



MEMORANDUM FOR: The File

FROM: John C. McGovern, Ph.D.
Assistant Regional Administrator
Sustainable Fisheries Division

SUBJECT: 2023 Gulf of Mexico Gag Recreational Closure Analysis

Gulf of Mexico (Gulf) gag are managed in federal waters under the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico (Reef Fish FMP). In May 2023, a temporary rule to implement interim measures was put in place to reduce gag overfishing. The temporary rule reduced the annual catch limit (ACL) for gag using updated data from the Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES), and changed the recreational fishing season from June 1 to December 31 to September 1 through November 10, 2023. In addition, the temporary rule stated that if the National Marine Fisheries Service (NMFS) projects recreational landings will reach the recreational ACL before November 10, 2023, NMFS will close the recreational sector as required by the accountability measures specified in 50 CFR 622.41(r)(2). The temporary rule to implement interim measures set the stock ACL (commercial and recreational landings combined) to 661,901 pounds (lb) gutted weight (gw). The commercial sector of gag is managed as a limited access catch share program and is allocated 39% of the stock ACL (258,000 lb gw). The recreational ACL for gag was set to 61% of the stock ACL (403,759 lb gw).

Recreational landings were obtained from the Southeast Fisheries Science Center on June 26, 2023, and included the Texas Parks and Wildlife Division (TPWD) recreational creel survey, the Louisiana Department of Wildlife and Fisheries creel survey (LA Creel), the Southeast Region Headboat Survey (SRHS), and MRIP-FES. The MRIP survey file also included imputed MRIP-FES catch estimates for 2020 and 2021 to account for disruptions in dockside sampling due to COVID. Historical recreational landings from 2020 through 2022 and projected closure dates are provided in **Table 1**.

A three-year average (2020-2022) of monthly landings was used to predict future landings. Monthly landings were estimated using data from MRIP-FES charter, MRIP-FES private recreational, TPWD, and LA Creel by assuming equal daily catch rates for months within a wave and then combining those data with SRHS, which are provided monthly. Estimated monthly landings were then divided by the number of days in each month to provide a daily catch rate to project expected closure dates. Elevated fishing effort for recreational gag may occur during the recreational opening for gag in September, and therefore different scenarios were considered to project a range of potential season closures. These scenarios included using 1) a three-year average (2020-2022) for waves 5 and 6, 2) the upper 95% confidence interval of a three-year average (2020-2022) for waves 5 and 6, 3) 2022 landings since these are the most recent observed landings, 4) a three-year average (2020-2022) for wave 3 in place of



wave 5 to account for the shift in the start of the recreational gag fishing season, and 5) the highest wave 5 landings seen (2020) and a three-year average (2020-2022) for wave 6 landings.

Table 1. Recreational landings (lb gw) of Gulf gag by month from 2020-2022. The recreational season was closed January through May in 2020 through 2022. The recreational season was closed January through August in 2023. Projected 2023 landings using a range of three-year average scenarios are also provided.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Landings	Projected Closure Date
2020	Closed					387,745	180,706	177,962	453,233	469,174	597,400	619,125	2,949,058	--
2021	Closed					478,507	289,471	286,366	47,695	51,162	723,683	745,610	2,780,611	--
2022	Closed					775,517	294,919	293,949	116,532	123,204	636,206	658,892	2,899,772	--
<i>Projected 2023 with FES</i>	<i>Closed</i>								<i>205,820</i>	<i>214,513</i>	<i>217,477</i>	<i>Closed</i>	<i>637,810</i>	<i>Oct 29</i>
<i>Projected 2023 with FES Upper 95% Confidence Interval</i>	<i>Closed</i>								<i>451,393</i>	<i>467,388</i>	<i>241,876</i>	<i>Closed</i>	<i>1,160,657</i>	<i>Sep 27</i>
<i>Projected 2023 with 2022 landings</i>	<i>Closed</i>								<i>116,532</i>	<i>123,204</i>	<i>212,069</i>	<i>Closed</i>	<i>451,805</i>	<i>Nov 8</i>
<i>Projected 2023 with average wave 3 landings</i>	<i>Closed</i>								<i>547,265</i>	<i>214,513</i>	<i>217,477</i>	<i>Closed</i>	<i>979,255</i>	<i>Sep 23</i>
<i>Projected 2023 with highest wave 5 landings</i>	<i>Closed</i>								<i>453,233</i>	<i>469,174</i>	<i>217,477</i>	<i>Closed</i>	<i>1,139,884</i>	<i>Sep 27</i>

Source: SEFSC MRIP FES Recreational ACL dataset [June 26, 2023].

*Wave 6 for the 2023 gag recreational season will only be open November 1 – November 10. Projected landings in November are those expected only through November 10, 2023.

Based on historical landings and the scenarios projected, the recreational gag ACL is projected to be met as early as September 23, 2023, and as late as November 8, 2023. This is a reduction in season length when compared to the November 10, 2023, closure predicted for the temporary rule to implement interim measures. The analysis for the interim measures that predicted a November 10, 2023, closure used the most recent data available at the time, which included the 2017-2021 fishing years. The current projection used landings from 2020-2022. These higher harvest rates during recent years indicate that the catch limit will be harvested prior to November 10, 2023.

In choosing an appropriate closure date for 2023 in light of the new projections, NMFS examined five closure projection scenarios coupled with indicators of gag harvest from the 2023 recreational season. NMFS also received anecdotal information from many fishermen that gag harvest in 2023 is high relative to previous September fishing. In addition, NMFS considered preliminary data from the SRHS, which estimated that gag landings in September 2023 were 2-3x higher than in recent years. While headboats constitute only a small percentage of all landings, the increased landings may be an indication of above average gag landings throughout the recreational gag sector. NMFS recognizes that Hurricane Idalia may have resulted in reduced effort for a short period of time in certain areas where gag are frequently captured (e.g. Florida's "Big Bend"). However, even with a possible abbreviated period of decreased effort, fishing effort for gag likely remained high as there were no major storms in the eastern Gulf of Mexico during September.

Of the five closure projections, NMFS selected October 19, 2023 as the closure date. This date represents a midpoint between the earliest and latest closure projections.

NMFS notes that any overage of the ACL in the 2023 fishing year would be deducted from the catch limits in 2024, and may result in a marked reduction of the 2024 catch limits and season duration if a substantial overage does occur. The early closure date will reduce or mitigate the potential for a 2023 overage of the recreational ACL resulting in reduced fishing opportunities for gag in 2024.

cc: F/SER29 – Gray
F/SER24 – Hood, Luers