

South Atlantic Fishery Management Council
Snapper Grouper Advisory Panel
Red Grouper Fishery Performance Report
April 2017

At their April 2017 meeting, the South Atlantic Fishery Management Council's (Council) Snapper Grouper Advisory Panel (AP) reviewed fishery information for Red Grouper and developed a Fishery Performance Report (FPR). The purpose of the FPR is to assemble information from AP members' experience and observations on the water and in the marketplace to complement scientific and landings data. The FPR for Red Grouper is the first Snapper Grouper FPR for the South Atlantic, and will be provided to the Scientific and Statistical Committee (SSC) and the Socio-Economic Panel (SEP). The format of future FPRs may change based on input from the AP, SSC, SEP, and the South Atlantic Council.

Advisory Panel members:

Kenny Fex (Chairman) (Commercial/NC)
David Moss (Vice-Chairman)
(Recreational/FL)
Robert Johnson (Charter/FL)
Jim Atack (Recreational/NC)
Red Munden (Conservation/NC)
Richard Stiglitz (Commercial/FL)
Rusty Hudson (Commercial/FL)
Robert Thompson (Charter/SC)
Jimmy Hull (Commercial/Dealer/Retail/FL)
David Snyder (Consumer Rep/GA)
James Freeman (Commercial/FL)
Kerry Marhefka (Commercial/Dealer SC)

Todd Kellison (At-large/NOAA)
Robert Lorenz (Recreational/NC)
Dick Brame (NGO/Recreational/NC)
Wes Covington (Recreational/SC)*
Manny Herrera (Commercial/FL)
Deidra Jeffcoat (Charter/GA)
Robert Freeman (Charter/NC)
Greg Mercurio (Charter/FL)
Wayne Mershon (Commercial/Dealer/SC)
Andy Piland (Charter/NC)*
Scott Buff (Commercial/NC)
Lange Sykes (Recreational/FL)*

*not in attendance

Fishery Overview

Based on data through 2008, the SEDAR 19 (2010) stock assessment concluded that Red Grouper were overfished and overfishing was occurring. The 2008 fishing mortality rate was found to be about 35% higher than the fishing mortality rate that would produce maximum sustainable yield (MSY). The spawning stock biomass (SSB) in 2008 was found to be just below the level at which the stock is considered to be overfished (Minimum Stock Size Threshold). Hence, in 2011, the Council developed Amendment 24 to the Snapper Grouper Fishery Management Plan. The amendment implemented new fishing levels based on results of SEDAR 19 (2010) and put in place a rebuilding plan¹ with the aim of ending overfishing and rebuilding the Red Grouper stock. An update to the SEDAR 19 (2010) assessment was just completed and will be reviewed by the SSC in April 2017. The South Atlantic Council will obtain the SSC's recommendations at their June 2017 meeting and move forward with any needed management changes.

¹ Amendment 24 changed the definition of MSST so the Red Grouper stock is not considered overfished. Nonetheless, the Council adopted a rebuilding plan in the same amendment.

Detailed landings and economic information was provided to the Snapper Grouper AP. This document is attached at the end of the FPR.

Stock observations

Red Grouper is primarily a regional fishery mostly based in North Carolina. Availability of fish has not changed in recent years and size is consistent. In North Carolina, AP members reported that Red Grouper are caught at depths of 80-100 ft. or 140-180 ft., and the sizes have been consistent in recent years. Red Grouper are usually not the primary target commercial species but are commonly caught on multi-species commercial trips. AP members reported that Scamp were the target species on many of these trips with incidental Red Grouper catch.

In the private recreational sector, Red Grouper have been rare in the past two years. In 2012, Red Grouper were biting but not large, maybe 5-12 lbs. One AP member reported that older fishermen have observed a 7-9 year cycle of Red Grouper abundance, and this may be a period of lower availability. However, the AP observed that there have been less Red Grouper available overall in North Carolina waters since about 2008.

Commercial fishermen based out of Morehead City, NC, reported that Red Grouper has never been a primary species for them and they do not target Red Grouper. They can be caught in 140-180 ft. of water and are mixed in with triggerfish on the edge. There have been posts on social media from the recreational sector in that area.

