

# **Regulatory Amendment 25**

to the Fishery Management Plan for the  
Snapper Grouper Fishery of the South Atlantic  
Region

## **Public Hearing Summary**

**Acceptable Biological Catch & Annual Catch Limit Adjustment  
and Revision of Management Measures for Blueline Tilefish,  
Fishing Year and Commercial Accountability Measure Revisions  
for Yellowtail Snapper, and Recreational Bag Limit Adjustment for  
Black Sea Bass**

**October 30, 2015**

The South Atlantic Fishery Management Council is **requesting public comment on Regulatory Amendment 25 until 5:00 p.m. on November 16, 2015**. Comments may be submitted in writing at the Council address on the last page of this summary document. Comments may also be submitted via fax (843-769-4520) or email ([Mike.Collins@safmc.net](mailto:Mike.Collins@safmc.net)) with the subject line “Reg 25”.

**Public hearing webinars** will be held on **Monday November 9, and Thursday November 12, 2015 at 6:00 p.m.** See the back of this document or go to [www.safmc.net](http://www.safmc.net) for information on how to register.

# Background

## What Action Is Being Proposed?

Fishery managers are proposing changes to regulations through Regulatory Amendment 25 to the Fishery Management Plan (FMP) for the Snapper Grouper Fishery of the South Atlantic Region (Regulatory Amendment 25).

Regulatory Amendment 25 proposes measures to adjust the acceptable biological catch and annual catch limits, optimum yield, and commercial and recreational management measures for the blueline tilefish stock; change the fishing year and revise accountability measures for yellowtail snapper; and increase the recreational bag limit for black sea bass.

## Why are the Council and the National Marine Fisheries Service Considering Action?

### Blueline Tilefish

The regulatory amendment would increase the annual catch limit and optimum yield for blueline tilefish based on a new acceptable biological catch recommendation from the South Atlantic Council's Scientific and Statistical Committee (SSC). The SSC's previous ABC recommendation, which resulted in the annual catch limit implemented through Amendment 32 in March 2015, was based on the rebuilding projections derived from the most recent blueline tilefish stock assessment results (SEDAR 32 2013). In September 2015, the SSC meet to reconsider their ABC recommendation since the original stock assessment projections were no longer considered best scientific information available. Therefore, the SSC recommended

setting the ABC at the equilibrium yield at 75%  $F_{MSY}$ . The equilibrium yield, 224,100 pounds whole weight (lbs ww), was derived from the stock assessment (SEDAR 32 2013). As this acceptable biological catch recommendation is for blueline tilefish along its range along the entire U.S. east coast, it is referred to as a "stock ABC".

**Actions 1-3** of Regulatory Amendment 25 address acceptable biological catch and annual catch limit adjustments and commercial and recreational management measures for blueline tilefish based on the SSC's acceptable biological catch recommendation and taking into account landings that occur north of the Council's jurisdiction.

### Black Sea Bass

The South Atlantic Council is considering an increase to the recreational bag limit to ensure that optimum yield is being achieved for the black sea bass resource. Regulatory Amendment 9 (SAFMC 2010) implemented a reduction in the bag limit for black sea bass from 15 fish to 5 fish. This change became effective on June 22, 2011. Since then, the recreational ACL for black sea bass increased substantially (from 482,620 lbs ww to 1,033,980 lbs ww; Regulatory Amendment 19) and the stock assessment indicated that black sea bass in the South Atlantic are neither overfished nor undergoing overfishing (SEDAR 25 Update 2013).

### Yellowtail Snapper

The yellowtail snapper fishing year is currently the calendar year for the commercial and recreational sectors. The South Atlantic Council is considering a change to the fishing years to provide economic benefits to fishermen and to protect spawning fish.

The yellowtail snapper portion of the snapper grouper fishery is centered in South

Florida. Harvest of yellowtail snapper for commercial fishermen is prohibited when the annual catch limit is met or projected to be met. Because the fishing year begins January 1<sup>st</sup>, if a closure is triggered, it would occur during the winter months. For example, the commercial sector is scheduled to close October 31, 2015. Closures during the latter part of the year have a greater adverse impact to fishermen and dealers compared to other times of the year as yellowtail snapper command a higher price per pound during winter months. The South Atlantic Council is therefore considering a change in the start date of the fishing year to sometime in the summer or early fall.

A change to the fishing year would also be expected to protect yellowtail snapper when they spawn. A closure, if one were to occur, would likely happen during late spring/early summer if the fishing year is changed to begin in summer/early fall. Options to change the fishing year start date for the recreational sector are also included for consideration.

Yellowtail snapper are assessed as a unit stock in the Southeast U.S. The South Atlantic Council and Gulf of Mexico Fishery Management Council (Gulf of Mexico Council) agreed on a jurisdictional split of the acceptable biological catch based on the proportion of landings in each area. This jurisdictional acceptable biological catch allocation was implemented through the Comprehensive ACL Amendment (SAFMC 2011) and the Generic ACL Amendment

(GMFMC 2011). Each Council adopted annual catch limits and accountability measures accordingly.

Recently there has been interest in managing yellowtail snapper under a combined multi-jurisdictional acceptable biological catch and annual catch limit (see Joint SA/Gulf Amendment on South Florida Issues, under development). However, the South Atlantic Council is considering maintaining the jurisdictional split of the yellowtail snapper acceptable biological catch and revising commercial accountability measures instead. The South Atlantic Council established sector annual catch limits and accountability measures for yellowtail snapper; however, the Gulf of Mexico Council did not specify sector allocations or sector accountability measures for yellowtail snapper. To revise accountability measures to apply to the commercial sector across Council jurisdictions, the Gulf of Mexico Council would first have to establish sector allocations. The intent is to revise the commercial accountability measures so that an in-season closure would only be triggered when the **total commercial annual catch limit for the South Atlantic and Gulf of Mexico** is met or projected to be met.

## What is the History of Recent Management for Blueline Tilefish?

The SEDAR 32 (2013) stock assessment used data through 2011 and found the stock of blueline tilefish in the Atlantic to be overfished<sup>1</sup> and undergoing overfishing. At their December 2013 meeting, the South Atlantic Council initiated development of Amendment 32 to the Snapper Grouper FMP (Amendment 32) and voted to request emergency action to reduce overfishing of blueline tilefish immediately while Amendment 32 was being developed. The emergency rule, which was effective on April 17, 2014, set the blueline tilefish ACL at the yield at  $75\%F_{MSY} = 224,100$  pounds whole weight (lbs ww).

Amendment 32 was approved by the National Marine Fisheries Service on March 18, 2015, and the regulations were implemented on March 30, 2015. The amendment set the annual catch limit for the South Atlantic region at 98% of the recommended acceptable biological catch based on projections at the recommended P\* (P-star) level according to the South Atlantic Council's ABC control rule; the remaining 2% was set aside to account for landings north of North Carolina based on average landings at the time (**Table 1.6.1**).

<sup>1</sup> Effective November 6, 2014, Regulatory Amendment 21 changed the definition of the minimum stock size threshold (MSST) for several snapper grouper species with low natural mortality, including blueline tilefish. Under the revised definition ( $MSST = 75\% SSB_{MSY}$ ) the blueline tilefish stock is not considered overfished.

**Table 1.6.1.** Commercial and recreational annual catch limits (lbs ww) for blueline tilefish as implemented through Amendment 32.

Year	Blueline Tilefish ACL (lbs ww)		
	Total	Commercial	Recreational
2015	35,632	17,841	17,791
2016	53,457	26,766	26,691
2017	71,469	35,785	35,685
2018 and beyond until modified	87,974	44,048	43,925

Although the blueline tilefish stock was assessed as one unit along the U.S. east coast, regulations resulting from the final rule for Amendment 32 only apply to vessels in the South Atlantic Council's area of jurisdiction. Concerns about rapidly increasing commercial and party/charter landings of blueline tilefish north of the North Carolina/Virginia boundary, particularly in New Jersey, prompted the Mid-Atlantic Fishery Management Council (Mid-Atlantic Council) in February 2015 to request emergency action to implement a commercial trip limit of 300 lbs ww and a recreational possession limit of seven fish per person within its jurisdiction.

Representatives from the Mid-Atlantic Council attended the South Atlantic Council's March 2015 meeting in St. Simons Island, Georgia, and discussed concerns about applying the 2013 blueline tilefish stock assessment results throughout the species' range. The South Atlantic Council approved a motion requesting extension of regulations through the Mid-Atlantic and New England areas contingent on the South Atlantic Council's SSC review of SEDAR 32's applicability to the area north of North Carolina. The South Atlantic Council's SSC, including members that are also on the Mid-Atlantic Council's SSC, reviewed the stock assessment during its April 28-30, 2015, meeting and determined the SEDAR 32 assessment constituted best scientific information available and should be applicable to the blueline tilefish stock throughout its range along the U.S. east

coast. Based on this determination, the South Atlantic Council requested that the National Marine Fisheries Service take emergency action to apply the Amendment 32 measures to the Mid-Atlantic and New England Councils' areas of jurisdiction north of the North Carolina/Virginia border.

On June 4, 2015, NMFS approved the Mid-Atlantic Council's request for emergency action and implemented a commercial trip limit of 300 lbs ww and a recreational possession limit of seven fish per person. The Mid-Atlantic Council initiated development of an amendment to their Golden Tilefish Fishery Management Plan to include blueline tilefish in the fishery management unit and implement permanent management measures before the emergency rule regulations expire on June 5, 2016 (the original emergency rule expires on December 1, 2015 but can be extended for an additional 186 days). The South Atlantic Council's emergency action request is currently under review.

