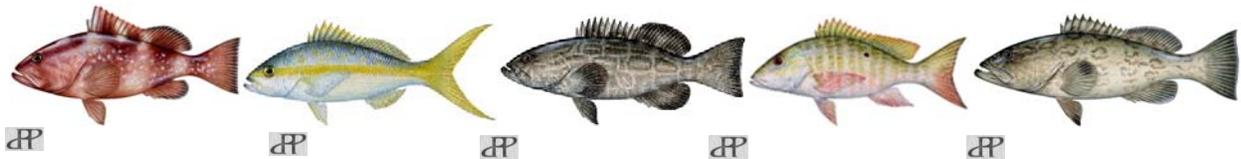


5/20/2015

# Modifications to Gulf Reef Fish and South Atlantic Snapper Grouper Fishery Management Plans



## Draft Joint Generic Amendment on South Florida Management Issues

June 2015



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# COVER SHEET

## Name of Action

Draft Joint Generic Amendment to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico and to the Fishery Management Plan for the Snapper-Grouper Fishery of the South Atlantic Region

## Responsible Agencies and Contact Persons

Gulf of Mexico Fishery Management Council  
2203 North Lois Avenue, Suite 1100  
Tampa, Florida 33607  
Carrie Simmons ([carrie.simmons@gulfcouncil.org](mailto:carrie.simmons@gulfcouncil.org))

813-348-1630  
813-348-1711 (fax)  
[gulfcouncil@gulfcouncil.org](mailto:gulfcouncil@gulfcouncil.org)  
<http://www.gulfcouncil.org>

South Atlantic Fisheries Management Council  
4055 Faber Place Drive, Suite 201  
North Charleston, SC 2940  
Gregg Waugh ([gregg.waugh@safmc.net](mailto:gregg.waugh@safmc.net))

843-571-4366  
843-769-4520 (fax)  
<http://www.safmc.net>

National Marine Fisheries Service  
Southeast Regional Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, Florida 33701  
Rich Malinowski ([rich.malinowski@noaa.gov](mailto:rich.malinowski@noaa.gov))

727-824-5305  
727-824-5308 (fax)  
<http://sero.nmfs.noaa.gov>

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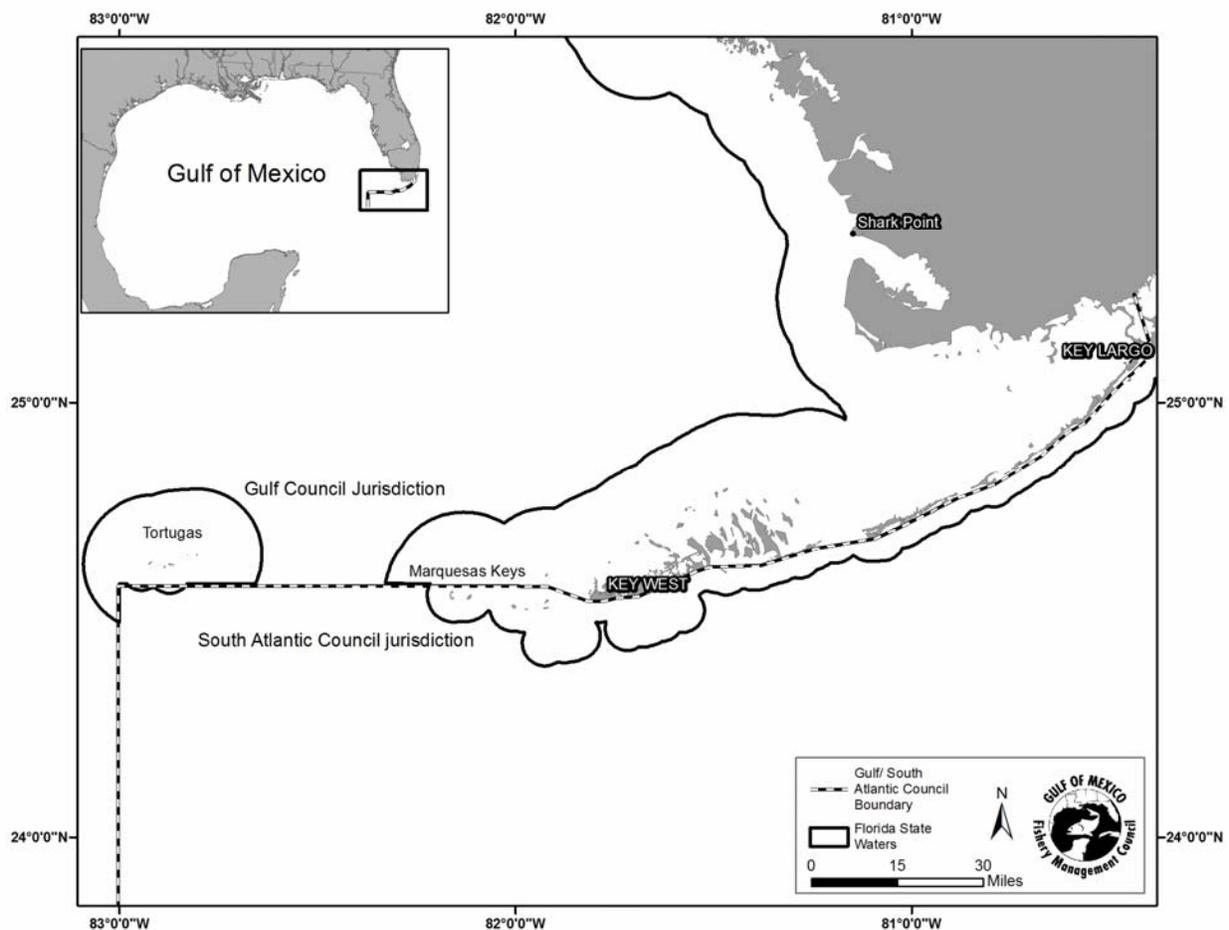
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# CHAPTER 1. INTRODUCTION

## 1.1 Background

Currently, some recreational and commercial fishing regulations for south Florida species differ between the Gulf and South Atlantic Council waters and in some cases, state and adjacent federal waters (**Tables 1** and **2**). This makes it difficult for fishermen to abide by different regulations in the south Florida area, particularly the Florida Keys, where anglers can fish in multiple jurisdictions on a single trip (**Figure 1**). The goal of the of this document and the Joint Council Committee on South Florida Management Issues (Joint Council Committee) is to provide guidance in determining the best solutions for fisheries management issues that are unique to south Florida, ultimately leading to similar regulations across the south Florida region.



**Figure 1.** Inter-Council jurisdiction boundary in southern Florida, Florida Keys and Monroe County between the Gulf of Mexico and South Atlantic Councils. A full description of the inter-Council boundary can be found: 61 FR 32540, June 24, 1996, as amended at 63 FR 7075, February 12, 1998 or (CFR 600.105).

**Table 1.** Recreational fishing regulations for reef fish species in State waters of the Gulf/South Atlantic and federal waters of the Gulf of Mexico and South Atlantic. Minimum size limits are all in total length (TL); bag limits are per person per day; “S-G” stands for “Snapper-Grouper”.

Species	Recreational Regulations	Florida State Waters	Federal Waters Gulf of Mexico	Federal Waters South Atlantic
<b>Mutton Snapper</b>	Size Limit	16” TL		
	Bag Limit	10 snapper aggregate		
	Closed season	None		
<b>Yellowtail Snapper</b>	Size Limit	12” TL		
	Bag Limit	10 snapper aggregate	20 S-G aggregate	
	Closed season	None		
<b>Black Grouper</b>	Size Limit	Atlantic: 24” TL / Gulf: 22” TL	22” TL	24” TL
	Bag Limit	1 gag or black	4 grouper aggregate	1 gag or black
	Closed season	Jan 1-Apr 30	Feb 1-Mar 31 seaward 20 fathoms	Jan 1-Apr 30
<b>Gag</b>	Size Limit	Atlantic: 24” TL / Gulf: 22” TL	22”TL	24”TL
	Bag Limit	1 gag or black	2 person within 4 grouper aggregate	1 gag or black
	Closed season	Jan 1-Apr 30	Jul 1-Dec 2	Jan 1-Apr 30
<b>Red Grouper</b>	Size Limit	20” TL		
	Bag Limit	3 per person within grouper aggregate	2 per person within 4 grouper aggregate	3 per person within grouper aggregate
	Closed season	Jan 1-Apr 30	Feb 1-Mar 31 seaward 20 fathoms	Jan 1-Apr 30
<b>Scamp</b>	Size Limit	Atlantic: 20” TL / Gulf: 16” TL	16” TL	20” TL
	Bag Limit	Atlantic: 3 / Gulf: 4, per person	4 per person within grouper aggregate	3 per person within grouper aggregate
	Closed season	Jan 1-Apr 30	Feb 1-Mar 31 seaward 20 fathoms	Jan 1-Apr 30
<b>Yellowfin Grouper</b>	Size Limit	20” TL		
	Bag Limit	Atlantic: 3 / Gulf: 4, per person	4 per person within grouper aggregate	3 grouper/person grouper aggregate
	Closed season	Jan 1-Apr 30	Feb 1-Mar 31 seaward 20 fathoms	Jan 1-Apr 30
<b>Yellowmouth Grouper</b>	Size Limit	20” TL	None	20” TL
	Bag Limit	Atlantic: 3 / Gulf: 4, per person	4 per person within grouper aggregate	3 grouper/person grouper aggregate
	Closed season	Jan 1-Apr 30	Feb 1-Mar 31 seaward 20 fathoms	Jan 1-Apr 30

**Table 2.** Commercial fishing regulations for reef fish species in State waters of the Gulf/South Atlantic and federal waters of the Gulf of Mexico and South Atlantic. Minimum size limits are all in total length (TL).

<b>Species</b>	<b>Commercial Regulations</b>	<b>Florida Gulf/South Atlantic State Waters</b>	<b>Federal Waters Gulf of Mexico*</b>	<b>Federal Waters South Atlantic</b>
<b>Mutton Snapper</b>	Size Limit	16" TL		
	Trip Limit	None		
	Closed season	None		
	Bag Limit	May-June: Restricted to 10 fish/person/day or trip (most restrictive)	None	May-June: Restricted to 10 fish/person/day or trip (most restrictive)
<b>Yellowtail Snapper</b>	Size Limit	12" TL		
	Trip Limit	None		
	Closed season	None		
<b>Black Grouper</b>	Size Limit	24" TL		
	Trip Limit	None		
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30
<b>Gag</b>	Size Limit	24" TL		
	Trip Limit	None		1,000 lbs gw
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30
<b>Red Grouper</b>	Size Limit	18" TL / 20" TL	18" TL	20" TL
	Trip Limit	None		
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30
<b>Scamp</b>	Size Limit	16" TL / 20" TL	16" TL	20" TL
	Trip Limit	None		
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30
<b>Yellowfin Grouper</b>	Size Limit	20" TL		
	Trip Limit	None		
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30
<b>Yellowmouth Grouper</b>	Size Limit	20" TL	None	20" TL
	Trip Limit	None		
	Closed season	Jan 1-Apr 30**	None	Jan 1-Apr 30

\*All shallow-water grouper species in federal waters of the Gulf of Mexico are managed under an Individual Fishing Quota (IFQ) system, and do not have trip limits or closed seasons.\*\*This closure applies only to South Atlantic state waters and Monroe County.

## *History of Gulf of Mexico and South Atlantic Councils Efforts*

The Joint Council Committee was formed in response to a South Atlantic Fishery Management Council (South Atlantic Council) motion in June 2011 and the Gulf of Mexico Fishery Management Council (Gulf Council) agreeing to work together on this effort. The group was first convened in January of 2014 to begin discussing management needs of south Florida species, which refers to those areas adjacent to the Floridian peninsula and primarily south of 28° North latitude. The actions and alternatives currently considered in this document are recommendations from the Joint Council Committee. The Joint Council Committee has met three times and over the course of these meetings several actions and alternatives have been moved to the considered, but rejected section (Appendix A). The Gulf and South Atlantic Councils have only reviewed and made recommendations regarding this document during their respective March 2015 meetings.

The Gulf and South Atlantic Councils and Florida Fish and Wildlife Conservation Commission (Florida FWC) are responding to various suggestions for addressing the inconsistencies in management across the three jurisdictions (Gulf Council, South Atlantic Council, and State of Florida) in south Florida. The Joint Council Committee is currently considering a suite of management alternatives to address stakeholder concerns, and to more efficiently respond to necessary regulatory changes as they arise. One of the major changes to management structure that the Joint Council Committee is considering is delegation of management to Florida FWC for yellowtail snapper, mutton snapper, and recreational management of black grouper. These species are primarily caught and landed off the State of Florida. Because the Gulf Council currently manages commercial black grouper via the Individual Fishing Quota (IFQ) program, delegation to Florida FWC is only currently being considered for recreational management. The Joint Council Committee has also added actions and alternatives to consider addressing differences in grouper regulations in the south Florida region including species compositions, seasonal closures, bag limits, and minimum size limits. For differences in recreational and commercial regulations for grouper and snapper species see Tables 1 and 2 respectively.

Prior to the Joint Council Committee meetings Florida FWC held a series of South Florida workshops in August of 2013. Some of the ideas proffered by the public that the Joint Council Committee is not currently considered are listed below. The complete summary of these workshops can be found in Appendix C.

### Separate South Florida Council

Establishing a separate Council for South Florida would be time consuming, expensive, and duplicate already existing management authority. Requirements would include congressional establishment of a new Council, appointment of staff, office space, equipment needs, etc. Also, this would introduce yet a fourth management body with which affected fishermen and the general public would need to work. The Councils concluded this is was not an efficient or effective approach.

### Secession by Florida from the Gulf and South Atlantic Councils

Similar to creating a separate “South Florida Council”, a change such as this approach would require legislation to enact, and would require a significant amount of time and resources. If the

State of Florida was successful in this effort, then a commensurate set of regulations would still have to be developed and fishermen would still be operating under three management jurisdictions. The Councils concluded this was not an efficient or effective approach.

#### Streamlining management measures in South Florida

During the spring of 2014, the South Atlantic Council held port meetings in south Florida as part of their visioning project to develop a long-term vision and strategic plan for the snapper-grouper fishery. Stakeholder input received at these meetings echoed the sentiment heard during the Joint South Florida Issues workshops held by Florida FWC in August 2013. Stakeholder concerns during the port meetings included, but were not limited to: inconsistent regulations between Florida and the two federal jurisdictions (size limits, bag limits, and seasons); spawning season closures; circle hook requirements; and species specific concerns about black grouper, yellowtail snapper, and mutton snapper. Based upon growing stakeholder concern and feedback, the Joint Committee moved forward with development of an amendment that would address the aforementioned concerns.

#### ***Delegation Requirements and Considerations***

Delegation to Florida FWC would require their agreement to accept responsibility of management of various species throughout their range, or species management could be limited to waters off the State of Florida, if other Gulf and South Atlantic States prefer to manage those species in federal waters. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) allows for the delegation of management to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the fishery management plan (FMP; Appendix B). The delegation of management authority to the states requires a three-quarters majority vote of the voting members of both the Gulf Council and the South Atlantic Council (Appendix B).

The Magnuson-Stevens Act (16 U.S.C. §1856(a)(3)) outlines the procedure in the case of a state's regulations not being consistent with the FMP (Appendix B). If NMFS determines that a state's regulations are not consistent with the FMP, NMFS shall promptly notify the state and the Council of the determination and provide an opportunity for the region to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the region does not correct the inconsistencies identified by NMFS, then the delegation to the region shall not apply until NMFS and the Gulf and South Atlantic Councils find that the region has corrected the inconsistencies. In application, the response times between NMFS' determination of inconsistency and the implementation of corrective action by the State of Florida would be case specific.

#### ***Structure of the Current Document***

During the second meeting, the Joint Council Committee reviewed a draft document organized by type of action with sub-alternatives for each species involved (management-oriented actions), but found this approach to be unnecessarily complicated. The Joint Council Committee then changed their approach to the discussions and organized the actions by species and addressed each type of action that applied to that particular species. The Joint Council Committee directed

staff to further develop the actions/alternatives using species-oriented structure. This structure facilitates the development of specific management alternatives for each species throughout the south Florida region.

The organizational structure was again discussed during the third meeting. NOAA General Counsel thought the document would be improved if the actions/alternatives were organized by type of action with sub-alternatives for each species (management-oriented actions). However, the Joint Council Committee was more comfortable with the current structure organized by species and also thought the public would better understand the proposed alternatives with this structure. The Joint Council Committee directed staff to maintain the current structure (species-oriented actions).

The Joint Council Committee has pursued the approaches outlined in this document in an effort to harmonize fisheries regulations, where possible, throughout the south Florida region and in some cases even throughout the Gulf and South Atlantic Council jurisdictions. Several species occurring in this region do not occur in comparable abundance elsewhere in Gulf or South Atlantic waters. This regional concentration of socially and economically important species creates an opportunity for the Councils to develop consistent recreational and commercial regulations. Current regulations for yellowtail snapper, mutton snapper, and shallow-water grouper complexes in the Gulf and South Atlantic are being considered in this amendment and proposed management alternatives aim to simplify existing fishing regulations across jurisdictions.

## 1.2 Purpose and Need

The wording shown for Purpose and Need is new proposed language from the IPT.

The purpose for this amendment is to simplify fisheries management issues unique to reef fish species in the south Florida region, which are currently managed by different regulatory agencies in the Gulf of Mexico, South Atlantic, and State of Florida waters.

The need for this amendment is to decrease the public's burden of compliance with differing regulations based on separate regulatory agencies across adjacent bodies of water (i.e., Gulf of Mexico, South Atlantic, and State of Florida waters). This action would decrease administrative burdens with respect to geographical and temporal law enforcement concerns, and would improve the efficacy with which fishery resources in the south Florida region are managed.

### **COUNCIL ACTION**

Option 1. Consider approving the Purpose and Need as shown above or

Option 2. Consider modifying the wording for the Purpose and Need and approve.

## CHAPTER 2. DRAFT MANAGEMENT ALTERNATIVES

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*Action 1 & 2 pertain exclusively to yellowtail snapper.*

### **Action 1: Partial Delegation of Commercial and/or Recreational Management of Yellowtail Snapper to the State of Florida for Federal Waters Adjacent to the State of Florida**

*Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures. Alternatives in this Action may be selected in conjunction with those in Action 2.*

**Alternative 1:** No action. Do not delegate management of yellowtail snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively. **(SAFMC SG AP)**

**Alternative 2:** Determine specific recreational management items for delegation to the State of Florida for yellowtail snapper:

**Option 2a:** Size limits

**Option 2b:** Seasons

**Option 2c:** Bag limits

**Option 2d:** Minor modifications to existing allowable gear

**Alternative 3:** Determine specific commercial management items for delegation to the State of Florida for yellowtail snapper:

**Option 3a:** Size limits

**Option 3b:** Seasons

**Option 3c:** Trip limits

**Option 3d:** Minor modifications to existing allowable gear

**IPT Note:** To apply the Magnuson-Stevens Act delegation provision (16 U.S.C. §1856(a)(3)) the process for delegating management measures to the State of Florida will need further discussion and clarification. Specifically, the Joint Council Committee recommendation that would require the State of Florida to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils ultimately may not be a required.

**IPT Note:** Staff needs clarification if all actions pertain to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** The IPT recommends removing Options 2d and 3d from Action 1 if the Councils cannot determine what exactly is desired by “minor modifications to existing allowable gear”. Analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.

**Note:** South Atlantic Fishery Management Council’s Snapper Grouper AP (SAFMC SG AP) recommendations are in green.

### **COUNCIL ACTION**

Option 1. Consider approving Action 1 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 2. Consider moving Options 2d and 3d to the considered but rejected appendix.

Option 3. Consider the SAFMC SG AP recommendation.

### **Discussion**

This action considers partial delegation of the management of yellowtail snapper to the State of Florida for the recreational (**Alternative 2**) and/or commercial (**Alternative 3**) fisheries. It is the Joint Council Committees’ preference that the Councils remain responsible for establishing and implementing ACLs and AMs. The harvest of yellowtail snapper is almost entirely from waters adjacent to the State of Florida (**Tables 3 and 4**). The Councils would remain responsible for setting acceptable biological catch (ABC) and annual catch limit (ACL) values, and for establishing accountability measures (AMs). Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. The Magnuson-Stevens Act allows for the delegation of management to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the FMP (Appendix B). The delegation of management authority to the states requires a three-quarters majority vote of the voting members of both the Gulf of Mexico Fishery Management Council (Gulf Council) and the South Atlantic Fishery Management Council (South Atlantic Council) (Appendix B).

The Magnuson-Stevens Act (16 U.S.C. §1856(a)(3)) outlines the procedure in the case of a state’s regulations not being consistent with the FMP (Appendix B). If National Marine Fisheries Service (NMFS) determines that a state’s regulations are not consistent with the FMP, NMFS shall promptly notify the state and the Councils of the determination and provide an opportunity for the region to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the region does not correct the inconsistencies identified by NMFS, then the delegation to the region shall not apply until NMFS and the Gulf and South Atlantic Councils find that the region has corrected the inconsistencies. In application, the response times between NMFS’ determination of inconsistency and the implementation of corrective action by the State of Florida would be case specific.

In **Alternative 1**, all management of yellowtail snapper would be retained by the Councils. The regulations outlined in **Tables 1 and 2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the yellowtail snapper season opens for both Councils on January 1.

**Alternative 2** would determine specific recreational management items for delegation to the State of Florida for yellowtail snapper, including: **Option 2a-** size limits; **Option 2b-** seasons; **Option 2c-** bag limits; and **Option 2d-** minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. It is the Joint Council Committees’

preference that the Councils remain responsible for establishing and implementing ACLs and AMs.

**Alternative 3** would determine specific commercial management items for delegation to the State of Florida for yellowtail snapper, including: **Option 3a**- size limits; **Option 3b**- seasons; **Option 3c**- tip limits; and **Option 3d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of commercial fisheries management to the State of Florida. It is the Joint Council Committees' preference that the Councils remain responsible for establishing and implementing ACLs and AMs.

**Table 3.** Mean percent of recreational landings (lb ww) by species and state, 2009-2013.

Species	FL	AL	GA	LA	MS	NC	SC	TX
yellowtail snapper	99.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
mutton snapper	99.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
black grouper	94.8%	5.0%	0.0%	0.0%	0.0%	0.0%	0.01%	0.2%

**Table 4.** Mean percent of commercial landings (lb ww) by species and state, 2009-2013.

Species	FL	AL	GA	LA	MS	NC	SC	TX
yellowtail snapper	99.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
mutton snapper	97.5%	0.0%	0.1%	0.0%	0.0%	0.7%	1.7%	0.0%
black grouper	93.2%	0.6%	1.1%	0.6%	0.0%	0.2%	2.1%	2.2%

## Action 2: Establish and Consolidate ABCs and ACLs for Yellowtail Snapper

*Note: Alternatives in this Action may be selected in conjunction with those in Action 1, meaning delegation to the State of Florida could be selected and yellowtail snapper could be managed with an overall ABC, with or without sector ACLs.*

**Alternative 1.** No action. Maintain the current commercial and recreational ACLs for yellowtail snapper based on the South Atlantic Council's Snapper Grouper Fishery Management Plan and maintain the current total ACL for yellowtail snapper in the Gulf based on the Reef Fish FMP. (SAFMC SG AP)

**Alternative 2:** Manage yellowtail snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

**Alternative 3.** Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

**Option 3a:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3b:** Base sector allocations on average landings from 2009-2013

**Option 3c:** Base sector allocations on average landings from 2004-2013

**IPT Note:** Staff needs clarification if this action pertain to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions

### COUNCIL ACTION

Option 1. Consider approving Action 2 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 2. Consider the SAFMC SG AP recommendation

### Discussion

This action considers establishing and combining Gulf and South Atlantic annual catch limits (ACLs) for yellowtail snapper into one Southeastern U.S. acceptable biological catch (ABC) and ACL. The NMFS would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective Scientific and Statistical Committees (SSC) for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for the overfishing limit (OFL) and ABC for yellowtail snapper. Although yellowtail snapper has been managed as two separate stocks for regulatory purposes, the stock assessment considered yellowtail snapper from the Gulf and South Atlantic to be a single biological stock (SEDAR 27 2013). For the purposes of management of yellowtail snapper, the ACL could be set equal to the ABC since the stock is not currently overfished or undergoing overfishing (SEDAR 27 2013). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering other criteria in

addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council’s SSC agrees to an ABC for yellowtail snapper based on yield projections from the most recent stock assessment (SEDAR 27 2013). The current jurisdictional apportionment is based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for yellowtail snapper ABC. The jurisdictional split of the ABC was established by using 50% of catch history from 1993-2008 + 50% of catch history from 2006-2008 resulting in 75% of the ABC going to the South Atlantic, 25% of the ABC going to the Gulf. This methodology was established in the Generic Gulf of Mexico and Comprehensive South Atlantic ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

**Alternative 2** would use both Councils’ agreed upon ABC for management of yellowtail snapper as a single unit with an overall combined ACL. Currently each Council’s SSC agrees to an ABC for yellowtail snapper from the most recent stock assessment. A similar method would be used for this alternative and for **Alternative 3**. The method of management in **Alternative 2** could still have within it recreational and commercial fishing allocations. However, neither sector would close in a fishing year so long as the overall ACL had not been met, if that accountability measure (AM) was selected as preferred.

**Alternative 3** would use both Councils’ agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options. When determining the resultant sector allocations for **Options 3a – 3c**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. **Option 3b** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 5** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 6**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council’s jurisdiction. For yellowtail snapper, the respective ACLs were not exceeded; however, in 2012 the commercial sector landed 90% of their ACL. Subsequently a new stock assessment showed that the ABC could be increased permitting an increase in ACLs for both Councils.

**Table 5.** Sector allocation options for yellowtail snapper for Alternative 3 of Action 2. Percentages were derived from landings in whole weight.

<b>Yellowtail Snapper Sector ACL Options</b>		
<b>Option</b>	<b>Commercial</b>	<b>Recreational</b>
<b>Option 3a</b>	76%	24%
<b>Option 3b</b>	80%	20%
<b>Option 3c</b>	73%	27%

## Landings Data Description

The following methods were used to partition landings of yellowtail snapper, mutton snapper, and black grouper between the Gulf and South Atlantic Councils by sector. Commercial landings are assigned to sub-region (Gulf of Mexico or South Atlantic) based on fisher-reported catch area. For example, landings reported north of U.S. 1 are considered to be within the Gulf of Mexico jurisdiction and south of U.S. 1 landings are considered to be within the South Atlantic jurisdiction. Headboats based from Texas to Gulf-based in Monroe County are within the Gulf of Mexico jurisdiction, and headboats from North Carolina to the Florida Keys are within the South Atlantic jurisdiction. Marine Recreational Fisheries Statistics Survey (MRFSS) data was post-stratified to break the Florida Keys out from the Gulf of Mexico landings. The MRFSS landings from the Florida Keys were re-assigned to the South Atlantic Council, because most legal sized yellowtail snapper, black grouper, and mutton snapper are likely caught in South Atlantic waters (GMFMC CL/AM Amendment 2011).

**Table 6.** Commercial and recreational landings of yellowtail snapper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight. Gulf commercial landings data for 1993 are confidential.

