

Snapper Grouper AP Discussion Document for Regulatory Amendment 20 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region

Rebuilding strategy, annual catch limits, and
management measures for snowy grouper



Environmental Assessment Regulatory Impact Review Regulatory Flexibility Act Analysis

March 25, 2014

Chapter 1. Introduction

1.1 What Actions Are Being Proposed?

Regulatory Amendment 20 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) proposes to adjust the rebuilding strategy, acceptable biological Catch (ABC), annual catch limit (ACL), maximum sustainable yield (MSY), minimum stock size threshold (MSST), and optimum yield (OY), and revise management measures for the snowy grouper component of the snapper grouper fishery.

1.2 Who is Proposing the Actions?

The South Atlantic Fishery Management Council (South Atlantic Council) is proposing the action. The South Atlantic Council develops the regulatory amendment and submits it to the National Marine Fisheries Service (NMFS) who publishes a rule to implement the regulatory amendment on behalf of the Secretary of Commerce. NMFS is an agency in the National Oceanic and Atmospheric Administration within the Department of Commerce.

South Atlantic Fishery Management Council

- Responsible for conservation and management of fish stocks
- Consists of 13 voting members: 8 appointed by the Secretary of Commerce, 1 representative from each of the 4 South Atlantic states, the Southeast Regional Administrator of NMFS; and 4 non-voting members
- Responsible for developing fishery management plans and amendments under the Magnuson-Stevens Act; and recommends actions to NMFS for implementation
- Management area is from 3 to 200 miles off the coasts of North Carolina, South Carolina, Georgia, and east Florida through Key West with the exception of Mackerel which is from New York to Florida, and Dolphin Wahoo, which is from Maine to Florida

1.3 Where is the Project Located?

Management of the federal snapper grouper fishery located off the southeastern United States (South Atlantic) in the 3-200 nautical miles U.S. Exclusive Economic Zone (EEZ) is conducted under the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP, SAFMC 1983) (**Figure 1.3.1**). Species included in Regulatory Amendment 20 are among the 59 species managed by the South Atlantic Council under the Snapper Grouper FMP.

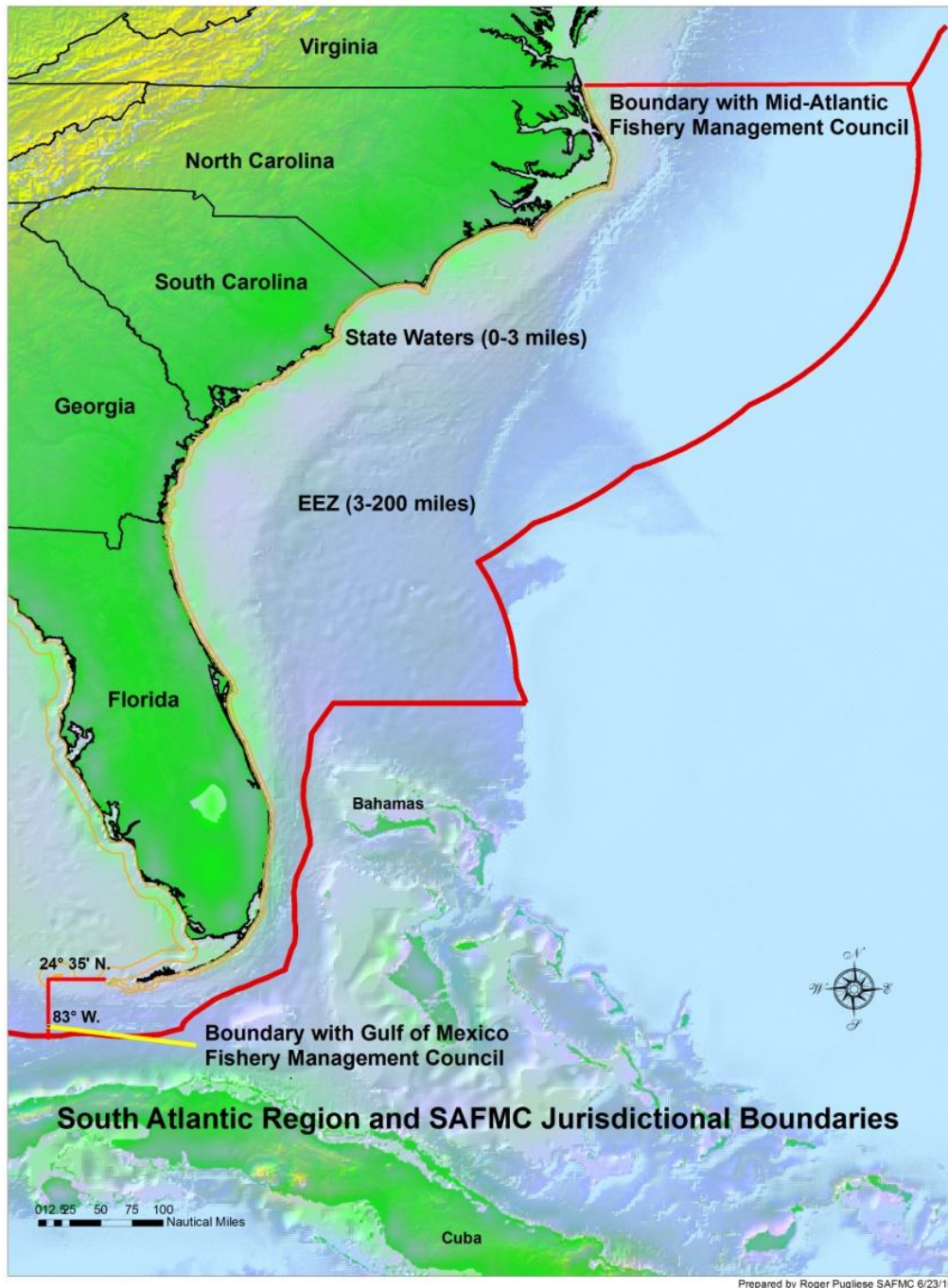


Figure 1.3.1. Jurisdictional boundaries of the South Atlantic Council.

1.1 Purpose and Need

Purpose for Action

The *purpose for the* of this proposed action is to adjust the rebuilding strategy, Acceptable Biological Catch (ABC), Annual Catch Limit (ACL), Maximum Sustainable Yield (MSY), Minimum Stock Size Threshold (MSST), Optimum Yield (OY), and revise management measures for the snowy grouper component of the snapper grouper fishery. These adjustments address the recent stock assessment results based on data through 2012.

Need for Action

The *need for the proposed action is to* prevent overfishing and continue rebuilding the stock while minimizing, to the extent practicable, adverse social and economic effects.

The IPT recommends the changes shown above.

1.5 What is the History of Management for the species considered in this amendment?

Snapper grouper regulations in the South Atlantic were first implemented in 1983. See **Appendix D** of this document for a detailed history of management for the snapper grouper fishery.

Note: Appendix D will be included with the amendment document. The Background section of this discussion document includes information on the history of assessments and snowy grouper management.

Chapter 2. Proposed Actions and Alternatives

2.1 Action 1. Adjust the Rebuilding Strategy for Snowy Grouper

Alternative 1 (No Action). The current rebuilding strategy is specified as maintaining a modified/constant fishing mortality rate ($F=F_{MSY}$) throughout the rebuilding timeframe. The TAC specified for 2009, of 102,960 pounds ww remains in effect beyond 2009 until modified. The current ABC is 102,960 pounds ww consistent with this rebuilding strategy.

Discussion

This rebuilding strategy is pre P* and ABC Control Rule. In addition, the current rebuilding strategy did not clearly state that the F_{MSY} and ABC would change with each stock assessment. This creates a disagreement between the strategy and its implementation, as the yield at F_{MSY} no longer equals the 102,960 pounds ww estimated for 2009 in the earlier assessment.

Alternative 2. Define a rebuilding strategy for snowy grouper that maintains a constant fishing mortality rate ($F=F_{Rebuild}$) throughout the rebuilding timeframe. Year 1 remains 2006 and the yield at $F_{Rebuild}$ and ABC projections will change with each assessment. **Specify a probability of success of 50% or what the SSC recommends based on the ABC control rule (Council to specify).** ABC would change each year until 2019**~~2019**~~; the ABC for 2019**~~2019**~~ would remain in effect until modified.

Discussion

This clarifies that the $F_{Rebuild}$ and ABC change with each stock assessment and that the Council is either retaining the current 50% probability of success or is utilizing the ABC Control Rule to determine the probability of success (likely close to 70%). ABC values are shown in **Table 1**.

Preferred Alternative 3. Define a rebuilding strategy~~yies~~ for snowy grouper that maintains a constant fishing mortality rate ($F=75\%F_{MSY}$) throughout the rebuilding timeframe. Year 1 remains 2006 and the yield at $75\%F_{MSY}$ and ABC projections will change with each assessment. ABC would change each year until 2019~~5~~; the ABC for 2019 would remain in effect until modified.

Discussion

This clarifies that the yield at $75\%F_{MSY}$ and ABC change with each stock assessment and that the probability of success is currently estimated as 68.9%. ABC values are shown in **Table 2**. This value has been used for a number of other species, most recently blueline tilefish.

