met:

1. Allowing an imprecise cap on total harvest will still ensure long-term productivity of the resource and the economic well-being of the fishery and dependent species and is unlikely to exceed an ACL.
2. Unavoidable bycatch would occur after a quota was reached and further landings prohibited, curtailing the harvest of other resources or creating discards.
3. Fishing in excess of an HG or ACT is not expected to significantly affect future yields or exceed an ACL.
4. Overfishing is not likely to occur.

Generally, a quota will not be used for domestic fisheries unless extra protection of an individual species becomes important. Foreign fishing allocations will generally be quotas. Quotas should be used for domestic fisheries when:

1. A high degree of protection of one species is needed to ensure the future well-being of the fishery or dependent species.
2. Permitting bycatch after an HG is reached cannot be accepted if the objectives of the FMP are to be met.
3. Fishing in excess of an HG would significantly affect future yields or exceed an ACL.
4. Overfishing may occur and is less likely under quota management.

The choice of a numerical specification of an HG, ACT, or quota is based on a balance of its social, economic, biological, and ecological effects as stated above.

4.9 Annual Assessment and Management Cycles

This FMP specifies that schedules for annually assessed CPS be developed based on the Council's workload

and meeting schedule, opportunity for industry and technical review of biomass estimates and HGs or quotas, seasonal patterns in the fishery, collection and processing of survey and fishery CalCOFI data ~~during the peak spawning season~~, collection of other data, time required for notification of fishers, and workload of the CPSMT and CPSAS. The FMP does not specify what those schedules will be, since they will be implemented through regulations.

The annual assessment and management cycles determine the start and close date (season) for each annually assessed fishery. These may be changed by abbreviated rulemaking as described in Chapter 2 Section 2.1.

Detailed management schedules and processes for CPS fisheries are found in COP 9, Schedule 3.

5.0 BYCATCH, INCIDENTAL CATCH, AND ALLOCATION

This FMP establishes incidental catch allowances for CPS and an allocation formula for Pacific sardine.

5.1 Incidental Catch Allowances

~~"Bycatch" is defined in the MSA as "fish which are harvested in a fishery, but not sold or kept for personal use and includes economic discards and regulatory discards." In the CPS fisheries, fish are caught and sold incidental to catching other species, because they sometimes school together.~~ Incidental catch allowances permit fishermen to land a certain percentage of fish that would otherwise be considered bycatch. Incidental catch allowances can be expressed as an amount or percentage of catch, landings, or deliveries.

Incidental catch allowances will be set by the Council, based on recommendation from the CPSMT, and consistent ~~with Sections 5.1.1 through 5.1.6 of this~~ the FMP. Estimates of total incidental catch expected under the incidental catch allowances will be factored into HG, quota, or other ACT recommendations. As described in Section 4.8 Chapter 4, estimates of total incidental catch will normally be combined with the directed fishery HG to arrive at a total OY. The purpose of this adjustment is to ensure that overfishing does not occur due to incidental catch.

Incidental catch allowances are the primary method for managing bycatch in the CPS fishery. Other management approaches, such as fishing seasons or area restrictions, might also be required to reduce bycatch or incidental catch. The incidental catch allowances described here do not exclude the possibility of trip limits or other regulations imposed to reduce bycatch, prolong the directed fishery, or for other purposes.

5.2.1.6 Guidelines and Criteria for Setting Incidental Catch Allowances

In setting incidental catch allowances, Council will consider existing regulations, goals and objectives of this FMP, best available data, scientific and management advice available, guidelines given below, and other policies established by the Council. If decision by the NMFS Regional Administrator about incidental catch allowances is necessary due to time constraints, it will be made based on consultation with the Council Chair, Director of the California Department of Fish and Game, CPSMT, CPSAS, other representatives appointed by the Council, and interested parties as appropriate

5.2.1.6.1—Overfished Stocks

In order of priority, the Council's goals in setting incidental catch allowances for overfished stocks should be to (1) minimize fishing mortality on overfished stocks, and (2) minimize discards of overfished stocks. Incidental catch allowances for overfished stocks should approximate rates of incidental catch when fishing

is conducted in a manner that minimizes catch of the overfished stock.

