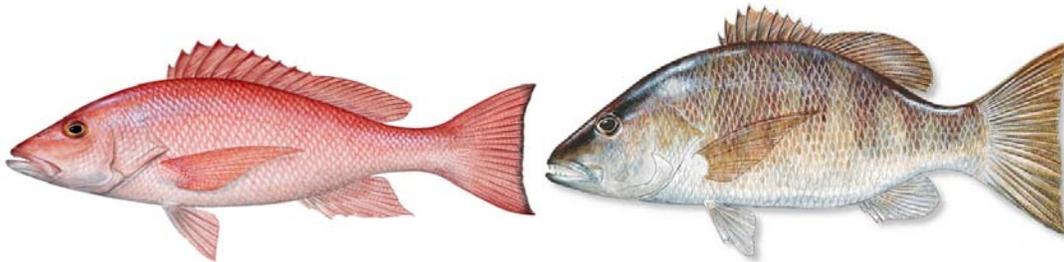


Update to Red Snapper Calibrations and Gray Snapper Catch Limits



Draft Framework Action to the Fishery Management Plan for Reef Fish Resources in the Gulf of Mexico

April 2023



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ENVIRONMENTAL ASSESSMENT COVER SHEET

Framework Action to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico: Update to Red Snapper and Gray Snapper Catch Limits, including Environmental Assessment, Regulatory Impact Review, and Regulatory Flexibility Act Analysis.

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This Environmental Assessment is being prepared using the 2020 CEQ NEPA Regulations as modified by the Phase I 2022 revisions. The effective date of the 2022 revisions was May 20, 2022 and reviews begun after this date are required to apply the 2020 regulations as modified by the Phase I revisions unless there is a clear and fundamental conflict with an applicable statute. This Environmental Assessment began on February 16, 2023, and accordingly proceeds under the 2020 regulations as modified by the Phase I revisions.

ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
AM	accountability measure
BEA	Bureau of Economic Analysis
BiOp	biological opinion
BLL	bottom longline
CFR	code of federal regulations
CHTS	Coastal Household Telephone Survey
CFpA	cash flow per angler
Council	Gulf of Mexico Fishery Management Council
CS	consumer surplus
CV	coefficient of variation
Data Calibration FA	Gulf of Mexico Red Snapper Recreational Data Calibration and Recreational Catch Limits Framework Action
DLMTToolkit	Data Limited Methods Toolkit
DPS	distinct population segment
EA	environmental assessment
EEZ	exclusive economic zone
EIS	economic impact statement
EFH	essential fish habitat
EFP	exempted fishing permit
EJ	environmental justice
E.O.	executive order
ESA	Endangered Species Act
F	fishing mortality rate
FES	fishing effort survey
FMP	Fishery Management Plan
GDP	Gross Domestic Product
GRSC	Great Red Snapper Count
GSAD	Gulf and South Atlantic Dealers
Gulf	Gulf of Mexico
gw	gutted weight
HCR	harvest control rule
IFQ	individual fishing quota
IPCC	Intergovernmental Panel on Climate Change
LDWF	Louisiana Department of Wildlife and Fisheries
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MFMT	maximum fishing mortality threshold
MMPA	Marine Mammal Protection Act
mp	million pounds
MRIP	Marine Recreational Information Program
MSST	minimum stock size threshold
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration

OFL	overfishing limit
PAH	polycyclic aromatic hydrocarbons
PS	producer surplus
PW	product weight
Reef Fish FMP	Fishery Management Plan for Reef Fish Resources in the Gulf of Mexico
RFA	Regulatory Flexibility Act
RFFA	reasonably foreseeable future actions
RIR	regulatory impact review
RQ	regional quotient
Secretary	Secretary of Commerce
SEDAR	Southeast Data and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
SPR	spawning potential ratio
SRHS	Southeast Region Headboat Survey
SSC	Scientific and Statistical Committee
TAC	total allowable catch
TL	total length
TNR	trip net revenue
TPWD	Texas Parks and Wildlife Department
tpy	tons per year
UCB	uncharacterized bottom
VOC	volatile organic compounds
VMS	vessel monitoring system\
ww	whole weight

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CHAPTER 1. INTRODUCTION

The Gulf of Mexico (Gulf) red snapper and gray snapper stocks are managed under the Fishery Management Plan for Reef Fish Resources in the Gulf of Mexico (Reef Fish FMP). The recreational sector of the red snapper fishery is managed separately by each of the five Gulf states but the federal annual catch limit (ACL) is summed collectively for these states. Because states estimate recreational catch using different methodologies and units from each other and from federal estimates, state units must be calibrated to make them comparable.

Gray snapper is managed as a stock, with a combined ACL and ACT for the recreational and commercial sectors. The Gulf of Mexico Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviewed the results of Southeast Data, Assessment, and Review 75 (SEDAR 75) during its January 2023 meeting. The SSC determined that the assessment was consistent with the best scientific information available.

This document will consider changes to the red snapper calibration ratios for Alabama, Florida, and Mississippi, and will consider updates to catch limit for Gulf gray snapper based on the results from SEDAR 75.

1.1 Background: Red snapper private recreational data collection and calibrations

The red snapper stock is currently in a rebuilding plan. Consistent with this rebuilding plan, both commercial and recreational catch limits have been allowed to increase as the stock has recovered.

In 2015, the recreational red snapper sector was divided into a private angling component and a federal for-hire component (GMFMC 2014), which receive 57.7% and 42.3% of the total recreational ACL, respectively. The federal for-hire component consists of fishermen fishing from vessels with a federal charter/headboat permit for Gulf reef fish and is unaffected by the actions considered in this framework action. The private angling component consists of fishermen fishing from privately owned and rented vessels, and for-hire vessels (charter boats and headboats) without a federal permit (i.e., state-licensed for-hire vessels). For-hire vessels without federal permits are restricted to fishing for red snapper in state waters.¹

Beginning In 2014, the Gulf states began establishing recreational monitoring programs for red snapper landed by anglers from their state with the exception of Texas, which has always had its

¹ Federal waters refer to the area extending from the seaward boundaries of the Gulf states of Alabama, Florida, Louisiana, Mississippi, and Texas, as those boundaries have been defined by law, out to 200 nautical miles (nm) from shore. State waters refer to the area from shore out to the seaward boundary of each state. For the purpose of reef fish management, state waters extend 9 nm from shore for all five Gulf states.

own monitoring program.² However, each of these monitoring programs is unique and does not produce results that are directly comparable to each other or to federal estimates generated by the Marine Recreational Information Program (MRIP). In 2022, NMFS published a final rule that adjusted the state catch limits to account for the monitoring programs used by each Gulf state (87 FR 74014, December 2, 2022). This action would revise those adjustments for Alabama, Florida, and Mississippi, based on updated information.

Red Snapper Federal Recreational Data Collection and Recalibration

NMFS created the Marine Recreational Fisheries Statistics Survey (MRFSS) shortly after the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) mandated a national program for the management of U.S. fishery resources (Papacostas and Foster 2018). MRFSS estimates are available beginning in 1981 for the catch, effort, and participation of US recreational fishing, including for Gulf red snapper. This survey included both offsite telephone surveys to collect information about recreational fishing activity and onsite interviews at marinas and other recreational access points to collect information about the fish that were caught. In response to a peer-review by the National Research Council (2006), MRFSS was replaced by MRIP to meet increasing demand for more precise, accurate, and timely recreational catch estimates.

MRIP introduced a new survey design for the Access Point Angler Intercept Survey (APAIS) in 2013. This new design addressed concerns regarding the validity of the survey approach; specifically, that trips recorded during a given time period are representative of trips for a full day (Foster et al. 2018). The more complete temporal coverage with the new survey design provided for consistent increases or decreases in APAIS angler catch rate statistics, which are used in stock assessments and management, for at least some species (NOAA 2019).