Alternative 4. Define a rebuilding strategy~~yies~~ for snowy grouper that maintains a constant fishing mortality rate ($F=F_{current}$) throughout the rebuilding timeframe. Year 1 remains 2006 and the yield at $F_{current}$ and ABC projections will change with each assessment. ABC would change each year until 2019**~~2019**~~; the ABC for 2019**~~2019**~~ would remain in effect until modified.

The IPT recommends the changes shown above.

Discussion

See **Table 3** for ABC values under Alternative 4.

Note: The median values were used for the projections in Tables 1-4 rather than the deterministic base run estimates because at the SSC's October 2013 meeting they discussed the use of the Monte Carlo Bootstrap (MCB) results for management. Specifically, they discussed using them for both determining stock status and for catch level recommendations in the projections. The decision was to not use the MCB analysis when determining status due to the fact that unrealistic combinations of biological parameters can occur and there is currently no way of filtering out those results or weighting MCB runs. However, the SSC did concur that using the MCB runs to make catch level recommendations based on the projections was appropriate, because it takes into consideration the scientific uncertainty in the assessment model when calculating the ABC. The statistic they decided was appropriate to use when dealing with the MCB runs was the median of the runs, since the median is more robust than the mean to skewed distributions.

Table 1. Alternative 2 ABC values (pounds ww) based on yield at $F=F_{\text{Rebuild}}$ and probability of rebuilding of 50% or the value from the ABC Control Rule (likely close to 70%).

| Year | Yield at $F_{\text{rebuild 50\%}}$ | 5 Year ABC | 3 Year ABC | Probability Rebuilding | Yield at $F_{\text{rebuild 70\%}}$ | 5 Year ABC | 3 Year ABC | Probability Rebuilding |
|------|------------------------------------|------------|------------|------------------------|------------------------------------|------------|------------|------------------------|
| 2013 | 102,585 | | | 12.0% | 102,585 | | | 12.0% |
| 2014 | 102,585 | | | 14.8% | 102,585 | | | 14.8% |
| 2015 | 194,423 | 194,423 | 194,423 | 17.8% | 130,918 | 130,918 | 130,918 | 18.3% |
| 2016 | 208,101 | 208,101 | 208,101 | 19.7% | 143,619 | 143,619 | 143,619 | 21.2% |
| 2017 | 219,825 | 219,825 | 219,825 | 22.0% | 156,320 | 156,320 | 156,320 | 25.2% |
| 2018 | 231,549 | 231,549 | | 24.6% | 168,044 | 168,044 | | 28.9% |
| 2019 | 242,296 | 242,296 | | 26.9% | 179,768 | 179,768 | | 32.4% |
| 2020 | 253,043 | | | 29.1% | 191,492 | | | 35.7% |
| 2021 | 262,813 | | | 31.0% | 202,239 | | | 38.8% |
| 2022 | 271,606 | | | 32.8% | 212,986 | | | 41.5% |
| 2023 | 280,399 | | | 34.7% | 222,756 | | | 44.4% |
| 2024 | 288,215 | | | 36.2% | 232,526 | | | 47.0% |
| 2025 | 295,054 | | | 37.8% | 241,319 | | | 49.4% |
| 2026 | 301,893 | | | 39.1% | 249,135 | | | 51.7% |
| 2027 | 308,732 | | | 40.3% | 257,928 | | | 53.9% |
| 2028 | 314,594 | | | 41.5% | 264,767 | | | 55.8% |
| 2029 | 319,479 | | | 42.5% | 271,606 | | | 57.7% |
| 2030 | 323,387 | | | 43.7% | 278,445 | | | 59.3% |
| 2031 | 328,272 | | | 44.6% | 284,307 | | | 60.9% |
| 2032 | 333,157 | | | 45.4% | 291,146 | | | 62.4% |
| 2033 | 337,065 | | | 46.2% | 296,031 | | | 63.6% |
| 2034 | 340,973 | | | 47.0% | 301,893 | | | 64.8% |
| 2035 | 344,881 | | | 47.7% | 307,755 | | | 66.0% |
| 2036 | 348,789 | | | 48.4% | 312,640 | | | 67.2% |
| 2037 | 351,720 | | | 49.1% | 316,548 | | | 68.3% |
| 2038 | 353,674 | | | 49.6% | 321,433 | | | 69.3% |
| 2039 | 357,582 | | | 50.2% | 325,341 | | | 70.2% |

Note: For snowy grouper, the current Total ABC = 102,960 lbs ww; the Commercial ACL (95%) = 97,812 lbs ww; and the Recreational ACL = 5,148 lbs ww or 523 fish.

Table 2. Preferred Alternative 3 ABC values (pounds ww) based on yield at $F=75\%F_{MSY}$.

| Year | Yield at 75% F_{MSY} | 5 Year ABC | 3 Year ABC | Probability Rebuilding |
|------|---------------------------|---------------|---------------|---------------------------|
| 2013 | 102,585 | | | 12.0% |
| 2014 | 102,585 | | | 14.8% |
| 2015 | 164,136 | 164,136 | 164,136 | 17.3% |
| 2016 | 178,791 | 178,791 | 178,791 | 18.5% |
| 2017 | 192,469 | 192,469 | 192,469 | 20.3% |
| 2018 | 205,170 | 205,170 | | 22.4% |
| 2019 | 218,848 | 218,848 | | 24.7% |
| 2020 | 231,549 | | | 27.2% |
| 2021 | 243,273 | | | 29.7% |
| 2022 | 254,997 | | | 32.3% |
| 2023 | 264,767 | | | 34.9% |
| 2024 | 274,537 | | | 37.4% |
| 2025 | 283,330 | | | 39.8% |
| 2026 | 291,146 | | | 42.4% |
| 2027 | 299,939 | | | 44.8% |
| 2028 | 306,778 | | | 47.2% |
| 2029 | 312,640 | | | 49.5% |
| 2030 | 318,502 | | | 51.8% |
| 2031 | 324,364 | | | 54.1% |
| 2032 | 330,226 | | | 56.3% |
| 2033 | 336,088 | | | 58.4% |
| 2034 | 340,973 | | | 60.2% |
| 2035 | 345,858 | | | 62.0% |
| 2036 | 350,743 | | | 63.6% |
| 2037 | 354,651 | | | 65.5% |
| 2038 | 358,559 | | | 67.2% |
| 2039 | 362,467 | | | 68.9% |

Note: For snowy grouper, the current Total ABC = 102,960 lbs ww; the Commercial ACL (95%) = 97,812 lbs ww; and the Recreational ACL = 5,148 lbs ww or 523 fish.

Table 3. Alternative 4 ABC values (pounds ww) based on $F=F_{\text{current}}$.

| Year | F_{current} | 5 Year ABC | 3 Year ABC | Probability Rebuilding |
|------|----------------------|------------|------------|------------------------|
| 2013 | 102,585 | | | 12.0% |
| 2014 | 102,585 | | | 14.8% |
| 2015 | 147,527 | 147,527 | 147,527 | 18.2% |
| 2016 | 160,228 | 160,228 | 160,228 | 20.8% |
| 2017 | 171,952 | 171,952 | 171,952 | 24.4% |
| 2018 | 183,676 | 183,676 | | 28.0% |
| 2019 | 195,400 | 195,400 | | 31.3% |
| 2020 | 207,124 | | | 34.2% |
| 2021 | 216,894 | | | 36.9% |
| 2022 | 227,641 | | | 39.4% |
| 2023 | 237,411 | | | 41.8% |
| 2024 | 246,204 | | | 43.9% |
| 2025 | 255,974 | | | 46.0% |
| 2026 | 263,790 | | | 47.9% |
| 2027 | 271,606 | | | 49.6% |
| 2028 | 278,445 | | | 51.2% |
| 2029 | 285,284 | | | 52.7% |
| 2030 | 291,146 | | | 54.0% |
| 2031 | 297,008 | | | 55.3% |
| 2032 | 301,893 | | | 56.5% |
| 2033 | 307,755 | | | 57.6% |
| 2034 | 312,640 | | | 58.6% |
| 2035 | 318,502 | | | 59.5% |
| 2036 | 323,387 | | | 60.4% |
| 2037 | 326,318 | | | 61.4% |
| 2038 | 330,226 | | | 62.3% |
| 2039 | 334,134 | | | 63.1% |

Note: For snowy grouper, the current Total ABC = 102,960 lbs ww; the Commercial ACL (95%) = 97,812 lbs ww; and the Recreational ACL = 5,148 lbs ww or 523 fish.

2.1.1 Comparison of Alternatives

Will be added for June Council meeting.

