

# Supplement to the Draft Environmental Impact Statement (SDEIS) - Amendment 15B for the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

# April 2008

South Atlantic Fishery Management Council 4055 Faber Place, Suite 201 North Charleston, South Carolina 29405 (843) 571-4366 / FAX (843) 769-4520 Toll Free (866) SAFMC-10 email: <u>safmc@safmc.net</u>

National Marine Fisheries Service Southeast Regional Office 263 13<sup>th</sup> Avenue South St. Petersburg, Florida 33701 (727) 824-5301 / FAX (727) 824-5308



THIS IS A PUBLICATION OF THE SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL PURSUANT TO National Oceanic and Atmospheric Administration Award No. NA05NMF4410004

## Supplement to the Draft Environmental Impact Statement (SDEIS) - Amendment 15B for the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

#### Lead Agencies:

National Marine Fisheries Service Southeast Regional Office 263 13<sup>th</sup> Avenue South St. Petersburg, Florida 33701

South Atlantic Fishery Management Council 4055 Faber Place Drive, Suite 201 North Charleston, South Carolina 29405

#### **Proposed Action:**

To update economic analysis in Section 4.4 for the bag limit sale provision in Amendment 15B to the Snapper Grouper Fishery Management Plan for the South Atlantic Region

#### Abstract:

Actions contained within the Draft Environmental Impact Statement (DEIS) for Amendment 15B include: Define allocations for snowy grouper and red porgy; update management reference points for golden tilefish; implement a plan to monitor and assess bycatch; implement measures to minimize the impacts of incidental take on sea turtles and smalltooth sawfish; modify permit renewal and transferability requirements; and modify sales restrictions for snapper grouper species caught under the bag limit.

The Notice of Availability (NOA) for the DEIS was published on November 9, 2007, with a comment period ending January 11, 2008. This supplement to the DEIS provides an update to the economic analysis for the bag limit sales provision using data that became available after the publication of the NOA for the DEIS. The no action **Alternative 1** would allow the continued sale of snapper grouper species from the South Atlantic EEZ without a Federal snapper grouper permit. The Council's **Preferred Alternative 2** would require a valid Federal commercial permit to sell South Atlantic snapper and groupers; whereas, **Alternative 3** would require a Federal charter/headboat snapper grouper permit to sell bag limit harvested species from the South Atlantic EEZ.

Alternative 1 would allow all customary bag-limit sales activity to continue unaffected. Current estimates of annual bag-limit sales are approximately 17 percent of total snapper grouper sales, or approximately 1.5 million pounds valued at approximately \$2.6 million (nominal ex-vessel value). To the extent that recreational trip demand is influenced by the ability to subsidize the cost of a fishing trip through the sales of bag limit-fish, under the status quo, angler trip demand under Alternative 1 should remain unchanged. Under Alternative 1, the Federal commercial snapper grouper sector would continue to be denied access to snapper grouper species that are harvested under the bag limit, sold, and counted against the commercial quota.

Assuming compatible regulations are adopted by all states, **Preferred Alternative 2** would eliminate all bag-limit sales, estimated at approximately \$2.6 million in annual nominal ex-vessel value. This would constitute a reduction of approximately \$294,000 per year, or a 19-percent reduction in average annual gross revenues per vessel associated with fish sales by vessels in the for-hire fishery, and approximately \$2.3 million per year, or a 9 percent reduction in gross

revenues per year, in seafood harvests for commercial vessels that do not possess a Federal commercial snapper grouper permit.

Alternative 3 would allow continued snapper grouper bag limit sales by vessels that possess a Federal for-hire snapper grouper permit. As a result, only the harvests and revenues discussed above associated with vessels without either of the Federal snapper grouper permits would be affected. These values are approximately \$2.3 million (nominal ex-vessel value) per year, or a 9 percent reduction in gross revenues per year, in seafood harvests assuming compatible regulations are adopted by all states. If compatible regulations are not adopted by any states, the expected reduction in annual harvests and sales of snapper grouper associated with vessels that do not have either of the Federal snapper grouper permits is approximately \$1.48 million (nominal ex-vessel value), or approximately 5 percent of average annual revenues, since sales from state waters (estimated to be approximately 8 percent) would not be affected. This amount also reflects the assumption that some portion of the bag-limit EEZ harvest and sales would not be marketed through Federally-permitted dealers continues (estimated to be approximately 30 percent).

The social impacts of **Alternative 3** are expected to be intermediate to those of **Alternative 1** and **Preferred Alternative 2** since **Alternative 3** would reduce, yet not totally eliminate, bag limit snapper grouper sales. Economic losses to vessels that currently sell bag-limit quantities of snapper grouper would still be expected, but would not be as great as under **Preferred Alternative 2**, while accelerated closure pressure would be reduced, yet not eliminated. Thus, disruption of activities and relationships associated with bag-limit sales would be reduced relative to **Preferred Alternative 2**, while full avoidance of the adverse social consequences of accelerated commercial closure and other adverse economic pressures on the Federal commercial snapper grouper fleet would not be achieved. The bag-limit sales debate could continue.

#### If you would like further information regarding this statement, please contact:

Dr. Roy E. Crabtree Regional Administrator Southeast Regional Office National Oceanic and Atmospheric Administration 263 13<sup>th</sup> Avenue South, St. Petersburg, Florida 33701 Phone: 727-824-5305 FAX: 727-824-5308

#### **Further information:**

The SDEIS and DEIS may be accessed electronically through the South Atlantic Fishery Management Council's Web site at <u>http://www.safmc.net</u>, or the e-Rulemaking Portal at <u>http://www.regulations.gov</u>.

#### 4.4 Modification to the Sales Provisions

Alternative 1 (no action). Allow species in the snapper grouper management unit taken from the South Atlantic EEZ, up to the allowed bag limit, to be sold to a licensed dealer if the seller possesses a state-issued license to sell fish.

Alternative 2 (preferred). A South Atlantic snapper grouper harvested in the EEZ on board a vessel that does not have a valid Federal commercial permit for South Atlantic snapper grouper, or a South Atlantic snapper grouper possessed under the bag limits, may not be sold or purchased. A person aboard a vessel with both a for-hire vessel permit and a Federal commercial snapper grouper permit is considered to be fishing as a charter when fishing as described in 50 CFR §622.2. Snapper grouper caught on such a trip may not be sold or purchased.

