SUMMARY OF AMENDMENT 18A TO THE SNAPPER GROUPER FISHERY MANAGEMENT PLAN OF THE SOUTH ATLANTIC REGION (AMENDMENT 18A)

The South Atlantic Fishery Management Council (Council) is developing regulations to limit participation in the golden tilefish fishery through an endorsement program; allocate commercial golden tilefish quota among gear groups; establish criteria for transferability of endorsements; change the golden tilefish fishing year; change golden tilefish commercial trip limits; limit participation and effort in the black sea bass fishery; implement measures to reduce bycatch in the black sea bass fishery; and improve the accuracy, timing, and quantity of fisheries data. The regulations are expected to be implemented in 2012. These actions are needed for comprehensive management of snapper grouper species throughout their range and will address issues that have arisen as a result of a more stringent regulatory regime in the South Atlantic region.

This document is intended to serve as a SUMMARY for all the actions and alternatives in Amendment 18A. It also includes a summary of the expected biological and socio-economic effects from the management measures.

Purpose and Need of the Proposed Actions

The *purpose* of Amendment 18A is to make changes to the management of the golden tilefish and black sea bass fisheries and to improve reporting of commercial and for-hire data.

These actions are *need*ed because issues have arisen as a result of a more stringent regulatory regime in the South Atlantic region. The Council is also concerned about the accuracy, timing, and quantity of fisheries data and is proposing management measures that would improve fisheries data.

Management Actions

There are 11 *actions* in Amendment 18A that will accomplish the Purpose and Need:

1. Limit participation in the golden tilefish fishery through an endorsement program
2. Allocate the commercial golden tilefish quota among gear groups
3. Allow for transferability of golden tilefish endorsements
4. Adjust the golden tilefish fishing year
5. Establish golden tilefish commercial trip limit
6. Establish trip limits for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook-and-line fishery.
7. Limit participation in the black sea bass pot fishery
8. Limit effort in the black sea bass pot fishery
9. Reduce bycatch in the black sea bass fishery
10. Improvements to commercial data reporting
11. Improvements to for-hire data reporting

Each *action* has a range of *alternatives* in order to accomplish the purpose and need. Alternatives are developed for Council members and the public to weigh biological, economic and social impacts. The public is given the opportunity to comment on the alternatives as well. The range must include at least the no action (to do nothing) and preferred (the Council's choice) alternatives.

Background

Limit Participation in the Golden Tilefish Fishery

Recent amendments to the Snapper Grouper FMP have imposed more restrictive harvest limitations on snapper grouper fishermen. In an effort to identify other species to target, fishermen may increase participation in the golden tilefish fishery. An increase in participation in the golden tilefish fishery would intensify the "race to fish" that already exists in the fishery and has resulted in a shortened season. The fishing seasons in recent years have already been shortened to such a degree that South Carolina longline fishermen, who are typically unable to fish until April or May due to weather conditions; and hook-and-line fishermen from Florida, who typically do not fish until the fall, are increasingly unable to participate in the fishery. The Council is concerned an increase in participation in this fishery will deteriorate profits for current golden tilefish fishermen and has proposed an endorsement program to limit effort in the fishery.

Current Commercial Regulations for Golden Tilefish
4,000 pound gutted weight trip limit until 75% of the quota is caught, after which, a 300 pound gutted weight trip limit is imposed.

Allocate Commercial Golden Tilefish Quota among Gear Groups

In order to allocate endorsements among gear users, the Council must also allocate the commercial quota between the two groups of gear users. The poundage caught by each gear endorsement holder will be subtracted from each gear group quota portion. This is necessary in order to preserve opportunities for both gear user groups to fish.

Transferability of Golden Tilefish Endorsements

The Council is concerned an increase in participation in this fishery will diminish profits for current golden tilefish fishermen and has proposed an endorsement program to limit effort in the fishery (Action 1). If the Council decides to move forward with an endorsement program, the details of the program will need to be decided. Action 3 addresses the transferability of the endorsements in the proposed golden tilefish endorsement program.

Adjust Golden Tilefish Fishing Year

Current regulations for golden tilefish include a 4,000 pound gutted weight trip limit until 75% of the quota is caught, after which, a 300 pound gutted weight trip limit is imposed. Longline vessels typically fish for golden tilefish at the start of the year when the trip limit is 4,000 pounds. Longline boats are usually larger than bandit reel vessels and need the larger trip limit to make a profitable trip. In years past, the quota would not be met until late in the year giving both Florida longline fishermen, who begin fishing in January or February,

and South Carolina fishermen, who typically are unable to fish until April or May due to weather conditions, the opportunity to make several trips before the trip limit drops to 300 pounds gutted weight. However, in recent years, effort has increased due to restrictions in the shark longline fishery and the golden tilefish quota has been reached in late summer and the trip limit has been reduced even sooner in the year. As a result, fishing opportunities for South Carolina longline fishermen have been significantly reduced. At the same time hook-and-line fishermen in Florida have been unable to participate since the season closes before they enter in September.