Year	Commercial		Recreational	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	Confidential	1311367	51015	1189637
1994	1344942	860543	11762	880763
1995	591074	1265856	3434	660358
1996	485120	973815	2854	554130
1997	218384	1455496	2008	702997
1998	341479	1183074	4965	487063
1999	601027	1245345	39260	288951
2000	388984	1203154	4781	395845
2001	246849	1174008	7045	328458
2002	341823	1069057	7782	407848
2003	463743	948886	11472	510314
2004	478221	1002309	17937	698058
2005	510437	814899	31176	576247
2006	542237	694958	21477	560320
2007	350079	628608	19726	786399
2008	460569	910323	6056	746313
2009	891925	1085281	19250	348536
2010	569275	1126231	8783	434259
2011	769730	1125220	25560	390998
2012	630984	1439586	5087	493409
2013	728387	1305002	6991	666026

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the yellowtail snapper fishery has historically been dominated by the commercial fishery. It is important to note that during the time periods considered in Alternative 3, neither the commercial nor the recreational sector exceeded their respective ACLs in the South Atlantic waters and the Stock ACL in the Gulf waters.

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*Actions 3-6 pertain exclusively to mutton snapper*

### **Action 3: Partial Delegation of Commercial and/or Recreational Management of Mutton Snapper to the State of Florida in Federal Waters Adjacent to the State of Florida**

*Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures. Alternatives in this Action may be selected in conjunction with those in Actions 4, 5, and 6.*

**Alternative 1:** No action. Retain management of Mutton Snapper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively. **(SAFMC SG AP)**

**Alternative 2:** Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

**Option 2a:** Size limits

**Option 2b:** Seasons

**Option 2c:** Bag limits

**Option 2d:** Minor modifications to existing allowable gear

**Alternative 3:** Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

**Option 3a:** Size limits

**Option 3b:** Seasons

**Option 3c:** Trip limits

**Option 3d:** Minor modifications to existing allowable gear

**IPT Note:** To apply the Magnuson-Stevens Act delegation provision (16 U.S.C. §1856(a)(3)) the process for delegating management measures to the State of Florida will need further discussion and clarification. Specifically, the Joint Council Committee recommendation that would require the State of Florida to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils may ultimately not be a required.

**IPT Note:** Staff needs clarification if all actions pertain to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** The IPT recommends removing Options 2d and 3d from Action 1 if the Councils cannot determine what exactly is desired by “minor modifications to existing allowable gear”. Analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.

**IPT Note:** Delegating the setting of bag limits and trip limits under Alternatives 2 and 3 (Options 2c and 3c) in this action seems to duplicate efforts in Actions 5 and 6. If it is the Councils’

desire is to delegate management measures to the State of Florida as outlined in this action, then the Councils' may wish to reconsider the establishment of bag and trip limits for mutton snapper (Actions 5 and 6).

### **COUNCIL ACTION**

Option 1. Consider moving Options 2d and 3d to the considered but rejected appendix.

Option 2. Consider approving Action 3 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 3. Consider the SAFMC SG AP recommendation.

### **Discussion**

This action considers partially delegating the management of mutton snapper to the State of Florida for the recreational (**Alternative 2**) and/or commercial (**Alternative 3**) fisheries. The harvest of mutton snapper is almost entirely from Florida (**Tables 3 and 4**). The Councils would remain responsible for setting ACLs and for establishing AMs. Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. Additionally, prior to implementing any changes in management items delegated herein, the Joint Council Committee recommended that the State of Florida be required to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils. This may not be required based on the Magnuson-Stevens Act delegation provision (16 U.S.C. §1856(a)(3)). The Magnuson-Stevens Act allows for the delegation of management to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the FMP (Appendix B). The delegation of management authority to the states requires a three-quarters majority vote of the voting members of both the Gulf Council and the South Atlantic Council (Appendix B).

The Magnuson-Stevens Act (16 U.S.C. §1856(a)(3)) outlines the procedure in the case of a state's regulations not being consistent with the FMP (Appendix B). If National Marine Fisheries Service (NMFS) determines that a state's regulations are not consistent with the FMP, NMFS shall promptly notify the state and the Council of the determination and provide an opportunity for the region to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the region does not correct the inconsistencies identified by NMFS, then the delegation to the region shall not apply until NMFS and the Gulf and South Atlantic Councils find that the region has corrected the inconsistencies. In application, the response times between NMFS' determination of inconsistency and the implementation of corrective action by the State of Florida would be case specific.

In **Alternative 1**, all management of mutton snapper would be retained by the Councils. The regulations outlined in **Tables 1 and 2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the mutton snapper season opens for both Councils on January 1.

**Alternative 2** would determine specific recreational management items for delegation to the State of Florida for mutton snapper, including: **Option 2a-** size limits; **Option 2b-** seasons; **Option 2c-** bag limits; and **Option 2d-** minor modifications to existing gear. Multiple options

may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. It is the Joint Council Committees' preference that the Councils remain responsible for establishing and implementing ACLs and AMs.

**Alternative 3** would determine specific commercial management items for delegation to the State of Florida for mutton snapper, including: **Option 3a**- size limits; **Option 3b**- seasons; **Option 3c**- trip limits; and **Option 3d**- minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of commercial fisheries management to the State of Florida. It is the Joint Council Committees' preference that the Councils remain responsible for establishing and implementing ACLs and AMs.

## Action 4: Establish and Consolidate ABCs and ACLs for Mutton Snapper

*Note: Alternatives in this Action may be selected in conjunction with those in Actions 3, 5, and 6. More than one alternative may be selected as preferred in this action.*

**Alternative 1.** No action. Maintain the current commercial and recreational ACLs for mutton snapper based on the South Atlantic Councils Snapper Grouper Fishery Management Plan and maintain the current total ACL for mutton snapper in the Gulf based on the Reef Fish Resources FMP. (SAFMC SG AP)

**Alternative 2:** Manage mutton snapper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

**Alternative 3.** Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

**Option 3a:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3b:** Base sector allocations for waters off Florida on average landings from 2009-2013

**Option 3c:** Base sector allocations for waters off Florida on average landings from 2004-2013

**IPT Note:** Staff needs clarification if this action pertains to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

### COUNCIL ACTION

Option 1. Consider approving the Action 4 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 2. Consider the SAFMC SG AP recommendation.

### Discussion

This action considers establishing and combining Gulf and South Atlantic ACLs for mutton snapper into one Southeastern U.S. ABC and ACL. The NMFS would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective SSC for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for the OFL and ABC for mutton snapper. Although mutton snapper has been managed as two different stocks for regulatory purposes, the stock assessment (SEDAR 15A 2008) and recent update assessment (2015 SEDAR 15A Update) considers mutton snapper from the Gulf and South Atlantic to be a single biological stock. For the purposes of management the ACL could be equal to the ABC, since mutton snapper are not presently overfished or experiencing overfishing (SEDAR 15A 2008). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering

other criteria in addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council’s SSC agrees to an ABC for mutton snapper based on yield projections from the most recent stock assessment (SEDAR 15A 2008). The current jurisdictional apportionment is based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for mutton snapper ABC. The jurisdictional split of the ABC was established by using 50% of catch history from 1990-2008 + 50% of catch history from 2006-2008 resulting in 79% of the ABC going to the South Atlantic and 21% of the ABC going to the Gulf. This methodology was established in the Generic Gulf of Mexico and Comprehensive South Atlantic ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

**Alternative 2** would manage mutton snapper as a single unit with an overall combined multijurisdictional ABC and ACL. This method of management could still have within it recreational and commercial fishing allocations. However, neither sector would be closed in a fishing year so long as the overall ACL had not been met, if that accountability measure (AM) was selected as preferred.

**Alternative 3** would use both Councils’ agreed upon acceptable biological catch (ABC) for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options. When determining the resultant sector allocations for **Options 3a – 3c**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. The current years used for the jurisdictional apportionment for mutton snapper are established by using 50% of catch history from 1990-2008 instead of 1993. The Councils used 50% of the catch history from 1993-2008 for the yellowtail snapper jurisdictional apportionment. **Option 3b** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 7** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 8**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council’s jurisdiction. For mutton snapper, the respective ACLs were not exceeded.

**Table 7.** Sector allocation options for mutton snapper for Alternative 3 of Action 4. Percentages were derived from landings in whole weight.

<b>Mutton Snapper Sector ACL Options</b>		
<b>Option</b>	<b>Commercial</b>	<b>Recreational</b>
<b>Option 3a</b>	32%	68%
<b>Option 3b</b>	25%	75%
<b>Option 3c</b>	27%	73%

**Table 8.** Commercial and recreational landings of mutton snapper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight. Gulf commercial landings data for 1993-1996 are confidential. For explanation of landings data see Action 2 discussion.

Year	Commercial		Recreational	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	Confidential	169112	4664	540658
1994	Confidential	176022	4946	399568
1995	Confidential	196265	2767	458726
1996	Confidential	207243	20493	314405
1997	69841	221674	2303	339350
1998	73343	282490	10665	312690
1999	84854	168141	3583	266928
2000	80146	124475	1717	340501
2001	99960	133047	4077	302430
2002	101446	132219	2705	422465
2003	124508	144109	9891	555855
2004	201938	145861	13296	396210
2005	140947	96298	2243	466909
2006	214115	74839	1976	631323
2007	133086	88550	34047	748118
2008	81391	76705	20281	822520
2009	43689	78132	5766	436032
2010	54242	74737	1541	569471
2011	94238	66158	1391	281247
2012	88695	77122	7156	477022
2013	107814	73392	4960	481731

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the mutton snapper fishery has historically been dominated by the recreational fishery. It is important to note that during the time periods considered in **Alternative 3**, neither the commercial nor the recreational sector exceeded their respective ACLs.

## Action 5. Modify Mutton Snapper Recreational Bag Limit in Gulf of Mexico and South Atlantic

*Note: Alternatives in this Action may be selected in conjunction with those in Actions 3, 4, and 6.*

**Alternative 1:** No action. Mutton snapper is part of the aggregate 10 snapper bag limit in the Gulf of Mexico, the South Atlantic, and the State of Florida. In the Gulf of Mexico, the 10 snapper-per-person aggregate includes all snapper species in the reef fish management unit except red snapper, vermilion snapper, and lane snapper (**Table 9**). In the South Atlantic, the 10 snapper-per-person aggregate includes all snapper species in the snapper grouper management unit except red snapper and vermilion snapper (**Table 9**). Cubera snapper less than 30 inches total length (TL) are included in the 10 fish bag limit. The aggregate 10 snapper bag limit includes a maximum of 2 cubera snapper per person (not to exceed 2 per/vessel) for fish 30 inches TL or larger off Florida.

**Alternative 2:** Remove mutton snapper from the recreational aggregate bag limit and change the recreational bag limit for mutton snapper during the regular season (July-April) and during the spawning season (May-June).

**Option 2a:** 10 fish/person/day in the regular season, 2 fish/person/day during the spawning season

**Option 2b:** 5 fish/person/day in the regular season, 2 fish/person/day during the spawning season (**SAFMC SG AP**)

**Option 2c:** 4 fish/person/day in the regular season, 2 fish/person/day during the spawning season

**Alternative 3:** Retain mutton snapper within the aggregate 10 snapper bag limit in the Gulf of Mexico and the South Atlantic, but specify bag limits for mutton snapper within the snapper recreational aggregate bag limit during the regular season (July-April) and during the spawning season (May-June).

**Option 3a:** Within the aggregate snapper bag limit, no more than 10 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

**Option 3b:** Within the aggregate snapper bag limit, no more than 5 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

**Option 3c:** Within the aggregate snapper bag limit, no more than 4 fish/person/day in the regular season and no more than 2 fish/person/day during the spawning season may be mutton snapper.

**IPT Note:** The Councils' may wish to revisit the inclusion of both Options 2b/c and 3b/c, since they differ by only 1 fish per person per day. If the Councils wish to include both options, then additional rationale will help frame subsequent analyses.

**IPT Note:** Staff needs clarification if this action pertains to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** Establishing recreational bag limits in this action seems to duplicate efforts in Action 3. If it is the Councils’ desire to establish recreational bag limits for mutton snapper in the manner shown in this action then the Councils may wish to reconsider delegating the establishment and modification of bag limits for mutton snapper to the State of Florida as outlined in Action 3. It would seem to be contradictory to consider delegating the recreational bag limits to the State of Florida in one action, and then to rationalize appropriate bag limit modifications under a Council management strategy in another action.

**COUNCIL ACTION**

Option 1. Consider approving the Action 5 alternatives for detailed analyses after staff receives IPT requested clarification. Specifically the consideration of Options 2b/c and 3b/c since they differ by 1 fish per person per day.

Option 2. Consider the SAFMC SG AP recommendation.

**Discussion**

There is concern by the public regarding fishing effort on mutton snapper spawning aggregations during the May-June peak spawning season in the Florida Keys despite the healthy status of the mutton snapper stock. In 2010, the Snapper Grouper Advisory Panel (SGAP) recommended that the South Atlantic Council consider a spawning area closure or a seasonal closure in May and June of each year. Furthermore, the SGAP recommended that the mutton snapper bag limit be reduced to 3 fish per person per day. According to the most recent stock assessment of mutton snapper in the southeastern United States (SEDAR 15A 2008), mutton snapper are neither overfished ( $SSB_{2006}/SSB_{30\%SPR} = 1.14$ ) nor experiencing overfishing ( $F_{2006}/F_{30\%SPR} = 0.51$ ). An update stock assessment of mutton snapper is expected to be made available to the Councils by June 2015. Currently, mutton snapper is part of the 10 snapper aggregate in the Gulf and South Atlantic (**Table 9**). Current regulations for mutton snapper in the Gulf and South Atlantic are shown in **Table 10**.

**Table 9.** Species composition of the 10 snapper aggregate in the Gulf and South Atlantic.

Gulf of Mexico	South Atlantic
Gray snapper	Gray snapper
Mutton snapper	Mutton snapper
Yellowtail snapper	Yellowtail snapper
Cubera snapper	Cubera snapper
Queen snapper	Queen snapper
Blackfin snapper	Blackfin snapper
Silk snapper	Silk snapper
Wenchman	Dog snapper
	Lane snapper
	Mahogany snapper

**Table 10.** Current recreational mutton snapper fishing regulations in State waters off Florida, the Gulf of Mexico and the South Atlantic (June 2015).

Species	Regulations	State Waters Gulf and South Atlantic	Federal Waters Gulf of Mexico	Federal Waters South Atlantic
Mutton Snapper	Size Limit	16" TL		
	Bag Limit (per person/day)	10 snapper aggregate (per person/day)		
	Season	Year round		

The peak of mutton snapper recreational landings occur during the May-June spawning season (Wave 3) in the South Atlantic during 2012 and 2013 (**Table 11**). Impacts of various bag limits for 2011-2013 are shown in **Table 12**. An examination of the recent years of complete data (2011- 2013) revealed there were only 72 trips (0 in Texas, 6 private/charter and 66 headboat trips) in the Gulf of Mexico region that landed mutton snapper. Because there were not enough samples for the Gulf of Mexico region to complete a meaningful analysis, the recreational bag limit analysis for mutton snapper is focused on the South Atlantic region (Appendix D).

The main difference between **Alternatives 2** and **3** is that **Alternative 2** removes mutton snapper from the snapper recreational aggregate bag limit, while **Alternative 3** retains mutton snapper within the snapper recreational aggregate bag limit. Both **Alternatives 2** and **3** establish specific bag limits for mutton snapper during the regular and spawning seasons, respectively. For both alternatives, **Options 2a and 3a** consider maintaining the recreational bag limit of 10 fish/person/day during the July-April regular season, and reducing the recreational bag limit to 2 fish/person/day during the spawning season. **Options 2a and 3a** would be expected to reduce recreational harvest during the May-June (Wave 3) spawning season by 22% for the headboat sector and 20% for the private/charter sector; however, there would be no reduction in recreational harvest during July-April (**Table 12**). **Option 2b and 3b** would specify a 5 fish/person/day for the recreational sector during July-April, and 2 fish/person/day during the May-June spawning season. **Option 2b and 3b** would be expected to reduce recreational harvest during the regular season by 6% for the headboat sector, and 6% for the private/charter sectors. **Options 2c and 3c** would specify a 4 fish/person/day for the recreational sector during July-April, and 2 fish/person/day during the May-June spawning season. **Options 2c and 3c** would be expected to reduce recreational harvest during the regular season by 9% for the headboat sector, and 5% for the private/charter sectors. A 2 fish/person/day spawning season recreational bag limit would be expected to reduce harvest by 22% and 20% for the headboat and private/charter sectors, respectively during the May-June spawning season (**Table 12**). If **Alternative 2** is selected by itself, it could potentially increase the opportunity for the recreational harvest of the snapper species still included as part of the snapper recreational aggregate bag limit.

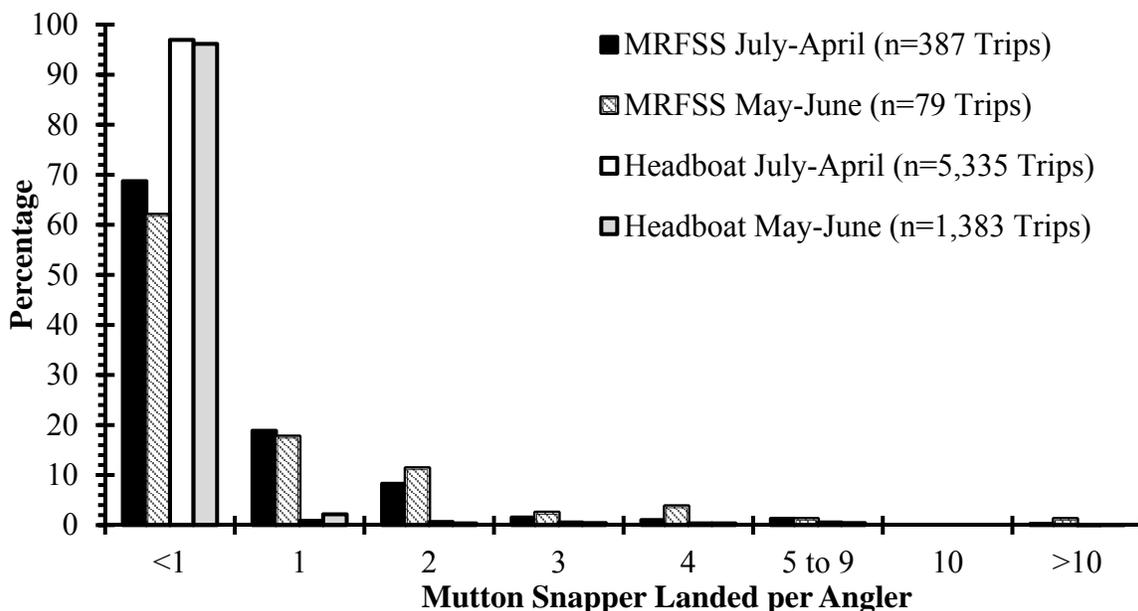
**Table 11.** South Atlantic recreational (private, charter, headboat) mutton snapper landings by wave. Source: [http://sero.nmfs.noaa.gov/sustainable\\_fisheries/acl\\_monitoring/index.html](http://sero.nmfs.noaa.gov/sustainable_fisheries/acl_monitoring/index.html).

Year	1	2	3	4	5	6	Total
2012	46,282	102,210	182,880	77,015	27,275	34,366	470,028
2013	50,961	36,208	175,774	91,913	90,689	36,186	481,731

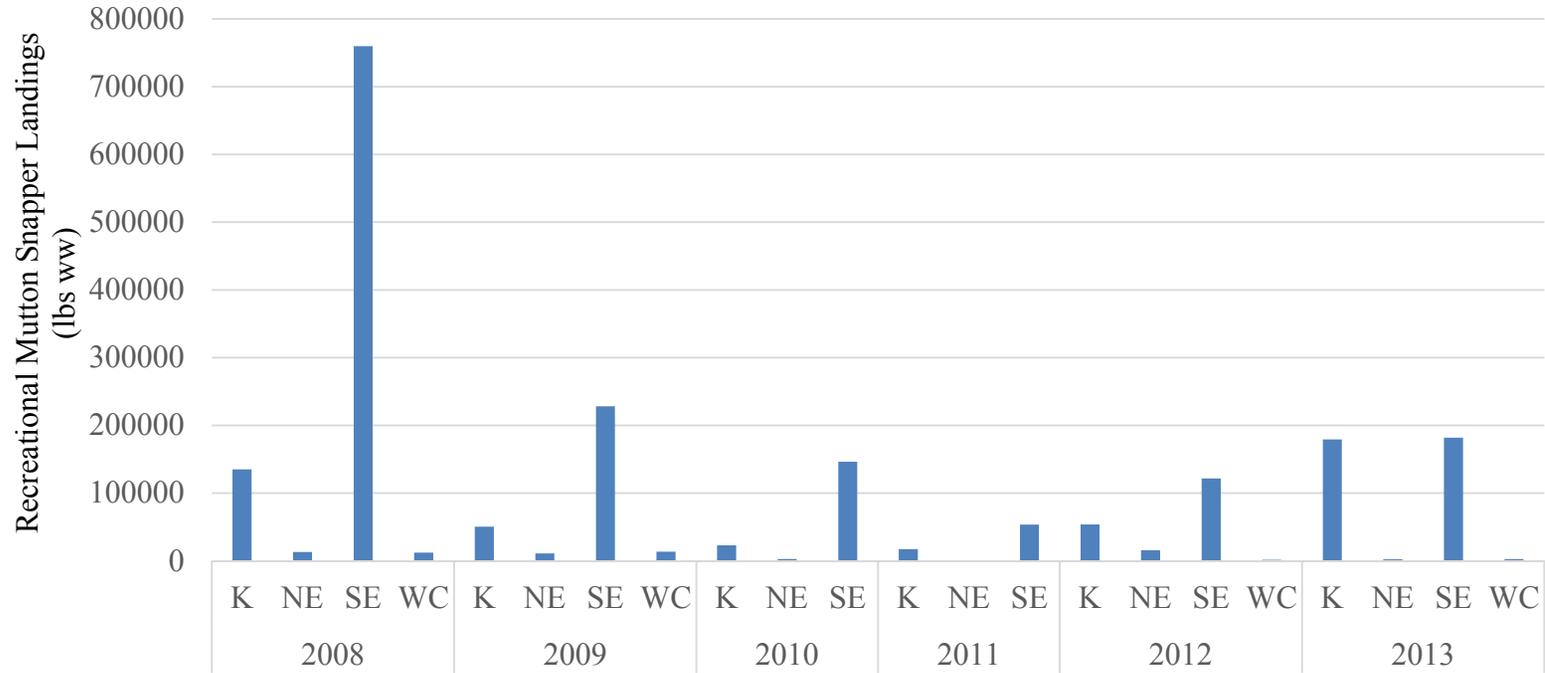
**Table 12.** Percent reductions in landings for various bag limits generated from South Atlantic recreational landings for the years 2011 and 2013. The reductions were calculated in terms of mutton snapper numbers with respect to dataset (MRIP and headboat) and non-spawning (July to April) and spawning (May-June) season.

Bag Limit	MRIP			Headboat		
	Jul-Apr	May-Jun	All Year	Jul-Apr	May-Jun	All Year
10	0.0	0.0	0.0	0.0	0.0	0.0
9	0.2	1.3	0.4	0.3	0.4	0.3
8	0.4	2.5	0.9	0.7	0.8	0.7
7	1.3	3.8	1.8	1.3	2.0	1.5
6	2.3	5.1	2.9	2.9	3.8	3.1
5	3.5	6.3	4.1	5.5	6.2	5.7
4	5.1	8.4	5.8	9.4	9.7	9.5
3	8.5	12.7	9.3	15.3	14.7	15.2
2	14.1	20.3	15.3	25.0	21.7	24.2
1	29.3	34.2	30.3	37.5	32.4	36.3

The distribution of mutton snapper catch-per-angler is shown in **Figure 2**. As can be seen, most anglers catch three or fewer mutton snapper. Furthermore, most of the mutton snapper landings are from the Southeast (**Figure 3**) data collection area which is in the South Atlantic Council jurisdiction.



**Figure 2.** Distribution of South Atlantic mutton snapper landed per angler by season from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. The regular season is from July to August and the spawning season is from May to June.



**Figure 3.** Total recreational landings (lbs ww) of mutton snapper from Florida waters from 2008-2013 by reporting region: K = Keys (Monroe County), NE = Northeast (Nassau County to Brevard County), SE = Southeast (Indian River County to Dade County), WC = West Central (Collier County to Citrus County). The Panhandle of Florida (otherwise denoted as “P”; Levy County to Escambia County) is not represented here due to the absence of mutton snapper landings in the Panhandle region.

## Action 6. Modify Mutton Snapper Commercial Trip Limit in the Gulf of Mexico and South Atlantic

*Note: Alternatives in this Action may be selected in conjunction with those in Actions 3, 4, and 5.*

**Alternative 1:** No action. During May-June, the commercial sector in the South Atlantic is restricted to 10 mutton snapper per day or 10 mutton snapper per trip, whichever is more restrictive. There is no bag or trip limit for the commercial sector in the Gulf or South Atlantic from July through April. **(SAFMC SG AP)**

**Alternative 2:** Establish a commercial trip limit for mutton snapper during the regular season (July through April) in the Gulf of Mexico and the South Atlantic.

**Option 2a:** 10 fish/person/day

**Option 2b:** Some higher bag or trip limit.

**Alternative 3:** Specify a commercial trip limit for mutton snapper during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

**Option 3a:** 2 fish/person/day

**Option 3b:** 5 fish/person/day

**Option 3c:** 10 fish/person/day

**Option 3d:** No bag or trip limit

**Alternative 4:** Specify a commercial trip limit for mutton snapper that is identical to the recreational bag limit during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

**Alternative 5:** Specify a commercial trip limit for mutton snapper for the handline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

**Option 5a:** 2 fish/person/day

**Option 5b:** 5 fish/person/day

**Option 5c:** 10 fish/person/day

**Option 5d:** Some other trip limit

**Alternative 6:** Specify a commercial trip limit for mutton snapper for the longline sector during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic.

**Option 6a:** 500 pounds whole weight (450 pounds gutted weight) trip limit

**Option 6b:** Some other trip limit

**IPT Note:** Staff needs clarification if this action pertains to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** Establishing commercial trip limits in this action seems to duplicate the efforts of Action 3. If it is the Councils' desire to establish trip limits for mutton snapper in the manner shown in this action then the Councils may wish to reconsider delegating the establishment and modification of trip limits for mutton snapper to the State of Florida as outlined in Action 3. It

would seem to be contradictory to consider delegating the setting of trip limits to the State of Florida in one action, and then to rationalize appropriate bag limit or trip limit modifications under a Council management strategy in another action.

**IPT Note:** The Councils may wish to consider vessel limits for commercial mutton snapper fishing. The biological effects of bag limits could vary depending on the number of crew aboard a commercial fishing vessel, making biological effects more difficult to determine. For example, the biological effects of four crew members retaining the per-person trip limit in Alternative 5 would be greater than the same for only two crew members. Analysis of Alternative 5 may prove difficult, since there is no way to know how many crew could be on board a commercial fishing vessel on any given day.

### **COUNCIL ACTION**

Option 1. Consider approving Action 6 alternatives for detailed analyses after staff receives IPT requested clarification.

