RESPONSES TO COMMENTS

The following section satisfies NEPA's requirement for responding to comments on the draft (DEIS). The comments, including a summary of the comments, are contained in **Appendix X**. NEPA requires that a federal agency shall respond to comments on the DEIS by one or more of the following means: (1) Modify an existing alternative; (2) develop and analyze a new alternative; (3) supplement, improve, or modify the analyses; (4) make factual corrections; or (5) explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position. The following section responds to written comments generated during the comment period for the Fishery Management Plan (FMP) and DEIS, in addition to those received as verbal testimony during the public hearings.

The first section summarizes and responds to Environmental Protection Agency (EPA) comments on the DEIS, which received an Environmental Concerns with additional information requested (EC-2) rating from that agency. Although the EPA strongly supported aspects of Amendment 17A, EPA was concerned about the length of the rebuilding schedule. The remaining sections summarize and respond to comments received from state agencies, various organizations, and the general public.

A. DEIS COMMENTS

I. Environmental Protection Agency (EPA) Comments

Comment 1 (NEPA Process): *The EPA would like rationale as to why Amendment 17B, which was once combined with Amendment 17A in a single Amendment 17, is supported by an EA and not an EIS like Amendment 17A. The EPA also requested a draft of the Amendment 17B EA for review and comment.*

Response: Red snapper overfishing was originally going to be addressed in what was once called Amendment 17 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 17). In January 2008, the Council began to develop Amendment 17. At that time, Amendment 17 was intended to establish annual catch limits (ACLs) and accountability measures (AMs) for all snapper grouper species undergoing overfishing in 2010 pursuant to new Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requirements. As the amendment development process progressed, it became clear that issues surrounding red snapper would require a greater amount of time to address than actions for the other nine species undergoing overfishing and could unnecessarily delay the specification of ACLs and AMs for the remaining nine species. Therefore, at their June 2009 meeting, the Council voted to split red snapper out of Amendment 17 into its own amendment in order to remove the risk of possibly delaying the implementation of ACLs and AMs for the other snapper grouper species undergoing overfishing. The result of the separation was two amendments. Amendment 17A, which addresses red snapper overfishing, and Amendment 17B which establishes ACLs and AMs for nine snapper grouper species undergoing overfishing.

When the decision was made that the original Amendment 17 required an environmental impact statement (EIS) as the supporting NEPA document, the prohibition on red snapper harvest and possession and the proposed area closure to end overfishing of the stock were the two elements seen as being significant. Therefore, when red snapper was split out of Amendment 17 to create Amendment 17A, the determination that an EIS was required for Amendment 17A was made based on the fact that the two actions deemed significant in Amendment 17 had been moved to Amendment 17A. The remaining ACL, AM, and management measure actions were moved to Amendment 17B. The Regional Administrator made the determination that an EA was the proper environmental document for Amendment 17B since the preferred actions are largely based on preexisting quotas. Public hearings for both Amendments 17A and 17B were held in November 2009. A copy of integrated Amendment 17B/EA was transmitted to the EPA for review on April 30, 2010.

Comment 2 (F_{MSY} proxy): *The EPA agreed with the choice of Alternative 2 ($F_{40\%\ SPR}$) as the F_{MSY} proxy for red snapper.*

Response: Alternative 2, which uses $F_{40\%SPR}$ as a proxy for F_{MSY} is more conservative than the status quo alternative ($F_{30\%SPR}$) and therefore, requires greater harvest reductions to reach the rebuilding objective. Therefore, the biological benefits of Alternative 2 for the red snapper stock would be greater than Alternative 1 (No Action) because Alternative 2 would allow for less harvest increasing the likelihood that overfishing would end and the stock would be rebuilt to SSB_{MSY}.

Comment 3 (Rebuilding schedule): *The EPA prefers shorter rebuilding periods than the preferred alternative which designates a 35 year rebuilding schedule. It is unclear as to why the very stringent proposed area closure would require such a lengthy rebuilding schedule and, conversely, why the proposed long rebuilding period would not benefit the affected fishermen more.*

Response: Thirty-five years is the longest rebuilding schedule allowed for South Atlantic red snapper under the Magnuson-Stevens Act. The shorter the rebuilding schedule the more restrictive harvest limitations need to be to achieve the rebuilding goal, and the more negative the short-term socioeconomic impacts are to the fishing communities. If no harvest of red snapper was allowed, as specified under the shortest rebuilding schedule (Alternative 2), it is still expected that red snapper would be caught and released by commercial and recreational fishermen targeting species that co-occur with red snapper. Alternative 2 would not be expected to rebuild the stock to SSB_{MSY} because it is not possible to eliminate incidental mortality of one species in a multispecies complex, without prohibiting fishermen from targeting all associated species wherever the prohibited species occurs. Alternative 3 specifies a 25 year rebuilding schedule; however, the probability that the stock could rebuild within that timeframe is less certain than a longer timeframe due to uncertainties associated with assessment and effectiveness of proposed management measures.

