

# Catch Limit Modifications for Gulf of America Lane Snapper



## Abbreviated Framework Action under the Fishery Management Plan for the Reef Fish Resources of the Gulf Including Regulatory Impact Review and Regulatory Flexibility Act Analysis

June 2026



*This is a publication of the Gulf Council pursuant to National Oceanic and Atmospheric Administration Award No. NA25NMF4410007C.*

This page intentionally blank

## Responsible Agencies Contact Persons

Gulf Council

4107 W. Spruce Street, Suite 200

Tampa, Florida 33607

Ryan Rindone ([ryan.rindone@gulfcouncil.org](mailto:ryan.rindone@gulfcouncil.org))

813-348-1630

813-348-1711 (fax)

[gulfcouncil@gulfcouncil.org](mailto:gulfcouncil@gulfcouncil.org)

<http://www.gulfcouncil.org>

National Marine Fisheries Service (Lead Agency)

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701

Kelli O'Donnell ([kelli.odonnell@noaa.gov](mailto:kelli.odonnell@noaa.gov))

727-824-5305

<https://www.fisheries.noaa.gov/>

727-209-5990

## ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
AM	accountability measures
CFpA	net cash flow per angler
Council	Gulf Council
CS	consumer surplus
E.O.	Executive Order
EEZ	exclusive economic zone
EFH	Essential Fish Habitat
FES	Fishing Effort Survey
FL	fork length
FMP	Fishery Management Plan
GDP	gross domestic product
GFMC	Gulf Fishery Management Council
GMFMC	Gulf of Mexico Fishery Management Council
Gulf	Gulf of America (Formerly Gulf of Mexico)
gw	gutted weight
IA	interim analysis
IFQ	individual fishing quota
IRFA	initial regulatory flexibility analysis
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MD	Memorial Day
mp	million pounds
MRFSS	Marine Recreational Fishery Statistics Survey
MRIP	Marine Recreational Information Program
NAICS	North American Industry Classification System
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	overfishing limit
OMB	Office of Management and Budget
PS	producer surplus
Reef Fish FMP	Fishery Management Plan for the Reef Fish Resources in the Gulf
RFA	Regulatory flexibility analysis
RIR	Regulatory Impact Review
SEDAR	Southeast Data, Assessment, and Review
SEFSC	Southeast Fisheries Science Center

SERO	Southeast Regional Office
SRHS	Southeast Regional Headboat Survey
SSC	Scientific and Statistical Committee
SSRG	Social Scientists Research Group
TL	total length
TNR	trip net revenue
WTP	willingness-to-pay
ww	whole weight

# TABLE OF CONTENTS

Abbreviations Used in this Document .....	ii
Table of Contents .....	iv
List of Tables .....	v
List of Figures .....	vi
Chapter 1. Introduction .....	1
1.1 Background .....	1
1.2 Purpose and Need .....	3
1.3 Modification of the OFL, ABC, and Stock ACL for Gulf Lane Snapper.....	3
Chapter 2. Regulatory Impact Review.....	5
2.1 Introduction.....	5
2.2 Problems and Objectives.....	5
2.3 Description of Fisheries .....	5
2.4 Impacts of Management Measures .....	23
2.5 Public and Private Costs of Regulations .....	25
2.6 Net Benefits of the Regulatory Action.....	26
2.7 Determination of Significant Regulatory Action .....	26
Chapter 3. Regulatory Flexibility Act Analysis.....	28
3.1 Statement of the need for, objective of, and legal basis for the proposed action.....	28
3.2 Description and estimate of the number of small entities to which the proposed action would apply.....	29
3.3 Description of the projected reporting, record-keeping and other compliance requirements of the proposed action .....	31
3.4 Identification of all relevant federal rules, which may duplicate, overlap or conflict with the proposed action .....	31
3.5 Significance of economic impacts on a substantial number of small entities.....	31
3.6 Description of the significant alternatives to the proposed action and discussion of how the alternatives attempt to minimize economic impacts on small entities.....	32
Chapter 4. List of Preparers .....	33
Chapter 5. References .....	34
Appendix A. Gulf Lane Snapper Minimum Size Limit and Season Prediction Analysis .....	36
Appendix B. Public Comments Received.....	39

