

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE GREATER ATLANTIC REGIONAL FISHERIES OFFICE 55 Great Republic Drive Gloucester, MA 01930

December 8, 2022

Dr. Christopher Moore Executive Director Mid-Atlantic Fishery Management Council 800 North State Street, Suite 201 Dover, DE 1990

Dear Chris:

As you know, the Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Boards will be taking final action on 2023 recreational management measures for summer flounder, scup, and black sea bass at the December meeting. This is the first time the Council and Boards will set measures based on the recently submitted Percent Change Approach as proposed in the Harvest Control Rule Framework Adjustment. To date, we have been supportive of the Recreational Reform Initiative and the Harvest Control Rule; however, we have not yet approved the framework. How the Council and Board apply the proposed approach at the December meeting could have implications for our decision-making process and, ultimately, our ability to approve the framework. With this letter, I intend to address two issues: First, you asked a question as to whether additional accountability measures are required through the upcoming Council action; and, second, I want to clarify for the Council the agency's position on the use of the best available scientific information as it pertains to implementation of the Percent Change Approach.

To address the first issue, I understand that following the Monitoring Committee's recent discussion, questions have been raised regarding the implementation of an accountability measure for the recreational scup fishery. As noted in our October 20, 2022, letter, the reductions implemented in 2022 satisfy the accountability measures that were previously triggered for scup and black sea bass. Therefore, no further action is required of the Council in response.

To address the second issue, we need to consider the design and intent of the Percent Change Approach. The Percent Change Approach considers two factors: 1) Biomass compared to the target level, as defined by the most recent stock assessment; and 2) a confidence interval (CI) around an estimate of expected harvest under current measures compared to the average recreational harvest limit (RHL) for the upcoming 2 years. For all three stocks, the results of the 2021 Management Track Stock Assessments were used to determine the biomass category (scup and black sea bass being at "very high" biomass levels, and summer flounder in the "low" stock biomass category). The second step of the Percent Change Approach, comparing expected harvest to the RHL, requires an estimate of 2023 harvest and the respective CIs around those harvest estimates for each stock.



In September 2021, the Council convened a peer review panel consisting of members of its Scientific and Statistical Committee (SSC) to review two potential recreational management models that could be used in conjunction with the Harvest Control Rule. The two models were a Recreational Fleet Dynamics Model (RFDM) developed by RI Department of Environmental Management staff, and an Economic Recreational Demand Model (RDM) developed by Northeast Fisheries Science Center Social Sciences Branch staff as part of the Council's extensive Summer Flounder Management Strategy Evaluation. While the final consensus report did not make a definitive conclusion about model preference, it did outline the strengths and shortcomings of each model and the appropriateness of each model under various circumstances. While we value the input of the peer review panel, particularly the suggestions for fine-tuning and improving the models, ultimately it is the agency's responsibility, on behalf of the Secretary of Commerce, to make a determination under National Standard 2 of the Magnuson-Stevens Fishery Conservation and Management Act that management measures recommended by a Council are based on the best scientific information available. Therefore, I want to ensure you understand, in advance of any final decisions by the Council at the upcoming meeting, that we consider the RDM model to represent the best scientific information available for use in implementing the Percent Change Approach.

In consultation with Dr. Jon Hare of the Northeast Fisheries Science Center, in order to reach this conclusion, we reviewed the consensus report of the peer review panel, as well as the individual reports, along with an evaluation of the factors used in developing and implementing the two models. In particular, we agree with the reviewer who concluded that the RDM "is a more powerful model as it uses anglers' preferences to characterize the effort response to changes in regulation, and from that response predicts harvest, discards, and anglers' welfare. The reduced-form model (i.e., the RI DEM model) is unable to characterize the trade-off anglers face and therefore is unable to predict changes in effort and anglers' welfare." I want to be clear on this point because some of the recent discussions and recommendations of the Council's Summer Flounder, Scup, and Black Sea Bass Monitoring Committee would be inconsistent with this determination.

At the Monitoring Committee meeting held on November 10, 2022, the Committee recommended the use of the RFDM to develop the 2023 recreational fishing regulations for scup and black sea bass and the RDM for summer flounder. At the Monitoring Committee meeting, GARFO staff raised concerns about the large confidence intervals being produced by the RFDM. This situation is particularly problematic for scup, because the RFDM results would provide for a 10-percent increase in scup harvest while the RDM would require a 10-percent decrease in harvest. Both models' median projected harvest estimates suggest that keeping status quo regulations in 2023 would result in recreational harvest much greater than the RHL. However, because of the large confidence intervals around the RFDM predictions (a difference of approximately 14 million lb between the upper and lower bounds due to high model uncertainty), the RFDM predicts that the lower bound on the recommended 80-percent confidence interval is just below the RHL. According to the pre-specified outcomes developed for the Percent Change Approach, when the RHL is within the expected harvest confidence interval and the stock is greater than 150 percent of the target – which scup is – then measures should be implemented that result in a 10-percent liberalization in harvest. This would be difficult to justify given that the median harvest value predicted by both the RDM and the RFDM are 46 and 35 percent higher than the RHL. Additionally, recreational scup catch exceeded the recreational ACL in 2020 by 79 percent and in 2021 by 135 percent. The RFDM can, for scup only, model different management measures by mode (for-hire/private), but this utility may be minimized by the degree of uncertainty when MRIP data are disaggregated. Of specific concern is that a recommendation from the Council to increase scup harvest by 10 percent, when the RDM specifies a 10-percent reduction is necessary, would be inconsistent with National Standard 2.

In contrast, the RDM uses more robust data on recreational catch because it includes data from a survey completed in 2022 on angler behavior. The addition of this data set reduces the model's reliance on Marine Recreational Information Program (MRIP) data, which is one of the reasons the confidence intervals are not as wide as the RDFM. The RDM also captures how changes in regulations affect the tradeoffs that anglers make among the three species, rather than assuming these effects are independent.

The Monitoring Committee summary report cites the ease of use of the RFDM due to the R Shiny Application, as a benefit, and partial rationale for model selection. While the RDM does not yet have a similar application, it can be developed for future years, and Center staff have committed to supporting the states and regions to develop management measures if the RDM is selected.

In addition to our concerns described here related to National Standard 2 and the use of the best scientific information available, the Monitoring Committee's preference for the RFDM as the basis for the implementation of the Percent Change Approach for scup and black sea bass would seem to contradict the Council and Commission's intent to improve recreational management by incorporating more robust data approaches and shifting away from a reliance on MRIP data alone.

We look forward to working with the Council and Board on the continued efforts to improve recreational management.

Sincerely,

Michael Pentory

Regional Administrator

cc: Dr. Jon Hare, Science and Research Director, Northeast Fisheries Science Center