4.1 Snapper Grouper Fishery Management Plan (black grouper, yellowtail snapper & mutton snapper)

4.3.1 Action 13: Specify Jurisdictional Allocations for Black Grouper

Alternative 1 (No Action). Do not establish jurisdictional allocation of the black grouper acceptable biological catch (ABC) between the Gulf of Mexico and South Atlantic Councils.

Alternative 2. Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for black grouper ABC based on one of the following methods:

Subalternative 2a. South Atlantic = 46% of ABC and Gulf of Mexico = 54% of ABC (Established by using ~~catch history~~ average landings from 1991-2008).

Subalternative 2b (Preferred). South Atlantic = 47% of ABC and Gulf of Mexico = 53% of ABC (Established by using 50% of ~~catch history~~ average landings from 1986-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

Subalternative 2c. South Atlantic = 48% of ABC and Gulf of Mexico = 52% of ABC (Established by using 50% of ~~catch history~~ average landings from 1991-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

Subalternative 2d. South Atlantic = 50% of ABC and Gulf of Mexico = 50% of ABC (Divide the ABC evenly between the two Councils).

4.3.1.1 Biological Effects

At the June 2010 South Atlantic Council meeting, a motion was made for Gulf of Mexico and South Atlantic staff to work together to develop alternative methods for allocating the black grouper catch between the South Atlantic and Gulf of Mexico Councils' jurisdictional areas. The stock assessment for black grouper treated the Gulf of Mexico and South Atlantic management unit as a single stock rather than providing separate assessments. The Gulf of Mexico Council received a letter dated June 10, 2010, from the South Atlantic Council accepting the Gulf of Mexico Council's ABC control rule and the ABC recommendation developed by the Gulf of Mexico Council's SSC.

The Gulf of Mexico Council's SSC recommends that a five-year time stream from 2011-2015, to include landings and dead discards in whole weight as the ABC for black grouper, for a P* of 0.33 (**Table 4-46**).

Table 4-46. Black grouper landings and discard projections (lbs whole weight) for 2011-2015.
(Source: OFL projections table A3.3.4.17 of the final SEDAR 19 stock assessment report and ABC projections, R. Muller, FL FWC, FWRI, person communication).

	OFL		
Year	**Landings**	**Discards**	**Total**
2011	695,007	123,952	818,959
2012	652,810	127,396	780,206
2013	627,552	130,213	757,765
2014	619,665	130,237	749,902
2015	615,801	130,207	746,008

	ABC		
Year	**Landings**	**Discards**	**Total**
2011	523,000	126,761	649,761
2012	522,543	132,399	654,942
2013	545,595	130,978	676,574
2014	558,711	130,314	689,025
2015	564,737	130,018	694,755

Table 4-47. ABCs (lbs whole weight) for South Atlantic and Gulf of Mexico using jurisdiction allocations specified in **Subalternatives 2a-2d** and preferred alternative for ACL of 522,543 lbs whole weight for Gulf of Mexico and South Atlantic specified for 2012 in **Table 4-46**.

Alternative	South Atlantic	Gulf of Mexico
Alternative 2a	240,370	282,173
Alternative 2b	245,595	276,948
Alternative 2a	250,821	271,722
Alternative 2b	261,272	261,272

Table 4-48. ABCs (lbs whole weight) for South Atlantic and Gulf of Mexico by year using jurisdiction allocations specified in preferred Subalternative 2b.

Year	ABC	South Atlantic	Gulf of Mexico
2011	523,000	245,810	277,190
2012	522,543	245,595	276,948
2013	545,595	256,430	289,165
2014	558,711	262,594	296,117
2015	564,737	265,426	299,311

Alternative 1 (No Action) would not establish jurisdictional allocation of the black grouper ABC between the Gulf of Mexico Council and South Atlantic Council (Councils). Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf of Mexico and South Atlantic. Since black grouper are primarily landed off Florida, especially southern Florida and in the Florida Keys (Monroe County), jurisdictional allocation of this stock presents some issues. These issues primarily revolve around dividing the recreational landings in Monroe County, because the current Gulf of Mexico and South Atlantic Council jurisdictional boundary line is the Florida Keys.

After discussions with the SEDAR 19 (2010) analysts regarding recreational landings (MRFSS-charterboat, private, and shore mode), the recommendation was made to remove all Florida Keys landings from the Gulf of Mexico Council landings, including discards, and place them into the South Atlantic landings. Legal sized black grouper

caught in the Florida Keys are more likely to have been caught from South Atlantic jurisdictional waters; however, based on the current system of MRFSS landings for Monroe County they were previously grouped into the Gulf of Mexico landings. Black grouper are probably caught in the back reef area of the Florida Keys (Gulf of Mexico Council jurisdiction), but are probably not legal size (B. Muller, FL FWC, FWRI, personal communication). The headboat fishery already accounts for Florida Keys (Monroe County) by including those landings in the South Atlantic jurisdiction (SEDAR 19 2010). The commercial data set used to derive the jurisdictional allocations are from the Florida trip ticket program so that "area fished" could be stratified, which is particularly important for the Florida Keys. The commercial data set, which allows the Florida Keys (Monroe County) landings to be split between Council jurisdictions, is slightly higher than landings data used in the SEDAR 19 (2010) stock assessment.

Subalternative 2a would establish a jurisdictional allocation of ABC for the South Atlantic = 46% of ABC and Gulf of Mexico = 54% of ABC. These percentages were derived using ~~catch history~~ average landings from 1991-2008. Recreational data collection and fish species identification were notably improved in 1991 so the time series was started in that year.

Subalternative 2b (Preferred) would establish a jurisdictional allocation of ABC for the South Atlantic = 47% of ABC and Gulf of Mexico = 53% of ABC. These percentages were derived using the same formula presented in the letter from the South Atlantic Council to the Gulf of Mexico Council: use 50% of ~~catch history~~ average landings from 1986-2008 + 50% of ~~catch history~~ average landings from 2006-2008. Under **Subalternative 2b (Preferred)**, the ABC for the Gulf of Mexico and South Atlantic endorsed by the Gulf of Mexico SSC for 2012 (the year when measures are likely to be implemented for the Comprehensive ACL Amendment) is 522,543 pounds whole weight (without dead discards (**Table 4-46**)). Under this alternative the ABC for the South Atlantic would be 245,595 lbs whole weight (**Table 4-47**).

Subalternative 2c would establish a jurisdictional allocation of ABC for the South Atlantic = 48% of ABC and Gulf of Mexico = 52% of ABC. These percentages were derived from the same formula presented in the June 10, 2010 letter, but starting the catch history in 1991 when recreational data collection and fish species identification were notably improved (use 50% of ~~catch history~~ average landings from 1991-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

Subalternative 2d would establish a jurisdictional allocation of ABC for the South Atlantic = 50% of ABC and Gulf of Mexico = 50% of ABC, dividing the ABC evenly between the two Councils. In recent years, commercial landings of black grouper have been similar in each Council's jurisdiction and using catch history results in percentages that are close to a 50:50 split of the ABC. For example, using catch history in 2001-2008 resulted in a jurisdictional allocation of ABC for the South Atlantic = 49% and Gulf of Mexico = 51% of the ABC. This time series was started in 2001 when the first full year in the Gulf of Mexico EEZ that different minimum size limits were adopted for both the commercial (24 inches total length, TL) and recreational (22 inches TL) sectors. The

South Atlantic Council increased the minimum size limit from 20 inches TL to 24 inches TL in 1999 for both sectors. Using catch history in 1999-2008 resulted in a jurisdictional allocation of ABC for the South Atlantic = 46% of the ABC and Gulf of Mexico = 54% of the ABC, the same percentages that are listed under **Subalternative 2a**.