Despite the large size of the proposed closed area and the total prohibition on harvest and possession of red snapper in Amendment 17A, regulatory discards of red snapper will still occur

while fishermen target other co-occurring snapper grouper species outside of the closed area. Because bycatch mortality is high for this species, those regulatory discards will still account for a significant portion of fishing related mortality of red snapper, slowing progress toward the rebuilding goal. However, as the stock rebuilds through time, it is the Council's intent to change regulations in order to reduce the socio-economic effects to the fishing industry (i.e., reducing the size of the closure). This ramping down of harvest restrictions over time will greatly benefit fishermen through increased revenues and a more stable red snapper fishery in the future.

It is not possible to implement a shorter rebuilding schedule without significantly increasing the magnitude of negative socioeconomic impacts in the form of a larger area closure. The Council acknowledges the cumulative effects of Amendment 17A proposed regulations, recent fisheries regulations, and other circumstances other than regulations (rise in fuel costs, decrease in dock space, national economic recession leading to a decrease in for-hire trips, etc) will have negative economic and social effects. By choosing the longest rebuilding schedule, negative socioeconomic impacts would be mitigated to the greatest extent possible while still ending overfishing.

Comment 4 (Area closure)*: In general the EPA is in favor of the closed area proposed in Amendment 17A, and realizes that other co-occurring snapper grouper species will benefit from the closure. Generally the EPA agrees with allowing some exemptions in the proposed closed area as a means of relieving societal impacts to affected fishers, unless those exceptions generate their own new substantive impacts.*

Response: NOAA Fisheries Service agrees that an area closure within which all harvest and possession of snapper grouper species is prohibited would significantly decrease the level of bycatch mortality of red snapper and contribute to rebuilding the stock. Furthermore, other snapper grouper species, including some of which are experiencing overfishing and/or are overfished will accrue biological benefits from the proposed closure. As the red snapper population recovers, the hope is that the Council could remove some of the harvest restrictions (i.e., reduce the size of the closed area). At their March 2010 meeting, the Council chose to keep an exemption for fishing with spearguns for species other than red snapper within the closed area but did not keep, as a preferred alternative, the exemption for fishing with black sea bass pot gear within the closed area. The Council is concerned about increased participation in the black sea bass fishery because the stock is overfished and in a rebuilding plan. Furthermore, the quota is being met very quickly, and the Council is considering actions in Amendment 18 to the Fishery Management Plan for the South Atlantic Region (Amendment 18) to limit the number of black sea bass that can be fished due to concern about "ghost fishing" of lost traps and potential interactions with protected species. The Council chose to retain the spearfishing exemption because of its selectivity as a gear type. Spearguns are the least likely of all fishing gear to produce red snapper bycatch and allowing the use of spearguns may help to offset, to a small degree, some of the negative socioeconomic impacts expected from large area closures.

Comment 5 (Circle hook requirement): *The EPA supports the proposed requirement for use of circle hooks north of 28 degrees latitude snapper grouper vessels using hook and line gear.*

Response: NOAA Fisheries Service agrees that requiring circle hooks in the area of the South Atlantic north of 28 degrees latitude may help reduce discard mortality of red snapper where they are most abundant. The Council felt taking advantage of any reasonable method to reduce red snapper bycatch mortality is warranted considering the overfished condition. The Council is also aware that use of circle hooks could substantially reduce harvest of some species, which would have positive biological benefits but have negative social and economic impacts on fishermen dependent upon the species. Fishermen expressed concern regarding the potential inability to catch yellowtail snapper and mangrove snapper with circle hooks. Therefore, the Council felt it was important to limit the circle hook requirement to South Atlantic areas north of 28 degrees where yellowtail snapper and mangrove snapper are less prevalent.

Comment 6 (Monitoring program): *The EPA agrees with NOAA Fisheries Service's choice of using a fishery-independent monitoring program to track the progress of red snapper rebuilding efforts. However, the EPA feels that fishery-dependent monitoring may be used in conjunction with fishery-independent monitoring if funding for the latter is insufficient.*

Response: This proposed framework under the fishery-independent monitoring program continues the long-term data series from Marine Resources Monitoring Assessment and Prediction (MARMAP) surveys and adds a complementary sampling program to expand needed coverage. This option would build upon the existing MARMAP sampling program, which already exists. The program would be expanded and sampling made more specific for monitoring red snapper and better monitoring of other snapper grouper species. This amendment does not preclude the use of fishery-dependent data for monitoring red snapper in the future, as NOAA Fisheries Service and the Southeast Fisheries Science Center (SEFSC) are constantly working toward improved data gathering and methods of analysis. Fishermen, working with researchers, could obtain funding from NOAA Fisheries Service to obtain information on red snapper for studies on life history, release mortality, mapping locations of high abundance, etc.