MRIP also transitioned from the legacy Coastal Household Telephone Survey (CHTS) to a new mail survey (Fishing Effort Survey [FES]). Launched in 2015, FES replaced CHTS in 2018. Both survey methods collect data needed to estimate marine recreational fishing effort (number of fishing trips) by shore and private/rental boat anglers on the Atlantic and Gulf coasts. The CHTS used random-digit dialing of homes in coastal counties to contact fishermen. The new mail-based FES uses fishing license and registration information as one way to identify and contact fishermen (supplemented with data from the U.S. Postal Service). NMFS conducted side-by-side testing of CHTS and FES from 2015 to 2017 to develop a calibration model for transitioning between the two data currencies. Landings estimates since 2018 are back-calculated from MRIP-FES to MRIP-CHTS for quota monitoring purposes because red snapper quotas were developed using MRIP-CHTS data, but recreational landing estimates are derived using MRIP-FES.

² The survey designs used in Louisiana, Mississippi, Alabama, and Florida have been certified by NMFS (<https://www.fisheries.noaa.gov/topic/recreational-fishing-data/ensuring-sound-science>). This certification means that NMFS has evaluated and accepted the statistical rigor of a recreational fishing survey design, but it does not mean that the estimates produced by the state surveys are equivalent to the MRIP-CHTS estimates or are appropriate to use for management, since each survey design is subject to various methodological assumptions and methods that could affect estimates of catch and effort.

Reef Fish Amendments 50(A-F)

In 2017, the Council began working on amendments to create a state management program for red snapper that would allow each state to set various management measures that apply to private anglers and state permitted charter vessels landing red snapper in that state. This comprehensive process included the development of six amendments (Amendments 50A-F) for the Reef Fish FMP, including a Program Amendment (GMFMC 2019a) and five individual state amendments, one for each Gulf state (GMFMC 2019b-f). NMFS published a final rule implementing these amendments in 2020 (85 FR 6819, February 6, 2020). The rule allocated each state a portion of the red snapper private angling component annual catch limit (ACL) and required each state to constrain landings to its ACL.

State Fishery-Dependent Reporting Programs and Need for Calibration

Under state management, each state uses its own data collection program to estimate private angler red snapper harvest and constrain landings to its state specific ACL. However, NMFS has observed differences (sometimes substantial) between federal estimates of recreational catch and each state's own estimate. Specifically, the Alabama and Mississippi surveys tend to generate much lower landings estimates than the federal survey. Further, the red snapper catch limits, such as the overfishing limit (OFL) and total recreational ACL, are based, in part, on private-angling landings estimated using the Federal data collection system, and NMFS uses the estimates from the federal survey to determine whether landings exceed the total recreational ACL (quota) and the stock OFL. Therefore, there is a need to calibrate state and federal landing estimates. The calibration allows estimates produced using one method to be compared to the estimates produced using a different method. In the case of the Gulf red snapper, calibrations facilitate conversion of ACLs in MRIP-CHTS units to the state survey units, which are used to monitor harvest.³ In July 2019, NMFS published a white paper⁴ detailing the data available and the need for calibration of the Gulf state survey-generated catch and effort data if it is to be considered for use in stock assessment models.

Initial Red Snapper Calibration Determination

In January of 2023, NMFS implemented a framework adjustment to the Reef Fish FMP (GMFMC 2021) that applied calibration ratios to the federal ACLs for each state by which states would manage to in their own units. The calibration ratios that are currently in place are in Table 1.1.1.

³ Although the state and federal surveys generate estimates measured in pounds of fish, these estimates are not directly comparable, as described above. To signify that the estimates use different scales, this document uses the term “units” to differentiate between the federal and various state catch limits.

⁴ <https://media.fisheries.noaa.gov/dam-migration/94100569.pdf>

Table 1.1.1: Current calibration for each of the Gulf states. The ratio is multiplied by the state-specific federal ACL to get state ACLs in each state’s units.

State	Ratio of state landings to MRIP-CHTS landings
Florida	1.0602
Alabama	0.4875
Mississippi	0.3840
Louisiana	1.06
Texas	1*

*No calibration adjustment is made to Texas’s data.

Alabama’s Snapper Check to MRIP-CHTS ratio was calculated from the ratio of the means of the 2018-2019 landings in pounds (lb), and was equal to 0.4875. For Florida and Mississippi, two ratios were used to convert from the state surveys to MRIP-CHTS. Both Florida and Mississippi used the mean of a three-year (i.e., 2015-2017) time series of MRIP-FES to MRIP-CHTS red snapper private mode landings. For Florida, private mode red snapper landings from May 2015 through December 2019 were used to estimate a Gulf Reef Fish Survey (GRFS; now, State Reef Fish Survey [SRFS]) to MRIP-FES ratio. When the Florida ratios were combined, the result was a ratio of 1.0602 between GRFS and MRIP-CHTS. The Mississippi Tails n’ Scales (TNS) to MRIP-FES ratio was based on the mean red snapper landings from 2018 and 2019. When the two ratios were combined, the result was a TNS to MRIP-CHTS ratio of 0.3840. The SSC concluded that the methods used to generate conversion ratios between Gulf state surveys and MRIP-CHTS data are appropriate for the monitoring of the red snapper state-specific ACLs (Table 1.1.1).

Updating Red Snapper Calibrations for Mississippi, Alabama, and Florida

At its June 2022 meeting, the Council directed the SSC to review state private recreational red snapper calibration ratios using more recent state survey data and provide a recommendation to the Council on change(s) to ratios, if necessary, prior to the January 2023 Council meeting. State agency staff from Mississippi, Alabama, and Florida analyzed contemporary landings data and produced updated calibration ratios. A summary of each state’s presentation and subsequent SSC discussions can be found in the January 2023 SSC meeting summary report.⁵ The SSC reviewed the proposed calibration using the following criteria:

- Is the proposed revised calibration ratio calculated in a method that is similar to the which was approved as consistent with the best scientific information available (BSIA) by the SSC in August 2022?
- Is the justification for the year(s) and MRIP waves(s) recommended for calculating the proposed revised calibration ratio sufficient? If not, describe why and if possible, offer alternatives.

⁵ <https://gulfcouncil.org/wp-content/uploads/Gulf-Standing-RF-Socio-Eco-SSC-Summary-Jan-2023-01202023.pdf>

- Are there any additional clarifications necessary for considering a state’s proposed revised calibration ratio as being consistent with BSIA?

The SSC provided rationale and recommended updated calibration values for all three states, which are summarized below.

Florida

Florida did not select a preferred method for updating calibrations, relying instead on the judgement of the SSC to determine the most appropriate time series. The SSC discussed potential changes to Florida’s calibrations and agreed with Florida’s justification for excluding 2020 due to disruption of the catch portion of the survey during the COVID-19 pandemic. In addition, the SSC discussed the merits of not using 2015 – 2017 data due to the inclusion of the CHTS telephone survey, which included biases not in the current survey. The SSC discussed whether it was more appropriate to sum the landings between the surveys and then determine the ratio, or to average the ratios for the years considered. An SSC member noted that the direction from NOAA Office of Science and Technology (OST) was to sum the landings between the surveys and then determine the ratio.

The SSC recommended that the proposed Florida calibration from SRFS to MRIP-CHTS for the private angling component of red snapper using data from 2018, 2019, and 2021 to determine the updated calibration ratio of 1.34 lb ww. In addressing the terms of reference, the SSC found that the methodology used by Florida was similar to that proposed as BSIA in August of 2020. The SSC recommended using 2018, 2019, and 2021 for Florida’s updated calibration ratio based on the aforementioned justification. After discussing the changing relationship between MRIP-CHTS and MRIP-FES from 2015 to 2021, the SSC sought no further clarification on Florida’s proposal.