The Council must set incidental catch allowances for all overfished stocks. Once set, incidental catch allowances for overfished stocks remain in force until they are changed. Incidental catch allowances for overfished stocks can be revised during the fishing season if conditions warrant or new information becomes available.

5.1.1— Incidental Catch Allowances When Stocks are Overfished

When a stock is overfished ~~according to the definition of overfishing~~ as defined in this FMP, incidental catch allowances for commercial fishing shall be set at 0 percent to 20 percent of landed weight, as recommended by the Council.

5.2.2.1.6.2 Stocks Not Overfished

Incidental catch allowances for stocks that are not overfished are enforced once a directed fishery HG has been reached, and the directed fishery has been closed. Goals in setting incidental catch allowances for stocks that are not overfished should be to (1) avoid unnecessary discard, (2) ensure that HG is taken, but not exceeded, and (3) promote efficiency and profitability in the fishery. Estimates of total incidental catch (based on past or current incidental catch rates, incidental catch allowances, HGs and other conditions in the fishery) are normally considered when HGs are set. Thus, incidental catch allowances should be set at the same time and in concert with HGs.

Incidental catch allowances are meant to accommodate catches that are difficult to avoid during normal fishing directed at other species. Therefore, incidental catch allowances should be set at levels that approximate incidental catch rates during normal fishing activities and do not result in landings in excess of an ACL or ABC.

5.1.2— Incidental Catch Allowances When Stocks are Not Overfished

When a stock is not overfished ~~according to the definition of overfishing~~ as defined in the FMP, incidental catch allowances for commercial fishing shall be set at 0 percent to 45 percent of landed weight, as recommended by the Council.

5.2.2.1.5.1.3 Pacific (~~chub~~) Mackerel Landed Incidentally

When the Pacific (~~chub~~) mackerel resource is not overfished, and total landings for the directed fishery established under an HG have been caught, the Council may set an allowable incidental trip limit of one mt or lower.

5.2.3.5.1.7 Incidental Catch Allowance for Shared ~~EC~~ Ecosystem Component Species

Shared EC Species could continue to be taken incidentally without violating Federal regulations, unless regulated or restricted for other purposes, such as with bycatch minimization regulations. The targeting of Shared EC Species is prohibited.

5.3 Catch Allowance for Live Bait

5.3.15.1.4 *Catch Allowances for Live Bait When Stocks are Overfished*

When a stock is overfished ~~according to the definition as defined~~ in the FMP, catch allowances for live bait fishing may be determined by the Council. Allowing a directed live bait fishery when a stock is overfished is contingent on Council consideration of biological, environmental, and socio-economic factors. The Council is required to minimize fishing mortality on an overfished stock to the extent practicable and to undertake a rebuilding program, which may be implicit to the harvest control rule or explicit.

5.3.25.1.5 ~~*Incidental Catch Allowances for Live Bait When Stocks are Not Overfished*~~

When a stock is not overfished according to the definition of overfishing in the FMP and an ACL is not anticipated to be exceeded, no restrictions are placed on live bait harvest.

~~5.1.6 Guidelines and Criteria for Setting Incidental Catch Allowances~~

~~In setting incidental catch allowances, Council will consider existing regulations, goals and objectives of this FMP, best available data, scientific and management advice available, guidelines given below, and other policies established by the Council. If decision by the NMFS Regional Administrator about incidental catch allowances is necessary due to time constraints, it will be made based on consultation with the Council Chair, Director of the California Department of Fish and Game, CPSMT, CPSAS, other representatives appointed by the Council, and interested parties as appropriate.~~