Golden Tilefish Commercial Trip Limit

While Florida longline fishermen begin fishing in January or February, Florida hook-and-line fishermen traditionally participate in the golden tilefish fishery in September. However, the derby that has developed in recent years has not enabled them to participate in the fishery. The commercial golden tilefish trip limits are such that longline fishermen have the opportunity to fish under a 4,000 pound trip limit early in the year while hook-and-line fishermen have to fish under a smaller trip limit that is likely not high enough for them to make a profit. Changing the commercial golden tilefish fishing year may eliminate the need for different trip limits.

Golden Tilefish Commercial Trip Limits for Fishermen not Receiving an Endorsement

Because some fishermen with historical landings of tilefish will not receive an endorsement due to their historical landings falling below the minimum required to qualify for an endorsement, the Council has proposed trip limits (or bycatch allowance) for non-endorsement holders. The poundage caught by these fishermen would be subtracted from the hook and line gear group quota.

Limit Participation in the Black Sea Bass Pot Fishery

In December 2008, the Council requested NOAA Fisheries Service issue a control date of December 4, 2008. The control date sets a date in time the Council could use to limit participation; anyone entering the black sea bass pot fishery after the specified date may not be guaranteed continued participation. Action 7 proposes alternatives that would limit tag distribution to fishery participants based on historical landings. The Council is concerned that there could be an increase in fishing for black sea bass pots due to various recent amendments that restrict fishing for other species. An increase in participation could degrade profits for historical participants and increase bycatch.

Limit Effort in the Black Sea Bass Pot Fishery

The Council is concerned increased restrictions imposed through Snapper Grouper Amendments 13C and 16, including a commercial quota for black sea bass, could increase the incentive to fish for black sea bass using pots. Currently, there is no limit on the number of tags issued to fishermen who target black sea bass or the number of pots that can be fished. An increase in participation in the black sea bass fishery would also diminish profits for current participants in that fishery. Action 8 proposes alternatives that would reduce the number of tags distributed in the black sea bass fishery to reduce the amount of pots fishermen could deploy.

Reduce Bycatch in the Black Sea Bass Fishery

The Council is concerned about the possibility of fishermen leaving large numbers of traps fishing for multiple days due to vessel or weather problems, which could unnecessarily kill many black sea bass. Fishing large numbers of traps also increases the chance that traps could be lost and "ghost fishing" could occur. Furthermore, fishing large numbers of traps increases the chance of entanglement of pot lines with right whales and other protected species. Action 9 proposes alternatives to reduce the possibility of bycatch in the black sea bass fishery.

What is Bycatch?

"Fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. [Bycatch] does not refer to fish released alive under a recreational catch and release program."
Magnuson-Stevens Act (MSA) Section 3(2)

Improvements to Commercial and For-Hire Data Reporting

The goal of Actions 10 and 11 is to improve the accuracy, timing, and quantity of fisheries statistics collected by the current data collection programs for fisheries managed by the Council. To accomplish this goal, the Council believes modifications should be made to the current data collection programs. Data elements improved by the action may include, but are not limited to: Landings; discards; effort; biological sampling of landings and discards; fishery-independent information; and economic and social characterization of the fisheries.

❖ Action 1. Limit Participation in the Golden Tilefish Fishery

Alternative 1 (No Action). Do not limit effort in the golden tilefish fishery through an endorsement program.

Alternative 2. Limit golden tilefish effort through a golden tilefish gear endorsement program: Distribute golden tilefish gear specific endorsements for snapper grouper permit holders that qualify under the eligibility requirements stated below. Only snapper grouper permit holders with a golden tilefish longline endorsement or a golden tilefish hook-and-line endorsement associated with their snapper grouper permit will be allowed to possess golden tilefish. Individuals that meet the qualifying criteria for both hook-and-line and longline endorsements only receive one endorsement.

Hook-and-line Endorsement Initial Eligibility Requirements

Preferred Sub-Alternative 2a. To receive a golden tilefish hook-and-line endorsement, the individual must have a harvest level of 1,000 pounds gutted weight (with hook-and-line gear) when the individual's best three of five years from 2001-2005 are aggregated.

Sub-Alternative 2b. To receive a golden tilefish hook-and-line endorsement, the individual must have a harvest level of 500 pounds gutted weight (with hook-and-line gear) when the individual's best three of five years from 2001-2005 are aggregated.

Sub-Alternative 2c. To receive a golden tilefish hook-and-line endorsement, the individual must have a harvest level of 500 pounds gutted weight (with hook-and-line gear) when the individual's landings from 2001-2005 are averaged.