Comment 7 (Environmental Justice): *The EPA encourages NOAA Fisheries Service to include in the final environmental impact statement (FEIS) a discussion on the demographics of affected fishermen and how the impacts of fishermen of all demographics can be reasonably offset.*

Response: An expanded discussion of potential environmental justice issues has been added to the Social Impacts Assessment portion of the amendment. The expanded discussion includes direct socioeconomic impacts on fishermen who would be affected by the regulatory actions in Amendment 17A. The assessment also includes a summary of various outreach efforts and meetings at which fishermen were invited to present their views on the proposed actions including any environmental justice concerns.

Comment 8 (Editorial suggestions): *The EPA suggested several acronyms be included in the list of acronyms, which appears immediately after the title page of the integrated document.*

Response: A thorough review of acronym usage in the document has been conducted and, most if not all, acronyms in the main text are now also listed in the list of acronyms.

II. Florida Department of Environmental Protection (FDEP) comments

Comment 9. *The FDEP does not agree with the Council's choice of $F_{40\%SPR}$ as a proxy for $F_{MSY.}$ Instead they recommend the Council change their preferred alternative to the no action alternative which would continue the use of $F_{30\%SPR}$ as the F_{MSY} proxy, which is less conservative and would require less stringent harvest restrictions.*

Response: The most recent stock assessment indicates the actual maximum sustainable yield (MSY) value ranges between 559,000 lbs whole weight to 3,927,000 lbs whole weight, suggesting that an actual MSY value cannot be reliably estimated. Therefore, the Council was presented with a choice of two F_{MSY} proxy alternatives, one more conservative and risk averse than the other. The choice between $F_{30\%SPR}$ and $F_{40\%SPR}$ as proxies for F_{MSY} is directly related to the level of risk the Council is willing to accept in rebuilding the stock and future management of red snapper. If $F_{30\%SPR}$ is not a proper proxy for F_{MSY}, the Council could have to take corrective actions in the future to rebuild the stock to B_{MSY} within the allowable timeframe. Using $F_{40\%SPR}$ as a proxy for F_{MSY} is more conservative, risk averse, and provides greater assurance overfishing would be ended and the stock would rebuild within the specified time. Because the F_{MSY} proxy of $F_{40\%SPR}$ requires greater harvest reductions, it is more likely to end overfishing and hedge against future overfishing events.

Comment 10. *The FDEP supports the adoption of the current preferred area closure alternative because it is as small as it can be without jeopardizing rebuilding efforts. The FDEP also encourages NOAA Fisheries Service to adopt contingent actions to reduce the area further if the latest stock assessment indicates that higher fishing mortality can be accommodated.*

Response: It is the objective of the Council and NOAA Fisheries Service to end overfishing of South Atlantic red snapper while, minimizing to the maximum extent practicable, negative socioeconomic impacts. The current preferred area closure alternative encompasses an approximate 6,161 mi^2 area off the coasts of Georgia and Florida. This alternative was one of the smallest area closures considered by the Council and was chosen as the preferred alternative because it is likely to significantly reduce bycatch mortality of red snapper while incurring the lower level of socioeconomic impacts relative to other alternatives.

If Amendment 17A is approved by the Secretary and implemented trough rulemaking, the Council and NOAA Fisheries Service could reduce the size of the closed area and increase allowable harvest if data indicated it is appropriate to do so. The Council is scheduled to receive the results of a SEDAR stock assessment (benchmark) for red snapper at the December 2010 Council meeting. The Council, over the course of the next several meetings, will discuss the necessary actions if the latest assessment requires a change in management. In addition, the Council will be exploring new management approaches for red snapper, which may include a tagging program, in Amendment 22 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 22).

Comment 11. *The FDEP recommends that the Council continue using $F_{REBUILD}$ in projections and accept projections that achieve the minimum allowable chance of rebuilding the fishery by the 2044 timeframe.*

Response: The preferred rebuilding strategy and optimum yield would set the rebuilding strategy equal to 97%F_{MSY} (97%$F_{40\%SPR}$) based a constant $F_{REBUILD}$ of 0.088. The ACL would be zero directed harvest. It is possible the red snapper stock could rebuild sooner than specified in 2044 since the Council is considering management measures to prohibit all harvest during the initial years of rebuilding and actions are being considered to reduce incidental catch. If data indicate the stock has been rebuilt before the designated time frame, the Council and NOAA Fisheries Service would consider actions to adjust the allowable harvest level as appropriate.

