



Gulf of Mexico Fishery Management Council

Managing Fishery Resources in the U.S. Federal Waters of the Gulf of Mexico

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Gulf of Mexico Gag Grouper

Scope of Work

Original: April 26, 2022

1. Update the approved SEDAR 72 Gulf of Mexico gag grouper base model:
 - Use the State of Florida's State Reef Fish Survey (SRFS) to inform private recreational landings data, if historical SRFS landings have been calibrated and SRFS has been certified by the NOAA Office of Science and Technology.
 - Document any changes or corrections made to model and input datasets and provide updated input data tables.
2. Update model parameter estimates and their variances, model uncertainties, estimates of stock status and management benchmarks, and provide the probability of overfishing occurring at specified future harvest and exploitation levels. Provide commercial and recreational landings and discards in pounds and numbers.
 - Use the following status determination criteria (SDC):
 - MSY or MSY proxy = yield at F_{MSY} or $F_{Rebuild}$ (if overfished)
 - $MSST = 0.5 * SSB_{MSY}$
 - $MFMT = F_{MSY}$ (or proxy) and $F_{Rebuild}$ (if overfished)
 - $OY = 75\%$ of F_{MSY}
 - If different SDC are recommended, provide outputs for both the current and recommended SDC.
 - Unless otherwise recommended, use the geometric mean of the previous three years' fishing mortality to determine $F_{Current}$. If an alternative approach is recommended, provide justification and outputs for the current and alternative approach.
 - Provide yield and spawning stock biomass streams for the overfishing limit and acceptable biological catch in pounds:
 - Annually for five years
 - Under a "constant catch" scenario for both three and five years
 - For the equilibrium yield at F_{MSY} , when estimable
3. Develop a stock assessment report to address these TORS and fully document the input data and results of the stock assessment model.

Topical Working Group

No topical working groups are requested for this additional model run.