Sub-Alternative 2d. To receive a golden tilefish hook-and-line endorsement, the individual must have a harvest level of 500 pounds gutted weight (with hook-and-line gear) when the individual's landings from 1999-2008 are averaged.

Sub-Alternative 2e. To receive a golden tilefish hook-and-line endorsement, the individual must have a harvest level of 1000 pounds gutted weight (with hook-and-line gear) when the individual's landings from 1999-2008 are averaged.

Longline Endorsement Initial Eligibility Requirements

Preferred Sub-Alternative 2f. To receive a golden tilefish longline endorsement, the individual must have a total of 2,000 pounds gutted weight golden tilefish caught (with longline gear) between 2005 and 2008.

Sub-Alternative 2g. To receive a golden tilefish longline endorsement, the individual must have a total of 5,000 pounds gutted weight golden tilefish caught (with longline gear) between 2005 and 2008.

Sub-Alternative 2h. To receive a golden tilefish longline endorsement, the individual must have an average of 5,000 pounds gutted weight golden tilefish caught (with longline gear) between 2005 and 2008.

Golden tilefish, *Lopholatilus chamaeleonticeps*

Life History

Tilefish inhabit the outer continental shelf and upper continental slope along the entire east coast of the United States and the Gulf of Mexico south to Venezuela. They are found in waters from 250-1,500 feet deep, where bottom temperatures range from 49° to 58° F. Individuals live in cone-shaped burrows, and concentrate in small groups or pods. Females are smaller than males, although whether or not the species displays hermaphrodism is unknown.

Golden tilefish reach sexual maturity at about 27 inches long and about 9 pounds. Spawning occurs from March to September, and females lay from 2-8 million pelagic eggs. Tilefish feed during the day on bottom crustaceans, clams, snails, worms, anemones and sea cucumbers. They can reach lengths of 38 inches, although growth is slow.

Impacts from Action 1 (Limit Participation in the Golden Tilefish Fishery)

Biological

All of the sub-alternatives under **Alternative 2** would result in a cap placed on the number of participants but not necessarily limit the effort or harvest in the golden tilefish fishery. It is possible that alternatives which limit the number of participants could also result in a reduction in the amount of gear deployed and golden tilefish landed. If this were the case, then biological benefits could be expected for golden tilefish and the chance of interactions with protected species could be reduced under some alternatives. The number of endorsements issued under each sub-alternative is listed in Tables 1 and 2.

Table 1. Number of permits that qualify for **hook and line endorsements** under each sub-alternative. Values are estimates

Hook and Line Sub-Alternatives	Eligibility Requirement	Number of Endorsements
Preferred Sub-Alternative 2a	At least 1,000 lbs gw when best 3 of 5 yrs 2001-05 are aggregated	23
Sub-Alternative 2b	At least 500 lbs gw when best 3 of 5 yrs 2001-05 are aggregated	29
Sub-Alternative 2c	At least 500 lbs gw when 2001-05 landings are averaged	13
Sub-Alternative 2d	At least 500 lbs gw when 1999-07 landings are averaged	13
Sub-Alternative 2e	At least 1,000 lbs gw when 1999-07 landings are averaged	7
Sub-Alternative 2f	At least 1,000 lbs gw when best 3 of 5 yrs 2001-05 are aggregated and at least 1 lb was landed in 2008	13
Sub-Alternative 2g	At least 1,000 lbs gw when best 3 of 5 yrs 2001-05 are aggregated and at least 1 lb was landed in 2007 or 2008	16
Sub-Alternative 2h	At least 500 lbs gw when best 3 of 5 yrs 2001-05 are aggregated and at least 1 lb was landed in 2008	14
Sub-Alternative 2i	At least 500 lbs gw when best 3 of 5 yrs 2001-05 are aggregated and at least 1 lb was landed in 2007 or 2008	18
Sub-Alternative 2j	At least 500 lbs gw when 2001-05 landings are averaged and at least 1 lb was landed in 2008	8
Sub-Alternative 2k	At least 500 lbs gw when 2001-05 landings are averaged and at least 1 lb was landed in 2007 or 2008	10

Table 2. Number of permits that qualify for **longline endorsements** under each sub-alternative. Values are estimates.

Longline Sub-Alternatives	Eligibility Requirement	Number of Endorsements
Preferred Alternative 2l	At least 2,000 lbs gw when landings from 2006-08 are aggregated	17
Alternative 2m	At least 5,000 lbs gw when landings from 2006-08 are aggregated	12
Alternative 2n	At least 5,000 gw lbs when landings from 2006-08 are averaged	12

Socio-economic

Regarding economic benefits, in general, it is expected that any of the Sub-alternatives will yield greater economic benefits compared to **Alternative 1** because the Sub-alternatives limit the number of participants. Who economically benefits from each of these sub-alternatives depends on whether they receive an endorsement or not. The benefit of a smaller numbers of endorsements is an expectation of higher *average* profits per endorsement holder. Therefore, it can be expected that the highest average profits per hook and line endorsement holder could occur under **Sub-alternative 2e** and the lowest under **Sub-alternative 2b**. The highest average profits per longline endorsement holder would occur under **Sub-alternatives 2m and 2n** and the lowest under **Sub-alternative 2l**.

