Amendment 50

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

Scoping Document

Background

In 1991, Amendment 4 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Snapper Grouper FMP) reported that the Red Porgy stock was undergoing overfishing and was overfished. Amendment 4 put in place a rebuilding plan and implemented a minimum size limit for Red Porgy. The rebuilding plan went into effect in 1991 with a target time to rebuild in 10 years. The stock was assessed in 1999 and was determined to be overfished and undergoing overfishing. The National Marine Fisheries Service (NMFS) issued an emergency rule to prohibit harvest and possession of Red Porgy in federal waters off the South Atlantic states. The prohibition was in place through August 28, 2000.

The Red Porgy stock in the South Atlantic was the first assessed through the Southeast Data, Assessment, and Review (SEDAR) process in 2002. That assessment indicated the stock was overfished but not undergoing overfishing. Commercial harvest was closed during the Red Porgy peak spawning season, the commercial trip limit and recreational bag limit

History of Red Porgy Stock Status

Assessment	Overfished	Overfishing
SEDAR 1 2002	X	
SEDAR 1 Update 2006	X	
SEDAR 1 Update 2012	X	
SEDAR 60 2020	X	X

were reduced; and a new 18-year rebuilding plan was put in place (Amendment 12, SAFMC 2000). The rebuilding schedule started with the no harvest emergency rule in September 1999 and ended on December 31, 2017. The findings from update assessments in 2006 and 2012 also resulted in overfishing determinations for the Red Porgy stock. The stock has not rebuilt despite management efforts throughout its management history.

The most recent assessment followed a standard approach with data through 2017 (SEDAR 60 2020) and incorporated the revised estimates for recreational catch (Fishing Effort Survey). The findings of the assessment indicated that the South Atlantic Red Porgy stock is overfished and undergoing overfishing (**Figure 1**). The Council's Scientific and Statistical Committee (SSC) reviewed the assessment during their April 2020 meeting and provided catch level recommendations to the Council in June. The Council then began work on an amendment to end overfishing of Red Porgy and address rebuilding and allocations.

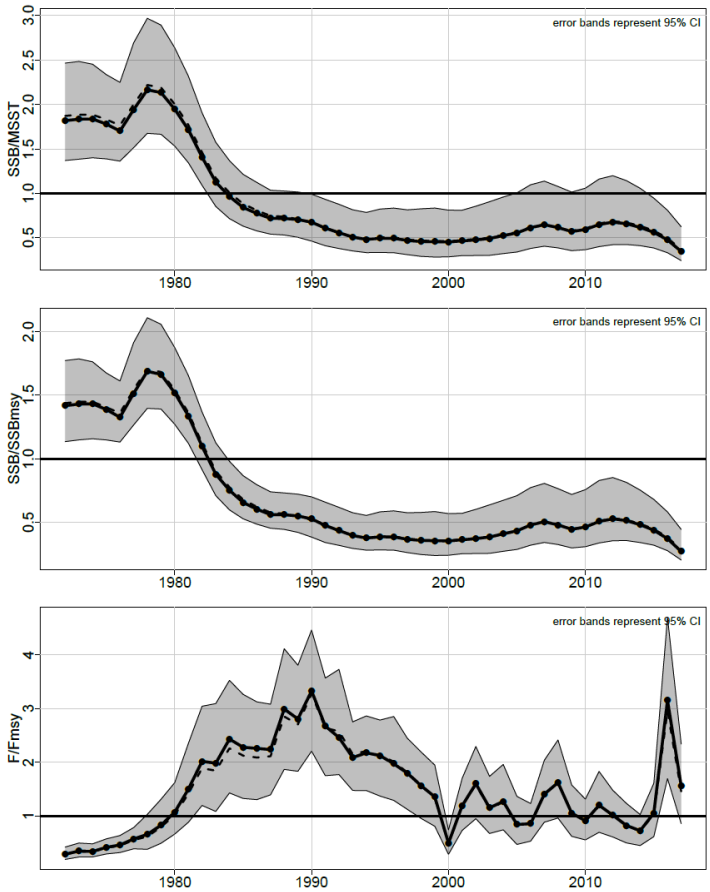

Figure 1. Estimated time series of spawning stock biomass (SSB) and fishing mortality (F) relative to benchmarks. Top: SSB relative to the minimum stock size threshold (MSST), if less than 1 stock is overfished. Middle: SSB relative to SSBMSY, if less than 1 stock is overfished. Bottom: F relative to FMSY, if > 1 stock is undergoing overfishing.