50 CFR §622.2 specifies that a charter vessel means a vessel less than 100 gross tons (90.8 mt) that is subject to the requirements of the United States Coast Guard (USCG) to carry six or fewer passengers for hire and that engages in charter fishing at any time during the calendar year. A charter vessel with a commercial permit, as required under Sec. 622.4(a)(2), is considered to be operating as a charter vessel when it carries a passenger who pays a fee or when there are more than three persons aboard, including operator and crew. However, a charter vessel that has a charter vessel permit for Gulf reef fish, a commercial vessel permit for Gulf reef fish, and a valid Certificate of Inspection (COI) issued by the USCG to carry passengers for hire will not be considered to be operating as a charter vessel provided--

(1) It is not carrying a passenger who pays a fee; and

(2) When underway for more than 12 hours, that vessel meets, but does not exceed the minimum manning requirements outlined in its COI for vessels underway over 12 hours; or when underway for not more than 12 hours, that vessel meets the minimum manning requirements outlined in its COI for vessels underway for not more than 12-hours (if any), and does not exceed the minimum manning requirements outlined in its COI for vessels that are underway for more than 12 hours.

**Alternative 3.** Require a Federal charter/headboat snapper grouper permit or Federal commercial snapper grouper permit to sell snapper grouper species from the South Atlantic EEZ up to the bag limit of snapper grouper species.

#### 4.4.1 Biological Effects of Modifications to the Sales Provisions Alternatives

Currently, commercial or recreational fishermen without a Federal snapper grouper permit may sell snapper grouper species in an amount not exceeding applicable recreational bag limits. It is not possible to distinguish landings from a recreational fisherman and those of a commercial fisherman who does not possess a Federal snapper grouper permit since both can obtain a state license to sell reef fish. Some commercial fishermen are concerned that, when fishermen without a Federal snapper grouper permit sell their catch to dealers, the catch is counted toward the commercial quota. In addition, some sales may result in double counting if catches are reported through the Marine Recreational Fisheries Statistics Survey and through commercial snapper grouper dealers. Therefore, the Council is considering alternatives to prohibit the sale of bag limit caught snapper grouper species. The intent of this action is to ensure regulations are fair and equitable, fish harvested by the recreational sector are not counted toward commercial quotas, and total landings data are accurate.

The no action **Alternative 1** would allow the continued sale of snapper grouper species from the South Atlantic EEZ up to the allowed bag limit. The Council's **Preferred Alternative 2** would require a valid Federal snapper grouper commercial permit to sell South Atlantic snapper and grouper. South Atlantic snapper and grouper possessed under the bag limits would not be able to be sold or purchased. Currently, some recreational fishermen may intentionally catch more fish than they can consume with the intent to sell. Therefore, **Preferred Alternative 2** could have biological benefits if it results in a decrease in fishing effort. Similarly, **Alternative 3**, which would require a Federal charter/headboat snapper grouper permit or Federal commercial snapper grouper permit to sell snapper grouper species from the South Atlantic EEZ up to the bag limit of snapper grouper species, could also have biological benefits if it resulted in a reduction in fishing effort.

The elimination of bag-limit sales under **Preferred Alternative 2** or reduction of bag limit sales under **Alternative 3** could be biologically neutral since either alternative could result in the transfer of harvest from fishermen without the appropriate Federal permit to Federally permitted fishermen. However, if restrictions in bag limit sales result in an overall reduction in harvest, there could be a biological gain with an associated increase in the mean age and size of the stock. The requirement of a Federal snapper grouper permit to sell snapper grouper species could result in a reduction in fishing mortality if fish previously harvested and sold under the bag limit are not harvested by fishermen with the commercial Federal snapper grouper permit. This scenario could occur for species primarily harvested in state waters, such as sheepshead and yellowtail snapper, or any species primarily found in waters where the Federal commercial vessels do not significantly fish.

Conversely, it is possible that restriction of bag-limit sales could result in biological harm if those previously selling bag limit quantities continue to harvest these fish and only cease their sale. This could result in increased quota availability for fishermen with the commercial Federal snapper grouper permit and increased overall species mortality since there would no longer be bag limit sales that would be counted towards the commercial quota. However, the Council is developing Amendment 17, which would establish annual catch limits and accountability measures for the recreational and commercial sectors to ensure harvest is maintained below a certain level, overfishing does not occur, and action is taken if annual catch limits are exceeded. In the future under **Preferred Alternative 2**, sale of catch from commercial fishermen who do not have a Federal snapper grouper commercial permit would be eliminated and catch that was sold by recreational fishermen that previously counted towards a commercial quota would be applied to a quota or allocation for the recreational sector. While a biological gain or loss is possible with each scenario, neither effect is expected to be significant and, overall, the restriction of bag limit sales, under either alternative, is expected to be biologically neutral.

The proposed alternatives are not expected to impact ESA-listed species. They are unlikely to appreciably alter fishing effort or fishery operations to an extent that would change the existing level of risk for interactions with the South Atlantic snapper grouper fishery. However, monitoring programs will allow NOAA Fisheries Service to track and evaluate any increased risk to ESA-listed species. If necessary, an ESA consultation can be re-initiated to address any increased levels of risk.

# 4.4.2 Economic Effects of the Modifications to the Sales Provisions Alternatives

# Introduction and Description of Methodology

**Preferred Alternative 2** would prohibit the sale and purchase of snapper grouper harvested in the EEZ by vessels that have not been issued a Federal snapper grouper permit. Under current regulations, the Federal commercial snapper grouper permit allows the possession of snapper grouper harvested in the EEZ in quantities that exceed the bag limits. Federal regulations currently allow the sale of bag-limit quantities harvested in the EEZ, by either commercial or recreational fishermen, if the fishermen possess the appropriate state license to sell fish. Alternative 3 would allow continued bag-limit sales if the fishermen possessed the Federal snapper grouper for-hire permit.

No Federal data program systematically captures bag-limit sales. The primary recreational data collection program, the Marine Recreational Fisheries Statistics Survey (MRFSS), allows anglers to indicate that they have sold or plan to sell their fish, but there is no confidence that such reporting captures the full magnitude of the sales behavior by recreational anglers, particularly since the survey is angler-based and most bag limit sales are believed to be made by for-hire captains and crew. For commercial vessels, the primary vessel-level federal data collection program, the NMFS finfish logbook program, is not capable of capturing bag-limit sales by commercial vessels that only possess state licenses since this program only collects data from Federally permitted vessels.