Social impacts resulting from **Action 1** are expected to be mixed. While the alternatives should preserve and possibly increase the social benefits to the more active producers and dealers, and associated communities, absent fishermen landing in multiple ports and selling to multiple dealers in the same city, reduced social and economic benefits will be experienced by some communities and dealers as well as the fishermen who do not receive an endorsement.

❖ Action 2. Allocate Commercial Golden Tilefish Quota Among Gear Groups

Alternative 1 (No Action). Do no allocate commercial golden tilefish quota among gear groups.

Alternative 2. Allocate commercial golden tilefish quota based on 75% longline, 25% hook-and-line

Alternative 3. Allocate commercial golden tilefish quota based on 85% longline, 15% hook-and-line

Alternative 4. Allocate commercial golden tilefish quota based on 90% longline, 10% hook-and-line

Impacts from Action 2 (Allocate Commercial Golden Tilefish Quota Among Gear Groups)

Biological

The biological effect of the alternatives would be similar since it is likely the quota would be met regardless of which alternative is selected. However alternatives allocating a greater portion of the quota to hook and line gear users could have greater biological benefits for protected species and the benthic habitat as well as sea turtles. Historical landings indicate that from 2004-08, 90% of the golden tilefish were taken by longline gear while the remaining 10% were taken by hook and line gear users. However, at one time, the golden tilefish were only harvested with hook and line gear.

Socio-economic

Availability of economic data for the golden tilefish participants specifically prevents a quantitative analysis. For obvious reasons, opportunities for greater profitability for each gear group increase with the quota portion allocated to them.

❖ Action 3. Allow for transferability of golden tilefish endorsements

Alternative 1 (No Action). Longline and hook and line golden tilefish endorsements are not allowed to be transferred.

Alternative 2. Longline and hook and line golden tilefish endorsements can be transferred between any two individuals or entities that hold valid SG permits.

Option 1: Transferability allowed upon program implementation.
Option 2: Transferability not allowed during the first 2 years of the program.
Option 3: Transferability not allowed during the first 3 years of the program.
Option 4: Transferability not allowed during the first 5 years of the program.

Alternative 3. Longline golden tilefish endorsements can be transferred between any two individuals or entities that hold valid commercial unlimited SG permits.

Option 1: Transferability allowed upon program implementation.
Option 2: Transferability not allowed during the first 2 years of the program.
Option 3: Transferability not allowed during the first 3 years of the program.
Option 4: Transferability not allowed during the first 5 years of the program.

Alternative 4. Hook and line golden tilefish endorsements can be transferred between any two individuals or entities that hold valid commercial unlimited SG permits.

Option 1: Transferability allowed upon program implementation.
Option 2: Transferability not allowed during the first 2 years of the program.
Option 3: Transferability not allowed during the first 3 years of the program.
Option 4: Transferability not allowed during the first 5 years of the program.

Alternative 5. Hook and line golden tilefish endorsements can be transferred between any two individuals or entities that hold valid commercial limited (225 lb) SG permits.

Option 1: Transferability allowed upon program implementation.
Option 2: Transferability not allowed during the first 2 years of the program.
Option 3: Transferability not allowed during the first 3 years of the program.

Option 4: Transferability not allowed during the first 5 years of the program.

Alternative 6. Hook and line and longline golden tilefish endorsements can be transferred between any two individuals or entities that hold valid commercial unlimited SG permits regardless of gear endorsement category.

Option 1: Transferability allowed upon program implementation.
Option 2: Transferability not allowed during the first 2 years of the program.
Option 3: Transferability not allowed during the first 3 years of the program.
Option 4: Transferability not allowed during the first 5 years of the program.

Impacts from Action 3 (Allow for transferability of golden tilefish endorsements)

Biological

The biological effects of the alternatives would likely be very similar. Among **Options 1-4**, **Option 4** could have the greatest positive effect for golden tilefish because it would place the longest time period on when an endorsement could be transferred which could result in decreased participation. However, effort might not show a corresponding decrease with the number of participants in the fishery.

Socio-economic

Under **Alternative 1** fishermen would be able to sell their snapper grouper permit but they would not be able to sell their golden tilefish gear endorsement which could result in difficultly selling their permit, vessel, and gear since permits are often sold with the vessel and gear. **Alternative 2** would provide the greatest amount of endorsement transfer flexibility. The degree of transfer flexibility could influence the aggregate profitability of the fishery and the average individual profitability. Under each alternative, are various options for when transferability would be allowed. The rationale behind delaying transferability of catch privilege assets, like endorsements, is to allow people time to develop an understanding of the value of the endorsements before selling them.