III. Environmental Conservation Organization comments

Comment 12. *One commenter is opposed to allowing the use of spearguns for fishing for species other than red snapper within the proposed closed area because of a potential effort shift spearfishing.*

Response: From a biological perspective, spearguns are the most selective gear type available if the user is well-versed in species identification. Because of its selectivity as a gear type, spearguns would be the least likely of all fishing gear to produce red snapper bycatch. Although, studies have shown evidence that spearfishing can selectively remove the largest individuals from fish populations, the Council felt allowing the use of spearguns would not impede rebuilding of red snapper and could also help to offset, to a small degree, some of the negative socioeconomic impacts expected from large area closures.

Comment 13. *One commenter urged the Council and NOAA Fisheries Service to begin work on catch share amendments, which may help to alleviate some of the negative economic impacts incurred as a result of actions in Amendment 17A.*

Response: The Council and NOAA Fisheries Service have begun development of Amendment 21 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 21). This amendment includes actions to establish a catch share program for several species within the snapper grouper fishery management unit. If implemented through rulemaking, Amendment 21 would add catch shares to the list of existing tools available to NOAA Fisheries Service for management of snapper grouper stocks in the South Atlantic.

Comment 14: *One commenter supported a 25- year rebuilding schedule rather than the Council's current preferred rebuilding schedule of 35 years.*

Response: Thirty-five years is the longest rebuilding schedule allowed for South Atlantic red snapper under the Magnuson-Stevens Act. The shorter the rebuilding schedule the more restrictive harvest limitations need to be to achieve the rebuilding goal, and the more negative the short-term socioeconomic impacts. It is not possible to implement a shorter rebuilding schedule without significantly increasing the magnitude of negative socioeconomic impacts in the form of a larger area closure. The current preferred alternatives were chosen by the Council because they are likely to end overfishing of red snapper within a time period allowed under the Magnuson-Stevens Act, while minimizing, to the extent practicable, adverse socioeconomic impacts.

Comment 15: *Two commenters stated that they support larger closed areas over the current preferred closed area.*

Response: The Council and NOAA Fisheries Service are tasked with ending overfishing of red snapper while minimizing adverse socioeconomic impacts on the fishing community. In order to achieve both of those goals, the Council carefully considered many alternative area closures and weighed the biological benefits and economic impacts of each. The current preferred area closure is the alternative that is most likely to end overfishing, while causing the least amount of market disruption and fishing community impacts. As the stock rebuilds over time, the Council's intent is to increase the allowable harvest and decrease the size of the area closure, if appropriate. The Council will be considering alternative approaches to managing red snapper in Amendment 22.

Comment 16: *Two commenters stated the preferred AMs are not true AMs because they trigger no specific action if the ACL is exceeded. Additionally, one commenter recommended the use of annual catch targets (ACT) in setting up a system of accountability for red snapper. A combination of post-season and in-season AMs was also recommended for the red snapper fishery.*

Response: The Council has chosen an ACL of zero for red snapper which is applied to directed harvest. Therefore, no directed harvest of red snapper would be permitted year-round throughout the entire South Atlantic exclusive economic zone, thus creating a year round seasonal closure for commercial and recreational harvest of red snapper. The same rationale was used for setting an ACL of zero for speckled hind and warsaw grouper in Amendment 17B, which are also not associated with any additional harvest restrictions in the form of AMs.

The preferred red snapper AM alternative includes a provision for tracking catch per unit effort (CPUE) via fishery-dependent and fishery-independent monitoring programs, and periodically evaluating the CPUE data to determine if adjustments to the ACL are appropriate. If the data indicate an adjustment is warranted, action could be taken expeditiously through a framework amendment.

Prohibiting all directed harvest of red snapper is the most stringent AM that could be implemented for the species. The Council did consider establishing ACTs as part of the accountability mechanism for red snapper (see Appendix A). However, the intent of the Council is to prohibit commercial and recreational harvest of red snapper, therefore, the Council did not feel that ACTs were necessary at this time. It is anticipated that red snapper harvest will be allowed in the future, at which time the Council may consider establishing ACTs. ACTs could be specified and/or adjusted via a framework amendment. The updated framework procedure for setting total allowable catch in for the snapper grouper fishery, proposed in Amendment 17B, includes adjustments to many harvest parameters as well as AMs. As the stock rebuilds the Council would have the option of implementing additional in-season and/or post-season AMs if they feel it is appropriate to do so.