In May 2015, the Southeast Regional Office Regional Administrator requested that the Southeast Fisheries Science Center (SEFSC) provide scientific advice on whether the SEDAR 32 projections represented the current state of the blueline tilefish stock given that the level of reported blueline tilefish landings in 2014 approached the biomass estimated by the projections. The Southeast Fisheries Science Center responded that the SEDAR 32 projections constituted the best scientific information available. However, the South Atlantic Council's SSC later concluded that "...the projections were properly prepared using accepted methods, incorporate typical assumptions and uncertainties, and reflect expected outcomes given the parameters with which they were prepared. However, given the concerns noted with continued shifts in the fishery since the assessment was completed, potential spatial patterns to the population and impacts of such patterns on productivity, and the

inability of the projections to address effort shifts in the same manner as the assessment, the existing projections may not accurately reflect the population and fishery as they now exist, and therefore, cannot be considered Best Scientific Information Available. Based on this decision the Committee recommends that revised projections be prepared."

Following the South Atlantic Council's June 2015, meeting, a request was sent to the Southeast Fisheries Science Center for revised projections for the blueline tilefish stock. On September 9, 2015, the South Atlantic Council's SSC convened again via webinar to review the new projections and consider other approaches to recommend a revised ABC for the blueline tilefish stock. The SSC stated that "Based on the limited scope of the projections (i.e., not all recruitment scenarios were evaluated), the high degree of uncertainty in the original assessment, and the disconnect between assessment and projections (the terminal year of data for this assessment was 2011 and the fishery has undergone major changes since then), the SSC concluded that the projections provided by the SEFSC do not represent the Best Scientific Information Available and were not adequate to support blueline tilefish fishing level recommendations for either current or future years." Instead, **the SSC recommended setting the acceptable biological catch at the equilibrium yield at 75%F<sub>MSY</sub>**. This value, 224,100 lbs ww, is for blueline tilefish along its range along the U.S. east coast based on results of the SEDAR 32 (2013) stock assessment. This value was also temporarily adopted as the ACL while the South Atlantic Council developed Amendment 32 to implement fishing levels based on the SEDAR 32 (2013) projections. At the June 2015 South Atlantic Council meeting, the chair of the SSC stated that the recommended acceptable biological catch was sufficient to prevent overfishing of the blueline tilefish stock.

# Proposed Actions and Alternatives

## 2.1 Action 1. Adjust the **Acceptable Biological Catch (ABC)**, **Annual Catch Limit (ACL)** and **Optimum Yield (OY)** for the South Atlantic blueline tilefish stock

NOTE: Council to approve highlighted wording

**Alternative 1 (No Action).**  $ACL = OY = 98\%(ABC)$ .

**Alternative 2.**  $ACL=OY=98\%$ (stock ABC)

NOTE: This alternative uses the current ABC equation implemented through Amendment 32 but applied to the new ABC recommendation

**Alternative 3.**  $ACL = OY = 96\%$ (stock ABC) (The ratio of landings between the South Atlantic and Greater Atlantic Regions from 2005-2010 is 96%).

**Alternative 4.**  $ACL = OY = 93\%$ (stock ABC) (The ratio of landings between the South Atlantic and Greater Atlantic Regions from 2005-2013 is 93%).

**Alternative 5.**  $ACL = OY = 89\%$ (stock ABC) (The ratio of landings between the South Atlantic and Greater Atlantic Regions from 2011-2013 is 89%).

**Alternative 6.**  $ACL = OY = 88\%$ (stock ABC) (The ratio of landings between the South Atlantic and Greater Atlantic Regions from 2005-2014 is 88%).

**Alternative 7.**  $ACL = OY = 78\%$ (stock ABC) (The ratio of landings between the South Atlantic and Greater Atlantic Regions from 2011-2014 is 78%).

## Preliminary Analyses

The South Atlantic Fishery Management Council (South Atlantic Council) developed sector annual catch limits (ACLs) and optimum yield (OY) for blueline tilefish in Amendment 32 to the Snapper Grouper FMP (Amendment 32). The National Marine Fisheries Service implemented ACLs and OY for blueline tilefish on March 30, 2015 (**Table 2.1.1**). These are the ACLs and OY values provide by **Alternative 1 (No Action)**. The sector ACLs and OY are based on the older ABC recommendation ( $P^*=30\%$ ), an ACL two percent less than the ABC, and established sector allocations (50.07% commercial and 49.93% recreational).

**Table 2.1.1.** Current Annual Catch Limit (ACL) and sector ACLs for blueline tilefish.

Year	Blueline Tilefish ACL as Established by Amendment 32 (Implemented March 30, 2015) (lbs ww)		
	Total	Commercial	Recreational
2015	35,632	17,841	17,791
2016	53,457	26,766	26,691
2017	71,469	35,785	35,685
2018 and beyond until modified	87,974	44,048	43,925

Note: These ACLs are based on an ABC recommendation of P\*=30%. The values are 36,359 (2015), 54,548 (2016), 72,928 (2017), and 89,769 lbs ww (2018).

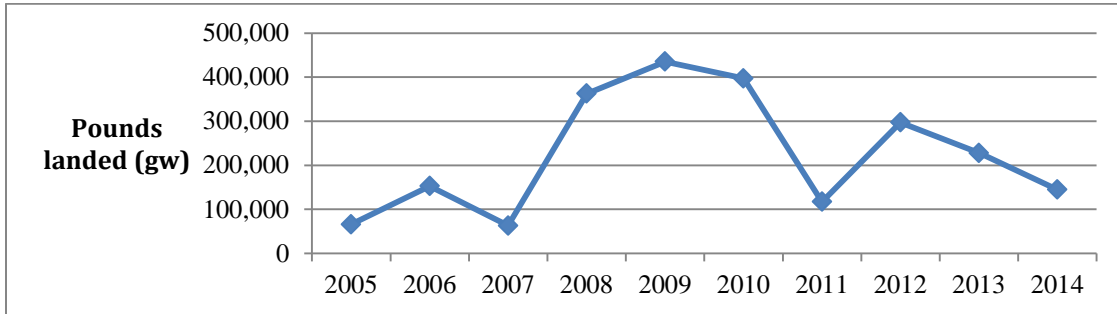
The South Atlantic Council is considering changing the current ACLs and OY based on a revised ABC recommendation from their Scientific and Statistical Committee (SSC) (**Table 2.1.2**). The sector ACL and OY values provide by **Alternatives 2** through **7** are based on an ABC recommendation of the equilibrium yield at 75%F<sub>MSY</sub> (224,100 pounds whole weight [lbs ww]). **Alternative 2** would retain the current ACL equation as **Alternative 1 (No Action)** (ACL = OY = 98%ABC), but would update the value per the new ABC recommendation from the South Atlantic Council’s SSC. **Alternatives 3** through **7** consider adjusting the ABC to account for landings north of the South Atlantic Council’s area of jurisdiction. These fishing level specifications are temporary pending an update to the blueline tilefish stock assessment in 2017, and results from genetic studies to establish the stock structure of blueline tilefish.

**Table 2.1.2.** Proposed South Atlantic Acceptable Biological Catch (ABC), Annual Catch Limits (including sector ACLs) and recreational Annual Catch Target (ACT) for blueline tilefish in the South Atlantic.

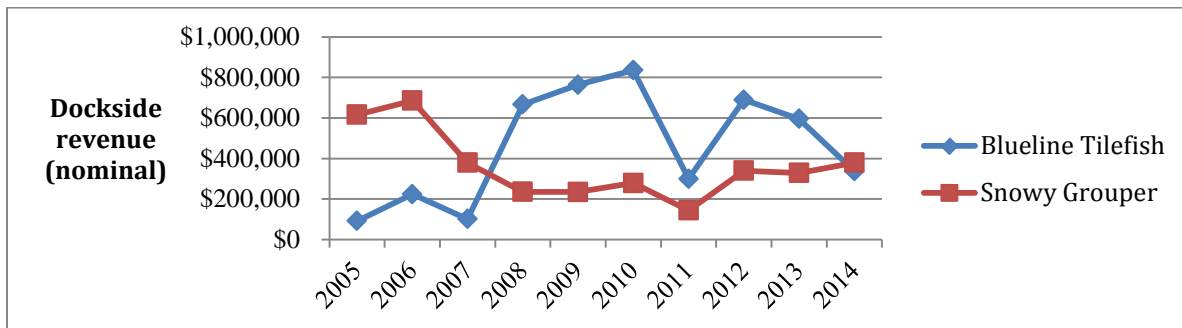
	Alt 2 (98%)	Alt 3 (96%)	Alt 4 (93%)	Alt 5 (89%)	Alt 6 (88%)	Alt 7 (78%)
Stock ABC	224,100	224,100	224,100	224,100	224,100	224,100
Total ACL	219,618	215,136	208,413	199,449	197,208	174,798
Comm ACL	109,963	107,719	104,352	99,864	98,742	87,521
Rec ACL	109,655	107,417	104,061	99,585	98,466	87,277
Rec ACT	68,666	67,265	65,163	62,360	61,659	54,653

As shown in **Figure 2.1.1** below, commercial landings of blueline tilefish greatly increased after 2007. This increase is likely related to the 100-lbs commercial trip limit on snowy grouper established in 2008. Prior to the snowy grouper trip limit, blueline tilefish was primarily caught as bycatch while targeting higher priced snowy grouper. Now, once commercial fishing vessels reach the trip limit for snowy grouper they harvest blueline tilefish, which is found in more areas than snowy grouper, and which prior to 2015 had no trip limit. The switch of blueline tilefish from bycatch to targeted species is illustrated in the relationship of dockside revenues for blueline tilefish and snowy grouper from 2003 through 2012 (**Figure 2.1.2**). This is not to

suggest, however, that trips that land blueline tilefish target or land only snowy grouper and blueline tilefish. Note that the drop in landings in 2011 occurred when fishing for blueline tilefish and five other species in federal waters seaward of 240 feet deep was prohibited from February 1, 2011, until May 10, 2012.