- Provide guidance for Option 5d and Option 6b trip limits for analysis, analyses cannot be completed as currently written.
- Consider including gutted weight and whole weight for the longline component of the commercial sector.
- Consider using the wording “vertical line” instead of “handline” in Alternative 5.
- Consider commercial trip limits be limited to the spawning season (May-June) due to the health of the mutton snapper stock.
- Consider reducing the number of alternatives based on updated analysis provided in the discussion.

Option 2. Consider the SAFMC SG AP recommendation.

### **Discussion**

Some members of the public have expressed concerns regarding fishing effort on mutton snapper spawning aggregations during the May-June peak spawning season in the Florida Keys despite a healthy status of the mutton snapper stock. This action considers alternatives for mutton snapper commercial trip limits in the Gulf of Mexico and the South Atlantic. Current commercial fishing regulations for mutton snapper are detailed in **Table 13 (Alternative 1)**. During May and June, the commercial sector in the South Atlantic is restricted to 10 mutton snapper per day or 10 mutton snapper per trip, whichever is more restrictive. There is no bag or trip limit for the commercial sector in the Gulf or South Atlantic during the July-April regular season. The commercial sector in the Gulf has no bag limit or trip limit restrictions during the mutton snapper peak spawning season (May-June).

**Table 13.** Current commercial mutton snapper fishing regulations in State waters off Florida, the Gulf of Mexico and the South Atlantic (June 2015).

Species	Regulations	State Waters Gulf and South Atlantic	Federal Waters Gulf of Mexico	Federal Waters South Atlantic
Mutton Snapper	Size Limit	16" TL		
	Trip Limit	None		
	Closed Season	None		
	Bag Limit	May-June: Restricted to 10 fish/person/day or trip	None	May-June: Restricted to 10 fish/person/day or trip

**Tables 14 and 15** show commercial landings of mutton snapper by gear type from 2004-2013 for the Gulf and South Atlantic Councils, respectively. In the Gulf, bottom longline gear has historically been the predominate gear used to harvest mutton snapper (**Table 14**). In 2008, bottom longline regulations were modified to reduce interactions with protected sea turtle species, which could be one reason bottom longlines landings were reduced in 2009-2013 (GMFMC 2009). The predominate gear in South Atlantic waters has been vertical line gear for harvesting mutton snapper (**Table 15**). Trap gear was phased out in the Gulf in 2007; however, trap landings of mutton snapper are still reported in the South Atlantic and are likely bycatch from the spiny lobster fishery (Matthews et al. 2005).

**Table 14.** Commercial landings of mutton snapper by gear in the Gulf of Mexico for 2004-2013. Landings are reported in pounds whole weight. Confidential landings are labeled as “NA”.

Year	Vertical	Longline	Traps	Diving	Other
2004	34,944	161,006	5,166	822	0
2005	20,634	115,772	2,952	1,271	NA
2006	25,345	186,193	994	1,029	NA
2007	20,335	110,979	631	612	NA
2008	14,745	65,227	647	759	NA
2009	12,258	29,589	847	811	NA
2010	18,262	35,294	NA	358	NA
2011	28,227	64,412	NA	729	NA
2012	27,013	59,375	NA	568	NA
2013	19,782	86,277	NA	1,073	0

Source: Commercial ACL dataset. Gulf vertical line includes: hook-and-line by hand and hook-and-line power assisted (bandit). “Other” includes landings from seine nets and unclassified gear.

**Table 15.** Commercial landings of mutton snapper by gear in the South Atlantic for 2004-2013. Landings are reported in pounds whole weight. Confidential landings are labeled as “NA”.

Year	Vertical	Longline	Traps	Diving	Other
2004	98,513	36,609	6,225	3,805	709
2005	81,551	4,626	2,662	5,023	2,436
2006	59,071	8,774	3,427	2,959	608
2007	59,955	17,564	5,918	3,770	1,343
2008	61,836	8,692	2,296	3,052	829
2009	69,088	2,827	1,873	3,429	915
2010	66,464	644	4,048	2,759	822
2011	54,997	NA	7,111	3,599	372
2012	66,912	NA	3,875	6,156	NA
2013	60,586	NA	3,321	8,865	NA

Source: Commercial ACL dataset. South Atlantic vertical line includes: hook-and-line by hand, hook-and-line power assisted (bandit) and hook-and-line troll. “Other” includes landings from the following gears: gill nets, lift nets, seine nets, and unclassified gear.

The commercial landings of mutton snapper for all Florida counties are highest during the May-June peak spawning period (**Figure 4**). Overall Florida landings of mutton snapper were highest in 2008 and decreased through 2011. Landings increased in 2012 and 2013 (**Figure 5**). An examination of the monthly distribution of mutton snapper landings from commercial logbook and dealer reports shows similar trends (**Tables 16a** and **16b**). In addition, commercial landings of mutton snapper in the South Atlantic are highest during the May-June spawning season despite the current 10 fish/person/day bag limit.

**Alternative 2, Option 2a** would establish a commercial trip limit for mutton snapper during the regular season (July-April) of 10 fish/person/day. Currently, there are no commercial bag or trip limits in effect for commercial harvest of mutton snapper during the regular season. Using commercial trip interview program landings for the Southeastern U.S. the average weight of a landed mutton snapper from 2009-2013 ranges from 8.1-8.8 pounds whole weight (ww) or 7.3-7.9 pounds gutted weight (gw) depending on the region. A 10 fish/person/day bag limit would correspond to about an 88 pound ww (79 gw) trip limit in the Gulf of Mexico and about an 81 pound ww (73 gw) trip limit in the South Atlantic. **Alternative 2, Option 2a** would correspond to 65% reduction in commercial mutton snapper landings in the Gulf and a 20% reduction in commercial landings in the South Atlantic (**Table 17**). The combined percent reduction estimated for Gulf and South Atlantic waters is estimated to be 45%. **Option 2b** would establish a commercial bag or trip limit in excess of 10 fish per person per day. **Table 17** used 12 fish per person per day as an example which is estimated to result in an increase in mutton snapper landings by 12% in the Gulf and 26% in the South Atlantic, respectively (**Table 17**).

**Alternative 3, Options 3a through 3c** would specify a commercial trip limit for mutton snapper during the spawning season (May-June) of 2, 5, or 10 fish/person/day. **Option 3d** would not specify a commercial bag limit or trip limit for mutton snapper during the spawning season. A 2 fish/person/day commercial bag limit would be expected to reduce harvest in the Gulf and South Atlantic combined by 21% during the May-June spawning season; a 5 fish/person/day commercial bag limit would be expected to reduce harvest by 16%; and a 10 fish/person/day would be expected to reduce commercial harvest of mutton snapper during the spawning season by 7% (**Table 17**).

**Alternative 4** would specify a commercial trip limit for mutton snapper that is identical to the recreational bag limit during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic. This alternative is estimated to reduce commercial mutton snapper landings in the Gulf of Mexico by 12% and provide no reduction in landings for the South Atlantic Council (**Table 17**).

**Alternatives 5** would specify a commercial trip limit for mutton snapper for vertical line gear during the spawning season (May and June) in the Gulf of Mexico and the South Atlantic. **Option 5a** would set a vertical line trip limit of 2 fish/person/day corresponding to 3% reduction in commercial mutton snapper landings in the Gulf and 25% reduction in commercial landings in the South Atlantic (**Table 17**). **Option 5b** would set a vertical line trip limit of 5 fish/person/day corresponding to 3% reduction in commercial mutton snapper landings in the Gulf and 18% reduction in commercial landings in the South Atlantic. **Option 5c** would set a vertical line trip limit of 10 fish/person/day corresponding to 2% reduction in commercial mutton snapper landings in the Gulf and no reduction in commercial landings in the South Atlantic. **Option 5d** would set some other vertical line trip limit. Until the Councils' determine what that limit would be, this option cannot be analyzed.

**Alternative 6 Option 6a** would set a longline gear trip limit of 500 pounds whole weight corresponding to a 4% reduction in commercial mutton snapper landings the Gulf and no reduction in commercial mutton snapper landings in the South Atlantic. **Alternative 6, Option 6b** would set some other trip limit. Until the Councils' determine what that limit would be, this

option cannot be analyzed. For example if a 50 lb ww longline gear trip limit was established, a 12% reduction in landings is estimated for the Gulf and no reduction in landings is estimated for the South Atlantic (**Table 17**).

**Table 16a.** Monthly distribution of mutton snapper landings from commercial logbook in the Gulf and South Atlantic during 2009-2013

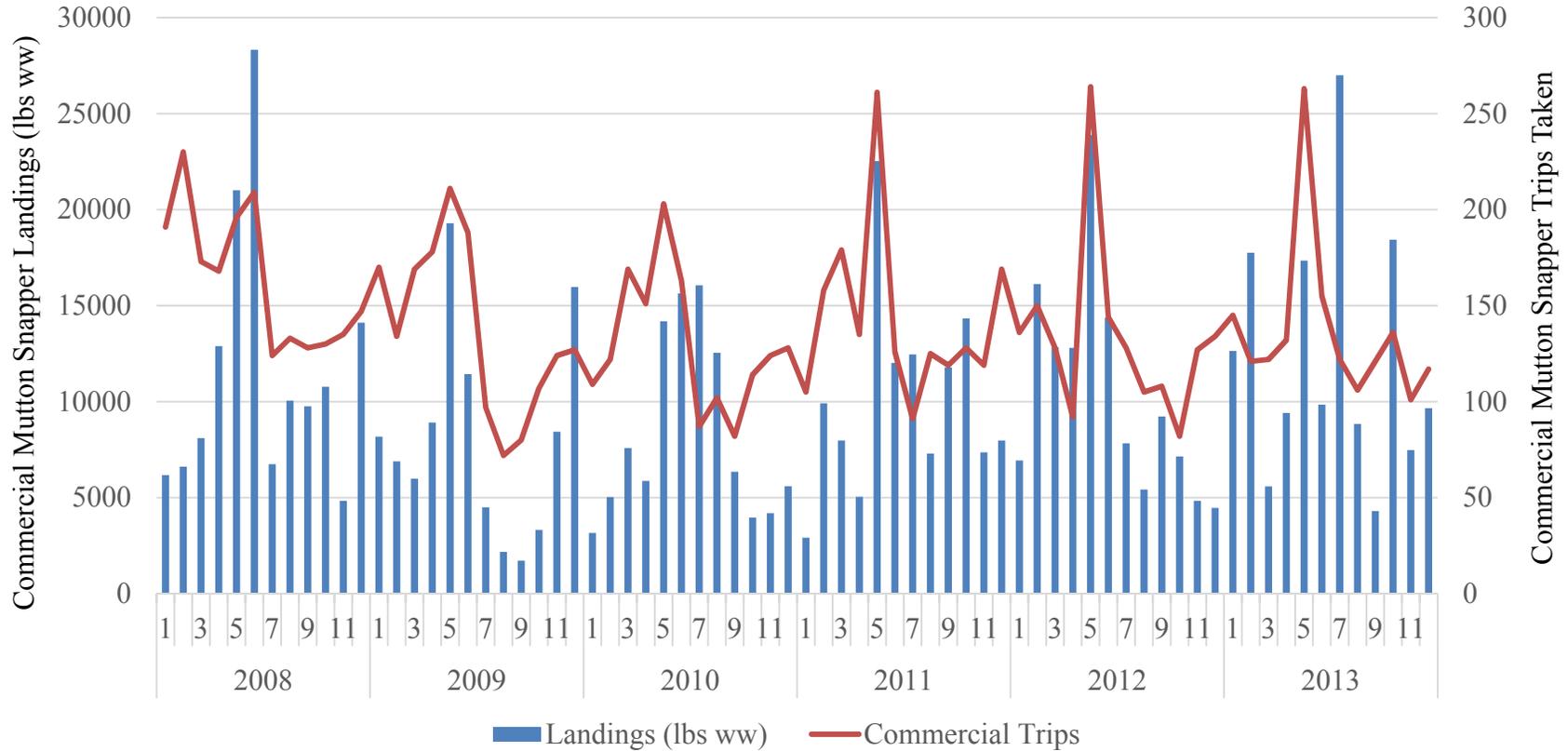
Month	Total	South Atlantic	Gulf
1	5.8%	5.5%	6.1%
2	9.0%	6.5%	11.3%
3	6.4%	5.6%	7.1%
4	7.2%	6.1%	8.2%
5	16.9%	22.6%	11.6%
6	10.4%	14.0%	7.1%
7	11.8%	9.8%	13.7%
8	7.5%	8.3%	6.7%
9	6.1%	5.5%	6.7%
10	6.9%	5.4%	8.3%
11	5.6%	5.6%	5.7%
12	6.3%	5.1%	7.5%

**Table 16b.** Monthly distribution of mutton snapper landings from dealer reported landings (Accumulative Landings System) in the Gulf and South Atlantic during 2009-2013.

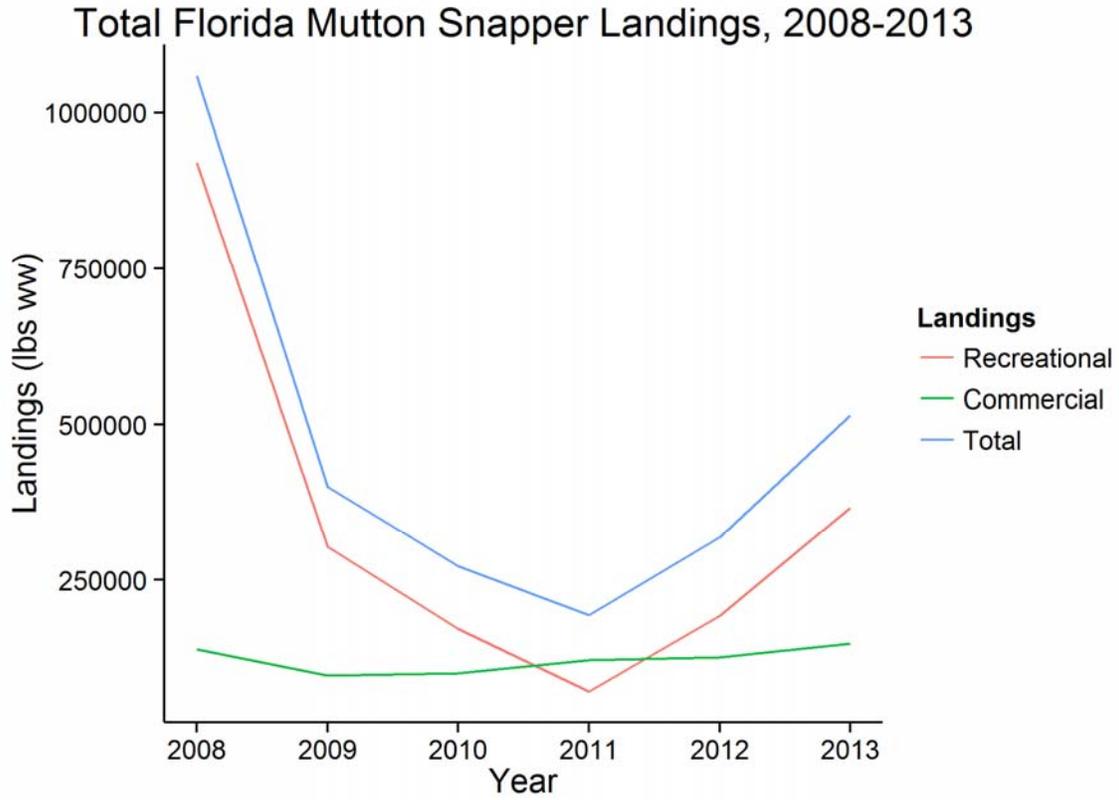
Month	Total	South Atlantic	Gulf
1	5.5%	5.7%	5.4%
2	8.6%	6.8%	10.3%
3	6.5%	5.5%	7.5%
4	7.1%	6.5%	7.6%
5	16.3%	20.8%	11.9%
6	10.9%	14.7%	7.4%
7	11.5%	9.0%	13.9%
8	7.4%	8.3%	6.5%
9	6.0%	5.3%	6.7%
10	7.4%	5.5%	9.2%
11	5.9%	6.0 %	5.7%
12	6.9%	5.9%	7.9%

**Table 17.** Percent increases and decreases in landings for various proposed commercial trip limit alternatives. Percent increases are positive numbers and percent decreases are negative numbers. Both the percent increases and decreases came from mutton snapper commercial logbook data from 2011 to 2013.

<b>Alternative</b>	<b>Option</b>	<b>Season</b>	<b>Gulf of Mexico</b>	<b>South Atlantic</b>	<b>Gulf and South Atlantic</b>
<b>Alt 2</b>	Option 2a: 10 fish	July-April	-65%	-20%	-45%
	Option 2b: 12 fish		12%	26%	19%
<b>Alt 3</b>	Option 3a: 2 fish	May-June	-16%	-27%	-21%
	Option 3b: 5 fish		-14%	-20%	-16%
	Option 3c: 10 fish		-12%	0	-7%
	Option 3d: No limit		0	NA	NA
<b>Alt 4</b>	10 fish	May-June	-12%	0	-7%
<b>Alt 5</b>	Option 5a: 2 fish, Vertical line Sector	May-June	-3%	-25%	-12%
	Option 5b: 5 fish, Vertical line Sector		-3%	-18%	-8%
	Option 5c: 10 fish, Vertical line Sector		-2%	0%	-6%
<b>Alt 6</b>	Option 6a: 500 lbs ww, Longline sector	May-June	4%	0	2%
	Option 6b: 50 lbs ww, Longline sector		-12%	0	-6%



**Figure 4.** Commercial mutton snapper landings and trips by month from 2008 to 2013. Left y-axis (blue bars) is total commercial mutton snapper landings (lbs ww) for all Florida counties. Right y-axis (red line) is total commercial mutton snapper trips taken.



**Figure 5.** Total landings of mutton snapper in Florida (lbs ww). Data are from the Florida Fish and Wildlife Conservation Commission recreational landings and commercial trip ticket programs.

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*Actions 7 & 8 pertain exclusively to black grouper*

## **Action 7: Partial Delegation of Recreational Management of Black Grouper to the State of Florida in Federal Waters Adjacent to the State of Florida**

*Note: Under this action, the Councils will remain responsible for setting annual catch limits and determining appropriate accountability measures. Alternatives in this Action may be selected in conjunction with those in Actions 8, 9, and 10.*

**Alternative 1:** No action. Retain recreational management of black grouper in the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively. (SAFMC SG AP)

**Alternative 2:** Determine specific recreational management items for delegation to the State of Florida for black grouper:

**Option 2a:** Size limits

**Option 2b:** Seasons

**Option 2c:** Bag limits

**Option 2d:** Minor modifications to existing allowable gear

**IPT Note:** Staff needs clarification if all actions pertain to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** The IPT recommends removing Options 2d. If the Councils cannot determine what exactly is desired by “minor modifications to existing allowable gear”. Analyses are not currently possible without knowing which modifications will be open to consideration by the Councils.

**IPT Note:** If it is the Councils’ desire to delegate recreational management measures to the State of Florida then the Councils’ may wish to reconsider the establishment of bag limits and closed season in Action 11. It would seem to be contradictory to consider delegating the setting of recreational management measures to the State of Florida in one action, and then to rationalize appropriate bag limits and season closures under a Council management strategy in another action.

### **COUNCIL ACTION**

Option 1. Consider moving Option 2d to the considered but rejected appendix.

Option 2. Consider approving Action 7 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 3. Consider the SAFMC SG AP recommendation.

### **Discussion**

This action considers alternatives that would partially delegate the management of black grouper to the State of Florida for the recreational (**Alternative 2**) sector. **Tables 3** and **4** reveal that

harvest of black grouper is almost entirely from Florida with a very low percentage of landings occurring from other Gulf and South Atlantic States. Delegation of commercial management measures for black grouper is not currently being considered by the Joint Council Committee because it is currently part of the shallow-water grouper Individual Fishing Quota (IFQ) program in the Gulf of Mexico. The Magnuson-Stevens Act allows for the delegation of management to a state to regulate fishing vessels beyond their state waters, provided its regulations are consistent with the FMP (Appendix B). The delegation of management authority to the states requires a three-quarters majority vote of the voting members of both the Gulf Council and the South Atlantic Council (Appendix B). The Councils' would remain responsible for setting annual catch limit (ACL) values and for establishing accountability measures (AMs) as outlined by the Joint Council Committee. Any existing permit requirements would remain in effect for fishing in the respective jurisdictions. Additionally, prior to implementing any changes in management items delegated herein, the State of Florida will be required to submit a management plan outlining changes for review and approval by the Gulf and South Atlantic Councils. This may not be required based on the Magnuson-Stevens Act delegation provision (16 U.S.C. §1856(a)(3)).

The Magnuson-Stevens Act (16 U.S.C. §1856(a)(3)) outlines the procedure in the case of a state's regulations not being consistent with the FMP (Appendix B). If National Marine Fisheries Service (NMFS) determines that a state's regulations are not consistent with the FMP, NMFS shall promptly notify the state and the Council of the determination and provide an opportunity for the region to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the region does not correct the inconsistencies identified by NMFS, then the delegation to the region shall not apply until NMFS and the Gulf and South Atlantic Councils find that the region has corrected the inconsistencies. In application, the response times between NMFS' determination of inconsistency and the implementation of corrective action by the State of Florida would be case specific.

In **Alternative 1**, all management of black grouper would be retained by the Councils. The regulations outlined in **Tables 1** and **2** would remain in effect, along with season opening and closing dates and current permissible gears. Currently, the black grouper season is open from May 1 through December 31 in the South Atlantic for both the commercial and recreational sectors. In the Gulf the recreational sector open year round, if fishing shoreward of the 20 fathom depth contour from February 1 through March 31.

**Alternative 2** would determine specific recreational management items for delegation to the State of Florida for black grouper, including: **Option 2a-** size limits; **Option 2b-** seasons; **Option 2c-** bag limits; and **Option 2d-** minor modifications to existing gear. Multiple options may be selected as preferred for this alternative, thereby delegating one or multiple facets of recreational fisheries management to the State of Florida. It is the Joint Council Committees' preference that the Councils remain responsible for establishing and implementing ACLs and AMs.

## Action 8: Establish and Consolidate ABCs and ACLs for Black Grouper

*Note: Alternatives in this Action may be selected in conjunction with those in Actions 7, 9, and 10. More than one alternative may be selected as preferred in this action.*

**Alternative 1.** No action. Maintain the current recreational ACLs based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively. (SAFMC SG AP)

**Alternative 2:** Manage black grouper as a single unit with an overall combined multijurisdictional acceptable biological catch (ABC) and annual catch limit (ACL).

**Alternative 3.** Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

**Option 3a:** Combine the current recreational allocations (i.e., 63.12% of the ACL for the South Atlantic and 27% of the ACL for the Gulf) for black grouper into a single recreational allocation.

**Option 3b:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3c:** Base sector allocations on average landings from 2009-2013

**Option 3d:** Base sector allocations on average landings from 2004-2013

**IPT Note:** Staff needs clarification if all actions pertain to waters adjacent to State of Florida or throughout the Gulf and South Atlantic Council jurisdictions.

**IPT Note:** Consider moving Alternative 3 Option 3a to the considered, but rejected appendix based on the fact that the recreational portion of the Gulf black grouper ACL is undefined. There is no defined allocation of recreational harvest, instead black grouper is included in the shallow-water grouper complex (see discussion for more information).

### COUNCIL ACTION

Option 1. Consider approving Action 8 alternatives for detailed analyses after staff receives IPT requested clarification.

Option 2. Consider the SAFMC SG AP recommendation.

### Discussion

This action considers establishing and combining the Gulf and South Atlantic ABCs and ACLs for black grouper in the Southeastern U.S. The NMFS would continue to monitor the landings and notify the Councils when the ACL is met or projected to be met. The respective SSCs for each Council would meet jointly to review stock assessment information, and would collectively determine appropriate values for OFL and ABC for black grouper. Although black grouper has been managed as two different stocks for regulatory purposes, the stock assessment (SEDAR 19 2010) considered black grouper from the Gulf and South Atlantic to be a single biological stock.

For the purposes of management of black grouper, the ACL could be set equal to the ABC, since black grouper are not currently overfished or undergoing overfishing (SEDAR 19 2010). Currently, only landings data are being used to determine allocations for this amendment. The Councils are considering other criteria in addition to landings data, such as social and economic considerations, for determining allocations in the future.

Currently, each Council's SSC agrees to an ABC for black grouper based on yield projections from the most recent stock assessment (SEDAR 19 2010). The current jurisdictional apportionment is based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for black grouper ABC. The jurisdictional split of the ABC was established by using 50% of catch history from 1986-2008 + 50% of catch history from 2006-2008 resulting in 47% of the ABC going to the South Atlantic and 53% of the ABC going to the Gulf. This methodology was established in the Generic Gulf of Mexico and Comprehensive South Atlantic ACL and AM Amendments (GMFMC 2011; SAFMC 2011) (**Alternative 1**).

**Alternative 2** would manage black grouper as a single unit with an overall combined multijurisdictional ABC and ACL. This method of management could still have within it recreational and commercial fishing allocation. However, neither sector would be closed in a fishing year so long as the overall ACL had not been met, if that AM was selected as preferred.

**Alternative 3** would use both Councils' agreed upon acceptable biological catch (ABC) for black grouper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic using one of the time period options. When determining the resultant sector allocations for **Options 3b – 3d**, sector landings will be capped at their respective sector ACLs (where appropriate), to ensure that overfishing in some years does not result in biased allocation ratios. **Option 3a** would combine the current recreational allocations (i.e., 63% of the ACL for the South Atlantic and 27% of the ACL for the Gulf) for black grouper into a single recreational allocation. The respective commercial allocations for each Council would continue to be managed directly by the responsible Council. This option may be inherently problematic for several reasons, first the recreational portion of the Gulf black grouper ACL and annual catch target (ACT) is undefined because there is no defined allocation of recreational harvest, instead black grouper is included in the shallow-water grouper complex (GMFMC 2011). The ACL for the shallow-water groupers is determined using black grouper as the indicator species for the complex. This means that the Gulf recreational allocation for black grouper is undefined and would need to be revisited.

**Option 3b** would divide the sector allocations based on the ratio of landings, with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013. **Option 3c** would base sector allocations for waters off the State of Florida on average landings from 2009-2013. **Option 3d** would base sector allocations for waters off the State of Florida on average landings from 2004-2013. **Table 19** outlines the resultant allocations for **Options 3a – 3c** of **Alternative 3**, based on the recreational and commercial landings in **Table 20**. Sector allocation options were determined with landings constrained to be no higher than the ACL for each respective sector in each Council's jurisdiction. For black grouper, the respective ACLs were not exceeded.

**Table 18.** Sector allocation options for black grouper for Alternative 3 of Action 8. Percentages were derived from landings in whole weight.

<b>Black Grouper Sector ACL Options</b>		
<b>Option</b>	Commercial	Recreational
<b>Option 3a</b>	<i>Would vary annually based on yield projections</i>	
<b>Option 3b</b>	62%	38%
<b>Option 3c</b>	48%	52%
<b>Option 3d</b>	58%	42%

**Table 19.** Commercial and recreational landings of black grouper in the Gulf of Mexico and South Atlantic for 1993-2013. Landings are reported in pounds whole weight.