The National Marine Fisheries Service notified the Council (via letter dated June 12, 2020) of the status of the Red Porgy stock. Following notification that a stock is undergoing overfishing and is overfished, the Council must develop a fishery management plan amendment with actions that end overfishing immediately and rebuild the affected stock. The Council has two years from receiving notification to develop this amendment.

Overview of the Commercial Fishery

- Current commercial regulations: 14-inch (total length) minimum size limit and trip limit of 60 fish from January 1 to April 30 and 120 fish from May 1 through December 31. Commercial ACL is allocated 30% to January-April
- and 70% to May-December (effective February 2020).

- Commercial landings of Red Porgy in the South Atlantic averaged 78% of the commercial ACL from 2015 through 2019 (**Table 1**).

Table 1. Commercial landings of Red Porgy from 2014 through 2019.

Year	Landings (lbs ww)
2019*	104,608
2018	126,209
2017	126,761
2016	124,914
2015	153,681

- The percent of trips harvesting Red Porgy from 2015 through 2019 are shown in **Figure 2**.

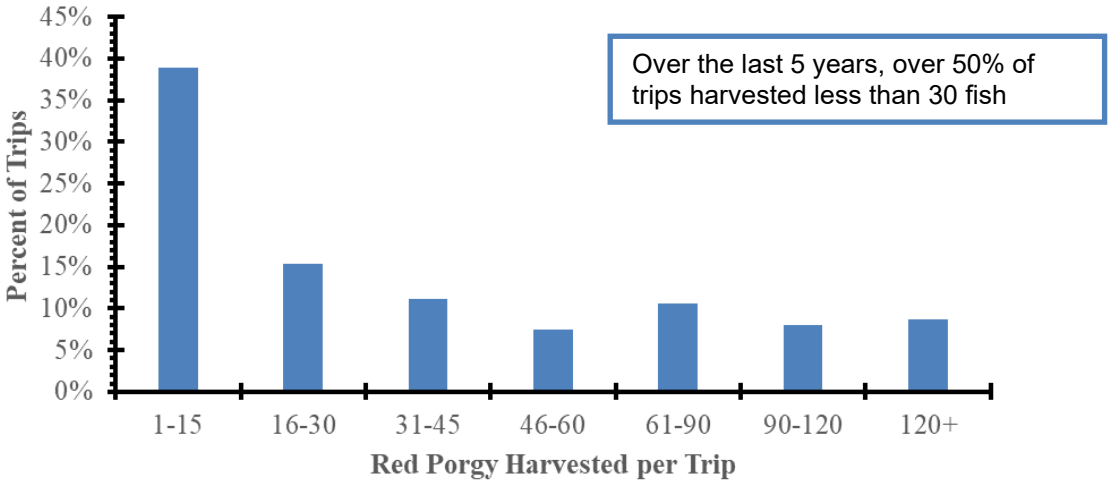

Figure 2. The percent of commercial trips (n=5,669) harvesting red porgy (numbers of fish) by bin from 2015 through 2019. Source: SEFSC Commercial Logbook [May 26, 2020].

- Predicted landings with 95% confidence interval based on data from 2017 through 2019 with the current trip limits are shown in **Figure 3**.

- January-March landings were backfilled using mean 2017-2019 May landings using the mean ratio of May landings to January-April landings from 1986-1999 (the final year the fishery was open January-April until 2020).