## LIST OF TABLES

<b>Table 1.1.1.</b> Landings of lane snapper (lb ww) by sector from 2006-2025, by weight (lb ww), and stock ACL values. ....	3
<b>Table 2.3.1.1.</b> Number of valid Gulf commercial permits for reef fish, 2016-2020. ....	6
<b>Table 2.3.1.2.</b> Number of vessels, landings, and revenue by year for permitted commercial Gulf lane snapper vessels. All dollar estimates are in 2024\$. ....	7
<b>Table 2.3.1.3.</b> Purchase statistics for dealers that bought Gulf lane snapper 2020-2024. All dollar estimates are in 2024\$. ....	9
<b>Table 2.3.1.4.</b> Annual pounds and value of fresh grouper imports 2020-2024. ....	10
<b>Table 2.3.1.5.</b> Annual pounds and value of frozen grouper, 2020-2024. All monetary estimates are in 2024\$. ....	10
<b>Table 2.3.1.6.</b> Annual pounds and value of fresh snapper imports, 2020-2024. All monetary estimates are in 2024\$. ....	11
<b>Table 2.3.1.7.</b> Annual pounds and value of frozen snapper, 2020-2024. ....	11
<b>Table 2.3.1.8.</b> Average annual business activity (2020 through 2024) associated with the commercial harvest of lane snapper in the Gulf. All monetary estimates are in thousands of 2024 dollars. ....	13
<b>Table 2.3.2.1.</b> Lane snapper recreational target trips, by mode and state, * 2020-2024. ....	15
<b>Table 2.3.2.2.</b> Lane snapper recreational catch trips, by mode and state, 2020-2024. ....	16
<b>Table 2.3.2.3.</b> Gulf headboat angler days and percent distribution by state (2020 through 2024). ....	17
<b>Table 2.3.2.4.</b> Number of valid or renewable Gulf reef fish for-hire permits, 2016-2020. ....	18
<b>Table 2.3.2.5.</b> Trip economics for offshore trips by Gulf charter vessels and Southeast headboats in 2017 (2024\$). ....	20
<b>Table 2.3.2.6.</b> Estimated average annual economic impacts (2020-2024) from Gulf charter, private vessel, and shore lane snapper target trips, by state,* using state-level multipliers. All monetary estimates are in 2024 dollars in thousands. ....	22
<b>Table 2.4.1.</b> Expected change in the recreational sector’s CS under the <b>Preferred Option 2</b> . Values are in 2024\$. ....	24
<b>Table 2.4.2.</b> Expected change in the commercial sector’s CS under the <b>Preferred Option 2</b> . Values are in 2024\$. ....	25
<b>Table 2.4.3.</b> Expected changes in the commercial sector revenue and PS, along with total expected change in net economic benefits to the commercial sector, under the <b>Preferred Option 2</b> . Values are in 2024\$. ....	25

## LIST OF FIGURES

**Figure 2.3.2.1.** Gulf headboat angler days by year and month (2020 - 2024). ..... 17

# CHAPTER 1. INTRODUCTION

## 1.1 Background

Gulf of America<sup>1</sup>(Gulf) lane snapper is managed under the Gulf Council’s (Council) Fishery Management Plan for the Reef Fish Resources of the Gulf (Reef Fish FMP). An annual catch limit (ACL) is set for the stock, with no allocation between the commercial and recreational sectors.