The biological effects of allocating a portion of the ABC to the Gulf of Mexico and South Atlantic identified in **Subalternatives 2a-2d** would be similar. The recent stock assessment indicates that management measures in both areas are sufficient to prevent overfishing. The South Atlantic Council has recently implemented a four-month spawning season closure for black grouper and the Gulf of Mexico Council has implemented an ITQ system for grouper species. Furthermore, both Councils are in the process of specifying ACLs and AMs for all managed species. Therefore, additional measures have been and are being considered to ensure black grouper does not experience overfishing.

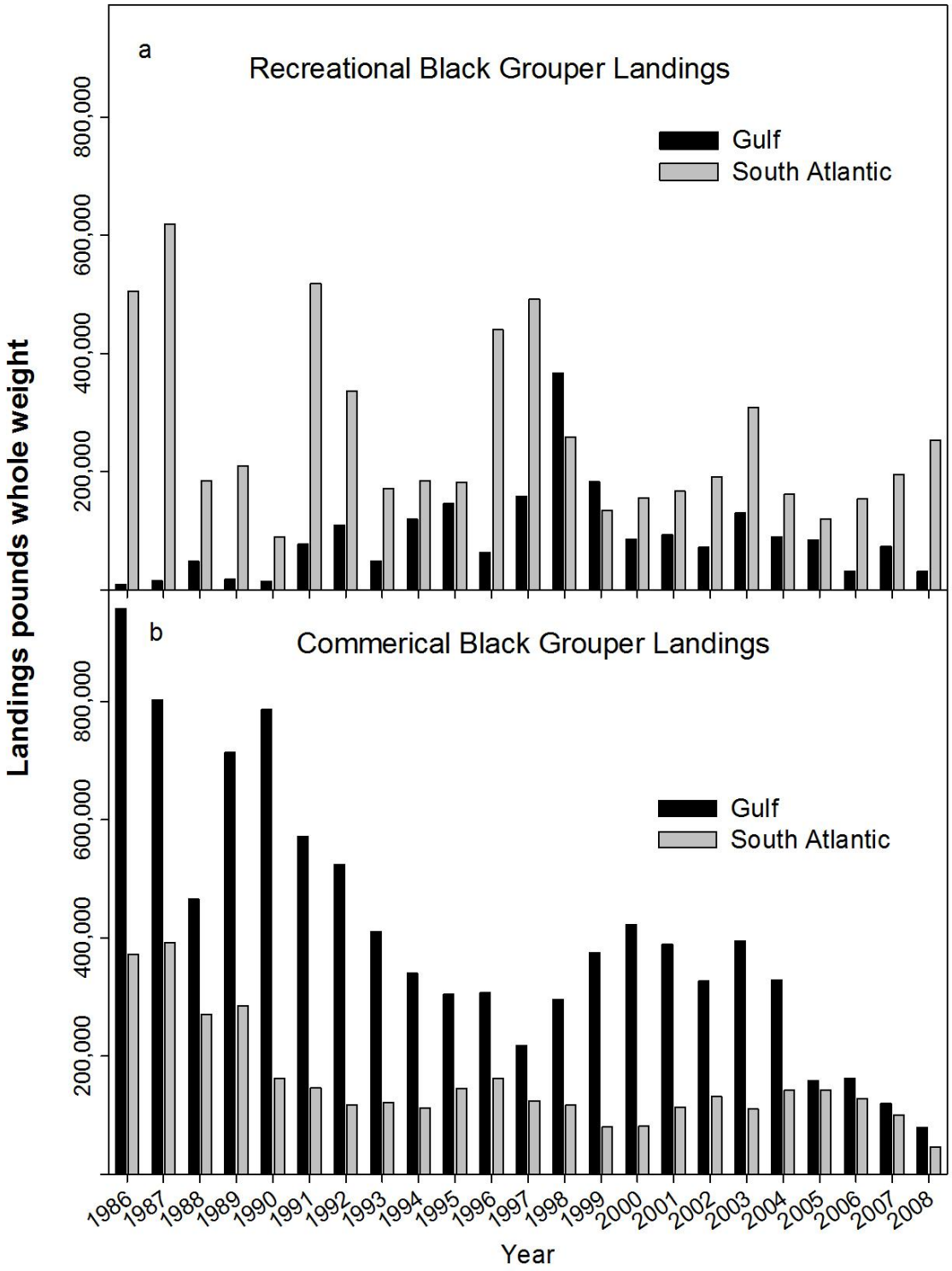

Figure 4-2. Landings of black grouper in whole weight (ww) in the Gulf of Mexico and South Atlantic jurisdictions A) recreational landings (MRFSS and headboat data combined) and B) commercial black grouper landings.
Sources: MRFSS data from T. Sminkey, NOAA Fisheries, personal communication and headboat data from SEDAR 19 (2010) Final Data Workshop Report. Commercial data from Florida's trip ticket program, B. Muller, FL FWC, FWRI, personal communication.

There is likely to be no additional biological benefit to protected species from **Alternative 1 (No Action)** because it would perpetuate the existing level of risk for interactions between ESA-listed species and the fishery. Previous ESA consultations determined the South Atlantic snapper grouper and Gulf of Mexico reef fish fisheries use the same general gear types and techniques to when fishing for groupers (including black grouper), and those activities were not likely adversely affect marine mammals or *Acropora* species. **Alternative 2** and its subalternatives are unlikely to alter fishing behavior in a way that would cause new adverse effects to these species. The biological benefits to sea turtles and smalltooth sawfish from **Alternative 2** and its subalternatives are unclear. If it perpetuates the existing amount of fishing effort in the fisheries it is unlikely to change the level of interaction between sea turtles and smalltooth sawfish and the fisheries as a whole. This scenario is likely to provide little additional biological benefits to sea turtles and smalltooth sawfish, if any. However, if the alternative reduces the overall amount of effort in the fisheries the risk of interactions with sea turtles and smalltooth sawfish will likely decrease, providing additional biological benefits to these species.

4.3.1.2 Economic Effects

The analysis of economic effects for the alternatives considered under **Action 13** assume the allocation of black grouper between the commercial and recreational sectors under **Alternative 2 (Preferred)** for **Action 14**, which are 36.88% commercial and 63.12% recreational. In addition, the average commercial ex-vessel price per pound for black grouper is $3.19 and the estimated recreational willingness-to-pay per pound for black grouper is $12.27 (personal communication, SEFSC). The analysis also assumes that, under **Alternative 1 (No Action)**, the distribution of black grouper landings between the South Atlantic and Gulf of Mexico Councils' jurisdictions would remain the same as it has been on average from 2005-2009. As can be seen in **Table 4-49**, relative to **Alternative 1 (No Action)**, the greatest increase in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits to participants in the South Atlantic black grouper fishery would accrue under **Subalternative 2d**, followed by **Subalternative 2c**, **Subalternative 2b (Preferred)**, while **Subalternative 2a** would provide the lowest total economic benefits.