Smaller Red Grouper are found in depths of 80-100 ft. in North Carolina. AP members noted that they may not be seeing as many older fish because they are getting taken as younger fish in shallower water. Observations from a commercial diver from North Carolina on the AP do indicate a decline in abundance of red grouper since the late 2000s (from about 2008-2009). Used so see them in 80-110 ft.

In waters off Charleston, SC, Red Grouper can be found in low relief bottom (“porgy bottom”) and there would be a lot of fish in compacted areas. There may be an impact on availability due to habitat damage by use of roller trawls in the past. Since mid-1980s, it’s been a bycatch species in South Carolina.

Off the coast of Georgia, charter captains on the AP reported that Red Grouper are incidental catch and are not commonly seen.

For charter vessels off North Florida, red grouper are not a target species. However, fishermen are still seeing the fish and they can catch them in 140-180 ft. near the shelf edge. Size hasn’t changed and has been consistent through time. For commercial day boats working in waters off the Florida east coast, Red Grouper is more of an incidental catch. AP members reported that the availability has not changed in recent years. When commercial vessels were trip boats, they would catch a couple of boxes but because most vessels function as day boats, Red Grouper catch is only a small part of multi-species fishery. Other AP members agreed that Red Grouper is more incidental catch, and can be found on inshore reefs to the big ledge ranging from 7-20 lbs. Generally they do not see small ones like there are in the Gulf, but Red Grouper are available

in waters around Volusia County (Daytona, Ormond Beach, Port Orange, Ponce Inlet). One AP member suggested that perhaps there is some “spillover” in the Florida Straits from fish in the Gulf.

In South Florida, recreational fishermen catch them in about 60 feet of water and shallower. One AP member reported that there is more targeting of Red Grouper in the spearfishing sector off the Florida east coast, possibly due to upcoming restrictions on hogfish. Popularity of Red Grouper for spearfishing has grown because the fish can be found in shallow waters and are easy to shoot. There has also been an overall increase in the number of recreational boats on the Florida east coast and a significant increase in the popularity of spearfishing.

In waters off the Florida east coast, smaller fish around 5-6 inches are sometimes caught in the estuaries. Red Grouper that are under 20 inches can be found in patches in shallow waters up and down the coast.

In the Florida Keys, Red Grouper are found somewhat abundantly on the shallow end of the reef, especially in the Lower Keys. However, big fish are sometimes caught in the outer reef. In the Lower Keys, there seems to be no issue with abundance. The fish are more abundant when water temperatures are lower, however, but this coincides with the seasonal closure. Smaller fish are found in shallow reef waters. During the time of year when the commercial harvest is open, Red Grouper are in deeper water and not as accessible. Increased spearfishing may also be affecting the stock.

AP members reported that the increasing abundance of lionfish (all areas) may be negatively affecting Red Grouper, along with the increase in the Goliath Grouper population in Florida. AP members maintain that Goliath Groupers prey extensively on red grouper (“probably their favorite fish to eat”).

An AP member observed that there has definitely been a decline in abundance since the 4-month closure went in to place. He maintains that because there was a delay in implementing the closure, fishermen off North Carolina (Cape Fear area) increased their effort on red grouper immediately prior to the closure. The AP member stated that he was able to harvest 900 pounds of red grouper in three days that winter.

Other members stated that observations on abundance are very regional and should not be generalized. Fishermen off Florida have not seen a similar decline to that which reportedly has occurred off North Carolina.

Commercial market observations

Off the east coast of Florida, Red Grouper is not a key commercial species. AP members noted that while there is a demand for grouper in general, there is not a lot of demand for Red Grouper specifically. The fish does not have a high yield compared to other species due to the large head and not a lot of meat. Restaurants do not prefer Red Grouper and commercial trips marketing to restaurants will try to sell any caught on a multi-species trip, but there is not consumer and restaurant demand.