Alabama

Alabama’s preferred method for updating calibrations was to include data solely from 2020 and 2021. Alabama reported that the number of trips estimated to be taken in 2018 and 2019 were more than for 2020 and 2021. The SSC questioned whether it was appropriate for Alabama to exclude 2018 and 2019 data, solely based on the calibration ratio for 2018 and 2019 being lower. The SSC noted that there was not a considerable change in methodology in sampling between 2018 and 2021, and that the rationale for including 2020 was solid, given that Alabama’s angler intercepts and effort survey were functioning as intended during 2020. Daily effort, daily harvest, and red snapper body length and weight compositions of landings declined in 2020 and 2021 compared to 2018 and 2019, but the biomass observed in 2018 and 2019 was lower.

Alabama reported that there were 28 days of recreational red snapper fishing in 2018, 34 days in 2019, 43 days in 2020, and 124 days in 2021. The Alabama representative added that longer season durations reduce the propensity for derby fishing behavior, resulting in lower daily estimates of catch and effort. The SSC noted that management was consistent from 2018 – 2021, but the relationship between estimates generated by Snapper Check and MRIP-CHTS was differentiating with time, and Alabama acknowledged that the reason for that changing

relationship should be investigated. The SSC discussed whether 2021 may be more different from 2018 – 2020, given the near three-fold increase in the fishing season duration in that year, and in the daily estimates of catch and effort. However, the SSC concluded that 2018 – 2021 were similar enough in most respects to be considered together.

The SSC recommended using Alabama Snapper Check recreational red snapper data from 2018 through 2021, resulting in an updated calibration ratio to 0.548 lb ww. In addressing the terms of reference, the SSC found that the methodology used by Alabama was similar to that proposed as BSIA in August of 2020. The SSC did not think there was adequate justification for using only 2020 and 2021 for Alabama’s calibration ratio.

Mississippi

Mississippi’s preferred scenario for updating the calibration ratio from Mississippi state Tails n’ Scales data to federal MRIP-CHTS data would use only waves 3 and 4 from 2018 – 2020. The Mississippi representative clarified that the calibration ratio between MRIP-CHTS and MRIP-FES used originally by Mississippi was the same used in August 2020 by NMFS; however, this ratio changes with time and years used, and the ratio has been updated from 2.18 to 1.66. This change results in a revised calibration ratio of 0.503.

Mississippi reported the magnitude of catch for 2019 and 2021 were both implausibly high, but accepted including 2019 to have a consistent, three-year time series to inform its calibration. The SSC discussed the merits of including waves 3 and 4 from 2019 but not 2021 to inform calibration, and ultimately concluded that the method was acceptable. They noted that it was unlikely there was much risk to the red snapper stock in recommending Mississippi’s proposal, versus also including waves 3 and 4 from 2021

The SSC recommended that the proposed Mississippi calibration from Tails n’ Scales to MRIP-CHTS use data from waves 3 and 4 from 2018-2020. The updated calibration ratio is 0.503 lb ww. In addressing the terms of reference, the SSC found that the methodology used by Mississippi was similar to that proposed as BSIA in August of 2020. The SSC agreed with excluding 2021 due to the implausibility of that estimate, and accepted the justification provided by Mississippi for using only waves 3 and 4.

Calibration Update Summary

With these recommendations, red snapper private recreational calibration ratios would change for Florida, Alabama, and Mississippi with the initial calibration ratios being retained for Louisiana and Texas (Table 1.1.2).

Table 1.1.2. Updated calibration ratios indicated as an appropriate method for quota monitoring by the SSC to convert state landings data collected in their respective state-specific data collection program to MRIP-CHTS units for monitoring the state ACLs.

State	Ratio of state landings to MRIP-CHTS landings
Florida	1.34
Alabama	0.548
Mississippi	0.503
Louisiana	1.06 [†]
Texas	1*

[†]Calibration ratio not updated.

*No calibration adjustment.

Current Red Snapper landings and management

The current red snapper catch limits were implemented in a January 2023 framework action. NMFS published a proposed rule on March 2, 2023, that would update catch limits as outline in Table 1.1.3. If implemented, these proposed catch limits are expected to take effect prior to June 1, 2023, when the federal for-hire component and most Gulf state private component recreational seasons commence.

Table 1.1.3. Current Gulf red snapper catch limits by type and sector in pounds whole weight. For a modified OFL and ABC, the remaining catch limits would be calculated relative to the previous catch limit as specified.

Catch Limit Type	Current Catch Limits	Proposed Catch Limits	Calculation
OFL	25,600,000	18,910,000	N/A
ABC	15,400,000	16,310,000	13.7% less than OFL
Total ACL	15,400,000	16,310,000	ACL = ABC
Commercial ACL	7,854,000	8,318,100	51% of ABC
Recreational ACL	7,546,000	7,991,900	49% of ABC
Federal For-Hire ACL	3,191,958	3,380,574	42.3% of Recreational ACL
Federal For-Hire ACT	2,904,682	3,076,322	9% less than For-Hire ACL
Private Angling ACL	4,354,042	4,611,326	57.7% of Recreational ACL
Private Angling ACT	3,483,234	3,689,061	20% below Private Angling ACL
Florida ACL	1,951,569	2,066,889	44.822% of Private Angling ACL
Alabama ACL	1,145,026	1,212,687	26.298% of Private Angling ACL
Mississippi ACL	154,568	163,702	3.55% of Private Angling ACL
Louisiana ACL	832,493	881,686	19.12% of Private Angling ACL
Texas ACL	270,386	286,363	6.21% of Private Angling ACL

Note: Values are in pounds whole weight. Recreational data are in MRIP-CHTS units.

Note: Changes in the respective Gulf states ACLs are being considered simultaneously in another action to address issues related to calibration of recreational data among the various state data collection programs.

1.2 Background: Gray snapper management and landings

Southeast Data, Assessment, and Review (SEDAR) 51 and Amendment 51

Gray snapper is managed as a single stock, with a combined ACL and ACT for the recreational and commercial sectors. Prior to 2018, the status of the gray snapper stock had not been evaluated in a stock assessment. In 2018, a gray snapper benchmark stock assessment was completed (SEDAR 51 2018) and reviewed by the Council’s SSC. The SSC accepted SEDAR 51 as consistent with BSIA and determined that the stock was experiencing overfishing as of 2015.

In Amendment 51 (GMFMC 2019g), the Council established stock status reference points for gray snapper, setting the MSY proxy as the yield when fishing at F based on the MSY proxy of 26% of the spawning potential ratio (SPR). The Council set the Maximum Fishing Mortality Threshold (MFMT) equal to $F_{26\%SPR}$. MSST was set equal to half of B_{MSY} (or MSY proxy), and the Optimum Yield at 90% of F_{MSY} or MSY PROXY. Amendment 51 also set updated catch limits for gray snapper based on the SSC’s recommendations. The Council applied the ACL/ACT Control Rule (using landings from 2014-2017) to establish an 11% buffer between the ABC and the ACL (Table 1.2.1).

Table 1.2.1: Current catch levels for gray snapper established in Amendment 51.

OFL (mp ww)	ABC (mp ww)	ACL (mp ww)
2.57	2.51	2.23

Gray Snapper Landings

Total annual landings of gray snapper have ranged from 2.576 mp ww in 2010 to 5.453 mp ww in 2012 (Table 1.2.2). From 2012 through 2017, landings averaged 4.96 mp ww without trend. The landings in 2010 may have been unusually low because of reduced fishing effort following the *Deepwater Horizon* MC252 oil spill. The majority of landings are from the recreational sector and gray snapper are frequently harvested by anglers in both inshore and offshore waters off Florida. The other Gulf states have relatively lower landings. Since the implementation of an ACL and ACT in 2012, total landings have not exceeded the ACL. If the ACL is exceeded for gray snapper, the AM requires in-season monitoring of the stock in the following year and, if the stock ACL is reached or projected to be reached, NMFS will close the harvest of gray snapper for the remainder of the fishing year (GMFMC 2011).

