## **Red Snapper Recreational Releases, 2010-2019**

## Prepared by South Atlantic Fishery Management Council Staff for the Snapper Grouper Advisory Panel

This report was prepared to aid in discussions of recreational red snapper releases at the April 2021 Snapper Grouper Advisory Panel (AP) Meeting. Analyses included in this report should be considered preliminary. More in-depth analyses with a greater level of review can be completed later at the direction of the South Atlantic Fishery Management Council.

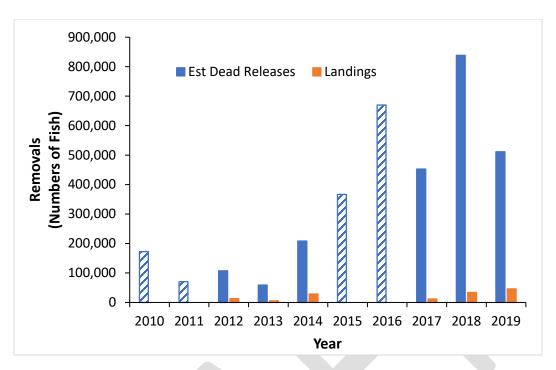
Seasonal recreational releases of red snapper from 2010-2019 were queried from the Marine Recreational Information Program and landings data were pulled from landings reports provided to the Council from 2012 to 2019 (generally provided at the June Council meetings). Releases are based on MRIP estimates using FES and APAIS adjustments. Two years of shore mode catch were excluded from these analyses due to catch from this mode not being a typical occurrence. MRIP samples in 2-month periods, called waves, which are used in these analyses to depict trends within the year. Waves are numbered from the beginning to the end of the year; for example, Wave 1 includes January and February and Wave 2 includes March and April. Landings data were not modified based on changes in MRIP survey because the landings data for red snapper during the mini-seasons were frequently estimated using other sources (see landings reports).

The analyses requested recreational removals (dead releases) by mode (private or charter), time of year, and whether a fishing season occurred during that year. Estimates of recreational landings are also included to allow comparisons with the estimates of dead releases. Dead releases were estimated using discard mortality rate estimates for the general recreational (private and charter modes) fleet from the draft SEDAR 73 stock assessment (SEDAR 2021) and multiplying by the number of releases. SEDAR 73 included four discard mortality rates that decreased from 2010 to 2021 for the general recreational fleet due to improved release practices and regulations requiring equipment to improve survival of released fish (Table 1).

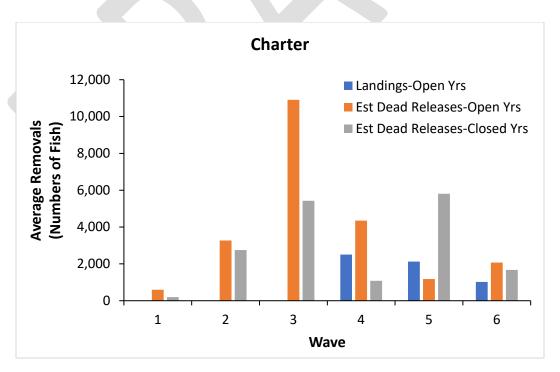
The number of dead releases was averaged over the past 10 years for charter boats and private trips for each wave. Average landings estimates were averaged across years that included an open season within each wave. Landings outside of the open season were included as harvest during the open season because averaging across years when harvest occurred during closed waves would bias averages low relative to past allowable landings within a wave that had an open season. Open seasons from 2010-2019 occurred in 2012 (Wave 5), 2013 (Wave 4), 2014 (Wave 4), 2017 (Wave 6), 2018 (Wave 4), and 2019 (Wave 4).

**Table 1.** Release mortality rates of red snapper for the general recreational fleet (private and charter modes) from the draft SEDAR 73 stock assessment (SEDAR 2021).

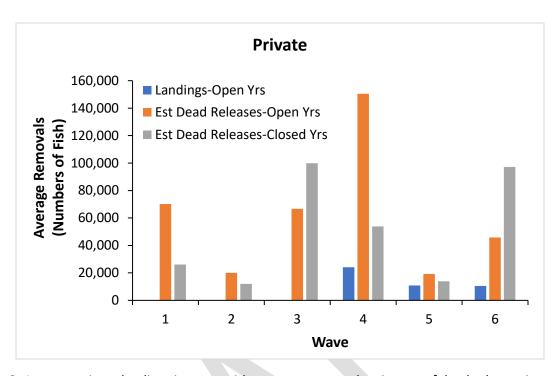
Block	1	2	3	4
Years	-2010	2011-2017	2017-2020	2021-
Rate	0.37	0.28	0.26	0.23



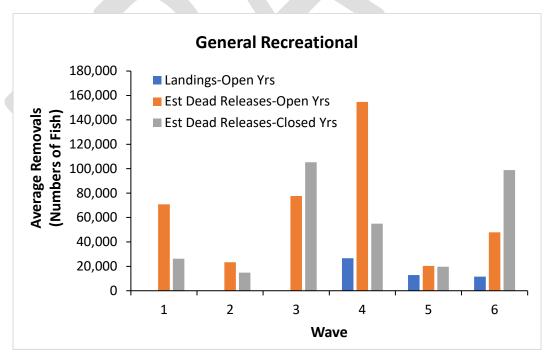
**Figure 1.** General recreational (charter and private) annual removals attributable to release mortality (Est Dead Releases) from 2010-2019 and annual landings for years in that timeframe that included open fishing seasons. Filled bars indicate years that included open fishing seasons. Lined bars indicate years that did not include open seasons.



**Figure 2.** Average charter landings in years with open seasons and estimates of dead releases in years with open and closed seasons by wave from 2010-2019.



**Figure 3.** Average private landings in years with open seasons and estimates of dead releases in years with open and closed seasons by wave from 2010-2019.



**Figure 4.** General recreational (charter and private) landings in years with open seasons and estimates of dead releases in years with open and closed seasons by wave from 2010-2019.