

MODEL EVALUATION WORKGROUP REPORT ON METHODOLOGY REVIEW – FINAL TOPIC SELECTION

At the April 2019 Pacific Fishery Management Council (Council) meeting, five topics were selected as candidates for Methodology Review, three of which were assigned to the Model Evaluation Workgroup (MEW). Those topics were: (1) Complete the documentation of the development of the new Chinook Fishery Regulation Assessment Model (FRAM) base period including algorithms, and review and update the FRAM documentation and User Manual that is currently on the Council website; (2) Develop a framework for evaluating FRAM performance utilizing postseason metrics; and (3) Examine the data and models used to forecast impacts on Columbia River summer Chinook to determine whether a change in methodology is warranted.

The MEW and Salmon Technical Team held a joint webinar on August 29, 2019, to discuss topics for the Methodology Review and other salmon-related business on the agenda of the Council's September meeting.

With regard to Methodology Review topics, MEW Chair Angelika Hagen-Breaux briefed the group on progress made in documenting the development of the new Chinook FRAM base period, and updating the User Manual as needed (topic 1). This continues to be a work in progress, and while the base period documentation will not be finished, the MEW expects to have an initial draft of a new FRAM User Manual ready in time for the Methodology Review in October 2019.

With regard to topic 2, the MEW has identified a two-step approach to develop a framework for evaluating FRAM performance based on conversations with the Scientific and Statistical Committee. The first step will focus on a pre- versus post-season FRAM comparison. The second step is to develop a post-season FRAM validation exercise using alternative data sources; i.e. genetic stock identification or exploitation rate analyses conducted by the Chinook Technical Committee of the Pacific Salmon Commission. Neither of these items will be ready for the Methodology Review in October 2019. Step-1 will require at least five years of overlap between pre-season and post-season run years using the new base period, which will not be available until 2024. Step-2 will also take some time, and the MEW will work to develop a plan and timeline for completion to present to the Council in April 2020.

Investigations are ongoing to examine the data and models used to estimate impacts on Columbia River summer Chinook (topic 3). While the MEW has identified some needed updates to data inputs, work is still underway to determine whether a full methodology review is warranted for other outstanding issues. The MEW intends to present its findings at the October 2019 Methodology Review, even if a full methodology review is not warranted. The MEW hopes to complete the investigation and report to the Council in November.