Table 1.2.2: Commercial and recreational landings of gray snapper by sector from 2001 through 2021. Recreational data is in Marine Recreational Information Program Fishing Effort Survey (MRIP-FES) units.

Year	Recreational Landings (lb ww)	Commercial Landings (lb ww)	Total Landings (lb ww)
2001	3,975,355	198,474	4,173,829
2002	2,467,762	231,703	2,699,465
2003	4,023,545	197,524	4,221,069
2004	5,160,472	230,789	5,391,261
2005	3,682,875	234,513	3,917,388
2006	2,995,692	203,103	3,198,795
2007	3,205,806	150,458	3,356,264
2008	3,870,136	150,990	4,021,126
2009	3,437,455	179,479	3,616,934
2010	2,463,242	112,307	2,575,549
2011	3,412,355	192,906	3,605,261
2012	5,273,610	179,006	5,452,616
2013	4,689,603	143,651	4,833,254
2014	4,924,553	198,897	5,123,450
2015	4,034,437	164,787	4,199,224
2016	4,994,530	156,192	5,150,722
2017	4,862,017	136,857	4,998,874
2018	4,209,127	111,892	4,321,019
2019	4,486,085	114,165	4,600,250
2020	4,571,986	91,113	4,663,099
2021	4,691,134	103,788	4,794,923

Source: SEFSC Recreational MRIP - FES Data (January 26, 2023); Commercial ACL Data (2001-2013: October 9, 2020; 2014-2021: October 19, 2022). Note Gulf Recreational landings reported to the Marine Recreational Information Program exclude Monroe County.

SEDAR 75 and SSC recommendations

In December 2022, the SEFSC finalized a new stock assessment report for gray snapper (SEDAR 75).⁶ SEDAR 75 resolved several concerns from the previous model (SEDAR 51 2018), and incorporated updated recreational landings data calibrated to MRIP-FES. The assessment incorporated data through 2020.

The SSC reviewed the results of SEDAR 75 during its January 2023 meeting. A summary of the presentation and SSC discussion is available in the meeting summary report.⁷ The SSC determined that the assessment was consistent with BSIA. The stock is not estimated to be overfished or undergoing overfishing as of 2020.

⁶ <https://sedarweb.org/documents/sedar-75-gulf-of-mexico-gray-snapper-final-stock-assessment-report/>

⁷ <https://gulfcouncil.org/wp-content/uploads/Gulf-Standing-RF-Socio-Eco-SSC-Summary-Jan-2023-01202023.pdf>

The SSC discussed the use of $F_{26\%SPR}$ for gray snapper, and the parallels drawn at the time for Amendment 51 with the productivity of gray snapper compared to red snapper. At the SSC’s January 2019 meeting, the SEFSC presented updated projections for gray snapper using three different values for F_{MSY} proxies ($F_{26\%SPR}$, $F_{30\%SPR}$, and $F_{40\%SPR}$), along with changing the MSST from $1-M*BMSY$ to $0.5*BMSY$. The SSC found the presented analyses to be statistically sound and appropriate, and ultimately recognized that $F_{26\%SPR}$ is scientifically acceptable as a proxy for MSY, but maintained its previous recommendation of the more risk-averse proxy using $F_{30\%SPR}$ because of the uncertainty in the SEDAR 51 assessment.

When reviewing SEDAR 75, the SSC requested projections using an MSY proxy of $F_{26\%SPR}$, consistent with the status quo from Amendment 51 to compare to the results of $F_{30\%SPR}$. However, the SSC acknowledged that recruitment and biomass would be expected to change with time, and noted that $F_{26\%SPR}$ is likely at the lower end of the acceptable spectrum of plausible MSY proxies for gray snapper. The SSC did not consider gray snapper less productive than red snapper, with respect to selecting an F_{MSY} proxy, but did comment that $F_{26\%SPR}$ was among the lowest established values in the Gulf.

The SSC discussed the assumption about future recruitment that is necessary to inform projections used to generate catch advice. Currently, the OFL for gray snapper uses the average model-derived recruitment deviations over the time period from the Beverton-Holt stock recruit relationship, and the ABC is set at 75% of the F_{MSY} proxy. The SSC noted that although recruitment has been observed to be much higher than the recent long-term mean, it is not expected to remain that high. SSC members discussed the merits of using long- and short-term recruitment means for OFL versus the ABC. An $F_{26\%SPR}$ represents the most optimistic plausible stock productivity estimate by the SSC in 2019, and recruitment is higher than the mean in recent history; however, the model does carry substantial uncertainty about certain parameters like recruitment, so it may be reasonable to consider those facts when evaluating the amount of risk to accept in the OFL and ABC projections. The SSC expressed some reservation about relying heavily on the recent recruitment estimates because there no definitive explanation of where that strong recruitment signal is coming from. As such, the SSC recommended continuing to use the long-term average recruitment deviations for the OFL. The SSC agreed that the ABC should be projected using 75% of the F_{MSY} proxy (Table 1.2.3).

Table 1.2.3: SSC recommended catch levels for gray snapper with OFL set to the yield at $F_{26\%SPR}$ and the ABC set to 75% of $F_{26\%SPR}$ for the period of 2024-2028. Note these values are in MRIP-FES.

Year	OFL (mp ww)	ABC (mp ww)
2024	9.402	7.063
2025	8.351	6.633
2026	7.405	6.199
2027	6.610	5.795
2028	5.969	5.438

As a second alternative, the SSC presented a constant catch recommendation. The OFL and ABC are calculated using a 5-year average of the projected yield (2024-2028) at $F_{26\%SPR}$ (Table 1.2.4). This approach would account for some of the uncertainty in the assumed recruitment relationship.

Table 1.2.4: SSC recommended constant catch levels for gray snapper with OFL and ABC set to a 5-year average of projected yield at $F_{26\%SPR}$. Note these values are in MRIP-FES.

Years	OFL (mp ww)	ABC (mp ww)
2024 - 2028	7.547	6.226

1.3 Purpose and Need

The purpose is to 1) update state specific private angling component calibration ratios and ACLs to provide a more accurate estimate of state landings for red snapper management; and 2) update gray snapper catch limits including the OFL, ABC, ACL, and ACT based on SEDAR 75 and approved as BSIA by the SSC.

The need for this action is to improve management of red snapper and gray snapper. For red snapper, more contemporary state private recreational landings data has been used to modify calibration ratios for Mississippi, Alabama, and Florida. These updated calibration ratios will be used to inform catch levels for the private recreational sector. For gray snapper, a more recent stock assessment has produced contemporary yield projections and incorporates private recreational data from the Marine Recreational Information Program Fishing Effort Survey. Considering an update to stock catch levels consistent with BSIA is necessary.

1.4 History of Management

1.4.1 Red Snapper

The **Fishery Management Plan (FMP) for Reef Fish Resources in the Gulf of Mexico (Reef Fish FMP)** was implemented in November 1984. The original list of species included in the management unit consisted of snappers, groupers, and sea basses. This summary focuses on management actions pertinent to catch limits of red snapper. A complete history of management for the **Reef Fish FMP** is available on the Council’s website⁸ including other actions affecting red snapper management.