In the Florida Keys, the ex-vessel price for Gulf Red Grouper can be up to \$6/lb but due to seasonal access issues for South Atlantic Red Grouper, the Keys fishermen cannot take advantage of this price. This is especially relevant now that Mexico has a closure as well and dealers in the Florida Keys can fetch up to \$10.99 per pound during that time. In general, when demand is high, the price can be \$5-10 per pound.

Management measures

AP members discussed the minimum size limit. Some AP members noted that the minimum size limit may not have any effect because of the depth, and that discard mortality may be high anyway. Keys fishermen felt that Red Grouper are hardier and are less likely to suffer barotrauma, and the current minimum size limit is sufficient. The seasonal closure is important to keep in place. AP members reported that the current management measures do not significantly affect their ability to catch and keep Red Grouper.

Research Recommendations

AP members recommended research on life history, specifically with studies on the fish inshore to get information on juveniles. The AP recommended additional research on abundance of Red Groupers during MPA research. One AP member stated that red grouper used to be abundant on the “tropical bottom” in what is currently the North Edisto MPA. One suggestion was the SEFSC ROV studies, although it was noted by NOAA Fisheries staff that the trap video survey is not currently properly designed to collect specific info on Red Grouper inside and outside of the existing MPAs. Since frequency of occurrence for all groupers in fishery independent surveys is generally low, a large sample size would be necessary to detect differences. Additional recommendations include research on the potential impact of lionfish on Red Grouper recruitment, and collecting information on the impact of spearfishing for Red Grouper.

Red Grouper Fishery Information

Snapper Grouper Advisory Panel

April 2017

At their April 2017 meeting, the Snapper Grouper AP reviewed the fishery information provided below, and then provided input on the fishery performance report for red grouper.

Fishery Overview

Based on data through 2008, the SEDAR 19 (2010) stock assessment concluded that Red Grouper were overfished and overfishing was occurring. The 2008 fishing mortality rate was found to be about 35% higher than the fishing mortality rate that would produce maximum sustainable yield (MSY). The spawning stock biomass (SSB) in 2008 was found to be just below the level at which the stock is considered to be overfished (Minimum Stock Size Threshold). Hence, in 2011, the Council developed Amendment 24 to the Snapper Grouper Fishery Management Plan. The amendment implemented new fishing levels based on results of SEDAR 19 (2010) and put in place a rebuilding plan¹ with the aim of ending overfishing and rebuilding the Red Grouper stock. An update to the SEDAR 19 (2010) assessment was just completed and will be reviewed by the SSC in April 2017.

Commercial Sector

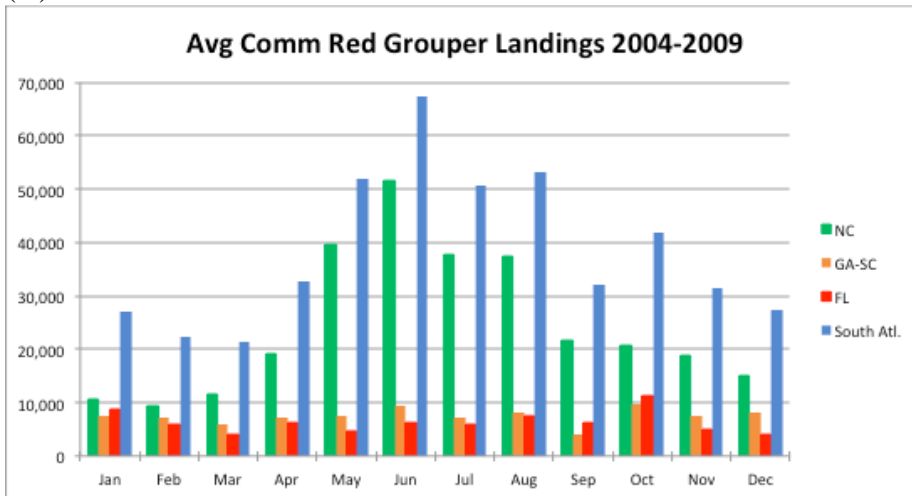
Figure 1 below shows average commercial landings from 2004 through 2009 (**A**), the period prior to the current Shallow Water Grouper closure, and from 2009 through 2015 (**B**). Average landings are presented by month and by state as well as for the entire South Atlantic region. For ease of comparison, the range of landings (y-axis) was kept the same for both figures. Landings for Georgia and South Carolina were aggregate to avoid data confidentiality issues.

