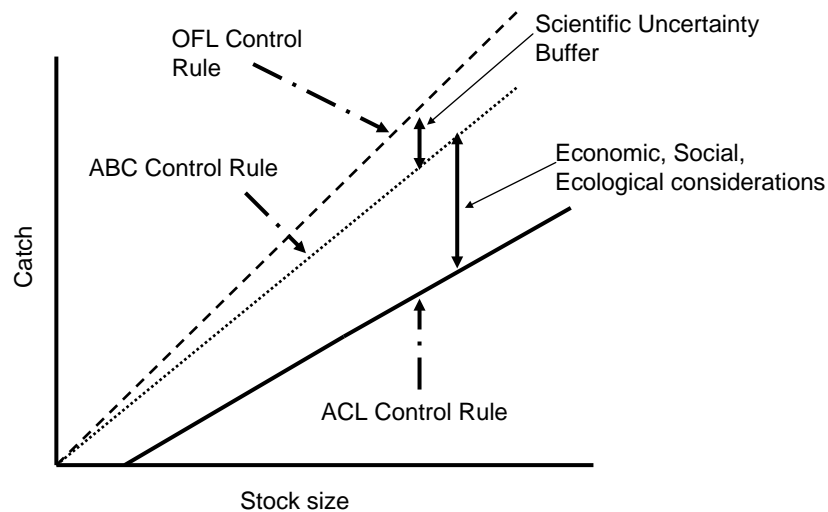


SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON  
FISHERY MANAGEMENT PLAN (FMP) AMENDMENTS TO IMPLEMENT ANNUAL  
CATCH LIMIT (ACL) REQUIREMENTS FOR CPS FISHERIES

All of the Council's Fishery Management Plans will need to be modified to some extent due to implementation of Annual Catch Limits (ACLs). The Council's Coastal Pelagics Fishery Management Plans already include harvest control rules which relate catch limits to assessment results and monitoring data. These harvest control rules could form the basis for satisfying the ACL requirements.

Three control rules will be needed to address the NS1 requirements. The overfishing limit (OFL) control is based on achieving maximum sustainable yield. Catches above the OFL constitute overfishing. Under the reauthorized Magnuson Act, the OFL and the acceptable biological catch (ABC) control rules differ due to scientific uncertainty (the scientific buffer). The ACL is lower than the ABC. The Council's current optimum yield (OY) control rules (such as the 40:10 control rule applied for groundfish management) account for the impact of ecological, social, and economic considerations. The Scientific and Statistical Committee (SSC) therefore recommends that the difference between the ABC and ACL control rules should account for ecological, social, and economic considerations. The figure below illustrates the three control rules in a hypothetical situation.



The SSC notes that there will not need for an annual catch target (ACT) control rule for Council fisheries for which management controls are successful. Such fisheries include groundfish and Coastal Pelagic Species (CPS).

The current Council harvest control rules do not explicitly account for scientific uncertainty. One way to include scientific uncertainty would be to base the ABC on a lower fishing mortality rate than that used to compute the OFL. The extent of difference between the fishing mortality rates used to compute the ABC and the OFL could be calculated based on scientific uncertainty

quantified by examining the variation in past assessment results and using the confidence intervals from a stock assessment. The aim of these examinations would be to assess how often the ABC from an assessment would exceed the OFL. It may be necessary to develop a tier system with, for example, three tiers, based on the level of scientific uncertainty, where the scientific buffer is larger for stocks that are more uncertain.

The SSC is required to provide recommendations for ABCs and hence needs to account for scientific uncertainty related to the estimation of OFL. A process should be established whereby the Council can evaluate the trade-off between the size of the scientific buffer and the risk of overfishing to establish a level of risk aversion. The SSC would then review the application of the scientific buffers based on that policy choice. It is not the role of the SSC to make policy decisions.

#### *Coastal Pelagics issues*

In relation to Coastal Pelagics species, the SSC notes that Pacific sardine, Pacific mackerel, northern anchovy, and jack mackerel would require ACLs. Market squid are short-lived and should be an exception under the ACL regulations. Agenda Item C.3.a, Attachment 3 suggests that the cutoffs included in the harvest control rules for Pacific sardine and Pacific mackerel provide a buffer for scientific uncertainty. The SSC does not support this suggestion because the cutoffs included in these harvest control rules were selected to maximize long-term yield given variation in recruitment (an MSY control rule). In relation to jack mackerel and northern anchovy, which are monitored species under the CPS Fishery Management Plan (FMP), the SSC recommends re-examining, or possibility updating, the existing assessments for these species and setting an ACL based on a low exploitation rate. If the catch exceeds this ACL, a stock assessment would be conducted. Even though krill is a prohibited harvest species, an ACL, based on the estimate of MSY included in the CPS FMP, may need to be set.

The SSC reviewed the two schedules in Item C.3.a, Attachment 3. Even the moderate schedule will be very difficult to achieve if additional analyses are required prior to the first FMP amendment drafts.

PFMC  
3/8/09