Amendment 50

Catch Level Adjustments, Rebuilding Schedule, and Allocations for Red Porgy

Decision Document

September 2021

Background

The most recent assessment of the red porgy stock in the South Atlantic followed a standard approach with data through 2017 (SEDAR 60 2020) and incorporated revised recreational landings estimates (Fishing Effort Survey). The findings of the assessment indicated that the South Atlantic red porgy stock is overfished and undergoing overfishing. The Council's Scientific and Statistical Committee (SSC) reviewed the assessment during their April 2020 meeting and found that the assessment represented the best scientific information available (BSIA). The Council received the results of the assessment and the SSC's recommendations at their June 2020 meeting and directed staff to begin work on a plan amendment to end overfishing as well as address rebuilding.

The Council received notification from NMFS (via letter dated June 12, 2020) of the status of the red porgy stock in the South Atlantic and indicated management has not made adequate progress in rebuilding the population. Following such notification, the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires the Council to develop a fishery management plan amendment with actions that end overfishing immediately

and rebuild the affected stock. The Council has two years to develop an amendment; hence, the statutory deadline would be June 12, 2022.

During the June 2021, meeting, the Snapper Grouper Committee did the following:

- Modified and approved the Purpose statement
- Selected preferred alternatives for Actions 1, 3, 4, 5a, and 5b.
- Removed consideration of total ACL = 0 and managing under no sector allocations.
- Removed consideration of recreational vessel limits and separate limits by mode.
- Added an alternative for a June-August recreational season for analysis.
- Added an alternative for a recreational accountability measure for analysis.
- Approved the amendment for public hearings at this meeting.

Note: This overview constitutes the public hearing presentation for this amendment. The draft amendment and this overview were made available in the briefing book for this meeting on August 27, 2021. An online comment form for the public to submit comment is also available. Members of the public who wish to provide oral comment to the Council will have the opportunity to do so on Wednesday, September 15, 2021, starting at 4:00 PM.

Management actions in this amendment

Action 1: Establish a rebuilding plan for red porgy
Action 2: Revise the red porgy total annual catch limit and annual optimum yield
Action 3: Revise the red porgy sector allocations and sector annual catch limits
Action 4: Modify red porgy commercial trip limits
Action 5: Modify red porgy recreational management measures
Sub-Action 5a. Bag limits
Sub-Action 5b. Recreational fishing season
Action 6: Modify red porgy recreational accountability measures

Amendment timing

September 2020	Review options paper and provide guidance to staff
December 2020	Review draft amendment and approve for scoping
Feb 3 & 4, 2021	Conduct scoping hearings
March 2021	Review scoping comments, review preliminary analyses, and provide guidance to staff
June 2021	Review modifications to the amendment, select preferred alternatives, and approve for public hearings
September 2021	**Review updated analyses and obtain public comment (public hearings) actions**
December 2021 or March 2022	Review final draft amendment and consider approval for formal review
Mid to late 2022	Regulations effective

Purpose and Need

Purpose for Action

The *purpose* of this fishery management plan amendment is to establish a rebuilding plan, set an acceptable biological catch, sector allocations and annual catch limits for South Atlantic red porgy based on the results of the most recent stock assessment, and modify management and accountability measures.

Need for Action

The *need* for this fishery management plan amendment is to end overfishing of South Atlantic red porgy, rebuild the stock, and achieve optimum yield while minimizing, to the extent practicable, adverse social and economic effects.

Committee Action:

NONE

Acceptable Biological Catch and Overfishing Limit

The SSC reviewed the red porgy stock assessment (SEDAR 60 2020) at their April 2020 meeting. The SSC recommended revising the overfishing limit (OFL) based on projections under a fishing mortality rate that would produce maximum sustainable yield ($F = F_{MSY}$) and recommended the $F = 75\% F_{MSY}$ scenario be used to set the acceptable biological catch (ABC) for red porgy. Both projections used average recruitment from the last three assessment years instead of long-term recruitment. The findings of SEDAR 60 indicated average recruitment showed a declining trend throughout the time series and has been below the recruitment levels corresponding to MSY for most of the past three decades.

The updated OFL and ABC values are based on **landed catch in pounds whole weight (lbs ww)** and are highlighted in blue (**Table 1**).

Table 1. South Atlantic red porgy OFL and ABC recommendations (in pounds and numbers of fish) based on management starting in 2022 (SEFSC, September 2020). NOTE: Catch levels in numbers of fish were included in the SSC's recommendations; hence, they are provided here for completeness.

OFL Recommendations		
Year	**Landings (lbs ww)**	**Numbers of Fish**
2022	97,000	62,000
2023	102,000	65,000
2024	107,000	67,000
2025	110,000	69,000
2026	113,000	71,000
ABC Recommendations		
Year	**Landings (lbs ww)**	**Numbers of Fish**
2022	75,000	47,000
2023	81,000	51,000
2024	87,000	54,000
2025	91,000	57,000
2026	95,000	59,000

Note: The SSC had a difficult time implementing the ABC control rule because red porgy has made little to no progress towards rebuilding given low recruitment in recent years. The projections indicate the ABCs will have only a very minor impact on stock rebuilding. If recruitment continues to be low, the productivity of the stock and the benchmark reference points will need to be reevaluated.

Proposed Actions

Preferred Alternatives

Changes in language since June 2021

Action 1. Establish a rebuilding plan for red porgy

Purpose of Action: The latest stock assessment (SEDAR 60 2020) indicated the stock is undergoing overfishing and remains overfished. Action is needed because the red porgy stock did not rebuild by the end of 2017 under the previous rebuilding plan. The Council has two years from when it receives notification from the NMFS to implement a new rebuilding plan. The plan must be implemented by June 2022.

Alternative 1 (No Action). The South Atlantic red porgy stock is overfished and undergoing overfishing. The red porgy stock in the South Atlantic was under an 18-year rebuilding plan that was expected to rebuild the stock by the end of 2017. Red porgy did not rebuild by the end of 2017.

Alternative 2. Establish the rebuilding plan to equal the shortest possible time to rebuild in the absence of fishing mortality (**T_{min}**). This would equal 11 years with the rebuilding period ending in 2032. 2022 would be Year 1.

Alternative 3. Establish the rebuilding plan to equal **T_{min} + one generation**. This would equal 18 years with the rebuilding period ending in 2040. 2022 would be Year 1.