In 1990, **Amendment 1** established the first red snapper rebuilding plan. From 1990 through 2009, red snapper harvest was managed using an annual total allowable catch (TAC), which was divided 51% to the commercial and 49% to the recreational based on the average of historical landings during 1979 through 1987. Amendment 1 also established a commercial red snapper quota of 3.1 mp ww. There was no recreational quota specified, only a bag limit of seven fish

⁸ <https://gulfcouncil.org/fishery-management/implemented-plans/reef-fish/>

and a minimum size limit of 13 inches total length (TL) (GMFMC 1989). Based on the 51:49 commercial to recreational sector allocation, the commercial quota implied a TAC of approximately 6.1 mp ww in 1990, followed by explicit TACs of 4.0 mp ww in 1991 and 1992, 6.0 mp ww in 1993 through 1995, and 9.12 mp ww from 1996 through 2006. The TAC was reduced to 6.5 mp ww in 2007 and 5.0 mp ww in 2008 and 2009 (GMFMC 1991).

The **Generic Sustainable Fisheries Act Amendment** (GMFMC 1999) required the establishment of quotas for recreational and commercial fishing that, when reached, result in a prohibition on the retention of fish caught for each sector for the remainder of the fishing year. With the establishment of a recreational quota in 1997, the NMFS Southeast Regional Administrator was authorized to close the recreational season for each species when the quota is reached, as required by the Magnuson-Stevens Act.

In 2006, **Amendment 26** established a red snapper IFQ program for the commercial sector. Commercial fishermen received red snapper shares based on their catch history. Allocation of the annual commercial harvest of red snapper is awarded to IFQ shareholders each year based on the commercial ACL and how many shares they hold. They are then able to fish that allocation throughout the year until they run out of allocation. Both shares and allocation are transferable, so a fisherman may purchase either shares or allocation from another fisherman during the fishing year (GMFMC 2006).

From 2010 through 2012, the SSC recommended the red snapper acceptable biological catch (ABC) at 75% of the OFL and the Council set the ACL equal to the ABC (GMFMC 2012). In 2010, the total ACL was increased to 6.945 mp ww. This increased the commercial quota from 2.550 mp ww to 3.542 mp ww and the recreational quota from 2.450 mp ww to 3.403 mp ww. In 2011, the ACL was raised to 7.185 mp ww, resulting in a 3.664 mp ww commercial quota and a 3.525 mp ww recreational quota. On August 12, 2011, NMFS published an emergency rule that, in part, increased the recreational red snapper quota by 345,000 lb for the 2011 fishing year.

In 2012, the SSC recommended that the ABC should be set at the yield corresponding to 75% of $F_{SPR26\%}$. The Council set the ACL equal to the ABC, which increased the ACL to 8.080 mp ww, resulting in a commercial quota of 4.121 mp ww and recreational quota of 3.96 mp ww (GMFMC 2012).

The **Generic ACLs/AMs Amendment** (GMFMC 2011) addressed a requirement in the Magnuson-Stevens Reauthorization Act of 2006 to establish ACLs and AMs for federally managed species.

A scheduled ACL increase in 2013 to 8.69 mp ww was cancelled due to an overharvest in 2012 by the recreational sector. After an analysis of the impacts of the overharvest on the red snapper rebuilding plan, the 2013 ACL was increased to 8.46 mp ww. In July 2013, the SSC reviewed a new benchmark assessment (SEDAR 31 2014), which showed that the red snapper stock was rebuilding faster than projected. The SSC used Tier 1 of the ABC and the rebuilding yield level was set as the yield that would rebuild the stock to 26% SPR by 2032 under a constant fishing mortality rate strategy ($F_{rebuild26\% SPR}$) (GMFMC 2013). This increased the ABC for 2013 to 13.50 mp ww, but the SSC warned that the catch levels would have to be reduced in future years

if recruitment returned to average levels. To reduce the possibility of having to decrease the ACL later, the Council set the 2013 stock ACL to 11.00 mp ww and the commercial quota at 5.61 mp ww and the recreational quota at 5.39 mp ww. Beginning in 2014, the recreational season length was set using an ACT that is 20% below the recreational ACL. A post-season AM that required an overage adjustment if the recreational ACL was exceeded if the stock was overfished was also implemented in 2014. The total ACL was set at 10.40 mp ww in 2014, 14.30 mp ww in 2015, 13.96 mp ww in 2016, and 13.74 mp ww in 2017 and subsequent years.

Amendment 40 divided the recreational quota into a federal for-hire component quota (42.3%) and a private angling component quota (57.7%) (GMFMC 2014). In 2015, this resulted in an ACT of 2.371 mp ww for the federally permitted for-hire component and 3.234 mp ww for the private angling component. The amendment also included a 3-year sunset provision on the separation of the recreational sector into distinct components. **Amendment 45** extended the separate management of the federal for-hire and private angling components for an additional 5 years through the 2022 red snapper fishing season (GMFMC 2016). In 2018, the ACT and ACL were 2.278 mp ww and 2.848 mp ww for the federally permitted for-hire component, and 3.108 mp ww and 3.885 mp ww for the private angling component.

For 2018, NMFS established a 51-day red snapper fishing season for the federal for-hire component [83 FR 17623] based on the component's ACT. For the private angling component, the 2018 and 2019 red snapper fishing seasons were set by the individual states through exempted fishing permits (EFP) approved by NMFS. The EFPs allocated a portion of the private-angling ACL to each state for harvest during the 2018 and 2019 fishing years.⁹

Amendment 36A (GMFMC 2017) modified the commercial IFQ programs. It included a provision that allows NMFS to withhold a portion of IFQ allocation at the start of the year equal to an anticipated quota reduction, which became effective in 2018.

A 2018 Framework Action titled **Modification of the Recreational Red Snapper Annual Catch Target Buffers** reduced the federal for-hire buffer by setting the ACT at 9% below the component's ACL for the 2019 fishing season only. **Amendments 50A-F** (GMFMC 2019a-f) became effective February 6, 2020, establishing a state management program in each Gulf state for the private angling component's harvest of red snapper. Under Amendments 50A-F, each Gulf state is responsible for managing its annual allocation of the private angling component ACL for red snapper using size limits, bag limits, and seasonal closures. If a state exceeds its allocation in a given fishing year, then the amount of the overage would be deducted from that state's quota for the following fishing year. The individual Gulf states are responsible for their own quota monitoring, and each has a data collection program in place to monitor that state's private angling landings. The individual states would determine if additional catch limit buffers (e.g., an ACT set lower than an ACL, with the fishing season based on the ACT) are necessary to successfully manage that state's allocated quota. A private angling ACT remains in place in the

⁹ For more information: <https://www.fisheries.noaa.gov/southeast/state-recreational-red-snapper-management-exempted-fishing-permits>

event a state's delegation is no longer effective. The federal for-hire component's harvest of red snapper will continue to be federally managed.

A Framework Action implemented in 2019 titled **Modify Red Snapper and Hogfish Catch Limits** increased the ACL for red snapper for 2019 and subsequent years. In 2019 another Framework Action titled **Modification to the Recreational For-hire Red Snapper ACT Buffer** established a federal for-hire ACT 9% below the component's ACL, extending the buffer reduction adopted through the 2018 Framework Action.

Two Framework Actions titled **Gulf of Mexico Red Snapper Recreational Data Calibration and Recreational Catch Limits** and **Modification of Annual Catch Limits for Gulf of Mexico Red Snapper** were implemented on January 1, 2023. The Data Calibration Framework modified recreational catch limits for the state-specific private angling ACLs. The Catch Limits Framework increased red snapper catch limits for both the commercial and recreational sectors.

Another Framework Action titled **Modification of Catch Limits for Gulf of Mexico Red Snapper** would reduce the OFL but increase other catch limits for red snapper after implementation. A proposed rule to implement this framework actions was published March 2, 2023. As of the date of this framework action, a final rule has not yet been published.

1.4.2 Gray snapper

The following summary describes management actions that affect the gray snapper component of the reef fish fishery in the Gulf. More information on the Reef Fish FMP and other Council FMPs can be obtained from the Council website.¹⁰

Fishery management unit: Gray snapper was included in the 33 species (15 snappers, 15 groupers, and 3 sea basses) that comprised the original fishery management unit (FMU) of the Reef Fish FMP (GMFMC 1981). Species have been added and subtracted through **Amendments 1 and 15** (GMFMC 1989, 1997) and the **Generic ACL/AM Amendment**¹¹ (GMFMC 2011). These changes did not affect gray snapper, which has always been in the FMU.