This framework action modifies the lane snapper overfishing limit (OFL), acceptable biological catch (ABC), and stock ACL, in response to the 2026 Southeast Data, Assessment, and Review (SEDAR) 49 Interim Analysis (IA) for Gulf lane snapper. Previous lane snapper IAs relied on the recreational headboat catch per unit effort (CPUE) index; however, that index is prone to effects from management bias and, as of 2026, the data for that index are no longer sampled as they were historically. The current IA used the Gulf Fishery Independent Survey of Habitat and Ecosystem Resources (G-FISHER) composite video index of relative abundance as the representative index. The G-FISHER index indicated that the Gulf lane snapper stock has increased in abundance since the 2010s through the early 2020s and has remained stable since. The data from the G-FISHER index are corroborated by public comment from fishermen at Council meetings, which has indicated both that lane snapper is more abundant and that the average size of lane snapper landed has increased. During its review of the 2026 SEDAR 49 IA, the Council’s Scientific and Statistical Committee (SSC) updated the reference period from 1999 – 2008, as was used in previous lane snapper IAs, to 2009 – 2018 using the G-FISHER index to better capture fishery dynamics for the stock. The results of this IA indicated that the OFL and ABC for Gulf lane snapper could be increased. The SSC recommended that the Gulf lane snapper OFL be 1,336,445 pounds (lb) whole weight (ww), and the ABC be 1,304,917 lb ww for 2026 – 2028 and subsequent years.<sup>2</sup> Because the stock is considered healthy, the current stock ACL is set equal to the ABC.

The National Marine Fisheries Service (NMFS) monitors commercial and recreational landings and prevents further harvest when the stock ACL is met or projected to be met. In 2021, NMFS implemented a framework action under the Reef Fish FMP that modified the lane snapper OFL, ABC, and stock ACL, and modified the accountability measure (AM) provision to require a prohibition on harvest for the remainder of the fishing year if lane snapper landings meet or are projected to meet the stock ACL (GMFMC 2021a). Prior to this change, the AM required in-season monitoring only if landings during the prior year exceeded the stock ACL. In October 2024, NMFS implemented another framework action under the Reef Fish FMP to increase the lane snapper OFL, ABC, and stock ACL (GMFMC 2024) in response to the SSC’s review of the 2023 SEDAR 49 IA for lane snapper<sup>3</sup>. The catch limits implemented in 2021 and 2024 are directly comparable to those collected by the Marine Recreational Information Program’s

---

<sup>1</sup> The Gulf of Mexico was renamed the Gulf of America pursuant to Executive Order 14172, and Secretary of the Interior Order No. 3423.

<sup>2</sup> <https://gulf-council-media.s3.amazonaws.com/uploads/2026/01/Gulf-Standing-SSC-Summary-Jan-2026-FINAL.pdf>

<sup>3</sup> <https://sedarweb.org/documents/report-of-the-gulf-of-mexico-ssc-review-of-the-2023-update-to-the-sedar-49-lane-snapper-assessment/>

(MRIP) Fishing Effort Survey (FES) as opposed to the legacy Marine Recreational Fishery Statistics Survey (MRFSS). When recreational landings were monitored in MRFSS, the stock ACL was exceeded yearly starting in 2016. After NMFS began using MRIP-FES to monitor recreational landings, the stock ACL was also exceeded in every year except 2021 and 2025. When comparing historical recreational landings converted to MRIP-FES to the current stock ACL, the stock ACL has only been exceeded five times in the past decade. In this same time period, landings have only exceeded the proposed stock ACL twice. Although the lane snapper stock ACL was increased in 2024, the stock ACL was projected to be harvested early and fishing was closed on November 26, 2024. In 2025, the lane snapper fishing season remained open for the entire fishing year (January 1 – December 31) however, once the last wave of recreational landings estimates was received, the stock ACL was estimated to have been exceeded.

Landings for the commercial and recreational sectors from 2006 through 2025 in lb ww are shown in Table 1.1.1. As noted above, recreational landings were monitored using MRFSS prior to 2021 and MRIP-FES from 2021 to present. Commercial sector landings have shown a slight decreasing trend since 2006; whereas recreational sector landings have increased beginning in 2016, with some fluctuations. NMFS implemented closures in 2019 (December 13), 2021 (closed October 18 and reopened December 23<sup>4</sup>), 2022 (November 15), and 2024 (November 26).

In August 2025, the Council completed and transmitted a framework action under the Reef Fish FMP to increase the minimum size limit of Gulf lane snapper for both sectors from 8 inches total length (TL) to 10 inches TL. The Council expected this change to increase the fishing season duration under the current catch limits by requiring the discarding of fish under 10 inches TL. If this increase in the Gulf lane snapper minimum size limit is combined with the proposed increase in catch limits in this framework action, the fishing season duration for the species would be expected to be extended further compared to increasing the minimum size limit alone (Appendix A).