❖ Action 4. Adjust Golden Tilefish Fishing Year

Alternative 1 (No Action). Retain existing January 1st start date for the golden tilefish fishing year.

Alternative 2. Change the start of the golden tilefish fishing year from January 1st to September 1st.

Preferred Alternative 3. Change the start of the golden tilefish fishing year from January 1st to August 1st.

Alternative 4. Change the start of the golden tilefish fishing year from January 1st to May 1st.

Impacts from Action 4 (Adjust Golden Tilefish Fishing Year)

Biological

The biological effects of **Alternatives 2-4** would be very similar. Changing the fishing year is unlikely to increase landings or decrease the number of months the fishery operates due to the small amount of landings taken by the hook and line sector historically.

Socio-economic

The economic impact of **Alternatives 2-4** are distributional and could benefit hook and line users and Carolina fishermen primarily. However, since **Alternative 1 (No Action)** allows fishing for tilefish during months when other fisheries are closed, **Alternative 1** could result in higher ex-vessel prices for tilefish than in the past and could help dealers maintain customers.

❖ Action 5. Establish Golden Tilefish Fishing Limits

Alternative 1 (No Action). Retain the 300 pound gutted weight trip limit when 75% of the quota is taken.

Preferred Alternative 2. Remove the 300 pound gutted weight trip limit when 75% of the quota is taken.

Alternative 3: Prohibit longline fishing after 75% of the quota is taken.

Impacts from Action 5 (Establish Golden Tilefish Fishing Limits)

Biological

The expected biological effect of **Preferred Alternative 2** is expected to be minimal. In the commercial fishery, most golden tilefish (92%) are taken with longline gear deployed by large vessels that make long trips and depend on large catches (> 3,000 pounds) to make a trip economically feasible. Therefore, a 300 pound gutted weight trip limit when 75% of the quota is met would shut down commercial longline sector, and might reduce their potential annual catch.

Socio-economic

The economic effects of **Alternatives 1-3** are largely distributional. **Alternative 2** benefits longline fishermen while **Alternative 3** benefits hook and line fishermen compared to the status quo.

❖ Action 6. Establish trip limits for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook-and-line fishery

Alternative 1 (No Action). Do not establish trip limits for the golden tilefish hook and line fishery for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook and line fishery.

Alternative 2. Establish trip limits of 300 lbs for the golden tilefish hook and line fishery for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook and line fishery.

Alternative 3. Establish trip limits of 400 lbs for the golden tilefish hook and line fishery for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook and line fishery.

Alternative 4. Establish trip limits of 500 lbs for the golden tilefish hook and line fishery for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook and line fishery.

Impacts from Action 6 (Establish trip limits for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook-and-line fishery)

Biological

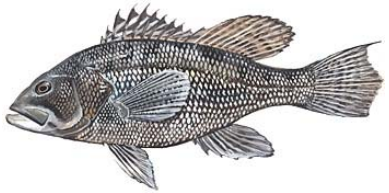
The biological impacts would be similar for all of the alternatives and would not increase or decrease the biological impacts from the status quo. The biological effect of **Alternatives 1-4** would be similar since it is likely that the quota would be met regardless of which alternative is selected. Furthermore, since the same gear would be used under all alternatives, different trip limits for a small amount of hook and line quota is likely to have little biological effect.

Socio-economic

Economic impacts of the alternatives would be positive for fishermen who did not qualify for an endorsement under **Action 1** but because catches under the trip limits would count towards the hook and line quota, the economic impacts would be negative for hook and line endorsement holders. Under **Action 2**, the hook and line quota allocation would be 68,584 pounds, 41,150 pounds, and 27,433 pounds, depending on the alternative. If the lower estimate of 133 vessels made 1 trip using the 300 pound trip limit (Action 6, **Alternative 2**), an estimated 39,900 pounds in landings would result, which is significant compared to the hook and line allocation of 27,433 pounds to 68,584 pounds, depending on the alternative chosen in **Action 2**.

Actions Addressing Black Sea Bass

Black Sea Bass, *Centropristis striata*



Life History

Black sea bass are temperate marine fish that inhabit irregular hard-bottom areas, such as wrecks or reefs. They are found from Cape Cod to Cape Canaveral, and those found in the South Atlantic Bight usually occur more inshore with other tropical reef fish such as snappers, groupers, porgies and grunts. Black sea bass are protogynous hermaphrodites; that is, they change sex with size. Large individuals are males, and smaller individuals are female. The number of eggs produced in a spawning season ranges from 30 thousand to 500 thousand depending on the size of the fish. The spawning season is June through October in the Mid-Atlantic Bight, and February through May in the South Atlantic Bight. Females reach sexual maturity when they are 7.5 inches long, and males when they are 9 inches long. Black sea bass may live up to 20 years, although fish older than 9 years are rare. The maximum size attained is 24 inches and 6 pounds. Black sea bass are opportunistic feeders eating whatever is available, preferring crabs, shrimp, worms, small fish and clams.