Year	<b>Commercial</b>		<b>Recreational</b>	
	<i>Gulf</i>	<i>South Atlantic</i>	<i>Gulf</i>	<i>South Atlantic</i>
1993	515679	146214	13903	169438
1994	431911	131164	26451	217951
1995	309725	201737	63266	177669
1996	306206	190494	29489	372712
1997	185267	169530	54740	465053
1998	254355	174739	138058	272127
1999	362967	128968	43216	66471
2000	416218	122650	14505	107069
2001	389736	136082	30654	154036
2002	334195	149681	16054	130980
2003	389081	151382	18404	234406
2004	372206	147167	8352	189348
2005	217295	115345	45363	164478
2006	225776	81753	1555	124960
2007	137965	95501	20413	193300
2008	67007	52722	4583	179112
2009	38649	46726	23154	137771
2010	27537	44057	391	36186
2011	50526	62407	667	51898
2012	54165	50813	30718	149353
2013	63400	54075	3815	99096

Source: SERO ALS Database (commercial landings) and MRIP (recreational landings)

Landings indicate that the black grouper fishery has historically been dominated by the commercial fishery. However, recreational landings have increased in the more recent time series (2009-2013), resulting in the ratio of landings between the sectors to slightly favor the recreational sector. It is important to note that during the time periods considered in **Alternative 3**, neither the commercial nor the recreational sector exceeded their respective ACLs.

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*Actions 9 & 10 pertain to seasonal closures in the shallow-water grouper fisheries of the Gulf of Mexico and the South Atlantic. Seasonal closures are time-based closures to fishing effort to conserve or protect fish stocks from harvest during periods of increased vulnerability, such as during spawning seasons.*

## **Action 9. Modify Shallow-water Grouper Species Compositions and Seasonal Closures in the Gulf and South Atlantic**

*Note: Alternatives in this action may be selected in conjunction with those in Actions 7, 8, and 10. Currently, more than one alternative may be selected as preferred for this action.*

**Alternative 1:** No action. Retain the existing respective shallow-water grouper species compositions and seasonal closures in the Gulf and South Atlantic Councils. **(SAFMC SG AP)**

**Alternative 2:** Remove the shallow-water grouper closure for all affected grouper species in the Gulf of Mexico and the South Atlantic:

**Option 2a:** from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida.

~~**Option 2b:** Throughout each Council's jurisdiction.~~

**Alternative 3:** Establish identical regulations for shallow-water grouper species compositions for the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

**Option 3a:** Adopt the Gulf shallow-water grouper species composition for the Gulf and South Atlantic.

**Option 3b:** Adopt the South Atlantic shallow-water grouper species composition for the Gulf and South Atlantic.

**Option 3c:** Specify a new and identical shallow-water species complex for the Gulf and South Atlantic.

**Alternative 4:** Establish identical regulations for the shallow-water grouper seasonal closures in the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida:

**Option 4a:** Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.

**Option 4b:** Adopt the South Atlantic shallow-water grouper seasonal closures for the Gulf and South Atlantic.

**Option 4c:** Establish new and identical regulations for shallow-water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.

~~**Alternative 5:** Establish identical regulations for the shallow-water grouper seasonal closures throughout the Gulf and South Atlantic:~~

~~**Option 5a:** Adopt the Gulf shallow-water grouper seasonal closures for the Gulf and South Atlantic.~~

~~**Option 5b:** Adopt the South Atlantic shallow water grouper seasonal closures for the Gulf and South Atlantic.~~

~~**Option 5c:** Establish new and identical regulations for shallow water grouper seasonal closures in the Gulf of Mexico and the South Atlantic.~~

**Alternative 6:** Modify the shallow-water grouper seasonal closure off Monroe County, Florida to allow harvest of other shallow-water grouper species and only close harvest of gag.

**IPT Note:** If it is the Councils' intent to modify shallow-water grouper species compositions the IPT recommends splitting this action into two separate actions addressing species compositions and seasonal closures, respectively.

**Note:** Items in ~~strickthrough~~ were recommended to be moved to the Considered but Rejected Appendix by the Gulf Council in April 2015.

**SAFMC SG AP MOTION: Council Consider Moving the Management Boundary for Snapper Grouper Species from the GULF/SOUTH ATLANTIC Council Boundary North to Shark Point for the Snapper Grouper Fishery Management Unit.**

**APPROVED BY SAFMC SG AP (13/0)**

### **COUNCIL ACTION**

Option 1. Consider moving Option 2b and Alternative 5, Options 5a-5c to the considered but rejected appendix based on the Gulf Council's motions at their April 2015 meeting.

Option 2. Consider the IPT recommendations to split this action into two separate actions addressing species compositions and seasonal closures, respectively.

- Review the proposed restructured actions and alternatives and determine if any of the restructured alternatives by species can be used.
- Clarify to staff which sector the seasonal closures apply toward.
- Clarify to staff if South Florida areas are designated for closures, what regulations would be applied to the remaining Council jurisdictions?
- Consider reducing the number of alternatives

Option 3. Consider the SAFMC SG AP recommendation.

### **Discussion:**

In the Gulf of Mexico, a separate recreational gag season was developed as part of the gag rebuilding plan (GMFMC 2012). Because other SWG stocks are considered healthy, the utility of the SWG closure was questioned. In addition, much of the dominant gag spawning grounds are now protected by time-area closures. In response to this, the Gulf Council submitted a framework action that among other things, eliminated the February 1 through March 31 SWG closure shoreward of 20 fathoms in the Gulf of Mexico (GMFMC 2012). These new regulations were adopted and implemented in 2013. The SWG closure is still enforced in the exclusive economic zone in the Gulf for waters seaward of 20 fathoms (~36.5 m, or 120 feet). It should be noted that the SEDAR 33 stock assessment, in combination with additional analyses as requested by the Gulf Council's SSC, determined that the Gulf of Mexico gag population was rebuilt at their June 2014 meeting.

The January-April commercial and recreational spawning season closure for South Atlantic SWG was put into place through the final rule for Amendment 16 to the Snapper Grouper FMP (SAFMC 2008). Off the southeastern United States, gag spawn from December through May, with a peak in March and April (McGovern et al. 1998). There is some evidence that spawning may occur earlier off Florida compared to other more northern areas. Gag may make annual late-winter migrations to specific locations to form spawning aggregations, and fishermen know many of these locations. McGovern et al. (2005) found gag were capable of extensive movement and suggested some large scale movement may be related to spawning. In 1998, the South Atlantic Council took action to reduce fishing mortality and protect spawning aggregations of gag and black grouper. Actions included a March-April spawning season closure for the commercial sector. While a March-April commercial closure may offer some protection to spawning aggregations including the selective removal of males, the January-April spawning season closure provided greater protection. Although gag spawn from December through May, aggregations are in place before and after spawning activity (Gilmore and Jones 1992). Therefore, males can be removed from spawning aggregations early in the spawning season, and this could affect the reproductive output of the aggregation if there were not enough males present in an aggregation for successful fertilization of eggs. Amendment 16 (SAFMC 2008) also established a provision to close other SWG including black grouper, red grouper, scamp, red hind, rock hind, yellowmouth grouper, yellowfin grouper, graysby, and coney, which are also known to spawn during January-April. Further protection for gag and SWG were provided through the establishment of ACLs and AMs in Amendment 17B to the Snapper Grouper FMP (SAFMC 2010b) and the Comprehensive ACL Amendment (SAFMC 2011), respectively. Thus, the seasonal closure provides protection to SWG during their spawning season when SWG species may be exceptionally vulnerable to fishing pressure, and ACLs and AMs are in place to help ensure overfishing does not occur. Information on SWG in the South Atlantic is provided in **Table 21**.

**Alternative 1** would retain the existing respective shallow-water grouper species compositions and seasonal closures in the Gulf and South Atlantic Councils. **Alternative 2** would remove the shallow-water grouper closure for all affected grouper species in the Gulf of Mexico and the South Atlantic either from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida (**Option 2a**) ~~or throughout each Council's jurisdiction (**Option 2b**)~~. Law enforcement personnel have commented that the geographic boundaries proposed in **Alternative 2, Option 2a** may be easier to abide by and enforce. The Dade/Monroe County line in the east is a well-known and acknowledged boundary, and the waters west of Shark Point on the west coast of Monroe County do not constitute heavily used fishing grounds.

**Alternative 3** would establish identical regulations for shallow-water grouper species compositions for the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida by adopting either the Gulf shallow-water grouper species composition (**Option 3a**) or the South Atlantic shallow-water grouper species composition (**Option 3b**) for the Gulf and South Atlantic, or by specifying a new and identical shallow-water species complex for the Gulf and South Atlantic (**Option 3c**). Developing identical regulations for shallow-water grouper species compositions in both

Councils' jurisdictions would simplify management for fishermen, especially those who may fish in both Councils' jurisdictions on a single trip. **Alternative 4** would establish identical regulations for the shallow-water grouper seasonal closures in the Gulf and South Atlantic from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida by adopting the Gulf shallow-water grouper seasonal closures (**Option 4a**) or the South Atlantic shallow-water grouper seasonal closures (**Option 4b**) for the Gulf and South Atlantic, or by establishing new and identical regulations for shallow-water grouper seasonal closures in both Councils' jurisdictions (**Option 4c**). ~~**Alternative 5** would establish identical regulations for the shallow-water grouper seasonal closures in the same manner and with the same options as **Alternative 4**, except that the resultant regulations would be applicable throughout the Gulf and South Atlantic.~~ **Alternative 6** would modify the shallow-water grouper seasonal closure off Monroe County, Florida to allow harvest of other species and only close harvest of gag. **Alternative 6** would allow fishermen to pursue shallow-water grouper species determined in **Alternative 3** (if **Alternative 3** is selected as preferred), while protecting the recovery of gag in the South Atlantic.

Spawning season closures were established by both Councils based on the effects of fishing pressure on the reproductive characteristics of shallow-water grouper (SWG) are most often seen in the average size of fish landed, and in changes in sex ratios over time (Coleman et al. 1996; Koenig et al. 2000). Long-term effects can include decreases in fecundity, population abundance, and concomitantly, catch limits. Commercially and recreationally important SWG species which would be subject to additional exploitation, such as red grouper (*Epinephelus morio*), black grouper (*Mycteroperca bonaci*), gag (*M. microlepis*), yellowfin grouper (*M. venenosa*), yellowmouth grouper (*M. interstitialis*), and scamp (*M. phenax*), all of which are protogynous species (Shapiro 1987, Böhlke and Chaplin 1993) attracted to high-relief sites. Gag, scamp, and black grouper form predictable, localized, and seasonal spawning aggregations, increasing their vulnerability to exploitation (Gilmore and Jones 1992; Coleman et al. 1996; Coleman et al. 2000; Brule et al. 2003). Yellowfin and yellowmouth groupers may be similarly vulnerable; however, substantially less empirical life history information is available for these two species (**Table 20**).

**Table 20.** Gulf of Mexico shallow-water grouper spawning information and recreational season closures. The shallow-water grouper complex applies to both the recreational and commercial sector in the Gulf of Mexico; however, the commercial sector is managed with an individual fishing quota system so the season closures listed below only apply to the recreational sector.

<b>Gulf of Mexico Shallow-Water Grouper Complex</b>					
<b>Species</b>	<b>Current Recreational Closure</b>	<b>Spawning Season</b>	<b>Spawning Depth</b>	<b>Northernmost Distribution</b>	<b>Data Source(s)</b>
<b>Gag</b>	1/1-6/30 and 12/4-12/31	January-May	50-120 m	Northern Florida Panhandle	SEDAR 33
<b>Black Grouper</b>	2/1- 3/31 > 20-fath	February-April	≥ 30 m	Middle Grounds/Big Bend	SEDAR 19
<b>Red Grouper</b>	2/1- 3/31 > 20-fath	March-May	25-120 m	Northern Florida Panhandle	SEDAR 12, 2009 SEDAR 12 Update
<b>Scamp</b>	2/1- 3/31 > 20-fath	January-May	30-100 m	Gulf-wide	Heemstra and Randall 1993, Coleman et al. 2011
<b>Yellowfin Grouper</b>	2/1- 3/31 > 20-fath	February-April	30-40 m	Gulf-wide	Nemeth et al. 2006
<b>Yellowmouth Grouper</b>	2/1- 3/31 > 20-fath	March-May	≤ 150 m	Gulf-wide	Heemstra and Randall 1993; Bullock and Murphy 1994

**Table 21.** South Atlantic shallow-water grouper complex spawning information. The shallow-water complex applies to both the commercial and recreational sectors in the South Atlantic.

<b>Species</b>	<b>Current Rec &amp; Comm Closure</b>	<b>Peak Spawning Season</b>	<b>General Spawning Depth</b>	<b>Data Source(s)</b>
<b>Gag</b>	January-April	January-May	24-117 m	McGovern et al. 1998; SEDAR 10
<b>Black Grouper</b>	January-April	January-March	≥ 30 m	Crabtree and Bullock 1998; SEDAR 19
<b>Red Grouper</b>	January-April	February-April	30-90 m	Williams and Carmichael 2009; SEDAR 19
<b>Scamp</b>	January-April	March-May	33-93 m	Williams and Carmichael 2009; Harris et al. 2002
<b>Yellowfin Grouper</b>	January-April	March in FL Keys		Taylor and McMichael 1983
<b>Yellowmouth Grouper</b>	January-April	March-May in Gulf		Bullock and Murphy 1994
<b>Red Hind</b>	January-April	December-February in Caribbean		Thompson and Munro 1978
<b>Rock Hind</b>	January-April	January through March off Cuba		García-Cagide et al. 1994; Rielinger 1999
<b>Graysby</b>	January-April	March, May-July in Caribbean		Erdman 1976
<b>Coney</b>	January-April	November to March off Puerto Rico		Figuerola et al. 1997

## Action 10. Modify Black Grouper Fishery Closures and Bag Limits in the Gulf of Mexico and the South Atlantic.

*Note: Alternatives in this action may be selected in conjunction with those in Actions 7, 8, and 9.*

**Alternative 1: No Action** – Do not modify black grouper recreational closures in the Gulf of Mexico or recreational and commercial closures in the South Atlantic. Maintain currently established seasonal bag limits in both the Gulf of Mexico and the South Atlantic, with black grouper included as a component of the shallow-water grouper and reef fish aggregate bag limits. **(SAFMC SG AP)**

**Alternative 2:** Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf and of the recreational and commercial seasons in the South Atlantic.

**Alternative 3:** Establish a recreational seasonal closure for black grouper for the Gulf and the South Atlantic. *(Multiple options may be chosen)*

**Option 3a:** January

**Option 3b:** February

**Option 3c:** March

**Alternative 4:** Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Florida.

**Alternative 5:** Remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Monroe County, Florida.

~~**Alternative 6:** Remove black grouper from recreational aggregate bag limits in the Gulf of Mexico.~~

**Alternative 7:** Remove black grouper from recreational aggregate bag limits in the South Atlantic.

**Alternative 8:** Establish a recreational bag limit for black grouper.

**Option 8a:** One fish/person/day

**Option 8b:** Two fish/person/day

**Option 8c:** Three fish/person/day

**Option 8d:** Four fish/person/day

**Option 8e:** Apply this bag limit only to the following area(s):

Sub-option 8a: Off Monroe County

Sub-option 8b: In federal waters off Florida

~~Sub-option 8c: In federal waters of the Gulf and the South Atlantic~~

**Alternative 9:** Modify the commercial seasonal closure for black grouper in the Gulf of Mexico and the South Atlantic.

**Option 3a:** January

**Option 3b:** February

**Option 3c:** March

Added by the South Atlantic Council. This addition is not supported by the Gulf Council.

**IPT Note:** The IPT recommends splitting this action into two separate actions addressing seasonal closures and bag limits, respectively.

**IPT Note:** Establishing bag limits under Alternative 8 of Action 11 seems to duplicate efforts in Alternative 2, Option 2c of Action 7. If it is the Councils' desire to establish bag limits for black grouper in the manner shown in Action 11, then the Councils may wish to reconsider delegating the setting and changing of bag limits for black grouper to the State of Florida as outlined in Action 7.

The South Atlantic Council wants to include discussion and a new alternative considering changes to commercial black grouper management, including seasonal closures and trip limits. These changes would affect the Gulf shallow-water grouper IFQ program. The Gulf Council does not support the inclusion of this discussion.

**Note:** Items in ~~strike through~~ were recommended to be moved to the Considered but Rejected Appendix by the Gulf Council in April 2015.

## **COUNCIL ACTION**

Option 1. Consider moving Alternative 6 and Sub-Option 8c to the considered but rejected appendix based on the Gulf Council's motions at their April 2015 meeting.

- Review the proposed restructured actions and alternatives and determine if any of the proposed seasonal closures or bag limit alternatives by species are applicable.
- Clarify to staff which sector the seasonal closures apply toward.
- Clarify to staff if South Florida areas are designated for closures, what regulations would be applied to the remaining Council jurisdictions
- Consider reducing the number of alternatives

Option 2. Consider modifying Alternative 3 Options to list the months January – March, based on the South Atlantic Council's recommendations.

Option 3. Consider moving Alternative 9 to the considered but rejected appendix based on Gulf Council discussion and no motion to adopt.

Option 4. Consider the SAFMC SG AP recommendation.

## **Discussion**

Modifying the current black grouper closures in the Gulf of Mexico and the South Atlantic could provide or remove protections to spawning aggregations, especially during peak spawning activity in January through March. The protection of spawning aggregations has shown to be beneficial to other heavily-targeted protogynous groupers (see Gulf of Mexico gag, SEDAR 33). Also, modifying the inclusion of black grouper in recreational bag limits in the Gulf of Mexico

and the South Atlantic could provide additional harvest capacity for the recreational sector in the south Florida region, and may increase removals of other shallow-water groupers which may be under rebuilding plans. Removal of black grouper from the shallow-water grouper aggregate bag limit could permit the additional harvest of other shallow-water grouper species still included in bag limit. The same can be said about the potential additional harvest of other reef fish species included in the reef fish aggregate bag limit.

**Alternative 1** would retain the current black grouper recreational closure in the Gulf of Mexico, and the recreational and commercial closures in the South Atlantic. Currently established seasonal bag limits in both the Gulf of Mexico and the South Atlantic would also remain the same, with black grouper included as a component of the shallow-water grouper and reef fish aggregate bag limits.

**Alternative 2** would remove black grouper from the shallow-water grouper closure of the recreational season in the Gulf and of the recreational and commercial seasons in the South Atlantic, thus allowing harvest throughout the South Florida region year-round. Alternatively,

**Alternative 3** would establish a recreational seasonal closure for black grouper during January only (**Option 3a**), during February only (**Option 3b**), or during March only (**Option 3c**). Multiple months can be selected for **Alternative 3** if a closure is determined necessary for multiple months.

**Alternative 4** would remove black grouper from the shallow-water grouper closures of the recreational season in the Gulf of Mexico and the recreational and commercial seasons in the South Atlantic in federal waters off Florida. This would open black grouper up to recreational fishing effort beyond 20 fathoms in Gulf waters off Florida during February and March, and to recreational and commercial fishing effort in Atlantic waters off Florida from January through April.

**Alternative 5** would have the same effects as **Alternative 4**, except that **Alternative 5** would only apply to those waters off Monroe County, Florida.

~~**Alternative 6** would remove black grouper from recreational aggregate bag limits in the Gulf of Mexico, and **Alternative 7** would do the same in the South Atlantic. **Alternatives 6** and **7** have the potential to result in increased harvest capacity for those species remaining in the shallow-water grouper aggregate bag limits, as black grouper would no longer account for some portion of those bag limits. Such a removal would permit the harvest of additional fish still included within those respective aggregate bag limits.~~

**Alternative 8** would establish a recreational bag limit for black grouper, with one of the following options: **Option 8a**: One fish/person/day; **Option 8b**: Two fish/person/day; **Option 8c**: Three fish/person/day; and **Option 8d**: Four fish/person/day. **Option 8e** of **Alternative 8** would apply the bag limit option selected from **Options 8a-8d** only to the following area(s): **Sub-option 8a**: Off Monroe County or **Sub-option 8b**: In federal waters off Florida; ~~or **Sub-option 8c**: In federal waters of the Gulf and the South Atlantic.~~ Due to a paucity of data, it is not

possible to conduct a thorough analysis of this alternative for Gulf waters. An analysis of **Alternative 8** for South Atlantic waters is provided in Appendix E.

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*The following action pertains to harmonizing size and bag limits for shallow-water grouper species. Any changes selected in Action 9 will directly impact which species are included in the following action.*

## **Action 11: Harmonize bag and size limits for species in shallow-water grouper complex seasonal closures in Federal Waters Adjacent to Monroe County, Florida.**

**Alternative 1:** No action – Retain the current bag and size limits for species in shallow-water grouper complex seasonal closures in federal waters adjacent to Monroe County, Florida.

**(SAFMC SG AP) Alternative 2:** Harmonize the bag limits for species included in the shallow-water grouper seasonal closures ~~in the exclusive economic zone of the Gulf of Mexico and the South Atlantic~~ in federal waters adjacent to Monroe County, Florida.

**(SAFMC SG AP) Alternative 3:** Harmonize the size limits for species included in the shallow-water grouper seasonal closures ~~in the exclusive economic zone of the Gulf of Mexico and the South Atlantic~~ in federal waters adjacent to Monroe County, Florida.

Modified by the South Atlantic Council. These alternatives are not supported by the Gulf Council in April 2015

**Note:** Species included in the shallow-water complex considered for Action 11 will be subject to the preferred alternatives selected in Action 9.

**IPT Note:** The wording approved by the South Atlantic Council for Alternatives 2 and 3 (~~in strikethrough~~) needs to be amended to reflect that Action 11 addresses only federal waters adjacent to Monroe County, Florida.

**SAFMC SG AP MOTION: Adopt Alternatives 2 &3 in Action 12 (now number 11 above) with the wording: In Federal Waters Adjacent to Monroe County Florida. Approved by SAFMC SG AP (14/0)**

### **COUNCIL ACTION**

Option 1. Review the proposed restructured actions and alternatives and determine if any of the proposed bag limits, seasonal closures, and size limits by species can be applied in this document.

- Clarify to staff to which sector this action is applicable
- Clarify to staff to which area or areas this action is applicable
- Consider incorporating the modified language for Alternatives 2 and 3 with other guidance provided to staff.

Option 2. Consider moving Action 11 to considered but rejected appendix.

Option 3. Consider the SAFMC SG AP recommendation.

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*Action 12 pertains to modifications of permissible gear types.*

## **Action 12. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters**

*Note: This action may be selected in conjunction with Actions 1, 3, and 7. Multiple alternatives may be selected as preferred for this action.*

**Alternative 1:** No action – Retain the current hook requirements in the exclusive economic zone of the Gulf of Mexico and the South Atlantic.

**Alternative 2:** Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in the exclusive economic zone of the Gulf of Mexico.

**Option 2a:** For the recreational fishing sector

**Option 2b:** For the commercial fishing sector

**Alternative 3:** Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

**Option 3a:** For the recreational fishing sector

**Option 3b:** For the commercial fishing sector

**Alternative 4:** Require the use of circle hooks when fishing with natural bait for all snapper-grouper species south of 28° North latitude in the exclusive economic zone of the South Atlantic.

**Option 4a:** For the recreational fishing sector

**Option 4b:** For the commercial fishing sector

**Alternative 5:** Remove the requirement to use circle hooks when fishing with natural bait for all species in the snapper grouper complex north of 28° North latitude in the exclusive economic zone of the South Atlantic.

**Option 5a:** For the recreational fishing sector

**Option 5b:** For the commercial fishing sector

**Alternative 6:** Remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in federal waters from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida

**Option 6a:** For the recreational fishing sector

**Option 6b:** For the commercial fishing sector

**IPT Note:** The IPT recommends the removal of Alternative 5, as it is outside of the scope of this amendment. The area being referenced in Alternative 5 includes areas north of the State of Florida.

The South Atlantic Council would like to retain Alternative 5, as it would allow them to address other aspects of Snapper-Grouper management in one document. The Gulf Council discouraged the inclusion of items which are outside the scope of this amendment.

**SAFMC SG AP MOTION: Recommend removing circle hook requirement in South Atlantic for recreational sector (Alternative 5 Option 5a). Disapproved by SAFMC SG AP (2/10)**

**COUNCIL ACTION**

Option 1. Consider the SAMFC SG AP motion to modify the language for Alternative 2 to specify a boundary south of 28 degrees north, Shark Point to the Dade/Monroe County line, or the SA/GM Council boundary.

Option 2. Consider reducing the number of alternatives to limit the scope of this action to south Florida species and areas. For example, consider removing Alternative 5.

**Discussion:**

Action 12 pertains to modifications of permissible gear types. In 2008, the Gulf Council adopted a preferred management alternative in Amendment 27 to the Reef Fish Fishery Management Plan, which required recreational anglers fishing in federal waters to use non-stainless steel circle hooks when catching reef fishes with natural bait (50 CFR 622.41). Circle hooks are defined by regulation as “a fishing hook designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape.” Florida matched federal regulations, with the added specification that a circle hook must have zero degrees of offset (Florida Administrative Code §68B-14.005).

In 2010, the South Atlantic Council approved Amendment 17A to the snapper grouper Fishery Management Plan (SAFMC 2010a), which required recreational and commercial anglers fishing in federal waters to use non-stainless steel circle hooks (offset or non-offset) when fishing for all species in the snapper grouper complex when using hook-and-line-gear with natural baits in waters North of 28 degrees North latitude. This requirement was effective March 3, 2011.

Multiple reef fish species managed by the Gulf Council occur in waters south of 28°N latitude. A recent stock assessment on red snapper recognized and incorporated reduced discard mortality as a result of the requirement to use circle hooks when fishing with natural bait (SEDAR 31 2013). Sauls and Ayala (2012) observed red snapper caught with circle hooks and J hooks within the recreational sector and reported a 63.5% reduction in potentially lethal hooking injuries for red snapper caught with circle hooks (6.3% potentially lethal injuries, versus 17.1% with J hooks) (SEDAR 31 2013). SEDAR 33 (2014a, b) examined the effects of hook type on gag and greater amberjack and determined that the generally low level of recreational discard mortality for both species (both prior to and after the 2008 circle hook requirement) negated the realization of benefits from using circle hooks (Sauls and Ayala 2012; Sauls and Cermak 2013; Murie and Parkyn 2013).