Due to the lack of coverage of bag-limit sales in the federal data collection programs, evaluation of bag-limit sales requires examination of state data captured in their respective trip ticket systems. Each South Atlantic state requires the collection of triplevel data at the point of sale, with state-specific qualification criteria and transfer rules for the respective licenses or endorsements that allow sales within the state. Such criteria, however, even where reporting opportunities exist to indicate whether the trip was on a charter or not, do not systematically allow clear determination of whether these bag-limit sales occur from a trip of recreational or commercial origin. Nevertheless, the trip ticket data can be used to identify vessels with the appropriate Federal permits and disaggregate snapper grouper harvests and sales by vessels with and without Federal permits. For the following analysis of the potential economic effects of the alternative sales provisions, harvest data for 2004-2006 were used. The appropriate 2007 databases were incomplete at the time of the analysis. Federal permits data were evaluated to identify all entities, with associated vessel identification codes (id codes), that were permitted to fish in the respective Federal snapper grouper fisheries (commercial snapper grouper or forhire snapper grouper) for any period of time (one day or more) in each of the respective years. Preliminary analysis using NMFS logbook data determined that it was inappropriate to track a common pool of current participants in the fishery back through each of the focus years since changes in vessel registration resulted in a progressively diminished ability to match harvests with vessels in the Federally permitted fishery. As a result, as the analysis progressed back in time (2006 to 2005 to 2004), an increasing proportion of snapper grouper harvests could not be associated with currently Federally permitted vessels. Since similar results would be expected to occur with trip ticket data, unique vessel participation lists were prepared for each year.

Since any vessel selling snapper grouper harvested from the EEZ that did not possess a Federal commercial snapper grouper permit would be limited to the bag limit, the analysis assumed that all EEZ snapper grouper sales for vessels that could not be linked to a Federal permit represented bag-limit sales. This assumption may result in over-estimation of bag-limit sales since some vessel id code non-matching may be due to missing data or data entry error. The extent of such omission or error and resultant over-estimation is unknown, but is assumed to not be proportionally substantial relative to the estimates of correctly identified bag-limit sales (sales accurately associated with vessels that did not possess a Federal permit).

The analysis examined all vessels with recorded snapper grouper harvests. Although compatible state regulations are always sought, since Federal regulations only apply to vessels and fishermen with a Federal permit, the analysis required identifying which vessels had either of the Federal snapper grouper permits (commercial or for-hire) and those which did not. A vessel that possessed both Federal snapper grouper permits (commercial and for-hire) was combined with the commercial-permit group since possession of the Federal commercial snapper grouper permit would allow continued sales under any of the alternatives, though the vessel would be technically limited to bag-limit quantities if operating as a headboat or under charter.

All snapper grouper harvest and sales were partitioned according to permit type (Federal commercial snapper grouper, Federal for-hire snapper grouper, or neither Federal snapper grouper permit), area fished (EEZ or state waters; although multiple state-water codes exist for some states, such as bay or estuary, harvests were collapsed to a common state water grouping; area fished break-out was required because absent compatible state regulations, the action would only affect fish harvested from the EEZ), and dealer type (those with a Federal dealer permit or not). EEZ-harvested bag limit caught fish can only be sold to Federally permitted snapper grouper dealers. Harvests of all other species by

vessels that harvested snapper grouper were also quantified to identify the relative importance of snapper grouper harvests to total harvest and sales.

Given the complexity of the analysis, each layer of data disaggregation (e.g., by permit category, by water body, by species type, by dealer) often results in differences due to programming nuances, data loss or leakage due to missing data or additional data entry error (not all records with snapper grouper species will have waterbody codes, and not all records with the appropriate species codes and waterbody codes will have dealers codes, etc.), or other indeterminate reasons. Thus, totals from one level of disaggregation may not exactly match totals from another level. The time required to eliminate these differences can often be excessive given the minor difference in results. Such was the case in this analysis and totals across all results do not match exactly. Despite this outcome, the results are determined to be adequate to indicate direction and relative importance of the potential magnitude of effects.

Data and analysis were received from the respective state data collection programs and personnel via phone calls, and e-mails with attached data (Alan Bianchi, North Carolina Division of Marine Fisheries, personal communication; Robert Wiggers, South Carolina Department of Natural Resources, personal communication; Julie Califf, Georgia Department of Natural Resources, personal communication; and Chad Hanson, Florida Fish and Wildlife Conservation Commission, personal communication). Analysis of the Federal permit data and additional analysis of the Florida trip ticket data was performed by SERO personnel (John Vondruska, NMFS SERO, personal communication), while NMFS Accumulated Landings System (ALS) data were summarized by Southeast Fisheries Science Center staff (Josh Bennett, SEFSC, personal communication). Due to confidentiality issues, in the following analysis, all South Carolina data are combined with North Carolina data and all Georgia data are combined with Florida data. Additionally, all for-hire data are reported only at the regional level and distribution of snapper grouper harvests by fishermen permit type and dealer type is unavailable at this time. This information is expected to be available prior to Council final action and be provided in the Final Environmental Impact Statement (FEIS) and in Amendment 15B, which will be made available for public comment. For the current analysis, a proxy value for harvest distribution across dealer types is used.

In addition to the information that can be derived from state trip ticket data, anecdotal information indicates that bag-limit sales occur outside all standard Federal and state reporting systems (i.e., undocumented sale to restaurants, friends, etc.). The magnitude of these sales cannot be determined. Further, it cannot be determined with certainty whether such sale would be expected to increase or decrease in response to management change. Heightened interest in and sensitivity to bag-limit sales, particularly in the form of peer and industry self-scrutiny and reporting or as a result of increased enforcement activity, could result in a decline in these unregulated sales. On the other hand, the elimination of currently legal sales opportunities could result in an increase in sales through unregulated channels.

## **Description of Analytical Results**

The results of the analysis are provided in Tables 4-5 through 4-7. Analysts are verifying their results and analyzing disaggregated results for for-hire vessels and by dealer type. Final data and analysis will be provided in the FEIS and in Amendment 15B, which will be made available for public comment. Table 4-5 contains estimates of snapper grouper harvest and sales (pounds whole weight and nominal ex-vessel value) by state and permit category. Table 4-6 similarly focuses on snapper grouper harvest and sales and further disaggregates harvest and sales by waterbody (where the fish were caught). Table 4-7 contains information on total snapper grouper sales, by state and permit type, and total sales of all other species by all fishing entities that recorded snapper grouper harvests.

Table 4-5. Snapper grouper harvest and value by permit category.	2004-2006 average, state trip ticket
data.	