2.2 Action 2. Adjust Annual Catch Limits for Snowy Grouper

Alternative 1. (No Action.) The current ABC = 102,960 lbs ww or 87,254 lbs gw. The total ACL (=ABC), commercial ACL, and recreational ACL are shown below.

| whole weight | | Calculated Values | | Implemented Values (SG Am 15B) | | |
|---------------|---------|-------------------|--------------|--------------------------------|--------------|------------|
| ABC | ACL | Com ACL (95%) | Rec ACL (5%) | Com ACL (95%) | Rec ACL (5%) | |
| 102,960 | 102,960 | 97,812 | 5,148 | | | |
| | | | | | | |
| gutted weight | | | | | | |
| ABC | ACL | Com ACL (95%) | Rec ACL (5%) | Com ACL (95%) | Rec ACL (5%) | Rec # Fish |
| 87,254 | 87,254 | 82,891 | 4,363 | 82,900 | 4,400 | 523 |

Note: ACL is equal to ABC right now but Amendment 17B did not specifically set ACL=ABC. It set the commercial ACL equal to the commercial quota from Amendment 15B and the recreational ACL equal to the recreational allocation from Amendment 15B. It indicated the TAC was equal to the yield at Foy. By default it set ACL = ABC but there is no alternative that states ACL = ABC in Amendment 17B, and ACL was an unknown entity in Amendment 15B.

Alternative 2. Specify that ACL=ABC=OY.

The ACL, commercial ACL, and recreational ACL are shown below.

| Year | whole weight | | Calculated Values | | Estimated |
|------|---------------|---------|-------------------|--------------|-----------|
| | ABC | ACL | Com ACL (95%) | Rec ACL (5%) | Rec #Fish |
| 2015 | 164,136 | 164,136 | 155,929 | 8,207 | 834 |
| 2016 | 178,791 | 178,791 | 169,851 | 8,940 | 908 |
| 2017 | 192,469 | 192,469 | 182,846 | 9,623 | 978 |
| 2018 | 205,170 | 205,170 | 194,912 | 10,259 | 1,042 |
| 2019 | 218,848 | 218,848 | 207,906 | 10,942 | 1,112 |
| | gutted weight | | | | Estimated |
| | ABC | ACL | Com ACL (95%) | Rec ACL (5%) | Rec #Fish |
| 2015 | | | | | |
| 2016 | | | | | |
| 2017 | | | | | |
| 2018 | | | | | |
| 2019 | | | | | |

Note: If the Council chooses 75%Fmsy and retains ACL=ABC, the values would be as shown above. This will be updated once the SSC provides their recommendation and/or the Council chooses a preferred ABC. Recreational estimated number of fish is calculated using the same ratio of numbers to whole weight as currently used; this will need to be updated by the SEFSC.

Alternative 3. Update the ABC from the recent SEDAR assessment. Set $ACL=X\%ABC=OY$. The ABC, ACL, commercial ACL, and recreational ACL are shown below.

Sub-alternative 3a. Set $ACL=95\%ABC=OY$

Sub-alternative 3b. Set $ACL=90\%ABC=OY$

Sub-alternative 3c. Set $ACL=85\%ABC=OY$

(values will be added once the SSC provides their recommendation and/or the Council chooses a preferred ABC.)

2.2.1 Comparison of Alternatives

Will be added for June Council meeting.

2.3 Action 3. Split the Commercial Fishing Season for Snowy Grouper

(Note: The Accountability Measures (AMs) are being addressed in the Generic Accountability Measure/Dolphin Allocation Amendment.)

Alternative 1 (No Action). The current commercial snowy grouper fishing season is the calendar year with no split of the commercial ACL.

Alternative 2. Split the commercial snowy grouper fishing season with an equal split of the commercial ACL into seasonal commercial quotas between January through April and May through December with the following trip limits for each of the seasons: Any remaining commercial quota from season 1 carries over into season 2; any remaining commercial quota from season 2 does not carry over into the next year.

Sub-alternative 2a. 100 pounds whole-gutted weight (lb ww_{gw}).

Sub-alternative 2b. 150 pounds whole-gutted weight (lb ww_{gw}).

Sub-alternative 2c. 200 pounds whole-gutted weight (lb ww_{gw}).

| Year | whole weight | | | Com Quota Jan-April | Com Quota May-Dec |
|------|--------------|---------|---------------|------------------------|----------------------|
| | ABC | ACL | Com ACL (95%) | | |
| 2015 | 164,136 | 164,136 | 155,929 | 77,965 | 77,965 |
| 2016 | 178,791 | 178,791 | 169,851 | 84,926 | 84,926 |
| 2017 | 192,469 | 192,469 | 182,846 | 91,423 | 91,423 |
| 2018 | 205,170 | 205,170 | 194,912 | 97,456 | 97,456 |
| 2019 | 218,848 | 218,848 | 207,906 | 103,953 | 103,953 |

Note: If the Council chooses 75%Fmsy and retains ACL=ABC, the values would be as shown above. This will be updated once the SSC provides their recommendation and/or the Council chooses a preferred ABC. Recreational estimated number of fish is calculated using the same ratio of numbers to whole weight as currently used; this will need to be updated by the SEFSC.

IPT recommends the changes to Alternative 2 and insertion of the table above.

2.3.1 Comparison of Alternatives

Will be added for June Council meeting.

2.4 Action 4. Modify the Commercial Trip Limit for Snowy Grouper

(Note: The Accountability Measures (AMs) are being addressed in the Generic Accountability Measure/Dolphin Allocation Amendment.)

Alternative 1 (No Action). The current commercial snowy grouper trip limit is 100 pounds whole-gutted weight (lb wwgw).

Alternative 2. Establish a Modify the commercial snowy grouper trip limit from January 1 until the ACL is met or projected to be met:

Sub-alternative 2a. 300 pounds whole-gutted weight (lb wwgw).

Sub-alternative 2b. 200 pounds whole-gutted weight (lb wwgw).

Sub-alternative 2c. 150 pounds whole weight-gutted (lb wwgw).

Alternative 3. Establish a Modify the commercial snowy grouper trip limit of 150 pounds whole weight (lbw w) from January through April and a different trip limit from May through the end of the year:

Sub-alternative 3a. 50 pounds whole-gutted weight (lb wwgw).

Sub-alternative 3b. 100 pounds whole-gutted weight (lb wwgw).

Alternative 4. Establish a Modify the commercial snowy grouper trip limit of 100 pounds whole weight (lb ww) January through April for all areas; for May through August from North Carolina through Cape Canaveral, Florida and south of Marathon, Florida as shown below; and 100 pounds whole weight (lb ww) May through August for the rest of the area. From September through the end of the year, or until the ACL is met or projected to be met, the trip limit would be set at 100 pounds whole weight (lb ww).

Sub-alternative 4a. 200 pounds whole-gutted weight (lb wwgw).

Sub-alternative 4b. 250 pounds whole-gutted weight (lb wwgw).

Sub-alternative 4c. 300 pounds whole-gutted weight (lb wwgw).

The IPT recommends replacing the text, “Establish a...” with, “Modify the...” in Alternatives 2-4 in Action 4 and that “whole” and “ww” be changed to “gutted” and “gw” in all the alternatives.

The IPT recommends that Alternative 4 not be analyzed by the IPT, and that it be sent to the, “Considered, but rejected appendix”. The rationale is: catch data cannot be broken down by the geographical areas as depicted in the text of this alternative; and major assumptions including a high level of uncertainty would be involved in the data analysis for this alternative. Furthermore, Alternative 2 in Action 3 has sub-alternatives that better capture the Council’s intent.

Discussion

The commercial ACL was exceeded in 2010 and 2012; the commercial season was closed in 2012 and 2013 (Table 4). The existing commercial trip limit of 100 lbs gw has not prevented

fishermen from harvesting the full commercial ACL. Under the increased commercial ACL, the Council is looking at relaxing the existing commercial trip limit to allow the increased landings to be harvested. Trip limits have a different affect on fishermen in different areas depending on the distance to the fishing grounds (**Table 5** and **Figures 1-5**). This information can be used to help inform decisions about the appropriate trip limit for different areas.

Table 4. Commercial landings and closures using numbers from the quota monitoring system (including the Atlantic side of Monroe County) for 2009-2013.

| Species | Year | Fishing Season | Total Landings (gw) | ACL (gw) | Quota % | Closure Date |
|---------------|-------|----------------|---------------------|----------|---------|--------------|
| Snowy Grouper | 2013 | Jan 1 - Dec 31 | 81,188 | 82,900 | 97.93 | 08/10/13 |
| | 2012 | | 88,889 | 82,900 | 107.22 | 12/19/12 |
| | 2011 | | 36,533 | 82,900 | 44.07 | |
| | 2010 | | 86,648 | 82,900 | 104.52 | |
| | 2009 | | 75,614 | 82,900 | 91.21 | |
| | 2008 | | 72,685 | 84,000 | 86.53 | |
| | 2007 | | 111,995 | 118,000 | 94.91 | |
| | 2006* | | 213,813 | 151,000 | 141.60 | 10/23/06 |
| | 2005 | | 206,638 | 344,508 | 59.98 | |

*Amendment 13C to the Snapper-Grouper FMP (Amendment 13C) reduced the snowy grouper quota, and the commercial sector closed when Amendment 13C was implemented, because the new quota had already been exceeded.