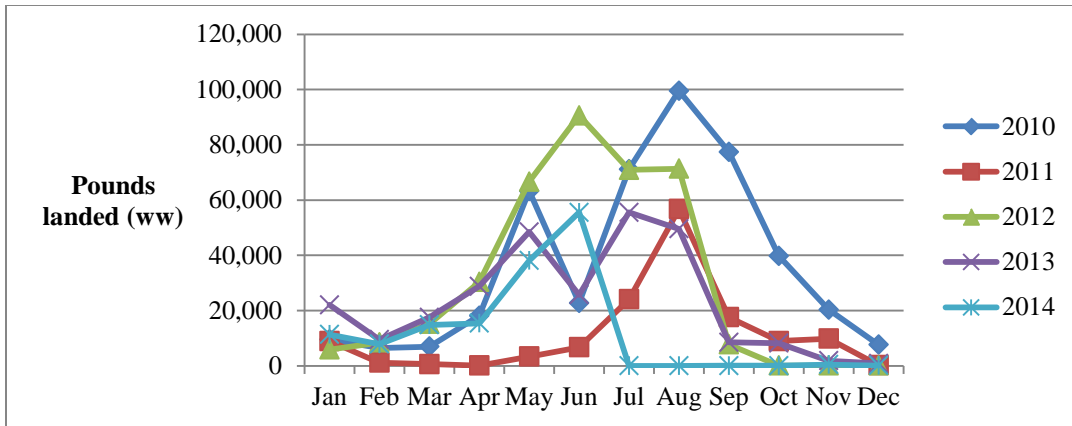
**Figure 2.1.1.** Annual commercial landings (lbs gw) of blueline tilefish, 2005 – 2014.  
Source: SEFSC Economic Query System



**Figure 2.1.2.** Annual dockside revenue from blueline tilefish and snowy grouper commercial landings, 2005 – 2014.  
Source: SEFSC Economic Query System

The fishing year for blueline tilefish is the calendar year, January 1 to December 31, and commercial landings vary seasonally. Landings peak in the summer months as shown in **Figure 2.1.3**. However, since the separation of blueline tilefish from the Deepwater Complex, the commercial season for blueline tilefish has ended earlier (June 2014 and April 2015) when landings reached the species ACL. Note that in 2012, there were no commercial landings from October through December because the season closed in September when landings for the Deepwater Complex reached the commercial ACL and blueline tilefish was part of the complex at the time.





**Figure 2.1.3.** Annual commercial landings of blueline tilefish in the South Atlantic Region by month, 2010 – 2014.  
Source: NMFS ACL data.

When blueline tilefish was part of the Deepwater Complex, commercial landings of blueline tilefish were limited by the Complex’s commercial ACL, which in 2012 and 2013 was 378,667 and 309,195 lbs ww, respectively. After the removal of blueline tilefish from the complex in 2014, the commercial ACL for the species was set at 112,207 lbs ww and the season closed on June 23, 2014. Commercial landings reached approximately 142% of the commercial ACL that year.

In 2015, the commercial ACL was set at 17,841 lbs ww, and the commercial fishing season closed on April 7. Preliminary commercial landings data as of September 21, 2015, indicate a total of 68,547 lbs gw (76,773 lbs ww) of blueline tilefish has been landed, which is an overage of 58,932 lbs ww. Under current regulations, the commercial ACL for 2016 would be reduced by the amount of the commercial ACL overage if commercial landings exceed the commercial ACL, the total ACL is exceeded, and blueline tilefish stock is overfished. Although commercial landings exceeded both the commercial ACL and the total ACL (35,632 lbs ww) in 2015, the blueline tilefish stock is not overfished. Therefore, the 2016 commercial ACL will not be reduced and is set to increase to 26,766 lbs ww for 2016, to 35,785 lbs ww for 2017, and 44,048 lbs ww for 2018 and thereafter.

In 2014, recreational anglers landed a total of 95,712 lbs ww of blueline tilefish in the region, which was less than the recreational ACL at the time (**Table 2.1.3**). However, in 2015, the recreational season closed on June 10, when landings of blueline tilefish reached and exceeded the recreational ACL. Preliminary data indicate that approximately 269% (47,838 lb ww) of the recreational ACL (17,791 lbs ww) was landed in 2015. Presently, the 2016 recreational ACL is set to be 26,691 lbs ww, then increase to 35,685 lbs ww in 2017 and 43,925 lbs ww in 2018 and thereafter. From 2010 through 2014, average annual recreational landings of blueline tilefish in the region were 129,480 lbs ww (NMFS SERO).

**Table 2.1.3.** Recreational landings (lbs ww) of blueline tilefish in South Atlantic Region, 2014 and 2015.  
Source: NMFS SERO ACL.

Year	Jan/Feb	Mar/Apr	May/June	Jul/Aug	Sep/Oct	Nov/Dec	Total	ACL
2014	6,908	19,804	23,914	30,817	12,833	1,436	95,712	111,893
2015	32,600	1,950	13,288	0	0	0	47,838	17,791

All of the proposed changes to the ABC in **Alternatives 2** through **7** will increase the current ACL from **Alternative 1 (No Action)**. The average price per pound (in 2014 dollars) from 2010 through 2014 is \$2.47 per pound. **Table 2.1.4** shows the expected dockside value of the commercial blueline tilefish ACL under the proposed alternatives. Compared to all the other alternatives, **Alternative 1 (No Action)** is expected to result in between \$127,788 (compared to **Alternative 7**) and \$183,220 (compared to **Alternative 2**) less direct, positive economic effect for fishermen, assuming the entire commercial ACL for blueline tilefish is caught in future years. In terms of least to most expected direct positive economic effect, **Alternative 1 (No Action)** would rank first followed in order by **Alternative 7**, **Alternative 6**, **Alternative 5**, **Alternative 4**, and **Alternative 3**. **Alternative 2** would have the highest expected positive direct economic effect.

**Table 2.1.4.** Expected value of the commercial blueline tilefish fishery (in 2014 dollars).

	Pounds (ww)	Value
Alternative 1 (No Action)	35,785	\$88,389
Alternative 2	109,963	\$271,609
Alternative 3	107,719	\$266,066
Alternative 4	104,352	\$257,749
Alternative 5	99,864	\$246,664
Alternative 6	98,742	\$243,893
Alternative 7	87,521	\$216,177

## 2.2 Action 2. Revise the commercial trip limit for blueline tilefish

NOTE: Council to approve highlighted wording

**Alternative 1 (No Action).** Do not revise the commercial trip limit for blueline tilefish of 100 pounds gutted weight (lbs gw).

**Alternative 2.** Increase the commercial trip limit for blueline tilefish to 200 lbs gw.

**Alternative 3.** Increase the commercial trip limit for blueline tilefish to 300 lbs gw.

### Preliminary Analyses

Since March 2015, there has been a commercial trip limit of 100 lbs gw for blueline tilefish. Prior to that, there was no commercial trip limit for blueline tilefish; however, a vessel with a 225-lbs snapper-grouper permit was limited to no more than 225 lbs ww of blueline tilefish per trip. From 2010 through 2014, an average of approximately 33% of trips that landed the species landed more than 100 lbs gw (**Table 2.2.1**). Moreover, an average of approximately 33% of the vessels that landed blueline tilefish had at least one trip that landed over 100 lbs gw (**Table 2.2.2**).

**Table 2.2.1.** Number of trips and percentage of trips with blueline tilefish landings by lbs gw landed, 2010 - 2014.

Year	Number of Trips by Pounds (gw) of Blueline Tilefish Landed					
	1 to 100	101 - 200	201 – 300	Over 300	Total	% Over 100
2010	434	45	18	208	705	38.4%
2011	216	16	11	77	320	32.5%
2012	382	26	11	118	537	28.9%
2013	440	39	23	138	640	31.3%
2014	350	41	28	95	514	31.9%
<b>Average</b>	<b>364</b>	<b>33</b>	<b>18</b>	<b>127</b>	<b>543</b>	<b>32.6%</b>

Source: SEFSC Economic Query System.

**Table 2.2.2.** Number of vessels and percentage of vessels with blueline tilefish landings by lbs gw landed per trip, 2010 - 2014.

Year	Number of Vessels by Most Pounds Landed of Blueline Tilefish					
	1 to 100	101 - 200	201 - 300	Over 300	Total	% Over 100
2010	92	10	8	21	131	29.8%
2011	68	6	5	19	98	30.6%
2012	90	13	6	16	125	28.0%
2013	83	11	10	25	129	35.7%
2014	77	21	7	29	134	42.5%
<b>Average</b>	<b>82</b>	<b>12</b>	<b>7</b>	<b>22</b>	<b>123</b>	<b>33.3%</b>

Source: SEFSC Economic Query System.

