Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

M E M O R A N D U M

Date: July 28, 2023

To: Michael P. Luisi, Chairman, MAFMC

From: Paul J. Rago, Ph.D., Chair, MAFMC Scientific and Statistical Committee (SSC)

Subject: Executive Summary Report of the July 2023 SSC Meeting

Executive Summary

Background

The SSC met in person in Philadelphia, PA and via webinar from 24th - 26th of July 2023, to develop ABC recommendations for Bluefish, Black Sea Bass, Scup, Summer Flounder, Longfin Squid, and Atlantic Mackerel. In addition, we provided comments on the National Standard 1 (NS1) Technical Guidance Memo, and the draft NMFS Climate Governance Policy. Our review of the Governance Policy was developed at a webinar meeting on July 12, 2023 and will be provided separately. A summary of the ABC recommendations by the SSC is provided below (Table 1).

Bluefish

Results of a Level 2 Management Track Assessment were presented by Anthony Wood, NEFSC; a summary of recent management activities, feedback from the Advisory Panel, and a staff recommendation for an ABC were presented by Karson Cisneros, MAFMC. Cynthia Jones, SSC, led the review of the OFL CV determination and response to the Terms of Reference.

The SSC acknowledged the significant improvements in the assessment following the Research Track Assessment. Significant advances included changes to natural mortality rates, more sophisticated methods for deriving CPUE from MRIP data, and reductions in retrospective patterns. The current spawning stock biomass estimate of 52,747 mt is 60% of the Bmsy proxy value of 88,131 mt; the current fishing mortality rate estimate of F=0.152 is 64% of the Fmsy proxy of 0.239. Following review and discussion, the SSC set most appropriate estimate of the

OFL CV = 100%. Applying the Council's risk policy, t**he SSC recommended ABCs of 7,929 mt in 2024 and 9,903 mt in 2025.**

Black Sea Bass

The SSC reviewed previous catch recommendations specified in 2022 for 2023. Updated data and fishery information, feedback from the Advisory Panel, and a staff recommendation for a 2024 ABC were presented by Julia Beaty, MAFMC. Olaf Jensen, SSC, led the SSC responses to the Terms of Reference. Based on the 2021 MTA, the spawning stock biomass estimate was 29,769 mt, which was 210% of the Bmsy proxy value of 14,441 mt; the current fishing mortality rate estimate of F=0.39 is 85% of the Fmsy proxy of 0.46. The exceptional 2011 and very strong 2015 year classes are no longer dominating fishery removals as they approach the maximum age for this species. Stock biomass is expected to decline as the population becomes more reliant on recent average recruitments.

The SSC noted the difficulties of forecasting harvests and discards in the recreational fishery. Subsequent discussions related to retrospective adjustments and the current downward trajectory of the stock revealed a need for criteria for interim measures that could be applied to all stocks during interim reviews of ABCs. In this regard, greater specificity is needed on relevant statistical methods and decision criteria to be applied, and the potential magnitude of admissible ABC adjustments. **Despite the concern over the expected decline in SSB and taking into account that current SSC is twice the size of SSBmsy and F is below Fmsy, the SSC recommended setting the 2024 ABC equal to the 2023 ABC of 7,557 mt.**

Scup

Results of a Level 2 Management Track Assessment were presented by Mark Terceiro, NEFSC; a summary of recent management activities, feedback from the Advisory Panel, and a staff recommendation for an ABC were presented by Hannah Hart, MAFMC. John Boreman, SSC, led the review of the OFL CV determination and responses to the Terms of Reference. The current spawning stock biomass estimate of 193,087 mt is 246% of the Bmsy proxy value of 78,593 mt; the current fishing mortality rate estimate of F=0.098 is 52% of the Fmsy proxy of 0.19.

The SSC noted the dome-shaped pattern of fishery selectivity and increases in retrospective patterns that are causes of concern. Following extensive discussion, the SSC increased the OFL CV estimate from the previous value of 60% to 100% for the 2024-2025 specifications to reflect these concerns. **The SSC recommended ABCs of 19,876 mt in 2024 and 18,028 mt in 2025.**

Summer Flounder

Results of a Level 2 Management Track Assessment were presented by Mark Terceiro, NEFSC; a summary of recent management activities, feedback from the Advisory Panel, and a staff recommendation for an ABC were presented by Kiley Dancy, MAFMC. Michael Wilberg, SSC, led the review of the OFL CV determination and response to the Terms of Reference.

The spawning stock biomass estimate in 2022 of 40,994 mt is 83% of the Bmsy proxy value of 49,561 mt; the fishing mortality rate estimate in 2022 of F= 0.464 is 103% of the Fmsy proxy of 0.451. Overfishing is occurring but its magnitude is small. Summer Flounder is one of the most exhaustively reviewed stocks in the Northeast and assessment models with substantially different structures and assumptions have been applied. The current model performs extraordinarily well and has a nominal retrospective pattern. Following this discussion, the most appropriate estimate of the OFL CV was set to 60%.