Table 4-49. Changes in South Atlantic Commercial Gross Revenue, Recreational Consumer Surplus, and Total Economic Benefits for Black Grouper, **Action 13**. ACLs are in lbs whole weight.

Alternative	SA ACL	Gulf ACL	SA Commercial ACL	SA Recreational ACL	SA Commercial Gross Revenue	SA Recreational CS	Change in SA Gross Revenue Relative to Alt. 1	Change in SA CS relative to Alt 1	Total Change in Economic Benefits
Alternative 1	208,154	314,846	76,767	131,387	$244,887	$1,612,118	$0	$0	$0
Alternative 2a	240,580	282,420	88,726	151,854	$283,036	$1,862,880	$38,149	$250,762	$288,911
Alternative 2b	**245,810**	**277,190**	**90,655**	**155.155**	**$289,189**	**$1,903,752**	**$44,302**	**$291,634**	**$335,936**
Alternative 2c	251,040	271,960	92,584	158,456	$295,343	$1,944,255	$50,456	$332,137	$382,593
Alternative 2d	261,500	261,500	96,441	165,059	$307,647	$2,025,274	$62,760	$413,156	$475,916

4.3.1.3 Social Effects

In establishing jurisdictional allocations for black grouper the social effects are similar to any allocation choice. Depending upon how the allocation is determined, the ensuing harvest thresholds will determine the overall social effects. While the **Subalternatives 2a** through **2d** progressively give more allocation to the South Atlantic and are based upon different time series, it is difficult to know what the social effects would be although recent discussions have implied that more landings, especially recreational may be coming from the South Atlantic. This also relates to better identification of the species so may justify that allocation. **Subalternative 2b (Preferred)** is between the other allocation schemes and is based upon catch history from two different time periods and may account for differing harvesting patterns historically and presently. The **Alternative 1 (No Action)** would likely impose administrative burdens on both Councils as they each have differing management regimes that include black grouper. Therefore, no action would likely have negative social impacts. By selecting **Subalternative 2b (Preferred)** the social effects should be positive as management of this species will be specific to each council and their regimen. However, the jurisdictional boundary does pose some problems for fishermen in the Keys as they can easily fish in both Councils' jurisdictions.

4.3.1.4 Administrative Effects

Alternative 1 (No Action) would retain the current allocations and would result in the least administrative burden. Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf of Mexico and South Atlantic. Under **Subalternatives 2b (Preferred)**, **2c**, and **2d**, ABC would be almost evenly divided among the Councils. This could increase the administrative impacts to NOAA Fisheries Service as landings would need to be monitored to ensure the commercial and recreational ACLs are not exceeded in each region. However, **Subalternative 2b (Preferred)** is not expected to increase administrative impacts relative to the other action alternatives.

4.3.1.5 Council Conclusions

The stock assessment for black grouper treated the Gulf and South Atlantic management unit as a single stock rather than providing separate assessments thus the ABC for black grouper applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf of Mexico and South Atlantic. Since black grouper are primarily landed off Florida, especially southern Florida and in the Florida Keys (Monroe County), jurisdictional allocation of this stock presents some issues. These issues primarily revolve around dividing the recreational landings in Monroe County, because the current Gulf of Mexico and South Atlantic Council jurisdictional boundary line is the Florida Keys. Both the South Atlantic and Gulf of Mexico Councils selected the jurisdictional allocation under **Subalternative 2b** (**Preferred)** (Gulf = 53% of the ABC and SA = 47% of the ABC (Established by using 50% of ~~catch history~~ average landings from 1986-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

The alternatives that were considered by both Councils removed all Florida Keys landings from the Gulf of Mexico, including discards, and placed them with South Atlantic landings since legal

sized black grouper caught in the Florida Keys are more likely to have been caught from South Atlantic jurisdictional waters. However, based on the current system of MRFSS landings for Monroe County, the landings were previously attributed to Gulf of Mexico waters. The headboat fishery already accounts for Florida Keys (Monroe County) by including those landings in the South Atlantic jurisdiction (SEDAR 19 2010). The Florida trip ticket program data set used for commercial data allows for stratification of "area fished". Landings were split in this fashion to more accurately reflect black grouper harvest in the two areas and thus provide more fair and equitable jurisdictional allocation alternatives.

The Snapper Grouper AP supported the South Atlantic Council's preferred jurisdictional allocation alternative for black grouper.

The South Atlantic Council's SSC did not provide a recommendation for this action.

The LEAP did not have a recommendation for this action.

The South Atlantic Council concluded that **Subalternative 2b (Preferred)** best meets the purpose and need to implement measures expected to prevent overfishing and achieve OY while minimizing, to the extent practicable, adverse social and economic effects. The preferred alternative also best meets the objectives of the Snapper Grouper FMP, as amended, while complying with the requirements of the Magnuson-Stevens Act and other applicable law.

4.3.6 Action 18: Establish Jurisdictional Allocations for Yellowtail Snapper

Alternative 1 (No action). Do not establish jurisdictional allocation of the yellowtail snapper acceptable biological catch (ABC) between the Gulf of Mexico and South Atlantic Councils.

Alternative 2. Establish a jurisdictional allocation for yellowtail snapper based on the most recent stock assessment for the South Atlantic and Gulf of Mexico (SEDAR 3, 2003).

Subalternative 2a. South Atlantic = 98% of ABC and Gulf of Mexico = 2% of ABC (Established by using ~~catch history~~ average landings from 1987-2001).

Subalternative 2b. South Atlantic = 98% of ABC and Gulf of Mexico = 2% of ABC (Established by using 50% of ~~catch history~~ average landings from 1987-2001 + 50% of ~~catch history~~ average landings from 1999-2001).

Subalternative 2c. South Atlantic = 100% of ABC and Gulf of Mexico = 0% of ABC (Established by using highest catch history from 1987-2001).

Subalternative 2d. South Atlantic = 95% of ABC and Gulf of Mexico = 5% of ABC (Established by using lowest catch history from 1987-2001).

Alternative 3. Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 73% of ABC and Gulf of Mexico = 27% of ABC (Established by using 50% of ~~catch history~~ average landings from 1993-2009 + 50% of ~~catch history~~ average landings from 2007-2009).

Alternative 4 (Preferred). Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 75% of ABC and Gulf of Mexico = 25% of ABC (Established by using 50% of ~~catch history~~ average landings from 1993-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

Alternative 5. Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 77% of ABC and Gulf of Mexico = 23% of ABC (Established by using ~~catch history~~ average landings from 1999-2008).

Alternative 6. Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 71% of ABC and Gulf of Mexico = 29% of ABC (Established by using ~~catch history~~ average landings from 2005-2009).

Table 4-60a. Values for ABC (lbs whole weight) for South Atlantic and Gulf of Mexico using jurisdiction allocations specified in **Alternatives 2-6** based on recommended ABC of 2,898,500 lbs whole weight for Gulf of Mexico and South Atlantic.

