



August 13, 2021

Eric Reid, Acting Chairman
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

Dear Eric:

Pursuant to section 304(e)(7) of the Magnuson-Stevens Fishery Conservation and Management Act, we are required to review all rebuilding plan at least every two years to determine whether adequate progress is being made to rebuild the subject stocks and immediately notify the Council if adequate progress is not being made. As a result of such a review, we have determined that Gulf of Maine (GOM) cod and Southern New England/Mid-Atlantic (SNE/MA) winter flounder are not making adequate rebuilding progress. Consistent with section 304(e)(3) of the Magnuson-Stevens Act, the Council is required to prepare and implement a revised rebuilding plan for each stock within two years of this notification.

Rebuilding progress reviews

We used the 2017 and 2019 stock assessment results to review the rebuilding plans for groundfish stocks under section 304(e)(7) of the Magnuson-Stevens Act. The criteria in the National Standard 1 (NS 1) guidelines state that the Secretary may find that a stock is not making adequate rebuilding progress if either:

1. The fishing mortality rate (F) required to rebuild the stock within the rebuilding timeframe ($F_{rebuild}$) or the ACL associated with $F_{rebuild}$ is exceeded, and accountability measures (AMs) are not correcting the operational issue that caused the overage, nor addressing any biological consequences to the stock or stock complex resulting from the overage when it is known; or
2. The rebuilding expectations of a stock or stock complex are significantly changed due to new and unexpected information about the status of the stock.

Neither GOM cod nor SNE/MA winter flounder met the first criteria for determining that the stocks were making inadequate rebuilding progress. For GOM cod, catch was below the annual catch limit (ACL) in 2018 and 2019, the most recent fishing years for which we have complete catch data. Although catch exceeded the ACL in 2016 and 2017, this was primarily due to catch from the recreational fishery and state waters commercial fisheries. We expect that proactive recreational measures addressed the recreational fishery overages, and they will keep the recreational fishery from exceeding its future GOM cod allocation. State waters catch has not contributed to any subsequent overages and we do not expect it to given the modifications to



state measures implemented to prevent excess catch. For SNE/MA winter flounder, the most recent assessments have concluded that overfishing is not occurring, but that the stock is overfished. Catch of SNE/MA winter flounder has consistently been below the ACL, and estimates of fishing mortality (F) have remained below F_{MSY} since 2008.

Gulf of Maine Cod

Based on the 2017 and 2019 assessments, GOM cod meets the second criterion of the NS 1 guidelines for not making adequate rebuilding progress. Rebuilding expectations have significantly changed as a result of new and unexpected information about the status of the stock. The rebuilding plan deadline is fishing year 2024. Despite fishing mortality reductions, the 2017 and 2019 operational assessments both determined that GOM cod remains overfished and overfishing is occurring. Overfishing was still occurring in 2018 in both stock assessment models, despite the catch remaining below the ACL. GOM cod recruitment has remained relatively low since 2010 despite reductions in catch and fishing mortality. There are unexpectedly limited signs of improvements in recruitment, and increases in recruitment and rebuilding have not occurred as expected. Therefore, under both assessment models, the stock is now projected to have only a 1-percent chance of rebuilding to the target biomass by 2024. Further, GOM cod shows a truncated size and age structure, which is consistent with a population experiencing high mortality. It is not clear whether the truncation is mainly due to recent high natural mortality, fishing mortality, and/or other environmental factors. Additionally, survey indices continue to be low, and the current spatial distribution of the stock is considerably less than its historical range within the Gulf of Maine. Models used in the GOM cod assessment continue to demonstrate a retrospective pattern. Both the 2017 and 2019 assessments cautioned that, should the retrospective patterns continue, the models may continue to overestimate spawning stock size and underestimate fishing mortality, which likely has contributed to continued overfishing.

We suggest that the Council should consider measures in its revised rebuilding plan beyond setting a new F target to enable the rebuilding of GOM cod. Specifically, the Council could consider additional spawning protections such as time/area closures, and selective gears or other measures that could foster increased spawning success to increase the probability of improvements in recruitment.

