

SALMON TECHNICAL TEAM REPORT ON THE
DRAFT KLAMATH RIVER FALL CHINOOK OVERFISHING ASSESSMENT

The Salmon Technical Team (STT) has reviewed the draft report 'Klamath River Fall Chinook Overfishing Assessment' dated August 22nd, 2007. The report is required by the Pacific Fishery Management Council's (Council's) Fishery Management Plan (FMP) as a result of the failure of Klamath River Fall Chinook (KRFC) to meet the adopted spawning escapement floor of 35,000 natural spawners for three consecutive years, 1994 – 1996.

The STT understands that the report is still very much a draft report and has not benefited from formal review of the Overfishing Assessment workgroup. The current version of the report lacks an Executive Summary, a Discussion, and a Conclusions/Recommendations section, we understand that those will be included in the final version of the report. Since this report is still in draft form, STT comments are limited to the scope and format of the report and to any analyses presented.

The report states both four purposes and four objectives. The difference between a purpose and an objective is not clearly stated, and any relationship between them is difficult to discern.

The report assesses the KRFC Stock/Ecosystem status in Section 2 and describes Council management of KRFC in Section 3. Both sections provide both historical and current information on stock status and management. The STT believes that both sections provide adequate information to put the recent KRFC escapement shortfalls into historical perspective.

Section 4.1.2 provides a description of issues surrounding the management of the river recreational fishery, and presents historical tables of river recreational and tribal harvest. This material is not particularly germane to the questions at hand, given the analysis presented in the following section and could be deleted. Section 4.1.3 of the report develops a comprehensive analysis framework for addressing all of the harvest related questions, and appears to be the most relevant of all the material presented in the report with respect to identifying the cause of the escapement shortfalls in 2004 to 2006. This section provides a detailed description of the Klamath Ocean Harvest Model (KOHM) performance and uncertainty surrounding model predictions of KRFC abundance, harvest, and escapement. The comparison of postseason/preseason estimates of age-specific KOHM quantities provides a fairly straightforward, and adequately documented, interpretation of the model performance. However, comparison of the single age values and ratios to the age 3+4+5 values and ratios is less intuitive and could benefit from additional description of the weighting process. A list of six conclusions is presented at the end of this section. It is unclear to the STT if these are intended to be only conclusions of that section, or if they are intended to be a part of the overall conclusions of the report. Either way, when the report's overall conclusions are written, the Section 4 conclusions should either be repeated or moved to that section.

The intent of having the information contained in Sections 5.1.1 and 5.1.2 presented separately from other sections of the report is unclear. The STT believes that the information in Sections 5.1.1 and 5.1.2 is more appropriate in Section 2. The correlation between Shasta river trap counts and jack returns is interesting, but its relation to factors leading to or causing the escapement shortfall of KRFC is unclear. Similarly, the discussions of possible hatchery/wild interactions, streamflow and water quality, and disease in Section 5.2 are interesting, but no direct or indirect relationship between these factors and the recent low escapements of KRFC is demonstrated or really even speculated on in most instances. The section should either be expanded to link this information to the escapement shortfall of KRFC from 2004-2006 or be deleted.

Section 5.3 provides a brief comparison of estimated survival rates of Trinity River and Iron Gate hatcheries. The intent of this section of the report and its relevance to overfishing of KRFC and subsequent escapement shortfall of the natural stock is unclear. The STT recommends that this section of the report be incorporated as part of Section 2. Useful additions to this section on marine survival might include a discussion of long term trends in ocean productivity (e.g., Pacific decadal oscillation, evidence of effects of El Niño or La Niña events, etc.) on early ocean survival, and a comparison of KRFC ocean survival with other Council area fall Chinook stocks.

The STT understands that several sections of the current version of the report contain factual errors. Those sections of the report should be carefully reviewed and corrected, or if that is not possible in light of time and manpower constraints, those sections should be removed.

PFMC
09/06/07