

SAFMC Management Strategy Evaluation Summary for the Socio-Economic Panel

April 2023

The Council has started a management strategy evaluation (MSE) for the snapper grouper fishery focusing on strategies to reduce the number of released fish to improve yield throughout the fishery. The management strategy will also consider the needs for fishery access and resource use while preventing overfishing and rebuilding overfished stocks. The MSE is part of the Council's approach to address overfishing of Red Snapper while considering access, yield, and sustainability of species in the snapper grouper complex.

The MSE is being developed by staff at [Blue Matter Science](#). They are experts in developing MSEs and have worked on MSEs for state, regional, and international fisheries. A MSE is a process that allows scientists, managers, and stakeholders to test how different strategies (e.g., regulations or harvest control rules) could perform in a closed loop simulation. Since testing of these strategies can be problematic in the real world due to potential negative impacts on fisheries, stakeholders, or communities, MSEs use a simulation model(s) to evaluate management approaches that may achieve the intended purpose. The SAFMC MSE is being developed using [openMSE](#). The MSE is being developed for species with stock assessments to help guide the sustainability of the stock.

The primary purpose of the Snapper Grouper MSE is to evaluate management procedures that reduce the number of released Red Snapper and increase survival of released Red Snapper to help end overfishing and also to identify strategies to improve yield throughout the fishery while balancing stakeholder and biological needs. Red Snapper is of particular concern because the stock is overfished and experiencing overfishing. Ninety-nine percent of the Red Snapper recreational catch is released (based on data from 2017 through 2021), and 1 out of every 4 Red Snapper released ends up dying. The Council must focus on reducing recreational releases to address overfishing which is a significant challenge in a multi-species fishery. A MSE won't specify a single outcome or strategy that solves and addresses all management issues or concerns. Rather, it provides an opportunity to evaluate different management strategies and their associated biological, social, and economic tradeoffs.

During discussion about stakeholders needs at the March Council meeting, there was mention integrating angler welfare and angler well-being into the MSE process. The SEP will be asked to discuss available socio-economic data and methods that can be used to evaluate angler well-being and angler welfare. Also the SEP will be asked to provide potential concepts, objectives, and strategies to address angler well-being and angler welfare that would be appropriate for the snapper grouper fishery. An example from concept to strategy for an MSE would be concept: stakeholders identifying the lack of trophy fish being available, objective: increase the number of trophy fish in the population, and strategy: increase the minimum size limit to allow for a higher percentage of fish reaching trophy fish.

The Council will gather input from stakeholders in 2023 and anticipates completing the model by mid-2024. For more information, please visit the MSE project page <https://safmc-mse.netlify.app/> or contact Chip Collier (chip.collier@safmc.net)