Source: SERO web-site:

http://sero.nmfs.noaa.gov/sustainable_fisheries/acl_monitoring/commercial_sa/historical/index.html

Table 5. Estimated travel distances (miles) from select ports/inlets/locations from North Carolina through Florida to approximated depths of 200, 300, 330, 600, and 650 feet.

| Location off North Carolina | Distance to Approx. 200ft | Distance to Approx. 300ft | Distance to Approx. 330ft | Distance to Approx. 500ft | Distance to Approx. 650ft |
|-----------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Oregon Inlet | 34.2 | 38.2 | 38.8 | 40.3 | 40.4 |
| Ocracoke | 31.7 | 32.1 | 32.4 | 33.8 | 35.2 |
| Morehead City | 41.1 | 45.2 | 45.7 | 46.9 | 48.3 |
| New River | 64.1 | 66.3 | 66.6 | 68 | 70.1 |
| Southport | 57.6 | 61.8 | 62 | 62.5 | 64.6 |
| | | | | | |
| Location off South Carolina | Distance to Approx. 200ft | Distance to Approx. 300ft | Distance to Approx. 330ft | Distance to Approx. 500ft | Distance to Approx. 650ft |
| Little River | 70.3 | 71.8 | 72.2 | 76 | 79.1 |
| Georgetown | 54.2 | 55.7 | 56 | 57.6 | 66.9 |
| Charleston | 53.9 | 57.5 | 58.9 | 62.7 | 65.3 |
| Hilton Head | 68.7 | 75.6 | 76.3 | 79.2 | 81.2 |
| | | | | | |
| Location off Georgia | Distance to Approx. 200ft | Distance to Approx. 300ft | Distance to Approx. 330ft | Distance to Approx. 500ft | Distance to Approx. 650ft |
| Savannah | 73.3 | 77.8 | 78.4 | 80.9 | 83.1 |
| St. Catherines | 81.8 | 83.3 | 83.9 | 85.5 | 87.5 |
| St. Simons | 80.2 | 81.4 | 82.1 | 83.4 | 85.6 |
| Fernandina | 75 | 76.1 | 76.5 | 77.8 | 79 |
| Jacksonville | 68.1 | 69.6 | 70 | 71.4 | 72 |
| | | | | | |
| Location off NE Florida | Distance (mi.) to Approx. 200ft | Distance (mi.) to Approx. 300ft | Distance (mi.) to Approx. 330ft | Distance (mi.) to Approx. 500ft | Distance (mi.) to Approx. 650ft |
| Ft. Pierce | 18.4 | 23.4 | 24.7 | 26.3 | 27.6 |
| Sebastian | 25.5 | 31 | 32.7 | 34 | 35.4 |
| Melbourne | 32.3 | 36.8 | 38.1 | 40 | 43 |
| New Smyrna | 42.4 | 46.6 | 47.3 | 49.2 | 51.6 |
| St. Augustine | 59.2 | 60.7 | 61.1 | 62.3 | 63.3 |
| | | | | | |
| Location off Fl Keys | Distance to Approx. 200ft | Distance to Approx. 300ft | Distance to Approx. 330ft | Distance to Approx. 500ft | Distance to Approx. 650ft |
| Key Largo | 7.6 | 9.2 | 10.1 | 12.4 | 14.5 |
| Islamorada | 5.9 | 7.5 | 8.3 | 11.9 | 15.2 |
| Marathon | 6.4 | 7.6 | 8 | 9.7 | 16.8 |
| Key West | 6.9 | 7.9 | 8.3 | 10.3 | 13.8 |

Source: Roger Pugliese, SAFMC Staff, prepared 2/6/14.

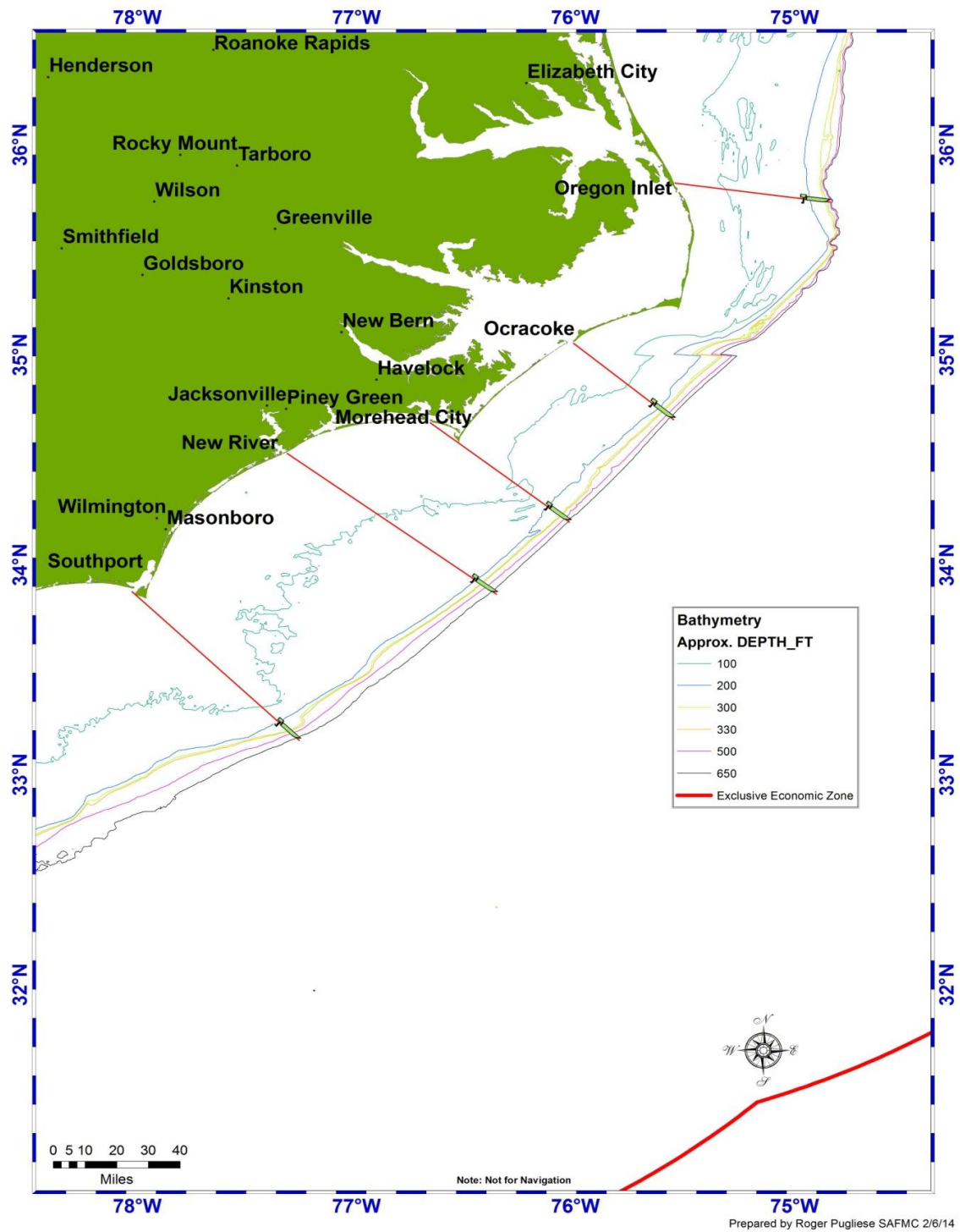


Figure 1. Estimated travel distances (miles) from select ports/inlets/locations in North Carolina to approximated depths of 200, 300, 330, 600, and 650 feet.