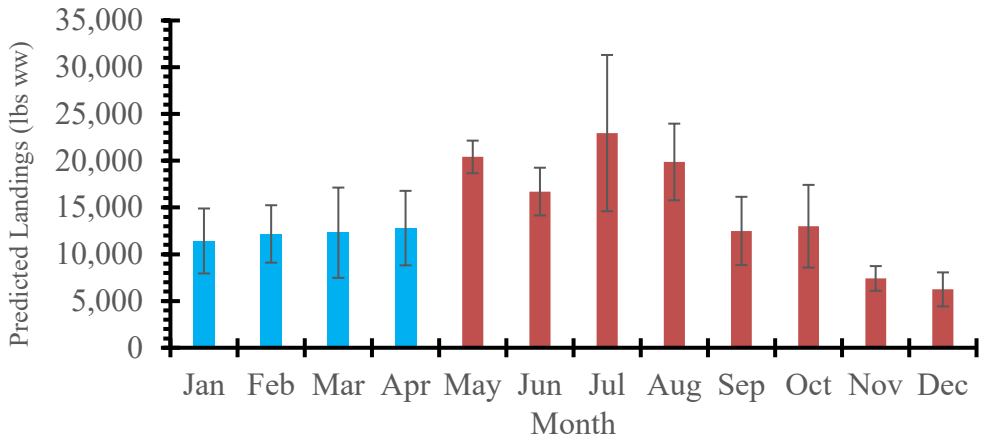

Figure 3. Predicted monthly Red Porgy landings (lb ww) with 95% confidence interval based on data from 2017 through 2019 with the current trip limits. The values for January through April (blue) are projected values since landings were not allowed during these months until 2020.
Source: SEFSC Commercial ACL file [October 9, 2020].

Overview of the Recreational Fishery

- Current recreational regulations: 14-inch (total length) minimum size limit and 3 Red Porgy per person/day or 3 per/person/trip, whichever is more restrictive.

- Recreational landings of Red Porgy in the South Atlantic from 2015 through 2019 are shown in **Table 3**.

Table 3. Recreational landings (lbs ww) of Red Porgy from 2015 through

Year	Landings (lbs ww)
2019	45,821
2018	387,053
2017	145,645
2016	581,889
2015	162,639

- Red Porgy recreational landings by two-month wave and predicted future landings are shown in **Figure 4**. Future landings were determined from taking an average of the landings from 2015 through 2017 and 2019. Landings from 2018 were excluded due to a proportional standard error (PSE) greater than 75 indicating a very imprecise estimate. Recreational landings are collected in two-month increments called waves (e.g., January and February = wave 1, March and April = wave 2, etc.).

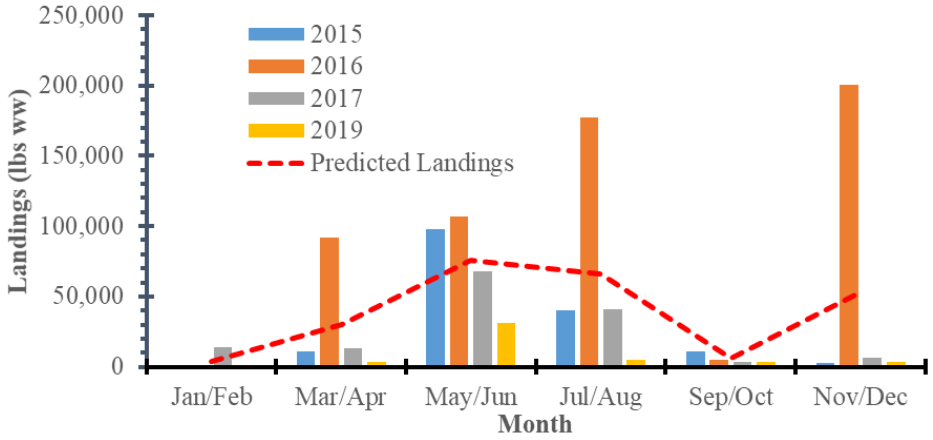

Figure 4. South Atlantic Red Porgy recreational landings by two-month wave and predicted future landings. Source: SEFSC MRIP FES Recreational ACL Dataset [September 16, 2020].

- The number of Red Porgy caught per trip on a given trip was collected by Marine Recreation Information Program (MRIP) and the Southeast Region Headboat Survey (SRHS) using data from 2015 through 2019 and is shown in **Figure 5**.

