

MODEL EVALUATION WORKGROUP REPORT ON  
METHODOLOGY REVIEW PROCESS PRELIMINARY TOPIC SELECTION FOR 2008

On Monday, the Model Evaluation Workgroup (MEW) met to review progress on past work tasks and to discuss future salmon fishery modeling projects of interest to the Council.

Over the past year there were new coho and Chinook stocks added to the Fishery Regulation Assessment Model (FRAM) modeling Base Periods. The set of FRAM documentation provided almost two years ago needs to be updated to include these new stocks and also capture the associated changes from the recent model calibrations. The need for periodic updates of the documentation was anticipated, and provides the opportunity for correcting errors and expanding documentation as needed or identified.

Analysis of the sensitivity in Chinook and coho FRAM to model parameters (e.g. various release mortality rates), and of input parameters (e.g. Chinook forecast age structure), has always been topic of technical discussions. With the advent, and potential expansions, of mark-selective fisheries (MSF) these issues potentially become more important as another layer of assumptions is necessarily imposed on the model (e.g., unmarked and marked retention errors, and mark rates).

Earlier this week, a FRAM sensitivity analysis was discussed between the Salmon Technical Team (STT), the Scientific and Statistical Committee (SSC), and MEW. Evaluation of MSF parameters using coho FRAM may be relatively straightforward, however the same task with multi-aged Chinook FRAM becomes challenging. The SSC has offered to provide an analysis design to add efficiency to the project and help insure that the effort will provide usable results.

The MEW would like to work with the STT and the SSC members on developing a sensitivity analysis on FRAM. We expect that this could be a multiyear assessment but considerable progress could be made in 2008 for a progress report at the fall Salmon Methodology Review Meeting.

In summary, the MEW proposes two tasks for the coming year:

- Update the sets of FRAM documentation.
- Initiate coho and Chinook FRAM Sensitivity Analysis, with an emphasis on the modeling of Mark Selective Fisheries.