Alternative 4. Establish the rebuilding plan to equal **T_{min} times two**. This would equal 22 years with the rebuilding period ending in 2044. 2022 would be Year 1.

Preferred Alternative 5. Establish the rebuilding plan to equal the time estimated to rebuild the stock with a 50% probability of success while maintaining fishing mortality at **75% of the Maximum Fishing Mortality Threshold** (MFMT) during the rebuilding period. For red porgy, 75%MFMT = 75%F_{MSY}. This would equal 26 years with the stock reaching a 50% probability of rebuilding success in 2047. 2022 would be Year 1.

Discussion:

- **Alternative 2** through **Preferred Alternative 5** present different rebuilding timeframes based on guidance in the Magnuson-Stevens Act National Standards.

- **Alternative 2** corresponds to the minimum amount of time needed to rebuild (T_{min}) in the absence of fishing mortality (no allowable catch and zero discards). Hence, under **Alternative 2**, the red porgy annual catch limit (ACL) would need to be set equal to zero. The Council removed consideration of zero harvest in June 2021.

- **Alternative 3** proposes a rebuilding timeframe of 18 years based on the time it would take to rebuild under the T_{min} scenario (11 years) plus one generation. Generation time is the length of time between when an individual is born and the birth of its offspring.

- **Alternative 4** is equal to 22 years: the time it would take to rebuild under the T_{min} scenario (11 years) times two.

- **Preferred Alternative 5** is based on the maximum time allowed for rebuilding (T_{max}). Assumed catch levels under this scenario exceed the current recommendation for ABC. Under this scenario, a 51.1% probability of rebuilding success would be achieved in 2047. This projection assumed current fishing mortality from 2018 through 2021.

Defining the Range of Alternatives for Rebuilding

Guidance on how to define the upper and lower bounds of a rebuilding timeframe are specified in the National Standard 1 (NS 1) of the Guidelines (https://www.fisheries.noaa.gov/national/laws-and-policies/national-standard-guidelines).

Regarding how to determine the minimum time for rebuilding a stock (T_{min}), NS 1 specifies that *"T_{min} means the amount of time the stock or stock complex is expected to take to rebuild to its maximum sustainable yield (MSY) biomass level in the absence of any fishing mortality. In this context, the term "expected" means to have at least a 50 percent probability of attaining the B_{msy}, where such probabilities can be calculated. The starting year for the T_{min} calculation should be the first year that the rebuilding plan is expected to be implemented."* For red porgy, according to projections from SEDAR 60, the minimum predicted time to rebuild in the absence of any fishing mortality under long-term average recruitment is 11 years, thus T_{min} is specified as 11 years (**Alternative 2**).

With T_{min} corresponding to greater than 10 years, NS 1 provides guidance to define the maximum time for rebuilding a stock (T_{max}) as follows; *"If T_{min} for the stock or stock complex exceeds 10 years, then one of the following methods can be used to determine T_{max}: (i) T_{min} plus the length of time associated with one generation time for that stock or stock complex* (**Alternative 3**)*; (ii) The amount of time the stock or stock complex is expected to take to rebuild to B_{msy} if fished at 75 percent of MFMT* (**Alternative 5**)*; or (iii) T_{min} multiplied by two* (**Alternative 4**)*."*

The rebuilding timeframe based on T_{min} is **Alternative 2** and the range of potential rebuilding timeframes based on T_{max} is captured in **Alternatives 3** through **5**. Year 1 for all the rebuilding timeframes would be 2022.

Summary of Biological Effects:

- **Alternative 1 (No Action)** would have adverse effects on the stock as red porgy is overfished and currently without a rebuilding plan and is not a viable alternative because it is not based on BSIA.

- **Alternatives 2** through **Preferred Alternative 5** are based on the BSIA and would likely have beneficial effects to the red porgy stock as they would establish a timeframe for rebuilding the stock.

- The rebuilding timeframe under **Alternative 2** is projected to rebuild the red porgy stock in the least amount of time; therefore, it can be expected that future biological benefits may accrue soonest, followed by **Alternative 3**, **Alternative 4**, and **Preferred Alternative 5**.

Summary of Economic Effects:

- A rebuilding plan does not impose direct economic effects, as it does not directly constrain harvest or fishing effort.

- Implied economic benefits would be highest under **Alternative 2**, followed by **Alternative 3**, **Alternative 4**, **Preferred Alternative 5**, and **Alternative 1 (No Action)**, which is not a viable alternative.

Summary of Social Effects:

- Although establishing a rebuilding plan is an administrative action, the timeframe would determine the severity of the management measures necessary to rebuild the red porgy resource within the allotted period.

- Long-term benefits would be experienced soonest under **Alternative 2**, followed by **Alternative 3**, **Alternative 4**, **Preferred Alternative 5**, and **Alternative 1 (No Action)**. Alternatively, fewer short-term negative effects on fishing communities would be seen under **Alternative 1 (No Action)**, followed by **Preferred Alternative 5**, **Alternative 4**, **Alternative 3**, and **Alternative 2**.

Committee Action:

PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE AND MODIFY IF NEEDED

Action 2. Revise the red porgy total annual catch limit and annual optimum yield

Purpose of Action: The SSC recommended a new ABC based on results of SEDAR 60 (2020) and the total annual catch limit and annual optimum yield must be adjusted accordingly. The Council cannot set the total annual catch limit above their SSC's recommended ABC.

Alternative 1 (No Action). The total annual catch limit and annual optimum yield for red porgy are equal to the current acceptable biological catch (328,000 pounds whole weight/315,384 lbs gutted weight).

Preferred Alternative 2. Revise the total annual catch limit and annual optimum yield for red porgy and set equal to the updated acceptable biological catch based on the results of the latest stock assessment (SEDAR 60 2020). The 2026 total annual catch limit and annual optimum yield would remain in place until modified.

Year	Total ACL (lbs ww)	Total ACL (lbs gw)
2022	75,000	72,115
2023	81,000	77,885
2024	87,000	83,654
2025	91,000	87,500
2026+	95,000	91,346

Alternative 3. Revise the total annual catch limit and annual optimum yield for red porgy and set equal to 90% of the updated acceptable biological catch. The 2026 total annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)	Total ACL (lbs gw)
2022	67,500	64,904
2023	72,900	70,096
2024	78,300	75,288
2025	81,900	78,750
2026+	85,500	82,212

Alternative 4. Revise the total annual catch limit and annual optimum yield for red porgy and set equal to 80% of the updated acceptable biological catch. The 2026 annual catch limit would remain in place until modified.