Trends in annual commercial landings by month for the entire time series (2004 through 2015) are shown in **Figure 2**. The shallow water grouper closure was implemented in 2009, depicted in the figure by a break in the series.

Figure 3 shows price per pound in actual (not adjusted for inflation) dollars by state for Red Grouper from 2006 through 2015. The figure also shows the average price per pound for all three states in actual (not adjusted) dollars and adjusted dollars.

¹ Amendment 24 changed the definition of MSST so the red grouper stock is not considered overfished. Nonetheless, the Council adopted a rebuilding plan in the same amendment.

(A)



(B)

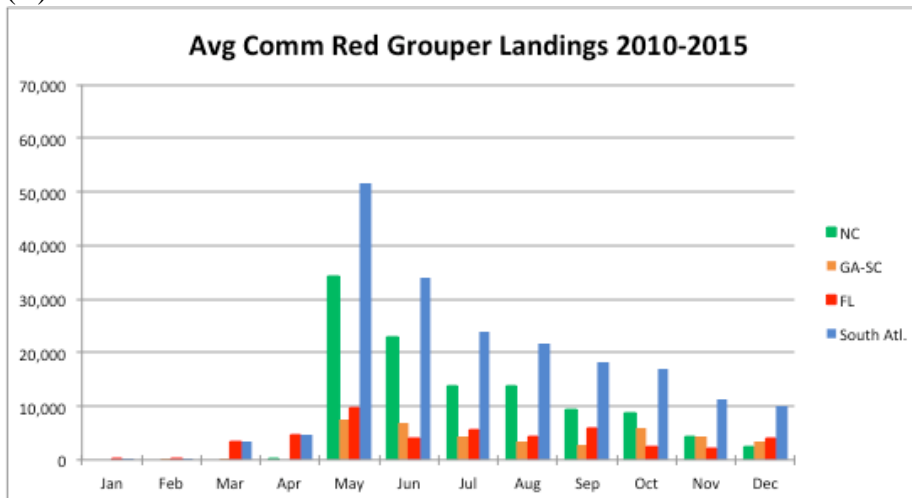


Figure 1. Average commercial landings (pounds whole weight; lbs ww) of red grouper by month and state for pre-closure (2004-2009) and post-closure (2010-2015) years. Source: SAFMC based on SAFE data from SEFSC.