---

<sup>4</sup> In 2021, the fishery reopened on December 23 upon implementation of a higher stock ACL.

**Table 1.1.1.** Landings of lane snapper (lb ww) by sector from 2006-2025, by weight (lb ww), and stock ACL values. Recreational landings are inclusive of MRIP-FES data.

Year	Recreational Landings (lb ww)	Commercial Landings (lb ww)	Total Landings	ACL FES (lb ww)
2006	513,265	49,340	562,605	
2007	531,385	29,222	560,607	
2008	354,496	25,475	379,971	
2009	535,266	35,848	571,114	
2010	178,642	17,262	195,904	
2011	151,116	14,365	165,481	
2012	423,252	28,928	452,180	
2013	456,712	23,189	479,901	
2014	467,957	30,237	498,194	
2015	401,702	46,027	447,729	
2016	612,615	34,723	647,338	
2017	1,272,029	42,618	1,314,647	
2018	791,568	26,435	818,004	
2019	1,036,281	24,299	1,060,580	
2020	852,730	24,246	876,976	
2021	554,911	22,885	577,797	1,028,973
2022	1,113,580	16,447	1,130,027	1,028,973
2023	1,125,173	28,217	1,153,390	1,028,973
2024	1,366,313	30,297	1,396,610	1,088,873
2025	1,066,620	26,844	1,093,464	1,088,873

**Source:** Commercial data sources – SEDAR 49 (2006-2013) and Southeast Fishery Science Center’s (SEFSC) ACL Monitoring Data (2014-2025), accessed February 2026; recreational data source – SEFSC FES ACL Monitoring Data, accessed February 2026.

## 1.2 Purpose and Need

The purpose of this framework action is to modify the OFL, ABC, and stock ACL for Gulf lane snapper based on the 2026 SEDAR 49 Interim Analysis.

The need for this framework action is to update existing lane snapper catch limits based on the best scientific information available and to achieve optimum yield while preventing overfishing, consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

## 1.3 Modification of the OFL, ABC, and Stock ACL for Gulf Lane Snapper

**Option 1: No Action.** Retain the current OFL, ABC, and stock ACL for the Gulf lane snapper stock. The OFL is 1,116,331 lb ww and the ABC is 1,088,873 lb ww. The stock ACL is set equal to the ABC.

**Preferred Option 2:** Modify the OFL for the Gulf lane snapper stock to be 1,336,445 lb ww, and the ABC to be 1,304,917 lb ww, for 2026 – 2028 and subsequent years. The stock ACL is set equal to the ABC.

**Option 1** would retain the current catch limits for Gulf lane snapper, as established in 2024.

**Preferred Option 2** would increase the lane snapper catch limits based on the 2026 Gulf lane snapper IA, using data through 2024. The stock ACL would increase by 216,044 lb ww, which would be expected to result in a longer fishing season duration compared to **Option 1**. During its January 2026 meeting, the SSC determined that the results of the 2026 SEDAR 49 IA were consistent with the best scientific information available and used the results of that analysis to inform the OFL and ABC recommendations. **Preferred Option 2** is consistent with the updated catch advice recommended to the Council by its SSC. Given the recent history of the stock ACL being exceeded, both the commercial and recreational sectors support the increase in the catch limits specified in **Preferred Option 2**.

### **Council Conclusion:**

The Council chose **Preferred Option 2**, which modifies the Gulf lane snapper OFL, ABC, and stock ACL based on the recommendation of its SSC. **Preferred Option 2** is consistent with the best scientific information available and is expected to allow additional harvest of Gulf lane snapper while also preventing overfishing.

# CHAPTER 2. REGULATORY IMPACT REVIEW

## 2.1 Introduction

The National Marine Fisheries Service (NMFS) requires a Regulatory Impact Review (RIR) for all regulatory actions that are of public interest. The RIR does three things: 1) it provides a comprehensive review of the level and incidence of impacts associated with a proposed or final regulatory action; 2) it provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problem; and, 3) it ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way. The RIR also serves as the basis for determining whether the regulations are a “significant regulatory action” under the criteria provided in Executive Order (E.O.) 12866. This RIR analyzes the impacts this framework action would be expected to have on the federal Gulf of America (Gulf) lane snapper fishery.