Year	Total ACL (lbs ww)	Total ACL (lbs gw)
2022	60,000	57,692
2023	64,800	62,308
2024	69,600	66,923
2025	72,800	70,000
2026+	76,000	73,077

Discussion:

- Per the guidance provided at 50 CFR § 600.310(f)(4)(iv), the Council has chosen to specify optimum yield (OY) for red porgy on an annual basis and set it equal to the ACL.

- **Preferred Alternative 2** is based on the SSC's ABC recommendation and would implement ABC=ACL. **Alternatives 3** and **4** would add a 10% and 20% buffer, respectively, between the ABCs and total ACLs.

Summary of Biological Effects:

- **Alternative 1 (No Action)** is not a viable alternative because it is not based on BSIA.

- **Preferred Alternative 2** would result in the least biological benefit to the red porgy stock as there would be no buffer between the ABCs and the total ACLs. Biological benefits resulting from **Alternatives 3** and **4** would increase as the buffer increases.

Summary of Economic Effects:

Total

- The economic effects of Action 2 would greatly depend on the year examined, but based on cumulative estimated reductions in recreational consumer surplus (CS) and commercial producer surplus, it is estimated that net economic benefits would change by -$1,604,028, -$1,632,820, and -$1,661,612 in the first year of implementation (2022) from **Preferred Alternative 2**, **Alternative 3**, and **4** respectively.

Commercial

- **Preferred Alternative 2** through **Alternative 4** would result in a decrease in economic benefits from reducing commercial landings of red porgy.

- Overall, approximately 161 vessels harvested red porgy on average each year from 2015 through 2019.

- The average annual gross revenue for these vessels was $68,079 (2019$) per vessel during 2015-2019. **Preferred Alternative 2** through **Alternative 4** are expected to reduce annual gross revenue per vessel by $985, $1,036, and $1,086 in the first year of implementation (2022) under each alternative respectively (2019$).

- Total short-term economic benefits for commercial vessels would be highest under **Alternative 1 (No Action)**, followed by **Preferred Alternative 2**, **Alternative 3**, and **Alternative 4**.

Recreational

- The total ACL for **Alternative 1 (No Action)** incorporates CHTS-based estimates of recreational landings while **Preferred Alternative 2** through **Alternative 4** incorporate FES based estimates of recreational landings, therefore direct comparison is not appropriate.

- Given the variability in ACL by year, the economic effects depend on the year examined. In the first year of implementation (2022) it is estimated that CS would change by -$1,554,327, -$1,578,020, -$1,601,714, and $1,759,737 from **Preferred Alternative2, Alternative 3**, **and Alternative 4.**

- Total short-term economic benefits for the recreational sector would be highest under **Alternative 1 (No Action)**, followed by **Preferred Alternative 2**, **Alternative 3**, and **Alternative 4.**

Summary of Social Effects:

- Depending on the sector allocations chosen in Action 3, there may be some years in which landings would exceed their respective ACL and AMs would be triggered resulting in some negative effects on recreational fishermen and for-hire and commercial businesses that target red porgy.

- In general, a higher ACL would lower the chance of triggering an AM and result in the lowest level of negative effects on fishing communities.

- **Preferred Alternative 2** would be the most beneficial for fishermen, followed by **Alternative 3**, and **Alternative 4**.

Committee Action:

PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE AND MODIFY IF NEEDED

Action 3. Revise the red porgy sector allocations and sector annual catch limits

Purpose of Action: The Council's Allocations Trigger Policy states the Council will review sector allocations upon completion of a stock assessment. In addition, recreational landings estimates have been revised to adopt the new Fishing Effort Survey methodology. This action allows the Council to consider how to allocate the total ACL between the commercial and recreational sectors from 2022 onwards under the revised catch levels.

Note: The revised total annual catch limit in Alternative 1 (No Action) and 2 reflects Preferred Alternative 2 in Action 2: ABC=ACL=OY with implementation in 2022.

Alternative 1 (No Action). Retain the current commercial and recreational sector allocations as applied to the **revised total annual catch limit** for red porgy. The red porgy total annual catch limit is allocated 50% to the commercial sector and 50% to the recreational sector. An equal allocation was selected because it was closest to status quo at the time (2001-2003 landings were 51% recreational and 49% commercial). The commercial annual catch limit is split into two seasons with 30% allocated to season 1 (January through April) and 70% allocated to season 2 (May through December).

Year	Commercial ACL (lbs gw)			Recreational ACL (lbs gw)
	Total	Season 1 quota	Season 2 quota	
2022	36,058	10,817	25,240	36,058
2023	38,942	11,683	27,260	38,942
2024	41,827	12,548	29,279	41,827
2025	43,750	13,125	30,625	43,750
2026+	45,673	13,702	31,971	45,673

Preferred Alternative 2. Allocate 51.43% of the red porgy total annual catch limit to the commercial sector and 48.57% to the recreational sector. This allocation is based on the allocation formula: Annual catch limit = ((mean landings 2006-2008)*0.5)) + ((mean landings 1986-2008)*0.5) applied to the revised total annual catch limit that includes recreational landings from the Marine Recreational Information Program using the Fishing Effort Survey method.

Year	Commercial ACL (lbs gw)			Recreational ACL (lbs gw)
	Total	Season 1 quota	Season 2 quota	
2022	37,089	11,127	25,962	35,026
2023	40,056	12,017	28,039	37,829
2024	43,023	12,907	30,116	40,631
2025	45,001	13,500	31,501	42,499
2026+	46,979	14,094	32,886	44,367

Discussion:

- **Alternative 1 (No Action)** was revised since June 2021 based on consultation with SERO and NOAA GC. Structure of Action 2 reflects a tiering approach so an adequate comparison of all of the alternatives can be made to the no action alternative (i.e., all alternatives are inclusive of FES units).

- The sector allocations proposed under **Preferred Alternative 2** result from applying the allocation formula adopted through the Comprehensive ACL Amendment (SAFMC 2011) for unassessed snapper grouper species: Annual catch limit = ((mean landings 2006-2008)*0.5)) + ((mean landings 1986-2008)*0.5). The same formula has also been used to allocate the total ACL for some assessed species (i.e., golden tilefish). This formula was not used in Amendment 15B to establish the current red porgy sector allocations.