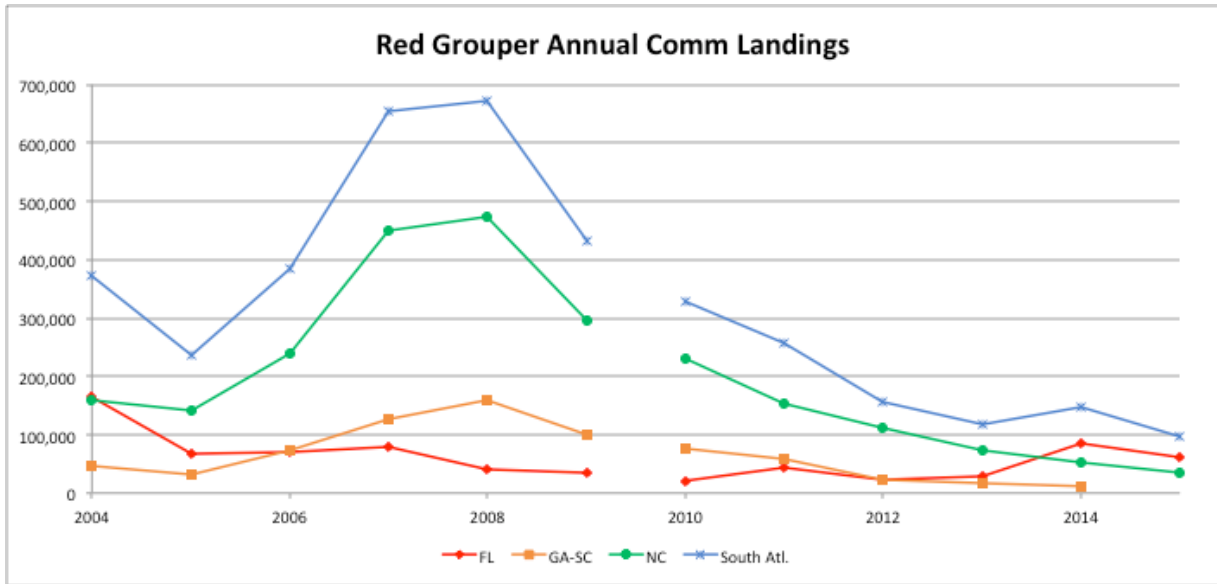


Figure 2. Annual commercial landings (lbs ww) of red grouper from 2014 through 2015
Source: SAFMC based on SAFE data from SEFSC.