Recent recruitment has been below average and projections were based on recruit estimates in the last 12 years. **The SSC recommended ABCs of 8,111 mt in 2024 and 9,411 mt in 2025, respectively. If the Council should prefer to adopt a constant average ABC policy, an ABC of 8,761 mt for 2024 and 2025 would satisfy the Council's risk policy.**

Longfin Squid

Results of a Level 2 Management Track Assessment were presented by Lisa Hendrickson, NEFSC; a summary of recent management activities, feedback from the Advisory Panel, and a staff recommendation for an ABC were presented by Jason Didden, MAFMC. Michael Frisk, SSC, led the review of the OFL CV determination and responses to the Terms of Reference. The SSC noted the differences in relative abundance estimates between the spring and fall NEFSC bottom trawl surveys. Coupled with known differences in seasonal growth rates, scale differences between surveys may be indicative of productivity differences between seasons.

Efforts to develop an analytical stock assessment model have not been successful; hence it is not possible to specify stock status or derive an OFL. Given the lack of trend in swept area biomass estimates and stability in catches over recent decades, and the efficacy of management measures to distribute fishing effort seasonally and spatially, SSC recommended continuation of recent ABCs for another three years. **The SSC recommended ABCs of 23,400 mt each year for 2024, 2025 and 2026**. The SSC looks forward to the results of the Research Track Assessment in 2026 and its application for determination of future ABCs.

Atlantic Mackerel

Results of a Level 1 Management Track Assessment were presented by Kiersten Curti NEFSC; a summary of recent management activities, feedback from the Advisory Panel, and staff recommendation for an ABC were presented by Jason Didden, MAFMC. David Secor, SSC, led the responses to the Terms of Reference.

SSC deliberations focused on the limited recovery of stock biomass since the inception of the rebuilding program. The SSC noted that elimination of overfishing in the Management Track Assessment was expected given low catches, but the lack of rebuilding in stock size was unexpected. Moreover, apparent overestimation of recent incoming year classes suggests stock biomass will decline further. Information from the February 2023 Fisheries and Oceans Canada (DFO) assessment of the northern contingent of Atlantic Mackerel has led to a closure of Canadian commercial fisheries. **In view of these considerations, the SSC recommended ABCs of 2,726 mt and 3,900 mt in 2024 and 2025, respectively.** These recommendations are

based on the results of a sensitivity analysis provided by the NEFSC that included a downward adjustment of estimated recruitment in 2022 to the time series median. This change, along with the updated estimates of stock size in 2022, results in a reduction of Frebuild from F=0.11 to F=0.07. Given our current understanding of stock condition, this level of Frebuild is expected to have a 61% chance of rebuilding by 2032. The SSC expressed low confidence in this forecast. It also noted that clarification of NMFS policy on the definition of overfishing during rebuilding is necessary.

Comments on NS1 Guidance on Reference Points and Status Determination

Richard Methot, NMFS, Headquarters, presented a comprehensive overview of newly revised NS1 guidance on methods for estimating reference points and defining status determination. Considerable progress has been made since this guidance document was originally developed in 1998. Improvements in methods for Data Limited Stocks have been substantial. The report also highlighted the need for dynamic reference points that are responsive to changing environmental conditions. Such approaches must distinguish effects due to low stock size from longer-term changes in productivity. This report and results of ongoing national and international research will be valuable to the SSC as it develops future ABC recommendations.

Comments on NMFS Draft Climate Governance Policy

The SSC acknowledged the importance of addressing the consequences of changes in spatial distribution of species in response to climate change and applauded the NMFS efforts to address these changes comprehensively. However, the current document and recommendations (stated to be non-binding) are insufficient to support the proposed changes to management jurisdictions. General patterns of species movements are well described, but quantification of the fraction of stocks in subareas is not yet adequate for management. A similar concern was expressed about the need to distinguish short-term from long-term changes in distributions. Economic criteria for shifting patterns of landings are similarly difficult to distinguish responses to distributional shifts from other economic and management factors. Finally, the SSC expressed concerns about increased workloads that would be required to support implementation of this policy. Such increases would be borne by the Councils, State partners, Science Centers, and Regional Offices.

Table 1. Summary of the catch limit recommendations, in metric tons, made by the Mid-Atlantic SSC during their July 24-26, 2023 meeting. For summer flounder, the first set of recommendations are associated with an annual/varying ABC approach, and the second set of recommendations are associated with a constant/average ABC approach. OFL – Overfishing Limit; ABC – Acceptable Biological Catch; OFL CV – Overfishing Limit Coefficient of Variation.

Species	Year	OFL	ABC	OFL CV
Bluefish	2024	11,734	7,929	100%
	2025	12,467	9,903	
Black Sea Bass	2024	NA	7,557	NA
Scup	2024	20,295	19,876	100%
	2025	18,408	18,028	
Summer Flounder (annual ABC)	2024	10,422	8,111	60%
	2025	11,515	9,411	
Summer Flounder (constant ABC)	2024	10,422	8,761	60%
	2025	11,325	8,761	
Longfin Squid	2024	NA	23,400	NA
	2025	NA	23,400	NA
	2026	NA	23,400	NA
Atlantic Mackerel	2024	NA	2,726	NA
	2025	NA	3,900	NA