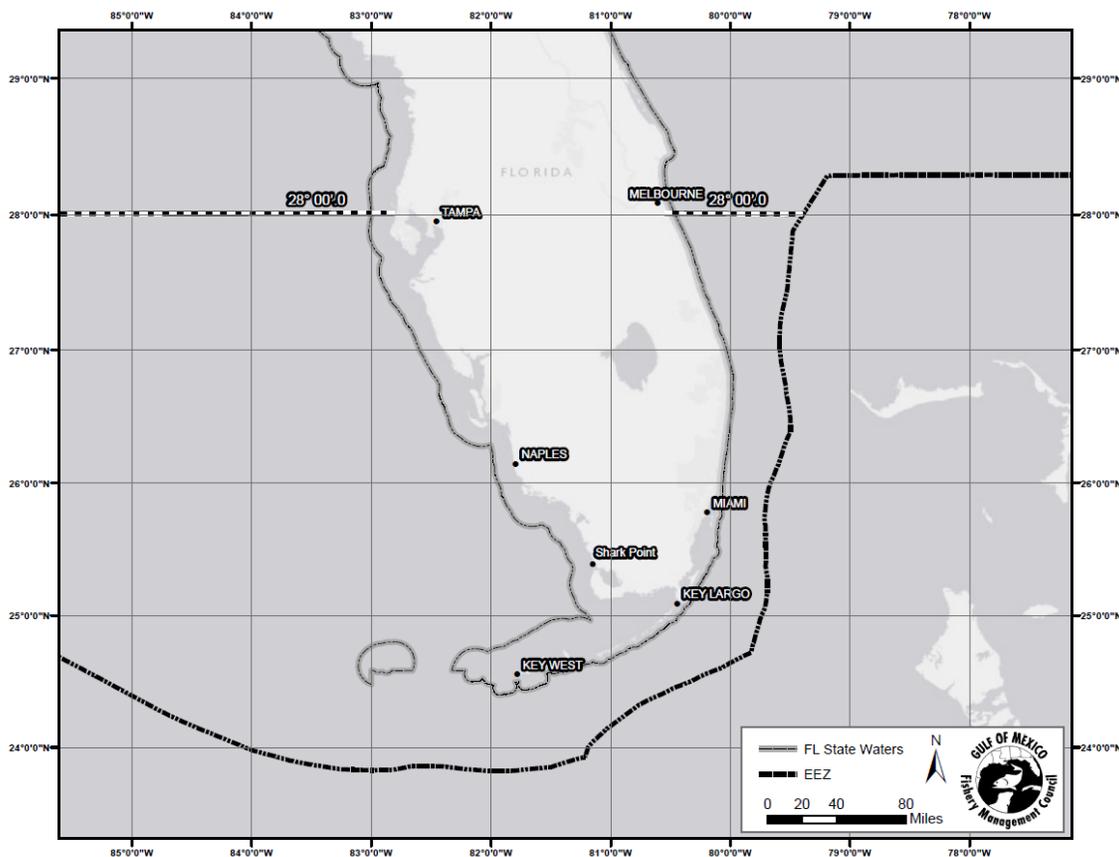
**Alternative 1** would retain the current circle hook requirements in Gulf of Mexico jurisdictional waters, requiring recreational anglers fishing in federal waters to use non-stainless steel circle hooks when catching reef fish with natural bait. Biological impacts from this alternative are not expected to change from present conditions. Any biological benefit(s) to the current circle hook requirement would be expected to persist.

**Alternative 2** would remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper in the Gulf of Mexico. **Option 2a** would remove the requirement for the recreational fishing sector, and **Option 2b** would remove the requirement for the commercial fishing sector. Anglers have informed resource managers of an increased propensity for gut-hooking yellowtail snapper when fishing with circle hooks due to the small size of hook needed to successfully hook yellowtail snapper. Anglers indicate that the smaller circle hooks are swallowed completely into the stomach, increasing the likelihood of the hook snagging somewhere in the fish's digestive tract. If J-hooks are permitted for use, anglers argue, they will be able to hook yellowtail snapper in the mouth more frequently due to the morphology of the fish's mouth.

In the absence of scientific literature to characterize differences in lethal hooking injuries from different hook types for yellowtail snapper, the biological effects of removing the circle hook requirement are largely unknown. However, requiring the use of one hook type for multiple cohabitating species and not for another may result in a management measure which is difficult to enforce. Anglers fishing for yellowtail snapper with hooks other than circle hooks would not be likely to keep from landing any of the other reef fish species for which circle hooks are required. Incidental catch of fish other than yellowtail snapper under **Alternative 2 Option 2a** may have deleterious biological effects on bycatch, including those species which are currently under rebuilding plans (red snapper and gray triggerfish). These effects could be influential elsewhere in the Gulf, as yellowtail snapper are increasingly found off Texas. A potential exception to these possible impacts applies to the commercial fishing sector (**Option 2b**), where the fishing practices used almost exclusively target yellowtail snapper. Commercial fishermen indicate that they use chum bags on the surface to encourage yellowtail snapper to school near the transom of the fishing vessel, and then use natural bait on small hooks to catch and land the fish. The commercial fishermen also indicate that their release tools allow them to release yellowtail snapper which have been caught with J-hooks more easily than those caught with circle hooks, resulting in decreased handling times for fish which are to be discarded.

**Alternative 3** would remove the requirement to use circle hooks when fishing with natural bait for yellowtail snapper south of 28°N latitude in the EEZ in the Gulf (**Figure 6**). **Option 3a** would remove the requirement for the recreational fishing sector, and **Option 3b** would remove the requirement for the commercial fishing sector. **Alternative 3** would be expected to have similar negative biological consequences as **Alternatives 2**, albeit to a lesser degree than both. Under **Alternative 3**, all yellowtail snapper which occur in the Gulf south of 28°N latitude would be vulnerable to fishing pressure from hook types other than circle hooks. Permitting the use of any hook type may have negative effects on the rebuilding plans of other reef-associated species (such as red snapper), and may result in increased discard mortality in multiple fisheries.

**Alternative 4** would require the use of circle hooks when fishing with natural bait for all snapper-grouper species south of 28° North latitude in the exclusive economic zone of the South Atlantic for the recreational fishing sector (**Option 4a**) and/or the commercial sector (**Option 4b**). Such a requirement would make the snapper-grouper regulations in the South Atlantic commensurate with the reef fish regulations for the Gulf of Mexico. Additionally, benefits to the biological environment may be realized for those species with documented decreases in post-release mortality when caught with circle hooks as opposed to other hook types.

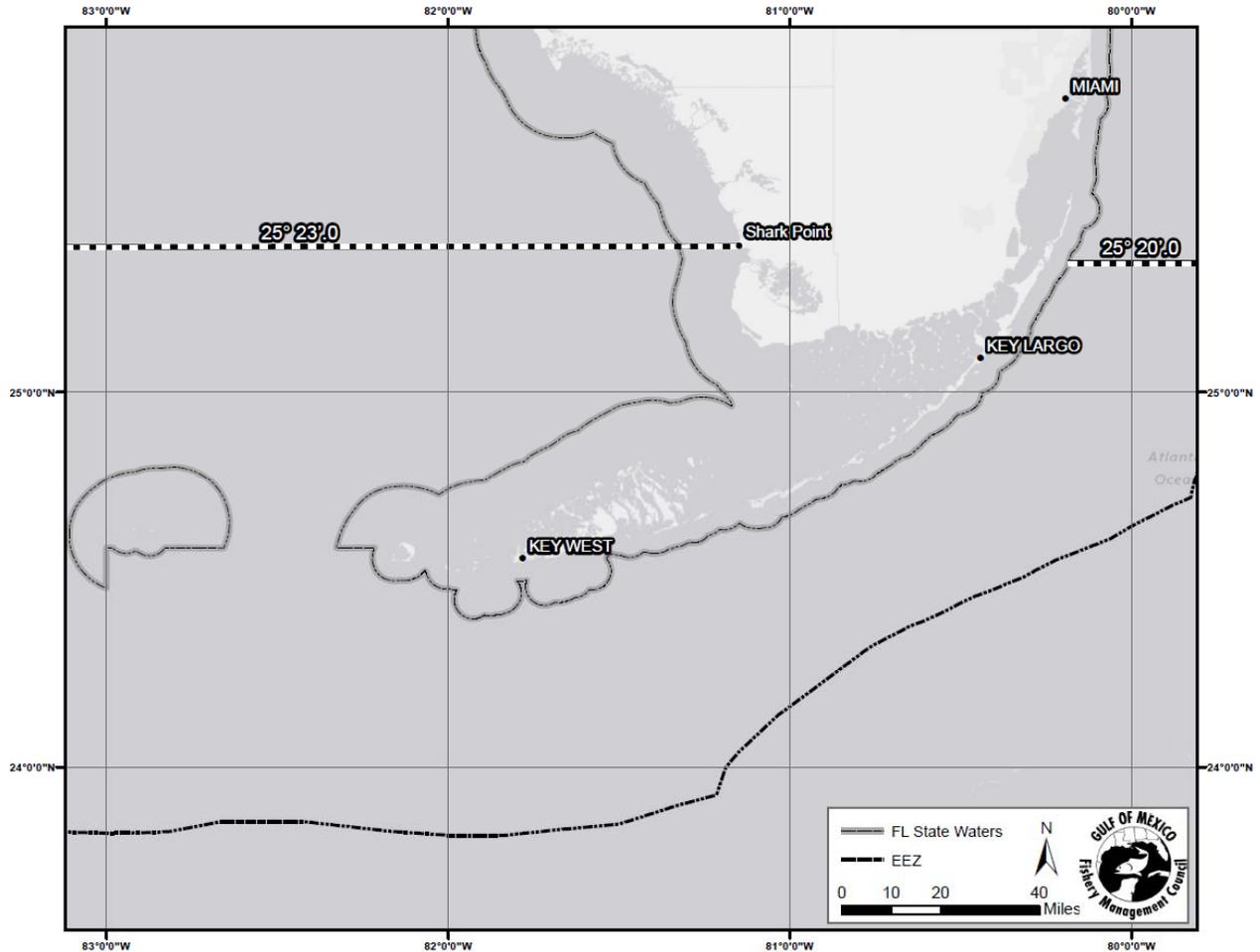


**Figure 6.** State of Florida with proposed 28 degree North latitude boundary in the Gulf and South Atlantic Councils' jurisdictions.

**Alternative 5** would remove the requirement to use circle hooks when fishing with natural bait for all species in the snapper grouper complex north of 28° North latitude in the exclusive economic zone of the South Atlantic for the recreational fishing sector (**Option 5a**) and/or the commercial sector (**Option 5b**). This alternative would create consistent fishing regulations for the selected sector(s) throughout the South Atlantic Council's jurisdiction. Any socio-economic benefits currently realized south of 28° North latitude would be realized north of that line, as would any biological impacts.

**Alternative 6** would remove the requirement to use circle hooks when fishing for yellowtail snapper in federal waters from the Dade/Monroe County line on the east coast of Florida to Shark Point on the west coast of Monroe County, Florida (**Figure 7**) for the recreational fishing sector (**Option 6a**) and/or the commercial sector (**Option 6b**). Circle hooks are currently not required when fishing for yellowtail snapper south of 28° N latitude in the exclusive economic zone of the South Atlantic. The primary harvest areas for both the recreational and commercial sectors exist south of ~26° N latitude (Monroe and Dade counties, >70% recreational and >97% commercial). When commercial fishing for yellowtail snapper, fishermen use chum to bring the fish to the surface. Small hooks are baited with natural bait and fish are typically hooked at the surface within five meters of the fishing vessel. This practice has been shown to limit bycatch of

non-yellowtail snapper species, since fishermen can actively monitor which fish are pursuing a bait. Additionally, commercial fishermen believe that the combination of hook size and historical fishing practices can serve as safeguards against bycatch of undersized yellowtail snapper and non-yellowtail snapper species.



**Figure 7.** State of Florida with proposed Shark Point boundary line on the west coast of Florida and Dade/Monroe County line on the east coast of Florida.

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*Action 13 pertains exclusively to accountability measures. Accountability measures are used by the Councils to compensate for overages in a given fishing year, to decrease the probability that deleterious impacts to fisheries will persist for long time periods.*

## **Action 13: Specify Accountability Measures for South Florida Species**

*Note: Under some circumstances more than one alternative could be selected as preferred.*

**Alternative 1:** No action. Maintain the current recreational and commercial accountability measures (AMs) for yellowtail snapper, mutton snapper, and black grouper based on the Reef Fish Resources and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

South Atlantic: Commercial AM – In-season closure when the ACL is expected to be met and ACL reduced in following fishing season if species is overfished and ACL is exceeded.  
Recreational AM – if ACL is exceeded, monitor landings in following season for persistence in landings and reduce the length of the following fishing season, if necessary.

Gulf: For Yellowtail Snapper and Mutton Snapper, if the combined commercial and recreational landings exceed the stock ACL, in-season AMs are in effect for the following year. If the combined landings reach or are projected to reach the stock ACL, both sectors will be closed for the remainder of that fishing year. For black grouper, this AM applies to the ACL for the other shallow-water grouper aggregate (black grouper, scamp, yellowmouth grouper, and yellowfin grouper).

**Alternative 2:** If the sum of the commercial and recreational landings exceeds the stock ACL, then during the following fishing year, if the sum of commercial and recreational landings reaches or is projected to reach the stock ACL, then the commercial and recreational sectors will be closed for the remainder of that fishing year. On and after the effective date of a closure, all sales, purchases harvest or possession of this species in or from the EEZ will be prohibited.

**Option 2a:** For yellowtail snapper

**Option 2b:** For mutton snapper

**Option 2c:** For black grouper

**Alternative 3:** If commercial landings as estimated by the Science and Research Director reach or are projected to reach the commercial ACL, NMFS the Regional Administrator shall publish a notice to would 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 EEZ would be limited to the recreational bag and possession limit. Additionally, if the commercial ACL is exceeded, NMFS the Regional Administrator shall publish a notice to would 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.

**Option 3a:** For yellowtail snapper

**Option 3b:** For mutton snapper

**Option 3c:** For black grouper

**Alternative 4:** If recreational landings, as estimated by the Science and Research Director, exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings. If necessary, NMFS the Regional Administrator shall publish a notice to **would** reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if NMFS the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

**Option 4a:** For yellowtail snapper

**Option 4b:** For mutton snapper

**Option 4c:** For black grouper

**Alternative 5:** If recreational landings reach or are projected to reach the recreational ~~annual catch limit~~ ACL, NMFS **would** National Marine Fisheries Service will file a notification with the Office of the Federal Register to close the recreational sector for the remainder of the fishing year, unless, using the best scientific information available, NMFS determines that a closure is unnecessary.

**Option 5a:** If the species is overfished

**Sub-option 5a(1):** For yellowtail snapper

**Sub-option 5a(2):** For mutton snapper

**Sub-option 5a(3):** For black grouper

**Option 5b:** Regardless of stock status

**Sub-option 5b(1):** For yellowtail snapper

**Sub-option 5b(2):** For mutton snapper

**Sub-option 5b(3):** For black grouper

**Alternative 6:** The Councils would jointly set the ACL for the recreational and commercial sector. If the combined recreational ACL and commercial ACL is met or expected to be met, NMFS would close both sectors for the remainder of the fishing year.

**Option 6a:** yellowtail snapper

**Option 6b:** mutton snapper

**Option 6c:** black grouper

**Note:** The South Atlantic Council is considering changes to their accountability measures in Snapper-Grouper Amendment 34, which could change the no-action and alternatives in Action 13. Amendment 34 has been transmitted to the Secretary of Commerce by the South Atlantic Council and is currently in the NMFS review and rule-making process.

**SAFMC SG AP MOTION:** The SAFMC SG AP did not discuss the AMs. They chose to wait until the Council take action before they provide any input.

## **COUNCIL ACTION**

Option 1. Consider modifying the language for Alternatives 3, 4, and 5 to track the language used by the South Atlantic Council.

Option 2. Consider modifying the language for Alternatives 3, 4, and 5 to track the new language provided by NMFS SERO.

Option 3. Consider reducing the number of alternatives based Council decisions made on previous actions.

## **Discussion**

**Alternative 2** follows the AMs that are in place for Gulf species; whereas, **Alternatives 3-5** follow AMs that are being considered for snapper-grouper species in the Comprehensive AM and Dolphin Allocation Amendment. **Alternative 6** would close the areas covered by a joint ABC and ACL to fishing for the species selected in the associated options only when the overall ACL is met. **Alternative 6** would require each Council to establish recreational and commercial ACLs for the preferred options.

Compared to **Alternative 1 (No Action)**, **Alternatives 2-6** would benefit the biological environment to varying degrees based on the sub-alternatives chosen under each alternative. For the recreational sector, the most biologically beneficial option is likely **Alternatives 5**. For the commercial sector, the most biologically beneficial option compared to **Alternative 1 (No Action)** is likely to be **Alternative 3**. None of the alternatives considered under this action would significantly alter the way in which the fisheries are prosecuted in the South Atlantic EEZ. No adverse impacts on endangered or threatened species are anticipated because of this action; nor are any adverse impacts on essential fish habitats or habitat areas of particular concern including corals, sea grasses, or other habitat types.

For the commercial sector, the alternatives may be ranked from lowest to highest probability of paybacks and short-term adverse economic effects as follows: **Alternative 1 (No Action)**, **Alternatives 2**, **Alternatives 6**, and **Alternative 3**. The likelihood that a species would be affected by this action is based primarily on the probability that its total ACL would be reached, and whether or not the species is overfished.

For the recreational sector, **Alternative 4** would be less likely to cause short-term direct economic effects compared to **Alternatives 5** and **6** because any closure would not occur until the second year of overages. However, **Alternatives 5** and **6** would be more likely to prevent long term, direct economic effects compared to **Alternative 4**.

For the commercial sector, maintaining the current AMs under **Alternative 1 (No Action)** would not be expected to result in additional negative effects on the commercial fleets of these fisheries, but could also negate benefits to the commercial sectors by not allowing flexibility in the payback provisions, such as those in **Alternatives 3** and **6**. **Alternative 3** would provide the most flexibility for triggering the payback AM, in that the most critical conditions must be met before the payback is triggered, and would be expected to be most beneficial to commercial fishermen in that it would be less likely that a payback is required for an overage. Additionally, **Alternative 3** would be more consistent with AMs for other species such as king mackerel and Spanish mackerel in the South Atlantic.

For the recreational sector, maintaining the current AMs under **Alternative 1 (No Action)** would not be expected to result in additional negative effects on recreational fishermen and for-hire businesses, other than inconsistency in AMs among all species. For many of these species, establishment of a payback provision without a post-season AM under **Alternative 4** would create an increased likelihood that an overage of the recreational ACL could reduce fishing opportunities in the following year. However, **Alternatives 4** provides some flexibility in how a post-season payback would be triggered. The in-season closure AM for the recreational sector in **Alternatives 5** and **6** could have negative effects on recreational fishing opportunities and for-hire businesses for the stocks that do not have a recreational in-season AM in place. However, **Alternative 6** would reduce the likelihood of a recreational in-season closure.

**Alternatives 2-6** may be associated with slight changes to the administrative environment based on the frequency with which each of the AM options for the commercial sector would be triggered. The payback provision under **Alternatives 3** and **4** would be triggered less frequently given that the species must be overfished and the total ACL exceeded, resulting in the lowest direct effects on the administrative environment. The administrative impacts associated with **Alternative 2** are largely the same as those under **Alternative 4**, with the addition of continued monitoring for persistence of increased landings when a species' recreational ACL has been exceeded. **Alternatives 3** and **4** are the least likely to be triggered. Overall, the administrative impacts of all the alternatives considered under this action, compared to **Alternative 1 (No Action)**, are expected to be minimal.

## CHAPTER 3. REFERENCES

- Böhlke, J.E. and C.C.G. Chaplin. 1993. Fishes of the Bahamas and adjacent tropical waters, 2nd edition. University of Texas Press, Austin, TX. 771 p.
- Brulé, T., X. Renan, T. Colas-Marrufo, Y. Hauyon, A.N. Tuz-Sulub, C. Deniel. 2003. Reproduction in the protogynous black grouper (*Mycteroperca bonaci* (Poey)) from the southern Gulf of Mexico. Fisheries Bulletin 101: 463-475.
- Bullock, L.H. and M.D. Murphy. 1994. Aspects of the life history of the yellowmouth grouper, *Mycteroperca interstitialis*, in the eastern Gulf of Mexico. Bulletin of Marine Science 55(1):30-45.
- Coleman, F.C., Koenig, C.C. and L.A. Collins. 1996. Reproductive styles of shallow-water groupers (Pisces: Serranidae) in the eastern Gulf of Mexico and the consequences of fishing on spawning aggregations. Environmental Biology of Fishes 47: 129-141.
- Coleman, F.C., C.C. Koenig, G.R. Huntsman, J.A. Musick, A.M. Eklund, J.C. McGovern, R.W. Chapman, G.R. Sedberry and C.B. Grimes. 2000. Long-lived reef fishes: The grouper-snapper complex. Fisheries 25(3): 14-21.
- Crabtree, R.E. and L.H. Bullock. 1998. Age, growth, and reproduction of black grouper, *Mycteroperca bonaci*, in Florida waters. Fisheries Bulletin. 96:735-753.
- Erdman, D.S. 1976. Spawning patterns of fishes from the northeastern Caribbean. Agric. Fish. Contrib. Puerto Rico Department of Agriculture Vol. 8.
- Figuerola, M, D. Matos-Caraballo, and W. Torres. 1997. Maturation and reproductive seasonality of four reef fish species in Puerto Rico. Proceedings of the Gulf Caribbean Fisheries Institute 50: 938-968.
- García-Cagide, A., R. Claro, and B.V. Koshelev. 1994. Reproducción. p. 187-262. In R. Claro (ed.) Ecología de los peces marinos de Cuba. Inst. Oceanol. Acad. Cienc. Cuba. and Cen. Invest. Quintana Roo (CIQRO) México.
- Gilmore, R.G. and R.S. Jones. 1992. Color variation and associated behavior in the epinepheline groupers, *Mycteroperca microlepis* (Goode and Bean) and *M. phenax* (Jordan and Swain). Bulletin of Marine Science 51: 83-103.
- GMFMC (Gulf of Mexico Fishery Management Council) 2009. Amendment 31 to the Fishery Management Plan for Reef Fish Resources in the Gulf of Mexico: Addresses Bycatch of Sea Turtles in the Bottom Longline Component of the Gulf of Mexico Reef Fish Fishery. <http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Final%20Draft%20RF%20Amend%2031%206-11-09.pdf>

GMFMC (Gulf of Mexico Fishery Management Council) 2012. Framework action to set the 2013 gag and recreational fishing season and bag limit and modify the February-March shallow-water grouper closed season. Framework Action to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico.

Koenig, C.C., F.C. Coleman, C.B. Grimes, G.R. Fitzhugh, C.T. Gledhill, K.M. Scanlon, and M. Grace. 2000. Protection of essential fish spawning habitat for the conservation of warm temperate reef fish fisheries of shelf-edge reefs of Florida. *Bulletin of Marine Science* 66:593-616.

Matthews, T.R., C. Cox, and D. Eaken. 2005. Bycatch in Florida's spiny lobster trap fishery. *Proceedings of the 47<sup>th</sup> Gulf and Caribbean Fisheries Institute*. 66-78.

McGovern, J.C., G. R. Sedberry, H. S. Meister, T. M. Westendorff, D. M. Wyanski and P. J. Harris. 2005. A Tag and Recapture Study of Gag, *Mycteroperca microlepis*, from the Southeastern United States. *Bulletin of Marine Science* 76:47-59.

McGovern, J.C., D.M. Wyanski, O. Pashuk, C.S. Manooch, III, and G.S. Sedberry. 1998. Changes in the sex ratio and size at maturity of gag, *Mycteroperca microlepis*, from the Atlantic coast of the southeastern United States during 1976-1995. *Fisheries Bulletin* 96:797-807.

Murie, D.J. and D.C. Parkyn. 2013. Preliminary release mortality of Gulf of Mexico greater amberjack from commercial and recreational hand-line fisheries: Integration of fishing practices, environmental parameters, and fish physiological attributes. SEDAR, North Charleston, SC. SEDAR33-DW29. 13 p.

Nemeth, R.S., E. Kadison, S. Herzlieb, J. Blondeau, E.A. Whiteman. 2006. Status of a yellowfin (*Mycteroperca venenosa*) grouper spawning aggregation in the U.S. Virgin Islands with notes on other species. *Proceedings of the Gulf and Caribbean Fisheries Institute* 57:541-558.

Rielinger, D.M. 1999. Impacts of fishing gear on habitat in Tropical Seas: Gulf of Mexico, South Atlantic, and Caribbean. Reefkeeper International.

SAFMC (South Atlantic Fishery Management Council). 2009. Amendment 16 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Impact Statement, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 608 pp. plus appendices.

SAFMC (South Atlantic Fishery Management Council). 2010a. Amendment 17A to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 375 pp. plus appendices.

SAFMC (South Atlantic Fishery Management Council). 2010b. Amendment 17B to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region with Final Environmental Assessment, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 406 pp. plus appendices.

SAFMC (South Atlantic Fishery Management Council). 2011. Comprehensive Annual Catch Limit Amendment for the South Atlantic Region with Final Environmental Impact Statement, Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 4055 Faber Place Drive, Ste 201, Charleston, S.C. 29405. 755 pp. plus appendices.

Sauls, B. and O. Ayala. 2012. Circle hook requirements in the Gulf of Mexico: application in recreational fisheries and effectiveness for conservation of reef fishes. *Bulletin of Marine Science* 88:667-679.

Sauls, B. and B. Cermak. 2013. Characterization of greater amberjack discards in recreational for-hire fisheries. SEDAR, North Charleston, SC. SEDAR33-DW04. SEDAR, North Charleston, SC. 24 p.

SEDAR 10. 2006. Stock assessment of gag in the South Atlantic. Available from the SEDAR website: [www.sefsc.noaa.gov/sedar/](http://www.sefsc.noaa.gov/sedar/)

SEDAR 12. 2009. Stock assessment update of red grouper in the Gulf of Mexico. Available from the SEDAR website: [www.sefsc.noaa.gov/sedar/](http://www.sefsc.noaa.gov/sedar/)

Shapiro, D.Y. 1987. Reproduction in groupers. Pages 295-327 in J.J. Polovina and S. Ralston, editors. *Tropical snapper and groupers: biology and fisheries management*. Westview Press, Boulder and London.

SEDAR 19. 2009. Stock assessment of black grouper. Available from the SEDAR website: [www.sefsc.noaa.gov/sedar/](http://www.sefsc.noaa.gov/sedar/)

SEDAR 33. 2013. Stock assessment of gag in the Gulf of Mexico. Available from the SEDAR website: [www.sefsc.noaa.gov/sedar/](http://www.sefsc.noaa.gov/sedar/)

SEDAR 31, 2013. Stock Assessment Report for Gulf of Mexico Red Snapper. Southeast Data, Assessment, and Review. North Charleston, SC. 1103 pp.

SEDAR 33, 2014a. Stock Assessment Report for Gulf of Mexico Gag. Southeast Data, Assessment, and Review. North Charleston, SC. 609 pp.

SEDAR 33, 2014b. Stock Assessment Report for Gulf of Mexico Greater Amberjack. Southeast Data, Assessment, and Review. North Charleston, SC. 499 pp.

Taylor, R.G. and R.H. McMichael, Jr. 1983. The wire fish-trap fisheries in Monroe and Collier counties, Florida. *Fla. Mar. Res. Publ.*, no. 39, FDNR, St. Petersburg, FL (USA), 19 pp.

Thompson, R. and J.L. Munro. 1978. Aspects of the biology and ecology of Caribbean reef fishes: Serranidae (hinds and groupers). *J. Fish Biol.* 12:115-146.

Williams and J. Carmichael 2009. Final Report: South Atlantic Fishery Independent Monitoring Program Workshop Hosted by the: National Marine Fisheries Service, Southeast Fisheries Science Center and South Atlantic Fishery Management Council.