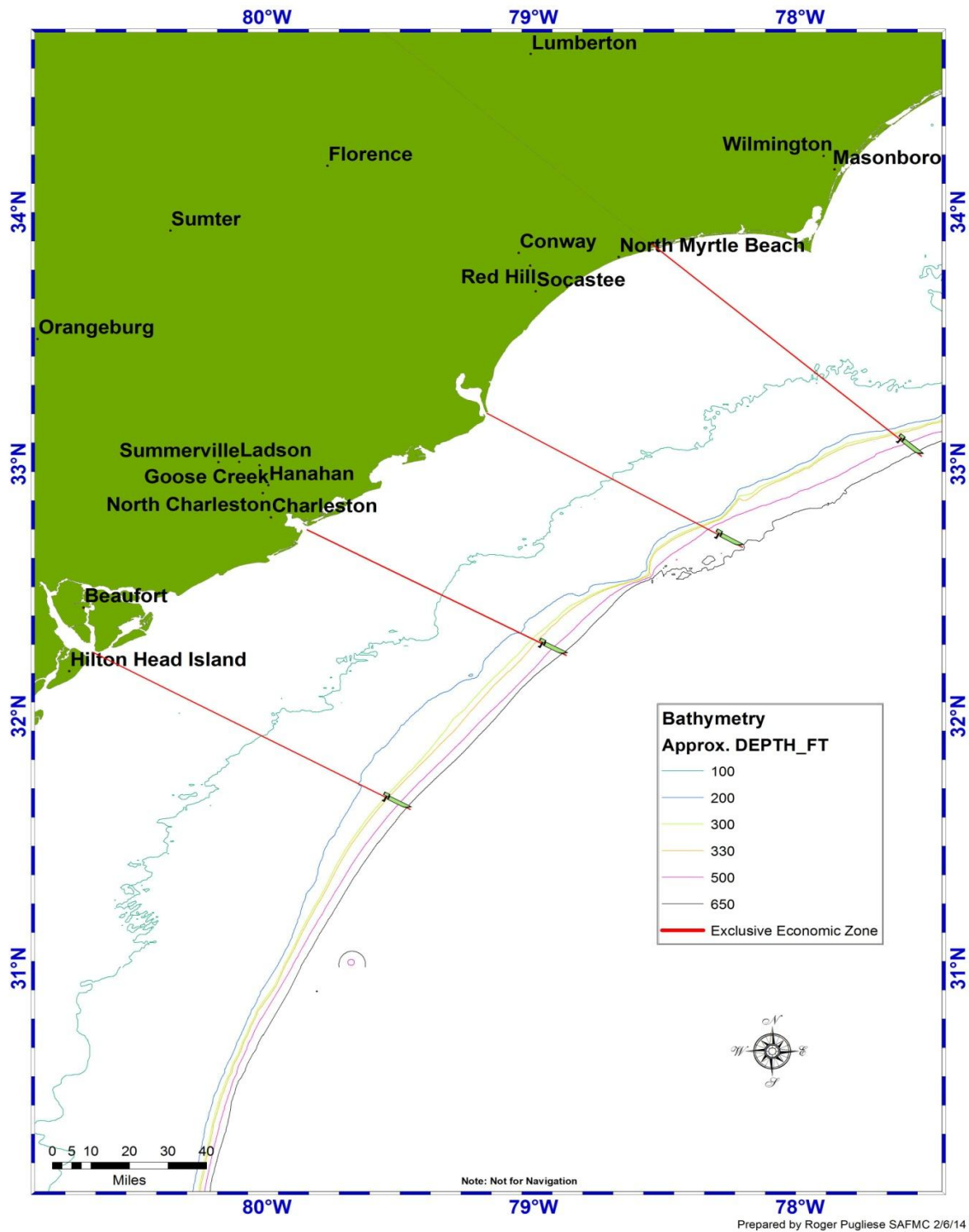


Figure 2. Estimated travel distances (miles) from select ports/inlets/locations in South Carolina to approximated depths of 200, 300, 330, 600, and 650 feet.

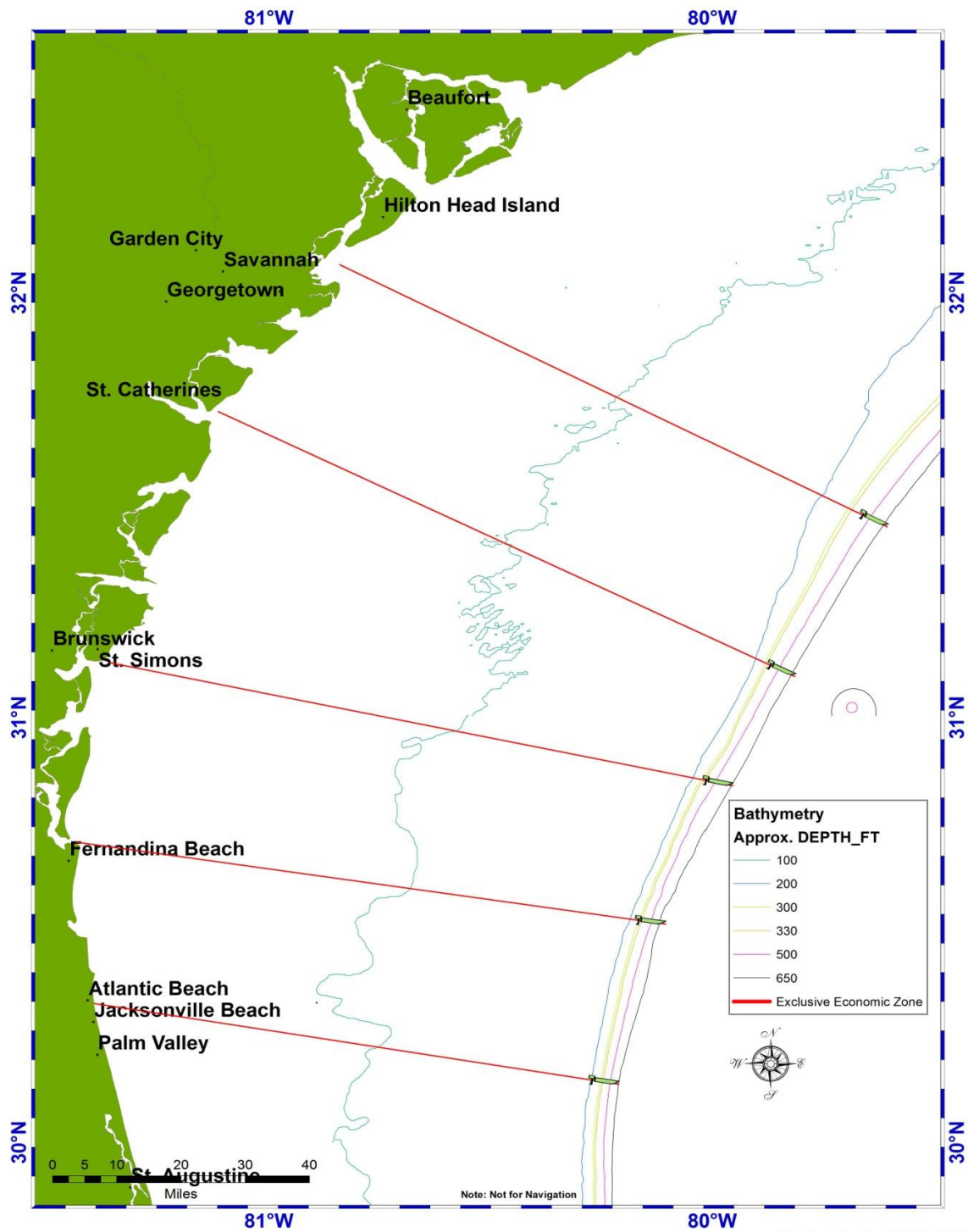


Figure 3. Estimated travel distances (miles) from select ports/inlets/locations in Georgia and Northeast Florida to approximated depths of 200, 300, 330, 600, and 650 feet.

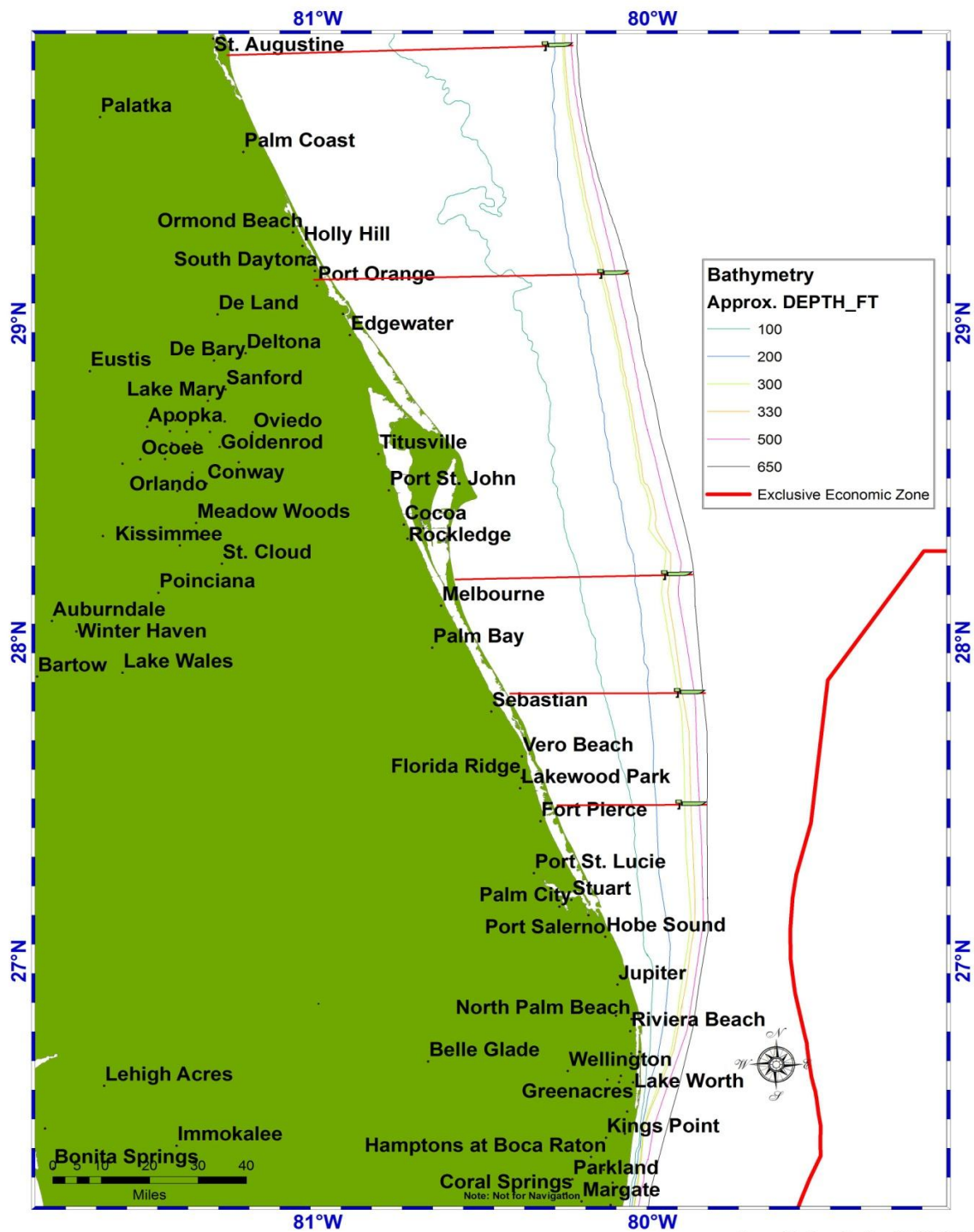


Figure 4. Estimated travel distances (miles) from select ports/inlets/locations on the Florida East Coast to approximated depths of 200, 300, 330, 600, and 650 feet.

