



Draft Options for Reef Fish Amendment 56:
**Modifications to Gulf of Mexico Gag Grouper
Status Determination Criteria, Sector Allocations,
Catch Limits, and Fishing Seasons**

Reef Fish AP Meeting: October 11, 2022

Recap:

SEDAR 72 SRFS Run (2022)

- Overfished and undergoing overfishing
- SSC recommended revising F_{MSY} proxy
 - F_{MAX} not supported; $F_{40\%SPR}$ recommended
 - $F_{40\%SPR}$ likely more considerate of gag biology, red tide vulnerability
- Proportion of males is very low (~2% of SSB)

Considerations:

- Fishing pressure, especially on males in deeper water
- Discard mortality
- Vulnerability to fishing during spawning seasons



Recap:

Magnuson-Stevens Act Requirements

- Council must implement measures to end overfishing and rebuild gag grouper within 2 years
 - Council officially notified by NMFS in January 2022
- Measures need to be in place before IFQ allocation released, or by January 26, 2024.
 - Once allocation is released, it can't be recalled
 - Holdback possible, but not likely much poundage available in 2023 regardless



Interim Rule

- Council recommended interim rule measures in June 2022
- Only needs to reduce, not end, overfishing
- Recommended catch limits under MRIP-FES, $F_{30\%SPR}$, and using a medium red tide severity estimate for 2021

Interim Rule

- Recommended revising recreational fishing season to Sept 1 – Nov 10
- NMFS is working on this interim rule, with implementation in January 2023
 - Needed before IFQ allocation is released
 - Can be effective for up to 366 days
- Council did not modify sector allocation percentages

Modification of Gulf Gag Grouper Status Determination Criteria

- F_{MSY} determines the amount of allowable fishing mortality
- Low SPR targets = smaller stock sizes over time
 - Larger proportion of total stock allowed to be caught
 - Less buffer between catch limits and total SSB
 - More vulnerable to changes in F , episodic mortality



Modification of Gulf Gag Grouper Status Determination Criteria

- Higher SPR targets = larger stock sizes over time
 - More robust to fishing pressure, episodic mortality
 - Low yield initially, but greater yield long-term
 - $F_{40\%SPR}$ more in line with grouper life history
 - Considerate of reproductive potential and sex ratio
- Can re-specify SDC in ACL change, if no other options being considered
 - RF Amendment 48



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Alternative 1: No Action – Retain the current sector allocation from Reef Fish Amendment 30B. 61% of the total ACL is allocated to the recreational sector, and 39% to the commercial sector. This sector allocation was established using MRIP-CHTS data currency based on average landings between 1986 – 2005. Retain the current catch limits from SEDAR 33, using F_{MAX} .



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Alternative 2: Retain the current sector allocation of 61% of the total ACL to the recreational sector, and 39% to the commercial sector. Recreational landings will be monitored using the SRFS landings data. Update the catch limits based on the SRFS Run, using $F_{40\%SPR}$. Select a rebuilding timeline.

De facto reallocation to commercial, due to slightly higher historical recreational landings under SRFS



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Alternative 3: Modify the sector allocation for Gulf gag grouper. Apply the calibrated SRFS landings data to the historical period used in the current allocation (1986 – 2005). The new sector allocation of the total ACL will be 65% to the recreational sector and 35% to the commercial sector. Recreational landings will be monitored using the SRFS landings data. Update the catch limits based on the SRFS Run, using $F_{40\%SPR}$. Select a rebuilding timeline.



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

- Current sector allocation uses MRIP-CHTS and F_{MAX}
- Sector allocation could use current percentages, and set and monitor catch limits in SRFS
- Sector allocation could also use SRFS to update current percentages, and set and monitor catch limits
- Council could recommend other time series to examine



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

- Options: 1986-2005, 1986-2009, 1986-2019, Bowtie
- Current: 61% rec, 39% comm

Reference Time Period	Commercial %	Recreational %
1986 - 2005	34.99	65.01
1986 - 2009	34.56	65.44
1986 - 2019	33.61	66.39
Reference Time Period (Bowtie)	Commercial %	Recreational %
50% 1986 - 2005, 50% 2003 - 2005	36.14	63.86
50% 1986 - 2009, 50% 2007 - 2009	32.87	67.13
50% 1986 - 2019, 50% 2017 - 2019	32.35	67.65

Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

- Council decided to request projections using 65% recreational, 35% commercial, at $F_{40\%SPR}$
 - Minimal differences in alternative allocation scenarios
 - Considers the data currency used in the most recent stock assessment
 - Higher F_{MSY} proxy = more robust stock, higher long-term yields



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Current OFL, ABC, ACLs, and ACTs for Gulf gag grouper, from SEDAR 33:

OFL	4.180 mp gw
ABC	3.120 mp gw
Total ACL	3.120 mp gw
Com ACL	1.217 mp gw
Com Quota	0.939 mp gw
Rec ACL	1.903 mp ww
Rec ACT	1.713 mp ww

Note: Alternative 1 would set catch limits in MRIP-CHTS currency, which is no longer consistent with BSIA. Thus, Alternative 1 is not viable.



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Alternative 1:

- ABC/ACL not changed following SEDAR 33 Update (2016), due to Council concern about stock health
- 14% buffer between Comm ACL and quota
 - RF30B
- 10% buffer between Rec ACL and ACT
 - RF30B
- Comm set in gutted weight, Rec in whole weight



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

Rebuilding timeline options for each allocation/catch limit alternative:

Option a: T_{Min} at $F = 0$, or 11 years

Option b: 75% of $F_{40\%SPR}$, or 18 years

Option c: $T_{Min} + 1$ generation time, or 19 years

Option d: $T_{Min} * 2$, or 22 years

T_{Min} , or 11 years, would require the fishery to close, which the Council has resolved not to do if possible.



Action 1: Modification of Gulf Gag Grouper Sector Allocation and Catch Limits

- Excel File



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Alternative 1: No Action – Retain the current fishing seasons for Gulf gag grouper. The commercial sector has a year-round fishing season under the IFQ program. The recreational fishing season is closed from January 1 – May 31 annually, opening on June 1 and closing on December 31 or when the recreational ACL is projected to be met.



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Alternative 2: Modify the current recreational fishing season for Gulf gag grouper. The recreational fishing season will be closed from January 1 – August 31 and open on September 1. The recreational fishing season will close on November 10 for the remainder of the year, or when the recreational ACL is projected to be met, whichever occurs first.



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Alternative 3: Modify the current recreational fishing season for Gulf gag grouper. The recreational fishing season will be closed from January 1 – September 30 and open on October 1. The recreational fishing season will close on December 31 or when the recreational ACL is projected to be met, whichever occurs first.



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Alternative 4: Modify the current recreational fishing season for Gulf gag grouper. The recreational fishing season will be closed from January 1 – October 31 and open on November 1. The recreational fishing season will close on December 31 or when the recreational ACL is projected to be met, whichever occurs first.



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Notes:

- The commercial fishery is currently open year-round under the IFQ program. There are presently no closed seasons associated with IFQ fisheries.
- The Council recommended that NMFS implement a revised recreational fishing season for gag grouper via interim rule at its June 2022 meeting, which is reflected in Alternative 2.



Action 2: Modification of Gulf Gag Grouper Fishing Seasons

Notes:

- Rec fishing season from IR may be able to be open beyond Nov 10 as stock rebuilds.
- Other options proposed by fishermen (October or November opening) shift fishing pressure off males
- Sunset provision(s) or other measure for re-evaluating sector-specific fishing seasons?



Questions?