			% Total		% Total
State	Permit Category Pounds Pounds \		Value	Value	
North Carolina + South Carolina	Federal SG	3,078,482	40.33%	\$6,623,543	43.13%
	Federal For-hire SG	CONF		CONF	
	Not Permitted/Unknown	433,777	5.68%	\$851,809	5.55%
Florida + Georgia	Federal SG	3,043,586	39.87%	\$6,133,011	39.94%
	Federal For-hire SG	CONF		CONF	
	Not Permitted/Unknown	910,322	11.93%	\$1,454,891	9.47%
All	Federal SG	6,122,068	80.20%	\$12,756,554	83.06%
	Federal For-hire SG	167,530	2.19%	\$294,178	1.92%
	Not Permitted/Unknown	1,344,099	17.61%	\$2,306,700	15.02%
Total		7,633,697		\$15,357,432	

Federal SG - Federal commercial snapper grouper permit.

Federal For-hire SG - Federal charter or headboat snapper grouper permit.

Not Permitted/Unknown - does not have or cannot be linked with a Federal snapper grouper permit. CONF - confidential.

					% Total
State	Permit Category	Waterbody	Pounds	Value	\$
North Carolina + South Carolina	Federal SG	EEZ	3,074,519	\$6,621,029	
		State	3,963	\$2,514	
	Federal For-hire SG	EEZ	CONF	CONF	
		State	CONF	CONF	
	Not Permitted/Unknown	EEZ	400,659	\$840,223	
		State	33,118	\$11,585	
Florida + Georgia	Federal SG	EEZ	2,451,586	\$4,827,711	
		State	592,000	\$1,305,700	
	Federal For-hire SG	EEZ	CONF	CONF	
		State	CONF	CONF	
	Not Permitted/Unknown	EEZ	839,748	\$1,304,384	
		State	72,874	\$155,507	
All	Federal SG	EEZ	5,526,105	\$11,448,740	
		State	595,963	\$1,308,214	
	Federal For-hire SG	EEZ	138,530	\$245,478	
		State	29,000	\$48,700	
	Not Permitted/Unknown	EEZ	1,240,407	\$2,144,607	
		State	105,992	\$167,092	
Total Bag-limit Sales (For-hire + Not Permitted/Unknown)		EEZ	1,378,937	\$2,390,085	91.72%
		State	134,992	\$215,792	8.28%
		Total	1,513,929	\$2,605,877	

Table 4-6. Snapper grouper harvest and value by permit category and waterbody. 2004-2006 average, state trip ticket data.

Federal SG - Federal commercial snapper grouper permit.

Federal For-hire SG - Federal charter or headboat snapper grouper permit.

Not Permitted/Unknown - does not have or cannot be linked with a Federal snapper grouper permit. CONF - confidential.

Table 4-7.	All species harvest	and value by permit category	v. 2004-2006 average, state trip ticket data.
	/ in operiod has reet	and falle by permit eategery	- Loo - Looo avoi ago, olalo inp lionot aala

						Avg. Value	Avg. Value
State	Permit Category	Species	Participants	Pounds	Value	Participant	% of Total
North Carolina + South Carolina	Federal SG	Other Species		2,239,170	\$1,983,923	\$13,971	25.11%
		Snapper grouper		2,728,687	\$5,917,753	\$41,674	74.89%
		Total	142	4,967,857	\$7,901,676	\$55,646	
	Federal For-hire SG	Other Species		CONF	CONF	CONF	
		Snapper grouper		CONF	CONF	CONF	
		Total	CONF	CONF	CONF	CONF	
	Not Permitted/Unknown	Other Species		20,577,901	\$14,965,046	\$34,324	90.56%
		Snapper grouper		785,987	\$1,559,107	\$3,576	9.44%
		Total	436	21,363,888	\$16,524,153	\$37,899	
Florida + Georgia	Federal SG	Other Species		5,008,140	\$12,329,918	\$22,337	66.78%
		Snapper grouper		2,771,272	\$6,133,011	\$11,111	33.22%
		Total	552	7,779,412	\$18,462,929	\$33,447	
	Federal For-hire SG	Other Species		CONF	CONF	CONF	
		Snapper grouper		CONF	CONF	CONF	
		Total	CONF	CONF	CONF	CONF	
	Not Permitted/Unknown	Other Species		9,270,528	\$13,923,140	\$13,452	90.52%
		Snapper grouper		911,530	\$1,457,580	\$1,408	9.48%
		Total	1,035	10,182,058	\$15,380,720	\$14,861	
All	Federal SG	Other Species		7,247,310	\$14,313,841	\$20,625	54.29%
		Snapper grouper		5,499,959	\$12,050,764	\$17,364	45.71%
		Total	694	12,747,269	\$26,364,605	\$37,989	
	Federal For-hire SG	Other Species		622,880	\$1,284,311	\$10,034	81.36%
		Snapper grouper		167,530	\$294,178	\$2,298	18.64%
		Total	128	790,410	\$1,578,489	\$12,332	
	Not Permitted/Unknown	Other Species		29,848,429	\$28,888,186	\$19,638	90.54%
		Snapper grouper		1,697,517	\$3,016,687	\$2,051	9.46%
		Total	1,471	31,545,946	\$31,904,873	\$21,689	

Federal SG - Federal commercial snapper grouper permit.

Federal For-hire SG - Federal charter or headboat snapper grouper permit.

Not Permitted/Unknown - does not have or cannot be linked with a Federal snapper grouper permit. Other Species - all other species harvested by these entities; all weights reported in "pounds" even though this may not be the proper unit for some species.

CONF - confidential.

It should be noted that all fishing harvest and sales, as depicted in Tables 4-5 through 4-7, are assumed to constitute the status quo for the purpose of this analysis, despite reflecting conditions in 2004-2006. Although, in most cases, more stringent fishing regulations exist today, due notably to the measures implemented through Snapper Grouper Amendment 13C (see below), the means by which to systematically modify the 2004-2006 data to reflect these regulations and resultant fishing behavioral adaptation have not been identified. Thus, the 2004-2006 data are used without modification. Since it is unknown the extent to which current fishing behavior and resulting harvest patterns differs from 2004-2006, the net effect of using unmodified data cannot be determined.

