SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON REVIEW OF 2008
FISHERIES AND SUMMARY OF 2009 STOCK AUNDANCE ESTIMATES

Dr. Robert Kope, from the Salmon Technical Team (STT), provided the Scientific and Statistical Committee (SSC) with an overview of the 2008 salmon fisheries and abundance estimates for 2009. Dr. Pete Lawson, from the SSC, reviewed a change in the approach to forecasting abundance for Oregon Coast Natural (OCN) and Oregon Production Index (OPI) coho salmon.

The SSC notes that: (1) the Klamath River Fall Chinook stock has failed to achieve its minimum spawner escapement target in four of the last five years and (2) the preseason forecast for the Sacramento River Fall Chinook stock is for an abundance only slightly greater than the 122,000 minimum escapement target.

With regard to the OCN predictor, the Oregon Production Index Technical Team (OPITT) has adopted a new abundance time series based on new run reconstructions and application of the backwards FRAM model. The new data series has the advantage of being consistent with the data series used for FRAM modeling, but it is much shorter than the data series used in previous years and has less contrast in the environmental variables. The OCN forecast model developed for 2009 is similar to previously used models but incorporates an environmental variable that accounts for different productivity during warm and cold ocean regimes. The SSC recommends that OCN forecast methods be reviewed at the salmon methodology review in the fall.

The SSC commends the STT for adding figures to Preseason Report I that compare preseason with corresponding post-season estimates for various stocks making significant contributions to Council area fisheries (Figures I-1, I-2a, and I-2b). This additional information facilitates the visual evaluation of uncertainty regarding preseason estimates. As a further step towards a formal evaluation of uncertainty and risk in salmon management, the SSC recommends that Preseason Report I include prediction intervals for estimates of salmon abundance and exploitation rates. Given the uncertainties in projecting salmon abundance and exploitation rates, it is difficult to assess the chances of achieving management objectives or to evaluate whether a management goal has been attained. The explicit recognition of uncertainty in salmon statistics is a necessary first step towards incorporating uncertainty and risk in salmon management decision making. Quantifying this uncertainty may be needed to meet ACL requirements in the future.

PFMC
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