We understand that with the expected 2023 implementation of a new rebuilding plan, the timing presents some challenges with pending Council actions relative to its consideration of new cod stock structure and Amendment 23 to the FMP¹. However, the Council is required to implement a new rebuilding plan by 2023 and cannot wait to see how these two issues unfold over the next year to two years before it considers ways to adjust the rebuilding plan for GOM cod. The Council is likely to be making decisions on how to address cod stock structure around the same time the new rebuilding period would begin. Amendment 23, if approved, may provide information shortly into the rebuilding period that the Council should consider. We strongly urge the Council to be prepared to consider new information from its consideration of cod stock

¹ The Council took final action on Amendment 23 in September 2020. If approved, implementation is anticipated for May 2022.

structure, Amendment 23, and any other information after implementation of a new rebuilding plan.

Southern New England/Mid-Atlantic Winter Flounder

Using assumed catch in 2017 and $F=0$ through 2023, the 2017 assessment projected that SNE/MA winter flounder had less than a 1-percent chance of reaching the spawning stock biomass target by 2023. The 2020 assessment found a similarly low chance of reaching the target biomass (5 percent, using assumed catch in 2020 and $F=0$). There is an overall declining trend in spawning stock biomass over the time series, and current estimates are at a time series low. Spawning stock biomass and recruitment continue to decline despite low fishing mortality rates over the last decade. Because the assessments show that fishing mortality is low and overfishing is not occurring, SNE/MA winter flounder's projected inability to rebuild by the rebuilding deadline is likely not due to continued overfishing, but rather low productivity. Based on the new information regarding the unlikelihood of the stock reaching the spawning stock biomass target by the target date of 2023, this stock meets the second criterion of the NS 1 guidelines for not making adequate rebuilding progress.

Consideration of a new F target may be challenging given the stock's lack of rebuilding progress despite low fishing mortality. We therefore recommend the Council consider measures in its revised rebuilding plan beyond setting a new F target to enable rebuilding, such as spawning protections (i.e., selective gear requirements or time/area closures) to support additional growth for this stock. We also acknowledge that it will be difficult to design management measures to rebuild the stock when faced with climate change and other external factors that could be limiting the stock's ability to rebuild to historical reference points despite the management measures, as indicated in Bell, et al².

Next steps

Revised rebuilding plans for GOM cod and SNE/MA winter flounder must be implemented within two years, i.e. by August 2023. As such, the Council should include changes in an upcoming action that would allow us to implement changes to the rebuilding plan along with other management measures for the 2023 fishing year that begins on May 1, 2023. We support the recent Groundfish Committee recommendation for the Groundfish Plan Development Team (PDT) to consider factors impacting rebuilding of GOM cod and SNE/MA winter flounder to proactively address this requirement. The Council used the results of the 2020 assessment to set catch limits for SNE/MA winter flounder for the 2021-2023 fishing years in Framework 61, and we expect the Council will use the upcoming 2021 assessment information to set catch limits to prevent overfishing for GOM cod for the 2022-2024 fishing years in Framework Adjustment 63. These will serve as the best scientific information available until the Council develops revised rebuilding plans can be developed.

We will continue to provide advice and collaborate on the development and implementation of rebuilding programs through our participation on the Groundfish Plan Development Team, the Groundfish Committee, and the Council. If you have any questions about this guidance, or the

² Bell, Richard J, Anthony Wood, Jonathan Hare, David Richardson, John Manderson, and Timothy Miller. 2018. Can. J. Fish. Aquat. Scie. 75: 1405-1414.

development of rebuilding plans for these stocks, please contact Sarah Bland, Assistant Regional Administrator for Fisheries for the Greater Atlantic Regional Fisheries Office, at (978) 281-9257.

Sincerely,



Michael Pentony
Regional Administrator
Greater Atlantic Regional Fisheries Office
National Marine Fisheries Service

cc: Janet L. Coit, Assistant Administrator for Fisheries, National Marine Fisheries Service
Samuel D. Rauch III, Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service
Tom Nies, Executive Director, New England Fisheries Management Council
Dr. Jon Hare, Director, Northeast Fisheries Science Center
Kelly Denit, Director, Office of Sustainable Fisheries