Alternative	South Atlantic	Gulf of Mexico
Alternative 2a	2,840,530	579,700
Alternative 2b	2,840,530	579,700
Alternative 2c	2,898,500	0
Alternative 2d	2,753,575	144,925
Alternative 3	2,115,905	782,595
Alternative 4 (Preferred)	**2,173,875**	**724,625**
Alternative 5	2,231,845	666,655
Alternative 6	2,057,935	840,565

Table 4-60b. Values for ACL (lbs whole weight; commercial and recreational sectors combined), commercial ACL, recreational, and recreational ACT based on preferred alternative of ABC = 2,173,875 lbs whole weight for the South Atlantic.

Parameter	Value	Source
ABC	2,173,875	Action 18, Preferred Alternative 4
ACL	2,173,875	Action 6, Preferred Alternative 2
Comm ACL	1,565,190	Action 5, Preferred Alternative 2
Rec ACL	608,685	Action 5, Preferred Alternative 2
Rec ACT	529,556	Action 8, Preferred Alternative 2d

4.3.6.1 Biological Effects

Under **Alternative 1 (No Action)**, the Gulf of Mexico and South Atlantic Councils would need to agree on an ACL and on a common set of regulations (i.e., bag limits, size limits, and closed season(s)), and sector allocations. **Alternative 2** would establish a jurisdictional allocation for yellowtail snapper, based on the most recent stock assessment for the South Atlantic and Gulf of Mexico (SEDAR 3 2003), which does not consider stratified yellowtail snapper data for Monroe County, Florida. Juvenile yellowtail are likely more abundant in the Gulf of Mexico Council's jurisdiction and adults along the reef tract are more abundant in the South Atlantic Council's jurisdiction. Therefore, alternatives that consider post-stratified data are likely more appropriate for determining jurisdictional allocations than **Alternative 2**.

Under **Alternatives 3-6**, data for yellowtail snapper in the Florida Keys were stratified into the South Atlantic and Gulf of Mexico. **Alternatives 3** through **6** take into account any management changes that took place for yellowtail snapper in both the Gulf of Mexico and South Atlantic Council's FMPs since all catch history data began in 1993. The biological effects of allocating a portion of the ABC to the Gulf of Mexico and South Atlantic identified in **Alternatives 2-6** would be similar. The 2003 stock assessment indicates yellowtail snapper are not experiencing overfishing and are not overfished. Furthermore, both Councils are in the process of specifying ACLs and AMs for all managed species. Therefore, additional measures have been and are being considered to ensure yellowtail snapper does not experience overfishing.

Relative to **Alternative 1 (No Action)**, the greatest change in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits to participants in the South Atlantic yellowtail snapper fishery would accrue under **Subalternative 2c**, followed by **Subalternative 2a** and **Subalternative 2b** (which are equivalent), **Subalternative 2d**, **Alternative 5**, **Alternative 4 (Preferred)**, **Alternative 3**, and the least, under **Alternative 6**.

The allocation procedure selected may have few social effects depending upon the other restrictions that come from the administration by each Council. At present it is difficult to ascertain any specific social effects other than any reduction in harvest or increased regulatory burden from the allocation scheme may have negative social effects.

Alternative 1 (No Action) would retain the current allocations and would result in the least administrative burden. All of the action alternatives and subalternatives would carry a moderate administrative burden. Establishing jurisdictional allocation would increase the administrative impacts to NOAA Fisheries Service as landings would need to be monitored in both the Gulf of Mexico and South Atlantic in relation to the commercial and recreational portion of the allocation for overage and commercial quota purposes. **Subalternative 2c** would carry the least administrative burden.

Table 4-61. The OFL and ABC recommendations from the South Atlantic Scientific and Statistical Committee.

OFL (ww)	ABC (ww)
Yield @ F_{MSY}	2,898,500 lbs.

Source: The ABC is the average of the OY defined as $75\%_{MSY}$ for the "fleet" and "ICA" models Table 2 minutes from the South Atlantic SSC report.

Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf of Mexico and South Atlantic. Since yellowtail snapper are primarily landed off Florida especially southern Florida and in the Florida Keys (Monroe County), jurisdictional allocation of this stock presents some issues. Recreational landings in other Gulf of Mexico and South Atlantic states are low, averaging less than 38,000 lbs whole weight. These allocation issues primarily revolve around dividing the landings (commercial and recreational) in Monroe County, because the current Gulf of Mexico and South Atlantic Council jurisdictional boundary line is the Florida Keys.

The most recent stock assessment for yellowtail snapper was completed in 2003 and has landings through 2001 (SEDAR 3 2003). The landings in the stock assessment are divided by the following regions: 1 - North of Palm Beach County; 2 - Palm Beach through Miami-Dade Counties; 3 - Monroe County (Florida Keys); and 4 - Gulf of Mexico north or west of the Keys. In the stock assessment, landings in regions 1 and 2 are clearly in the South Atlantic jurisdiction; whereas, region 3 - Monroe County (Florida Keys) is more difficult to determine if the landings came from the South Atlantic or Gulf of Mexico Councils' jurisdiction without stratifying the landings.

Alternative 1 (No Action) would not establish jurisdictional allocation of yellowtail snapper between the Gulf of Mexico and South Atlantic Councils. Under this alternative, yellowtail snapper would be managed jointly. The two Councils would need to agree on an annual catch limit and on a common set of regulations (i.e., bag limits, size limits, and closed season(s)). If both Councils decided to allocate this species they would also have to agree on recreational and commercial allocation.

Alternative 2 would establish a jurisdictional allocation for yellowtail snapper based on the most recent stock assessment for the South Atlantic and Gulf of Mexico (SEDAR 3 2003), which does not consider stratified yellowtail snapper data for Monroe County, Florida. Yellowtail snapper are likely caught in the back reef area of the Florida Keys (Gulf of Mexico Council jurisdiction), but are probably not legal size (B. Muller, FL FWC, FWRI, personal communication). Juveniles are typically found over shallow-water including the back reef on patch reefs and grass beds. Adult yellowtail snapper typically inhabit sandy areas near offshore reefs at depths ranging from 10-70 m (SEDAR 3 2003). Based on information in the stock assessment and discussions with the analyst, juvenile yellowtail are likely more abundant in the Gulf of Mexico Council jurisdiction and adults along the reef tract are more abundant in the South Atlantic Council jurisdiction (B. Muller, personal communication). Therefore, alternatives that consider post-stratified data are likely more appropriate for determining jurisdictional allocations than **Alternative 2**.

Subalternatives 2a and **2b** result in the same jurisdictional allocation for South Atlantic = 98% of the ABC and Gulf of Mexico = 2% of the ABC. These percentages were derived by using the formula presented in the June 10, 2010 letter from the South Atlantic Council to the Gulf of Mexico Council for black grouper as the following, but with more recent landings: use 50% of the catch history from 1987-2001 + 50% of the catch history from 1999-2001. Using catch history from 1987-2001 resulted in the same jurisdictional allocation between the South Atlantic and Gulf of Mexico (**Subalternative 2a**). **Subalternative 2c** would allocate 100% of ABC to the South Atlantic by using highest catch history from 1987-2001, which occurred in 2000. **Subalternative 2d** would allocate 95% of ABC to the South Atlantic and 5% to the Gulf of Mexico by using lowest catch history from 1987-2001, which occurred in 1999. The amount of yellowtail snapper landings that would be allocated to the Gulf of Mexico and South Atlantic is shown in **Table 4-60a**.