Comment 17: *Two commenters supported the proposed circle hook requirement.*

Response: NOAA Fisheries Service agrees that requiring circle hooks in the area of the South Atlantic north of 28 degrees latitude may help reduce discard mortality of red snapper where they are most abundant. The Council felt taking advantage of any reasonable method to reduce red snapper bycatch mortality is warranted considering its overfished condition.

Comment 18: *One commenter felt the assumptions used in determining the percentage reduction needed to end overfishing of red snapper did not adequately account for scientific and management uncertainty.*

Response:
The percent reduction required to end overfishing immediately changes depending on the choice of many factors, including the choice of the F_{MSY} proxy and level of recruitment increase in 2006 (Table 1).

Table 1. Reduction in total removals (landings plus dead discards) needed to end overfishing

Fmsy proxy	F40% proxy				F30% proxy			
	Base Estimated Recruitment	High Recruitment	Very High Recruitment	Extremely High Recruitment	Base Estimated Recruitment	High Recruitment	Very High Recruitment	Extremely High Recruitment
Alternative 2 and 6 (85% F_{MSY})	89%	88%	85%	81%	84%	83%	79%	79%
Alternative 3 and 7 (75% F_{MSY})	90%	89%	87%	85%	86%	85%	82%	81%
Alternative 4 and 8 (65% F_{MSY})	91%	90%	89%	87%	88%	87%	84%	83%
Alternative 5 and 9 (97% F_{MSY})	87%	86%	83%	81%	82%	81%	76%	73%

To determine the percent reductions, the Council utilized very high recruitment in 2006 and $F_{40\%SPR}$ proxy for F_{MSY}. The Council did factor in scientific and management uncertainty into both choices. The choice between $F_{30\%SPR}$ and $F_{40\%SPR}$ as proxies for F_{MSY} is directly related to the level of risk the Council is willing to accept in rebuilding the stock and future management of red snapper. If $F_{30\%SPR}$ is not a proper proxy for F_{MSY}, the Council could have to take corrective actions in the future to rebuild the stock to B_{MSY} within the allowable timeframe. Using $F_{40\%SPR}$ as a proxy for F_{MSY} is more conservative, risk averse, and provides greater assurance overfishing would be ended and the stock would rebuild within the specified time. Because the F_{MSY} proxy of $F_{40\%SPR}$ requires greater harvest reductions, it is more likely to end overfishing and hedge against future overfishing events.

At their September 2009 meeting, the Council indicated that projections should assume the 2006 year-class was inflated to 100% of the maximum recruitment event observed in the assessment over the years 1974–2006 (considered "very high" recruitment). The Council stated that the "very high" scenario is reasonable as it is in the middle of the scenarios presented by the SEFSC. The Council indicated the increase in recruitment is supported by age information of red snapper collected in 2009 (Appendix L) during the recent spike in landings, as approximately 80% of the fish were age 3 and 4 suggesting a recent strong recruitment event.

Comment 19: *Three commenters support the proposed utilization of a fishery-independent monitoring program for red snapper.*

Response: The proposed fishery-independent monitoring program continues the long-term data series from MARMAP surveys and adds a complementary sampling program to expand needed coverage. This option would build upon the existing MARMAP sampling program, which already exists. The program would be expanded and sampling made more specific for monitoring red snapper and better monitoring of other snapper grouper species. This amendment does not preclude the use of fishery-dependent data for monitoring red snapper in the future, as NOAA Fisheries Service and the SEFSC are constantly working toward improved data gathering and methods of analysis.

IV. Fishing Association comments

Comment 20. *Three commenters oppose the proposed snapper grouper area closure in Amendment 17A based on potential adverse economic impacts. One commenter is concerned there is not adequate economic analysis of impacts on the recreational fishing community in the document.*

Response: Amendment 17A contains a thorough analysis of potential economic impacts of the proposed closed area on the commercial and recreational sectors. The most current economic and demographic data were used in the subject analysis and all potential impacts are fully discussed. The Council and NOAA Fisheries Service must end overfishing of red snapper as required by the Magnuson-Stevens Act. Based on the most recent stock assessment the stock is being fished at eight times the sustainable rate. Therefore, significant harvest reductions, 83%, are needed to end overfishing and rebuild the population. That level of harvest reduction is likely to result in short-term adverse impacts on the economic environment, which are outlined in the document. However, as the stock rebuilds and some level of harvest is allowed, long-term economic benefits would be realized by both the recreational and commercial sectors. Amendment 22 will be exploring new management approaches for red snapper.