# APPENDIX A. CONSIDERED BUT REJECTED ACTIONS AND ALTERNATIVES

## Action 1: Modifications to the Fishery Management Plans of the Gulf and South Atlantic Fishery Management Councils

**Alternative 1:** No action. Do not modify the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

**Alternative 2:** Delegate management of any of the species listed below to the State of Florida.

**Option 2a:** yellowtail snapper

**Option 2b:** mutton snapper

**Option 2c:** black grouper recreational fishery only

Note: Alternative 2 would delegate all management including ABC, ACLs, management measures, etc.

**Alternative 3:** Manage each stock as a single unit with an overall combined multijurisdictional annual catch limits (ACLs).

Suggested wording from FWC Staff from minutes pages 125-127: The Gulf and South Atlantic Councils will agree to manage any of the species listed below with an overall ABC and an overall ACL. Each Council would agree to a recreational and commercial split. Both Councils will close their jurisdictions when the overall ACL is met.

**Option 3a:** yellowtail snapper

**Option 3b:** mutton snapper

**Option 3c:** black grouper

**Alternative 4:** Remove any of the species listed below from the Reef Fish and Snapper Grouper Fishery Management Plans for the Gulf and South Atlantic Councils, respectively.

**Option 4a:** yellowtail snapper

**Option 4b:** mutton snapper

**Option 4c:** black grouper

**Alternative 5:** Remove any of the species listed below from the Reef Fish Fishery Management Plan of the Gulf Council and request the Secretary of Commerce designate the South Atlantic Council as the responsible Council.

**Option 5a:** yellowtail snapper

**Option 5b:** mutton snapper

**Alternative 6:** Remove any of the species listed below from the Snapper Grouper Fishery Management Plan of the South Atlantic Council and request the Secretary of Commerce designate the Gulf Council as the responsible Council.

**Option 6a:** yellowtail snapper

**Option 6b:** mutton snapper

**Rationale:** Action 1 was removed by the Committee, and the alternatives therein were merged within other remaining Actions in the document.

### **Action 3: Allocate Yellowtail Snapper Sector Annual Catch Limits to the State of Florida and Create a Landings Allowance for other Gulf and South Atlantic States**

**Alternative 2.** Use both Councils' agreed upon ABC for yellowtail snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

**Option 2a:** Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

**Alternative 3.** Use both Councils' agreed upon ABC for yellowtail snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 75% of the ABC for South Atlantic Council jurisdictional waters, and 25% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

**Option 3a:** Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

**Option 3b:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3c:** Base sector allocations for waters off Florida on average landings from 2008-2012

**Option 3d:** Base sector allocations for waters off Florida on average landings from 200x-20xx

**Option 3e:** Employ some other allocation formula

**Alternative 4.** Create a landings allowance for yellowtail snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

**Option 4a:** Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

**Option 4b:** Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

**Rationale:** Alternative 2a was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future.

Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

## Action 4: Delegate Commercial and Recreational Management of Mutton Snapper to the State of Florida

**Alternative 2:** Determine specific recreational management items for delegation to the State of Florida for Mutton Snapper:

**Option 2a:** Size limits

**Option 2b:** Seasons

**Option 2c:** Bag limits

**Option 2d:** Minor modifications to existing allowable gear

**Option 2e:** Fishing year

**Alternative 3:** Determine specific commercial management items for delegation to the State of Florida for Mutton Snapper:

**Option 3a:** Size limits

**Option 3b:** Seasons

**Option 3c:** Commercial trip limits

**Option 3d:** Minor modifications to existing allowable gear

**Option 3e:** Fishing year

**Rationale:** Alternatives 2e and 3e were removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

## Action 5: Allocate Mutton Snapper Sector Annual Catch Limits to the State of Florida and Create a Bycatch Allowance for other Gulf and South Atlantic States

**Alternative 2.** Use both Councils' agreed upon ABC for mutton snapper and allocate the commercial and recreational ACLs for the Gulf and South Atlantic:

**Option 2a:** Use the South Atlantic Council's current sector allocation formula (bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

**Alternative 3.** Use both Councils' agreed upon ABC for mutton snapper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 82% of the ABC for South Atlantic Council jurisdictional waters, and 18% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

**Option 3a:** Use the South Atlantic Council’s current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1986-2008, and 50% on the mean of the landings from 2006-2008.

**Option 3b:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3c:** Base sector allocations for waters off Florida on average landings from 2008-2012

**Option 3d:** Base sector allocations for waters off Florida on average landings from 200x-20xx

**Option 3e:** Employ some other allocation formula

**Alternative 4.** Create a landings allowance for mutton snapper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

**Option 4a:** Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

**Option 4b:** Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

**Rationale:** Alternative 2a was removed after a mathematical bias was identified with the proposed “bowtie” approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

## **Action 8: Delegate Recreational Management of Black Grouper to the State of Florida**

**Alternative 2:** Determine specific recreational management items for delegation to the State of Florida for black grouper:

**Option 2a:** Size limits

**Option 2b:** Seasons

**Option 2c:** Bag limits

**Option 2d:** Minor modifications to existing allowable gear

**Option 2e:** Fishing year

**Rationale:** Alternative 2e was removed after the Committee determined that setting the fishing year should remain a Council responsibility, in conjunction with determining ABCs, ACLs, and AMs.

## **Action 9: Allocate Black Grouper Recreational Annual Catch Limits to the State of Florida and Create a Recreational Bycatch Allowance for other Gulf and South Atlantic States**

**Alternative 2.** Use both Councils' agreed upon ABC for black grouper and allocate the recreational ACLs for the Gulf and South Atlantic:

**Option 2b:** Use the South Atlantic Council's current sector allocation formula (Bowtie approach): divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

**Alternative 3.** Use both Councils' agreed upon ABC for black grouper and create Gulf commercial and recreational sector ACLs from the current ABC jurisdictional split: 47% of the ABC for South Atlantic Council jurisdictional waters, and 53% for Gulf Council jurisdictional waters. Gulf sector allocations would be derived from one of the options below, and the subsequent Gulf and South Atlantic sector allocations would be combined to create sector allocations off Florida:

**Option 3a:** Use the South Atlantic Council's current sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1991-2008, and 50% on the mean of the landings from 2006-2008.

**Option 3b:** Use the following sector allocation formula: divide the sector allocations based on the ratio of landings with 50% of the weighting given to the mean of the landings from 1993-2008, and 50% on the mean of the landings from 2009-2013.

**Option 3c:** Base sector allocations for waters off Florida on average landings from 2008-2012

**Option 3d:** Base sector allocations for waters off Florida on average landings from 200x-20xx

**Option 3e:** Employ some other allocation formula

**Alternative 4.** Create a recreational landings allowance for black grouper in the other Gulf (TX, LA, MS, AL) and other South Atlantic States (GA, SC, NC).

**Option 4a:** Adjust ABC by 1% to address landings in the other Gulf and South Atlantic States.

**Option 4b:** Adjust ABC by 2% to address landings in the other Gulf and South Atlantic States.

**Option 4c:** Adjust ABC by 3% to address landings in the other Gulf and South Atlantic States.

**Option 4d:** Adjust ABC by 4% to address landings in the other Gulf and South Atlantic States.

**Rationale:** Alternative 2b was removed after a mathematical bias was identified with the proposed "bowtie" approach. Alternative 3 was removed in favor of Alternative 2, and because changes in the current jurisdictional split would require revisiting sector allocations in the future. Alternative 4 was removed because it was not deemed necessary to accomplish stated management goals.

## Action 10: Specify Accountability Measures for South Florida Species

**Alternative 3:** If commercial landings as estimated by the Science and Research Director reach or are projected to reach the commercial 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 EEZ is limited to the bag and possession limit. Additionally,

**Option 3a:** 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.

**Option 3b:** 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 total ACL (commercial ACL and recreational ACL) is exceeded.

**Option 3c:** 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 4:** If recreational landings, as estimated by the Science and Research Director, exceed the recreational ACL, then during the following fishing year, recreational landings will be monitored for a persistence in increased landings.

**Option 4a:** If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

**Option 4b:** If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

**Option 4c:** If necessary, the Regional Administrator shall publish a notice to reduce the length of fishing season and the recreational ACL in the following fishing year by the amount of the recreational overage, only if the species is overfished and the total ACL (commercial ACL and recreational ACL) is exceeded. The length of the recreational season and recreational ACL will not be reduced if the Regional Administrator determines, using the best scientific information available, that a reduction is unnecessary.

**Rationale:** Alternatives 3a, 3b, 4a, and 4b were removed after a recommendation from the South Atlantic Council, which recently passed updated accountability measures in Snapper Grouper Amendment 34. Amendment 34 is currently undergoing regulatory review.

### Action 13. Changes to Circle Hook Requirement in Gulf and South Atlantic Jurisdictional Waters

**Alternative 3:** Remove the requirement to use circle hooks when fishing with natural bait for all reef fish south of 28° North latitude in the exclusive economic zone of the Gulf of Mexico.

**Option 3a:** For the recreational fishing sector

**Option 3b:** For the commercial fishing sector

**Rationale:** Alternative 3 was because of the documented positive biological effects identified for red snapper, which have shown decreased hooking mortality when caught with circle hooks. Because red snapper are undergoing rebuilding in the Gulf, the Committee elected to remove this alternative, so as to not jeopardize the rebuilding timeline for red snapper by potentially introducing additional discard mortality.

## APPENDIX B. DELEGATION PROVISION

### **Magnuson-Stevens Fishery Conservation and Management Act 16 U.S.C. §1856(a)(3), (b)**

(3) A State may regulate a fishing vessel outside the boundaries of the State in the following circumstances:

(A) The fishing vessel is registered under the law of that State, and (i) there is no fishery management plan or other applicable Federal fishing regulations for the fishery in which the vessel is operating; or (ii) the State's laws and regulations are consistent with the fishery management plan and applicable Federal fishing regulations for the fishery in which the vessel is operating.

(B) The fishery management plan for the fishery in which the fishing vessel is operating delegates management of the fishery to a State and the State's laws and regulations are consistent with such fishery management plan. If at any time the Secretary determines that a State law or regulation applicable to a fishing vessel under this circumstance is not consistent with the fishery management plan, the Secretary shall promptly notify the State and the appropriate Council of such determination and provide an opportunity for the State to correct any inconsistencies identified in the notification. If, after notice and opportunity for corrective action, the State does not correct the inconsistencies identified by the Secretary, the authority granted to the State under this subparagraph shall not apply until the Secretary and the appropriate Council find that the State has corrected the inconsistencies. For a fishery for which there was a fishery management plan in place on August 1, 1996 that did not delegate management of the fishery to a State as of that date, the authority provided by this subparagraph applies only if the Council approves the delegation of management of the fishery to the State by a three-quarters majority vote of the voting members of the Council.

(C) [Pertains to Alaska, only.]

(b) EXCEPTION.—

(1) If the Secretary finds, after notice and an opportunity for a hearing in accordance with section 554 of title 5, United States Code, that—

(A) the fishing in a fishery, which is covered by a fishery management plan implemented under this Act, is engaged in predominately within the exclusive economic zone and beyond such zone; and

(B) any State has taken any action, or omitted to take any action, the results of which will substantially and adversely affect the carrying out of such fishery management plan; the Secretary shall promptly notify such State and the appropriate Council of such finding and of his intention to regulate the applicable fishery within the boundaries of such State (other than its internal waters), pursuant to such fishery management plan and the regulations promulgated to implement such plan.

(2) If the Secretary, pursuant to this subsection, assumes responsibility for the regulation of any fishery, the State involved may at any time thereafter apply to the Secretary for reinstatement of its authority over such fishery. If the Secretary finds that the reasons for which he assumed such regulation no longer prevail, he shall promptly terminate such regulation.

(3) If the State involved requests that a hearing be held pursuant to paragraph (1), the Secretary shall conduct such hearing prior to taking any action under paragraph (1).

# APPENDIX C. FLORIDA FWC PUBLIC WORKSHOP SUMMARIES

South Florida Workshops Summary

Florida Fish and Wildlife Conservation Commission

Workshop Attendance:

Dania Beach – 23

Key Largo – 15

Key Colony Beach – 19

Key West – 50

Marco Island – 15

FWC Staff Present: Martha Bademan, Jessica McCawley, John Hunt, Tony Bresnen, Mason Smith (except Marco Island and Key Largo)

Council Members Present: Gulf - John Sanchez (except Marco Island); South Atlantic - Ben Hartig, John Jolley (Dania Beach only)



## General Comments

- State should require everyone with any charter license to report their data electronically, modeled after the national parks system that works well
- More recreational fishery data needs to be captured
- Strengthen reporting requirements for commercial fishermen
- Need consistency between state and federal rules, on both coasts if possible
- Close down known fish spawning areas
- Several comments about selling fish from charters – some in favor, some against
- Several commenters would like to see more law enforcement presence on the water in the Keys
- Commercial fishermen would like to see drones used by law enforcement to stop poaching
- Keep species open all year (no spawning closures), just decrease the bag limit to protect the populations
- Encourage development of marine hatcheries and grow out facilities
- FWC needs to be more proactive with water quality

## FKNMS process

- Many commenters spoke against the idea of having any new area closures within the Florida Keys National Marine Sanctuary
- Proposals could heavily impact the Keys community
- Closed areas would only benefit lionfish expansion

1

#### Regional management comments

- Need regional management of species like yellowtail snapper
- Several commenters liked the idea of creating a Florida Keys Regional Fishery Management Council
- Many commenters felt that the Keys don't get representation in fisheries management and would like someone from the Keys on one of the Councils
- South Florida and the Florida Keys is a unique ecosystem not found anywhere in the Gulf or South Atlantic
- Council management works fine for some species, but the population of red grouper in the keys is different from the population in North Carolina
- Think about island FMPs like is being done in the Caribbean Council – could keys be added to the Caribbean Council?
- Make all of the keys either Gulf or South Atlantic
- Regulations too complex now, a Florida Keys management plan would help simplify things
- Possible south Florida regional management area from Jupiter Inlet south through the Keys
- Manage based on species, not boundary lines

#### Barracuda

- Barracuda are concentrated on artificial structures around Jupiter Inlet, no longer on natural reefs
- Commercial harvest of barracuda seems dangerous – commonly carry ciguatera
- Barracuda are being shipped up to Miami and sold as food
- Charterboats target barracuda for mounts
- Species not as abundant since 2009 freeze
- End commercial harvest of barracuda
- Make barracuda catch and release only
- Need to protect declining barracuda stocks

#### Grouper, Gag

- Gag groupers were overfished in south Florida, Atlantic grouper closure allowed gags to back a comeback
- One commenter from Key Largo stated that gags aren't in this area, so why did the January – April closure also happen here?
- Atlantic closure hurts fishing for other species such as red grouper
- Groupers are available in the Keys when they are closed – winter the best time to grouper fish in the keys
- Several commenters suggested that they would like to see the Atlantic grouper closure reduced in length/eliminated. Suggestion: have January and February to fish

for groupers, and let groupers be closed in May (January – April closure would become March – May)

- In SW FL gags move inshore and are easier to catch in the winter months – would like gags to be open in state waters from December through February

#### Grouper, Goliath

- Goliaths are more valuable alive than dead and should remain closed
- Way too many goliath grouper now
- Eat many important reef fish and lobster
- Allow harvest through a tag system – require that to get another tag, you turn in data from the first tag
- Consider using a catch and release tagging system to collect more data for assessments
- Protecting this species while fishing down others has created an imbalance in the ecosystem

#### Grouper, Snowy

- Several commenters upset with the recreational snowy grouper closure (Atlantic federal waters)
- Snowy grouper are common in the Keys, species not in trouble
- If you want to close snowy grouper, need to close all deepwater species – can't avoid snowy grouper
- If the species is open commercially, it should be open recreationally
- Make regulations 1 per person with no size limit
- Hard to distinguish between a large snowy and small warsaw grouper

#### Hogfish

- Hogfish abundant in no spearing zones, absent from spearing areas
- If you increase the minimum size limit for hogfish, it could encourage people to shoot smaller ones

#### Jacks

- Quotas for the jacks complex are too low and do not make biological sense ( some abundant species have low quotas)
- Misidentification of some species of jacks could throw off landings data

#### Lionfish

- Try fish traps for lionfish

#### Lobster/Stone crab

- One commenter would like to be able to transfer or sell crawfish dive permits
- Number of crawfish dive permits needs to fall; don't end the moratorium on permits
- Concerns about trap line entanglements with endangered or protected species
- Increase penalties for violators
- One commenter wanted a recreational spiny lobster trap fishery

#### Pelagics (Mackerels, Cobia, Dolphin, and Wahoo)

- Several commenters suggested that federal rules need to be fixed to allow pelagics to be filleted (like snapper and grouper) when returning from the Bahamas
- Confusion between Bahamian and U.S. rules is a problem
- Eliminate minimum size limit for dolphin - impossible to measure without killing them
- Don't need 10 dolphin per person
- Would like to see the king mackerel commercial limits increased from 1,250 to 3,000 pounds and transit through state waters
- Expand the Spanish mackerel fishery

#### Sea cucumbers

- Concerns about declining populations
- Only seen on the Gulf side
- Markets for export as food to Japan and China developing
- Unsure of what limits should be; maybe 200 per vessel?
- People in Asian markets will buy them by the thousands
- Make a trip limit before it gets out of hand

#### Sharks

- Overpopulated in the Keys, hurting fishing for many reef species
- Too many species protected from harvest
- Learned behavior – associate boat noise with a free meal

#### Snapper, Mangrove

- Differences between state and federal rules are not logical
- Make state and federal regulations the same
- Use the federal regulations – 10 fish bag limit 12" TL
- May be difficult to catch 12" mangrove snappers in Florida state waters

#### Snapper, Mutton

- Several commenters suggested close mutton snapper during spawning (May and June)
- Too easy to catch mutton snapper during spawning
- Reduce bag limit to 2-3 per person, 10 per person is too many
- Make a vessel limit of 15-20 per vessel
- Other commenters suggested that bag limit reductions with no spawning closure would be the best option
- Another commenter suggested that populations are healthy and there is no need for a closure

#### Snapper, Red

- Red snapper becoming more common in south Florida. Can catch big ones in state waters
- The mini-season on the Atlantic could cause safety issues, need to discourage derby fishing
- Spillover of the species due to rebuilding of the stock can now be seen in the Keys

#### Snapper, Vermilion

- No problem with the species – fishing is great
- Would like to see vermilion made part of the snapper aggregate, and increase the aggregate from 5 to 10

#### Snapper, Yellowtail

- Yellowtail snapper fishing is the best it's ever been, species not in any trouble
- FWC should take over management of the species
- Manage as a joint-stock
- J hooks can reduce discard mortality of the species
- A few commenters in favor of circle hook requirements, and don't want to see exemption

#### Tarpon

- Make tarpon a federal gamefish species

## APPENDIX D. MUTTON SNAPPER BAG LIMIT AND TRIP LIMIT ANALYSIS

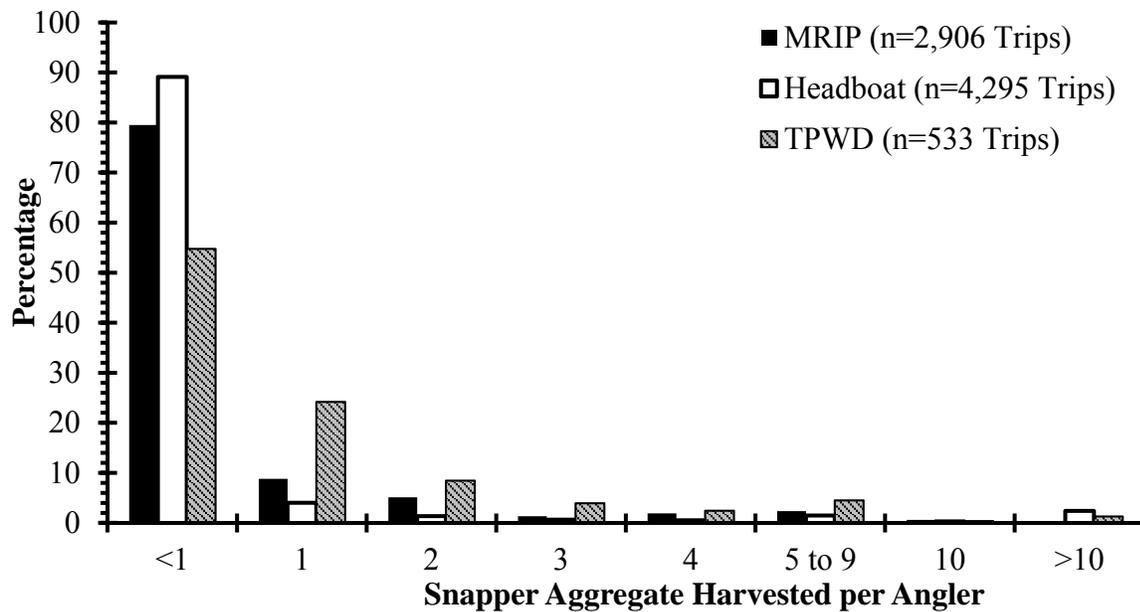
### **Mutton Snapper Bag Limit analysis for Action 5 of the Draft Joint Generic Amendment on South Florida Management Issues.**

Action 5 of the Draft Joint Generic Amendment on South Florida Management Issues proposes to both remove mutton snapper from the aggregate bag limit and reduce the mutton snapper bag limit. This report analyzes the Action 5 alternatives. The analysis focused primarily on the South Atlantic region because the Gulf of Mexico region had a low number of trips that sampled mutton snapper in the recreational surveys. An examination of the recent years of complete data (2011 to 2013) there were only 72 trips (0 in Texas, 6 MRIP, and 66 Headboat trips) in the Gulf of Mexico region. Therefore, there are not enough samples for the Gulf of Mexico region to do a meaningful analysis. The South Atlantic has significantly more mutton snapper trips surveyed with 8,525 trips (466 MRIP and 8,059 Headboat trips) from 2011 to 2013.

#### *Alternative 2: Remove mutton snapper from the recreational aggregate bag limit*

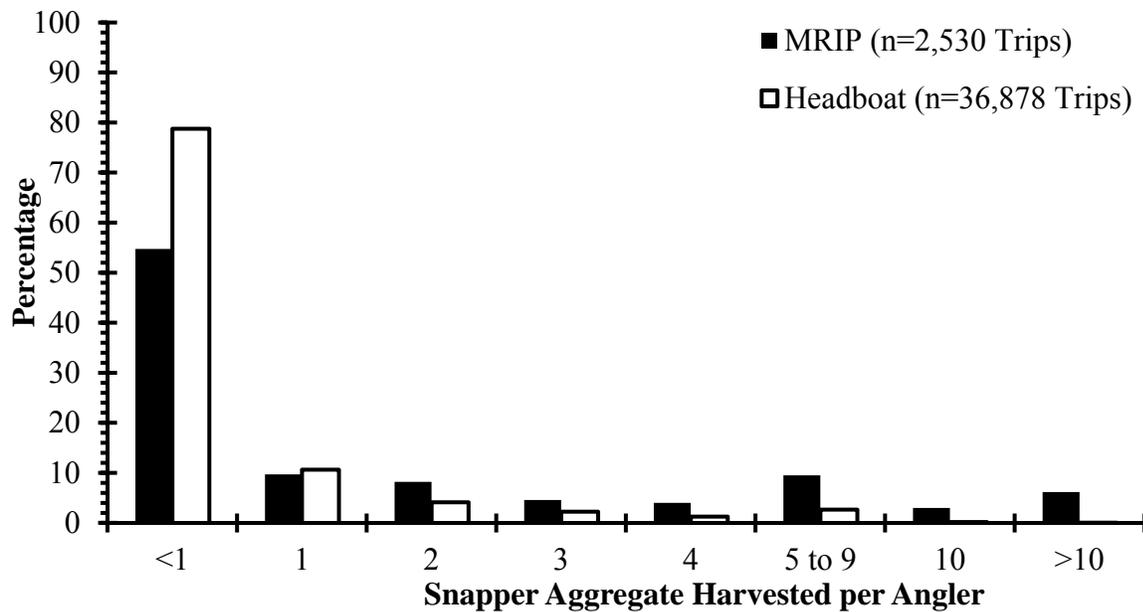
Mutton snapper are included in an aggregate bag limit and alternative 2 of Action 5 considers removing mutton snapper from it. This aggregate bag limit has a maximum of 10 fish, and encompasses the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, and silk for the Gulf of Mexico and South Atlantic regions. Wenchman are included in the Gulf of Mexico aggregate, and dog, lane, and mahogany snapper are included in the South Atlantic aggregate.

The Gulf of Mexico trips that harvested the aggregate snapper species were explored to reveal if the trip limit was being reached. An examination of the 2011-2013 catch records for all of the snapper in the aggregate are shown in Figure 1. Less than 2% (n = 153 trips) of the trips reached or exceeded the bag limit of 10 snapper per person. Therefore, the other snapper species should not be impacted by removing mutton snapper from the aggregate group as the 10 fish per angler aggregate is not currently constraining harvest.



**Figure 1.** Distribution of Gulf of Mexico snapper harvested per angler for the species of snapper included in the snapper aggregate bag limit from the three recreational datasets (MRIP, Headboat, and TPWD) from 2011 to 2013. This aggregate includes the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, silk, and wenchman.

South Atlantic trips that harvested the snapper aggregate species were explored to reveal if the trip limit was being reached. An examination of the 2011-2013 catch records for all of the snapper in the aggregate are shown in Figure 2. Less than 1% (n = 329 trips) of the trips reached or exceeded the bag limit of 10 snapper per person. Therefore, the other snapper species should not be impacted by removing mutton snapper from the aggregate group as the 10 fish per angler aggregate is not currently constraining harvest.

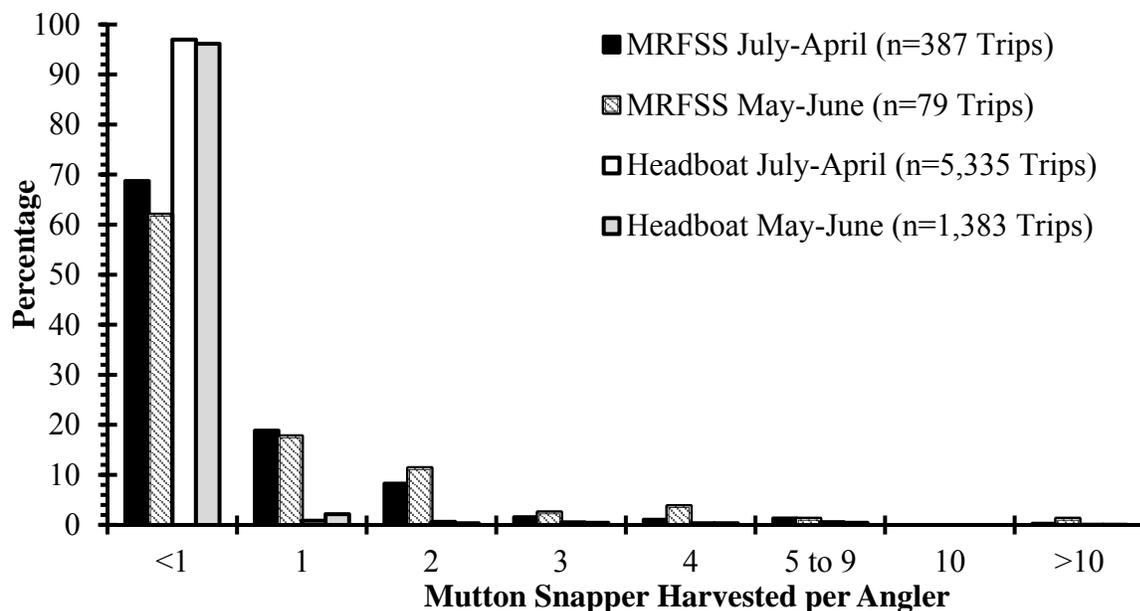


**Figure 2.** Distribution of South Atlantic snapper harvested per angler for the species of snapper included in the snapper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the snapper species of mutton, gray, yellowtail, cubera, queen, blackfin, silk, dog, lane, and mahogany.