Under **Alternatives 3-6**, data for yellowtail snapper in the Florida Keys were stratified into the South Atlantic and Gulf of Mexico using the following methods for each sector: commercial landings are based on annual landings summary and are sub-setted by region based on fisher reported "catch area"; headboat landings were defined as North Carolina-Florida Keys statistical areas 1-17 (South Atlantic); and 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 then re-assigned to the South Atlantic Council, because most legal sized yellowtail snapper (minimum size limit of 12-inch TL) would be caught in South Atlantic waters. All catch histories begin in 1993 due to issues associated with post-stratifying Florida Keys (Monroe County) landings prior to that date.

Alternatives 3-6 take into account any management changes that took place for yellowtail snapper in both the Gulf of Mexico and South Atlantic Councils since all catch history data begins in 1993. In the Gulf of Mexico, Amendment 1 effective in 1990 set a 12-inch TL minimum size limit for the recreational and commercial sectors that was compatible with state of Florida regulations (GMFMC 1989). Amendment 1 also limited the catch of yellowtail snapper by the 10-snapper aggregate bag limit for recreational anglers and the licensing requirements for commercial fishers (GMFMC 1989). In the South Atlantic, the original Fishery Management Plan, effective in 1985, set a 12-inch TL minimum size limit for yellowtail snapper and a 10-snapper per person possession limit (SAFMC 1983).

Alternative 3 would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper ABC based on the following method: South Atlantic = 73% of ABC and Gulf of Mexico = 27% of the ABC. These percentages were derived by using the formula presented in the June 10, 2010, letter from the South Atlantic Council for black grouper allocation as the following: use 50% of the catch history from 1993-2009 + 50% of the catch history from 2007-2009. The South Atlantic Council is using catch histories that include landings in 2009 and their inclusion is consistent with other data sets in their Comprehensive ACL Amendment. The concept of this method is to use all available years to determine the split and to provide additional weight to the most recent three years. The catch histories begin in 1993 due to issues associated with post-stratifying landings prior to that date from the Florida Keys (Monroe County). Using catch history from 1993-2009 resulted in a jurisdiction allocation of South

Atlantic = 74% of the ABC and Gulf of Mexico = 26% of the ABC, which is between this alternative and **Alternative 4 (Preferred)**.

Alternative 4 (Preferred) would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper ABC based on the following method: South Atlantic = 75% of ABC and Gulf of Mexico = 25% of the ABC. These percentages were derived by using the formula presented in the June 10, 2010 letter from the South Atlantic Council for black grouper allocation as the following: use 50% of the catch history from 1993-2008 + 50% of the catch history from 2006-2008. The concept of this method is to use all available years to determine the split, but this data set was stopped in 2008 similar to the methods used for black grouper jurisdictional allocation (**Action 13**). Using catch histories from 1993-2008 and catch histories from 2004-2008 resulted in the same jurisdictional allocation as this alternative, South Atlantic = 75% of the ABC and Gulf of Mexico = 25% of the ABC. Using catch history from 2000-2009 results in a jurisdictional allocation of South Atlantic = 76% of the ABC and Gulf of Mexico = 24% of the ABC, which is between this alternative and **Alternative 5**. Applying the preferred jurisdictional allocation in **Alternative 4** to the preferred alternatives in **Actions 5, 6,** and **8** for snapper grouper species results in the ACL and ACT values specified in **Table 4-60b**.

Alternative 5 would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch based on the following method: South Atlantic = 77% of ABC and Gulf of Mexico = 23% of ABC. These percentages were derived by using the most recent ten years of catch history data from 1999-2008, but stopping in 2008 similar to the methods used for black grouper allocation (**Action 14**). The assessment was conducted in 2009 so landings from that year were not available for the assessment.

Alternative 6 would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf of Mexico and South Atlantic Councils for yellowtail snapper acceptable biological catch based on the following method: South Atlantic = 71% of ABC and Gulf of Mexico = 29% of ABC. These percentages were derived by using the most recent five years of data including 2009 landings. The South Atlantic Council is using catch histories that include landings in 2009 and their inclusion is consistent with other data sets in the Comprehensive ACL Amendment.

The biological effects of allocating a portion of the ABC to the Gulf of Mexico and South Atlantic identified in **Alternatives 2-6** would be similar. The 2003 stock assessment indicates yellowtail snapper are not experiencing overfishing and are not overfished. Furthermore, both Councils are in the process of specifying ACLs and AMs for all management species. Additional measures have been and are being considered to ensure yellowtail snapper does not experience overfishing.

There is likely to be no additional biological benefit to protected species from **Alternative 1 (No Action)** because it would perpetuate the existing level of risk for interactions between ESA-listed species and the fishery. Previous ESA consultations determined the South Atlantic snapper grouper and Gulf of Mexico reef fish fisheries were not likely adversely affecting marine

mammals or *Acropora* species. **Alternatives 2-6** are unlikely to alter fishing behavior in a way that would cause new adverse effects to these species. The biological benefits to sea turtles and smalltooth sawfish from **Alternatives 2-6** are unclear. If it perpetuates the existing amount of fishing effort in the fisheries it is unlikely to change the level of interaction between sea turtles and smalltooth sawfish and the fisheries as a whole. This scenario is likely to provide little additional biological benefits to sea turtles and smalltooth sawfish, if any. However, if the alternatives reduce the overall amount of effort in the fisheries, the risk of interactions with sea turtles and smalltooth sawfish will likely decrease, providing additional biological benefits to these species.

4.3.6.2 Economic Effects

The analysis of economic effects for the alternatives considered under **Action 18** assume the allocation of yellowtail snapper between the commercial and recreational sectors under **Alternative 2 (Preferred)** for **Action 5**, which are 52.56% commercial and 47.44% recreational, respectively. In addition, the average commercial ex-vessel price per pound for yellowtail snapper is $2.60 and the estimated recreational willingness-to-pay per pound for yellowtail snapper is $10.93 (personal communication, SEFSC). The analysis also assumes that, under **Alternative 1 (No Action)**, the distribution of yellowtail snapper landings between the South Atlantic and Gulf of Mexico Councils' jurisdictions would remain the same as it has been on average from 2005-2009. Further, since the 2005-2009 distribution of landings is the basis for **Alternative 6**, the South Atlantic and Gulf of Mexico ACLs for yellowtail snapper are the same under **Alternative 1 (No Action)** and **Alternative 6**. As can be seen in **Table 4-62**, relative to **Alternative 1 (No Action)**, the greatest change in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits to participants in the SA yellowtail snapper fishery would accrue under **Subalternative 2c**, followed by **Subalternative 2a** and **Subalternative 2b** (which are equivalent), **Subalternative 2d**, **Alternative 5**, **Alternative 4 (Preferred)**, **Alternative 3**, and the least, for reasons explained above, under **Alternative 6**.

