SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON STOCK ASSESSMENT METHODOLOGY REVIEW - FINAL TOPICS

The Scientific and Statistical Committee (SSC) reviewed a proposal for groundfish stock assessment methodology review from the Northwest Fisheries Science Center (NWFSC) for commercial fishery-dependent index standardization using spatio-temporal modeling methods (Agenda Item G.4.a, Supplemental NWFSC Report 1). The primary goal is to develop methods that can account for the nonrandom nature of fishery-dependent information for use in stock assessments. There is concern about using fishery-dependent data for mobile and aggregating species given spatial variability and hyperstability in catchability. A hyperstability term can be developed to address concerns about fishermen being able to change locations to find fish. Effects of regulations on targeting, bycatch avoidance, and other considerations such as markets and impacts of processor locations relative to fishing grounds may also impact commercial catch per unit effort and additional analysis will be needed to address these factors. These methods may complement data from fishery-independent surveys that use gear that does not sample semi-pelagic species effectively, such as the West Coast Groundfish Bottom Trawl Survey.

The SSC supports review of the proposed methods. The SSC recommends validation of the methods using simulations or data for focal species for which there is a reliable index of abundance based on fishery-independent surveys, such as petrale sole. Species proposed for assessment in 2027 should be prioritized to allow application of the methods in the coming biennium. Communication with industry about markets, effort, gear modification, and targeting changes over time would also be beneficial in developing the filters and adjustments to account for changes through time within the analysis.

PFMC
09/21/25