

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
ESTIMATION PROCEDURES AND METHODOLOGIES

Modifications to the Coho and Chinook Fishery Regulation Assessment Models

The Scientific and Statistical Committee (SSC) was informed of a slight change in the coho fishery regulation assessment model (FRAM) that accounts for the Thompson River coho stock. These changes affect only the Fraser component of the model and do not affect any other stocks in the model.

At the November 1999 Council meeting, a presentation was given to the SSC on changes proposed for the chinook FRAM model for the 2000 management season. Mr. Larrie LaVoy presented an update on the status of these changes to FRAM. Proposed changes to chinook FRAM to allow it to evaluate mark-selective fishery proposals were not completed. Since there will be no mark-selective fisheries proposed for chinook for the 2000 management season, this will not present any problems. The only other changes to chinook FRAM were the addition of new tag code information for two stocks (White River spring chinook and Fraser late). These additions have virtually no impacts on the estimates of stock composition of Council fisheries.

Recreational Nonretention Hooking Mortality Rates

Dr. Robert Kope of the STT discussed the STT report on recommendations for hooking mortality rates in 2000 recreational ocean salmon fisheries (STT Report B.2.). The SSC had endorsed the methodology used in the report at the November 1999 meeting. The only changes from November were that some previously published estimates of hooking mortality rates were found to be incorrect on examination of the original data. These estimates were corrected for the STT analysis. In addition, estimates from three studies conducted in Canadian marine waters during 1999 were added to the analysis.

The SSC concurs with the recommendations of the STT based on a review of their report:

- Adopt a single hook-and-release mortality rate of 14% for chinook and coho salmon of all sizes released from recreational ocean fisheries using trolling, mooching, and motor mooching methods, except for California-style mooching.
- Continue to apply a weighted average of recreational troll and California-style mooching rates to California recreational ocean salmon fisheries.
- Continue to apply an additional dropoff mortality rate of 5% to all fish caught by ocean salmon hook-and-line fisheries to account for dropoff mortality, predation loss, noncompliance, etc.
- Support further research to estimate hook-and-release mortality rates, encounter rates, and develop fleet profiles of fishing gear/methods and hook wound locations.

In addition, the SSC recommends additional research on methods for expanding estimates of immediate hook-and-release mortality to long-term mortality estimates be conducted.

PFMC
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