An average of 123 vessels made 543 trips and landed 236,760 lbs gw of blueline tilefish (BLT) with a dockside value of \$575,075 (2014 \$) annually from 2010 through 2014 (**Table 2.2.3**). The average annual price (2014 \$) ranged from \$2.28 to \$2.69 per pound gw. Collectively, those 123 vessels had annual dockside revenues of approximately \$1.9 million (\$575,075 plus \$1,320,713) from their trips that landed blueline tilefish, and blueline tilefish revenues represented approximately 30% of that \$1.9 million. Dockside revenue from landings of blueline tilefish during the 5-year period represents an average of approximately 6% of all dockside revenue from all trips made by the 123 vessels. The average annual price (2014 \$) per pound for the other species landings during these trips ranged from \$2.32 to \$3.02.

**Table 2.2.3.** Numbers of vessels, trips, pounds and dockside revenue (2014 \$) from blueline tilefish (BLT) landings and dockside revenue from other species landed during blueline tilefish trip, 2010 - 2014.

Year	No. vessels with BLT landings	Number of trips with BLT landings	Pounds (gw) BLT landed	Dockside Revenue (2014 \$) from BLT	Average dockside revenue (2014 \$) per vessel	Average dockside revenue (2014 \$) per trip	Average price per pound (gw) BLT	Dock Rev. Other Species (2014 \$) from BLT trip
2010	131	705	397,165	\$907,017	\$6,924	\$1,287	\$2.28	\$1,403,653
2011	98	320	117,102	\$314,897	\$3,213	\$984	\$2.69	\$976,840
2012	125	537	297,237	\$711,194	\$5,690	\$1,324	\$2.39	\$1,087,420
2013	129	640	227,728	\$604,921	\$4,689	\$945	\$2.66	\$1,694,445
2014	134	514	144,568	\$337,347	\$2,518	\$656	\$2.33	\$1,441,207
<b>Ave.</b>	<b>123</b>	<b>543</b>	<b>236,760</b>	<b>\$575,075</b>	<b>\$4,607</b>	<b>\$1,039</b>	<b>\$2.47</b>	<b>\$1,320,713</b>

Source: SEFSC Economic Query System.

To evaluate the impacts of increasing the blueline tilefish commercial trip limit, we evaluated the ratios of mean 2012-2014 landings under simulated 150, 200, 250, and 300-pound gutted weight trip limits to a simulated 100-pound gutted weight trip limit. We also evaluated the percentage of trips with landings at various trip limit thresholds, and evaluated the number and

percentage of vessels that would be impacted by various trip limit alternatives. **Table 2.2.4** shows the estimated percent increase in harvest under the proposed trip limit alternatives.

**Table 2.2.4.** Projected increases in harvest under proposed blue-line tilefish commercial trip limit alternatives.

Trip Limit	Mean 2012-2014	2014
100 (status quo)	100%	100%
150	129%	128%
200	156%	152%
250	180%	174%
300	202%	192%

Source: SEFSC Commercial logbook (Sept 2015).

**Table 2.2.5** shows that from 2010 through 2014, when there was no commercial trip limit, on average 64% of the trips landed 100 lbs gw or less, 74% of the trips landed 200 lbs gw or less, and 77% of the trips landed 300 lbs gw or less. However, these trips tended to land a relatively small percent of the total annual landings, 4-8% overall.

If the commercial trip limit were to remain at 100 lbs ww (**Alternative 1 – No Action**), or increase to 200 lbs gw (**Alternative 2**) or 300 lbs gw (**Alternative 3**), the commercial fishery for blue-line tilefish is likely to remain a bycatch fishery. Since blue-line tilefish may not be a targeted species in the future, changes in the commercial trip limit are not likely to increase trip costs significantly unless fishermen need to move their fishing location more frequently to avoid catching blue-line tilefish.

**Table 2.2.5.** Average numbers of trips and landings of blue-line tilefish from the South Atlantic from 2010 to 2014 that were above and below the proposed commercial trip limit alternatives.

	Trips Below Limit	Pounds Below Limit	% Trips Below Limit	% lbs Below Limit	Trips Above Limit	Pounds Above Limit	% Trips Above Limit	% lbs Above Limit
Alternative 1 (100 lbs Limit)	335	8,940	64%	4%	191	222,676	36%	96%
Alternative 2 (200 lbs Limit)	388	13,627	74%	6%	138	217,989	26%	94%
Alternative 3 (300 lbs Limit)	404	17,521	77%	8%	122	214,095	23%	92%

Source: Southeast Fisheries Science Center (SEFSC)/Social Science Research Group (SSRG) Economic Panel Data.

In order to determine how many additional trips could land blue-line tilefish based on the trip limit alternatives in this action, the commercial sector ACL chosen in **Action 1** becomes relevant. **Table 2.2.6** assumes that all the trips that occurred below the Action 2 trip limits will continue to occur and that all other trips that land blue-line tilefish will catch the trip limit. **Table**

**2.2.6** shows how many trips could occur and how many pounds would remain to be landed under each of the ACL alternatives from **Action 1**.

From 2010 to 2014, an average of 543 trips landed blueline tilefish when there was no trip limit and blueline tilefish were being targeted (see **Table 2.2.3**). If an ACL is established in **Action 1** other than **Alternative 1 (No Action)**, it is not likely that the entire commercial ACL will be caught in future years with a 200 lbs gw (**Alternative 2**) or 300 lbs gw (**Alternative 3**) trip limit unless more trips land blueline tilefish as bycatch.

**Table 2.2.6.** Expected pounds and trips that could be affected by Action 2 trip limits based on proposed commercial sector ACL alternatives in Action 1.

<b>Action 1</b>	<b>Action 2 - Alternative 1</b>		<b>Action 2 - Alternative 2</b>		<b>Action 2 - Alternative 3</b>	
	<b>Pounds Remaining</b>	<b>Additional Trips</b>	<b>Pounds Remaining</b>	<b>Additional Trips</b>	<b>Pounds Remaining</b>	<b>Additional Trips</b>
Alternative 1 (No Action)	17,826	178	13,139	66	305	1
Alternative 2	101,023	1,010	96,336	482	83,502	278
Alternative 3	98,779	988	94,092	470	81,258	271
Alternative 4	95,412	954	90,725	454	77,891	260
Alternative 5	90,924	909	86,237	431	73,403	245
Alternative 6	89,802	898	85,115	426	72,281	241
Alternative 7	78,581	786	73,894	369	61,060	204

It cannot be predicted how many trips will be made in the future that will land blueline tilefish as it is likely only to be a bycatch fishery regardless of the commercial sector ACL changes in Action 1. However, the lower the trip limit, the more likely the commercial ACL will not be met. **Alternative 3** is likely to have the least direct negative economic effect, followed by **Alternative 2**, and **Alternative 1 (No Action)**.

## 2.3 Action 3. Adjust the Bag Limit for Blueline Tilefish for the Recreational Sector

NOTE: Council to approve highlighted wording

**Alternative 1 (No Action).** Do not revise the recreational bag limit for blueline tilefish. Recreational harvest of blueline tilefish is limited to 1 fish/vessel/day May through August (closed rest of year) within the aggregate grouper bag limit. The aggregate group contains the following species: gag, black grouper, snowy grouper, misty grouper, red grouper, scamp, yellowedge grouper, yellowfin grouper, yellowmouth grouper, blueline tilefish, golden tilefish, sand tilefish, coney, graysby, red hind, and rock hind.

**Alternative 2.** Establish a blueline tilefish bag limit of 1 fish/person/day year-round within the aggregate grouper bag limit.

**Alternative 3.** Modify the blueline tilefish vessel limit to 1 fish/vessel/day year-round within the aggregate grouper bag limit.

**Alternative 4.** Establish a blueline tilefish bag limit of 1 fish/person/day May through August within the aggregate grouper bag limit. Prohibit retention the rest of the year.

### Preliminary Analyses

The bag limit since March 2015 is one blueline tilefish per vessel per day in the South Atlantic EEZ when the federal season is open. Prior to that date, the bag limit had been the aggregate grouper/tilefish bag limit of 3-fish per person per day. Recreational harvest data for 2015 are preliminary; however, a comparison of the numbers of blueline tilefish harvested from the South Atlantic EEZ during the two waves of March/April and May/June from 2010 through 2015 is provided in **Table 2.3.1**. The harvest in May/June 2015 is within the range of the May/June harvest from 2010 through 2014, whereas the lack of harvest of blueline tilefish in March/April of 2015 falls outside the range from 2010 through 2014.

Up through 2015, the recreational fishing season opened on January 1 and remained open through December 31, unless it was closed when landings reached or were projected to reach the ACL. In 2015, for example, the season closed on June 10<sup>th</sup>. In 2016, the recreational season will be closed from January through April, will be open from May 1 through August 31 unless landings reach or exceed the recreational ACL, and then be closed from September 1 through December 31.

**Table 2.3.1.** Numbers of blueline tilefish harvested from South Atlantic EEZ in March/April and May/June, 2010 – 2014.

Year	Number of Blueline Tilefish Harvested in South Atlantic EEZ	
	March/April	May/June
2010	793	2,595
2011	54	487
2012	602	55
2013	1,245	849
2014	1,041	2,679
2015*	0	739

Source: National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

\* Preliminary estimates

To analyze the effects of the proposed bag limit alternatives, data for the private recreational and charter boat sectors were obtained through MRIP and for the headboat sector through the NMFS Southeast Headboat Survey. Bag limit reductions were based on the reported catch (i.e., not limited to current regulations) from 2010 to 2014. Some headboat trips were multi-day trips; therefore, the bag limit was based on the legal number for the trip length (trips lasting less than 24 hrs=1 fish per person or vessel, trips lasting between 24 and 48 hrs= 2 fish per person or vessel, and trips lasting longer than 48 hrs = 3 fish per person or vessel). Analyses also considered the 240-foot closure that was in place in 2011.