❖ Action 7. Limit Participation in the Black Sea Bass Pot Fishery

Alternative 1 (No Action). Do not further limit participation in the black sea bass pot fishery.

Preferred Alternative 2. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1 pound of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 2A. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 500 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 2B. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 2C. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 2000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 2D. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 5000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 2E. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 10,000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 12/04/08.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1 pound of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3A. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 500 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3B. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3C. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 2000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3D. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 5000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.

Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 3E. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 10,000 pounds of black sea bass caught with pot gear between 12/8/98 and the control date of 10/14/05.

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1 pound of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4A. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 500 pounds of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4B. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 1000 pounds of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4C. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 2000 pounds of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.

Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4D. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 5000 pounds of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Alternative 4E. Limit tag distribution to black sea bass pot fishermen with valid commercial snapper grouper permits that landed at least 10,000 pounds of black sea bass caught with pot gear by the date of 12/31/09. **These impacts cannot be analyzed since 2009 data is not yet finalized.**

Sub-Alternative 1. Minimum poundage based on average.
Sub-Alternative 2. Minimum poundage based on aggregate.
Sub-Alternative 3. Minimum poundage based on landings in one year.

Impacts from Action 7 (Establish trip limits for commercial fishermen who do not receive an endorsement in the commercial golden tilefish hook-and-line fishery)

Biological

The biological effects of **Alternatives 1-4** could be similar since the fishery would close when the quota is met regardless of the number of participants. Tables below show number of participants for each alternative and sub-alternative. Alternative 4 cannot be analyzed due to the unavailability of data.

Table 3. Number of fishermen with snapper grouper permits who fished pots with minimum black sea bass landings of 1, 500, 1,000, 2,000, 5,000, and 10,000 lbs whole weight in average (over 10 years), aggregate, and for one year (maximum) during 12/8/98 to 12/4/08 (Alternative 2). Values are estimates.

Alternative 2 (98-08)	Average	Aggregate	1 year
Alt 2 (1 lb)	107	107	107
Alt 2a (500 lbs)	65	94	94
Alt 2b (1,000 lbs)	47	89	86
Alt 2c (2,000 lbs)	39	80	70
Alt 2d (5,000 lbs)	19	65	46
Alt 2e (10,000 lbs)	12	47	22

Table 4. Number of fishermen with snapper grouper permits who fished pots with minimum black sea bass landings of 1, 500, 1,000, 2,000, 5,000, and 10,000 lbs whole weight in average (over 10 years), aggregate, and for one year (maximum) during 12/8/98 to 10/14/05 (Alternative 3). Values are estimates.

Alternative 3 (98-05)	Average	Aggregate	1 year
Alt 3 (1 lb)	96	96	96
Alt 3a (500 lbs)	62	84	82
Alt 3b (1,000 lbs)	53	76	74
Alt 3c (2,000 lbs)	38	68	60
Alt 3d (5,000 lbs)	23	59	43
Alt 3e (10,000 lbs)	15	43	21

Socio-economic

Analysis of these alternatives in terms of changes in aggregate profitability of the black sea bass portion of the snapper grouper fishery is not able to be conducted since it would require specific data on the costs and revenues of black sea bass pot vessels, which is not available. Distributional changes between alternatives deal with who benefits and who does not benefit as the result of the various alternatives, sub-alternatives, and options. In general, choosing an alternative that allows for a smaller number of vessels than currently fish for black sea bass to continue fishing, could increase average vessel profitability. Choosing an alternative that allows for a larger number of vessels than currently fish for black sea bass, could decrease average vessel profitability but allow for greater participation on the individual and community level.

❖ Action 8. Limit Effort in the Black Sea Bass Pot Fishery

Alternative 1 (No Action). Do not annually limit the number of black sea bass pots deployed or pot tags issued to holders of snapper grouper commercial permits.

Alternative 2. Require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NOAA Fisheries Service. Limit the black sea bass pot tags to 100 per vessel annually. NOAA Fisheries Service will issue new identification tags each fishing year that will replace the tags from the previous fishing year.

Preferred Alternative 3. Require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NOAA Fisheries Service. Limit the black sea bass pot tags to 50 per vessel annually. NOAA Fisheries Service will issue new identification tags each fishing year that will replace the tags from the previous fishing year.

Alternative 4. Require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NOAA Fisheries Service. Limit the black sea bass pot tags to 25 per vessel annually. NOAA Fisheries Service will issue new identification tags each fishing year that will replace the tags from the previous fishing year.

