

SALMON ADVISORY SUBPANEL STATEMENT ON THE KLAMATH RIVER FALL
CHINOOK CONSERVATION OBJECTIVE

The Salmon Advisory Subpanel (SAS) recommends the Council initiate a Fishery Management Plan amendment to address the need for *de minimis* fisheries when Klamath stock abundance is low. The SAS supports the Klamath Fishery Management Council proposal as one alternative to be considered during the amendment process. Scoping should be initiated at the March 2005 Council meeting in Seattle, and the SAS recommends issues be limited to changes to the Klamath River fall Chinook conservation objective to reduce workload issues and expedite the outcome.

Based on the presentation by Dr. Scott Foott at the Habitat Committee meeting October 25, it appears the juvenile outmigrants are significantly affected by pathogens in the mainstem Klamath River, in particular *Ceratomyxa shasta* and *Parvicapsula minibicornis*. Infections have only been detected in the mainstem Klamath River, and not in any of the four major tributaries (Shasta, Scott, Salmon, and Trinity rivers). The infection and subsequent mortality rates are very high for spring and summer outmigrants; however, fall releases of hatchery fingerlings show very low mortality rates. The key to reducing the infectious load appears to be control of the intermediate host, a small polychaete worm associated with algal mats which proliferate in the stable flow and bedload environment below Iron Gate Dam. The diseases associated with the pathogens are not transferred laterally between fish, and there is no indication of density dependence in infection or mortality rates. In other words, reduced juvenile production would not increase survival. In terms of adult equivalents, it is likely there are greater impacts to Klamath Basin fish populations from these diseases than from fisheries. Dr. Foott noted a need for increased research and monitoring to better understand the ecology of the basin, including improved juvenile abundance estimates for each of the major production areas. He noted his budget for research is only about \$10,000-\$28,000 annually.

The SAS considers disease problems in the Klamath Basin a major threat to the health of the Klamath ecosystem and the communities and fisheries which depend on it. We recommend the U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, and National Marine Fisheries Service direct additional funding to research and monitoring within the basin to help resolve this critical problem.

PFMC
10/31/05