March 6, 2023

South Atlantic Fisheries Management Council
4055 Faber Place Drive, Suite 201
North Charleston, SC 29405

Re: Written Comment for March 2023 SAFMC meeting

Council Members:

Thank you for the opportunity to address the important agenda item concerning Snapper-Grouper Regulatory Amendment 35 on Red Snapper & Release Mortality Reduction.

As a stakeholder I am forced to accept the unrealistic results of the SEDAR 73 stock assessment status for red snapper. My comments are in response to the base run model and inputs that were chosen by your SSC. In the model results dead discards of Red snapper from the recreational snapper-grouper fishery continue to be the primary factor slowing the rebuild of this stock and the re-opening of the South Atlantic Red snapper fishery. The SEDAR 73 stock assessment estimates that 500,000 to 800,000 Red snapper are killed each year as recreational fleet discards, we must turn dead discards into landings (see Figure below). This is mis-management and an unsustainable loss of Red snapper in the South Atlantic. I support management strategies that can reduce it. As Council members, you also are forced to manage the stock with the results of the SEDAR 73 SA Red snapper model that continues to provide unreliable stock status benchmarks that affect the livelihoods of fishermen in the South Atlantic.

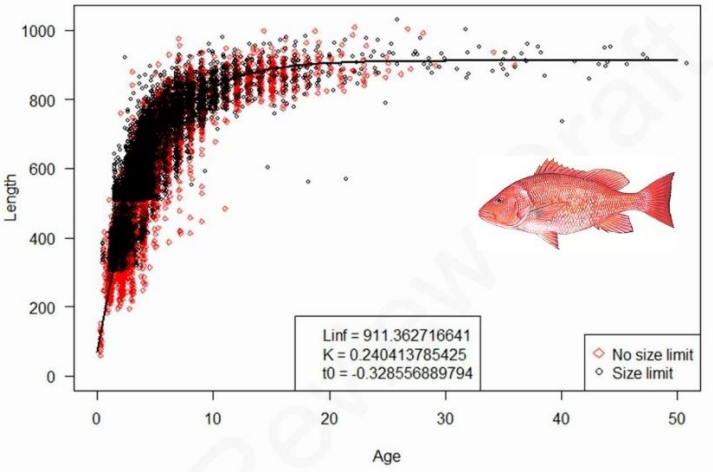
Figure 3.2.1.1. Red snapper recreational landings (black solid) and estimated dead discards (gray dashed) (numbers of fish) from SEDAR 73 (2021) by year from 1950 through 2019.

Council Leadership has demonstrated and stated that when the stock is considered rebuilt you will have no more Harvest or discard mortality yield than the current level. The Private Recreational sector is overcapitalized and has unlimited access to a Limited resource. If this overcapitalization continues all of our S/G fisheries will become dead discard fisheries. The Council must and should have implemented management measures in Amendment 35 for the Private recreational sector to become accountable, controlled and sustainable. The Private

recreational dead discard problem has destroyed the accountable managed, sustainable harvest of the Commercial sector and seafood Consumers. A S/G bottom fishing season by area or time for the Private recreational sector could solve this year-round dead discard mis-management. The vast majority of private recreational anglers' fish on the weekends and during the summer months. I ask you to research seasons for the private recreational SG sector ASAP.

Problems with the S73 BAM model for Red snapper

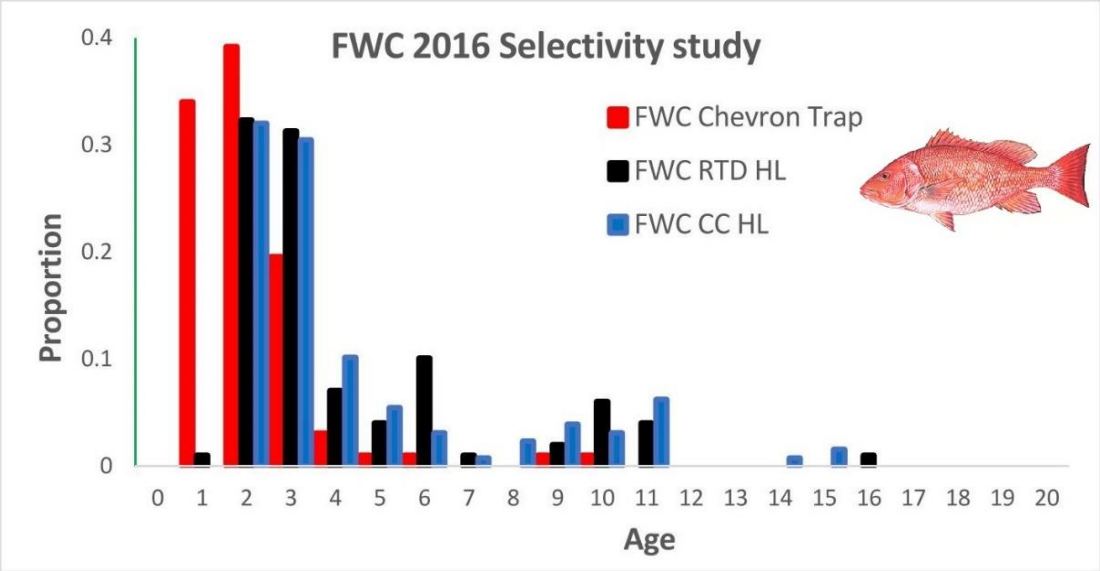
Problems continue to affect the ability of NMFS to accurately assess the South Atlantic Red snapper stock. The stock assessments will continue to be hamstrung by the use of Chevron traps and affixed stereo-cameras that routinely underestimate the stock structure for the simple reason that: 1) the trap selects for small fish, and 2) the camera can only estimate Red snapper length but not age. This is problematic for an age-based BAM model, where Red snapper age is largely undiscernible for fish that simple don't grow much longer in length after age 10 (see Figure, below).