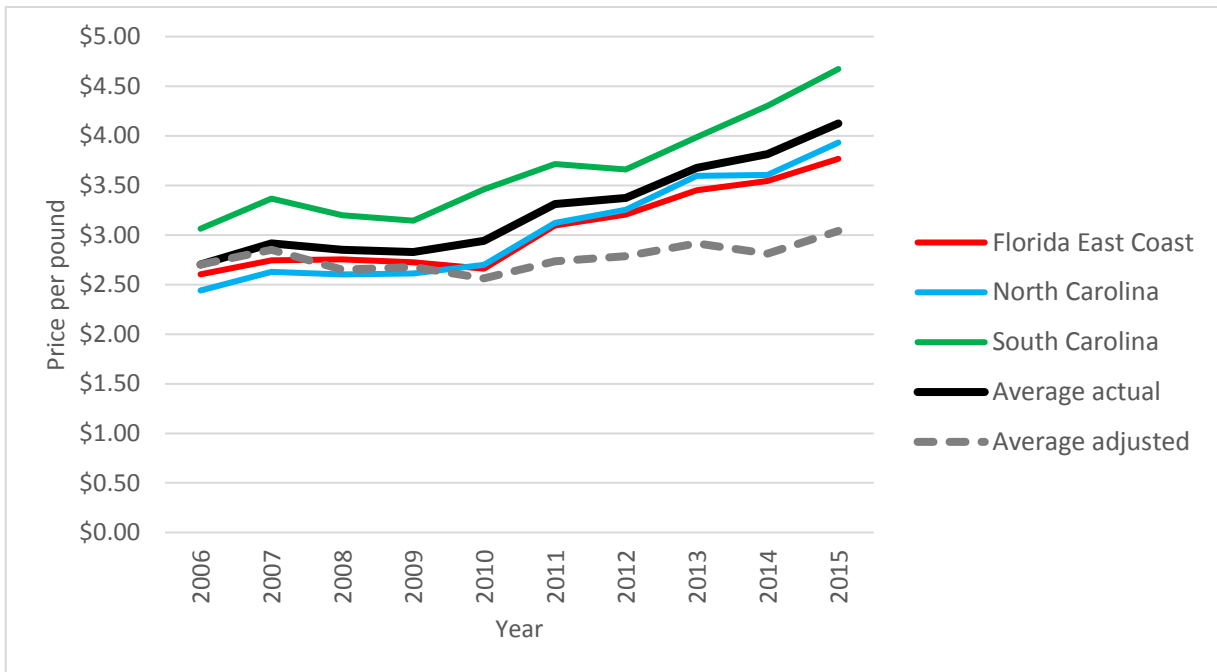


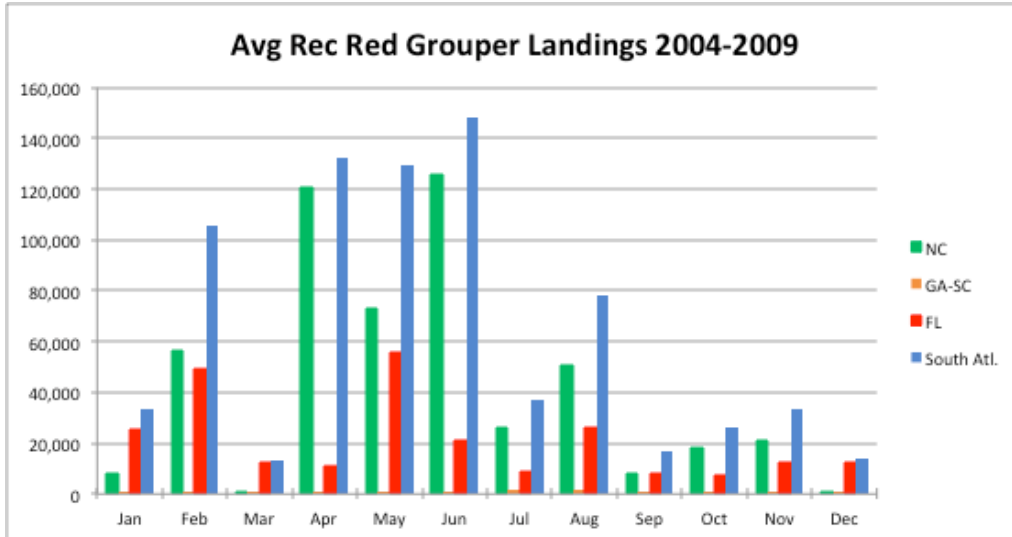
Figure 3. Price per pound (US\$, not adjusted) by state for commercial red grouper, and actual (not adjusted) average price (black line) and adjusted average price (gray dotted line). Georgia is not included to maintain confidentiality.

Source: NMFS Commercial Statistics website.

Recreational Sector

Similarly, summarized information (**Figures 4 & 5**) is provided below for the recreational sector based on Marine Recreational Information Program (MRIP) estimates.

(A)



(B)

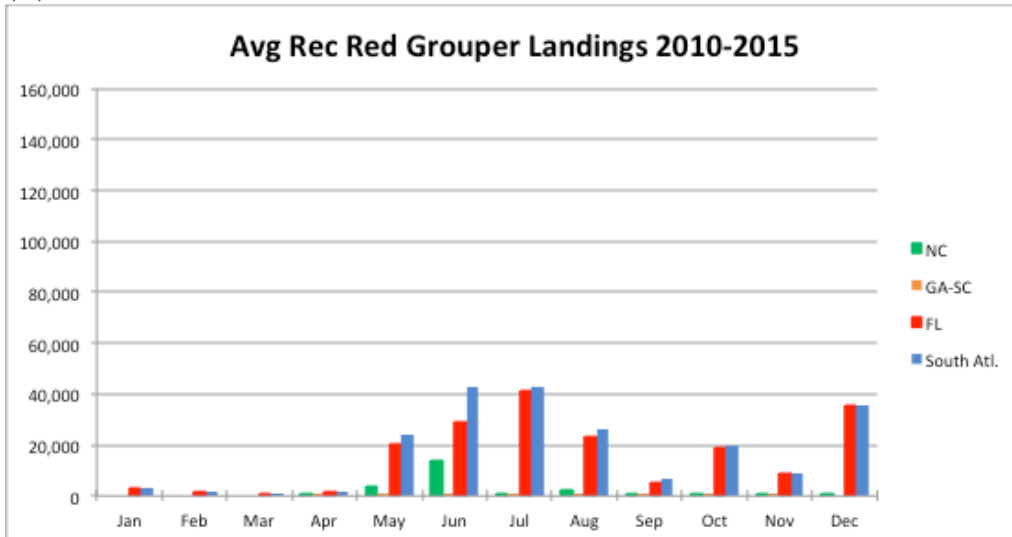


Figure 4. Average recreational landings (pounds whole weight; lbs ww) of **red grouper** by month and state for (A) pre-closure (2004-2009) and (B) post-closure (2010-2015) years. For easier comparison, the range of landings (y-axis) was kept the same for both figures.

Source: SAFMC based on MRIP data and average weights from the SEFSC.