Comment 21. *Two fishing association commenters, and nine commenters from the general public stated the data used in determining the magnitude of red snapper overfishing, and general population estimates are flawed. The same commenters also questioned the adequacy and reliability of recreational landings data currently available to fishery managers.*

Response: The most recent stock assessment was completed for red snapper through the Southeast Data, Assessment and Review (SEDAR) process in 2008 using data through 2006. The assessment (SEDAR 15) found the South Atlantic red snapper stock is overfished and currently undergoing overfishing. Data used for the assessment consisted of records of commercial catches provided by dealer and fishermen reports since the 1940s, headboat fishery catch records from the Southeast Headboat Survey since 1972, and recreational catch records from the MRFSS since 1981. Also included are U.S. Fish and Wildlife Service recreational fisheries surveys from 1960, 1965, and 1970. Landings and effort information are provided by dealer and fishermen reports and surveys. Information on catch lengths and ages is provided by fishing port sampling programs that support the catch statistics programs. Information on

biological characteristics, such as age, growth, and reproduction, is provided by various research studies. All of the data used in the assessment are described in the SEDAR 15 red snapper stock assessment report available on the SEDAR Web site at http://www.sefsc.noaa.gov/sedar/. The SEDAR Web site also provides extensive supporting documentation that describes data collection programs and research findings.

SEDAR is a cooperative Fishery Management Council process initiated in 2002 to improve the quality and reliability of fishery stock assessments in the South Atlantic, Gulf of Mexico, and US Caribbean. SEDAR is managed by the Caribbean, Gulf of Mexico, and South Atlantic Regional Fishery Management Councils in coordination with NOAA Fisheries Service and the Atlantic and Gulf States Marine Fisheries Commissions. SEDAR seeks improvements in the scientific quality of stock assessments and greater relevance of information available to address existing and emerging fishery management issues. SEDAR emphasizes constituent and stakeholder participation in assessment development, transparency in the assessment process, and a rigorous and independent scientific review of completed stock assessments. SEDAR is organized around three workshops. The first is a data workshop where datasets are documented, analyzed, and reviewed and data for conducting assessment analyses are compiled. The second is an assessment workshop where quantitative population analyses are developed and refined and population parameters are estimated. The third is a review workshop where a panel of independent experts reviews the data and assessment and recommends the most appropriate values of critical population and management quantities. All SEDAR workshops are open to the public. Public testimony is accepted in accordance with each Council's Standard Operating Procedures. Workshop times and locations are noticed in advance through the *Federal Register*.

The findings and conclusions of each SEDAR workshop are documented in a series of reports, which were ultimately reviewed and discussed by the Council and their Science and Statistical Committee (SSC). The stock assessment found red snapper is experiencing overfishing and is overfished. At its June 2008 meeting, the SSC determined the results of the red snapper assessment are based upon the best available science.

Red snapper are very vulnerable to overfishing and becoming overfished because they live for greater than 50 years. Furthermore, they grow quickly during the first 10 years of life reaching 20 inches total length by age three and approaching 20 pounds by age 10. Many fishermen have indicated, and landings data suggest, a large increase in the number of red snapper during the last few years, which has led many fishermen to suggest the data are flawed. However, this spike in landings may be the result of a large wave of young recruits, which entered the fishery around 2006, and were not accounted for in the SEDAR 15 assessment. Those new recruits likely caused an increase discards in 2007 and in the number of legal-size fish available for harvest in 2008 and 2009. Therefore, a new benchmark assessment is currently being conducted, and will include the increased catch data. The new benchmark assessment is scheduled be completed in December 2010.

Recreational landings data are collected through the Marine Recreational Fishing Statistics Survey (MRFSS), which conducts telephone surveys of coastal households and for-hire businesses, as well as in person access-point angler intercept surveys. These surveys are used to collect information on recreational fishery participation, fishing effort, and catch; in addition to

demographic, social, and economic characteristics of the participants. Though MRFFS and the new Marine Recreational Information Program (MRIP), which is currently being phased in, collect important recreational fishery data, they are associated with a high degree of uncertainty for infrequently encountered species. NOAA Fisheries Service is working toward improving MRFSS/MRIP data collection efforts, and is cooperating with recreational and for-hire fishermen to explore novel approaches to gathering recreational landings information.

Comment 22: *One commenter requested more discussion on the timing, and the potential effects of the new benchmark assessment for red snapper, which is scheduled to be completed in December 2010.*

Response: The Council is scheduled to receive the results of a SEDAR stock assessment (benchmark) for red snapper at the December 2010 Council meeting. Since the publication of the DEIS for Amendment 17A, additional discussion on the stock assessment currently under way has been added to the Environmental Impacts section of the document. Because NOAA Fisheries Service is obligated to develop a plan to end overfishing of red snapper within one year of receiving notification of its overfished status, the Council and NOAA Fisheries Service cannot postpone implementation of Amendment 17A until after the new assessment is completed. If the assessment indicates different harvest reductions are needed than those outlined in Amendment 17A, changes can be made to management measures expeditiously through a framework amendment or some other means. The Council will discuss the necessary actions if the latest assessment requires a change in management.