Table 4-62. Changes in South Atlantic Commercial Gross Revenue, Recreational Consumer Surplus, and Total Economic Benefits for Yellowtail Snapper, **Action 18**. ACLs are in lbs whole weight.

Alternative	SA ACL	Gulf of Mexico ACL	SA Commercial ACL	SA Recreational ACL	SA Commercial Gross Revenue	SA Recreational CS	Change in SA Gross Revenue Relative to Alt. 1	Change in SA CS relative to Alt 1	Total Change in Economic Benefits
1	2,057,935	840,565	1,081,651	976,284	$2,812,292	$10,670,788	$0	$0	$0
2a	2,840,530	57,970	1,492,983	1,347,547	$3,881,755	$14,728,693	$1,069,463	$4,057,905	$5,127,368
2b	2,840,530	57,970	1,492,983	1,347,547	$3,881,755	$14,728,693	$1,069,463	$4,057,905	$5,127,368
2c	2,898,500	0	1,523,452	1,375,048	$3,960,974	$15,029,279	$1,148,682	$4,358,491	$5,507,173
2d	2,753,575	144,925	1,447,279	1,306,296	$3,762,925	$14,277,815	$950,633	$3,607,027	$4,557,661
3	2,115,905	782,595	1,112,120	1,003,785	$2,891,511	$10,971,374	$79,219	$300,586	$379,805
4	**2,173,875**	**724,625**	**1,142,589**	**1,031,286**	**$2,970,731**	**$11,271,959**	**$158,439**	**$601,171**	**$759,610**
5	2,231,845	666,655	1,173,058	1,058,787	$3,049,950	$11,572,545	$237,658	$901,757	$1,139,415
6	2,057,935	840,565	1,081,651	976,284	$2,812,292	$10,670,788	$0	$0	$0

4.3.6.3 Social Effects

In establishing jurisdictional allocations for yellowtail snapper the social effects are similar to any allocation choice. Depending upon how the allocation is determined, the ensuing harvest thresholds will determine the overall social effects. **Alternative 1 (No Action)** may make management of yellowtail snapper more difficult as monitoring of landings with ACLs and AMs creates scenarios for more administrative burdens in accounting for catches. The **Subalternatives 2a** and **2b** are similar in that the allocation schemes give the same amount to each Council although they are based upon different time series and actually are almost equal in amount of pounds. It is difficult to know what the social effects would be although recent discussions have implied that more landings, especially recreational may be coming from the South Atlantic as this also relates to better identification of the species so may justify that allocation. **Subalternative 2b** is between the other allocation schemes and is based upon catch history from two different time periods and may account for differing harvesting patterns historically and presently. **Subalternative 2c** provides 100% allocation to the South Atlantic with **Subalternative 2d** allowing 5% to the Gulf of Mexico. **Alternatives 3-6** allocate based upon a different time series and jurisdictional boundary. As mentioned earlier, the allocation procedure selected may have few social effects depending upon the other restrictions that come from the administration by each Council. At present it is difficult to ascertain any specific social effects other than any reduction in harvest or increased regulatory burden from the allocation scheme may have negative social effects.

4.3.6.4 Administrative Effects

Alternative 1 (No Action) would retain the current allocations and would result in the least administrative burden. Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf of Mexico and South Atlantic. All of the action alternatives and subalternatives would carry a moderate administrative burden. Establishing jurisdictional allocation would increase the administrative impacts to NOAA Fisheries Service as landings would need to be monitored in both the Gulf of Mexico and South Atlantic in relation to the commercial and recreational portion of the allocation for overage and commercial quota purposes. Under **Subalternative 2c**, the ABC would be allocated 100% to the South Atlantic and 0% for the Gulf of Mexico. Under this scenario, monitoring, enforcement and reporting would carry the least administrative burden.

4.3.6.5 Council Conclusions

As for black grouper, the Gulf of Mexico and South Atlantic Councils requested that jurisdiction allocation alternatives be developed for yellowtail snapper between the two Councils' jurisdictional areas. The stock assessment for yellowtail snapper treated the Gulf of Mexico and South Atlantic management unit as a single stock rather than providing separate assessments. Thus the ABC currently applies across Council jurisdictions. Since yellowtail snapper are primarily landed off the state of Florida

especially southern Florida and in the Florida Keys (Monroe County), jurisdictional allocation of this stock presents some issues. These allocation issues primarily revolve around dividing the landings (commercial and recreational) in Monroe County, because the current Gulf of Mexico and South Atlantic Council jurisdictional boundary line is the Florida Keys. Both the South Atlantic and Gulf of Mexico Councils were presented with a suite of alternatives that treated the splitting of Monroe County landings similarly. Both Councils chose as their preferred alternative to establish a jurisdictional allocation based on the following method: South Atlantic = 75% of ABC and Gulf of Mexico = 25% of ABC (Established by using 50% of average landings from 1993-2008 + 50% of average landings from 2006-2008).

During their April 2011 meeting, the Snapper Grouper AP were provided recent landings (2005-2009) information for the South Atlantic and the Gulf of Mexico. Based on those landings and their knowledge of the fishery, the Snapper Grouper AP submitted for the South Atlantic Council's consideration an allocation of 70% of the ABC to the South Atlantic and 30% to the Gulf.

The South Atlantic Council's SSC did not provide a recommendation for this action.

The LEAP did not have a recommendation for this action.

The South Atlantic Council concluded that **Preferred Alternative 4** best meets the purpose and need to implement measures expected to prevent overfishing and achieve OY while minimizing, to the extent practicable, adverse social and economic effects. The preferred alternative also best meets the objectives of the Snapper Grouper FMP, as amended, while complying with the requirements of the Magnuson-Stevens Act and other applicable law.

4.3.7 Action 19: Establish Jurisdictional Allocations for Mutton Snapper

Alternative 1. (No Action). Do not establish jurisdictional allocation of the mutton snapper Acceptable Biological Catch (ABC) between the Gulf and South Atlantic Councils.

Alternative 2 (Preferred). Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for mutton snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 82% of ABC and Gulf = 18% of ABC (Established by using 50% of ~~catch history~~ average landings from 1990-2008 + 50% of ~~catch history~~ average landings from 2006-2008).

Alternative 3. Establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for mutton snapper Acceptable Biological Catch (ABC) based on the following method:

South Atlantic = 79% of ABC and Gulf = 21% of ABC (Established by using ~~catch history~~ average landings from 2002-2006).

Alternative 4. Do not establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for mutton snapper. The South Atlantic Council would manage mutton snapper in the South Atlantic and Gulf of Mexico.

4.3.7.1 Biological Effects

The Gulf of Mexico Council and South Atlantic Council requested that jurisdictional allocation alternatives be developed for mutton snapper between the two Council's jurisdictional areas. The stock assessment for mutton snapper (SEDAR 15A 2008) treated the Gulf and South Atlantic management unit as a single stock rather than providing separate assessments. The stock assessment was completed in 2008 and concluded that the stock is neither overfished nor undergoing overfishing.