- It is difficult to use landings from recent years to determine sector allocations because annual catch limits, current allocations, and management actions have affected those landings. Closures due to meeting the ACL have likely disrupted how the fishery would otherwise operate. Closures might occur for one sector and not the other.

- Also note that there was an economic downturn in 2009 that had significant impacts on the fishing community, both commercial and recreational. Using data from the years where the economy was performing poorly could also introduce biases in the data, further misaligning allocations.

Summary of Biological Effects:

- Biological effects are not expected to be substantially different between **Alternative 1 (No Action)** and **Preferred Alternative 2**, since the allocation percentages would be similar and do not affect the total ACL specified in Action 2.

- Because the commercial sector tends to harvest red porgy from deeper water than the recreational sector, it is possible that a higher allocation to the commercial sector could increase overall discard mortality. Therefore, **Preferred Alternative 2** could incur negative biological effects on the red porgy stock relative to **Alternative 1 (No Action)**.

Summary of Economic Effects:

- Under **Alternative 1 (No Action)**, sector allocations would remain at 50 percent of the total ACL for each sector. This allocation results in a reduction in total economic benefits being derived to both the commercial and recreational sectors due to the reduced total ACL, but no change in net economic benefits.

- Under **Preferred Alternative 2**, the commercial sector would be allocated an additional 1,072 lbs ww of red porgy, while the recreational sector would receive 1,072 lbs ww less.

- The economic effects of **Preferred Alternative 2** would depend on the year examined. In the first year that the new total ACL is implemented (2022), a reduction in total net

benefits of $6,213 would be expected. The recreational sector would experience a reduction in net benefits of $7,257 while the commercial sector would experience an increase in net benefits of $1,044.

Summary of Social Effects:

- **Alternative 1 (No Action)** may have few social effects as both sectors would have an equal ACL.

- With **Preferred Alternative 2**, there would be a slight decrease in the recreational percentage compared to **Alternative 1 (No Action)**, which could have some negative social effects if recreational fishermen have a negative perception of this change due to the slight decrease in fishing opportunity and concerns about long-term social effects, especially if future actions further decreased harvest opportunities.

- It is difficult to predict the social effects of any allocation scheme as it would depend upon decisions made in conjunction with other related actions.

- Both the commercial and recreational sectors are projected to experience closures under **Preferred Alternative 2**, even considering proposed actions in this amendment that aim to reduce harvest. Closures are likely to result in short-term negative social effects to fishing communities but overall long-term positive social effects from a healthy stock.

Committee Action:

PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE AND MODIFY IF NEEDED

Action 4. Modify red porgy commercial trip limits

Purpose of Action: Because the red porgy total ACL is being reduced to address the recent stock assessment and resulting stock status, the Council can adjust management measures to address overfishing and constrain harvest to the proposed commercial ACL. The Council has only considered modifying the commercial trip limit is and is not considering modifications to other commercial management measures.

Alternative 1 (No Action). The commercial trip limit for red porgy in the South Atlantic exclusive economic zone is 60 fish from January 1 through April 30 and 120 fish from May 1 through December 31.

Alternative 2. Reduce the commercial trip limit for red porgy from January 1 – April 30 to:

Preferred 2a. 15 fish per trip

2b. 20 fish per trip

2c. 30 fish per trip

2d. 45 fish per trip

Alternative 3. Reduce the commercial trip limit for red porgy from May 1 – December 31 to:

Preferred 3a. 15 fish per trip

3b. 20 fish per trip

3c. 30 fish per trip

3d. 45 fish per trip

3e. 60 fish per trip

Discussion:

- The sub-alternatives under **Preferred Alternative 2** would reduce trip limits during the first annual commercial season (January through April) whereas those under **Preferred Alternative 3** propose various trip limits for the second commercial season. Thus, the Council has the flexibility to modify the trip limit for one of the seasons or for both.

- Reducing commercial trip limits in combination with a reduction in the commercial ACL under Action 3 could extend the length of the respective commercial fishing seasons relative to **Alternative 1 (No Action)**.

- Allowing some retention of incidentally harvested red porgy could reduce potential negative effects resulting from increased discards under **Alternative 1 (No Action)**.

- From 2015 through 2019, greater than 50% of trips are estimated to have harvested less than 30 fish during a trip (**Figure 1**).

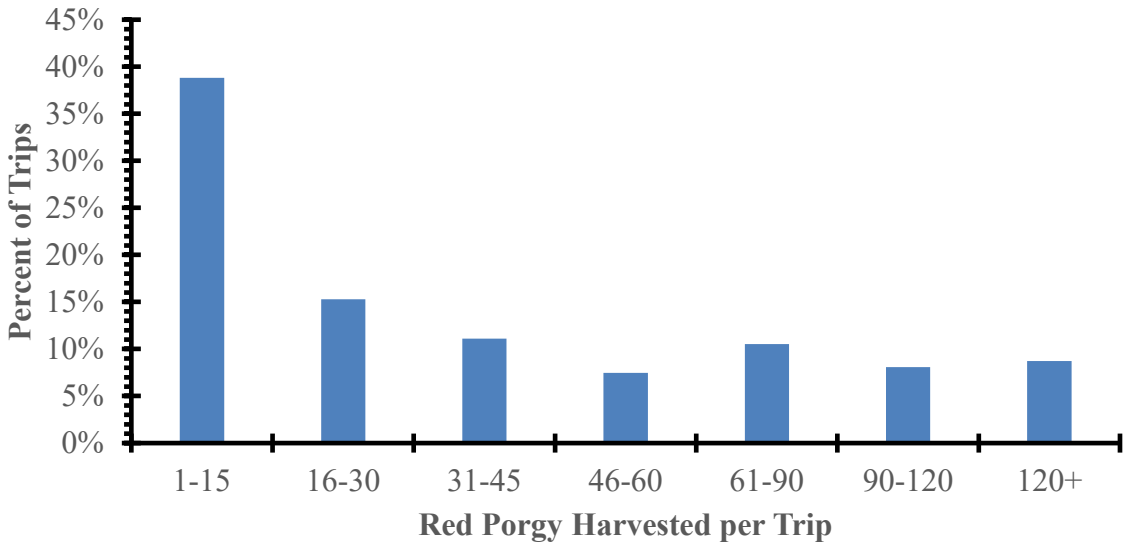

Figure 1. The percent of commercial trips (n=5,669) harvesting red porgy (numbers of fish) by bin from 2015 through 2019.
Source: SEFSC Commercial Logbook [May 26, 2020].