Comment 23: *One commenter does not agree with the Council's choice of preferred F_{MSY} proxy alternative ($F_{40\%SPR}$) and recommends $F_{30\%SPR}$ be used instead since it would require less stringent harvest reductions.*

Response: The Council and NOAA Fisheries Service acknowledge the link between the choice of F_{MSY} proxy and the subsequent management measures needed to reduce harvest to achieve the rebuilding goal. $F_{30\%SPR}$ is the current proxy for F_{MSY}. If this is not a proper proxy for F_{MSY}, the Council could have to take corrective actions in the future to rebuild the stock to B_{MSY} within the allowable timeframe. Using $F_{40\%SPR}$ as a proxy for F_{MSY} is more conservative, risk averse, and provides greater assurance overfishing would be ended and the stock would rebuild within the specified time. Because the F_{MSY} proxy of $F_{40\%SPR}$ requires greater harvest reductions and implies a more precautionary management goal, it is more likely to end overfishing and hedge against future overfishing events.

Comment 24: *One commenter stated the Council and NOAA Fisheries Service have done an inadequate job of explaining Amendment 17A to the public, thereby fueling public misperceptions and fears of potential impacts of the amendment.*

Response: The Council and NOAA Fisheries Service have provided several forms of outreach materials for public consumption in the form of frequently asked questions, Council newsletters, and public hearing drafts of Amendment 17A. In addition to printed materials the Council and NOAA Fisheries Service conducted five scoping meetings in May 2008, four scoping meetings in February 2008; and eight public hearings were held November 2009, four in Florida, one in

Georgia, one in South Carolina, one North Carolina, and one in Virginia. Public information sessions during regularly scheduled Council meetings were also held. At these sessions, the public had the opportunity to offer their opinions and have questions answered by the Regional Administrator and the Council Chairman. These public information sessions were held on March 2, 2009, June 10, 2009, September 16, 2009, December 9, 2009, March,3, 2010, and are scheduled for June, September, and December Council meetings in 2010. In addition to the public information sessions during the Council meetings, the Regional Administrator has traveled to various locations throughout the affected area to conduct additional town hall meetings where constituents raised concerns and had questions addressed regarding red snapper issues. The Council and NOAA Fisheries Service are constantly collaborating on ways to improve outreach and communication efforts with all parties affected by fishery management issues. In 2009, the Council began webcasting Council meetings in order to make committee and Council deliberations more accessible to the public, and NOAA Fisheries Service has made progress toward improving the usability of information on the Southeast Regional Office's web site. Additional suggestions for outreach improvements are always welcomed by the agency and the Council.

V. Other Comments

Comment 25. *Two counties and two townships, all in South Carolina, submitted resolutions opposing the proposed snapper grouper area closure citing potential impacts on the economy, tourism, and possible effort shifts to the remaining open areas. Additionally, twenty three commenters expressed general opposition to the proposed area closure also citing potential adverse socioeconomic impacts.*

Response: The Council and NOAA Fisheries Service are required, by the Magnuson-Stevens Act, to end overfishing of red snapper and implement ACLs and AMs for the stock by 2010. Because red snapper have been severely overfished for an extended period of time, significant harvest reductions are needed in order to comply with Magnuson-Stevens Act mandates. The Council and NOAA Fisheries Service are making every effort to end overfishing of the species, while being mindful of the potential adverse economic impacts certain management measures may incur. The Council has used the best data available to inform their choice of preferred alternatives. They have also considered the economic impacts of each, and have attempted to balance the harvest reductions needed with the least amount economic hardship possible. The most severe economic impacts would be realized in the short-run, with northeast Florida and Georgia bearing the brunt of the effects. Among the red snapper closure alternatives, the Council's preferred alternative has the least adverse economic impacts. As the stock rebuilds, it is likely that some harvest of red snapper would be allowed and the size of the proposed area closure would be reduced, easing the economic impacts on fishery participants and their communities.

Under the current preferred alternatives, all commercial and recreational harvest of red snapper would be prohibited, not only in the proposed closed area, but throughout the entire South Atlantic exclusive economic zone. Therefore, there would be no effort shift from one area to another for red snapper. However, effort shifts for other snapper grouper species that would also be prohibited within the proposed closed area may occur, the extent to which this could occur is

unknown. Amendment 17A includes a requirement for a fishery-independent monitoring program that would track fish populations both inside and outside the proposed closed area. Data from these monitoring efforts would indicate if fishing pressure increases in areas surrounding the proposed closed area. Furthermore, as the red snapper stock begins to rebuild, it is likely that some level of harvest would be allowed and the area closure may be decreased in size, reducing impacts of effort shifting in surrounding vicinities. A discussion of possible effort shifting due to the proposed area closure has been added to the Environmental Impacts section of the FEIS.

