

INTRODUCTION

This is the second report in an annual series of four reports prepared by the Salmon Technical Team (STT) of the Pacific Fishery Management Council (Council) to document and help guide salmon fishery management off the coasts of Washington, Oregon, and California. This report will be formally reviewed at the Council's March meeting. The third and fourth reports in this series will be developed at the close of the March and April Council meetings, respectively, to analyze the impacts of the Council's proposed and final ocean salmon fishery management recommendations for 2010.

This report provides 2010 salmon stock abundance forecasts, and an analysis of the impacts of 2009 regulations, or regulatory procedures, on the projected 2010 abundance. This analysis is analogous to that of a no-action alternative in a National Environmental Policy Act (NEPA) analysis, and is intended to give perspective in developing 2010 management measures. The report focuses on Chinook, coho, and pink salmon stocks that have been important in determining Council fisheries in recent years, and on stocks listed under the Endangered Species Act (ESA) with established National Marine Fisheries Service (NMFS) ESA consultation standards.

Chapter I provides a summary of stock abundance forecasts. Chapters II and III provide detailed stock-by-stock analyses of abundance, a description of prediction methodologies, and accuracy of past abundance forecasts for Chinook and coho salmon, respectively. Chapter IV summarizes abundance and forecast information for pink salmon. Four appendices provide supplementary information as follows: Appendix A provides a summary of Council stock management goals; Appendix B contains pertinent data for Oregon production index (OPI) area coho; Appendix C contains the Council's current harvest allocation schedules, and; Appendix D details justification for a minor change in the Sacramento Index predictor.

STT Concerns

Sacramento River fall Chinook (SRFC) adult escapement continues its declining trend, with the 2009 estimate representing the lowest escapement on record. The 2008 jack escapement of approximately 4,000 SRFC, while extremely low relative to historical data, was an increase over the 2007 jack escapement and was thought to signify a change in the stock abundance trajectory. However, the 2009 adult escapement was lower than forecast in the absence of nearly all fisheries, indicating that the recovery of this stock has yet to begin. The causes of the most recent escapement shortfall are not yet known, and it is unclear whether the SRFC stock will behave in the future as it has in the past. The 2010 Sacramento Index, forecast using the 2009 jack return, suggests a substantial increase in preseason adult ocean abundance of SRFC relative to recent years. Yet, given forecast uncertainty and the lack of demonstrable increases in adult abundance or escapement to date, the STT remains concerned about SRFC recovery.