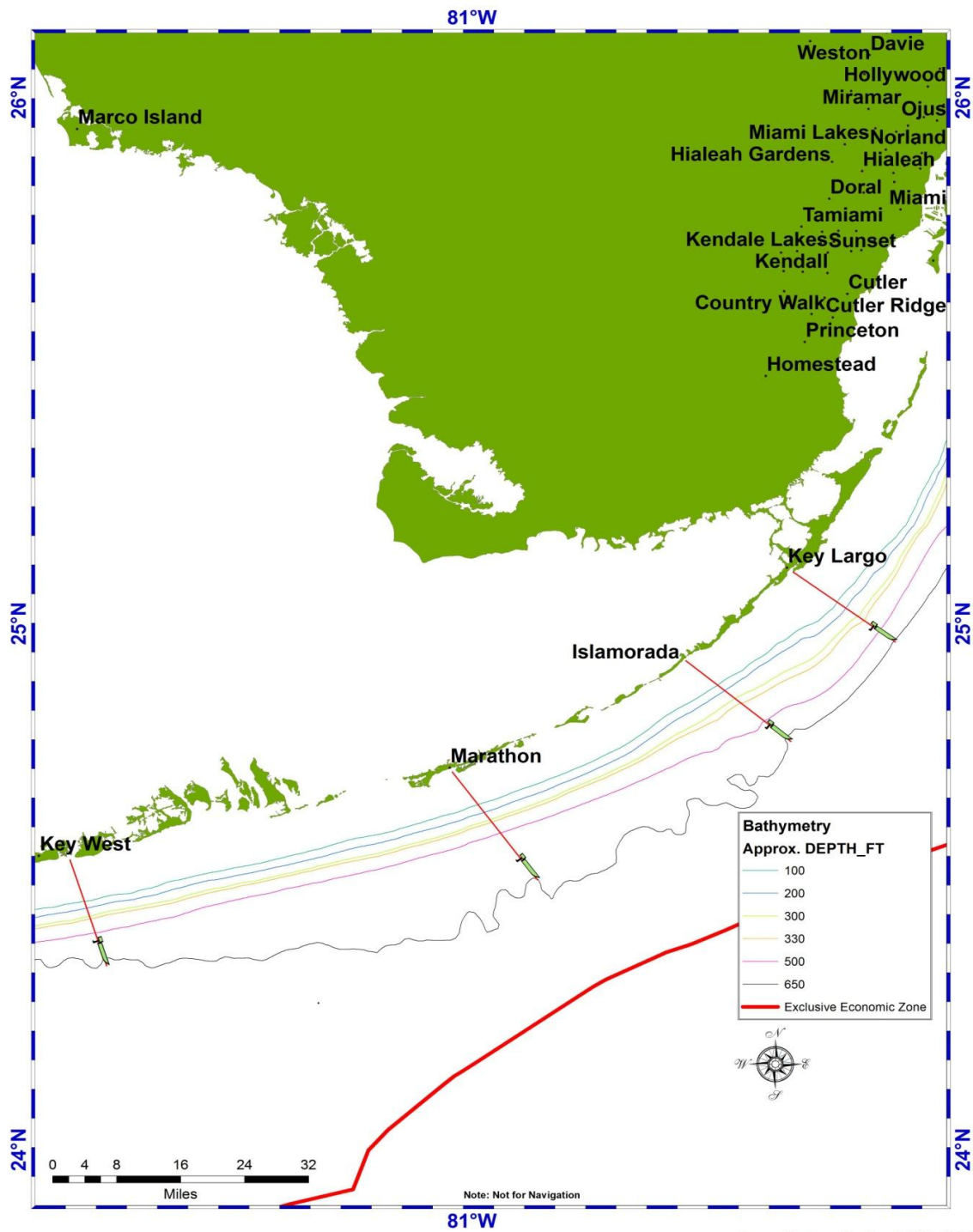


Figure 5. Estimated travel distances (miles) from select ports/inlets/locations in the Florida Keys to approximated depths of 200, 300, 330, 600, and 650 feet.

2.3.1 Comparison of Alternatives

Will be added for June Council meeting.

2.5 Action 5. Modify the Recreational Bag Limit for Snowy Grouper

(Note: The Accountability Measures (AMs) are being addressed in the Generic Accountability Measure/Dolphin Allocation Amendment.)

Alternative 1. (No Action.) The current recreational management measures are as follows:

- Part of Aggregate Grouper Bag Limit of 3/person/day of: gag, black grouper, snowy grouper, misty grouper, red grouper, scamp, yellowedge grouper, yellowfin grouper, yellowmouth grouper, blueline tilefish, golden tilefish, sand tile, coney, graysby, red hind and rock hind with a limit of 1 snowy grouper per vessel per day.
- Sale of recreationally caught fish prohibited.

Discussion

Alternative 1 (No Action) would not be expected to keep recreational landings below the expected recreational ACL based on past catches as shown in Tables 6-9 and based on 2012 recreational harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.

Alternative 2. Modify the recreational snowy grouper bag limit from 1/vessel/day to 1/vessel/day May through August and no retention during the rest of the year.

Discussion

Alternative 2 would not be expected to keep recreational landings below the expected recreational ACL based on past catches as shown in Tables 6-9 and based on 2012 recreational harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.

Alternative 3. Modify the recreational snowy grouper bag limit from 1/vessel/day year round to 1/vessel/day during May and June with no retention during the remainder of the year ~~and based on 2012 recreational harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.~~

The IPT recommends deleting text after, "...during the remainder of the year" in Alternative 3. Text for Alternative 3 would read, "Alternative 3. Modify the recreational snowy grouper bag limit from 1/vessel/day year round to 1/vessel/day during May and June with no retention during the remainder of the year".

Discussion

Alternative 3 would not be expected to keep recreational landings below the expected recreational ACL based on past catches as shown in Tables 6-9 and based on 2012 recreational

harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.

Alternative 4. Modify the recreational snowy grouper bag limit from 1/vessel/day year round to 1/vessel/day during May with no retention during the remainder of the year.

Discussion

Alternative 4 would be expected to keep recreational landings below the expected recreational ACL based on the approximate catches by wave as shown in Table 9 and based on 2012 recreational harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.

Alternative 5. Modify the recreational snowy grouper bag limit from 1/vessel/day year round to 1/vessel/day during June with no retention during the remainder of the year.

Discussion

Alternative 5 would be expected to keep recreational landings below the expected recreational ACL based on the approximate catches by wave as shown in Table 9 and based on 2012 recreational harvest. However, if future catches were similar to 2013 recreational harvest (Table 9) recreational landings would be below the expected recreational ACL.

The IPT recommends using the most recent two years of data (2012 and 2013), for data analysis (recreational data sets and commercial logbook) due to regulatory changes in prior years. Analysis of data from any other time period would need to be stated explicitly in the amendment.

Discussion

The recreational harvest has exceeded the recreational quota/ACL every year since implementation in 2009 except 2011 (**Table 6**). The recreational AM, implemented in 2011 along with the ACL, is as follows: If the recreational ACL is exceeded, the length of the following fishing season would be reduced by the amount necessary to ensure landings do not exceed the recreational ACL for the following fishing season. Compare the recreational ACL with projected recreational landings over a range of years. For 2010, use only 2010 landings. For 2011, use the average landings of 2010 and 2011. For 2012 and beyond, use the most recent three-year running average. The history of recreational closures is shown in **Table 7**. Recreational landings above the recreational ACL have a negative impact on allocations as shown in **Table 8**. Rather than the Council's intended allocation of 95% commercial and 5% recreational, harvests by sector since 2005 have been closer to 50/50 with the exception of 2011 when the landings were 98% commercial and 2% recreational. Recreational overages have also contributed to landings exceeding the ABC: $ABC = ACL = 102,960$ lbs ww for 2009 onwards. The ACL and ABC were exceeded each year from 2009 through 2012 except 2011 (**Table 8**).

Approximate recreational catch by wave for 2012 is shown in **Table 9**. The expected recreational ACL, based on 75%F_{MSY}, increases from 523 fish to 8,207 fish in 2015 and gradually increases each year to 10,943 fish in 2019. Based on 2012 catch rates, harvest during Wave 3 (May-June) is expected to exceed the expected recreational ACL under the existing 1/vessel bag limit. Data from 2013 show a completely different picture with the ACL not being exceeded although headboat catches and MRIP Wave 6 data are not included. The total MRIP landings for 2013 were 4,800 fish (**Table 6**).