Comment 26. *Two commenters stated it was unfair that North Carolina and South Carolina would not be affected by the proposed area closure.*

Response: Because area closures of the type proposed in Amendment 17A are associated with relatively significant socioeconomic impacts, the Council had to carefully weigh the biological benefits of various sizes of closures and their commensurate socioeconomic impacts. The goal of the Council and NOAA Fisheries Service is to implement a closed area large enough to end overfishing of red snapper while imposing the lowest amount of negative socioeconomic impacts on the fishing community and all shore-side fishery related business including tourism, as is practicable. The Council was presented with data, at their March 2010 meeting, that indicated a smaller closed area would still be an effective management tool for ending overfishing of red snapper and would provide a smaller negative economic impact than their original preferred alternative. Therefore, they changed their preferred alternative to an area that extends from northern Georgia to the middle of Florida. In doing so, the closed area that once extended up to and along the coast of South Carolina was removed. The new preferred closed area encompasses locations where red snapper are most prevalent, and therefore, the areas that would have the greatest biological benefit by a closure. If the area closure were extended northward to include areas where red snapper biomass is not as great, the area closure would result in only minor additional biological benefits, and would incur significantly greater negative socioeconomic impacts.

Comment 27. *Two commenters stated they were opposed to the circle hook requirement.*

Response: Requiring circle hooks in the area of the South Atlantic north of 28 degrees latitude may help reduce discard mortality of red snapper where they are most abundant. The Council felt taking advantage of any reasonable method to reduce red snapper bycatch mortality is warranted considering its overfished condition. Some constituents expressed concern that circle hooks would preclude them from being able to catch several specific fish species due to their mouth morphology. The majority of those species are landed south of 28 degrees latitude where red snapper are less abundant, therefore the Council chose to limit the circle hood requirement to areas north of 28 degrees latitude.

Comment 28. *One commenter stated support for the exemption for fishing with black sea bass pots within the proposed closed area.*

Response: At their December 2009 meeting the Council chose, as a preferred alternative, to allow fishing with black sea bass pot gear within the proposed closed area. This choice was

made based on the rationale that allowing commercial harvest of black sea bass and snapper grouper species other than red snapper using sea bass pots could alleviate, to some degree, negative socioeconomic effects caused by an area closure without impeding efforts to end overfishing of red snapper. However, the Council is concerned about increased participation in the black sea bass fishery because the stock is overfished and the quota is being met very quickly. Therefore, at their March 2010 meeting, the Council rescinded their previous choice of the black sea bass pot exemption alternative as a preferred alternative. The Council is considering actions in Amendment 18 to limit the number of black sea bass pots that can be fished due to concern about "ghost fishing" of lost traps and potential interactions with protected species. The proposed snapper grouper area closures could potentially lead to some effort shift into the black sea bass fishery. Currently, Amendment 18 contains an action to limit participation in the black sea bass fishery as well as the number of pots that can be fished per vessel in anticipation of effort shifts that may occur as a result of this and other amendments, which will or have already implemented more restrictive management measures.

Comment 29. *Two commenters requested that affected fishermen be bought out as a means to relieve their potential economic hardship.*

Response: At this time, there is no plan to reimburse fishermen who may be impacted by measures in Amendment 17A. The most consequential adverse socioeconomic impacts would be limited to the near-term. As the red snapper stock rebuilds over time it is likely that some level of harvest would be allowed and the size of the proposed area closure could be decreased. As harvest restrictions are relaxed, negative economic impacts related to Amendment 17A actions would decrease. The long-term benefit of a fully recovered stock will also be realized in the economic environment through a stabilized market for red snapper and other co-occurring snapper grouper species.

Comment 30. *One commenter stated the proposed area closure could push effort inshore and thus negatively impact juvenile populations of red snapper and other snapper grouper species.*

Response: The extent to which effort may shift to inshore areas as a result of the proposed area closures is not known. However, it may be assumed that some effort shift would take place. If red snapper fishing does move closer to shore, then reductions in depth-related discard mortality should be realized. It is difficult to predict exactly what those reductions would be, both because the level and pattern of effort shifting is unknown and because higher discard mortality rates will continue to be experienced in areas of the South Atlantic where area closures are not implemented. Retention of red snapper is currently prohibited and size limits are in place for most co-occurring snapper grouper species. Therefore, take of juvenile snapper grouper including red snapper is not likely to impact overall recovery of the stock or other snapper grouper populations.