The South Atlantic Council's SSC recommended that the OFL be set equal to the equilibrium maximum sustainable yield proxy, which is the yield at $F30\%_{SPR}$= 1.52 mp whole weight (ww) and the ABC be set equal to the equilibrium optimum yield, which is the yield at $F40\%_{SPR}$ = 1.16 mp whole weight (ww). The Gulf Council's SSC recommended a consistent OFL and ABC, but separated landed weight from the dead discards (**Tables 4-63 & 4-64**).

Table 4-63. OFL and ABC Recommendations from Gulf Council's SSC.

OFL (ww)		
Landings	Discards	Total
1,480,000	35,300	1,515,300

ABC (ww)		
Landings	Discards	Total
1,130,000	26,500	1,156,500

Table 4-64. Mutton snapper ABC (landed catch pounds ww) in Gulf of Mexico and South Atlantic based on jurisdictional allocation alternatives.

	Not Adjusted for Dead Discards		Adjusted for Dead Discards	
Alternative	Gulf	South Atl	Gulf	South Atl
Alternative 2 (preferred)	**208,080**	**947,920**	**203,400**	**926,600**
Alternative 3	242,480	913,520	237,300	892,700
Alternative 4	0	1,156,000	0	1,130,000

Table 4-65. Mutton snapper values (lbs whole weight) for OFL, ABC, ACL (commercial and recreational sectors combined), commercial ACL, recreational ACL, and recreational ACT based on preferred alternative of ABC = 926,000 lbs whole weight for the South Atlantic.

Parameter	Value	Source
OFL	1,515,300	Action 18
ABC	926,000	Action 18, Preferred Alternative 2
ACL	926,000	Action 5, Preferred Alternative 2
Comm ACL	222,384	Action 4, Preferred Alternative 2
Rec ACL	704,216	Action 4, Preferred Alternative 2
Rec ACT	612,668	Action 7, Preferred Alternative 2d

Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf and South Atlantic. Mutton snapper are widely distributed in the western Atlantic from Massachusetts and Bermuda to southeastern Brazil, including the Gulf of Mexico, the Bahamas, and the Greater and Lesser Antilles. Mutton snapper is found throughout the coastal waters of the Gulf of Mexico and is associated with coral reefs, sandy bottoms, and seas grasses, including estuaries and bays with mangroves (SEDAR 15A 2008).

Alternative 1 (No Action) would not establish jurisdictional allocation of mutton snapper between the Gulf and South Atlantic Councils. Under this alternative, mutton snapper would be managed jointly. The two Councils would need to agree on an ACL and on a common set of regulations (i.e., bag limits, size limits, and closed season(s)). If the Councils decided not to allocate this species by region they would have to agree on a recreational and commercial allocation.

Alternative 2 (Preferred) would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils for mutton snapper acceptable biological catch based on the following method: South Atlantic = 82% of the ABC and Gulf = 18% of the ABC. These percentages were derived by using the formula: 50% of the catch history from 1990-2008 + 50% of the catch history from 2006-2008. In **Alternatives 2 (Preferred)** and **3**, data from Monroe County, Florida are stratified using methodology described in **Action 18**. Employing the ABC for the preferred jurisdictional **Alternative 2** to the preferred alternatives in **Actions 5, 6,** and **8** for snapper grouper species results in the ACL and ACT values specified in **Table 4-65**.

Alternative 3 would establish a jurisdictional allocation based on the Florida Keys (Monroe County) jurisdictional boundary between the Gulf and South Atlantic Councils

for mutton snapper acceptable biological catch (ABC) based on the following method: South Atlantic = 79% of the ABC and Gulf = 21% of the ABC. These percentages were derived by using catch histories from 2002-2006, the most recent 5 years of data.

Alternatives 2 (Preferred) and **3** are similar, with only 3% difference in allocation of the ABC between the Gulf and South Atlantic Councils. Based on the stock assessment for mutton snapper (SEDAR 15A 2008), the commercial landings (handline and longline combined) are close to a 50:50 split between the Gulf and South Atlantic Councils. The recreational landings (Marine Recreational Fisheries Statistical Survey (MRFSS) and headboat) are primarily from the South Atlantic jurisdiction.

Alternative 4 would be dependent upon the Gulf Council relinquishing management of mutton snapper. Under this alternative the South Atlantic Council would manage mutton snapper in the South Atlantic, where most of the landings occur as well as the Gulf of Mexico. The biological effects of **Alternative 4** could be slightly greater than **Alternatives 2 (Preferred)** and **3** because management measures (a two month spawning season closure) are more restrictive for the commercial sector in the South Atlantic than in the Gulf of Mexico. However, commercial landings of mutton snapper are small relative to recreational landings, and landings from the Gulf of Mexico are much less than those in the South Atlantic. In the South Atlantic and Gulf of Mexico, there is a 16-inch total length minimum size limit in place for the commercial and recreational sectors, and mutton snapper is included in the 10-snapper aggregate recreational bag limit in both regions.

Regardless of which alternative is selected, SEDAR 15A (2008) indicates management measures in both areas are sufficient to prevent overfishing of mutton snapper. Furthermore, both Councils are in the process of specifying ACLs and AMs for all managedspecies. Therefore, additional measures have been and are being considered to ensure mutton snapper does not experience overfishing.

There is likely to be no additional biological benefit to protected species from **Alternative 1 (No Action)** because it would perpetuate the existing level of risk for interactions between ESA-listed species and the fishery. Previous ESA consultations determined the South Atlantic snapper grouper and Gulf of Mexico reef fish fisheries were not likely adversely affecting marine mammals or *Acropora* species. **Alternatives 2-4** are unlikely to alter fishing behavior in a way that would cause new adverse effects to these species. The biological benefits to sea turtles and smalltooth sawfish from **Alternatives 2-4** are unclear. If it perpetuates the existing amount of fishing effort in the fisheries it is unlikely to change the level of interaction between sea turtles and smalltooth sawfish and the fisheries as a whole. This scenario is likely to provide little additional biological benefits to sea turtles and smalltooth sawfish, if any. However, if the alternatives reduce the overall amount of effort in the fisheries, the risk of interactions with sea turtles and smalltooth sawfish will likely decrease, providing additional biological benefits to these species.

4.3.7.2 Economic Effects

Under **Preferred Alternative 4** for **Action 1** of the South Atlantic Comprehensive ACL Amendment, mutton snapper is to be retained in the snapper grouper FMU. In general, greater economic efficiency is attained when the allocation of management authority over all snapper grouper species and thus the associated costs more closely mirror the distribution of the resource. Landings of mutton snapper from state waters account for a smaller percentage (69%) of the total mutton snapper landings relative to the snapper grouper species being removed from the FMU under **Preferred Alternatives 2, 5,** and **9** for **Action 1.** However, the effective landings of mutton snapper under federal management are about 174,000 pounds rather than almost 562,000 pounds (whole weight). Most landings of mutton snapper are from state and federal waters off Florida and occur at Florida ports. Thus, the economic benefits associated with retaining federal management of mutton snapper are relatively small. In turn, federal resources (labor and capital) could be used to more effectively manage the other snapper grouper species expected to remain in the FMU.

