

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
SABLEFISH MANAGEMENT STRATEGY EVALUATION UPDATE

Ms. Maia Kapur (University of Washington) and Dr. Melissa Haltuch (Northwest Fisheries Science Center) briefed the Scientific and Statistical Committee (SSC) on progress for a management strategy evaluation (MSE) for Northeast Pacific sablefish that includes a spatially explicit operating model, which is currently in development by the Pacific Sablefish Transboundary Assessment Team (PSTAT). The MSE tool focuses on the demographic structure of fish stocks and how northeast Pacific sablefish are managed regionally. This model could explore the current and future biological consequences of catch allocations north and south of the 36° N. lat. management line. The SSC appreciates the research and collaboration underway to develop a transboundary operating model for use in a management strategy evaluation across the Northeast Pacific.

The SSC supports the decisions made by the analysts to date in developing the spatial operating model. The spatial dynamics and structure of the model are supported by research on spatially varying growth and widespread movement observed in sablefish. This operating model addresses previous SSC recommendations that a population model consistent with the understanding of sablefish stock structure be developed ([Agenda Item F.3.a, Supplemental SSC Report 1, March 2018](#)). The SSC reviewed the documentation supporting the operating model and could review a conditioned operating model at a later stage, if desired by the Council.

The SSC affirms the scope of this operating model is appropriate, given recent research on the genetic stock structure of sablefish, latitudinal patterns of growth, and an analysis of tagging data. If the Council or stakeholders wanted to use the MSE to investigate questions beyond the consequences of spatial stock structure on the ability of harvest control rules to achieve management objectives, the operating model would need to be further developed, which would require additional resources.

The SSC recognizes that MSE processes are iterative and discussed several areas of potential development of the operating model. For example, the operating model could be expanded to include more economic considerations or an economic submodel that could explore other aspects of fishing fleet dynamics relevant to sablefish. Future work could also explore the potential consequences of environmentally-driven or time-varying recruitment, growth, or movement, particularly considering previous work on environmentally-driven sablefish recruitment on the west coast.

The SSC supports the development of a process for the Council to engage with the PSTAT. Recent MSE efforts in other regions and best practices summarized in the [2018 Council Coordination Committee Scientific Coordination Subcommittee meeting report](#) have highlighted that stakeholder engagement is a critical component of an MSE process. The SSC recommends that the Council and analysts follow best practices identified and used in these other efforts. In particular, the SSC recommends the Council engage in discussions about management objectives and performance metrics as soon as practicable to ensure those inputs may be incorporated into

the model, and that performance metrics used to evaluate alternative management strategies reflect the interests and objectives of the Council. The SSC recommends the scheduling of a workshop for stakeholders to contribute to the development of management objectives and performance metrics.

PFMC
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