

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
FISHERY MANAGEMENT PLAN AMENDMENT 16, ANNUAL CATCH LIMITS AND
ACCOUNTABILITY MEASURES

Mr. Chuck Tracy and Dr. Peter Dygert presented the *Progress Report on Alternatives for Pacific Coast Salmon Plan Amendment 16* (Agenda Item C.1.b, SAC Report) for the Scientific and Statistical Committee (SSC). The salmon amendment committee (SAC) has made considerable progress and seeks guidance from the Council to help direct development of options. The SSC discussion was structured around the topics highlighted by the SAC (Agenda Item C.1, Situation Summary).

The SAC proposes the following stock classifications for the 69 salmon stocks currently in the Fishery Management Plan (FMP):

- Endangered Species Act (ESA)-listed stocks: These are subject to stock-specific consultation standards;
- Ecosystem Components: Far North Migrating (FNM) stocks and Puget Sound and Fraser River pink salmon are encountered at low rates in Council fisheries. A vulnerability analysis supports this classification;
- International exemptions: This applies to stocks managed under the Pacific Salmon Treaty that do not fall under one of the first two categories. The Council will need status determination criteria (SDC) for these (excepting Canadian stocks);
- Natural stocks that do not fall into any of the above categories: Only two stocks are in this category and will require annual catch limits (ACLs): Klamath River fall Chinook (KRFC), and Sacramento River fall Chinook (SRFC). Southern Oregon Coast Chinook may enter this category in the near future.

The SSC considers this to be a valid and defensible stock classification. KRFC will serve as an indicator stock for a stock complex including Klamath River spring Chinook, Smith River Chinook, and Southern Oregon Chinook. SRFC will serve as an indicator stock for a stock complex including fall and late fall stocks from the Sacramento and San Joaquin basins. Further evaluation of how well these indicator stocks represent each stock complex will be needed as more information becomes available.

It is clear that there will need to be a different management framework for salmon than has been developed for groundfish. Salmon management differs from other species management because the adults return to freshwater where spawning stock size can be determined. This allows status to be addressed directly and provides opportunities for finer scale management. For example, the SAC proposes to estimate ACLs pre-season, based on F_{msy} and the stock size projection, then reevaluate them post-season based on actual run sizes. This is responsive to highly variable recruitments and imprecise stock size predictors and represents an additional avenue of accounting for both scientific and management uncertainty. The SAC will bring a specific proposal to the September Council meeting. This proposal should include a process for the SSC to provide preseason overfishing limits (OFLs) and acceptable biological catches (ABCs) to the Council.

The SAC proposes scientific uncertainty buffers of 5 percent for stocks with direct estimates of Maximum Sustainable Yield (MSY) (KRFC) and 10 percent for stocks with proxy estimates of MSY (SRFC). Estimating a true MSY for natural stocks that are influenced by hatchery stocks is a difficult task. The SSC is concerned that the Council adopt appropriate levels of MSY and would like to see documentation for MSY proxy values used for Chinook and coho. The SSC would also like to see a discussion of the rationale behind the choice of 5 percent and 10 percent for buffers.

No additional buffers to account for management uncertainty are proposed at this time. The SAC proposes to use an adaptive management approach: if ACLs are consistently exceeded, the use of buffers would be considered and implemented as needed. The SAC reported that quotas have rarely been exceeded in recent quota-managed fisheries. The SSC would like to see a historical comparison of preseason quotas and postseason catches to support this.

SDC are needed for the following stocks: SRFC, KRFC, Southern Oregon Coast Chinook, Columbia River Summer Chinook, Washington Coast Coho, and Puget Sound Coho. SDC are proposed to be based on estimates of MSY levels of fishing mortality (F_{msy}) and spawner escapement (S_{msy}). Options presented include single-year and three-year SDC. Current overfishing criteria are based on three-year stock performance. The overfished threshold is proposed to be one half of S_{msy} . This is consistent with the National Standard 1 Guidelines, but the SSC would like to see analysis supporting use of this criterion for salmon and analysis of the merits of one and three year time frames for determining overfishing.

PFMC
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