## 2.2 Problems and Objectives

The problems and objectives addressed by this framework action are discussed in Section 1.2.

## 2.3 Description of Fisheries

Details on the economic environment of the recreational and commercial sectors of the broader reef fish fishery are provided in Amendment 48 to the Fishery Management Plan (FMP) for the Reef Fish Resources of the Gulf (Reef Fish FMP) and Amendment 5 to the FMP for the Red Drum Fishery of the Gulf (GMFMC 2021b). Additional details on the economic environment of the recreational and commercial sectors of the lane snapper component of the Gulf reef fish fishery are provided in the Modification of the Lane Snapper Size Limits Framework Action (GMFMC 2024). Sections 2.3.1 and 2.3.2 contain additional information on the economic environment of the commercial sector and the for-hire and private components of the recreational sector in the Gulf lane snapper fish fishery.

### 2.3.1 Commercial Sector

Any fishing vessel that harvests and sells lane snapper from the Gulf exclusive economic zone (EEZ) must have a valid Gulf reef fish commercial permit. Commercial Gulf reef fish permits are a limited access permit. After a permit expires, it can be renewed or transferred up to one year after the date of expiration. As of August 26, 2021, there were 814 valid or renewable commercial Gulf reef fish permits. As shown in Table 2.3.1.1, the number of permits that were valid at any point in a given year decreased steadily from 2016-2020. There were approximately 2% fewer valid permits in 2020 relative to 2016.

**Table 2.3.1.1.** Number of valid Gulf commercial permits for reef fish, 2016-2020.

<b>Year</b>	<b>Number of Permits</b>
<b>2016</b>	852
<b>2017</b>	850
<b>2018</b>	845
<b>2019</b>	842
<b>2020</b>	837

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed 05/17/22).

## **Vessels**

Not all holders of Gulf commercial permits for reef fish are active each year. The information in Tables 2.3.1.2 and 2.3.1.3 describe the landings and revenue for vessels that possessed a valid or renewable commercial Gulf reef fish permit and were actively fishing during the 2020-2024 timeframe as based on logbook information. Therefore, the values contained in this section may not match exactly with landings and revenue values presented elsewhere in this document that used ACL monitoring data. In addition, the landings are presented in gutted weight (gw) rather than in ww. Landings for all species in the SEFSC Social Science Research Group's (SEFSC-SSRG) Socioeconomic Panel data are expressed in gw to provide one unit for all species. This is because data summarizations, as presented in Tables 2.3.1.2 below, generally involve a multitude of species. Table 2.3.1.2 shows the landings and revenue from Gulf lane snapper and other species landed by these vessels. As shown in Table 2.3.1.2, the number of vessels that harvested lane snapper each year generally declined. The total number of vessels decreased by approximately 19% during this timeframe. Revenue from lane snapper landings has increased in recent years, reaching a five-year high of \$87,184 in 2024. Overall, lane snapper revenue increased by 9.9% on average annually during this timeframe. Furthermore, the average revenue per vessel increased by 31.5% over the same period. Revenue from landings of jointly caught and non-jointly caught species other than Gulf lane snapper comprised the majority of income for these vessels, averaging over \$54.2 million annually and peaking at over \$57.5 million in 2023. This suggests that these vessels have little financial dependency on Gulf lane snapper.

**Table 2.3.1.2.** Number of vessels, landings, and revenue by year for permitted commercial Gulf lane snapper vessels. All dollar estimates are in 2024\$.