As shown in **Table 2.3.2**, 144 charter boat trips and 36 private recreational trips caught at least one blueline tilefish (A, B1, or B2) from 2010 to 2014. This totaled to 745 anglers on charter vessels and 95 anglers on private recreational vessels. The headboat survey reported 468 trips with 9,734 anglers from 2010 to 2014. Most of the private and for-hire trips that reported blueline tilefish kept at least one blueline tilefish on the trip and there were few trips that reported any discards of blueline tilefish.

Four different alternatives were analyzed for **Action 3** and the comparative landings value was based on a three-blueline tilefish bag limit and included in the three grouper aggregate. Under **Alternative 1 (No Action)**, 1 fish per vessel from May through August and included in the grouper aggregate, results in average reduction in harvest from 76% to 94% depending on sector (**Table 2.3.3**). The estimated yearly reductions are also presented for reference. The reduction in harvest based on **Alternative 2**, one fish per person bag limit and included in the grouper aggregate, ranged from 36% to 53% depending on the sector and time period included. The reduction in harvest resulting from **Alternative 3**, 1 fish per vessel bag limit and included in the grouper aggregate, ranged from 61% to 89%. The reduction in harvest based on **Alternative 4**, 1 fish per person from May through August and included in the grouper aggregate, ranged from 63% to 89%.



**Table 2.3.2.** Number of sampled charter boat, private, and headboat vessels and anglers on the vessels reporting blueline tilefish and the percentage of trips landing blueline tilefish, and trips with discards from 2010 to 2014.

Year	Charter Boat				Private				Headboat			
	Trips Sampled Reporting Blueline Tilefish	Number of Anglers Sampled	% of Trips Landing Blueline Tilefish	% of Trips with Discarded Blueline Tilefish	Trips Sampled Reporting Blueline Tilefish	Number of Anglers Sampled	% of Trips Landing Blueline Tilefish	% of Trips with Discarded Blueline Tilefish	Trips Sampled Reporting Blueline Tilefish	Number of Anglers Sampled	% of Trips Landing Blueline Tilefish	% of Trips with Discarded Blueline Tilefish
2010	34	180	100%	9%	6	12	100%	0%	69	1,561	91%	14%
2011	20	114	100%	5%	2	4	100%	0%	115	2,099	97%	10%
2012	35	171	100%	3%	11	36	64%	36%	101	2,102	87%	44%
2013	19	92	100%	5%	7	17	86%	14%	67	1,449	100%	0%
2014	36	188	97%	3%	10	26	100%	0%	116	2,523	100%	3%

Source: SAFMC

**Table 2.3.3.** Percent blueline tilefish reduction in the charter boat, private recreational, and headboat sectors based on yearly reported catch and MRIP observations from 2010 to 2014 and the NMFS Headboat Survey. The average percent reduction for each Alternative (Alt) is calculated for the entire time series and without 2011 due to the deepwater closure.

Year	Charter Boat				Private				Headboat			
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 1	Alt. 2	Alt. 3	Alt. 4
	1 per vessel by season	1 per person	1 per vessel	1 per person by season	1 per vessel by season	1 per person	1 per vessel	1 per person by season	1 per vessel by season	1 per person	1 per vessel	1 per person by season
2010	92%	42%	84%	84%	90%	17%	50%	60%	45%	17%	25%	37%
2011	87%	27%	85%	86%	100%	33%	67%	100%	77%	35%	45%	72%
2012	94%	58%	90%	90%	78%	31%	73%	76%	82%	55%	74%	68%
2013	95%	51%	89%	91%	88%	75%	88%	67%	94%	78%	88%	89%
2014	94%	63%	92%	92%	68%	23%	55%	50%	82%	43%	57%	74%
Avg	92%	48%	88%	88%	85%	36%	67%	71%	76%	45%	58%	68%
Avg w/out 2011	94%	53%	89%	89%	81%	36%	66%	63%	76%	48%	61%	67%

Source: SAFMC

There are no specific economic data on the consumer surplus value to anglers for catching the first blueline tilefish compared to another species. It is rare for anglers to catch more than one blueline tilefish with only an average 4% of recreationally caught blueline tilefish being released between 2010 and 2014. However, it is logical to assume that being allowed to catch and keep a blueline tilefish has more value to the angler than not being allowed to catch a blueline tilefish altogether. Therefore, while it is not possible to put a specific dollar value to each of the alternatives of **Action 3**, it is possible to rank them in terms of highest to lowest in terms of consumer surplus value to anglers.

In order of most restrictive to least restrictive in terms of being able to keep blueline tilefish, (and therefore lowest to highest direct positive economic benefit to the recreational sector) **Alternative 2** would rank first followed by **Alternative 3**, **Alternative 4**, and lastly, **Alternative 1 (No Action)**.

## 2.4 Action 4. Increase the recreational bag limit of black sea bass

NOTE: Council to approve highlighted wording

**Alternative 1 (No action).** Do not increase the recreational bag limit for black sea bass. The recreational bag limit of black sea bass is 5 fish per person per day.

**Alternative 2.** Increase the recreational bag limit of black sea bass to 6 fish per person per day.

**Alternative 3.** Increase the recreational bag limit of black sea bass to 7 fish per person per day.

**Alternative 4.** Increase the recreational bag limit of black sea bass to 8 fish per person per day.

**Alternative 5.** Increase the recreational bag limit of black sea bass to 9 fish per person per day.

**Alternative 6.** Increase the recreational bag limit of black sea bass to 10 fish per person per day.

### Preliminary Analyses

From 2010 through 2014, an average of approximately 3.9 million black sea bass were caught annually in the South Atlantic Region by the recreational sector, and approximately 91% of those caught were released (Table 2.4.1).

**Table 2.4.1.** Recreational catch of black sea bass in South Atlantic Region, 2010 – 2014 (all modes and all areas).

Year	Number of Black Sea Bass Caught in South Atlantic Region			
	Harvested	Released	Total Caught	Percent Harvested
2010	508,525	2,595,082	3,103,607	16.38%
2011	336,706	3,031,378	3,368,084	10.00%
2012	292,735	4,374,457	4,667,192	6.27%
2013	246,303	2,864,561	3,110,864	7.92%
2014	338,238	4,967,202	5,305,440	6.38%
<b>Average</b>	<b>344,501</b>	<b>3,566,536</b>	<b>3,911,037</b>	<b>9.39%</b>

Source: National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

The fishing year for 2010/2011 through 2013/2014 was from June 1 through May 31. Recreational landings of black sea bass during the 2010/2011 fishing year exceeded the ACL by 67,253 pounds. In response, the 2011/2012 recreational ACL was reduced from 409,000 pounds to 341,747 pounds to account for the 67,253-pound overage, and in June 2011, the bag limit for black sea bass (in the EEZ) was reduced from 15 to 5 per person per day. The 2011/2012 season closed in October and the 2012/2013 season closed in September when landings reached the

recreational ACL. Also, in July 2012, the minimum size limit was raised from 12 to 13 inches total length. The recreational fishing year for the species currently begins April 1 and ends March 31.

Black sea bass are harvested from the South Atlantic EEZ by anglers in all four states of the region (**Table 2.4.2**). Florida ranks first by average annual harvest, followed in turn by South Carolina, North Carolina, and Georgia.

**Table 2.4.2.** Numbers of black sea bass harvested from South Atlantic EEZ by state, 2010 – 2014.

Year	Number of Black Sea Bass Harvested in EEZ				
	Florida	Georgia	North Carolina	South Carolina	Total
2010	129,151	11,525	100,959	197,470	439,105
2011	135,263	43,548	90,526	8,316	277,653
2012	83,454	6,045	68,594	79,237	237,330
2013	63,896	76,260	42,539	18,958	201,653
2014	99,166	33,732	59,286	101,851	294,035
<b>Average</b>	102,186	34,222	72,381	81,166	289,955

Source: National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

The tables below show the percent of trips that met the black sea bass bag limit in 2013 and 2014 for private and charter vessels (**Table 2.4.3**) and the percent of headboat trips (**Table 2.4.4**) that met the bag limit. On headboat trips that did not hit the bag limit, the total number of black sea bass landed was divided by 5 to estimate the maximum number of anglers that could have hit the bag limit on each trip. On average, a very small number of trips (private recreational, charter, and headboat) are harvesting the bag limit.

**Table 2.4.3.** Percent of private and charter trips that harvested the black sea bass recreational bag limit in 2013 and 2014.

Percent MRIP Trips that Did and Did Not Hit the Bag Limit							
Year	% Trips Hit Bag			% Trips Did Not Hit Bag			
	Charter	Private	Total	Charter	Private	Shore	Total
2013	8.5%	6.4%	6.8%	91.5%	93.6%	100%	93.2%
2014	7.9%	11.8%	9.7%	92.1%	88.2%	100%	90.3%
Avg.	8.1%	9.1%	8.4%	91.9%	90.9%	100%	91.6%

Source: MRIP

**Table 2.4.4.** Percent of headboat trips that harvested the black sea bass recreational bag limit in 2013 and 2014.

Percent Headboat Trips and Anglers That Hit Bag				
Year	% Trips		% Anglers	
	Did Not Hit Bag	Hit Bag	Did Not Hit Bag	Hit Bag
2013	96.7%	3.3%	78.3%	21.7%
2014	96.8%	3.2%	82.6%	17.4%
Avg.	96.8%	3.2%	80.6%	19.4%

Source: Southeast Headboat Survey

**Table 2.4.5** shows the percent of black sea bass on MRIP trips (private recreational and charter) that were landed and the percent that was discarded. **Table 2.4.6** shows the same information for headboat trips. A comparison of the percentage of landed fish and discarded fish to the total encountered shows that most of the black sea bass caught in 2013 and 2014 were discarded. On trips that hit the bag limit, the majority of the black sea bass were landed; however, there was still a significant amount of discards on those trips. Based on the low number of trips reaching the bag limit and the high percentage of the catch being discarded, the black sea bass recreational landings appear to be limited by the minimum size limit rather than the bag limit.

