

2021 Gulf of Mexico Red Snapper Recreational Season Length Estimates for the Federal For-Hire Component

National Marine Fisheries Service (NMFS), Southeast Regional Office
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Introduction

Red snapper are managed in Gulf of Mexico (Gulf) federal waters from Texas to the west coast of Florida by the Gulf of Mexico Fishery Management Council (Council). The recreational sector in the Gulf includes a private angling component and a federal for-hire component. The federal for-hire component includes charter vessels and headboats with a federal charter/headboat permit for reef fish, allowing these vessels to fish in federal waters. For-hire vessels without a federal permit are restricted to fishing for red snapper in state waters only. The Gulf federal recreational fishing regulations for red snapper include a 16-inch total length minimum size limit, two-fish per person bag limit (no red snapper may be retained by the captain or crew of a vessel operating as a charter vessel or headboat), and a federal for-hire season beginning on June 1 and ending when the component annual catch target (ACT) is projected to be caught. The ACT is set below the annual catch limit (ACL) to account for management uncertainty.

Amendment 40 to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico increased flexibility in managing red snapper landings and minimized the chance of recreational ACL overages by separating the recreational sector into two components. Prior to implementation of Amendment 40 in 2015, recreational management measures were applied to the recreational sector as a whole, without distinguishing between the private angling and federal for-hire components. Amendment 40 defined two distinct components of the recreational sector as 1) a private angling component that includes private anglers fishing from privately owned vessels, as well as operators of state-permitted for-hire vessels that do not have a federal permit, and 2) a federal for-hire component that includes operators of federally permitted for-hire vessels. The amendment allocated the red snapper recreational ACL between the private angling (57.7%) and federal for-hire (42.3%) components.

Because the federal for-hire component had not exceeded its ACL, NMFS implemented a framework action in the beginning of 2019 that reduced the 20% buffer between the ACL and ACT to 9% percent for the 2019 fishing year. In February 2020, NMFS published a final rule to implement a subsequent framework action that retains the 9% buffer for 2020 and beyond.

In 2018 and 2019, NMFS issued exempted fishing permits to the Gulf states to allow them to test managing private anglers in state and federal waters. Subsequently, on February 6, 2020, NMFS implemented regulations to allow each Gulf state partial management of private angling for red snapper in federal waters. Each state agency sets its own private angling red snapper season in both state and federal waters off its state, monitors landings, and closes fishing when their ACL is reached. Each state also is able to set the private angling bag and size limits.

Although the states set seasons for the red snapper private angling component in state and federal waters, NMFS must still set a red snapper season throughout federal waters for the federal for-

hire component. Prior to June 1 each year, NMFS projects the federal for-hire season closing date and notifies the public of the closing date for the upcoming season. If subsequent data indicate that the ACT has not been reached, NMFS may re-open the season. The purpose of this report is to project the 2021 recreational red snapper federal for-hire fishing season length, and to characterize the uncertainty of those projections.

The Southeast Data, Assessment, and Review (SEDAR) 52 stock assessment for Gulf red snapper was completed and reviewed by the Council's Scientific and Statistical Committee (SSC) in 2018. The assessment indicated the Gulf red snapper stock is not considered to be overfished or undergoing overfishing, but is still recovering consistent with the plan to rebuild the stock by 2032. The SSC determined that the stock assessment represented the best scientific information available and acknowledged the red snapper acceptable biological catch (ABC) could be increased. In a 2018 framework action, the Council selected the SSC's constant catch ABC recommendation of 15.1 million pounds (mp) whole weight (ww), which is equal to the total ACL. This framework action was implemented on March 5, 2019. The red snapper recreational ACL is split between the private angling (57.7%) and federal for-hire (42.3%) components.

Analysis and Projections of the For-hire Component Season Length

The federal for-hire ACT for the 2021 fishing year, which was effective on March 23, 2020, is the same as the 2020 fishing year ACT. Both the ACL and ACT (in pounds whole weight [lbs ww]) are provided in **Table 1**. If a change to the ACT occurs in the 2021 fishing year, the season length could be adjusted using the recommended catch rates.

Table 1. The 2021 Gulf for-hire component red snapper ACL and ACT in pounds whole weight.