Year	Count of Vessels	Lane Snapper landings (lbs gw)	Lane Snapper revenue	Joint catch revenue (same trip)	Non-joint catch revenue (other trips)	South Atlantic revenue	Average Revenue per Vessel
2020	297	20,277	\$69,344	\$21,574,221	\$29,268,492	\$139,573	\$171,891
2021	274	18,994	\$63,554	\$20,109,902	\$36,112,281	\$400,263	\$206,883
2022	228	13,515	\$50,204	\$18,518,335	\$34,187,949	\$473,628	\$233,465
2023	261	21,700	\$80,878	\$25,254,467	\$32,315,288	\$607,306	\$218,194
2024	241	21,495	\$87,184	\$25,409,391	\$28,719,304	\$248,505	\$225,993
<b>Average</b>	<b>261</b>	<b>19,410</b>	<b>\$70,233</b>	<b>\$22,173,263</b>	<b>\$32,120,663</b>	<b>\$373,855</b>	<b>\$211,285</b>

Source: Southeast Fisheries Science Center (SEFSC) Social Science Research Group (SSRG) Socioeconomic Panel (January 2025 version).

### Economic Value

Changes in commercial lane snapper landings may result in changes in ex-vessel prices due to less (or more) domestic lane snapper being available in markets. In turn, if the ex-vessel price is expected to change, gross revenue and thus consumer surplus (CS) would also be expected to change. The potential effects on ex-vessel price, gross revenue, and CS can be estimated utilizing the work by Asche (2020). According to the results of the inverse almost ideal demand system, Asche (2020) estimated a Marshallian own-price flexibility for “other snappers,” inclusive of lane snapper, of -0.340. The own-price flexibility is the percentage change in a product’s price relative to the percentage change of a product’s quantity sold, and thus estimates the responsiveness of a product’s price to the quantity being sold. The own-price flexibility estimate in Asche (2020) is not compensated for income. An income-compensated estimate would likely be lower, which would in turn yield smaller changes in the ex-vessel price and thus smaller changes in gross revenue and producer surplus (PS)<sup>5</sup>. Thus, any estimates based on their analysis should be considered maximum expected changes in ex-vessel price, gross revenue, and CS in the commercial sector.

Estimates of economic returns are not directly available for the lane snapper commercial sector in the Gulf. The most recent analysis, which calculated estimates of economic returns for Gulf reef fish commercial fishing vessels was performed by Liese (2023). Estimates of PS can be calculated from the cost information contained in Liese (2023) in conjunction with estimates of annual revenue from the SERO IFQ database and the SEFSC Social Science Research Group Socioeconomic Panel. PS is total annual revenue minus variable costs, including the costs for fuel, other supplies, and hired crew, as well as the opportunity cost of an owner’s time as captain. Net revenue from operations, which most closely represents economic profits to the owner(s), is total annual revenue minus variable and fixed costs, including the costs for fuel, other supplies, hired crew, vessel repair and maintenance, insurance, and overhead, as well as the opportunity cost of an owner’s time as captain and the vessel’s depreciation. According to

<sup>5</sup> PS is the difference between total annual revenue and variable costs.

Liese (2023), PS for commercial vessels that harvested Gulf reef fish was approximately 51% of their annual gross revenue, on average, from 2014 through 2018. Net revenue from operations was 32% of their annual gross revenue, on average, during this period. Applying these percentages to the estimate of average revenue per vessel provided in Table 2.3.1.2 would result in an estimated per vessel average annual PS of \$107,756 (2024\$) and an average annual net revenue from operations of \$80,288 per year. Liese (2023) also provides annual trip-level estimates of costs (as a percentage of trip revenue) and trip net revenue for vessels that harvested snappers and groupers in the South Atlantic. According to Liese (2023), labor, including both hired and owner's time, consumed 37.1% of trip revenue and fuel and supplies consumed 19.5%, leaving a trip net revenue margin of 43.4%, on average, from 2014 through 2018.

## **Dealers**

The information in Table 2.3.1.3 illustrates the purchasing activities of dealers that bought lane snapper from vessels from 2020 through 2024. Additionally, the purchasing activities of species harvested in the South Atlantic by these dealers is shown to provide a full accounting of the purchasing of dealers that bought lane snapper. The total number of dealers purchasing lane snapper declined each year from 2020-2023 but increased in 2024. As shown in Table 2.3.1.3, the total number of dealers increased by approximately 8.5% in 2024 relative to 2020. Purchases of lane snapper also increased in recent years. Overall, lane snapper purchases increased by 15.6% on average annually during this timeframe. The average purchases per dealer decreased by 10.0% over the same period. Purchases of other Gulf and South Atlantic species comprised the majority of income for these dealers, averaging over \$140.1 million annually. This suggests that dealers have little financial dependency on Gulf lane snapper.