Alternative 5. Require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NOAA Fisheries Service. Limit the black sea bass pot tags to 100 per vessel in year 1, 50 in year 2, and 25 in year 3. NOAA Fisheries Service will issue new identification tags each fishing year that will replace the tags from the previous fishing year.

Alternative 6. Require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NOAA Fisheries Service. Limit the black sea bass pot tags to 100 per vessel in year 1 and 50 in year 2. NOAA Fisheries Service will issue new identification tags each fishing year that will replace the tags from the previous fishing year.

Alternative 7. Annually issue tags to individuals based on a 10% reduction in the number of tags issued as of 12/04/08.

Alternative 8. Annually issue tags to individuals based on a 25% reduction in the number of tags issued as of 12/04/08.

Current Commercial Regulations for Black Sea Bass
Annual quota = 309,000 pounds. Size limit = 10 inches
Fishing year is from June 1 to May 31.

Impacts from Action 8 (Limit Effort in the Black Sea Bass Pot Fishery)

Biological

In general, biological benefits are higher with the smaller number of traps in the water. However, limiting the number of traps per person will not necessarily limit the overall number of traps being fished unless the numbers of participants (Action 7) are capped as well.

During 2003-2008, an average of 138 individuals per year requested tags when renewing their snapper grouper permit (**Table 4-5**). Under **Alternatives 2-6**, any individuals with a Federal snapper grouper commercial permit would be able to fish pots. There were 877 individuals with snapper grouper permits in 2007. Therefore, if the Council does not take action to limit the number of fishermen participating in the black sea bass fishery (**Section 4.3**) then there is greater potential for additional fishermen to fish pots under **Alternatives 2-6** than under **Alternative 7-8**.

Socio-economic

In general, it is expected that the short-term economic benefits of **Alternatives 2-6** increase with the larger number of traps allowed per vessel. However, how the total number of traps in the fishery influences the catch per unit effort will ultimately determine the long-term economic impacts of these alternatives. It is possible that even a low number of traps per vessel could have negative economic impacts in the short and long-term if there are large numbers of vessels participating in the fishery. Assuming the catch per unit effort remains stable, **Alternative 2** would offer the greatest short-term economic benefits but probably the smallest long-term economic benefits since the total number of traps in the fishery is not capped. **Preferred Alternative 3** would have the next largest short-term economic benefits (and next smallest long-term economic benefits) followed by **Alternatives 3, 4, 5, and 6**, in that order. If **Alternative 1 (No Action)** is chosen under the previous action, **Alternatives 7 and 8** would have the greatest long-term economic benefits compared to the other alternatives in this action because this would restrict participation to individuals (based on the time frame) *and* limit the total number of pots used.

If we assume that the number of pots carried per vessel is currently optimal for that individual vessel's operation, then any reduction in the number of vessels will have a negative impact on the profitability of that operation. **Alternative 2** restricts the number of pots per vessel to 100. While most vessels carry less than 100 pots, those that currently carry more than 100 pots will be negatively impacted since they will be restricted to 100 pots. While the cost of vessel operations remain largely fixed, except crew and food costs, the number of pots, which are used to generate revenue have decreased. The overall economic benefit of any of the alternatives will be a summation of the individual changes in profits. Given that there are only a few vessels fishing greater than 100 pots, the

negative economic impacts from alternatives with larger number of pots allowed per vessel are expected to be less than the negative economic impact of the alternatives with smaller numbers of pots allowed per vessel. Actual estimation of each vessel's profitability requires vessel specific cost data for black sea bass vessels, which is not available at this point in time.

Action 9. Implement Measures to Reduce Bycatch in the Black Sea Bass Pot Fishery

Alternative 1 (No Action). Do not implement additional regulations stipulating when black sea bass pots must be removed from the water.

Preferred Alternative 2. Black sea bass pots must be brought back to shore at the conclusion of each trip.

Alternative 3. Allow fishermen to leave pots in the water for no more than 72 hours.

Impacts from Action 9 (Implement Measures to Reduce Bycatch in the Black Sea Bass Pot Fishery)

Biological

Alternative 1 (No Action) would continue the risks of ghost fishing due to lost pots and entanglement with protected species, particularly when gear is left at sea for long periods of time and therefore would have the least amount of biological benefit for the alternatives considered. The biological benefit of **Preferred Alternative 2** would be greater than **Alternative 3** because most trips last 1 day. Therefore, under **Preferred Alternative 2**, pots would be in the water for the least amount of time and would have the least amount of risk for ghost fishing or entanglement with protected species. The biological benefit of **Alternative 3** would be less than **Preferred Alternative 2** because it would allow fishermen to leave pots in the water for as long as 72 hours and would increase the chance that pots could be lost or could interact with protected species.