- Predicted percent reductions in landings from proposed trip limit alternatives are shown in **Table 2**.

Table 2. The predicted percent change in landings per trip from either the 60-red porgy (January-April) or 120-red porgy (May-December) trip limits.

Current Trip Limit (# of red porgy)	Potential Trip Limit (# of red porgy)	Predicted Change in Landings per Trip
60	15	-62%
60	20	-52%
60	30	-35%
60	45	-15%
120	15	-71%
120	20	-64%
120	30	-51%
120	45	-36%
120	60	-25%

- Predicted season length for the commercial sector under a range of trip limits and assuming the total ACL is set at the recommended ABC for 2022 (Preferred Alternative 2 in Action 2) and current sector allocations are retained (Preferred Alternative 2 in Action 3) is shown in **Table 3**.

Table 3. The projected 2022 closure date of red porgy by season with different trip limit options and 95% confidence interval (CI). Note that 30% of the ACL (37,089 lbs gw) is allocated to the January-April season (season 1) and 70% to the May-December season (season 2).

Sub-alternatives	Season	ACL (lbs gw)	Trip Limit (# of red porgy)	Closure Date	95% CI
No Action	**1**	11,127	60 - Current	February 13	Jan 29 – Mar 25
Pref 2a	**1**	11,127	15	April 19	Mar 14 – No Closure
2b	**1**	11,127	20	March 29	Feb 27 – No Closure
2c	**1**	11,127	30	March 6	Feb 13 – No Closure
2d	**1**	11,127	45	February 20	Feb 3 – Apr 7
No Action	**2**	25,962	120 - Current	June 22	June 14 – July 4
Pref 3a	**2**	25,962	15	November 9	Sep 12 – No Closure
3b	**2**	25,962	20	September 18	Aug 13 – Dec 31
3c	**2**	25,962	30	August 9	July 21 – Sep 27
3d	**2**	25,962	45	July 18	July 7 – Aug 17
3e	**2**	25,962	60	July 8	June 29 – July 31

- An interactive tool to explore the effect of proposed trip limits can be accessed here: Red Porgy Decision Tool.

Summary of Biological Effects:

- Red porgy are often harvested incidentally when fishing for other snapper grouper species, such as vermilion snapper, gray triggerfish, red snapper, and black sea bass. Substantial changes in fishing effort or behavior are not expected as a result of this action.

- Since the majority of trips have harvested less than 30 fish per trip, **Sub-alternatives 2c** and **3c** would impart the highest biological benefit to the stock among the alternatives and sub-alternatives considered relative to **Alternative 1 (No Action)**. Matching the trip limit to what fishers are catching on an average trip may reduce discards over the long-term thus reducing adverse effects to the red porgy stock.

Summary of Economic Effects:

- Since the revised commercial sector ACL for red porgy is expected to be fully harvested regardless of the alternative or sub-alternative chosen, the total net economic effects expected to be similar amongst the alternatives.

- The higher trip limits being considered may help increase net operative revenues on trips where red porgy are landed.

- Higher trip limits would also likely result in the commercial AMs being triggered sooner, thus creating an earlier closure.

- Lower trip limits would allow for some level of commercial red porgy harvest over a longer period but contribute less to net operating revenue on trips where red porgy are landed.

Summary of Social Effects:

- Under the proposed ACLs, commercial landings of red porgy are likely to trigger AMs. Reducing the commercial trip limit could extend the length of the respective commercial fishing seasons and reduce the negative short-term effects of shorter seasons.

- Social effects depend on how commercial fishing communities are affected by a lower trip limit and a longer season or a higher trip limit and a shorter season and the likelihood of commercial harvest being open during times of the year when it is profitable to target red porgy.

Committee Action:

PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE AND MODIFY IF NEEDED

Action 5. Modify red porgy recreational management measures

Sub-Action 5a. Bag limit

Purpose of Action: A reduction in the recreational bag limit is being considered to address overfishing and constrain recreational harvest to the proposed recreational ACL. The Council also wanted to consider vessel limits for the private and charter modes and the headboat mode independently of each other and in combination. However, the Council removed consideration in June 2021.

Alternative 1 (No Action). The recreational bag limit for red porgy in the South Atlantic exclusive economic zone is 3 per person per day, or 3 per person per trip, whichever is more restrictive.

Preferred Alternative 2. Reduce the recreational bag limit for red porgy to 1 fish per person per day, or 1 fish per person per trip, whichever is more restrictive.

Alternative 3. Reduce the recreational bag limit for red porgy to 2 fish per person per day, or 2 fish per person per trip, whichever is more restrictive.

Note that structuring changed since June 2021 from two alternatives with sub-alternatives to three alternatives.

Discussion:

- Under **Alternative 1 (No Action)**, data show that most recreational trips from 2015 through 2019 landed, on average, 0 to 1 red porgy (**Figure 2**).

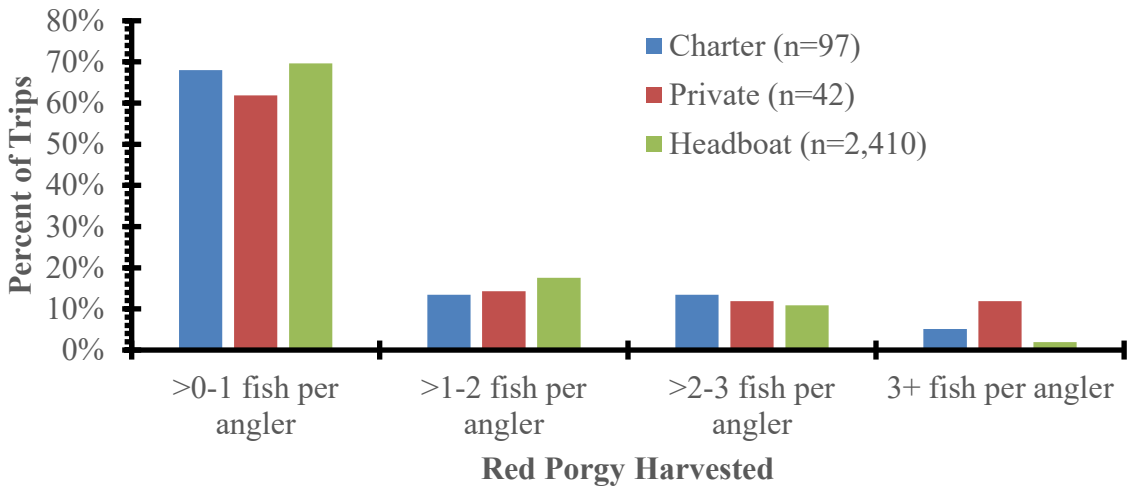

Figure 2. The percent of trips harvesting red porgy for private, charter, and headboat modes by bin from 2015 through 2019.
Sources: MRIP-FES survey data available at https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads. SRHS CRNF file [July 10, 2020].