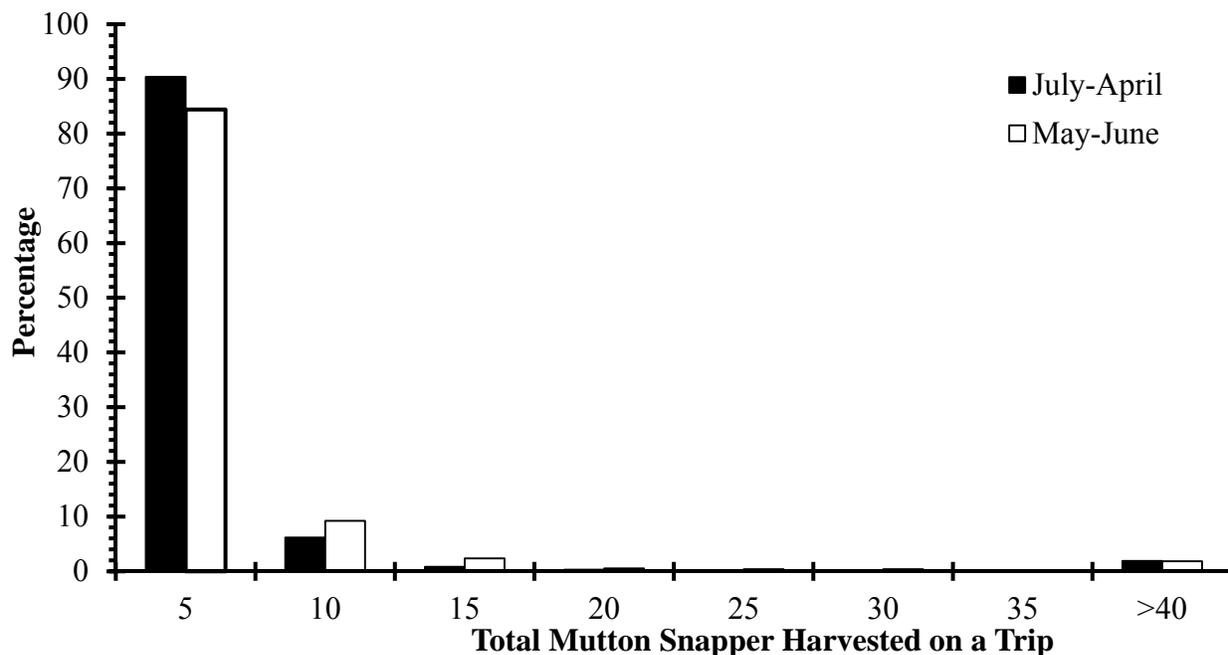
*Alternative 3: Retain mutton snapper within the aggregate bag limit but specify bag limits for mutton snapper within the regular season and during the spawning season.*

Analysis for alternative 3 only focused on the South Atlantic region. There was no analysis for the Gulf of Mexico region because of the low number of trips that sampled mutton snapper in this region.

There is concern from the public regarding fishing effort on mutton snapper spawning aggregations during the May-June peak spawning season. The trips that harvested mutton snapper were explored both within and outside the spawning season. Both the number of mutton snapper harvested per angler (Figure 3), and also the total mutton snapper harvested on a trip (Figure 4) were explored. In both cases the regular season and spawning season did not have distributional differences that were statistically significant (mutton snapper per angler, G-test,  $P = 0.950$ ; total mutton snapper harvested on a trip, G-test,  $P = 0.726$ ).



**Figure 3.** Distribution of South Atlantic mutton snapper harvested per angler by season from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. The regular season is from July to August and the spawning season is from May to June.



**Figure 4.** Distribution of the total number of mutton snapper harvested on a trip in the South Atlantic region from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. The regular season is from July to August and the spawning season is from May to June.

Percent reductions in landings from reducing the bag limit were calculated using data from 2011 to 2013. The reductions were calculated for each dataset and season (Table 1).

**Table 1.** Percent reductions in landings for various bag limits generated from South Atlantic recreational landings for the years 2011 and 2013. The reductions were calculated in terms of mutton snapper numbers with respect to dataset and non-spawning (July to April) and spawning (May-June) season. The datasets were MRIP and Headboat.

Bag Limit	MRIP			Headboat		
	Jul-Apr	May-Jun	All Year	Jul-Apr	May-Jun	All Year
10	0.0	0.0	0.0	0.0	0.0	0.0
9	0.2	1.3	0.4	0.3	0.4	0.3
8	0.4	2.5	0.9	0.7	0.8	0.7
7	1.3	3.8	1.8	1.3	2.0	1.5
6	2.3	5.1	2.9	2.9	3.8	3.1
5	3.5	6.3	4.1	5.5	6.2	5.7
4	5.1	8.4	5.8	9.4	9.7	9.5
3	8.5	12.7	9.3	15.3	14.7	15.2
2	14.1	20.3	15.3	25.0	21.7	24.2
1	29.3	34.2	30.3	37.5	32.4	36.3

Action 5 proposes different bag limits during July to April then during May-June because of the May-June spawning season. Table 2 provides the percent reductions for the bag limit options proposed.

**Table 2.** Percent reductions in landings for Alternative 2 of Action 5 for the Decision Document for Joint Council Committee on South Florida Management Issues. The bag limits were applied to Gulf of Mexico and South Atlantic recreational landings for the years 2011 and 2013. The reductions were calculated in terms of mutton snapper numbers with respect to dataset and non-spawning (July to April) and spawning (May-June) season. The datasets were MRIP and Headboat.

	MRIP		Headboat	
	Jul-Apr	May-Jun	Jul-Apr	May-Jun
Alt 2 Option 2a				
Bag Limit	10 fish	2 fish	10 fish	2 fish
Percent Reduction	None	20.3	None	21.2
Alt 2 Option 2b				
Bag Limit	5 fish	2 fish	5 fish	2 fish
Percent Reduction	3.5	20.3	5.9	21.2

In recent years the majority (about 80%) of the South Atlantic recreational landings came from MRIP (**Table 3**). Therefore, the percent reductions generated from the MRIP data will have a greater impact than the Headboat percent reductions.

**Table 3.** South Atlantic mutton snapper recreational landings by dataset.

Year	MRIP		Headboat		Total
	lbs	%	lbs	%	
2011	228,075	81	53,171	19	281,247
2012	402,382	84	74,640	16	477,022
2013	429,759	89	51,972	11	481,731

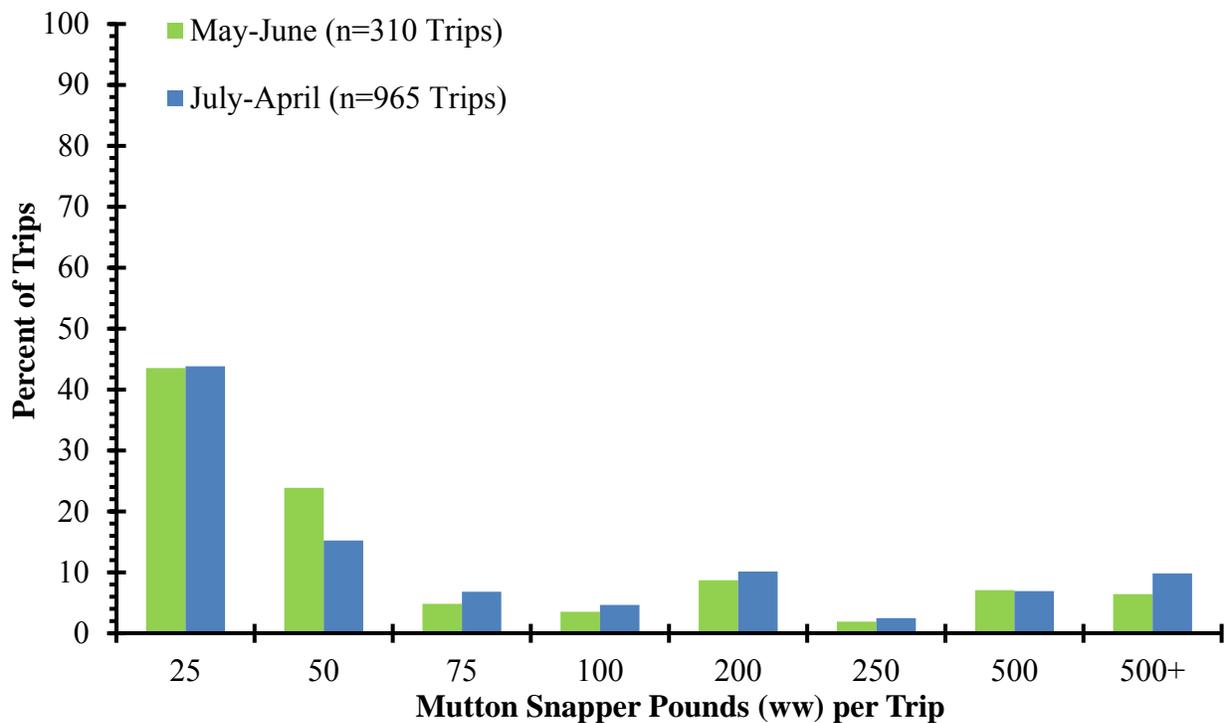
**Mutton Snapper Trip Limit Analysis for Action 6 of the Draft Joint Generic Amendment on South Florida Management Issues**

Action 6 of the Draft Joint Generic Amendment on South Florida Management Issues (Amendment) is proposing modifications to the mutton snapper commercial trip limit. The rationale behind these modifications is concern from the public regarding mutton snapper harvest during the spawning season of May-June. Therefore, the amendment is considering changes to the trip limit during the spawning season. The amendment also proposes imposing a trip limit outside the spawning season (July-April) to restrain harvest.

Commercial logbook data (accessed November 6, 2014) was explored to determine the harvest of mutton snapper per trip. Both the Gulf of Mexico and the South Atlantic had sufficient logbook data to do a trip limit analysis. The most recent years of complete data (2011-2013) had 1,275 trips landing mutton snapper in the Gulf of Mexico and 4,282 trips in the South Atlantic.

*Gulf of Mexico*

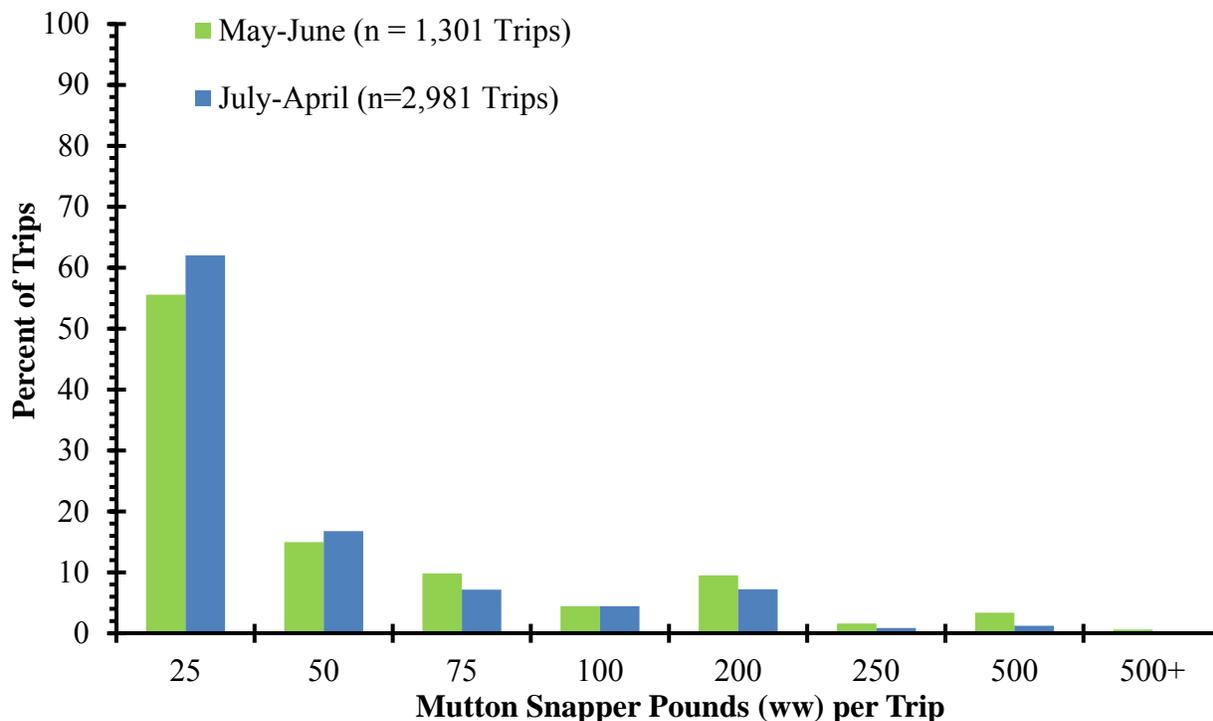
The Gulf of Mexico commercial trips that harvested mutton snapper were explored both within and outside the May-June spawning season (Figure 1). The regular season and spawning season did not have distributional differences that were statistically significant (G-test,  $P=0.806$ ). However, the Gulf of Mexico region had a higher percentage of trips than the South Atlantic region with more than 250 pounds whole weight (lbs ww) of mutton snapper harvested in a trip.



**Figure 1.** Distribution of the mutton snapper harvested per trip (lbs ww) in the Gulf of Mexico region from the commercial logbook dataset from 2011 to 2013. The spawning season is from May to June.

### *South Atlantic*

The South Atlantic currently has a trip limit for mutton snapper to add protection during the spawning season. From May-June there is a 10 mutton snapper trip limit per person or per day in the South Atlantic, whichever is more restrictive. South Atlantic commercial trips that harvested mutton snapper were explored both within and outside the May-June spawning season (Figure 2). The regular season and spawning season did not have distributional differences that were statistically significant (G-test,  $P=0.609$ ).



**Figure 2.** Distribution of the mutton snapper harvested per trip (lbs ww) in the South Atlantic region from the commercial logbook dataset from 2011 to 2013. The spawning season is from May to June.

### *Trip Limit Analysis*

The commercial logbook data provides landings in pounds; however, the current South Atlantic mutton snapper trip limit and most of the Amendment’s proposed modifications to the trip limit, are in numbers of fish. Landings in pounds were converted to numbers by dividing the harvest by the mutton snapper average weight. Average weight was calculated using the most recent years of complete data (2011-2013) from the commercial trip interview program (TIP) for three regions (Gulf of Mexico, South Atlantic, and Gulf of Mexico and South Atlantic combined). Table 1 provides the average weight for all three regions.

Table 1. Average weight (lbs ww) of mutton snapper for all three different regions generated from TIP data from 2011-2013.

<b>Location</b>	<b>Average</b>	<b>n</b>
Gulf of Mexico	8.82	850
South Atlantic	8.13	853
Gulf and South Atlantic	8.47	1,703

The Alternatives of Action 6 of the Draft Joint Generic Amendment on South Florida Management Issues were analyzed. Alternatives 2 and 6 proposed increases in the trip limit. This was analyzed by first determining the weight of 10 mutton snapper by multiplying by the

average weight by 10 for each region. Any trips that harvested less than the weight equivalent of 10 mutton snapper were not modified. Trips that had a mutton snapper harvest weight of 10 fish plus another 25 pounds were modified to meet the increased trip limit. This is assuming that trips that harvested the trip limit or slightly exceeded the limit would also meet the increased trip limit being proposed. Trips that harvested mutton snapper above 25 pounds of the 10 fish limit were not modified since these trips exceeded the limit and it was assumed in the future there will still be a similar proportion of trips that exceed the trip limit. Alternative 2 only proposed increasing the trip limit from July to April; therefore, the modifications to the commercial logbook data were only applied to this time period. Alternative 6 only proposed increasing the trip limit to the longline sector of the commercial fleet; therefore, the modifications to the commercial logbook data were only applied to harvest from longline gear.

Other Alternatives for Action 6 proposed decreasing the commercial trip limit or implementing a trip limit in the Gulf of Mexico region. This was done by first defining the trip limit in pounds (to match the commercial logbook data) by multiplying the average weight by the trip limit in numbers. For example a trip limit of 5 fish in the South Atlantic would be defined by multiplying 5 times 8.13 to get a trip limit of 41 pounds. Percent reductions were calculated by isolating the landings that exceeded the trip limit and evaluating these landings relative to the total landings. The percent reductions also followed the options in each alternative to adjust for trip limits that were only being considered for a specific time period or gear. Results for all of the proposed trip limit options for Action 6 are summarized in Table 2. Changes to the trip limit for longline gear in the South Atlantic had no impact on the South Atlantic landings. This is because there were no trips that harvested mutton snapper in the South Atlantic from 2011-2013 with longline gear. This is likely due to the regulation that prohibits bottom longline gear in depths less than 50 fathoms south of St. Lucie Inlet, Florida.

Table 2. Percent increases and decreases in landings for various commercial trip limits proposed in the Draft Joint Generic Amendment on South Florida Management Issues. Percent increases are positive numbers and percent decreases are negative numbers. Both the percent increase and decreases came from mutton snapper commercial logbook data from 2011 to 2013.

Alternative	Option	Season	Gulf of Mexico	South Atlantic	Gulf and South Atlantic
Alt 2	Option 2a: 10 fish	July-April	-65%	-20%	-45%
	Option 2b: 12 fish		12%	26%	19%
Alt 3	Option 3a: 2 fish	May-June	-16%	-27%	-21%
	Option 3b: 5 fish		-14%	-20%	-16%
	Option 3c: 10 fish		-12%	0	-7%
	Option 3d: No limit		0	NA	NA
Alt 4	10 fish		-12%	0	-7%

		May- June			
Alt 5	Option 5a: 10 fish, Handline Sector	May- June	-2%	0	-6%
	Option 5b: 5 fish, Handline Sector		-3%	-18%	-8%
	Option 5c: 2 fish, Handline Sector		-3%	-25%	-12%
Alt 6	Option 6a: 500 lbs ww, Longline sector	May- June	4%	0	2%
	Option 6b: 50 lbs ww, Longline sector		-12%	0	-6%

This analysis attempted to predict realistic changes to the landings from the various trip limit options presented in the amendment. Uncertainty exists in these projections, as economic conditions, weather events, changes in catch-per-unit effort (CPUE), fisher response to management regulations, and a variety of other factors may cause departures from this assumption. The bounds of this uncertainty are not captured by the model as currently configured; as such, it should be used with caution as a ‘best guess’ for future dynamics. In addition to the aforementioned sources of uncertainty, the modeled reductions associated with management measures assume that past performance in the fishery is a good predictor of future dynamics. We have attempted to constrain the range of data considered to recent years to reduce the unreliability of this assumption.

## APPENDIX E. BLACK GROUPEY ANALYSIS

### **Black Grouper Recreational Closure and Bag Limit Analysis for Action 11 of the Draft Joint Generic Amendment on South Florida Management Issues**

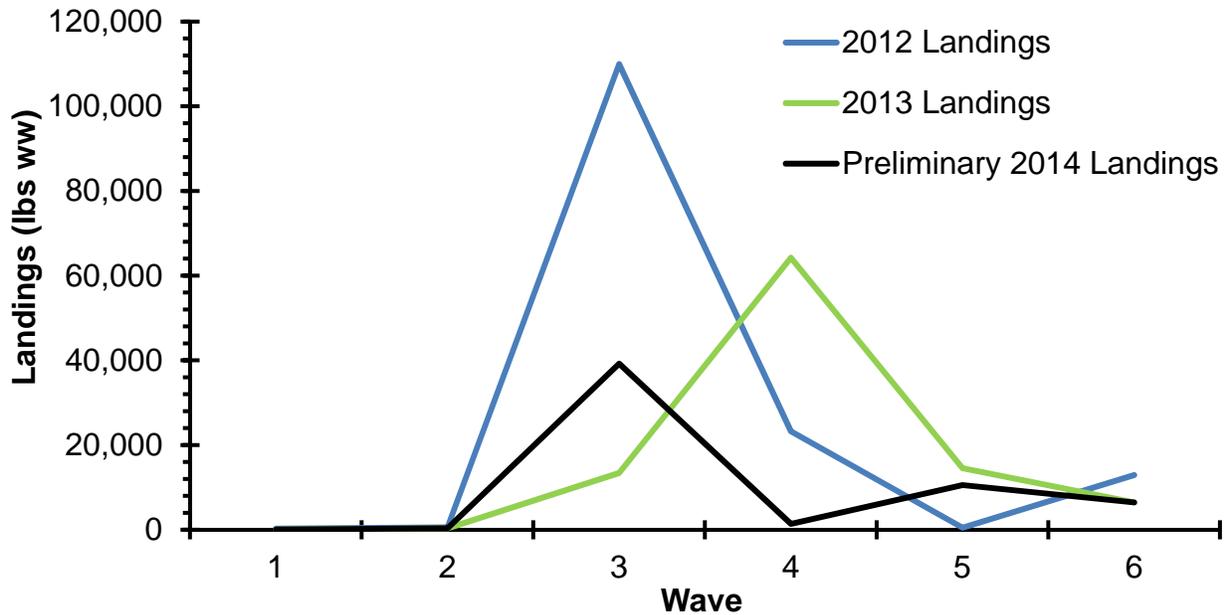
This analysis focused on the South Atlantic region. This is because the Gulf of Mexico region had a low number of trips that sampled black grouper in the recreational surveys. From 2011 to 2013 there were only 56 trips (3 MRIP and 53 Headboat trips) in the Gulf of Mexico region. Therefore, there are not enough samples to do a meaningful analysis.

Additionally, the recreational black grouper landings in the Gulf of Mexico have been relatively low. Black grouper are included in the shallow water grouper complex in the Gulf of Mexico which has had landings below the ACL in the past three years (2012, 2013, and 2014). This complex consists of black, scamp, yellowmouth, and yellowfin grouper. From 2011 to 2013 black grouper contributed to only about 7% of the total shallow water grouper landings.

In June of 2009, South Atlantic Snapper-Grouper Amendment 16 established a *recreational closed season for South Atlantic black grouper from January 1st to April 30th*. Action 11 of the Draft Joint Generic Amendment on South Florida Management Issues proposes to eliminate or modify this closure and modify the bag limit. Predictions of closure dates are required to determine if landings will exceed the black grouper ACL if the closed season and bag limit are modified.

#### **Estimating Future Landings**

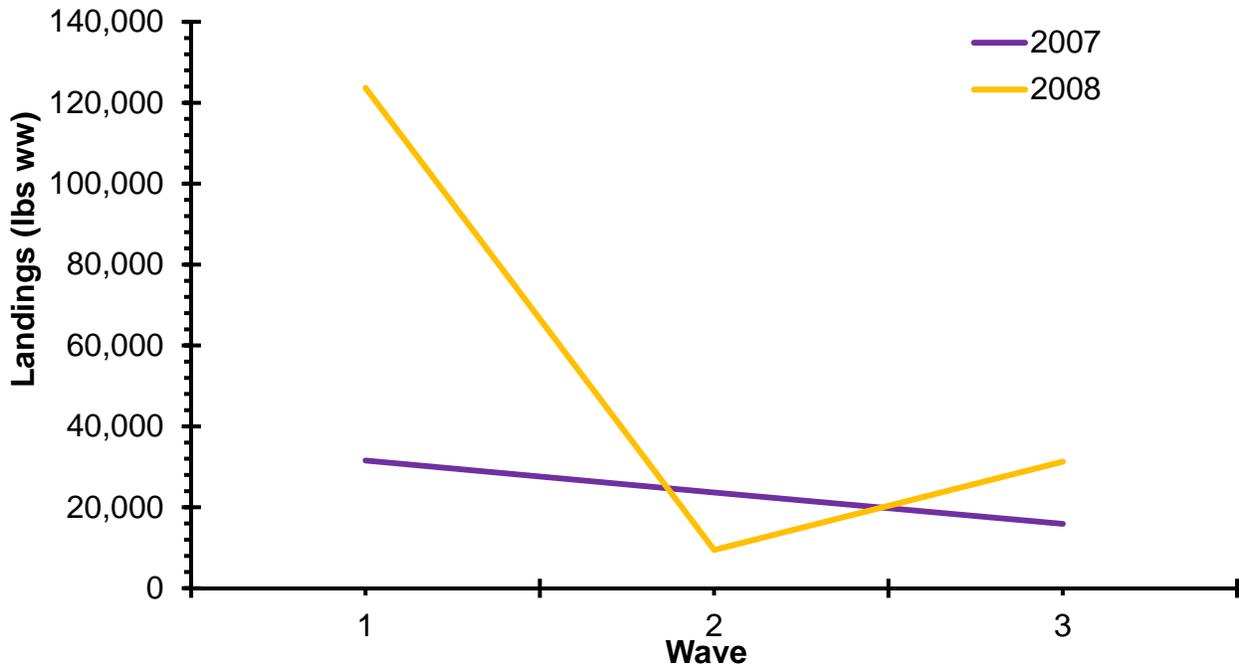
Data from the most recent years of complete landings (2012 and 2013) and preliminary 2014 landings were used as a proxy for future recreational landings for waves 3 through 6 (May to December). Landings from all three years of 2012 to 2014 were used, instead of just using the most recent year of landings, because landings were quite different in each of these years (Figure 1). Using all three years of data provides a range of different predictions for future landings. At the present time 2014 Headboat landings and MRIP landings for wave 6 (November to December) of 2014 are not available. Headboat landings from 2013 were used as a proxy for 2014 Headboat landings, and 2013 wave 6 MRIP landings were used as a proxy for 2014 wave 6 MRIP landings.