Socio-economic

Given that **Preferred Alternative 2 and Alternative 3** protect the biological resource as well as the surrounding ecosystem, the fishery would experience long-term economic benefits from these alternatives.

Black Sea Bass Pot Requirements

A black sea bass pot (or trap with six rectangular sides that does not exceed 25 inches in height, width, or depth) must be used or possessed in the South Atlantic EEZ between 35°15.19’ N lat (due east of Cape Hatteras Light, NC) and 28°35.1’ N. lat. (due east of the NASA Vehicle Assembly Building, Cape Canaveral, FL).

In the South Atlantic EEZ, pots may not be used or possessed in multiple configurations, that is, two or more pots may not be attached one to another so that their overall dimensions exceed those allowed for an individual sea bass pot. This does not preclude connecting individual pots to a line, such as a "trawl" or trot line. A black sea bass pot used in the South Atlantic must meet the following additional requirements:

1. For sides other than the back panel: hexagonal mesh (chicken wire) — at least 1.5 inches between wrapped sides; square mesh — at least 1.5 inches between sides; OR rectangular mesh — at least 1 inch between the longer sides and two inches between the shorter sides.
2. For the entire panel, i.e., the side of the pot opposite the side that contains the pot entrance, mesh that is at least 2 inches between sides.
3. It must have an escape panel or door with an opening equal to or larger than the interior end of the trap’s throat (funnel) placed on at least one side, excluding the top and bottom. Its hinges or fasteners must be made of one of the following degradable materials: ungalvanized or uncoated iron wire no larger than 19 gauge or 0.041 inches diameter OR galvanic, timed release mechanisms with a letter grade no higher than J.
4. It must have an unobstructed escape vent opening on at least two opposite vertical sides (excluding top and bottom) meeting the following requirements: The escape vent opening must measure at least 1 1/8 X 5 3/4" for rectangular vents, 1.75 X 1.75" for square vents (inside measure), or 2" diameter circular vents.
5. Sea bass pots must be removed from the water in the South Atlantic EEZ when the quota is reached.

❖ Action 10. Improvements to Commercial Data Reporting

Alternative 1 (No Action). Retain existing data reporting systems for the commercial sector. **Table X** below shows a list of current data reporting programs.

Alternative 2. Require all vessels with a Federal snapper grouper commercial permit to have an electronic logbook tied to the vessel's GPS onboard the vessel.

(Alternative 2 would require 100% of vessels to have an electronic logbook; whereas, current data reporting programs only require electronic logbooks if selected.)

Preferred Alternative 3. Provide the option for fishermen to submit their logbook entries electronically via an electronic version of the logbook made available online.

Alternative 4. Require that commercial landings and catch/effort data be submitted in accordance with ACCSP standards, using the SAFIS system.

Impacts from Action 10 (Improvements to Commercial Data Reporting)

Biological

It may be assumed that any alternative other than **Alternative 1 (No Action)** would contribute to more refined, complete, and timely information that can be used to inform future fishery management decisions, and would therefore, be socially and biologically beneficial.

Socio-economic

Economic effects resulting from **Alternatives 2-4** depend partially on whether fishermen or government pay for equipment needed to implement and maintain these alternatives. **Preferred Alternative 3** is expected to be least expensive to fishermen. **Alternative 2**, while less costly than observers and electronic monitoring, could be prohibitive for some fishermen depending on whether fishermen or government are expected to pay for implementation and upkeep. **Alternative 4** could be costly to those fishermen and dealers without access to a computer and internet service. However, a computer is expected to cost about $500, which is unlikely to be prohibitive for most businesses. **Alternatives 2-4** are expected to provide long-term economic and social benefits through improved fisheries management.

❖ Action 11. Improvements to For-Hire Data Reporting

Alternative 1 (No Action). Retain existing data reporting systems for the for-hire sector.

Alternative 2. Require *selected* vessels with a Federal For-Hire Permit to report electronically; NOAA Fisheries Service is authorized to require weekly or daily reporting as required.

Alternative 3. Require vessels operating with a Federal For-Hire permit to maintain a logbook for discard characteristics (e.g., size and reason for discarding), *if selected*.

Alternative 4. Require that for-hire landings and catch/effort data be submitted in accordance with the ACCSP standards, using the SAFIS system.

Impacts from Action 11 (Improvements to For-Hire Data Reporting)

Biological

It may be assumed that any alternative other than **Alternative 1 (No Action)** would contribute to more refined, complete, and timely information that can be used to inform future fishery management decisions, and would therefore, be socially and biologically beneficial. However, each of the alternatives differs in the amount and quality of data collected from the for-hire sector.

Socio-economic

Alternatives 2-4 are expected to provide long-term economic and social benefits through improved fisheries management. However, **Alternatives 2 and 4** might result in additional costs for some fishermen without a computer or internet access. Although, this is only expected to be about $500.