



Mid-Atlantic Fishery Management Council

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Mackerel Rebuilding

September 2021 Scientific and Statistical Committee (SSC) Meeting

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At its August Council meeting, the Council passed several motions related to mackerel rebuilding after considering the SSC's prior input. The Council voted to consider rebuilding plans that would have 50%, 60%, and 75% probabilities of rebuilding mackerel in ten years. Discussions with NMFS staff have indicated that a January 1, 2023 implementation date is likely, so the rebuilding target date would be June 1, 2032.

The Council would also need a standard P* acceptable biological catch (ABC) recommendation given that the Council's risk policy states that "for instances in which the application of the risk policy...results in a more restrictive ABC recommendation than the calculation of ABC derived from the use of FREBUILD...the SSC shall recommend to the MAFMC the lower of the ABC values." The risk policy also states that "The probability of not exceeding the F necessary to rebuild the stock within the specified time frame (rebuilding F or FREBUILD) must be at least 50 percent, unless the default level is modified to a higher probability for not exceeding the rebuilding F through the formal stock rebuilding plan."

The Council also requested NMFS take emergency action to limit catch to 15,512 metric tons (MT) in 2021/2022 while rebuilding is being reconsidered. For such interim actions, overfishing does not have to end immediately if biomass would still increase, which is predicted to occur at these catches even with the lower recruitment scenario. The Council also voted that the risk associated with using 15,512 metric tons for 2021 catch, a value slightly lower than expected, was acceptable. Given their decision about 2021 assumed catch and request for emergency action for 2021 and 2022, it appears reasonable to also assume a 2022 catch of 15,512 metric tons.

The Council also requested that the "SSC perform additional analyses regarding recruitment assumptions and reference points to inform rebuilding decisions." This relates to the July SSC Meeting report finding that "The issue of recruitment assumptions will require additional science deliberation."

All of the above considerations informed development of the Terms of Reference (TORs) for mackerel for the September 2021 SSC meeting. To provide additional information on potential stock performance, Council staff, in consultation with the SSC chair, requested the following projections from the Northeast Fisheries Science Center (all runs assume 15,512 MT for 2021 and 2022 catches):

1. Standard P* with 150% C.V. and 1975-terminal recruitment until rebuilt.
2. Standard P* with 100% C.V. and 1975-terminal recruitment until rebuilt.
- 3a. Calculated F-rebuild with 50% probability of rebuilding by June 1, 2032 and 1975-terminal recruitment.
- 3b. Same as 3a but apply P* buffer for 2023/2024 ABCs (like bluefish)
4. Calculated F-rebuild with 75% probability of rebuilding by June 1, 2032 and 1975-terminal recruitment.
- 5+ . Projections that explore split recruitment time series.

Given the nature of the issue, and some uncertainty about projection availability before the meeting, the mackerel TORs may not be able to be fully addressed at this time. If the TORs cannot be fully addressed, guidance on what additional information the SSC needs to complete the TORs is requested.