~~5.1.6.1 Overfished Stocks~~

~~In order of priority, the Council's goals in setting incidental catch allowances for overfished stocks should be to (1) minimize fishing mortality on overfished stocks, and (2) minimize discards of overfished stocks. Incidental catch allowances for overfished stocks should approximate rates of incidental catch when fishing is conducted in a manner that minimizes catch of the overfished stock.~~

~~The Council must set incidental catch allowances for all overfished stocks. Once set, incidental catch allowances for overfished stocks remain in force until they are changed. Incidental catch allowances for overfished stocks can be revised during the fishing season if conditions warrant or new information becomes available.~~

~~5.1.6.2 Stocks Not Overfished~~

~~Incidental catch allowances for stocks that are not overfished are enforced once a directed fishery HG has been reached, and the directed fishery has been closed. Goals in setting incidental catch allowances for stocks that are not overfished should be to (1) avoid unnecessary discard, (2) ensure that HG is taken, but not exceeded, and (3) promote efficiency and profitability in the fishery. Estimates of total incidental catch (based on past or current incidental catch rates, incidental catch allowances, HGs and other conditions in the fishery) are normally considered when HGs are set. Thus, incidental catch allowances should be set at the same time and in concert with HGs.~~

~~Incidental catch allowances are meant to accommodate catches that are difficult to avoid during normal fishing directed at other species. Therefore, incidental catch allowances should be set at levels that approximate incidental catch rates during normal fishing activities and do not result in landings in excess of an ACL or ABC.~~

~~5.1.7 Incidental Catch Allowance for Shared EC Species~~

~~Shared EC Species could continue to be taken incidentally without violating Federal regulations, unless regulated or restricted for other purposes, such as with bycatch minimization regulations. The targeting of Shared EC Species is prohibited.~~

~~5.45.2 Minor Directed CPS Finfish Fisheries~~

A very small sector of the CPS fishery harvests minor amounts of CPS not as part of the primary commercial directed fishery, but as a small artisanal fishery. This component of the fishery typically sells catch as specialty dead bait to recreational and commercial fisheries, or for human consumption to restaurants and the public. Total landings from this sector typically make up less than one percent of the total landings of any particular CPS stock. These operations do not fall under standard incidental landing exemptions and do not meet the incidental landing allowances described above when the directed fishery is closed. Setting minor directed harvest limits when other directed fishing has been closed, and managing this harvest under the ACL similar to other harvests allowed after the closure (e.g., live bait and incidental) allows these very small catches to continue under certain scenarios when this catch would otherwise be precluded, such as the Pacific sardine biomass dropping below the CUTOFF value, or when the directed fishery allocation for the year or a fishing period has been reached.

Minor directed fishing will be allowed to continue after a directed fishery is closed, unless otherwise specified, or an ACL is anticipated to be exceeded. The allowance for minor directed fishing is that no vessel or person may land more than one mt per day and vessels may not make more than one trip per day. Minor directed fishing will not be allowed after the ACL is met or exceeded, or is projected to be exceeded.

~~5.55.3 Seasonal Allocation for the Directed Pacific Sardine Fishery~~

The non-tribal share of the Pacific sardine HG is allocated coastwide on a seasonal basis as follows:

- ~~1. 35 percent of the HG to be allocated coastwide on January 1.~~
- ~~12. On July 1, 40 percent of the initial harvest guideline for Pacific sardine is allocated coastwide within the fishery management area. 40 percent of the HG, plus any portion not harvested from the initial allocation, to be reallocated coastwide on July 1.~~
- ~~23. On September 15, 25 percent of the initial harvest guideline for Pacific sardine plus the remaining unharvested portion of the July 1 allocation is allocated coastwide within the fishery management area. On September 15 the remaining 25 percent of the HG, plus any portion not harvested from earlier allocations, to be reallocated coastwide.~~
- ~~3.4. On January 1, 35 percent of the initial harvest guideline for Pacific sardine plus the remaining unharvested portion of the September 15 allocation is allocated coastwide within the fishery management area. 35 percent of the HG to be allocated coastwide on January 1.~~