On average, over the 2004-2006 fishing years, approximately 7.634 million pounds of snapper grouper species values at approximately \$15.357 million (nominal ex-vessel value) were harvested and sold per year (Table 4-5). In terms of value, approximately 83 percent of these harvests, approximately \$12.757 million (nominal ex-vessel value), were made by fishermen possessing the Federal commercial snapper grouper permit, approximately 2 percent, valued at approximately \$294,000 (nominal ex-vessel value), were made by entities with the Federal for-hire snapper grouper permit, and the remaining amount, approximately 15 percent, valued at approximately \$2.307 million (nominal ex-vessel value), were harvested and sold by entities with no identifiable Federal snapper grouper permit. For the purposes of this analysis, assuming that all snapper grouper harvest and sales that cannot be linked to a Federal commercial snapper grouper harvest and sales that cannot be linked to a Federal commercial snapper grouper harvest and sales that cannot be linked to a Federal commercial snapper grouper harvest and sales that cannot be linked to a Federal commercial snapper grouper harvest and sales, or approximately 1.511 million pounds (167,530 pounds for-hire + 1,344,099 pounds not permitted/unknown), valued at \$2.56 million (nominal ex-vessel value), was sold per year over this period as bag-limit fish.

As seen in Table 4-6 (percentages not shown), snapper grouper harvests by fishermen in all fleets (Federal commercial snapper grouper, Federal for-hire snapper grouper, and non-Federal) primarily originate from the EEZ, though a larger proportion of fish come from state waters in Florida than in other states (as depicted by the "Florida + Georgia" totals, of which Florida harvests dominate), as would be expected due to differences in geography, proximity to appropriate habitat, etc. Of the approximately \$2.61 million (nominal ex-vessel value) in snapper grouper harvests assumed to constitute bag-limit sales (note the small difference between the estimated \$2.56 million in value, \$2.56 million, from Table 4-5), approximately 8 percent, or approximately 135,000 pounds valued at approximately \$216,000 (nominal ex-vessel value), of the snapper grouper landings was harvested in state waters and the rest (approximately 1.379 million pounds valued at approximately \$2.39 million, nominal ex-vessel value) harvested in the EEZ. Harvests by vessels with the Federal for-hire snapper grouper permit were apportioned approximately 83 percent in terms of pounds and value (approximately 139,000 pounds valued at approximately \$245,000, nominal ex-vessel value) EEZ and 17 percent state water (approximately 29,000 pounds valued at approximately \$49,000, nominal ex-vessel value).

Disaggregation of snapper grouper harvests by dealer type (Federal permit or state license) is incomplete at this time. Thus far, results indicate that as much as 30 percent of

snapper grouper harvests unassociated with a Federal commercial snapper grouper permit, or fish assumed to constitute bag-limit sales, may be marketed through non-Federal dealers. While such analysis is unavailable at the waterbody harvest-level, these results suggest that a significant portion of fish assumed to constitute bag-limit sales may be marketed through dealers that only possess state licenses. Assuming 30 percent of the estimated EEZ harvested snapper grouper bag-limit sales (1.379 million pounds; Table 4-6) are sold through non-Federal dealers, then bag-limit sales would be apportioned approximately 965,000 pounds and 414,000 pounds, Federal dealer and state dealer, respectively, valued at approximately \$1.673 million (nominal ex-vessel value) and approximately \$717,000 (nominal ex-vessel value), respectively. For the Federally permitted for-hire sector, applying the same 30 percent rate to EEZ harvests (approximately 139,000 pounds valued at approximately \$245,000, nominal ex-vessel value), sales to Federal dealers are estimated at approximately 97,000 pounds, valued at approximately \$172,000 (nominal ex-vessel value), and sales to state dealers are estimated at approximately 42,000 pounds, valued at approximately \$74,000 (nominal ex-vessel value).

Table 4-7 depicts the relative importance of snapper grouper sales to the total fishing sales by entities in the different permit categories. The average fishing entity within the Federal commercial snapper grouper fleet generates approximately \$38,000 (nominal exvessel value) per year from seafood harvests, with approximately \$17,000 (approximately 46 percent) of this total derived from snapper grouper sales and approximately \$21,000 (approximately 54 percent) derived from the sales of other marine species (note that discussion of pounds harvested is not emphasized since, although the unit of weight reported in the summary is pounds, this may not be the appropriate unit for all species, notable shellfish or crustaceans). For entities in the Federal for-hire snapper grouper fleet, the appropriate totals are approximately \$12,000 (nominal ex-vessel value) combined average annual revenues (it should be clearly understood that seafood sales are not the primary income source of for-hire vessels, which is the charter fee; as described in Section 6.4, South Atlantic charterboats are estimated to have average gross annual revenues of approximately \$32,000-\$89,000, across all states, while headboats revenues are estimated to range from \$149,000-\$362,000), of which approximately \$2,000 (approximately 19 percent) and approximately \$10,000 (approximately 81 percent) are derived from snapper grouper and other species, respectively. For entities in neither Federal fleet, the appropriate totals are approximately \$22,000 (nominal ex-vessel value) combined average annual revenues, of which approximately \$2,000 (approximately 9 percent) and approximately \$20,000 (approximately 91 percent) are derived from snapper grouper and other species, respectively. From these results, it is evident that vessels in the Federal commercial snapper grouper fishery are significantly more dependent on snapper grouper revenues than operations in the other fisheries.

#### **Economic Effects on Vessels Selling Bag-Limit Quantities**

Alternative 1, the status quo, would allow all customary bag-limit sales activity to continue unaffected. As depicted in Tables 4-5 and 4-6, current estimates of annual bag-

limit sales are approximately 17 percent of total snapper grouper sales, or approximately 1.5 million pounds valued at approximately \$2.6 million (nominal ex-vessel value).

To the extent that recreational trip demand is influenced by the ability to subsidize the cost of a fishing trip through the sales of bag limit-fish, under the status quo, angler trip demand under Alternative 1 should remain unchanged. However, the increased harvest restrictions contained in Amendment 13C (SAFMC 2006) may induce operational change of for-hire vessels that either operate in the Federal snapper grouper fishery or possess an appropriate state license resulting in increased sales of bag-limit fish as for-hire vessels compete for reduced commercial quota. Fish harvested and marketed in this manner, whether harvested by for-hire vessels or private anglers, may be counted as both recreational and commercial harvests, complicating fishery assessments and resulting in accelerated quota closures. These sales reduce the amount and value of harvests allocated to the Federal commercial snapper grouper fishery, resulting in reduced revenues for the sector these quotas were intended for. Accelerated closures impose additional economic losses through market disruption (decreased period of time when fresh domestic product is available) and forced alteration of fishing practices, including effort transfer to other resources that may be less valuable and/or more expensive to catch, and fishing in new areas or with other gears to avoid the bycatch of nonmarketable species. This effort transfer may result in increased harvest stress to these alternative species, harming the status of these resources, inducing restrictive management, and diminishing the economic value of these fisheries.