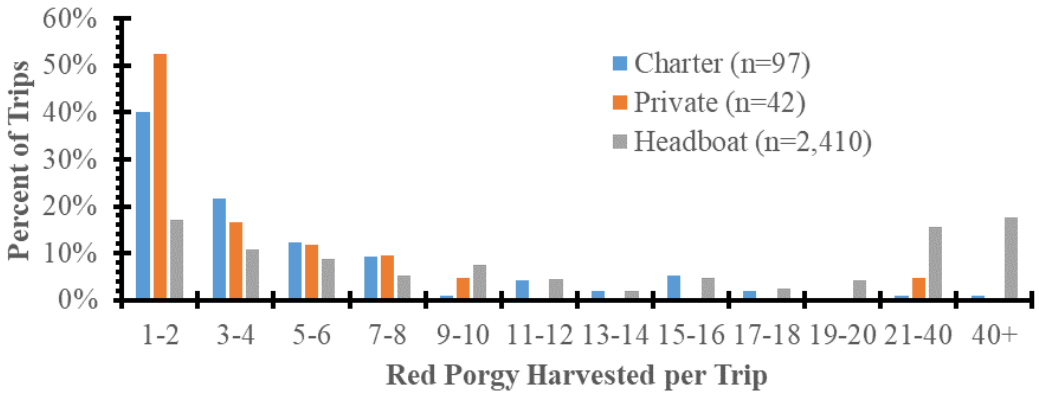

Figure 5. The percent of trips harvesting Red Porgy for private, charter, and headboat modes by bin from 2015 through 2019. Sources: MRIP-FES survey data available at https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads. SRHS CRNF file [July 10, 2020].

- The distribution of annual Red Porgy recreational harvest by mode is shown in **Figure 6**.

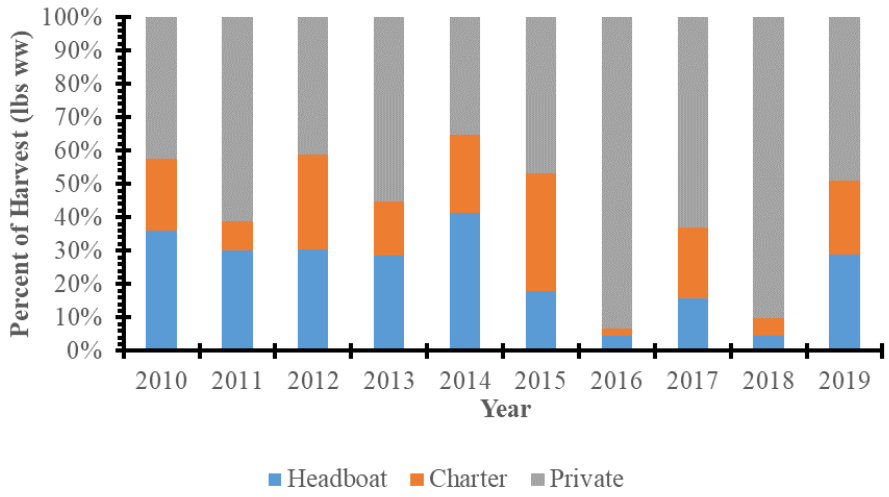

Figure 6. The percent of Red Porgy harvest (lbs ww) by mode from 2010 through 2019.

Recommended Acceptable Biological Catch and Overfishing Limit

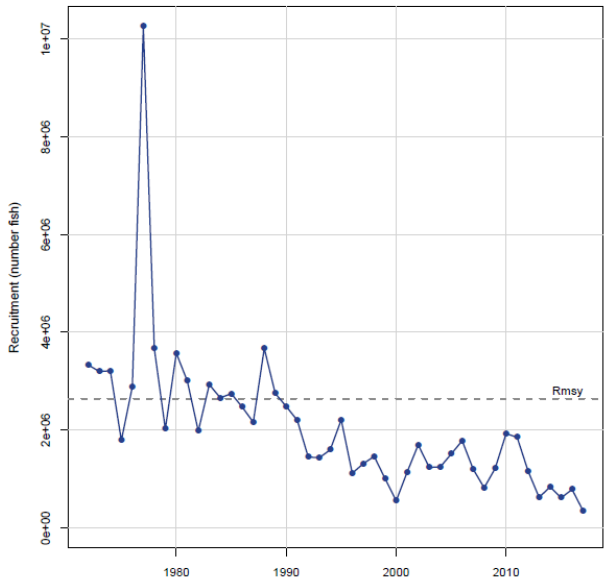

Figure 7. Estimated recruitment of age-1 fish. Horizontal line indicates recruitment level necessary to achieve maximum sustainable yield (Rmsy). Source: SEDAR 60 (2020).