Both the FWC's Repetitive Timed Drop (RTD HL) fisheries independent index of abundance and the Captain's Choice handline (CC HL) index have been demonstrated to catch (and provide age information on) Red snapper that are neither caught in the Chevron trap or seen in the Chevron Trap's affixed camera.

From S73 RD-02 (pg. 21), the Florida FWC reported:

> **"Overall, Red snapper captured in Chevron traps had smaller average length than those in the stereo-camera. This is largely attributable to decreasing capture probability with increasing size, especially in individuals over 600 mm FL** [~ > age 4]**.**
>
> **In contrast, the hooked gears captured larger Red snapper on average than were observed on stereo-video."**



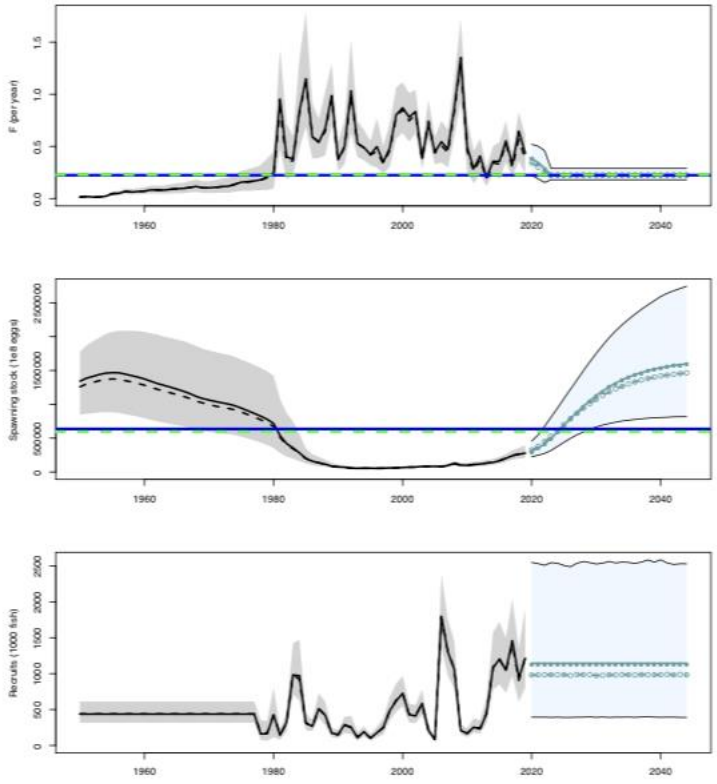
Comparison of FL FWC age structure analysis from 2016 selectivity study of fisheries independent and dependent gear-based paired-method assays (from S73 RD-02, Fig. 32), for Chevron trap (n=92), Repetitive Time Drop hook and line (RTD, n=96), and Captain's Choice hook and line (CC, n=121).

Science center leadership has stated in the past that cooperative hook and line sampling similar to RTD would be implemented at a federal level in the SA range. Hook and line sampling should be a priority to get a more accurate age structure of our S/G species. Why do we not have cooperative fisheries independent hook and line sampling on a closed fishery?

"Red snapper recruitment is that of a rebuilt stock"

South Atlantic red snapper recruitment rates have been spectacular for many years. This has been obvious to NMFS stock assessment scientists who said in S41, ***"red snapper recruitment in the South Atlantic is that of a rebuilt stock."*** Fishermen from Florida to North Carolina with their observations on the water have observed and told you the same. SAFMC staff have presented you a SG Amendment 35 option of opening the recreational fishery for just one day in the summer of 2023 and reducing the commercial harvest in half. At the same time, if these Red snapper recruitment rates continue, the S73 SA RS SAR (see Figure, below) indicate the stock will be rebuilt within 5 years and overfishing will no longer be occurring. Why did the SSC discount the high recruitment rate output in the S73 Red snapper model, when it is obvious that recruitment rates for many years are consistently that of a rebuilt stock ?