Stock status determination criteria: **Amendment 1** (GMFMC 1989) established an OY goal for all reef fish of 20% spawning stock biomass per recruit (SSBR) relative to the SSBR that would occur with no fishing, and an overfished stock was defined as a stock biomass below 20% SSBR. Overfishing was defined, for a stock that is not overfished, as fishing at a rate that would not allow harvest of OY on a continuing basis, and for a stock that is overfished, as fishing at a rate that is not consistent with rebuilding the stock to 20% SSBR. The SSBR terminology was later replaced with spawning potential ratio. The **Generic Sustainable Fisheries Act Amendment** (GMFMC 1999), was partially approved and measures were implemented in November 1999 that set MFMT for gray snapper at $F_{30\% SPR}$. Estimates of MSY, MSST, and OY were

¹⁰ http://www.gulfcouncil.org/fishery_management_plans/index.php

¹¹ Generic Annual Catch Limits/Accountability Measures Amendment for the Gulf of Mexico Fishery Management Council's Red Drum, Reef Fish, Shrimp, Coral and Coral Reefs Fishery Management Plans

disapproved because they were based on SPR proxies rather than biomass-based estimates. The **Generic ACL/AM Amendment** (GMFMC 2011), established a gray snapper OFL of 2.88 mp ww, ACL of 2.42 mp ww, ACT of 2.08 mp ww, and an accountability measure.

Catch limits and stock status determination criteria: **Amendment 51** established status determination criteria for gray snapper including an estimates of maximum sustainable yield (MSY), minimum stock size threshold (MSST), and optimum yield (OY). This amendment also modified the MFMT. The amendment additionally modified the gray snapper catch limits and removed the annual catch target. The 2020 gray snapper annual catch limit was set to 2,240,000 lb and the annual catch limit for 2021 and subsequent years was set at 2,230,000 lb. This final rule was effective December 17, 2020.

Other management measures: A 12-inch TL minimum size limit was established for gray snapper in **Amendment 1** (GMFMC 1989) for the commercial and recreational sectors. Gray snapper was also included in the 10-snapper recreational aggregate bag limit established through that amendment.

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1: Update red snapper private recreational catch limits for Mississippi, Alabama, and Florida based on calibration adjustments

Alternative 1: No Action. Retain the current state private recreational data calibration ratios for Mississippi, Alabama, and Florida.

The current catch limits were implemented in January 2023. A proposed rule, which if implemented would be effective by June 1, 2023, would change the catch limits as outlined in table 2.1.1 below.

Table 2.1.1. Current and Proposed annual catch limits (ACLs) under Alternative 1. All catch limits are in pounds whole weight (lb ww).

State	Regulation	ACL – MRIP-CHTS Units	Ratio	ACL (State Units)
Alabama	Current	1,145,026	0.4875	558,200
	Proposed	1,212,687		591,185
Florida	Current	1,951,569	1.0602	2,069,053
	Proposed	2,066,889		2,191,316
Mississippi	Current	154,568	0.3840	59,354
	Proposed	163,702		62,862

Alternative 2: Update state private recreational data calibration ratios of red snapper for Mississippi, Alabama, and Florida; ACLs are modified based on the revised ratios.

The ratios would be applied to the federal state-specific ACLs that are in place. A proposed rule, which if implemented would be effective by June 1, 2023, would change the catch limits as outlined in table 2.1.2 below.

Table 2.1.2. Current and proposed catch limits for Alternative 2. All catch limits are in pounds lb ww.

State	Regulation	ACLs – MRIP-CHTS Units	Ratio	2024+ ACL (lb ww) (State Units)
Alabama	Current	1,145,026	0.548	627,474
	Proposed	1,212,687		664,552
Florida	Current	1,951,569	1.34	2,615,102
	Proposed	2,066,889		2,769,631
Mississippi	Current	154,568	0.503	77,748
	Proposed	163,702		82,342

Discussion:

In this action, the Council would modify the Gulf of Mexico (Gulf) state-specific red snapper calibration ratios and associated state-specific ACLs for Alabama, Florida, and Mississippi based on updated landings data from these three states and recommendations from the Gulf of Mexico Fishery Management Council's (Council) Scientific and Statistical Committee (SSC).

Amendments 50A-F to the Fishery Management Plan (FMP) for Reef Fish Resources in the Gulf (Reef Fish FMP) (GMFMC 2019a-f) established state management for the harvest of red snapper by the private angling component of the recreational sector. The state allocations and ACLs established in Amendment 50A were: Alabama, 26.298%; Florida, 44.822%; Louisiana, 19.120%; Mississippi, 3.550%; and Texas, 6.210%.

A framework action (Calibration Framework) effective January 1, 2023, implemented calibration ratios developed by the NOAA Office of Science and Technology (OST) and the Gulf states to convert the state-specific ACLs from the Marine Recreational Information Program – Coastal Household Telephone Survey (MRIP-CHTS) units to Gulf state-specific survey units. These ratios are currently multiplied by the state-specific federal ACL (in MRIP-CHTS units) to arrive at the ACLs in state-specific units. The ratios implemented in the Calibration Framework are shown in Alternative 1 and Table 2.1.1.

Because the SSC only provided one recommendation for updating Alabama, Florida, and Mississippi's calibration ratios, there are only two alternatives considered in this Action. Texas does not have a calibration ratio and Louisiana did not present any updates to the SSC. Therefore, these states will not be discussed further in this section.

Under **Alternative 1**, each state would continue to operate under the calibration ratios implemented in the Calibration Framework. The calibration ratios that are currently used to convert ACLs in MRIP-CHTS units to ACLs in state units don't use the most recent state landings data and are no longer consistent with best scientific information available by the SSC. Selection of Alternative 1 is expected to result in state landings that are inconsistent with the federal state-specific ACL. This is because the ratios that are currently used to convert federal catch limits into ACLs in state units are not based on the most recent and appropriate landings data for each state. Thus, although **Alternative 1** would result in a federal state-specific ACL that is the same as in **Alternative 2**, the landings allowed for each state would be lower than what the federal catch limits specified. Thus, under Alternative 1, recreational fishermen in each of these three states would be allowed to harvest less red snapper than the federal ACL for that state specifies. Therefore, **Alternative 1** is not consistent with the best scientific information available.

Under **Alternative 2**, the calibration ratios for Alabama, Florida, and Mississippi would be updated using more recent state landings data for each state as compared the MRIP-CHTS landings for those years. The updated ratios would allow for higher state specific ACLs in the state-specific units but the state ACLs in MRIP-CHTS units would remain the same. Selection of **Alternative 2** is expected to result in state landings that are consistent with the federal state-specific ACLs. This is because the updated calibration ratios proposed in this framework

convert federal catch limits into ACLs in state units using the most recent and appropriate landings data for each state. Thus, **Alternative 2** would allow for consistency between federal and state ACLs, and would allow for fishermen from each of the three states to harvest red snapper consistent with the federal ACL for that state, which equates to more red snapper than current regulations permit them to harvest (Table 2.1.3). Therefore, **Alternative 2** is based on the best scientific information available.

Table 2.1.3. Private angling component state ACLs (lb whole weight) for Alabama, Florida, and Mississippi in state units, and increases proposed for current and pending ACLs based on updated calibration ratios.