- The percent reduction in red porgy landings for each potential bag limit by mode and overall is in **Table 4**.

Table 4. The percent reduction in red porgy landings for each potential bag limit by mode and overall with 95% CI. Note the total percent reduction is weighted by the contribution of each mode's landings to overall red porgy landings.

Mode	Preferred alternative 2 (1 fish)	Alternative 3 (2 fish)
Charter	12% (7-23%)	4% (2-8%)
Private	32% (21-42%)	10% (4-17%)
Headboat	28% (27-30%)	6% (5-7%)
Overall	29% (22-36%)	9% (4-12%)

Bag limit alternatives can be explored using the Red Porgy Decision Tool.

Summary of Biological Effects:

- **Preferred Alternative 2** would be expected to impart the most biological benefit to the red porgy stock as it would result in the greatest reduction in potential harvest of the alternatives considered.

- Under the proposed recreational ACL, none of the alternatives are predicted to allow recreational harvest to continue year-round.

- Restrictive bag limits could increase regulatory discards resulting in negative biological effects on the red porgy stock.

Summary of Economic Effects:

- **Preferred Alternative 2** would have noticeably larger negative economic effects on a per trip-level.

- Conversely, more restrictive retention limits would allow for longer open harvest seasons.

- Since the revised recreational sector ACL for red porgy is expected to be fully harvested regardless of the alternative chosen, the total net economic effects are expected to be similar among the alternatives.

Summary of Social Effects:

- **Alternative 1 (No Action)** would be the most beneficial to recreational fishermen in the short-term but could detract from measures to rebuild the red porgy stock.

- **Preferred Alternative 2**, which is projected to reduce catch by 29% overall, may eliminate some recreational fishing opportunities for for-hire and private recreational anglers.

- Less restrictive recreational limits in **Alternative 3** and **Alternative 1 (No Action)** would improve benefits to the recreational sector and associated businesses but would also substantially shorten the fishing season under the proposed recreational ACL.

Committee Action:

PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE AND MODIFY IF NEEDED

Sub-Action 5b. Recreational fishing season

Purpose of Action: To constrain recreational harvest to the proposed recreational ACL and avoid an in-season closure for that sector, the Council is considering establishing a recreational fishing season for red porgy in the South Atlantic.

Alternative 1 (No Action). Recreational harvest is allowed year-round until the recreational annual catch limit is met or is projected to be met.

Alternative 2. Establish a recreational fishing season for red porgy; harvest would be allowed during **January through April**.

Preferred Alternative 3. Establish a recreational fishing season for red porgy; harvest would be allowed during **May through June**.

Preferred Alternative 4. Establish a recreational fishing season for red porgy; harvest would be allowed during **July through August**.

Alternative 5. Establish a recreational fishing season for red porgy; harvest would be allowed during **June through August**.

Discussion:

- In the South Atlantic, red porgy **spawn from January through May** and spawning activity **peaks from January through March**.

- **Preferred Alternatives 3** and **4** combined would allow harvest of red porgy for four months, spanning two MRIP waves. Under **Alternative 5**, the fishing season would start in June, mid-way through Wave 3.

- South Atlantic red porgy recreational landings by two-month wave and predicted future landings are in **Figure 3**.

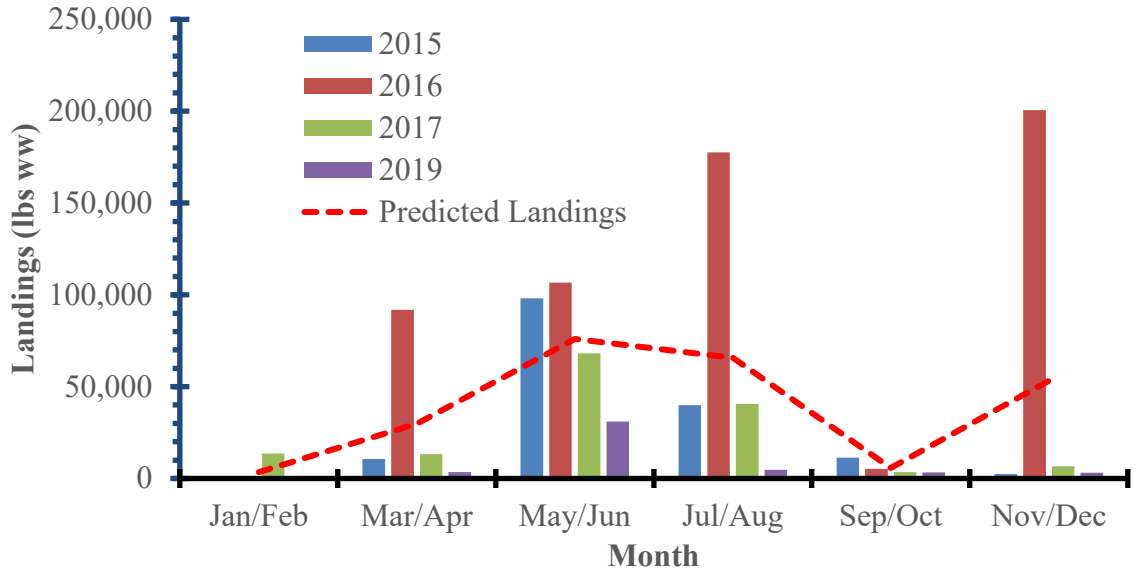

Figure 3. South Atlantic red porgy recreational landings by two-month wave and predicted future landings. Source: SEFSC MRIP FES Recreational ACL Dataset [September 16, 2020].

- Recreational season alternatives can be explored using the Red Porgy Decision Tool. Predicted landings are provided to compare to the proposed ACL for all alternatives (except Alternative 5 as the Decision Tool presents results by MRIP wave).