**Preferred Alternative 2** would prohibit the sale and purchase of snapper grouper harvested in the EEZ by vessels that have not been issued a Federal snapper grouper permit. Assuming the implementation of compatible regulations in all states, thus encompassing snapper grouper harvested in both state and Federal waters as well as marketed through all state licensed dealers, **Preferred Alternative 2** would eliminate all bag-limit sales by these entities, estimated at approximately \$2.6 million in nominal exvessel value. This would constitute a reduction of approximately \$294,000 per year, or a 19-percent reduction in average annual gross revenues per vessel, associated with fish sales by vessels in the for-hire fishery and approximately \$2.3 million per year, or a 9 percent reduction in gross revenues per year, in seafood harvests for commercial vessels that do not posses a Federal commercial snapper grouper permit.

Assuming compatible regulations are not adopted in any state, the estimated reduction in bag-limit sales revenues under **Preferred Alternative 2** would be limited to those harvests that originate from the EEZ and are marketed through dealers with a Federal permit. This would lower the reduction in bag-limit sales to approximately \$1.673 million, accounting for the estimated portion of bag-limit sales that originate in state waters (approximately 8 percent) and the estimated portion of bag-limit sales that are marketed through dealers without Federal licenses (approximately 30 percent). Applying this same combined ratio of reduction (\$1.673/\$2.6 = 64.5 percent) to the sector estimates in the previous paragraph (\$294,000 for the for-hire fleet and \$2.3 million for the non-Federal fleet) results in sector reductions of approximately \$190,000 and \$1.48 million, respectively. These values equate to approximately a 12 percent reduction in average

annual for-hire fish-sales revenues (\$190,000/128 vessels/\$12,332 total average revenues) and approximately a 5 percent reduction in average annual non-Federally permitted revenues (\$1.48 million/1,471 vessels/\$21,689 total average revenues).

Since **Preferred Alternative 2** would eliminate all snapper grouper bag-limit sales, sales could only occur from Federally permitted snapper grouper vessels operating as commercial vessels. For-hire vessels with both permits could only sell snapper grouper harvested while operating as a commercial vessel and no private recreational angler could sell their catch. For the recreational angler (non-for-hire customer), **Preferred Alternative 2** would eliminate the ability to subsidize the cost of a fishing trip through the sales of snapper grouper. As a result, some decrease in recreational angler demand may occur. The magnitude of this decrease cannot be determined. However, no evidence exists to suggest that the incidence of this behavior – selling fish to subsidize the cost of the trip – is a significant component to total recreational demand. Therefore, reduced angler demand is expected to be minimal.

A potentially more significant issue is that the loss of bag-limit sales revenues by for-hire revenues may require fee increases or service reductions. The use of bag-limit sales as a form of crew payment is understood to be a common industry practice, though the extent of such has not been quantified. The elimination of bag-limit sales for vessels that engage in this practice would require that either charter fees increase to replace these revenues, crew survive on lower wages, or fewer crew be utilized. Competition in the for-hire industry places limitations on the flexibility to increase charter fees, particularly under current conditions of cost increases from other sources, notably fuel cost increases. Nevertheless, an increase in charter fee would be expected to result in some reduction in angler demand, resulting in additional economic losses to the for-hire sector. Crew reductions in lieu of fee increases alters the nature of the service that the angler is purchasing and may also result in decreased angler demand. These phenomena and their expected economic effect are unknown.

Under current permit requirements, entry into the Federal commercial snapper grouper fishery would require acquisition of two commercial snapper grouper permits from current participants. Elimination of the two-for-one requirement is an option considered under the permit transferability action discussed in Section 4.13. The cost of a single permit is estimated to range from \$9,000-\$16,000 (2006 dollars). As depicted in Table 4-7, the average annual ex-vessel revenue derived from snapper grouper bag-limit sales is estimated to be approximately \$2,000. While some entities would be expected to receive more than this, a decision to acquire the necessary Federal permit in order to continue selling snapper grouper species would represent a significant change in their business orientation and may not be financially prudent. Since the opportunity to purchase these permits and enter the fishery currently exists, which would allow the sale of commercial quantities of snapper grouper, it is assumed that insufficient economic rationale exists for those businesses that have not done so to enter the fishery.

Alternative 3 would allow continued snapper grouper bag limit sales by vessels that possess a Federal for-hire snapper grouper permit. As a result, only the harvests and

revenues discussed above associated with vessels without either of the Federal snapper grouper permits would be affected. These values are approximately \$2.3 million (nominal ex-vessel value) per year, or a 9 percent reduction in gross revenues per year, in seafood harvests assuming compatible regulations are adopted by all states and approximately \$1.48 million (nominal ex-vessel value) per year, or a 5 percent reduction in average annual revenues (\$1.48 million/1,471 vessels/\$21,689 total average revenues).

# Economic Effects of the Sales Modification Provisions on Federally Permitted Vessels

Under Alternative 1, all customary bag-limit sales activity could continue unaffected. The Federal commercial snapper grouper sector would continue to be denied access to snapper grouper species that are currently or will be under quota management since these fish will be harvested by non-Federally permitted fishermen and counted against the commercial quota. The Federal sector would continue to have to bear the losses associated with recent management action, notably Snapper Grouper Amendment 13C (Amendment 13C; SAFMC 2006), which imposed a variety of quotas, trip limits, bag limits, and minimum size limits on the respective commercial and recreational sectors for snowy grouper, golden tilefish, vermilion snapper, black sea bass, and red porgy without the potential offset relief of protected access to fish intended for the Federally permitted commercial sector. The measures in Amendment 13C for snowy grouper, golden tilefish, vermilion snapper, and black sea bass were more restrictive than measures previously in place, while the red porgy measures loosened harvest restrictions. The estimated effects of Amendment 13C on the commercial Federally permitted snapper grouper fishery was a short-term annual loss of \$0.735 million in net revenues the first year, or approximately 12 percent to total net revenues for trips that harvested any of the affected species, increasing to \$1.085 million by the third year after implementation due to progressive restrictions. Although not implemented yet, additional harvest restrictions are anticipated for gag and red snapper through Snapper Grouper Amendments 16 and 18, respectively. The expected economic effects of these actions have not been determined yet. Conditions for the Federally permitted commercial snapper grouper sector could also worsen if economic conditions increase the incentives for increased bag-limit sales by either or both the Federal for-hire snapper grouper or non-permitted sectors.

