COASTAL PELAGIC SPECIES MANAGEMENT TEAM HANDOUT ON AMENDMENT 10 TO THE COASTAL PELAGIC SPECIES FISHERY MANAGEMENT PLAN - DRAFT SUMMARY OF ALTERNATIVES -

Issue 1 – Capacity Goal for the CPS Limited Entry Fleet

Alternative 1 - Adopted. Maintain 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 fin.fish target harvest level, approximately 110,000 mt, and with physical capacity available to harvest peak period amounts of finfish, 275,000 mt. The current fleet of 65 vessels would satisfy this goal. Estimated normal harvesting capacity for the current 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 Gross Registered Tonnage (GRT) for the current fleet is 5,642 mt.

Alternative 2. Work the fleet down to a smaller number of vessels with certain characteristics (e.g., smaller number of larger, 'efficient' vessels; or smaller number composed of CPS finfish 'specialists'), with normal harvesting capacity equal to average total finfish landings over the 1981-2000 period, approximately 57,676 mt.

Alternative 3. Base the fleet size on our expectations of long-term expected yields from the combined CPS finfish species and the number of vessels physically capable of harvesting that yield, 110,000 mt annually, without an excess capacity reserve.

Alternative 4. (status quo - no action). Maintain a fixed fleet of 65 vessels, with no capacity goal or limits on fleet GRT.

Issue 2 – Conditions for Transfer of Existing Permits

Alternative 1. (status quo - no action). No transferability of permits except 1) if the permitted vessel totally lost, stolen or scrapped, such that it cannot be used in a federally regulated commercial fishery, provided application for the permit originates from the vessel owner who must place it on a replacement vessel of the same or less harvesting capacity within one year of disability of the permitted vessel, or 2) the permit is placed on a replacement vessel of the same or less harvesting capacity provided the previously permitted vessel is permanently retired from all federally managed commercial fisheries for which a permit is required.

Alternative 2. Allow CPS finfish limited entry permits to be transferred without constraints.

Alternative 3 - Adopted. Allow CPS finfish limited entry permits to be transferred with restrictions on the harvesting capacity of the vessel to which it would be transferred to: 1) full transferability of permits to vessels of comparable capacity (vessel GRT +10% 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.

Subissue 2a – Adjusting Permit Transferability to Maintain the Capacity Goal

Alternative 1. (status quo per ***Issue 2, Adopted Alternative 3***). A CPS limited entry permit would be transferable on a 1 for 1 basis to a vessel with a harvesting capacity not in excess of 110% of that of the transferring vessel; if in excess of 110%, additional permits would have to be combined with the original permit to match the harvesting capacity of the vessel to which the permits will be transferred. There would be no provisions for adjusting transferability.

Alternative 2. Restore fleet capacity to target fleet GRT (5,642 mt) by restricting conditions for permit transfer when the upper threshold of fleet GRT(fleet GRT plus 5%, or 5,924 mt) is reached. Under Alternative 2, once the trigger point is met or exceeded, permits could only be transferred by combining-up on a 2 for 1 basis. Transfer restrictions could be repealed once fleet GRT is reduced back down to the 5,642 mt target.

Alternative 3. *(CPSMT Preferred)* Restore fleet capacity to target fleet GRT (5,642 mt) by restricting conditions for permit transfer when the upper threshold of fleet GRT(fleet GRT plus 5%, or 5,924 mt) is reached. Under Alternative 3, once the trigger point is met or exceeded, permits could only be transferred to vessels with equal or smaller GRT and the 10% vessel allowance would be removed. The 10% allowance could be reconsidered once total fleet GRT is reduced to 5,642 mt target.

Subissue 2b – Procedures for Issuing New Limited Entry Permits

Alternative 1. No qualifying criteria in the FMP. Under this option permits could be issued on a first come first served basis (e.g. through lottery or auction). Each vessel applying for a permit would have to have its harvest capacity evaluated so that in aggregate the new CPS finfish harvesting capacity target was not exceeded. This option is probably not doable unless none of the vessels applying have a history in the fishery.