- Red porgy landings are predicted to be below the proposed recreational ACL under **Alternative 2**. Predicted landings for both **Preferred Alternatives 3** and **4** (individually or in combination) and **Alternative 5** are above the proposed recreational ACL.

Summary of Biological Effects:

- **Alternative 1 (No Action)** and **Alternative 2** could impart negative biological effects to spawning red porgy. However, recreational landings on average are highest in the summer months (**Figure 3**).

- **Preferred Alternatives 3** and **4** would allow fishing during months of highest recreational fishing effort, highest predicted red porgy landings, and could reduce regulatory discards.

- Biological effects would be similar among **Preferred Alternatives 3** and **4** and **Alternative 5** since they would all shift fishing effort away from when red porgy are spawning.

Summary of Economic Effects:

- **Alternative 1 (No Action)** can help ensure that the ACL is harvested each year and all associate economic benefits from that harvest to recreational anglers is incurred.

- Establishing a fishing season helps increase predictability of the time period in which harvest would be allowed thus creating economic benefit if harvest during the spawning season is curtailed (**Preferred Alternatives 3** and **4 and Alternative 5**).

- All the alternatives, with the exception of **Alternative 2**, are projected to result in fully harvesting the recreational sector ACL, thus the economic effects would be similar from a consumer surplus perspective.

- There would be an expected reduction in consumer surplus from **Alternative 2** since the recreational ACL would not be full harvested.

- Since red porgy are rarely targeted, it is assumed that a reduction in the fishing season from **Alternatives 2** through **5** would not affect for-hire fishing trips in the South Atlantic region therefore there are no estimated changes in producer surplus (PS) provided for the recreational sector.

Summary of Social Effects:

- Generally, access to red porgy for recreational participants will depend on the season length specified.

- **Preferred Alternatives 3** and **4** would allow access when participation has been highest and prohibit harvest during the spawning season. These alternatives would contribute to rebuilding goals and the sustainability of the stock and impart long-term social benefits.

- Considering the proposed recreational allocation, proposed recreational bag limit, and peak harvest of red porgy, **Preferred Alternatives 3 and 4** are anticipated to result in highest social benefits for South Atlantic fishing communities, followed by **Alternative 5**, **Alternative 2** and **Alternative 1 (No Action)**.

IPT Comments:

The Snapper Grouper Advisory Panel recommended the following:
RECOMMEND CLOSING THE RECREATIONAL FISHERY FOR RED PORGY IN SYNCHRONY WITH THE SHALLOW WATER GROUPER SPAWNING SEASON CLOSURE.

Does the Committee wish to remove Alternative 2 from consideration as it coincides with the Shallow Water Grouper closure and the red porgy spawning season?

Committee Action:

CONSIDER THE IPT'S RECOMMENDATION AND MAKE MODIFICATIONS AS NEEDED.
PROVIDE RATIONALE FOR CURRENT PREFERRED ALTERNATIVE(S) AND MODIFY IF NEEDED

Action 6. Modify red porgy recreational accountability measures

Purpose of Action: Because of the needed reduction in catch levels, the Council is considering a revision to the recreational accountability measures (AM). In addition, the trigger for the AM may be revised through this action.

Note: language of alternatives has been simplified for discussion. See Appendix A for detailed language in draft amendment.

Alternative 1 (No Action).
In-Season:
If landings reach or are projected to reach the recreational ACL:

- Close harvest of red porgy for the remainder of the fishing year, regardless of stock status, unless NMFS determines that no closure is necessary based on BSIA.

Post-Season:
If landings exceed the recreational ACL:

- Monitor landings for a persistence in increased landings during the following fishing year.

If landings exceed the total ACL and red porgy are overfished:

- Reduce the length of the recreational fishing season and the recreational ACL by the amount of the recreational overage.

Alternative 2. NMFS will announce the recreational fishing season start and end dates each year. The fishing season will start on (Council selected date) and end when NMFS projects the recreational ACL will be met.

Alternative 3.
Trigger when ACL does not change from year to year:

- Use a single year of landings, beginning with the most recent year available, then a two-year average, then a three-year average, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

Trigger when ACL changes annually:

- If the arithmetic mean (**Sub-alternative 3a**[1]) or the geometric mean (**Sub-alternative 3b**[2]) of landings exceeds the recreational ACL:

[1] The arithmetic mean is calculated by adding the values of a set of numbers and then dividing the sum by the number of values in the set.
[2] The geometric mean is calculated by multiplying the values of a set of numbers and then taking the n^{th} root of the product, where n is equal to the number of values in the set.

AM: Reduce the length of the following season by the amount necessary to prevent the recreational ACL from being exceeded the following fishing year (unless NMFS determines that it is not necessary).

Alternative 4.
In-Season: None

Post Season:
If landings exceed the recreational ACL and the total ACL:

- Reduce the length of the subsequent season to prevent recreational ACL from being exceeded.

Recreational AM scenarios for each alternative.

	In-season closure	**Post-season AM**		
Alternative		**If recreational ACL exceeded**	**If recreational and total ACL exceeded**	**If recreational and total ACL exceeded, and overfished**
1 (No Action)	√[2]			√[1]
2			√[3]	
3		√[3]		
4			√[3]	

[1] Reduce recreational season length and recreational ACL by overage
[2] When recreational ACL reached or projected to be reached
[3] Reduce recreational season length

Discussion:

- **Alternative 1 (No Action)** would retain an in-season closure and a potential payback provision for an overage of the sector ACL, if the total ACL were exceeded and while red porgy remain overfished.

- Under **Alternative 2**, NMFS would announce the length of the recreational season annually with an end date corresponding to when the recreational ACL is projected to be met for that year. The start date for the recreational season would correspond to the preferred alternative in Sub-Action 5b. Hence, the May-August timeframe (preferred recreational season) would be the "book-ends" within which recreational harvest of red porgy would be allowed, based on how long NMFS determines the season can last.

- Note that under **Alternative 2**, if the recreational ACL were not met within the season, a reopening would not occur since recreational landings estimates would not be available in time to conduct projections for a reopening.

- **Alternative 2** has an implied payback in that the season length accounts for any overages the previous year (e.g., red snapper).

- **Alternative 3** proposes two ways to apply the AM: when the ACL changes from year to year and when the ACL remains constant (does not change from year to year). Per Action 2, the recreational ACL would change every year until 2026 and remain constant thereafter until modified.