**Preferred Alternative 2** and, to a lesser extent, **Alternative 3**, would be expected to offset the adverse economic effects described above. As discussed, approximately \$2.6 million in nominal ex-vessel value snapper grouper sales are estimated to occur on an annual basis. If transferred to the Federal commercial snapper grouper sector, these revenues would more than offset the projected annual losses associated with Amendment 13C and improve the ability of the commercial sector to weather any short-term adverse economic effects of future regulation. Even absent full transference of these revenues, the Federally permitted commercial sector would achieve a stronger financial position. The bag-limit sales restrictions are also expected to help avoid the adverse economic effects of potential incentives to increase bag-limit sales activity as a result of recent or future management measures for individual species and/or generally worsening economic conditions. The Federal management measures, notably quotas and seasons, are designed

to meet resource goals, while achieving the best economic and social outcome. Respective Federal commercial quotas are intended for use by Federally permitted commercial vessels. Increased harvest pressure from non-Federally permitted commercial entities or for-hire operations can result in earlier than expected quota closures, market disruptions, revenue loss, and increased likelihood of business failure within the Federal fleet.

The elimination of bag-limit sales under Preferred Alternative 2 or their reduction under Alternative 3 is expected to be, overall, biologically neutral since the general expectation is that the harvest of these fish is for the purpose of sale and either alternative would simply result in the transference of harvest and sales from one group of fishermen (those without the appropriate Federal permit) to Federally permitted fishermen. However, it is possible that restriction of bag-limit sales could result in a biological gain (with associated future economic benefits, such as higher quotas, higher trip limits, longer seasons, etc.) if not all the fish previously harvested and sold under the bag limit in fact get harvested by fishermen with the commercial Federal snapper grouper permit, resulting an overall reduction in harvest for that species. This scenario is expected to particularly be the case for species primarily harvested in state waters, such as sheepshead and yellowtail snapper, or any species primarily found in waters where the Federal commercial vessels do not significantly fish. Using Florida harvests as an example, vessels with Federal commercial snapper grouper permits dominate yellowtail snapper harvests, accounting for approximately 1.1 million pounds per year compared to approximately 185,000 pounds per year by vessels without the Federal commercial permit, while virtually all sheepshead is harvested by non-Federally permitted vessels. Harvest of these and other species may be due to circumstance such that they are harvested by Federally permitted vessels incidental to the directed harvest of other species, and their harvest, to date, has not been limited due to quota closure, trip limits, or stock abundance. Where such is the case, in the event of cessation of bag-limit sales, relocation of fishing effort to increase the harvest of these species may not be economically justified, resulting in overall decreased harvests of these species, with subsequent biological gains. It is unknown whether the economic benefits associated with these biological gains would be sufficient to offset the economic losses associated with the short-term reduced harvests.

Conversely, it is possible that restriction of bag-limit sales could result in biological harm (with associated future economic losses, associated with lower quotas, lower trip limits, shorter seasons, etc.) if those previously selling bag limit quantities continue to harvest some or all of these fish, particularly fish harvested on recreational trips (private or forhire), and all that ceases is their sale. This would result in increased quota availability for fishermen who possess the commercial Federal snapper grouper permit, since fish sold under the bag limit would not be counted towards the commercial quota, but increased overall individual species mortality.

Either scenario, a biological gain due to reduced total harvest, or a biological loss due to increased total harvest, is possible, though more so at the individual species level than at the management unit level. The likelihood of increased total harvest of some individual

species may in fact be greater than the likelihood of reduced total harvest, particularly for bag-limit sales of recreational origin. For recreational harvests, the presumption is that these fish are harvested primarily for recreational pleasure, with any sale incentive secondary. Thus, many of these fish may still be harvested to satisfy angler recreational motives and simply not sold.

While a prohibition on bag-limit sales may increase the possibility of increased total harvests for some species, the likelihood of any adverse effects accruing to increased total harvests will be reduced by the accountability measures that will be developed in Snapper Grouper Amendment 17. These accountability measures will ensure harvests are maintained below specified levels, overages are not persistent, and adverse effects are minimized. Overall, neither effect, a biological gain or loss, is expected to be significant and, overall, the restriction of bag-limit sales, under either alternative, is expected to be biologically neutral.

# 4.4.3 Social Effects of the Modifications to the Sales Provisions Alternatives

Under the Alternative 1 (status quo), social conflict between the competing harvest sectors is expected to worsen. Fisheries are largely separated into commercial and recreational sectors. The commercial sector is essentially a harvest sector, while the recreational sector has harvest and non-harvest (catch and release) components. Other societal interests are represented in general by environmental advocacy groups. Each of the groups is interested in proper environmental stewardship, since even the harvest sectors depend on and recognize the benefits of sustainable harvest and bequest value for future generations. Other than the potential for compromised accounting due to double counting and the issue of equity (concern that all components of the fishery are treated fairly), the issue of recreational sales largely is one of managing the allocation of harvest - how to distribute fishery mortality as opposed to how much fishery mortality is appropriate - and, thus, essentially reduces to an issue of concern between the commercial and recreational sectors. In fact, double counting, to the extent that it may result in reduced total harvest, may be beneficial to the resource and benefit environmental goals, since total mortality is decreased and more of the resource is available to rebuild and/or serve other environmental functions. However, allowable harvest levels encompass accepted biological stewardship goals and a management environment that does not support full utilization of allowable harvest precipitates economic and social loss to associated communities and industries. Otherwise, from a biological/ecological perspective, mortality is mortality regardless of the source.

Alternative 1 would allow bag limit-sales and activities in associated businesses and/or social or community structures to continue unchanged. All current practices and relationships could continue. However, not all these relationships are positive. The status quo would be expected to continue the contentious relationship between the competing commercial and recreational sectors.

Public comment and data investigations have documented that with respect to the snapper grouper fishery, it is important to further disaggregate the commercial fishery into two

sectors, the Federally permitted commercial snapper grouper sector, and commercial vessels that have only the appropriate state licenses. Points raised by the Federal commercial fleet include commercial allocations are intended for the benefit of commercial harvesters that depend on the harvest and sales of fish for their livelihood; it is inappropriate for for-hire vessels to profit from the allocations for both sectors, which occurs when a vessel gets paid for the charter and receives income from the sale of fish harvested on the charter; vessels that do not have to adhere to the same safety requirements and associated expenses as commercial vessels, as is the case for recreational vessels, should not be allowed to sell fish; and recreational angling is for the purpose of pleasure and it is inappropriate to subsidize this activity through bag limit-sales.