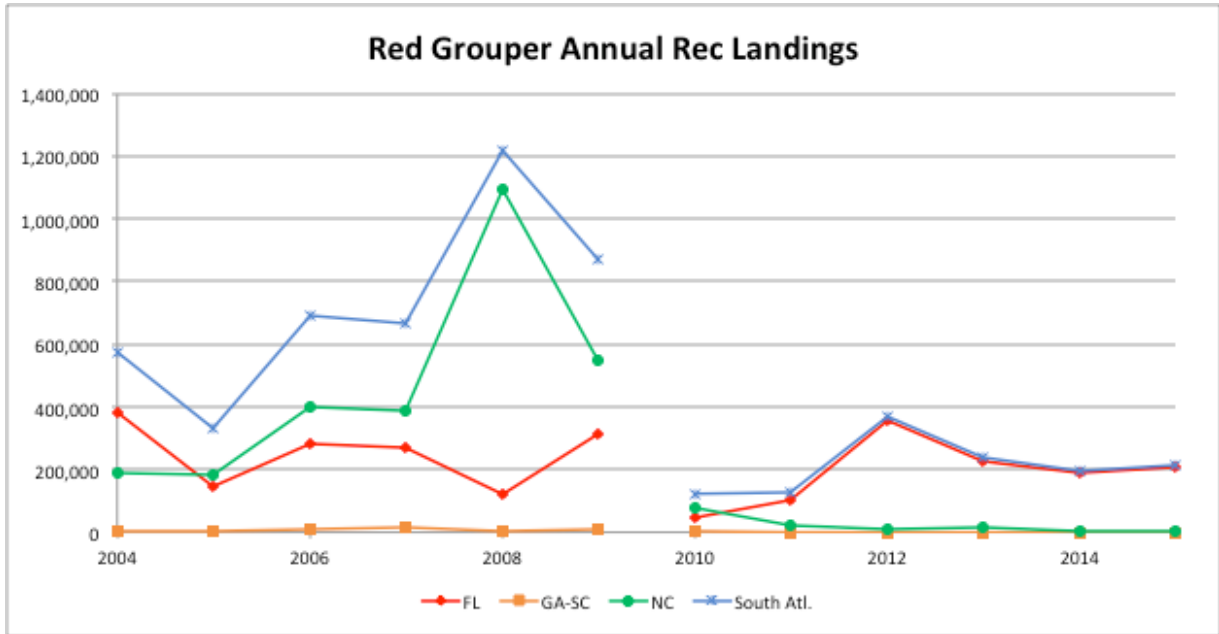


Figure 5. Annual recreational landings (lbs ww) of **red grouper** from 2014 through 2015 are shown below. The shallow water grouper closure was implemented in 2009, depicted in the figure by a break in the series.

Questions for Advisory Panel:

The AP is asked to provide the following information about Red Grouper based on their expertise, as appropriate:

1) Catch levels over the past 5 years:

- For the commercial sector, how has price and demand for red grouper changed?
- How has demand for charter/headboat trips targeting red grouper changed?
- When/where are the fish available, and has this changed?
- Has the size of the fish changed?
- Have there been effort shifts to/from red grouper?

2) Management measures:

- Is the 20-inch minimum size limit for the commercial sector appropriate?
- Is the 20-inch minimum size limit for the recreational sector appropriate?
- Are there new measures that the Council should consider?
- Are there other existing measures (i.e. 4-month closure) that should be changed?

3) Environmental/ecological

- Has there been a shift in red grouper abundance/availability due to environmental factors such as mild winter, storms, cold-water intrusions?
- The most recent assessment indicated that recruitment has been lower than expected since 2005. Are you observing low Red Grouper recruitment on the water? Can environmental or ecological drivers of recruitment be identified?
- Are there well-defined zoogeographic breaks (e.g., Florida keys, Cape Hatteras) that could inform stock structure?
- What are your observations concerning the timing and length of the red grouper spawning season in your area?

4) Other

- Do you have suggestions for research priorities for Red Grouper?
- What else is important for the Council to know about Red Grouper?