Scientific and Statistical Committee Report of July 24-26, 2023 Meeting

to

Mid-Atlantic Fishery Management Council August 11, 2023

Tab 16

Agenda: July 24-26, Philadelphia

- Bluefish*
- Black Sea Bass*
- Scup*
- Summer Flounder*
- Longfin Squid*
- Atlantic Mackerel*
- NMFS Draft Climate Governance Policy*
- Comments on Updated NS1 Guidelines
- Other Business

^{*}Items previously covered

Comments on NS1 Guidance on Reference Points and Status Determination

- Presentation by Rick Methot, NMFS
- Considerable progress since 1998
 - Data Limited stocks
 - Dynamic Reference Points—responding to climate change
 - Short vs long-term changes?
 - Environmental effects vs Dependent processes?
 - Moving average methods may be useful
 - Need for more spatial analyses in fisheries: Energy development, closed areas
- SSC comments
 - Changing life history characteristics when fishing mortality is reduced
 - Utility of long time series of fishery independent and dependent data
 - Utility of field experiments
 - Useful document for future assessments and SSC work

Other Business

- OFL CV sub-group will meet on August 24th to address:
 - Refinement of OFL CV process: clarity, transparency, completeness
 - Projection assumptions, especially catch in the first year
 - ABC reviews in between assessments—what constitutes a sufficient "signal" to recommend a change?
- Ecosystem Work Group will meet on August 28th to address:
 - Update on research efforts
 - MSE
 - Quantifying changes in Biological Reference Points.
- Next SSC meeting: September 12th -13th in Baltimore.
- Additional meeting in fall (tbd) to review MTA for Spiny Dogfish and Atlantic Mackerel.

Questions?



Bluefish Specifications 2024-25

- Received a Level 2 MTA of the updated assessment. First MTA after Research Track Assessment.
 - Advances: State-space model, revised measures of MRIP CPUE, changes to Natural mortality rates, reduced retrospective pattern
 - Current stock is 60% of Bmsy proxy [NOT Overfished]
 - Current F is 64% of Fmsy proxy [Overfishing NOT occurring]
- The SSC recommended the use of an OFL CV of 100% (see attachment 4 in SSC report)
- SSC recommended ABCs of 7,929 mt for 2024 and 9,903mt for 2025.

Black Sea Bass Specifications 2024

- The SSC reviewed updated fishery information, and staff recommendations for 2024. Timeline for RTA has been extended.
- Stock size in 2021 was 210% of Bmsy and fishing mortality was 85% of Fmsy.
- Stock size is predicted to decrease as dominance of 2011 and 2015 year classes declines. Population is becoming more reliant on recent average recruitments.
- Despite concerns over the expected decline in SSB and taking into account that current SSC is twice the size of SSB_{msy} and F is below F_{msy} , the SSC recommended setting the 2024 ABC equal to the 2023 ABC of 7,557 mt.
- Noted difficulties of forecasting harvests and discards in the recreational fishery.
- Greatest source of uncertainty—absence of an assessment since the 2021 MTA.
- 2021 assessment needed a correction for retrospective pattern.
- SSC needs to develop better criteria for evaluating "interim measures" of stock status. When are changes warranted? What are admissible magnitudes of changes in catch recommendations?

Scup Specifications 2024-25

- The SSC reviewed results of a Level 2 MTA of the updated assessment through 2022.
- Current biomass is 246% of Bmsy; fishing mortality is 52% of Fmsy.
- Concerns: dome shaped selectivity pattern (i.e., lower mortality on older fish)
- SSC applauded efforts to evaluate long term effects of Gear Restricted Areas.
- SSC increase estimate of OFL CV from 60% to 100% (see Attachment 5). Need for retrospective adjustment now required.
- SSC recommended ABCs of 19,876 mt for 2024 and 18,028 mt for 2025.
- Highlighted need to consider risks along with uncertainty when making projections.

Summer Flounder Specifications 2024-25:

- The SSC reviewed the results of a Level 2 MTA of the updated assessment through 2022.
- Stock is 83% Bmsy proxy; fishing mortality is 103% of Fmsy proxy.
- Review of OFL CV criterion (Attachment 3) suggested continuation of 60% for OFL CV (Attachment 6).
- 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.
- Recruitment has been below average and projections are based on observations from the last 12 years.
- Changes in life history characteristics: declining growth rates, maturity at age decreasing, changing sex ratios.
- Potential environmental effects not quantified.

Longfin Squid Specifications 2024-26

- The SSC reviewed results received a Level 2 MTA of the updated assessment through 2022.
- Survey indices do not show any trends and catch levels have been stable.
- Seasonal differences (fall vs spring) in survey abundances and catch levels between survey, and evidence of seasonal growth difference, suggest need for finer temporal scale models.
- No analytical stock assessment models have been developed to date.
- Trimester system seems to balance effects of seasonal spatial variations.
- The SSC recommended ABCs of 23,400 mt each year for 2024, 2025 and 2026. (relies on period of apparent low exploitation(1976-2009).
- The SSC looks forward to the results of the Research Track Assessment in 2026 and its application for determination of future ABCs.

Atlantic Mackerel Specifications 2024-25

- The SSC reviewed the results of a Level 1 MTA (direct delivery) of the updated assessment through 2022.
- Stock status changed from overfishing occurring to overfishing NOT occurring. Level 2 MTA required under current NRCC process
- Recovery of stock biomass has not occurred as previously predicted.
 - MTA suggested recent year classes were overestimated.
 - DFO Canada has recommended closure of its commercial fisheries.
- To address these prediction concerns, the 2022 year class was assumed to be equal to median value. As a result, Frebuild changes from 0.11 to 0.07. Rebuild probability estimated at 61% in 2032; SSC expressed low confidence in this projection.
- The SSC recommended ABCs of 2,726 mt in 2024 and 3,900 mt in 2025.
- Results considered provisional until reviewed by Level 2 MTA review in September.

Extra slide (covered elsewhere)

NMFS Draft Climate Governance Plan Tab 8

- Webinar on July 12. Chaired by Michael Wilberg
- Positive
 - Acknowledged importance of addressing spatial distribution of species
 - Applauded effort to address changes comprehensively
- Negative
 - Insufficient to support changes to management jurisdictions
 - Quantification of species movements is difficult, especially for decision making.
 - Distinguishing short from long-term changes in species distributions
 - Economics criteria: {Species} vs {Economic and Management Responses}?
 - Potential delays due to joint management
 - Increased cost for all partners