**Table 2.4.5.** Percent of black sea bass landed and discarded on private and charter trips in 2013 and 2014.

Percent of Black Sea Bass That Were Landed and Discarded on MRIP Trips						
Year	Did Not Hit Bag		Hit Bag		All Trips	
	% Landed	% Discarded	% Landed	% Discarded	% Landed	% Discarded
2013	32.2%	67.8%	61.1%	38.9%	39.2%	60.8%
2014	22.3%	77.7%	33.9%	66.1%	24.1%	75.9%
Avg.	25.1%	74.9%	44.8%	55.2%	28.7%	71.3%

**Table 2.4.6.** Percent of black sea bass landed and discarded on headboat trips in 2013 and 2014.

Percent Landed and Discarded BSB On All Headboat Trips						
Year	Did Not Hit Bag		Hit Bag		All Trips	
	% Landed	% Discarded	% Landed	% Discarded	% Landed	% Discarded
2013	9.5%	90.5%	34.7%	65.3%	10.5%	89.5%
2014	9.6%	90.4%	35.4%	64.6%	10.7%	89.3%
Total	9.5%	90.5%	35.0%	65.0%	10.6%	89.4%

On average, recreational anglers are discarding 12 times more black sea bass than they are landing. Even on trips that reach the bag limit, anglers are discarding 30% more black sea bass on average than they are landing. Therefore, it is not reasonable to assume that on trips

where anglers caught the bag limit, they would be able to retain all their discarded black sea bass if the bag limit was high enough. The analysis below (**Tables 2.4.7 - 2.4.9**) corrects for that by estimating the proportion of the discarded fish that were discarded due to the size limit versus those that were discarded due to hitting the bag limit. Results show almost no change in landings after a bag limit of 6. There are no longer any discards above the minimum size to increase the landings by an appreciable amount.

**Table 2.4.7.** Estimated landings and percent increase from current conditions for combined MRIP and headboat data in numbers of fish under different bag limit scenarios.

	Est. Landings (number) from Different Bag Limits						Increase from Current (number)					% Increase from Current				
	Current	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10
2013	326,303	330,084	331,366	332,659	334,687	334,735	3,781	5,063	6,356	8,384	8,432	1.2%	1.6%	1.9%	2.6%	2.6%
2014	417,001	426,765	430,363	431,173	431,211	431,379	9,764	13,362	14,171	14,209	14,378	2.3%	3.2%	3.4%	3.4%	3.4%
Ave.	371,652	378,425	380,864	381,916	382,949	383,057	6,772	9,212	10,264	11,297	11,405	1.8%	2.5%	2.8%	3.0%	3.1%

**Table 2.4.8.** Estimated landings and percent increase from current conditions for combined MRIP and headboat data in pounds whole weight (lbs ww) under different bag limit scenarios.

	Est. Landings (lbs) from Different Bag Limits						Increase from Current (lbs)					% Increase from Current				
	Current	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10
2013	415,888	421,233	422,861	424,497	427,106	427,182	5,344	6,972	8,608	11,217	11,293	1.3%	1.7%	2.1%	2.7%	2.7%
2014	579,164	592,845	597,913	598,896	598,951	599,307	13,681	18,750	19,732	19,787	20,144	2.4%	3.2%	3.4%	3.4%	3.5%
Ave.	497,526	507,039	510,387	511,696	513,028	513,245	9,513	12,861	14,170	15,502	15,719	1.9%	2.6%	2.8%	3.1%	3.2%

**Table 2.4.9.** Estimated percent of the recreational ACL that would be landed under the proposed bag limit alternatives based on 2013-2014 landings.

	% of ACL (lbs)					
	Current	Bag 6	Bag 7	Bag 8	Bag 9	Bag 10
2013	41.5%	42.1%	42.2%	42.4%	42.7%	42.7%
2014	57.8%	59.2%	59.7%	59.8%	59.8%	59.9%
Ave.	49.7%	50.6%	51.0%	51.1%	51.2%	51.3%

Information presented above show that few trips have landed the current recreational bag limit for black sea bass. However, the analysis also shows that large numbers of black sea bass caught by anglers are discarded, presumably because they are undersized. Until the stock of black sea bass biomass includes more individuals that meet the 13” minimum size limit or the minimum size limit is reduced, it is unlikely there will be much economic benefit to anglers because only 1.8% (6 fish bag limit - **Alternative 2**) to 3.1% (10 fish bag limit - **Alternative 6**) more fish are expected to be landed (see **Table 2.4.7**). Based on landings from 2013 and 2014, the current average recreational landings account for 49.7% on average of the recreational sector ACL (**Table 2.4.9**). Increasing the bag limit would only increase the harvest to up to 51.3% of the recreational sector ACL (**Table 2.4.9**). Over time, the black sea bass population may continue to increase in average size and a larger percentage of the recreational ACL may be harvested.

Participation, effort, and harvest are indicators of the value of saltwater recreational fishing. However, a more specific indicator of value is the satisfaction that anglers experience over and above their costs of fishing. The monetary value of this satisfaction is referred to as consumer surplus. The value or benefit derived from the recreational experience is dependent on several quality determinants, which include fish size, catch success rate, and the number of fish kept. These variables help determine the value of a fishing trip and influence total demand for recreational fishing trips.

Haab et al. (2001) estimated consumer surplus for an additional recreationally caught bottom fish in the South Atlantic Region to be \$4.02 (in 2014 dollars). It is estimated that 816,598 recreational trips landed black sea bass in 2014. **Table 2.4.10** shows the estimated increase in consumer surplus and the average per trip increase in consumer surplus for each fish increase for the black sea bass bag limit increases proposed in the **Action 4** alternatives.

**Table 2.4.10.** Total expected increase and per trip increase in consumer surplus expected for each increase in the recreational bag limit as proposed in Action 2.

	<b>Total Increase in Consumer Surplus</b>	<b>Per Trip Increase in Consumer Surplus</b>
Alt 2 (6 fish limit)	\$27,255	\$0.03
Alt 3 (7 fish limit)	\$64,328	\$0.08
Alt 4 (8 fish limit)	\$105,634	\$0.13
Alt 5 (9 fish limit)	\$151,096	\$0.19
Alt 6 (10 fish limit)	\$196,994	\$0.24

The greater the bag limit the greater the potential for direct positive economic effects. Therefore, the order of least to most increase in direct positive economic income is **Alternative 1 (No Action)**, **Alternative 2**, **Alternative 3**, **Alternative 4**, **Alternative 5**, and **Alternative 6**.



## 2.5 Action 5. Modify the fishing year for yellowtail snapper

**NOTE:** Council to approve highlighted wording

**Alternative 1 (No Action).** Do not modify the fishing year for yellowtail snapper. The fishing year (commercial and recreational) is the calendar year, January 1 through December 31.

**Alternative 2.** Modify the fishing year for the commercial sector for yellowtail snapper.

**Sub-alternative 2a.** June 1 through May 30

**Sub-alternative 2b.** July 1 through June 30

**Sub-alternative 2c.** August 1 through July 31

**Sub-alternative 2d.** September 1 to August 31

**Alternative 3.** Modify fishing year for the recreational sector for yellowtail snapper.

**Sub-alternative 3a.** June 1 through May 30

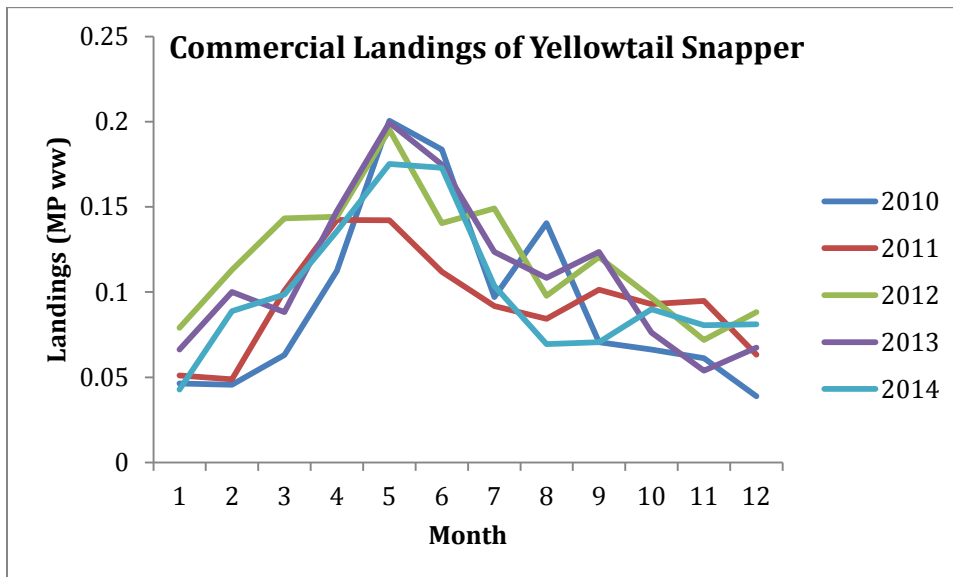
**Sub-alternative 3b.** July 1 through June 30

