SALMON TECHNICAL TEAM REPORT ON THE INVESTIGATON OF EFFORT FORECASTS PRODUCED FOR AREAS SOUTH OF CAPE FALCON USING THE KLAMATH OCEAN HARVEST MODEL

At the April 2022 Council meeting, the Salmon Technical Team (STT) stated plans to evaluate effort forecast performance and consider ways to improve the accuracy of effort projections produced by the Klamath Ocean Harvest Model (KOHM). Furthermore, the STT stated that they would develop a plan and timeline for addressing the effort forecasting issue and report back to the Council at their June 2022 meeting.

The STT and Model Evaluation Workgroup (MEW) met on May 24, 2022, to discuss two topics: (1) a report on the work required to investigate the potential for improvements to forecasts of Southern Oregon Northern California Coast Coho salmon ocean exploitation rates (to be provided to the Council in September) and (2) the KOHM effort forecast evaluation.

With regard to KOHM effort forecasts, the STT and MEW discussed work performed to date, which was focused on evaluating effort forecast performance at the month, management area, and fishery (sport and troll) level. In general, forecasted effort tended to be higher than postseason estimates in northern and central Oregon commercial fisheries, while effort forecast errors for commercial fisheries in northern and central California tended to be more balanced. There was also some evidence of over-prediction of effort in Oregon and California recreational fisheries, but the patterns in forecast error tended to vary from month to month within a management area. The STT and MEW also discussed the roles of fleet attrition, changes in fish distribution, and year-to-year changes in target stock abundances as potential drivers of the patterns observed.

Further work will primarily be focused on assessing effort forecast performance if more contemporary effort per day open data were used to make projections. Currently, the KOHM uses data from 1998 through the year prior to the management year to make effort forecasts. The STT will explore using shorter data ranges while continuing to employ existing effort forecasting methods. Similar to recent updates to the data ranges used to project contact rates per unit effort within the KOHM, a change of this nature would not require a formal methodology review. Different data ranges may be considered for different months, areas, or fisheries, and implementation of these data ranges will be dictated by the assessment of forecast performance.

The STT plans to meet again to discuss this topic in July or August and will provide a report detailing progress on this topic to the Council at its September meeting.

PFMC
06/07/2022