

SCIENTIFIC AND STATISTICAL COMMITTEE COMMENTS ON
REVIEW OF 2000 FISHERIES AND SUMMARY OF 2001 STOCK ABUNDANCE ESTIMATES

The Scientific and Statistical Committee (SSC) heard a summary of 2000 fisheries and projections for 2001 stock sizes from the Salmon Technical Team (STT). In general, stock abundances of coastal and Columbia River coho are predicted to be higher in 2001 than in recent years. This is especially true for Oregon Production Index (OPI) area hatchery fish. Washington coastal natural coho stocks are expected to be above their floor values. Oregon coastal natural coho are predicted to return at slightly below last year, but substantially above the parental spawner level. It remains to be seen whether this is the beginning of a trend toward higher marine survivals, or a "blip" following the 1998 *El Niño*, analogous to the peak returns of 1986. In either case, it is important to start planning now for the large hatchery surplus expected this fall. The Council's challenge is to take advantage of the hatchery production without adversely affecting wild stocks potentially beginning to stage a recovery. The SSC supports a fishery exploitation rate in the range of 0 to 8% on OCN coho based on the critically low 1998 parental spawning escapement, as described in the 2000 review of Amendment 13 of the salmon fishery management plan.

Chinook in 2001 are predicted to be similar in abundance to 2000. Notable exceptions are larger abundances of Klamath River age 4, and Columbia River Upriver Spring and Spring Creek Hatchery Fall chinook. California Central Valley fall chinook show a slight decline in recent years, but remain strong. Sacramento Winter Run chinook are likely to be a limiting factor for California chinook fisheries.

Preseason Report I presents stock size predictions to the nearest 100 fish, without any indication of the precision of these predictions. The SSC recommends that, in the future, predictions include a statistical measure of variability such as confidence limits or coefficients of variation. Without variance estimates it is impossible to assess the likelihood of meeting management objectives and the risks to sensitive stocks of proposed fishing seasons.

With larger hatchery stock sizes and mass-marked coho it is likely that the intensity of mark-selective fisheries will increase in the near future. Possible consequences of selective fisheries include difficulties in modeling nonlanded mortalities and reduction in our ability to assess stock composition from coded-wire tag (CWT) recoveries. Double index tagging experiments are designed to overcome some of these problems, but their usefulness has not been demonstrated. These fisheries are still in the experimental and developmental stages. The SSC recommends that a comprehensive review of selective fisheries be conducted no later than 2004. The review should focus on (1) the effectiveness of selective fisheries in reducing impacts on unmarked fish, (2) our ability to predict incidental impacts preseason, (3) our ability to assess these impacts postseason, and (4) effects on the quality of the CWT data base.