**Sub-alternative 3c.** August 1 through July 31

**Sub-alternative 3d.** September 1 to August 31

### Preliminary Analyses

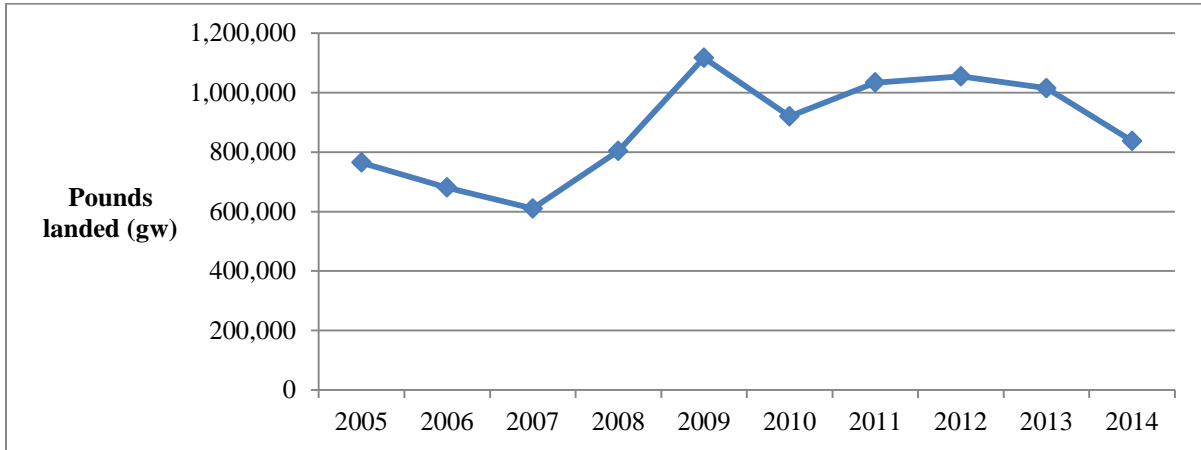
The fishing year for yellowtail snapper presently runs from January 1 to December 31. Commercial landings of yellowtail snapper from 2010 through 2014 peaked in the late spring to early summer as illustrated in **Figure 2.5.1** below.



**Figure 2.5.1.** Distribution of South Atlantic yellowtail snapper commercial landings by month, 2010-2014.

Source: SEFSC Commercial ACL Data (Oct 2, 2015).

Over the 10-year period from 2005 through 2014, commercial landings of yellowtail snapper varied from approximately 0.76 million to 1.1 million lbs gw (**Figure 2.5.2**). From 2008 to 2012, there was a generally increasing trend; however, since 2013 there has been a generally decreasing trend. Almost all of the yellowtail snapper landed during this time were harvested in federal waters.



**Figure 2.5.2.** Annual commercial landings (lbs gw) of yellowtail snapper, 2003 – 2012.  
Source: SEFSC Economic Query System.

Hook and line gear is the most popular gear used to commercially harvest yellowtail snapper. Over the 5-year period from 2010 through 2014, hook and line gear accounted for over 99%, but not all, of commercial landings (lbs ww) of South Atlantic yellowtail snapper.

Over the 5-year period from 2010 through 2014, commercial landings of yellowtail snapper in Florida dwarfed those in the other South Atlantic States. Over 99% (almost all) of the landings occurred in Florida (NMFS ACL).

Average monthly commercial landings of yellowtail snapper between 2010 and 2014 ranged from 55,329 to 185,728 lbs ww (**Table 2.5.1**). April through July landings ranked as the top four months by landings.

**Table 2.5.1.** Average monthly commercial landings of yellowtail snapper in South Atlantic Region.

Month	Ave. Pounds Landed (ww)
Jan	55,329
Feb	89,408
Mar	95,184
Apr	140,033
May	185,728
Jun	168,203
Jul	113,403
Aug	92,610
Sep	97,131
Oct	83,550
Nov	68,977
Dec	72,058
<b>Average</b>	<b>105,134</b>

Source: NMFS ACL.

An annual average of 971,710 lbs gw was landed from 2010 through 2014. Since 2012, the commercial ACL for yellowtail snapper has been 1,596,501 lbs ww and from 2012 through 2014, annual landings of the species were less than the commercial ACL.

There is not, nor has there been, a commercial trip limit for yellowtail snapper. From 2010 through 2014, an annual average of 256 vessels made 3,798 trips that landed yellowtail snapper, and approximately 87% (3,292) of those trips landed no more than 500 lbs gw of the species (**Tables 2.5.2** and **2.5.3**). Approximately 3% (118) of those annual trips and approximately 9% of those vessels landed more than 1,500 lbs gw in at least one trip.

**Table 2.5.2.** Number of trips with yellowtail snapper landings by pounds (gw) landed, 2010 - 2014.

Year	Number of Trips by Pounds Landed of Yellowtail Snapper					Total
	1 to 500	501 - 1,000	1,001 - 1,500	1,501 - 2,000	Over 2,000	
2010	3,190	343	104	48	42	3,727
2011	3,403	266	109	60	79	3,917
2012	3,341	258	121	93	69	3,882
2013	2,989	286	165	65	52	3,557
2014	3,536	195	92	45	39	3,907
<b>Average</b>	<b>3,292</b>	<b>270</b>	<b>118</b>	<b>62</b>	<b>56</b>	<b>3,798</b>

Source: SEFSC Economic Query System.

**Table 2.5.3.** Number of vessels by pounds (gw) landed of yellowtail snapper per trip, 2010 - 2014.

Year	Number of Vessels by Most Pounds Landed of Yellowtail Snapper					
	1 to 500	501 - 1,000	1,001 - 1,500	Over 1,500	Total	% Over 1,000
2010	230	20	14	29	293	14.7%
2011	202	21	18	26	267	16.5%
2012	195	29	6	27	257	12.8%
2013	177	17	20	20	234	17.1%
2014	187	19	13	12	231	10.8%
<b>Average</b>	<b>198</b>	<b>21</b>	<b>14</b>	<b>23</b>	<b>256</b>	<b>14.4%</b>

Source: SEFSC Economic Query System.

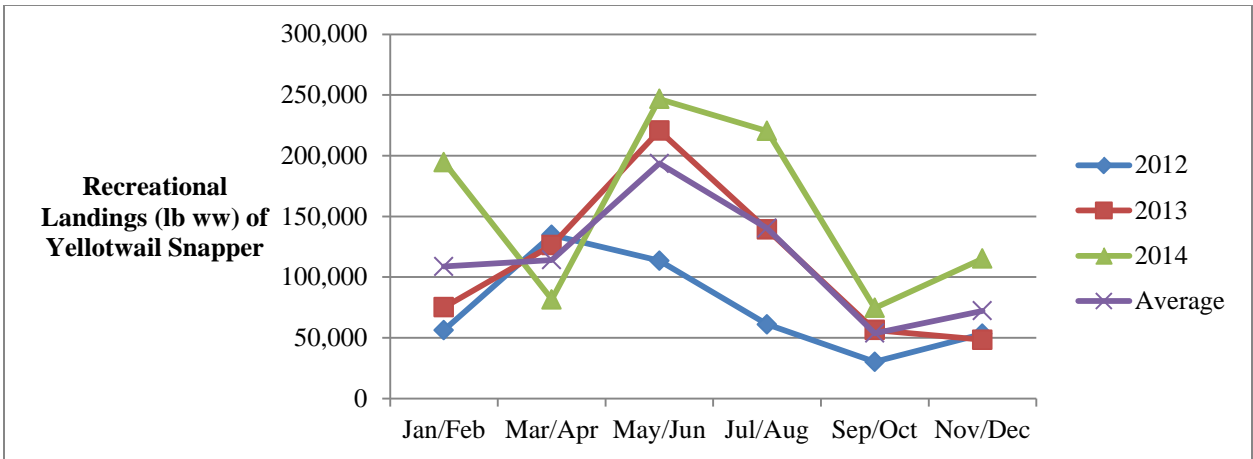
To evaluate the impacts of proposed changes to the yellowtail snapper fishing season, commercial and recreational landings were summarized from the latest SEFSC ACL databases by year and month (**Table 2.5.4**) and totaled according to the various proposed seasons. None of the alternatives are anticipated to result in a closure of the commercial ACL.

**Table 2.5.4.** Commercial yellowtail snapper landings (lbs ww) under proposed fishing year alternatives. Note for Alternative 1, landings summaries correspond to the first year in the sequence (e.g., 2011-2012 = 2011).