- **Alternative 3** would likely have the least likelihood of being triggered. Depending on landings and whether a change to the sector ACL is put in place, this alternative could delay the AM from being implemented for several years, allowing the recreational sector to exceed its ACL in a single year. There is also no safeguard in place to prevent the total ACL from being exceeded for more than one year.

- **Alternative 4** would remove the current potential "double penalty" of a reduction in the season length and a payback of the overage if the total ACL was exceeded.

- Under **Alternative 4**, the AM is tied to the total ACL. Under the proposed catch level reductions, AMs are likely to be triggered. Therefore, the total ACL may become a "moving target" if payback is triggered in the commercial sector. As such, the year after a payback (year 3), the recreational ACL would revert back to what's specified in the regulations.

Summary of Biological Effects:

- **Alternative 1 (No Action)** includes an in-season AM and thus provides added protection against ACL overages than alternatives that would remove the in-season AM. However, the post-season AM to correct for an overage, should one occur, would be delayed by one year.

- **Alternative 2** is similar to what is currently in place in the South Atlantic for black sea bass. This alternative would result in biological benefit to the stock in that it is likely to prevent overages of the recreational ACL but would not correct for an overage if it were to occur due to an unforeseen increase in recreational effort.

- **Alternative 3** would be the least likely to be triggered, as it uses a three-year mean that would reset when the sector ACL is changed. This alternative would likely result in the greatest negative biological impacts to the stock as it could allow overfishing to occur and continue for some time before it is corrected. Under this scenario rebuilding efforts could be compromised.

- **Alternative 4** would correct for recreational overages of the ACL but would not implement a mechanism to prevent the ACL from being exceeded since it would remove the current in-season AM. As such, this alternative could have negative biological effects to the red porgy stock.

Summary of Economic Effects:

- **Alternative 1 (No Action)** is the most stringent of the AMs being considered and would likely result in the greatest potential for short-term negative economic effects but long-term economic benefits.

- **Alternative 2** would limit overall harvest of red porgy but could result in economic benefits that mitigate the short-term cost of the AM itself by allowing more time to adjust to the changing harvest regulations. This could accelerate rebuilding which would result in long-term economic benefits.

- Both sub-alternatives under **Alternative 3** use three-year timelines for triggering an AM which could help mitigate the likelihood of a restrictive AM being put in place due to anomalies in the recreational data and would also allow the fishery to potentially continue to operate after a single year of particularly high landings that revert to long-term average levels the following year. Hence, **Alternative 3** could result in short-term economic benefits for the recreational sector and long-term potential economic costs to fishery participants.

- The economic effects of **Alternative 4** would likely be similar to those of **Alternative 3**, but the AM for this alternative would be triggered with a single year of landings and thus has a lower threshold to go into place. Once the AM is triggered, a reduction in the fishing season would closely mirror the economic effects of **Alternative 2**.

- In terms of potential short-term negative economic effects to the recreational sector, **Alternative 1 (No Action)** would have the highest potential negative economic effects, followed by **Alternative 2**, **Alternative 4**, and **Alternative 3** and its sub-alternatives.

Summary of Social Effects:

- Reducing the season length (**Alternative 1 (No Action)** and **Alternative 3**) is anticipated to result in direct negative social effects associated with loss of access to the resource.

- Under **Alternative 2**, while the end date for the recreational season could shift each year, announcing at the beginning of the season would allow private anglers and for-hire businesses to plan their activities in advance.

- **Alternative 3** would modify the AM and the AM trigger. The AM trigger itself should not have any negative social effects but could impose negative effects indirectly if the trigger initiates management action that is unnecessary at the time or delays management action when it is necessary.

- Under **Alternative 4** the fishing season may vary significantly from year to year due to changes in fishing behavior or environmental conditions. Inconsistent fishing seasons can make it challenging for private anglers and for-hire business to plan their fishing activities through the long-term.

- In terms of potential short-term social effects to fishing communities, **Alternative 1 (No Action)** would have the highest negative social effects, followed by **Alternative 2**, **Alternative 4**, and **Alternative 3** and its sub-alternatives.

IPT Comments/Recommendations:

- Please clarify intent to remove the in-season AM and rationale for modifying recreational AMs.

- Recommend removing **Alternative 3** from further consideration as it is complicated to explain to the public and weak for a species that is overfished.

- Is it the Council's intent to remove overfished criteria under **Alternative 4**? If so, suggest that "regardless of stock status" be added.

- Under **Alternative 4**, consider removing trigger of total ACL being exceeded for a payback. Removing total ACL from the AM responds to the Council's intent to not change the commercial AM (action was considered early in the development of this amendment but removed).

Committee Action:

CONSIDER THE IPT'S RECOMMENDATIONS AND MAKE MODIFICATIONS AS NEEDED
SELECT PREFERRED ALTERNATIVE AND PROVIDE RATIONALE

Appendix A. Full language of alternatives under Action 6 (recreational accountability measures)

Alternative 1 (No Action). If recreational landings reach or are projected to reach the recreational annual catch limit, recreational harvest of red porgy is closed for the remainder of the fishing year, regardless of stock status, unless National Marine Fisheries Service determines that no closure is necessary based on the best scientific information available.

If recreational landings exceed the recreational annual catch limit, then during the following fishing year recreational landings will be monitored for a persistence in increased landings. If the total annual catch limit is exceeded and red porgy are overfished, the length of the recreational fishing season and the recreational annual catch limit are reduced by the amount of the recreational annual catch limit overage.

Alternative 2. National Marine Fisheries Service will annually announce the recreational fishing season start and end dates in the Federal Register and by other methods, as deemed appropriate. The fishing season will start on (date) and end on the date National Marine Fisheries Service projects the recreational annual catch limit will be met.

Alternative 3. When the recreational annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

If the recreational annual catch limits are constant and the 3-year mean (Sub-alternative 3a or 3b) of landings exceeds the recreational annual catch limit, reduce the length of the following recreational fishing season by the amount necessary to prevent the recreational annual catch limit from being exceeded in the following fishing year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Sub-alternative 3a. Use the arithmetic mean to calculate average landings.

Sub-alternative 3b. Use the geometric mean to calculate average landings.

Alternative 4. If recreational landings exceed the recreational annual catch limit and the total (commercial and recreational combined) annual catch limit is exceeded, reduce the length of the following year's recreational fishing season by the amount necessary to prevent the recreational annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best scientific information available, that it is not necessary.