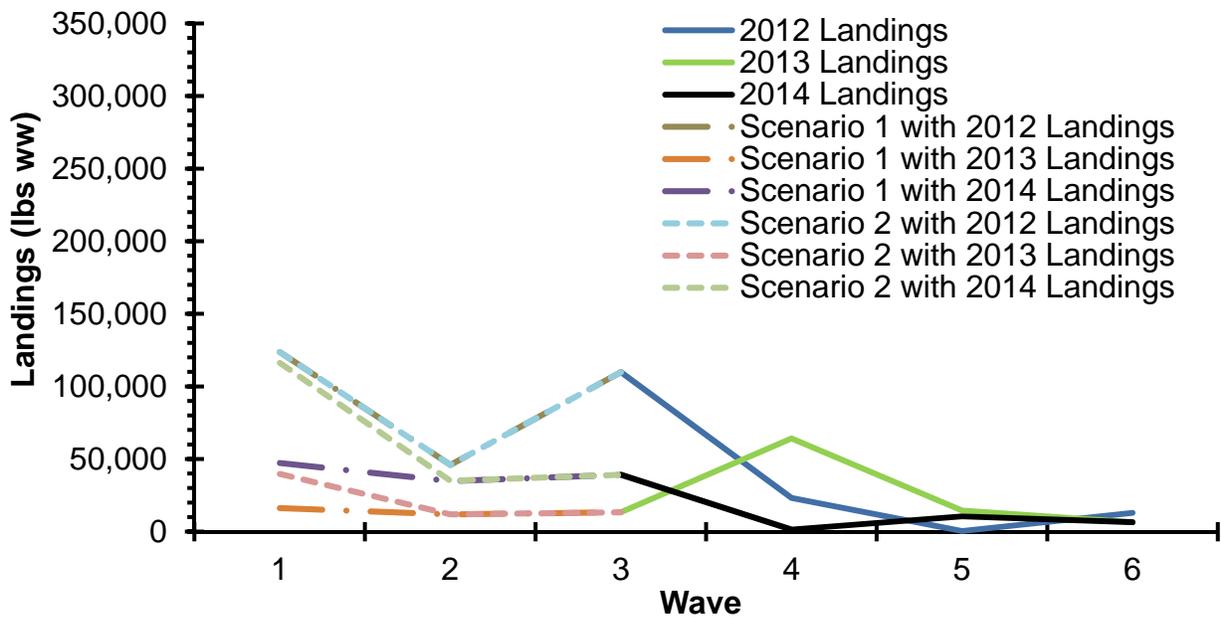
**Figure 1.** South Atlantic black grouper recreational landings by wave for 2012 and 2013, and preliminary landings for 2014.

**Alternative 2: Remove the January to April Closure in the South Atlantic**

Action 11 proposes to eliminate (Alternative 2) or modify (Alternatives 3 and 4) the current closure from January to April. Estimates of future recreational landings during the January to April closure were necessary to make predictions of closure dates. Two different scenarios were conducted to predict future landings for January through April (waves 1 and 2). Both scenarios determined wave 1 and 2 landings from the historical proportional relationship with wave 3 landings. Scenario 1 determined the proportional relationships using only Headboat landings because Headboat landings were estimated by a logbook program which is less vulnerable to sampling variability during low-effort fishing months. The second scenario determined the proportional relationship using both Headboat and MRIP landings. The closure was implemented in 2009; therefore, landings from 2007 and 2008 were used to determine the historical proportional relationship. Figure 2 displays the 2007 and 2008 recreational landings for waves 1 to 3. A 2-year average of the proportion was used to smooth the variability of black grouper landings from the two years. The average of the 2007 and 2008 Headboat landings proportion between waves determined the relationship between waves 1 and 3 was 1.2 (Standard Deviation = 0.98), and the relationship for waves 2 and 3 was 0.88 (Standard Deviation = 0.96). The average of the 2007 and 2008 Headboat and MRIP landings proportion determined the relationship between waves 1 and 3 was 2.96 (Standard Deviation = 1.82), and the relationship for waves 2 and 3 was 0.89 (Standard Deviation = 0.30). Since applying the proportion to wave 3 landings has the potential to overinflate wave 1 and 2 landings there was a landings cap placed on waves 1 and 2. The cap for wave 1 was 123,695 pounds whole weight (lbs ww) and 46,053 lbs ww for wave 2. These landings caps were the maximum landings for these two waves over the past ten years. Figure 3 provides a visual representation of the landings for the two scenarios.



**Figure 2.** South Atlantic black grouper recreational landings by wave for 2007 and 2008.



**Figure 3.** South Atlantic black grouper recreational landings by wave. Two scenarios were used to predict landings in waves 1 and 2. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

Once the landings for each wave were established for each scenario then it was assumed that each month (Headboat) or wave (MRIP) had uniform distributions of landings by day. The landings by day were cumulatively summed and compared to the ACL to predict closure dates. The current South Atlantic recreational ACL is 165,750 lbs ww.

Whether the stock exceeds the ACL or not is dependent on how representative 2012, 2013, or 2014 landings are to future landings (Table 1). If the future landings are similar to the 2012 landings then the recreational sector will be closed in season. However, if future landings are similar to 2013 landings then the recreational sector will be open for the entire year. The landings in 2014 were low which results in no closure for scenario 1, but there was a closure in scenario 2 due to the relatively higher 2014 wave 3 landings.

**Table 1.** Alternative 2 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. Alternative 2 proposes to remove the January to April closure in the entire South Atlantic region, and the ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, and 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
2012 Landings	316,382	25-Apr	316,382	25-Apr
2013 Landings	126,841	None	150,495	None
2014 Landings	139,868	None	208,985	23-May

### Alternative 3 and 4: Modify the Recreational Seasonal Closure

Alternatives 3 and 4 of Action 11 propose to modify the seasonal closure. An analysis of Alternatives 3 and 4 was conducted using the same estimates of future landings and scenarios that were used to analyze Alternative 2. The different options for Alternatives 3 and 4 were analyzed by assuming there were no landings during the month or months of a closure. This assumption is supported by the fact that landings during the closure months are typically 200 pounds or less.

Table 2 summarizes the analysis of landings and closure dates for the different options of Alternatives 3 and 4. Again, predictions of whether the stock exceeds the ACL or not are dependent on how 2012, 2013, or 2014 landings are representative of future landings. If the future landings are similar to the 2012 landings then the recreational sector will be closed in season. However, if future landings are similar to 2013 or 2014 landings then the recreational sector will be open for the entire year.

**Table 2.** Alternatives 3 and 4 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
January to March Closure				
2012 Landings	194,739	21-Jul	194,961	20-Jul
2013 Landings	104,580	None	104,607	None
2014 Landings	76,501	None	76,580	None
January Closure				
2012 Landings	307,405	31-May	399,610	7-Mar
2013 Landings	118,332	None	129,587	None
2014 Landings	116,685	None	149,570	None
February Closure				
2012 Landings	314,151	29-Apr	416,186	30-Jan
2013 Landings	119,156	None	131,611	None
2014 Landings	119,090	None	155,482	None
March Closure				
2012 Landings	327,400	21-Apr	520,959	30-Jan
2013 Landings	120,773	None	144,399	None
2014 Landings	123,816	None	191,174	20-Jun

### Results for Alternatives 2, 3 and 4

Action 11 proposes to eliminate (Alternative 2) or modify (Alternatives 3 and 4) the current closure from January to April. Table 3 summarizes the results of the analysis of landings and closure dates for both Alternative 2 and Alternative 3.

**Table 3.** Predicted annual recreational landings and closure dates for black grouper under two landings scenarios for Alternatives 2, 3, and 4. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and

wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
Alternative 2: No Seasonal Closure				
2012 Landings	377,109	21-Mar	570,897	30-Jan
2013 Landings	126,841	None	150,495	None
2014 Landings	139,868	None	208,985	23-May
Alternatives 3 and 4 Option a: January to March Closure				
2012 Landings	194,739	21-Jul	194,961	20-Jul
2013 Landings	104,580	None	104,607	None
2014 Landings	76,501	None	76,580	None
Alternatives 3 and 4 Option b: January Closure				
2012 Landings	307,405	31-May	399,610	7-Mar
2013 Landings	118,332	None	129,587	None
2014 Landings	116,685	None	149,570	None
Alternatives 3 and 4 Option c: February Closure				
2012 Landings	314,151	29-Apr	416,186	30-Jan
2013 Landings	119,156	None	131,611	None
2014 Landings	119,090	None	155,482	None
Alternatives 3 and 4 Option d: March Closure				
2012 Landings	327,400	21-Apr	520,959	30-Jan
2013 Landings	120,773	None	144,399	None
2014 Landings	123,816	None	191,174	20-Jun

There has been a decline in total annual recreational black grouper landing from 2012 to 2014 (Figure 1). The lowest total landings for all three years took place in 2014. If black grouper landings continue to decrease then the probability of exceeded the ACL will be decreased.

**Alternative 5: Remove black grouper from the shallow-water grouper closure of the recreational season in the South Atlantic in Federal waters off Monroe County, Florida.**

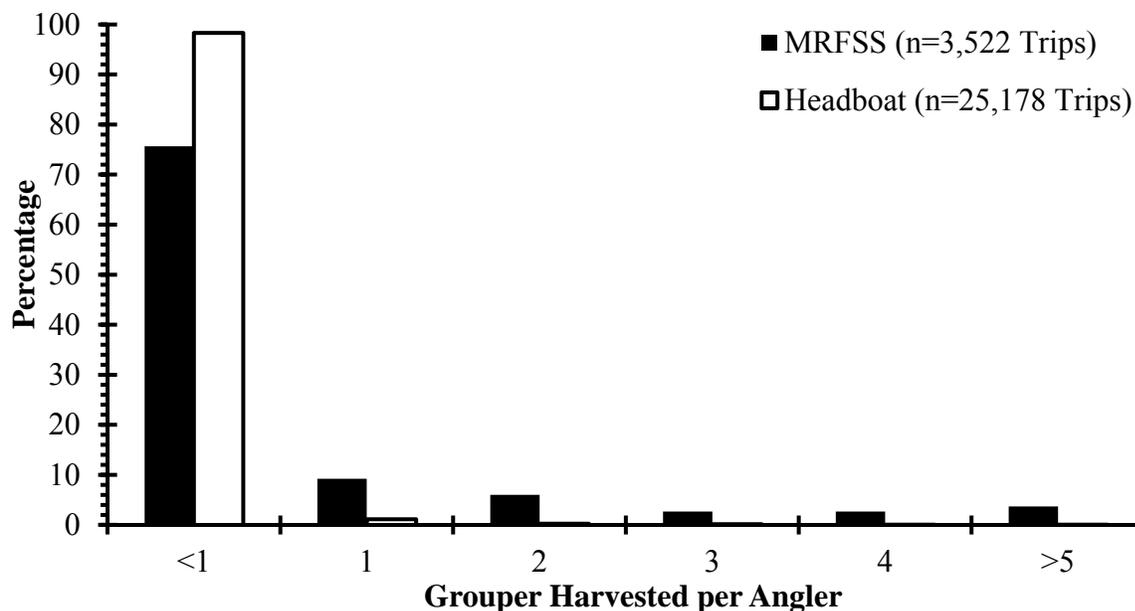
Alternative 5 was analyzed by applying the same method used for the analysis for Alternatives 2, 3, and 4 but only the Federal waters of Monroe County, Florida did not have the January to April closure. Therefore, the analysis only allowed January to April landings to occur in Federal waters of Monroe County. The landings were assumed to be zero from January to April for the rest of the South Atlantic region. Table 4 provides predicted landings and closure dates for Alternative 5.

**Table 4.** Alternative 5 predicted annual recreational landings and closure dates for black grouper under two landings scenarios. Alternative 5 proposes to remove the January to April closure only in Monroe County, Florida. The South Atlantic recreational ACL is 165,750 lbs ww. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Landings for waves 3 to 6 came from 2012, 2013, or 2014 landings.

	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
2012 Landings	238,902	11-Jun	238,902	11-Jun
2013 Landings	105,299	None	110,842	None
2014 Landings	132,089	None	194,665	14-Jun

**Alternative 6: Remove black grouper from the recreational aggregate bag limit in the Gulf of Mexico**

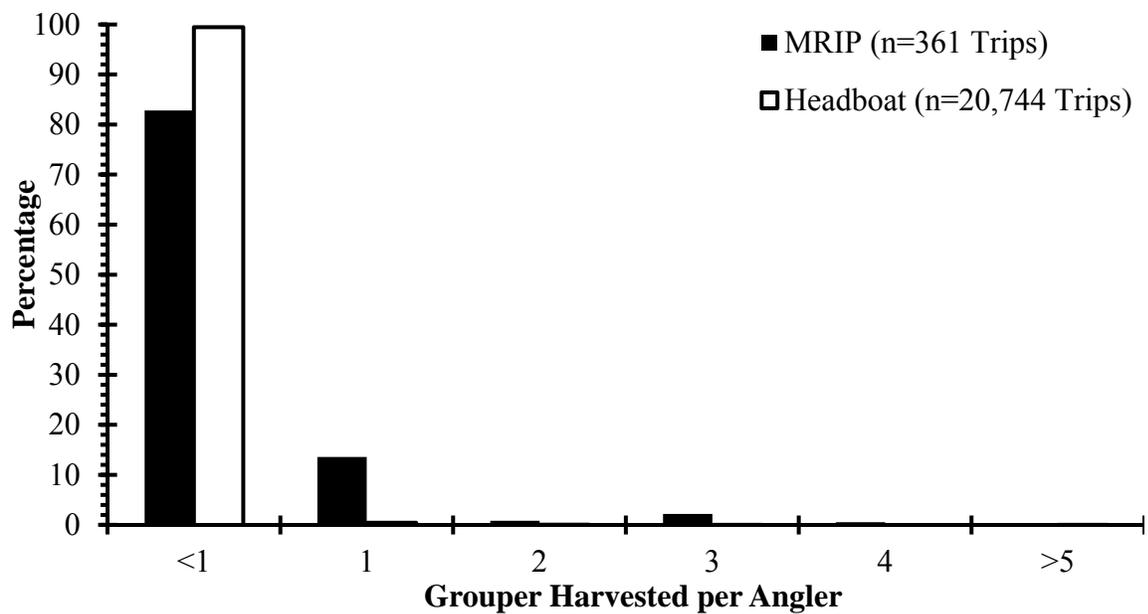
Black grouper are included in the Gulf of Mexico aggregate bag limit which is set at 4 grouper per angler. The aggregate bag limit contains black, gag, red, yellowfin, scamp, and yellowmouth grouper. Alternative 6 of Action 11 proposes to remove black grouper from the Gulf of Mexico aggregate bag limit. An examination of the 2011-2013 catch records for all grouper in the aggregate is shown in Figure 4. Less than 1% (n=255 trips) of the trips reached or exceeded the bag limit of 4 grouper per angler. Also, trips that harvested black grouper from 2011-2013 (n=56 trips) accounted for less than 1% of the total Gulf of Mexico trips sampled that harvested any of the aggregate grouper species (n=28,700 trips). Therefore, the other grouper species should not be impacted by removing black grouper from the aggregate group as the 4 grouper per angler aggregate is not currently constraining angler harvest.



**Figure 4.** Distribution of Gulf of Mexico grouper harvested per angler included in the grouper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the species of black, gag, red, yellowfin, scamp, and yellowmouth grouper.

**Alternative 7: Remove black grouper from the recreational aggregate bag limit in the South Atlantic**

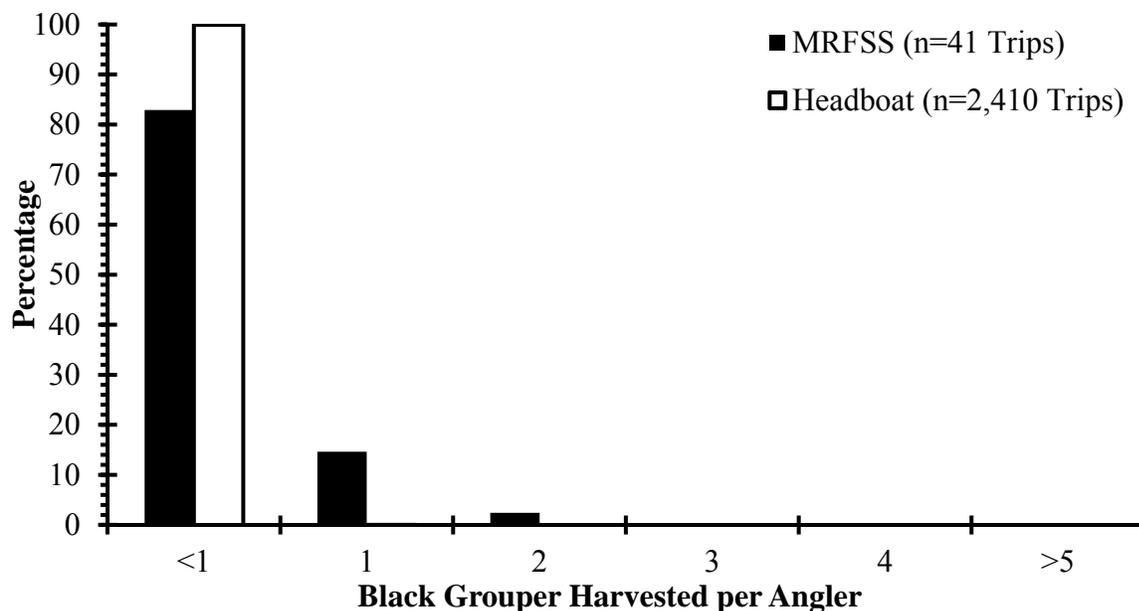
Black grouper are included in the South Atlantic grouper aggregate bag limit which is set at 3 grouper per angler, however only one grouper can be a black or gag grouper. The aggregate bag limit contains black, gag, red, red hind, rock hind, coney, graysby, yellowfin, scamp, and yellowmouth grouper. Alternative 7 of Action 11 proposes to remove black grouper from the South Atlantic aggregate bag limit. An examination of the 2011-2013 catch records for all grouper in the aggregate is shown in Figure 5. Less than 1% (n=15 trips) of the trips sampled reached or exceeded the bag limit of 3 grouper per angler. Therefore, the other grouper species should not be impacted by removing black grouper from the aggregate group as the 3 grouper aggregate is not currently constraining angler harvest.



**Figure 5.** Distribution of South Atlantic grouper harvested per angler included in the grouper aggregate bag limit from the two recreational datasets (MRIP and Headboat) from 2011 to 2013. This aggregate includes the species of black, gag, red, red hind, rock kind, coney, graysby, tiger, scamp, yellowfin, and yellowmouth grouper.

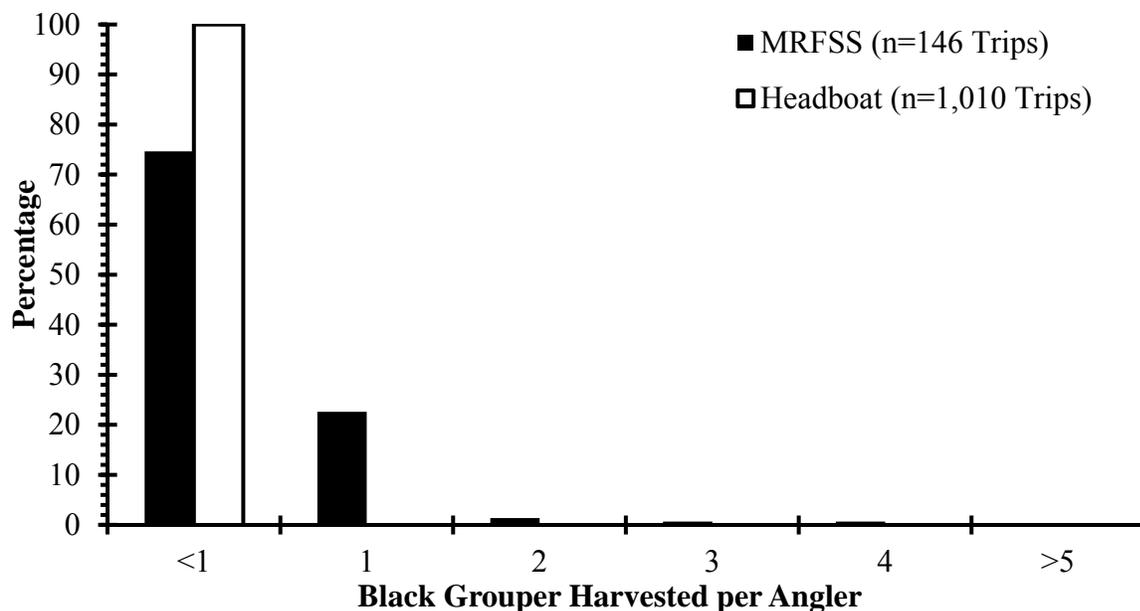
**Alternative 8: Modify the recreational bag limit for black grouper in the South Atlantic**

Alternative 8 proposes to increase the bag limit to two, three, or four black grouper per angler. The South Atlantic catch and effort files for the last 3 years of complete data (2011-2013) were explored. The South Atlantic region had 2,451 trips (41 MRIP and 2,410 Headboat trips) that reported black grouper in the South Atlantic. This region currently has a one fish bag limit for black grouper. This is reflected in the catch and effort files with 99% of the South Atlantic trips harvesting one black grouper or less per angler (Figure 6).



**Figure 6.** Distribution of South Atlantic black grouper harvested per angler from the two recreational datasets (MRIP and Headboat) from 2011 to 2013.

In February of 1999 South Atlantic Snapper-Grouper Amendment 9 changed the black grouper bag limit from five to two fish. Then in June of 2009 South Atlantic Snapper-Grouper Amendment 16 changed the black grouper bag limit from two to one fish. Landings data from 1996 to 1998 were reviewed to determine catch rates of black grouper per person during a time when anglers had the option of keeping up to five black grouper. Figure 7 provides the black grouper harvested per person from 1996 to 1998. Also, the stock was not overfished from 1996 to 1998 according to the latest black grouper assessment (SEDAR 19). The options to increase the bag limit were analyzed by first calculating the proportion of trips that caught two, three, and four black grouper relative to the number of trips that caught one black grouper. The proportions were calculated to be 6% for two fish, 3% for three fish, and 1% for four fish relative to the trips that harvested one black grouper. Percent increases in landings from increasing the bag limit were calculated by applying the proportions to the trips that harvested one black grouper from 2011 to 2013. Table 5 provides the percent increase in landings by dataset (MRIP and Headboat). Percent increases in landings by mode or by month were not possible because of small sample sizes ( $n < 30$ ).



**Figure 7.** Distribution of South Atlantic black grouper harvested per angler from the two recreational datasets (MRIP and Headboat) from 1996 to 1998.

**Table 5.** Percent increases in landings for various bag limits applied to South Atlantic recreational landings for the years 2011 and 2013. The increases were calculated in terms of numbers of fish with respect to dataset (MRIP and Headboat).

Bag Limit	MRIP	Headboat
1	0	0
2	2.9%	< 1%
3	3.2%	< 1%
4	3.4%	< 1%

The bag limit percent increases in landings were applied to landings Scenarios 1 and 2 of the 2014 landings. Figure 3 from above displays the landings scenarios for the 2014 landings. Alternative 8 also proposed to modify the bag limit for all of the South Atlantic region, only in waters off Monroe County, only in Federal waters off Florida, and only in Federal waters of the South Atlantic. The 2014 landings were separated by County, State, and Federal waters to analyze all of the bag limit options in Alternative 8, and Table 6 reveals the breakdown of those landings. The same landings were provided for the two categories of only in Federal waters off of Florida and only in Federal waters of the South Atlantic. This is because there were no additional black grouper 2014 landings outside of Florida that were declared in Federal waters of the South Atlantic. The percent increases in landings were applied to the appropriate body of water to analyze the options in Alternative 8. Table 7 provides the predicted annual landings and closure dates for the analytical results. It should be noted that because of low sample sizes, it was not possible to calculate bag limit increases for specific water bodies (county, State, Federal) and the same overall region-wide increase in harvest relating to the bag limit was used for all options considered.

**Table 6.** Two landings scenarios of 2014 recreational landings separated by water body. Scenario 1 used historical proportional relationships of Headboat landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Scenario 2 used historical proportional relationships of Headboat and MRIP landings for wave 1 to wave 3, and wave 2 to wave 3 to estimate wave 1 and wave 2 landings. Following the options in Alternative 8 the landings were separated into the four water body categories of: 1) all of the South Atlantic region, 2) only in waters off Monroe County, 3) only in Federal waters off Florida, and 4) only in Federal waters of the South Atlantic.

	Scenario 1				Scenario 2		
	Only Monroe County	Remaining Landings	Total		Only Monroe County	Remaining Landings	Total
Landings	117,211	22,658	139,869	Landings	175,583	33,403	208,986
Percent	84	16	100	Percent	84	16	100
	Only Federal Waters off Florida	Remaining South Atlantic Landings	Total		Only Federal Waters off Florida	Remaining South Atlantic Landings	Total
Landings	110,503	29,367	139,870	Landings	169,538	39,448	208,986
Percent	79	21	100	Percent	81	19	100
	Only Federal Waters of the South Atlantic	Remaining South Atlantic Landings	Total		Only Federal Waters of the South Atlantic	Remaining South Atlantic Landings	Total
Landings	110,503	29,367	139,870	Landings	169,538	39,448	208,986
Percent	79	21	100	Percent	81	19	100

**Table 7.** Predicted closure dates for Alternative 8 options using the two landings scenarios for 2014 recreational landings. Following the options in Alternative 8 the bag limit increases were applied to the four water body categories of: 1) all of the South Atlantic region, 2) only in waters off Monroe County, 3) only in Federal waters off Florida, and 4) only in Federal waters of the South Atlantic. The ACL is 165,750 lbs ww.

Bag Limit	Scenario 1		Scenario 2	
	Predicted Annual Landings (lbs ww)	Closure Date	Predicted Annual Landings (lbs ww)	Closure Date
All of South Atlantic Region (Federal and State waters)				
1 Fish	139,868	None	208,985	23-May
2 Fish	143,737	None	214,858	16-May
3 Fish	144,137	None	215,465	15-May

4 Fish	144,404	None	215,870	15-May
Option 8e: Sub-option 8e(i): Off Monroe County, Florida				
1 Fish	139,868	None	208,986	23-May
2 Fish	143,269	None	214,078	17-May
3 Fish	143,620	None	214,605	16-May
4 Fish	143,855	None	214,956	16-May
Option 8e: Sub-option 8e(ii): In Federal Waters off Florida				
1 Fish	139,869	None	208,986	23-May
2 Fish	143,074	None	213,903	17-May
3 Fish	143,405	None	214,411	16-May
4 Fish	143,626	None	214,750	16-May
Option 8e: Sub-option 8e(iii): In Federal Waters in South Atlantic				
1 Fish	139,869	None	208,986	23-May
2 Fish	143,074	None	213,903	17-May
3 Fish	143,405	None	214,411	16-May
4 Fish	143,626	None	214,750	16-May

Predictions of whether the stock exceeds the ACL or not are dependent which landings scenario is representative of future landings. If the future landings are similar to scenario 1 then the recreational sector will be open for the entire year. However, if future landings are similar to scenario 2 then the recreational sector will close in May.

The highest predicted landings and shortest season came from applying the increased bag limit options to the 2014 scenario 2 landings for the entire South Atlantic region. This is because this option applies the increased bag limit to the largest geographic area. The second highest predicted landings came from applying the increased bag limit options to the 2014 scenario 2 landings for the waters off Monroe County. This occurred because most of the black grouper landings (84%) in the 2014 landings occurred in Monroe County.

This analysis attempted to bracket the possible range of future landings considering with and without recreational season closures. Uncertainty exists in these projections, as economic conditions, weather events, changes in catch-per-unit effort, fisher response to management regulations, and a variety of other factors may cause departures from the predictions. Also, the majority of the landings estimates generated for each wave had proportional standard error values greater than 50%. This indicates high variability around the landings estimates and therefore low precision. This must be considered when evaluating the effects of bag limits and season closures.

## **References**

SEDAR 19. 2009. Stock assessment of black grouper. Available from the SEDAR website: [www.sefsc.noaa.gov/sedar/](http://www.sefsc.noaa.gov/sedar/)