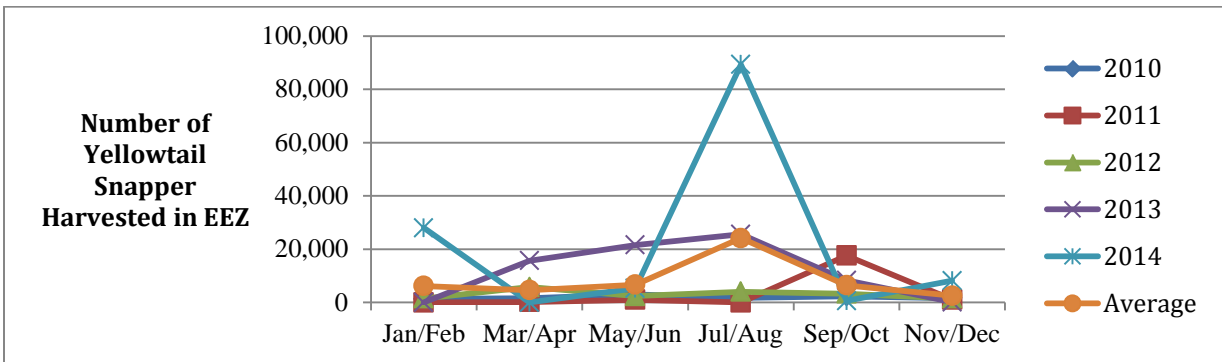
Alternative	Fishing Year	Average (2011-2014)			
		2011-2012	2012-2013	2013-2014	Average (last 3 FY)
1	Jan 1 - Dec 31	1,125,220	1,439,586	1,328,931	1,297,912
2a	June 1 - May 30	1,314,939	1,366,018	1,268,965	1,316,641
2b	July 1 - June 30	1,343,436	1,400,545	1,267,058	1,337,013
2c	Aug 1 - July 31	1,400,815	1,374,964	1,247,152	1,340,977

Source: SEFSC Commercial ACL Data (Oct 2, 2015)

The recreational fishing year for yellowtail snapper begins January 1 and ends December 31. Recreational landings of yellowtail snapper by weight in the region, on average, peak in May/June as illustrated by **Figure 2.5.3**, while harvest of yellowtail snapper by number, on average, peak in July/August (**Figure 2.5.4**). From 2010 through 2014, an average of 197,547 yellowtail snapper were harvested annually by recreational anglers in the South Atlantic Region, and 235,799 (approximately 54% of those caught) were released.



**Figure 2.5.3.** Recreational landings (lb ww) of yellowtail snapper in South Atlantic Region by wave, 2012 – 2014. Source: NMFS SERO ACL.



**Figure 2.5.4.** Number of yellowtail snapper harvested in South Atlantic EEZ by wave, 2010 – 2014. Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, October 16, 2015 (online recreational fisheries statistics query).

There is no bag limit specifically for yellowtail snapper; however, it is limited by the aggregate snapper grouper bag limit of 10 fish per person per day. Preliminary landings figures for 2015 indicate that approximately 32% of the recreational ACL had been landed during the first six months of the year.

**Table 2.5.5** present recreational landings of yellowtail for the proposed fishing years using data from 2011 through 2014. The current recreational ACL for yellowtail snapper is 1,440,990 lbs ww. As of October 27, 2015, 35% of the recreational ACL for yellowtail snapper had been landed.

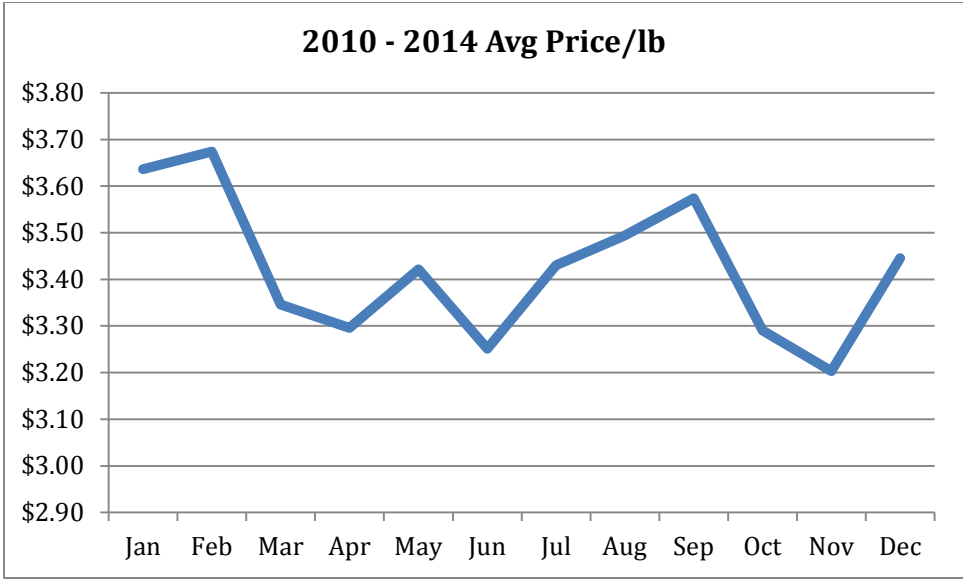
**Table 2.5.5.** Recreational yellowtail snapper landings under proposed fishing year alternatives.

Alternative	Fishing Year	Average (2011-2014)			
		2011-2012	2012-2013	2013-2014	Average (last 3 FY)
1	Jan 1 - Dec 31	390,999	493,409	666,026	516,811
2a	June 1 - May 30	463,480	558,980	754,354	592,271
2b	July 1 - June 30	483,054	614,718	766,971	621,581
2c	Aug 1 - July 31	478,362	654,012	809,310	647,228

Source: SEFSC MRFSS-based Recreational ACL Data (Sept 2015).

Two factors could impact the economic effects of this action: (1) whether the ACL is likely to be met prior to the end of the fishing year, and (2) if the ACL is met, whether there are significant differences in price per pound over time for the commercial fishery or differences in consumer surplus for the recreational fishery. During the years used for the economic effects analysis, 2010 through 2014, neither the commercial sector nor the recreational sector met their sector ACL. In 2015 the commercial ACL for yellowtail was closed on October 31, however 2015 data were not available for analysis. What is not known is the probability of future yellowtail snapper closures for either sector.

**Alternative 2** would change the start date of the fishing year for the commercial sector. Average price per pound by month for 2010 through 2014 for the commercial yellowtail snapper fishery is shown in **Figure 2.5.5**. The monthly price per pound fluctuated from a low of \$3.20 per pound in November to a high of \$3.67 per pound in February. The month of June had the second lowest average monthly price per pound at \$3.43. In seasons where there would be a closure of the commercial ACL, A June 1 start date (**Sub-alternative 2a**) would not be as financially beneficial as a July 1 (**Sub-alternative 2b**) or August 1 (**Sub-alternative 2c**) fishing year start date. As long as commercial harvest continues through at least February before a closure is triggered, a July 1 (**Sub-alternative 2b**) start date could have some economic benefit over an August 1 (**Sub-alternative 2c**) start date.



**Figure 2.5.5.** 2010 through 2014 average monthly price per pound for yellowtail snapper (in 2014 dollars).

There has not been a closure of the recreational sector for yellowtail snapper and, given the current management measures, none is anticipated in the future. Therefore, under **Alternative 3** there are no expected differences among **Sub-alternatives 3a-3c**.

## **2.6. Action 6. Revise Commercial Accountability Measures for Yellowtail Snapper**

**Alternative 1. No Action.** If commercial landings as estimated by the Science and Research Director reach or are projected to reach the commercial annual catch limit (ACL) the Regional Administrator shall publish a notice to close the commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession of this species in or from the South Atlantic EEZ is limited to the bag and possession limit. This bag and possession limit applies in the South Atlantic on board a vessel for which a valid Federal commercial or charter vessel/headboat permit for South Atlantic snapper grouper has been issued, without regard to where such species were harvested, i.e., in state or federal waters. If the commercial ACL is exceeded, the Regional Administrator shall publish a notice to reduce the commercial ACL in the following fishing year by the amount of the commercial overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded.

**Alternative 2.** If commercial yellowtail snapper landings in the South Atlantic, as estimated by the Science and Research Director, reach or are projected to reach the combined (South Atlantic + Gulf of Mexico) commercial yellowtail snapper Annual Catch Limit (ACL), the Regional Administrator shall publish a notice to close the South Atlantic commercial sector for the remainder of the fishing year. On and after the effective date of such a notification, all sale or purchase is prohibited and harvest or possession in or from the South Atlantic EEZ is limited to the bag and possession limit. This bag and possession limit applies in the South Atlantic on board a vessel for which a valid Federal commercial or charter/headboat permit for South Atlantic Snapper Grouper has been issued, without regard to where the species was harvested, that is, state or federal waters.

### **Preliminary Analyses**

(to be completed)



# What's Next?

The South Atlantic Fishery Management Council will hold a Question and Answer webinar to inform the public on proposed changes and answer questions. **The webinar will be held from 6:00 p.m. until 7:00 p.m. on Monday, November 2, 2015.**

**Public hearing webinars** will be held on **Monday November 9, and Thursday November 12, 2015 at 6:00 p.m.** Go to [www.safmc.net](http://www.safmc.net) for information on how to register. Public comment will be taken immediately after the webinar presentation.

In addition, the South Atlantic Fishery Management Council is requesting **public comment on Regulatory Amendment 25 until 5:00 p.m. on November 16, 2015.** Comments may be submitted in writing at the Council address below. Comments may also be submitted via fax (843-769-4520) or email ([Mike.Collins@safmc.net](mailto:Mike.Collins@safmc.net)) with the subject line "Reg 25".

Send Written Comments to:

Robert Mahood  
Executive Director  
South Atlantic Fishery Management Council  
4055 Faber Place Drive; Suite 201  
North Charleston, SC 29405

For questions about the amendment contact Myra Brouwer at (843) 571-4366 or [Myra.Brouwer@safmc.net](mailto:Myra.Brouwer@safmc.net). To download the draft amendment, please visit the Council's website at [www.safmc.net](http://www.safmc.net).