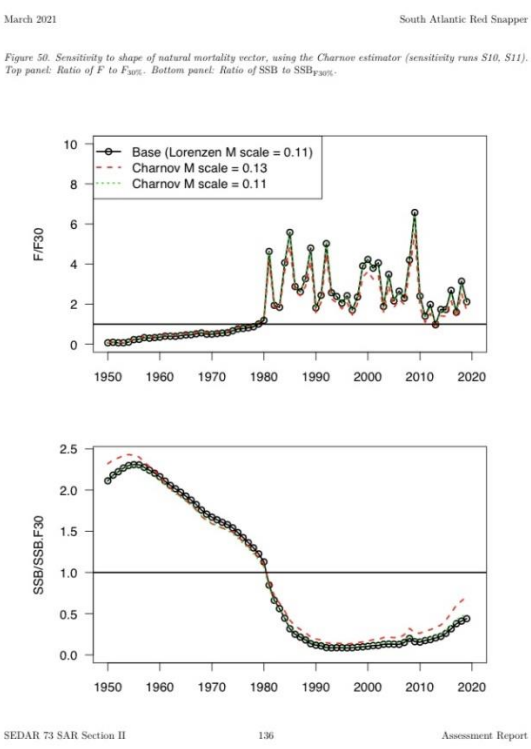
Figure 57. Projected time series under scenario 2—fishing mortality rate at $F = F_{30\%}$ and higher than expected recruitment. Expected values (base run) represented by solid lines with solid circles, medians represented by dashed lines with open circles, and uncertainty represented by thin lines corresponding to 5^{th} and 95^{th} percentiles of replicate projections. Solid horizontal lines mark $F_{30\%}$-related quantities (projection benchmarks); dashed horizontal lines represent corresponding medians. Spawning stock (SSB) is at time of peak spawning.

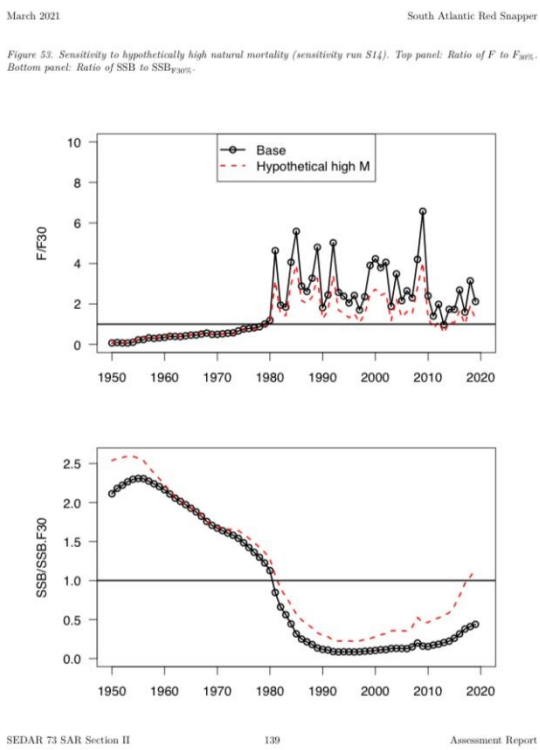


The S73 RS model is sensitive to Natural Mortality estimates

Natural mortality estimates play a driving role in stock assessment model benchmarks and was a significant source of uncertainty in the S73 SA RS assessment (see SEDAR 73 SAR). The estimated natural mortality rate which determines rebuilding age structure has been changed in successive SEDAR SA Red snapper stock assessments, from M=0.13 in S41 to M=0.11 in S73 utilizing different methods of estimating M (see left Figure, below). Also, setting the Natural Mortality much higher at M=0.2, as was done in a model sensitivity run (see right Figure, below), actually improves the stock status to a rebuilt stock status of Not Overfished and much lower Overfishing rate. How is that possible? Killing more fish with M creates a rebuilt stock in the model and reduces overfishing faster. Clearly the SEDAR 73 model results to stock status

are inaccurate and do not simulate observations from the South Atlantic by fisherrmen. During SEDAR 73 assessment I asked how many Red snapper over 20 years of age had been observed from the age readings. The response was that in the last 42 years 30,705 fisheries dependent samples have been taken. This resulted in only 141 Red snapper over 20 years of age. It is time for the NMFS to admit that we are never going to rebuild the Red snapper stock to have an abundance of over 20 up to 51 year old fish, as used in some Natural Mortality estimates. But from a population sustainability perspective, using a 28 year old fish as a rebuild target will suffice. The difference in this life history model estimate is literally the difference between having a nearly rebuilt stock versus one estimated rebuilt in 2047. It is time for the council to advise their SSC to use abundance and recruitment as the primary indicators of determining stock bio-mass and harvest levels.





SEDAR is currently conducting a multi-year research track assessment for red snapper, now is the time to fully engage with your SSC to implement changes so the model better resembles reality of the ocean.

Thank you for your consideration of this comment.

Respectfully, Jimmy Hull

Ponce Inlet Fl.