Alternative 2. *(CPSMT Preferred)* Use qualifying criteria originally established in Amendment 8 for issuance of new CPS finfish limited entry permits. This would probably entail continuing down the list of vessels having landings during the 1993-97 window period in order of decreasing window period landings. In this case, the next permit awarded would go to the 71st of the 640 vessels with window period finfish landings if this vessel were to apply. Each vessel on the list would have to have its harvest capacity evaluated so that in aggregate the new capacity target was not exceeded.

Alternative 3. Establish new qualifying criteria. This would involve establishing a new window period, minimum landings, etc. This would probably be desirable if there were reasons to extend the window period further back in time to qualify vessels whose history in the fishery pre-dated the original window period. Each vessel applying for a permit would have to have its harvest capacity evaluated so that in aggregate the new CPS finfish harvesting capacity target was not exceeded. This option might require an amendment to the FMP.

Issue 3 – Market Squid MSY

Alternative 1 (status quo - no action). Set no MSY.

Alternative 2. Set MSY proxy based on evaluation of historical landings, see *draft Amendment 9*, section 5.2.1). The CPSMT reviewed existing data (including fishery and biological) for the California market squid fishery to recommend an MSY value. There are not adequate data to make a mathematical MSY determination; therefore, guidance was taken from the NMFS publication: *Technical Guidelines on the Use of Precautionary Approaches to Implementing National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act (Restrepo et. al., 1998)*. Those guidelines suggest that in data poor situations such as the California market squid fishery, a proxy may be used for MSY, and that it is reasonable to use recent average catches from time periods when there is no qualitative or quantitative evidence of declining abundance. See *draft Amendment 9* for candidate average-catch calculations. This Alternative was not supported by the Science and Statistical Committee (SSC).

Alternative 3. Set MSY proxy based on spawning area expansion method, see *draft Amendment 9*, section 5.2.2). Commercial catch information from CDFG is available by location for the time period 1981 through 1999. Location information is recorded by fishing block, which encompasses a 10 by 10 nautical mile area. Over that time period, 262 unique blocks have been recorded on landing receipts. This number may be used to represent the total available fishing area in the range of the California fishery. In keeping with expansion of the fishery over this time period, the number of blocks fished has generally increased since 1981. By scaling the catch in any given season to account for what might have been caught in that season were all the blocks utilized, a proxy MSY for that year may be determined. See *draft Amendment 9* for candidate average-catch calculations. This Alternative was not supported by the Science and Statistical Committee (SSC).

Alternative 4 *(CPSMT Preferred)*. Set F_{MSY} proxy based on egg escapement method, see *Recommendations for Market Squid Management and Research, CPSMT Report, Exhibit H.2.b, November 2001)*. The current port sampling program implemented by the California Department of Fish and Game (CDFG), along with newly developed laboratory and analysis procedures conducted by the National Marine Fisheries Service (Southwest Fisheries Science Center, SWFSC), can provide an objective method for establishing Maximum Sustainable Yield (MSY)-based management goals for the squid resource, e.g., for developing biological reference points. In practical terms, the Egg Escapement (EE) 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}). However, it is important to note that this approach does not provide estimates of historical or current total biomass and thus, a definitive yield (i.e., quota or Acceptable Biological Catch) cannot be determined at this time. Ultimately, the EE approach can be used to assess whether the fleet is fishing above or below an a priori-determined sustainable level of exploitation and in this context, can be used as an effective management tool. Further technical details needed to implement the EE method are presented under four broad headings in the *CPSMT Report* cited above: (1) selection of a 'preferred' model scenario; (2) selection of a 'threshold' level of egg escapement (EE value) that can be considered a warning flag when tracking the status of the population; (3) fishery operations in (and after) El Niño/Southern Oscillation (ENSO) events; and finally, (4) necessary management-related constraints. This Alternative was supported by the Science and Statistical Committee (SSC) and is the preferred Alternative of the CPSMT. Reasons for adopting the EE method for monitoring/managing the squid population, rather than other analytical approaches (e.g., surplus production and depletion models, as well as Alternatives 1-3 above), are presented in *Report of the Stock Assessment Review (STAR) Panel for Market Squid, Final Workshop Report, November 2001*.