State	Catch Limits	State ACL (old calibration)	State ACL (new calibration)	Increase in state-specific units	Total Increase*
AL	Current	558,200	627,474	69,274	106,352
	Pending	591,198	664,552	73,354	
FL	Current	2,069,053	2,615,102	546,049	700,578
	Pending	2,191,315	2,769,631	578,316	
MS	Current	59,354	77,748	18,394	22,988
	Pending	62,862	82,342	19,480	

*Equal to Pending State ACL (new calibration) minus Current State ACL (old calibration).

Regardless of the alternative selected in this action, the federal ACLs in MRIP-CHTS units for Alabama, Florida, and Mississippi would not change. Although the calibration ratios that are currently in effect were based on the best available science when they were implemented, more recent landings data from the three Gulf states indicate these ratios no longer represent the relationship between each state's survey and the federal survey. The revised ratio for each state under **Alternative 2** would increase the catch limits in the state-specific units, but would not increase the catch limits MRIP-CHTS units. Thus, no increase of total catch is being allowed, but because the relationship between each state's landings estimates and the federal landings estimates have changed, each of the three states would be expected to increase the number of days that private anglers are permitted to harvest red snapper.

2.2 Action 2: Update gray snapper stock catch limits

Alternative 1: No Action. The OFL for gray snapper will remain 2.57 mp whole weight ww and the ABC will remain 2.51 mp ww. The ACL for gray snapper will be reduced from the ABC by 11% (2.23 mp ww). The recreational catch data will remain in Marine Recreational Information Program (MRIP) - Coastal Household Telephone Survey (CHTS) units.

OFL (mp ww)	ABC (mp ww)	ACL (mp ww)
2.57	2.51	2.23

Alternative 2: Catch limits for gray snapper will be updated based on projections informed by SEDAR 75 and recommendations from the SSC. Recreational catch data will be modified to MRIP-Fishing Effort Survey (FES) units. OFL is set to the yield at $F_{26\%SPR}$ and the ABC is set to 75% of $F_{26\%SPR}$ for the period of 2024-2028. The ACL is set using the ACL/ACT Control with a buffer of 8% between the ABC and ACL (Appendix A).

Year	OFL (mp ww)	ABC (mp ww)	ACL (mp ww)
2024	9.402	7.063	6.498
2025	8.351	6.633	6.102
2026	7.405	6.199	5.703
2027	6.610	5.795	5.331
2028+	5.969	5.438	5.003

Alternative 3: Catch limits for gray snapper will be updated based on projections informed by SEDAR 75 and recommendations from the SSC. Recreational catch data will be modified to MRIP-FES units. The OFL and ABC are set to a 5-year average of projected yield at $F_{26\%SPR}$. The ACL is set using the ACL/ACT Control Rule with a buffer of 8% between the ABC and ACL (Appendix A).

Years	OFL (mp ww)	ABC (mp ww)	ACL (mp ww)
2024 – 2028+	7.547	6.226	5.728

Discussion:

Action 2 would consider updates to the catch limits (OFL, ABC, and ACL) for gray snapper based on SEDAR 75 and OFL and ABC recommendations from the SSC. Additionally, **Alternatives 2 and 3** would update the catch limits to reflect that recreational catch and effort data are now provided by MRIP-FES as opposed to the MRIP-CHTS (See Chapter 1).

Alternative 1 (No Action) would maintain the current catch limits as set in Amendment 51 to the Fishery Management Plan for Reef Fish Resources in the Gulf of Mexico (Reef Fish FMP). These catch limits were based on the SEDAR 51 and were derived using recreational data from MRIP-CHTS, while recreational harvest data for gray snapper are now collected and monitored

using MRIP-FES. The catch limits in **Alternative 1** do not reflect the SSC's recent OFL and ABC recommendations.

Alternative 2 would modify catch limits for 2024 through 2028 by setting the OFL at the yield at $F_{26\%SPR}$ and the ABC at 75% of the yield at $F_{26\%SPR}$ each year. Catch limits in 2029 and future years would be set at the 2028 levels unless changes in future management actions. The SSC recommended setting the OFL based on long-term recruitment estimates, since recent recruitment has been very high and is not likely to be sustained. Because the stock biomass is above MSY, the OFL, ABC, and ACL would decrease each year from 2024 (OFL-9.402 mp; ABC-7.063 mp; ACL 6.498 mp) to 2028 (OFL-5.969 mp; ABC-5.438 mp; ACL-5.003 mp). The ACL would be set using an 8% buffer below the ABC as calculated from the Council's ACL/ACT Control Rule.

Alternative 3 would modify catch limits for 2024 through 2028+ by using a constant catch approach in making catch limits equal for each year. The OFL and ABC would be set to a 5-year average of projected yield $F_{26\%SPR}$ which equate to an OFL of 7.547 mp and an ABC of 6.226 mp. The ACL would be set at 5.728 mp using an 8% buffer below the ABC as calculated from the Council's ACL/ACT Control Rule.

The catch limits proposed in **Alternatives 2 and 3** differ from **Alternative 1** because of the recreational survey data used to generate those limits, and because the catch limits are based on projections obtained from SEDAR 75 rather than SEDAR 51. In **Alternative 1**, the catch limits are calculated using recreational data from MRIP-CHTS, while **Alternatives 2 and 3** catch limits are generated using recreational data from MRIP-FES. Conversions from MRIP-CHTS to MRIP-FES have generally resulted in higher recreational catch and effort values because MRIP-FES is accounting for more recreational fishing effort than previously estimated. MRIP-FES estimated recreational landings were 2.18 times higher than MRIP-CHTS recreational landings estimates on average between 2001 and 2021. The proposed gray snapper ACL in **Alternative 2** is nearly triple the current (**Alternative 1**) ACL, and the proposed 2024 ACL in **Alternative 3** is nearly 2.5 times the current (**Alternative 1**) ACL. However, much of the increase in the ACL in **Alternatives 2 and 3** are due to the conversion from MRIP-CHTS to MRIP-FES.

Alternatives 2 and 3 would result in equal allowable catch over the 2024 through 2028 fishing years. The OFL, ABC, and ACL in **Alternative 2**, when averaged over the 5-year period from 2024 through 2028 are equal to the corresponding catch limits in **Alternative 3**. **Alternative 2** allows for higher catch limits in the initial years of management, but catch limits decline each successive year (becoming less than **Alternative 3** in 2026). Catch limits considered in both **Alternatives 2 and 3** are informed by the same assumptions of constant recruitment and catch over the 5-year time period.

CHAPTER 3. REFERENCES

GMFMC. 1989. Amendment number 1 to the reef fish fishery management plan, includes environmental assessment, regulatory impact review, and regulatory flexibility analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 357 pp.

<https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/RF%20Amend-01%20Final%201989-08-rescan.pdf>

GMFMC. 1991. Regulatory amendment to the reef fish fishery management plan for setting the 1991 red snapper total allowable catch. Gulf of Mexico Fishery Management Council, Tampa, Florida. 47 pp.

<https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/Reef%20Fish%20Reg%20Amend%20-%201991-03.pdf>

GMFMC. 1997. Amendment 15 to the fishery management plan for the reef fish resources of the Gulf of Mexico, includes regulatory impact review, initial regulatory flexibility analysis, and environmental assessment. Gulf of Mexico Fishery Management Council. Tampa, Florida. 117 pp.

<https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/AMEND15.pdf>

GMFMC. 1999 Generic sustainable fisheries act amendment, to the following FMPs: Gulf coral and coral reef resources, coastal migratory pelagics, red drum, reef fish, shrimp, spiny lobster, stone crab. Includes regulatory impact review, initial regulatory flexibility analysis and environmental assessment. Gulf of Mexico Fishery Management Council, Tampa, Florida. 318 pp. <https://gulfcouncil.org/wp-content/uploads/Generic-SFA-amendment-1999.pdf>

GMFMC. 2006. Final amendment 26 to the Gulf of Mexico reef fish fishery management plan to establish a red snapper individual fishing quota program, including supplemental environmental impact statement, initial regulatory flexibility analysis, and regulatory impact review. Gulf of Mexico Fishery Management Council, Tampa, Florida. 298 pp.