The Scientific and Statistical Committee (SSC) reviewed the Red Porgy stock assessment (SEDAR 60 2020) at their April 2020 meeting. The SSC found that the assessment was conducted using the best scientific information available, was adequate for determining stock status and supporting fishing level recommendations and addressed uncertainty consistent with expectations and available information. The SSC recommended revising the overfishing limit (OFL) and acceptable biological catch (ABC) for Red Porgy to the levels shown in **Table 4**. The updated OFL and ABC values are based on landed catch and are shown in the blue column. The findings of SEDAR 60 also indicated average recruitment has been declining and has been below the recruitment levels expected to produce maximum sustainable yield (MSY) for most of the past three decades (**Figure 7**).

Table 4. South Atlantic Red Porgy **OFL and ABC recommendations** 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

What is ABC?

The **Acceptable Biological Catch** is the maximum amount of a stock than can be harvested without adversely affecting recruitment or other components of the stock.

The ABC is recommended by the Scientific and Statistical Committee (SSC). The Annual catch limit cannot exceed the recommended ABC.

Potential Management Actions

Action 1. Revise the Red Porgy rebuilding schedule

Alternatives	Time to Rebuilding (with at least 50% probability of success)
1 (No Action). Rebuilding plan expired in 2017 and stock has not rebuilt.	--
2. Shortest timeframe allowed (Tmin). F = 0 (no fishing) beginning in 2022.	11 years
3. Tmin + one generation (6-7 years) beginning in 2022.	18 years
4. Tmin X 2 beginning in 2022	22 years
5. Longest timeframe allowed (Tmax). F=75% of the Maximum Fishing Mortality Threshold beginning in 2022.	26 years

- Because the Red Porgy stock is no longer under a rebuilding plan (the previous one expired in 2017) and the stock is overfished, the Council has two years from when they receive notification from the National Marine Fisheries Service, to implement a new rebuilding plan. The plan must be implemented by June 2022.
- Note that all scenarios assume management starts in 2022.
- The predicted catch levels under Alternative 5 exceed the SSC's recommendations for OFL and ABC. This means that under this scenario, the stock could rebuild in less than the predicted time.
- One generation time = the average length of time between when an individual is born and the birth of its offspring (around 6-7 years for Red Porgy).

Action 2. Revise the Red Porgy total annual catch limit and optimum yield

Alternative 1 (No Action). The current annual catch limit and optimum yield for Red Porgy are equal to the acceptable biological catch (328,000 pounds whole weight).

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

Year	Total ACL (lbs ww)
2022	75,000
2023	81,000
2024	87,000
2025	91,000
2026	95,000

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

Year	Total ACL (lbs ww)
2022	67,500
2023	72,900
2024	78,300
2025	81,900
2026	85,500

Alternative 4. Revise the total annual catch limit and 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)
2022	60,000
2023	64,800
2024	69,600
2025	72,800
2026	76,000

Action 3. Revise the Red Porgy sector allocations and sector annual catch limits

Note: The revised total annual catch limit in Alternatives 1-3 assumes ABC=ACL=OY (Alternative 2 in Action 2) with implementation in 2022.

Alternative 1 (No Action). The Red Porgy total annual catch limit is allocated 50% to the commercial sector and 50% to the recreational sector. The commercial ACL 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 ww)			Recreational ACL (lbs ww)
	Total	Season 1	Season 2	
2022	37,500	11,250	26,250	37,500
2023	40,500	12,150	28,350	40,500
2024	43,500	13,050	30,450	43,500
2025	45,500	13,650	31,850	45,500
2026	47,500	14,250	33,250	47,500

Alternative 2. Apply the current allocation formula: ACL = ((mean landings 2006-2008)*0.5)) + ((mean landings 1986-2008)*0.5). This would result in a commercial allocation of 51.43% and a recreational allocation of 48.57% using revised recreational landings estimates from the Fishing Effort Survey.

Year	Commercial ACL (lbs ww)			Recreational ACL (lbs ww)
	Total	Season 1	Season 2	
2022	38,573	11,572	27,001	36,428
2023	41,658	12,497	29,161	39,342
2024	44,744	13,423	31,321	42,256
2025	46,801	14,040	32,761	44,199
2026	48,859	14,658	34,201	46,142

Note: Discard mortality is higher for commercial sector (53% in SEDAR 60). Initial allocation was set at 50% commercial to minimize discard mortality.

