

MODEL EVALUATION WORKGROUP REPORT ON THE
2021 SALMON METHODOLOGY REVIEW PROCESS
AND PRELIMINARY TOPIC SELECTION

The Model Evaluation Workgroup (MEW, Workgroup) met on Tuesday, April 6 to discuss possible methodology review topics for 2021, and reviewed potential topics with the Salmon Technical Team (STT) in a joint discussion. In addition, the chair of the MEW attended the Scientific and Statistical Committee (SSC) discussion with the STT on Wednesday, April 7.

The methodology review process was foregone last year due to the prioritization of essential items for the April 2020 Council agenda as a result of the COVID-19 pandemic. The list of potential review topics provided here are carry-overs from 2019, with responsible party shown in parentheses. The MEW also provides comments and suggestions on how to approach review of these topics.

- 1) Documentation of the Fishery Regulation Assessment Model (FRAM) program and the development of the new Chinook FRAM base period, including algorithms and User Manual (MEW).
 - a. The MEW suggests prioritizing components of the FRAM documentation so that attainable goals can be set. Each component has its own nuances and level of complexity. The MEW identified six main areas for FRAM documentation and has prioritized them in order. Item 2 (ii) appears to be a reasonable candidate for completion in 2021.
 - i. User Manual (complete, ready to upload to Council website)
 - ii. Overview
 - iii. Technical detail
 - iv. Chinook base period
 - v. Coho base period
 - vi. Programmer's guide
- 2) Evaluate post-season metrics of FRAM model performance (MEW).
 - a. FRAM Model: As mentioned in 2019, the new FRAM base period was used for the first time in 2017, so evaluating FRAM performance in a preseason versus postseason context will need to wait until at least 2022 post season data are available.
 - b. FRAM and outside Models: The MEW does see potential value in evaluating FRAM performance through a comparison of exploitation rates (ERs) derived using the Chinook Technical Committee's (CTC) exploitation rate analysis (ERA) with those derived using the most current version of FRAM post season output.

The MEW also discussed the recent interest in the Oregon Production Index (OPI) forecast. The forecast has not performed well in recent years, and this year's forecast is very high. The MEW acknowledged that the OPI Technical Team produces the forecasts in a collaborative process, and the Preseason I Report provides documentation of the forecast methodology.

Additionally, the MEW discussed the possibility of organizing a FRAM workshop. This workshop would be designed to provide members of the SSC, STT, and MEW with a detailed understanding of FRAM in order to facilitate the model evaluation process. The MEW introduced this concept in 2019, and interest remains in the concept. Such a workshop could be held in conjunction with the annual SSC/STT methodology review meeting typically held in October.

The MEW also noted that there are currently three vacancies on the Workgroup - one Columbia River Inter-Tribal Fish Commission, one Northwest Indian Fisheries Commission, and one from the Oregon Department of Fish and Wildlife. The MEW would like to see those vacancies filled; this would have the benefit of an expanded range of knowledge and expertise within the Workgroup and help share the workload for any future tasks.

PFMC
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