The analysis of economic effects for the alternatives considered under **Action 19** to establish a jurisdictional allocation of mutton snapper between the South Atlantic and Gulf Councils assumes that the allocation of mutton snapper between the commercial and recreational sectors under **Alternative 2 (Preferred)** for **Action 5**, which are 17.02% commercial and 82.98% recreational, respectively. Also, under **Alternative 1 (No Action)**, the distribution of mutton snapper landings between the South Atlantic and Gulf Councils' jurisdictions is assumed to remain the same as it has been on average from 2005-2009. Analysis adopts the South Atlantic Council SSC's recommendation for ABC that does not make adjustments for dead discards and assumes MRFSS landings data from Monroe County are assigned to the Gulf of Mexico. In addition, the analysis assumes the average commercial ex-vessel price per pound for mutton snapper is $2.43 and the estimated recreational willingness to pay per pound for mutton snapper is $10.93 (personal communication, SEFSC).

As can be seen in **Table 4-66**, relative to **Alternative 1 (No Action)**, the greatest losses in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits to participants in the South Atlantic mutton snapper fishery would accrue under **Alternative 2 (Preferred)**. Losses in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits to participants in the South Atlantic mutton snapper fishery would accrue under **Alternative 3.** Thus, participants in the South Atlantic mutton snapper fishery would be economically better off under **Alternative 1 (No Action)** relative to **Alternative 2 (Preferred)** and **Alternative 3**. Conversely, participants in the South Atlantic mutton snapper fishery would experience gains in commercial gross revenue, consumer surplus in the recreational sector, and thus total economic benefits under **Alternative 4**. Therefore, participants in the South Atlantic mutton snapper fishery would be economically better off under **Alternative 4** relative to **Alternative 1 (No Action)**, **Alternative 2 (Preferred)** and **Alternative 3**.

Table 4-66. Changes in South Atlantic Commercial Gross Revenue, Recreational Consumer Surplus, and Total Economic Benefits for **Alternatives 2-4** relative to **Alternative 1 (No Action)** under **Action 19**. ACLs are in lbs whole weight. Based on ABC recommendation from South Atlantic Council's SSC, which does not adjust the ABC for dead discards. Assumes ACL = ABC.

Alternative	SA ACL	Gulf ACL	SA Commercial ACL	SA Recreational ACL	SA Commercial Gross Revenue	SA Recreational CS	Change in SA Gross Revenue Relative to Alt. 1	Change in SA CS relative to Alt 1	Total Change in Economic Benefits
Alternative 1	970K	184K	165K	805K	$401,338	$8,801,123	$0	$0	$0
Alternative 2 (Preferred)	**890K**	**266K**	**151K**	**639K**	**$367,893**	**$8,067,701**	**-$33,445**	**-$733,422**	**-$766,867**
Alternative 3	913K	243K	155K	758K	$377,449	$7,818,600	-$23,889	-$902,523	-$926,412
Alternative 4	1,156K	0	197K	959K	$477,789	$9,998,232	$76,451	$1,197,109	$1,273,560

4.3.7.3 Social Effects

In establishing jurisdictional allocations for mutton snapper the social effects are similar to those for other species, like yellowtail snapper, within the Comprehensive ACL Amendment. Depending upon how the allocation is determined, the ensuing harvest thresholds will determine the overall social effects. Although **Alternative 1 (No Action)** may make management of mutton snapper more difficult as monitoring of landings with ACLs and AMs creates scenarios for more administrative burdens in accounting for catches. Furthermore, the social effects of **Alternative 4** would be dependent upon how the South Atlantic Council addresses issues regarding required permits to catch mutton snapper in the Gulf of Mexico and South Atlantic. The Councils would have to jointly meet and decide upon management which could add burdens to management through longer timeframes for decision-making. The allocation based upon **Alternatives 2 (Preferred)** and **3** are very close in their allocation and the social effects would differ minimally between the two. Both alternatives use data from the most recent years with **Alternative 2 (Preferred)** using older data also to account for the historical fishery. The social effects of **Alternatives 2 (Preferred)**, **3**, and **4** would likely be positive in the long term as it would allow for management and accountability based upon regional fishing activities. It becomes problematic in areas like the Florida Keys where fishermen may fish in both jurisdictional areas and management differences could make fishing decisions more complicated. Overall, if management becomes more accountable and fishing thresholds provide stability in harvest the benefits should be positive. It will depend upon the ability to monitor and implement any AMs through each council process over time.

4.3.7.4 Administrative Effects

Alternative 1 (No Action) would retain the current allocations and would result in the least administrative burden. Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf and South Atlantic. Under **Alternatives 2 (Preferred)** and **3**, 82% and 79% of the ABC, respectively, would be divided among the commercial and recreational sectors. This could increase the administrative impacts to NOAA Fisheries Service as landings would need to be monitored to ensure the commercial and recreational ACLs are not exceeded. **Alternative 4** could increase the administrative burden if changes are needed to the Federal Gulf Reef Fish and the Federal Snapper Grouper Permits.

4.3.7.5 Council Conclusions

The stock assessment for mutton snapper treated the Gulf and South Atlantic management unit as a single stock rather than providing separate assessments. The stock assessment was completed in 2008 and concluded that the stock is neither overfished nor undergoing overfishing. Currently, the ABC applies across Council jurisdictions; therefore, the Councils would have to agree to a jurisdictional allocation between the Gulf and South Atlantic. Since mutton snapper are primarily landed off the state of Florida especially southern Florida and in the Florida Keys (Monroe County),

jurisdictional allocation of this stock presents some issues. These allocation issues primarily revolve around dividing the landings (commercial and recreational) in Monroe County, because the current Gulf of Mexico and South Atlantic Council jurisdictional boundary line is the Florida Keys. Both the South Atlantic and Gulf of Mexico Councils were presented with a suite of alternatives that treated the splitting of Monroe County landings similarly. Both Councils chose as their preferred alternative to establish a jurisdictional allocation based on the following method: South Atlantic = 77% of the ABC and Gulf = 23% of the ABC. These percentages were derived by using the following formula: use 50% of the average landings from 1990-2006 + 50% of the average landings from 2004-2006. The concept of this method is to use all available years to determine the split. The catch history was recommended to begin in 1990 when fish identification and sampling methods improved (J. O'Hop, personal communication). The catch history ends in 2006 based on available data when the stock assessment was completed. Using average landings from 1990-2006 and average landings from 2004-2006 resulted in the same jurisdiction allocation as this alternative.

The Snapper Grouper AP and the South Atlantic Council SSC did not review the alternatives for mutton snapper jurisdictional allocations and thus no recommendations were provided to the Council. At its March 2011 meeting, the South Atlantic Council included mutton snapper among those species that would be removed from the FMU. However, the Florida later expressed concern over its ability to manage the species into Federal waters, particularly due to difficulty in enforcing regulations for out-of-state vessels. Therefore, in June 2011, the South Atlantic Council voted to retain mutton snapper within the FMU.

The LEAP did not have a recommendation for this action.

The South Atlantic Council concluded that **Alternative 2 (Preferred)** best meets the purpose and need to implement measures expected to prevent overfishing and achieve OY while minimizing, to the extent practicable, adverse social and economic effects. The preferred alternative also best meets the objectives of the Snapper Grouper FMP, as amended, while complying with the requirements of the Magnuson-Stevens Act and other applicable law.