Alternative 3. Remove sector allocations and manage under the total annual catch limit.

Year	Total ACL (lbs ww)
2022	75,000
2023	81,000
2024	87,000
2025	91,000
2026	95,000

- Allocations are being reviewed since the recreational landings stream changed in the new assessment. Landings estimates now use the new Fishing Effort Survey for the private component of the recreational fishery.

- Sector allocations for Red Porgy were implemented through Amendment 15B to the FMP (SAFMC 2009). An equal allocation was selected because it was closest to rhe distribution of landings at the time (2001-2003 landings were 51% recreational and 49% commercial). The Council discussed having to adjust the total allowable catch if the commercial sector was allocated greater than 50% due to higher commercial discard mortality.

- The allocation formula adopted through the Comprehensive ACL Amendment to the FMP (SAFMC 2011) has also been used to allocate the total ACL for some assessed species (i.e., golden Tilefish). However, the allocations formula was **not** used to revise Red Porgy sector allocations.

Action 4. Revise the Red Porgy recreational annual catch target

Alternative 1 (No Action). The Red Porgy recreational annual catch target is 117,555 pounds whole weight and is determined using the existing formula (annual catch target = recreational annual catch limit x (1-mean Proportional Standard Error over the previous 5 years)).

Alternative 2. Revise the Red Porgy recreational annual catch target based on a revised recreational annual catch limit and updated proportional standard error estimates for 2015-2019.

Year	Rec ACT (lbs ww)
2022	20,753
2023	22,413
2024	24,073
2025	25,180
2026	26,287

Note: the average PSE for 2015-2019 is 44.66%. Estimates based on rec ACL=50% (Alternative 1 of Action 3) of total ACL (Alternative 2 in Action 2).

Alternative 3. Remove the existing recreational annual catch target and do not specify a new recreational annual catch target for Red Porgy.

- The current Red Porgy recreational annual catch target (ACT) was based on the previous ACL values and exceeds the SSC recommended ABC for the stock.
- The Red Porgy ACT and formula were implemented through the Comprehensive ACL Amendment to the FMP (SAFMC 2011).
- Recreational ACTs are not currently used to trigger regulatory action in the South Atlantic.

NOTE: The Council has not yet approved Actions 5-8 for inclusion in this amendment

Action 5. Modify Red Porgy commercial management measures

1. Retain existing measures?

2. Reduce the commercial trip limit for Red Porgy in Season 1 (January 1 – April 30?
   - 15 fish per trip
   - 20 fish per trip
   - 30 fish per trip
   - 45 fish per trip

3. Reduce the commercial trip limit for Red Porgy in Season 2 (May 1 – December 31?
   - 15 fish per trip
   - 20 fish per trip
   - 30 fish per trip
   - 45 fish per trip
   - 60 fish per trip

Current Commercial Regulations

Trip limit = 60 fish Jan-April (Season 1); 120 fish May-Dec (Season 2).

Minimum Size Limit = 14 inches total length

Commercial Split Season:
30% of ACL in Season 1
70% of ACL in Season 2

Preliminary Analysis:

- The estimated reductions from projected landings for potential trip limits are shown in **Table 5.**

Table 5. The predicted percent change in landings from either the 60-red porgy (January-April, depicted in gray) or 120-red porgy (May-December) trip limits.

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

- 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 and current sector allocations are retained is shown in **Table 6**.

Table 6. The projected 2022 closure dates of Red Porgy by season with different trip limit options. Note, 30% of the ACL (37,500 lb ww) is allocated to the January-April season (in blue) and 70% to the May-December season. CI= confidence interval.

Season	ACL (lbs ww)	Trip Limit (# of Red Porgy)	Closure Date	Season Length (95% CI)
January 1 – April 30	11,250	60 - Current	January 31	24 – 42 Days
January 1 – April 30	11,250	45	February 5	28 – 48 Days
January 1 – April 30	11,250	30	February 14	36 – 61 Days
January 1 – April 30	11,250	20	February 28	47 – 86 Days
January 1 – April 30	11,250	15	March 15	58 – 107 Days
May 1 – December 31	26,250	120 - Current	June 11	38 – 48 Days
May 1 – December 31	26,250	60	June 27	52 – 66 Days
May 1 – December 31	26,250	45	July 6	61 – 80 Days
May 1 – December 31	26,250	30	July 23	74 – 105 Days
May 1 – December 31	26,250	20	August 20	92 – 156 Days
May 1 – December 31	26,250	15	September 27	116 – 244 Days