<https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/Amend26031606FINAL.pdf>

GMFMC. 2011. Final generic annual catch limits/accountability measures amendment for the Gulf of Mexico Fishery Management Council's red drum, reef fish, shrimp, coral and coral reefs fishery management plans, including environmental impact statement, regulatory impact review, regulatory flexibility analysis, and fishery impact statement. Gulf of Mexico Fishery Management Council, Tampa, Florida. 406 pp.

<https://gulfcouncil.org/wp-content/uploads/Final-Generic-ACL-AM-Amendment-September-9-2011-v.pdf>

GMFMC. 2012. Final regulatory amendment to the fishery management plan for the reef fish resources of the Gulf of Mexico: Revise Fall recreational fixed closed season and set 2012 and 2013 quotas for red snapper, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 62 pp.

https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/Final%20Red%20Snapper%20Fall%20Season%20and%20Quota%20RegAmend%20-%202003-20-2012.pdf?_t=1586438138

GMFMC. 2013. Framework action to the fishery management plan for the reef fish resources of the Gulf of Mexico: Red snapper 2013 quota increase and supplemental recreational season, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 95 pp.

<http://www.gulfcouncil.org/docs/amendments/Final%20Red%20Snapper%20Framework%20Action%20Set%202013%20Quotas%2008-01-13.pdf>

GMFMC. 2014. Final Amendment 40 to the reef fish fishery management plan for the reef fish resources of the Gulf of Mexico – recreational red snapper sector separation. Gulf of Mexico Fishery Management Council, Tampa, Florida. 304 pp.

<http://www.gulfcouncil.org/docs/amendments/RF%2040%20-%20Final%2012-17-2014.pdf>

GMFMC. 2016. Amendment 45 to the fishery management plan for the reef fish resources of the Gulf of Mexico: Revision of the red snapper recreational sector separation sunset provision, including environmental assessment, fishery impact statement, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 161 pp.

https://gulfcouncil.org/wp-content/uploads/FISHERY%20MANAGEMENT/REEF%20FISH/RF%2045%20Final.pdf?_t=1585250888

GMFMC. 2017. Final amendment 36A to the fishery management plan for the reef fish resources of the Gulf of Mexico: Modifications to commercial individual quota programs, including environmental assessment, fishery impact statement, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 193 pp.

<http://gulfcouncil.org/wp-content/uploads/RF36A-Post-Final-Action-5-25-2017-with-bookmarks.pdf>

GMFMC. 2019a. Final amendment 50A to the fishery management plan for the reef fish resources of the Gulf of Mexico: state management program for recreational red snapper. Gulf of Mexico Fishery Management Council, Tampa, Florida. 278 pp. <http://gulfcouncil.org/wp-content/uploads/State-Management-Program-for-Red-Snapper-Final-5-23-2019.pdf>

GMFMC. 2019b. Louisiana management for recreational red snapper. Final amendment 50B to the fishery management plan for the reef fish resources of the Gulf of Mexico, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis.

Gulf of Mexico Fishery Management Council, Tampa, Florida. 75 pp.
https://gulfcouncil.org/wp-content/uploads/Louisiana-State-Management-5-23-2019_FINAL.pdf

GMFMC. 2019c. Mississippi management for recreational red snapper. Final amendment 50C to the fishery management plan for the reef fish resources of the Gulf of Mexico, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 75 pp.
https://gulfcouncil.org/wp-content/uploads/Mississippi-State-Management-5-23-2019_FINAL.pdf

GMFMC. 2019d. Alabama management for recreational red snapper. Final amendment 50D to the fishery management plan for the reef fish resources of the Gulf of Mexico, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 75 pp.
https://gulfcouncil.org/wp-content/uploads/Alabama-State-Management-5-23-2019_FINAL.pdf

GMFMC. 2019e. Florida management for recreational red snapper. Final amendment 50E to the fishery management plan for the reef fish resources of the Gulf of Mexico, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 75 pp.
https://gulfcouncil.org/wp-content/uploads/Florida-State-Management-5-23-2019_FINAL.pdf

GMFMC. 2019f. Texas management for recreational red snapper. Final amendment 50F to the fishery management plan for the reef fish resources of the Gulf of Mexico, including environmental assessment, regulatory impact review, and regulatory flexibility act analysis. Gulf of Mexico Fishery Management Council, Tampa, Florida. 74 pp.
https://gulfcouncil.org/wp-content/uploads/Texas-State-Management-5-23-2019_FINAL.pdf

GMFMC. 2019g. Final amendment 51 to the fishery management plan for the reef fish resources of the Gulf of Mexico including environmental assessment, fishery impact statement, regulatory impact review, and regulatory flexibility act analysis: Establish gray snapper status determination criteria and modify annual catch limits. Gulf of Mexico Fishery Management Council, Tampa, Florida. 144 pp.
<https://gulfcouncil.org/wp-content/uploads/RF-Amendment-51-Gray-Snapper-11132019.pdf>

GMFMC. 2021. Framework action to the fishery management plans for reef fish of the Gulf of Mexico: Gulf of Mexico red snapper recreational data calibration and recreational catch limits, including environmental assessment, regulatory impact review, and regulatory flexibility analysis. Gulf of Mexico Fishery Management Council. Tampa, Florida. [93 pp.](#)
<https://gulfcouncil.org/wp-content/uploads/B-8a-Red-Snapper-Data-Calibration-and-ACL-Modification-04072021.pdf>

APPENDIX A: ACL/ACT BUFFER SPREADSHEET

As of 03/07/2023

ACL/ACT Buffer Spreadsheet

version 4.1 - April 2011

Gulf Gray Snapper

Sector: Both

Years: 2018-2021

sum of points 3
max points 7.0

Buffer between ACL and ACT (or ABC and ACL) Unweighted 8

Min. Buffer	0	min. buffer	User adjustable
Max Unw. Buff	19	max unwtd. Buff	
Max Wtd Buff	25	max wtd. buffer	User adjustable

Component	Element score	Element	Selection	Element result
Stock assemblage	0	This ACL/ACT is for a single stock.	x	0
	1	This ACL/ACT is for a stock assemblage, or an indicator species for a stock assemblage		
Ability to Constrain Catch	0	Catch limit has been exceeded 0 or 1 times in last 4 years	x	0
	1	Catch limit has been exceeded 2 or more times in last 4 years		
		For the year with max. average, add 0.5 pts. For every 10 percentage points (rounded up) above ACL. Not applicable (there is no catch limit)	0.0	
		Apply this component to recreational fisheries, not commercial or IFQ fisheries		
Precision of Landings Data Recreational	0	Method of absolute counting		2
	1	MRP proportional standard error (PSE) <= 20		
	2	MRP proportional standard error (PSE) > 20	x	
		Not applicable (will not be included in buffer calculation)		
		Apply this component to commercial fisheries or any fishery under an IFQ program		
Precision of Landings Data Commercial	0	Landings from IFQ program		1
	1	Landings based on dealer reporting	x	
	2	Landings based on other		
		Not applicable (will not be included in buffer calculation)		
Timeliness	0	In-season accountability measures used or fishery is under an IFQ	x	0
	1	In-season accountability measures not used		
Sum				3

Weighting factor	Element weight	Element	Selection	Weighting
Overfished status	0	1. Stock biomass is at or above B_{OY} (or proxy).	x	0
	0.1	2. Stock biomass is below B_{OY} (or proxy) but at or above B_{MSY} (or proxy).		
	0.2	3. Stock biomass is below B_{MSY} (or proxy) but at or above minimum stock size threshold (MSS).		
	0.3	4. Stock is over fished, below MSS.		
	0.3	5. Status criterion is unknown.		