Management Target	Landings (lbs ww)
ACL	3,130,000
ACT	2,848,000

Federal for-hire catch rates were calculated by dividing the annual for-hire landings by the number of days the federal for-hire season was open. Catch rates (lbs/day) are calculated for each state. Southeast Region Headboat Survey (SRHS) and Louisiana for-hire preliminary landings are available for 2020. Two different methods were used to project season length. The first method used federal for-hire catch rates from the previous three years of complete data for all states (**Table 2**). Catch rates have remained consistent, but there was a decline in 2019. Hurricane Barry occurred during July 2019, potentially causing the reduction in catch rates seen in Louisiana and Alabama in the 2019 for-hire season when compared to previous years. Other reasons, such as a reduction in effort compression, could be causing the lower 2019 daily catch rates observed.

Table 2. Federal for-hire catch rates (lbs/day) from the last three years for each state and the total for all states (Method 1). Catch rates were calculated by dividing the annual for-hire federal landings by the number of days the federal for-hire season was open.

Year(s)	AL	FL	LA	MS	TX	Total
2017	16,532	19,501	3,658	607	7,455	47,753
2018	14,324	22,100	3,088	162	8,201	47,875
2019	12,135	19,045	1,827	667	7,597	41,271
Average 2017-19	14,330	20,215	2,858	478	7,751	45,633

Source: MRIP CHTS SEFSC Recreational ACL Database [February 4, 2021]. 2019 and 2020 landings are preliminary.

The second method used a combination of the most recent three years and estimates 2020 Marine Recreational Information Program (MRIP) landings data using effort. The three most recent years of data were used for SRHS (2018-2020), Texas (2017-2019), and Louisiana (2018-2020). MRIP for-hire 2020 landings for Alabama, Florida, and Mississippi were estimated based on preliminary effort. From 2017-2019, a strong positive correlation (0.81) was found comparing MRIP for-hire red snapper landings and effort when the federal for-hire season is typically open (waves three [May/June] and four [July/August]). Overall, the estimated 2020 MRIP for-hire effort for the three states combined was about 15% higher than the 2017-2019 average when the federal for-hire season is typically open (**Table 3**). The state specific differences in effort from the 2017-2019 average were used to estimate 2020 MRIP for-hire landings and combined with 2018-2019 data for an adjusted catch rate (**Table 4**). The values were combined with the 2018-2020 SRHS catch rate of 10,805 (lbs/day) which is slightly lower than the 2017-2019 SRHS average.

Table 3. MRIP FES for-hire effort (angler trips) combined from waves three (May/June) and four (July/August) (Method 2). 2020 data is preliminary.

Year	Alabama	Florida	Mississippi	Total
2017	72,666	376,213	12,329	461,208
2018	77,139	398,523	12,855	488,517
2019	98,432	438,583	14,924	551,939
2020	88,970	475,053	10,341	574,364
Average '17-'19	82,746	404,440	13,369	500,555
2020 to '17-'19	+8%	+17%	-23%	+15%

Source: MRIP FES data available at <https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads>.

Table 4. State-specific for-hire and the SRHS catch rates (lb/day). Catch rates in 2020 for AL, FL, and MS are adjusted based on preliminary effort.

Years	AL	FL	LA	MS	TX* (2017-19)	SRHS	Total
2017-2019 (Method 1)	12,858	17,176	2,715	387	1,024	11,473	45,633
2018-2020 (Method 2)	12,486	18,454	1,934	318	1,024	10,805	45,021

Source: MRIP CHTS SEFSC Recreational ACL Database [February 4, 2021]. 2019 and 2020 landings are preliminary. *2020 catch rates for TX were not estimated.

Season length projections were determined by cumulatively summing the total catch rates until the ACT was projected to be met. Season lengths were projected using federal for-hire catch rates for using 2017-19 data and 2018-2020 data with estimates of MRIP for-hire landings based on effort for AL, FL, and MS. The projected for-hire season length was 62 days using 2017-2019 data only and 63 days using the available data from 2018-2020 and estimated MRIP data. (Table 5). Preliminary 2020 SRHS and LA for-hire catch rates were slightly less than 2019 catch rates, but the effect of the pandemic on catch rates for other states in 2020 are still unknown.

Table 5. Projections of season lengths to reach the federal for-hire component ACT (lbs ww) using catch rates (lbs/day) for two different methods. These calculations used catch rates from all of the Gulf States.

Years	Catch Rate	ACT	Number of Fishing Days
Average 2017-19 (Method 1)	45,633	2,848,000	62
Average 2018-20; Catch rates for some states are estimated (Method 2)	45,021	2,848,000	63

Source: MRIP CHTS SEFSC Recreational ACL Database [February 4, 2021]. 2019 and 2020 landings are preliminary.