Action 6. Modify Red Porgy recreational management measures

1. Retain existing measures?

2. Reduce the recreational bag limit for Red Porgy?
   - 1 fish per person per day, or 1 fish per person per trip, whichever is more restrictive
   - 2 fish per person per day, or 2 fish per person per trip, whichever is more restrictive

3. Establish a recreational fishing season for Red Porgy?
   - Waves 1 and 2 (January-April)
   - Wave 3 (May-June)
   - Wave 4 (July-August)
   - Waves 1, 2 (January-April) and Waves 5, 6 (September-December)

4. Establish a recreational vessel limit for Red Porgy?
   - 10 fish per vessel
   - 15 fish per vessel

Current Recreational Regulations

Bag Limit = 3 fish per person per day or 3 per trip, whichever is more restrictive.

Minimum Size Limit = 14-inch (total length) minimum size limit.

No Recreational Season

Preliminary Analysis:

- **Table 7** shows the percent change in Red Porgy landings **for each potential bag limit** by mode and overall.

Table 7. The percent change in Red Porgy landings by for each potential bag limit by mode and overall. Note, the total percent change is weighted by the contribution of each mode's landings to overall Red Porgy landings.

Mode	2-red porgy bag limit	1-red porgy bag limit
Charter	-4%	-12%
Private	-10%	-32%
Headboat	-6%	-28%
Overall	-9%	-29%

- The percent change in Red Porgy landings by **for each potential vessel limit and bag limit** combination by mode and overall is shown in **Table 8**.

Table 8. The percent change in Red Porgy landings by for each potential vessel limit and bag limit combination by mode and overall. Note that the total percent change is weighted by the contribution of each mode's landings to overall red porgy landings (see **Figure 6**). Green cells indicate a small decrease while red cells indicate a larger decrease in predicted landings.

Vessel Limit	15-fish			10-fish		
Bag Limit	**3-fish**	**2-fish**	**1-fish**	**3-fish**	**2-fish**	**1-fish**
Charter	-6%	-10%	-19%	-20%	-22%	-29%
Private	-13%	-34%	-50%	-20%	-34%	-50%
Headboat	-62%	-62%	-64%	-71%	-71%	-72%
Overall	-16%	-34%	-48%	-25%	-36%	-50%

Actions 7-8. Modify Red Porgy Commercial and Recreational Accountability Measures

- The Council is considering modifying accountability measures that will depend on the range of alternatives considered for commercial and recreational management measures.
- Changes may include announcing the start and end of a recreational season each year (if a season were to be implemented), in-season closures if ACLs are reached, and paybacks if ACLs are exceeded and depending on the status of the stock.

Please Provide Your Input!

Commercial

Which is more important: season length or trip limit?

Are there additional management measures that could be considered?

Recreational

When would be the best time to implement a recreational season for Red Porgy?

Is it more important to keep a certain bag or vessel limit or a longer season?

Are there additional management measures that could be considered?

Amendment timing

September 2020	Review options paper and provide guidance to staff
December 2020	Review draft amendment and approve for scoping
Feb 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
Jul-Aug 2021	Conduct public hearings
September 2021	Review public comment and approve all actions
December 2021 or March 2022	Review final draft amendment and consider approval for formal review
Mid to late 2022	Regulations effective

How to Comment

Via Webinar: webinars will be held on February 3 & 4 at 6:00 PM. Register for the webinars at the following links:

Wednesday, February 3, 2021 6 PM
Thursday February 4, 2021 6 PM

Written comments online: may be submitted on **Amendment 50** using the online public comment form available from the Public Hearings and Scoping Meetings page at http://safmc.net/safmc-meetings/public-hearing-and-scoping-meeting-schedule/
Comments submitted using the online comment form are immediately posted to the Council's website and available for all Council members and the public to view.

Written comments must be received by 5:00 PM on Friday, **February 5, 2021.**

Written comments by mail: Send comments to John Carmichael, Executive Director, SAFMC, 4055 Faber Place Drive, Suite 201, N. Charleston, SC 29405.

Written comments by fax: 843/769-4520.