

GROUND FISH MANAGEMENT TEAM REPORT ON SABLEFISH ECOSYSTEM INDICATORS: MANAGEMENT STRATEGY EVALUATION

The Groundfish Management Team (GMT) received a joint briefing with the Scientific and Statistical Committee (SSC) by Dr. Melissa Haltuch from the National Marine Fisheries Service Northwest Fisheries Science Center (NWFSC) on progress to date and anticipated future work regarding sablefish population dynamics, and offer the following thoughts.

Introduction:

Sablefish is the most valuable stock (per pound) managed by this Council. The economic importance is underscored by the fact that sablefish issues are considered at every Council meeting. Through the Management Strategy Evaluation (MSE) process, the Council can better understand tradeoffs associated with different management strategies and help prioritize management procedures that are likely to achieve management objectives under a changing climate.

Short Term Use of the MSE

The MSE information presented by Dr. Haltuch at this meeting evaluated how past and future sea level height (SL), as projected by the Intergovernmental Panel on Climate Change, as well as variable management strategies, may influence sablefish recruitment on the West Coast. The GMT views the results from this MSE as a good first step in a long process that can be used to improve future assessments and evaluate alternative management strategies. In the short term, we support the continued development of this MSE to evaluate environmental indicators of sablefish recruitment, with the objective of developing informative recruitment indices for future stock assessments. Specifically, the environmental index of SL has been used in a past assessment and should be further investigated in the next assessment.

Long Term Use of the MSE

Despite the Council's conservative management approach for several cycles, this stock remains in the precautionary zone. The MSE identified an apparent mismatch between the proxy target fishing mortality harvest rate ($F_{45\%}$) and the proxy biomass management target ($B_{40\%}$). While an MSE is not needed to reveal this mismatch, an MSE approach may allow a better exploration of appropriate management reference points for sablefish. The GMT notes the current focus on this issue has been sablefish; however, other managed groundfish stocks have the same apparent mismatch between target fishing mortality harvest rates and biomass targets.

An MSE approach can be used to explore a far broader suite of sablefish management issues, including alternative management strategies, explorations of area management effects, allocation issues, gear switching, and other initiatives the Council may want to consider that affect the sablefish resource and dependent fisheries. A comprehensive MSE should incorporate many different operating models, including alternative assessment models, ecosystem models, and economic impact projection models. The GMT recommends the Council commit to a long-term process to develop a more comprehensive MSE to explore the trade-offs associated with alternative sablefish management strategies using an ensemble modelling approach.

The GMT appreciated the presentation by Dr. Haltuch and the opportunity to provide input at this meeting. We will continue to be engaged as the process moves forward.

PFMC
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