Table 6. Recreational harvest versus recreational ACL using numbers from the quota monitoring system (excluding Monroe County) and from the recent SEDAR assessment (including Monroe County).

| Year | Recreational* | Rec Allocation | Current ACL | QMS** | | |
|--|---------------|----------------|-------------|-------|--|--|
| 2005 | 20,789 | | | | | |
| 2006 | 18,772 | | | | | |
| 2007 | 4,623 | | | | | |
| 2008 | 2,557 | | | | | |
| 2009 | 5,584 | 523 | | | | |
| 2010 | 5,892 | 523 | | 2,066 | | |
| 2011 | 147 | | 523 | 151 | | |
| 2012 | 16,688 | | 523 | 2,065 | | |
| 2013 | 4,800 | | 523 | 1,976 | | |
| *These numbers include Monroe County (SEDAR 36); current ABC/ACLs do not. | | | | | | |
| **Numbers of fish from the quota monitoring system excluded Monroe County. | | | | | | |
| Data for 2013 do not include headboat landings. | | | | | | |

Table 7. Recreational landings (numbers of fish) and closures using numbers from the quota monitoring system (excluding Monroe County) for 2011-2013.

| Species | Year | Fishing Season | Total Landings (N) | ACL (N) | ACL % | Closure Date |
|-----------------|------|----------------|--------------------|---------|-------|--------------|
| Snowy Grouper** | 2013 | Jan 1 - Dec 31 | 1,976* | 523 | 378% | 05/31/13 |
| | 2012 | | 2,065 | 523 | 395% | |
| | 2011 | | 151 | 523 | 28.9% | |

*Data through October 2013; the accountability measure for snowy grouper required that the 2013 fishing season be shortened if the average 2010-2012 recreational landings exceeded the ACL. Note: For 2012, the average 2010-2012 should have been used and for 2011, the average of 2010 and 2011 landings should have been used.

**Recreational ACL for snowy grouper did not exist until Amendment 17B to the Snapper Grouper FMP was implemented on January 31, 2011. The recreational allocation was established in Amendment 15B implemented 12/16/09; however, the AM was established in Amendment 17B.

Source: SERO web-site:

http://sero.nmfs.noaa.gov/sustainable_fisheries/acl_monitoring/recreational_sa/index.html

Table 8. Actual snowy grouper harvest by sector from 2005 through 2012.

| | Commercial | % Harvested | Recreational | % Harvested | Total |
|-------------|-------------------|--------------------|---------------------|--------------------|--------------|
| Year | (ww) | by Comm | (ww) | by Rec | (ww) |
| 2005 | 223,785 | 45% | 268,486 | 55% | 492,271 |
| 2006 | 228,452 | 48% | 245,179 | 52% | 473,631 |
| 2007 | 115,171 | 61% | 74,131 | 39% | 189,302 |
| 2008 | 77,814 | 71% | 31,148 | 29% | 108,962 |
| 2009 | 79,916 | 54% | 68,701 | 46% | 148,617 |
| 2010 | 90,976 | 49% | 94,715 | 51% | 185,691 |
| 2011 | 40,968 | 98% | 860 | 2% | 41,828 |
| 2012 | 95,869 | 50% | 95,309 | 50% | 191,178 |

Source: SEDAR 36.

Notes: SG Am 13C, effective 10/23/06, established a commercial trip limit 275 lbs gw in 2006, 175 lbs gw in 2007, and 100 lbs gw 2008 onwards. SG Am 15B, effective 12/16/09, established the commercial (95%) & recreational (5%) allocations and implemented a com quota = 82,900 lbs gw and rec allocation = 523 fish; (commercial ACL = 97,812 lbs ww and recreational allocation = 5,148 lbs ww). Amendment 17B, effective 1/31/11, specified that the commercial quota and recreational allocation were commercial and recreational ACLs. It implemented a recreational AM that would be triggered when the ACL was exceeded.

Note: A commercial quota with an inseason prohibition was in place from 2005-2012. The commercial quota has been 82,900 lbs gw (97,822 lbs ww). The commercial quota was exceeded in 2006 when the reduced quota from Amendment 13C was put into place. The quota was exceeded by 4% in 2010. A recreational ACL and AMs have been in place since 2011. The recreational ACL was exceeded in 2012 (catches were 378% of the ACL).

Table 9. Approximate recreational harvest (numbers of fish) by wave for 2012 and 2013.

| 2012 | | | | |
|-------------------------|-------|--------|--------|----------|
| Wave | SA | FLW | Monroe | Total SA |
| 1 | | | | |
| 2 | | 97 | 88 | 88 |
| 3 | 614 | 15,287 | 13,798 | 14,412 |
| 4 | 305 | | | 305 |
| 5 | 426 | 52 | 47 | 473 |
| 6 | | 1,495 | 1,349 | 1,349 |
| Total | 1,345 | 16,931 | 15,282 | 16,627 |
| % FLW made up by Monroe | | | 90.3% | |
| 2013 | | | | |
| 1 | 79 | | | 79 |
| 2 | 267 | | | 267 |
| 3 | 116 | 2,310 | 2,085 | 2,201 |
| 4 | 359 | 653 | 589 | 948 |
| 5 | 1,059 | 272 | 246 | 1,305 |
| 6 | 0 | 0 | 0 | 0 |
| Total | 1,880 | 3,235 | 2,920 | 4,800 |

Monroe County landings by wave were estimated by taking the known Monroe landings in 2012 and divide by the known landings from West FL to get the % of landings in FLW that came from Monroe in 2012. The percentage was then applied to each wave of FLW 2012 landings by wave. However, caution should be used. The Monroe landings might be all the landings from wave 3 and none from the other waves. This is just a preliminary estimate and will be updated with numbers from the SEFSC.

Source: SAFMC staff.

2.5.1 Comparison of Alternatives

Will be added for June Council meeting.

Background

Snowy Grouper Assessments

Prior to the Southeast Data, Assessment, and Review (SEDAR) process, the South Atlantic snowy grouper stock was examined for trends in catch per unit effort (CPUE) and landings, and was analyzed using catch curves and static spawning potential ratio (SPR) for the years 1988 (Staff 1991), 1990 (Huntsman et al. 1992), 1996 (Potts et al. 1998), and 1999 (Potts and Brennan 2001). Age and life-history information were quite limited for the earlier two analyses, but were updated for the latter two. Given the fishing mortality rates implied by catch curves, the resulting static SPRs were 15%, 15%, 5%, and 10% for 1988, 1990, 1996, and 1999, respectively.

In 2004, the snowy grouper stock was first assessed through SEDAR as a benchmark assessment (SEDAR 2004). That assessment (SEDAR-4) applied a statistical catch-age model to data through 2002. Recreational landings from the Florida Keys were not included because there was no way to post-stratify them into Atlantic and Gulf Council areas. The results indicated that fishing mortality first exceeded F_{MSY} in the mid-1970s, and overfishing continued through the end of the assessment period. During that time, the population declined to levels below SSB_{MSY} starting in the early 1980s. SEDAR-4 concluded that the stock was overfished and experiencing overfishing in 2002. $SSB_{2002}/SSB_{MSY} = 0.18$ and $F_{current}/F_{MSY} = 3.08$.

In 2013, the snowy grouper stock was assessed through SEDAR as a standard assessment (SEDAR 2013). That assessment (SEDAR 36) applied a statistical catch-age model to data through 2012. Recreational landings from the Florida Keys were included using a post-stratification methodology to separate Florida West Coast landings into those from the Atlantic and Gulf of Mexico areas. The results will be reviewed by the Scientific and Statistical Committee (SSC) in April 2014 and their report will be presented to the South Atlantic Fishery Management Council (Council) in June 2014. Until reviewed by the SSC, all values and conclusions are preliminary. The following is taken directly from the assessment report (page 8):

“Results suggest that spawning stock declined until the mid-1990s and then increased gradually over the last decade. The terminal (2012) base-run estimate of spawning stock was below SSB_{MSY} ($SSB_{2012}/SSB_{MSY} = 0.49$), as was the median estimate ($SSB_{2012}/SSB_{MSY} = 0.38$), indicating that the **stock remains overfished**. The estimated fishing rate has exceeded the MFMT (represented by F_{MSY}) for most of the assessment period, but only once in the last six years. This one overage occurred in 2012, when the recreational fleet exceeded its quota. Still, the terminal estimate, which is based on a three-year geometric mean, is below F_{MSY} in the case of the base run ($F_{2010-2012}/F_{MSY} = 0.59$) and the median ($F_{2010-2012}/F_{MSY} = 0.70$). Thus, this assessment indicates that the stock has not yet recovered to its biomass target, but is **no longer experiencing overfishing**.”

Stock status values from SEDAR 36 are:

| Quantity | Estimate |
|----------------------------|-------------------------------|
| F_{MSY} (proxy for MFMT) | 0.14 |
| MSY | 418,600 lbs whole weight (ww) |
| MSST | 1,442,264 lbs ww |
| $SSB_{2012}/MSST$ | 0.65 |

Source: SEDAR 36, Assessment Report, Table 18.