Points raised by the state commercial fleet include they are professional fishermen just like the Federal vessels and require these sales to make a living, and they have been excluded from the Federal fishery and it is unfair to take these sales away from them.

Points raised by recreational interests include a dead fish is a dead fish, so as long as the fish is properly documented, it should not matter whether they are sold or not; certain forhire vessel classes also must satisfy strict safety requirements and associated expenses, justifying equal access; and both the cost of fishing and competition demands are such that fish sales are required to keep charter fees sufficiently low while maintaining adequate crew.

Regardless of the merits of any individual argument, the contention is real and worsens when total available harvest declines. This is particularly the case for fisheries subject to quota closure, since allocations are not currently designed to account for bag limit-sales and bag-limit sales result in accelerated closures and reduced incomes to harvesters with the Federal commercial snapper grouper permit. As discussed above, the increased harvest restrictions contained in Amendment 13C and expected future action are expected to worsen this situation as fishermen compete for reduced commercial quota. The resultant accelerated closures are expected to impose additional economic losses and social disruption. Thus, **Alternative 1** would result in the continuation of this conflict between the competing sectors.

**Preferred Alternative 2** would eliminate all snapper grouper bag-limit sales. Since this would result in winners and losers in the bag-limit sales debate, all conflict between the sectors would not totally dissipate, but a certain degree of finality to the issue would be reached, at least for the snapper grouper fishery (sales of other species may still be allowed), allowing the respective parties to move forward. To the extent that having a decision is less contentious than ongoing debate, the social impacts of this alternative should be more positive than **Alternative 1**.

If bag limit-sales underpin a substantial portion of operational profits, for-hire pricing structure, or recreational trip demand, revenues, expenditures, and profits could be adversely affected, with concurrent affects on fishing businesses and associated industries, communities, and social structures. As discussed above, while non-trivial

with snapper grouper bag limit sales accounting for individual average annual nominal ex-vessel revenues of approximately 9 for vessels without a Federal permit and approximately 19 percent for vessels with the Federal for-hire snapper grouper permit (though these revenues are expected to be relatively minor compared to charter fees), snapper grouper sales comprise a significantly greater portion of total gross revenues for vessels in the Federal commercial snapper grouper fleet, suggesting any gain or loss may have a more significant effect on this fleet and associated businesses. While for-hire crew could still have their pay subsidized with fish, the fish would have to be accepted as table-fare rather than a good to be converted to cash. Such would likely not be totally acceptable since it is likely that many vessels generate more "fish for pay" than can reasonably be consumed. The magnitude of any of these linkages or dependencies cannot be determined. Elimination of the additional pressure on accelerated closures will allow avoidance of the adverse economic and social disruptions associated with fishery closures.

The overriding assumption of this proposed action is that the elimination of bag limit sales will largely result in transference of revenues, and associated benefits from one user-group to another, subject to some potential "leakage" (complete transference, pound for pound, may not occur), as discussed above. Although individual confidential data exists to track who has sold what species and amount fish through which dealer and associated county/community, it is not possible with available data for the purposes of this analysis to anticipate how the transference of fish from current bag-limit sales channels will pass through the sales channels of fishermen in the Federal commercial snapper grouper fleet. Thus, it is not possible to anticipate how product flows and associated economic and social effects would change under the proposed action. It is presumed that the current primary snapper grouper dealer centers and associated communities will remain unchanged, with only the quantities sold by individual fishermen changing and some individual dealers experiencing changes in snapper grouper volume. It is acknowledged, however, that this may not be the case and some distributional effects may occur if current bag-limit sales enter through different market channels than harvests by vessels that hold the Federal commercial snapper grouper permit. It is unknown to what extent current fishermen-dealer sales relationships are motivated by necessity/geography (only dealer in the area) or other factor (price, convenience, family relationship, other historical relationship, regulation, etc.). Should states not adopt compatible regulation, the possibility exists that sales through dealers who only possess a state license could increase. Alternatively, in order to maintain product flow, an increasing proportion of dealers may acquire the Federal permit. To reiterate, however, it is not possible at this time to identify which communities would be expected to benefit and which would be expected to suffer losses as a result of the proposed action.

It should also be noted that over twice as many entities engage in bag-limit sales, 128 entities with the Federal for-hire snapper grouper permit and 1,471 entities with no identifiable Federal permit, than operate in the Federal commercial fishery, 694 vessels, on average, per year. If social benefits are more strongly influenced by the number of pathways or social interactions (more fishermen equates to more social

channels/networks) than simply the volume of sales (the general assumption of the action is that the sales volume remains unchanged, only the number of participants and paths of participation change), then a redistribution of harvests to the Federal commercial fleet could have net adverse social consequences.

The social impacts of **Alternative 3** are expected to be intermediate to those of **Alternative 1** and **Preferred Alternative 2** since **Alternative 3** would reduce, yet not totally eliminate, bag limit snapper grouper sales. Economic losses to vessels that currently sell bag-limit quantities of snapper grouper would still be expected, but would not be as great as under **Preferred Alternative 2**, while accelerated closure pressure would be reduced, yet not eliminated. Thus, disruption of activities and relationships associated with bag limit-sales would be reduced relative to **Preferred Alternative 2**, while full avoidance of the adverse social consequences of accelerated commercial closure and other adverse economic pressures on the Federal commercial snapper grouper fleet would not be achieved. The adverse social consequences associated with the bag-limit sales debate would be reduced, but would continue.

**4.4.4 Administrative Effects of Modifications to the Sales Provisions Alternatives** The administrative effects of **Alternatives 1, 2, and 3** would be very similar. Since **Alternative 1** would allow the continued sale of snapper grouper species from the South Atlantic EEZ up to the allowed bag limit an increased administrative burden might not be expected. However, due to the potential for recreationally-caught fish being counted towards the commercial quota, there may be a need for the development of a system that accounts for the sector that caught a quota managed fish. Such a system could constitute a substantial administrative burden.

The Council's **Preferred Alternative 2** and **Alternative 3** would require a valid Federal permit to sell South Atlantic snapper and groupers. Any increased administrative burden associated with processing requests for permits from recreational fishermen who formerly sold their catch is likely to be minor.