Snowy Grouper Management

In Amendment 13C (SAFMC 2006), the South Atlantic Fishery Management Council (Council) specified the following snowy grouper measures that were implemented effective 10/23/06:

- Reduced the annual commercial snowy grouper quota from 344,508 lbs gutted weight (406,519 lbs whole weight) to 151,000 lbs gutted weight (178,000 lbs whole weight) in year 1; to 118,000 lbs gutted weight (139,000 lbs whole weight) in year 2; and to 84,000 lbs gutted weight (99,000 lbs whole weight) in year 3 onwards until modified.
- Specified a commercial trip limit of 275 lbs gutted weight (325 lbs whole weight) during year 1; 175 lbs gutted weight (210 lbs whole weight) during year 2; and 100 lbs gutted weight (115 lbs whole weight) during year 3 onwards until modified.
- After the commercial quota is met, all purchase and sale is prohibited and harvest and/or possession is limited to the bag limit.
- Limited possession of snowy grouper to one per person per day within the 5-grouper per person per day aggregate recreational bag limit.

In Amendment 14 (SAFMC 2007), the Council specified the following measures affecting snowy grouper that were implemented effective 2/12/09:

- Established eight deepwater Type II marine protected areas (MPAs) to protect a portion of the population and habitat of long-lived deepwater snapper grouper species.

In Amendment 15A (SAFMC 2008a), the Council specified the following snowy grouper measures that were implemented effective 3/20/08:

- Maximum sustainable yield (MSY) equals the yield produced by F_{MSY} . MSY and F_{MSY} are defined by the most recent SEDAR. For snowy grouper:
 - $F_{MSY} = 0.05 = \text{proxy for MFMT}$
 - $MSY = 313,056 \text{ pounds whole weight (ww)}$
- Optimum yield (OY) equals the yield produced by F_{OY} . If a stock is overfished, F_{OY} equals the fishing mortality rate specified by the rebuilding plan designed to rebuild the stock to SSB_{MSY} within the approved schedule. After the stock is rebuilt, $F_{OY} = 75\%F_{MSY} = 303,871 \text{ pounds ww}$.
- Minimum stock size threshold ($MSST = SSB_{MSY}(0.75) = 3,498,735 \text{ pounds ww}$).
- Snowy grouper are overfished ($SSB_{\text{current}}/MSST = 0.25$) and overfishing is occurring ($F_{\text{current}}/MFMT = 3.00$).
- Defined a rebuilding schedule as the maximum recommended period to rebuild if $T_{\text{MIN}} > 10$ years. The maximum recommended period equals $T_{\text{MIN}} + \text{one generation time} = 34$ years for snowy grouper. 2006 was Year 1.
- Defined a rebuilding strategy for snowy grouper that maintains a modified/constant fishing mortality rate throughout the rebuilding timeframe. The total allowable catch (TAC) specified for 2009 would remain in effect beyond 2009 until modified = 102,960 pounds ww.

In Amendment 15B (SAFMC 2008b), the Council specified the following measures affecting snowy grouper that were implemented effective 12/16/09:

- Prohibited the sale of bag-limit caught snapper grouper species.
- Changed the commercial permit renewal period to one year after the permit expires and transferability requirements to allow an individual to transfer his or her individual limited access transferable vessel permit to a corporation whose shares are all held by the individual or the individual and one or more of his or her immediate family members.
- Specified smalltooth sawfish and sea turtle requirements to minimize the impacts of incidental take on sea turtles or smalltooth sawfish caught in the South Atlantic snapper grouper fishery.
- Implemented a plan to monitor and address bycatch. Adopt the Atlantic Coastal Cooperative Statistics Program (ACCSP) Release, Discard and Protected Species Module as the preferred methodology. Until this module is fully funded, require the use of a variety of sources to assess and monitor bycatch including: observer coverage on vessels; logbooks; electronic logbook; video monitoring; Marine Recreational Fisheries Statistical Survey (MRFSS); state cooperation; and grant funded projects. After the ACCSP Bycatch Module is implemented, continue the use of technologies to augment and verify observer data. Require that commercial vessels with a snapper grouper permit, for-hire vessels with a for-hire permit, and private recreational vessels if fishing for snapper grouper species in the Exclusive Economic Zone (EEZ), if selected, shall use observer coverage, logbooks, electronic logbooks, video monitoring, or any other method deemed necessary to measure bycatch by National Marine Fisheries Service (NMFS).
- Defined allocations for snowy grouper based upon landings from the Accumulated Landings System (ALS), MRFSS, and headboat databases. The allocations were based on landings from the years 1986-2005. The allocations are 95% commercial and 5% recreational. Beginning in 2009, the commercial quota would be 82,900 lbs gutted weight and the recreational allocation would be 523 fish (4,400 lbs gutted weight). The commercial quota and recreational allocation specified for 2009 would remain in effect beyond 2009 until modified.

In Amendment 16 (SAFMC 2009), the Council specified the following measures affecting snowy grouper that were implemented effective 7/29/09:

- Reduced 5-fish aggregate grouper bag limit, including snowy grouper, to a 3-fish aggregate.
- Captain and crew on for-hire trips cannot retain the bag limit of species within the 3-fish grouper aggregate.
- Required use of dehooking tools to fish for snapper grouper species in the South Atlantic EEZ. Note: The Council proposed requiring venting but that was disapproved.

In Amendment 17B (SAFMC 2010), the Council specified the following measures affecting snowy grouper that were implemented effective 1/31/11:

- Specified the existing TAC (102,960 lbs ww or 87,254 lbs gw) and commercial quota and recreational allocation from Amendment 15B as annual catch limits (ACLs): commercial ACL = 82,900 lbs gw and recreational ACL = 523 fish (4,400 lbs gw).
- Retained the existing commercial regulation as the commercial accountability measure (AM): prohibit harvest, possession, and retention when the quota is projected to be met. All purchase and sale is prohibited when the quota is projected to be met.
- Established a recreational daily bag limit of 1 snowy grouper per vessel.
- Implemented AMs for the recreational sector: If the recreational ACL is exceeded, the length of the following fishing season would be reduced by the amount necessary to ensure landings do not exceed the recreational ACL for the following fishing season. Compare the recreational ACL with projected recreational landings over a range of years. For 2010, use only 2010 landings. For 2011, use the average landings of 2010 and 2011. For 2012 and beyond, use the most recent three-year running average.
- Updated the framework procedure for specification of TAC for the Snapper Grouper FMP to incorporate ACLs and ACTs and AMs.
- Prohibited all fishing for, possession, and retention of speckled hind and warsaw grouper. Prohibited fishing for, possession, and retention of 6 other deepwater snapper species (snowy grouper, blueline tilefish, yellowedge grouper, misty grouper, queen snapper, and silk snapper) beyond a depth of 240 feet (40 fathoms; 73 m).

In Regulatory Amendment 11 (SAFMC 2011), the Council specified the following measures affecting snowy grouper that were implemented effective 5/10/12:

- Eliminated the 240' harvest prohibition for 6 deepwater species, including snowy grouper that was established in Amendment 17B.

In Amendment 27 (SAFMC 2013), the Council specified the following measures that were implemented effective 1/27/14:

- Increased the number of allowable crew members from three to four on dual-permitted vessels (vessels that have both a federal South Atlantic Charter/Headboat Permit for Snapper Grouper and a South Atlantic Unlimited or 225-Pound Snapper Grouper Permit).
- Allowed captains and crew of for-hire vessels with federal South Atlantic Charter/Headboat Snapper-Grouper Permits to retain bag limit quantities of all snapper grouper species.

TIMING

- a. ✓ Council reviews Options Paper and provides guidance – March 3-7, 2013
- b. Snapper Grouper AP reviews Discussion Document and provide guidance – April 8-11 2013
- c. SSC reviews assessment – ~~October 2013~~ April 28 – May 1, 2014
- d. Council receives assessment results and SSC recommendations – ~~December 2013~~ June 9-13, 2014. Provide guidance on actions/alternatives to be included and approve for public hearings.
- e. Public Hearings – ~~January~~ August 2014:

Dates and cities are final; specific locations are being finalized.

| | |
|---|--|
| <u>August 6, 2014</u> North Myrtle Beach, SC Phone: 843- | <u>August 7, 2014</u> Atlantic Beach, NC Phone: 252 |
| <u>August 11, 2014</u> Key West, Florida Phone: 305- | <u>August 12, 2014</u> Doubletree by Hilton Oceanfront 2080 North Atlantic Ave. Cocoa Beach, FL 32931 Phone: 321-783-9222 |
| <u>August 13, 2014</u> Jacksonville, FL 32256 Phone: 904 | <u>August 14, 2014</u> Richmond Hill City Center 520 Cedar Street Richmond Hill, GA 31324 Phone: 912-445-0043 |

- f. Review public hearing comments, modify amendment as necessary, and approve for formal review and implementation – ~~March~~ September 2014
- g. Document submitted to NMFS – ~~March/April~~ October/November 2014