Estimates on the mark-ups between the ex-vessel price and dealer sales price of lane snapper are unavailable. Keithly and Tabarestani (2018) estimated the most recent mark-ups between the ex-vessel price and dealer sales price. However, those estimates only apply to grouper and tilefish and would be insufficient to estimate changes in PS or profit for lane snapper dealers. NMFS does not have estimates of those other costs for lane snapper dealers or seafood dealers more broadly, and thus does not have estimates of net cash flow or net revenue from operations for lane snapper dealers comparable to those in the commercial harvesting sector. Thus, while it is likely that the harvest of lane snapper generates some PS and profit for lane snapper dealers, NMFS does not possess the data to estimate PS and profit.

**Table 2.3.1.3.** Purchase statistics for dealers that bought Gulf lane snapper 2020-2024. All dollar estimates are in 2024\$.

Year	Number of Dealers	Lane Snapper Purchases	Other Gulf Purchases	South Atlantic Purchases	Total Purchases	Average Purchases per Dealer
2020	106	\$74,014	\$112,046,483	\$17,272,183	\$129,392,680	\$1,220,686
2021	104	\$68,253	\$130,941,946	\$19,433,236	\$150,443,435	\$1,446,571
2022	96	\$54,482	\$127,104,730	\$23,312,673	\$150,471,886	\$1,567,415
2023	94	\$95,515	\$121,564,625	\$22,609,952	\$144,270,092	\$1,534,788
2024	115	\$109,828	\$110,280,307	\$15,937,759	\$126,327,894	\$1,098,503
<b>Average</b>	<b>103</b>	<b>\$80,419</b>	<b>\$120,387,618</b>	<b>\$19,713,160</b>	<b>\$140,181,197</b>	<b>\$1,373,593</b>

Source: SEFSC Fishing Communities Web Query Tool, Version 1. Accessed 03/10/2026.

## Imports

Imports of foreign seafood products compete within the domestic seafood market, and in the U.S. imports dominate many segments of that market. Imports also tend to be price setters (products that are able to set prices in a market, due to the influence of having a majority of market share). Seafood imports can have downstream effects on the local fish market. At the harvest level, imports can affect ex-vessel prices fishermen receive for landings. As substitutes to domestic production, imports tend to cushion the adverse economic effects on consumers resulting from a reduction in domestic landings. Imports that directly compete with domestic reef fish, including lane snapper, are described in this section.

### *Groupers*

According to NMFS' foreign trade data,<sup>6</sup> grouper are not exported. Imports of fresh and frozen grouper products, which also directly compete with domestic harvest of Gulf reef fish species, are described in this section. As shown in Table 2.3.1.4, imports of fresh grouper products peaked in 2023. The total value of fresh grouper imports has been increasing in recent years and averaged \$63.0 million (2024\$) annually. The average price per pound (lb) product weight (pw) for fresh grouper products was \$5.32 from 2020-2024. Although not shown in the table, these products primarily originated from Mexico, Brazil, and Panama from 2020-2024.

<sup>6</sup> <https://www.fisheries.noaa.gov/foss/>

**Table 2.3.1.4.** Annual pounds and value of fresh grouper imports 2020-2024.

<b>Year</b>	<b>Total Pounds (lbs.)</b>	<b>Total Value</b>	<b>Price per Pound (\$/lbs.)</b>
2020	10,449,994	\$46,394,887	\$4.43
2021	12,246,904	\$65,449,667	\$5.34
2022	11,700,388	\$66,946,463	\$5.72
2023	12,628,176	\$68,236,890	\$5.41
2024	11,995,196	\$68,346,048	\$5.70
<b>Average</b>	<b>11,804,132</b>	<b>\$63,074,791</b>	<b>\$5.32</b>

Source: NOAA Foreign Trade Query Tool, accessed 10/20/24.

As shown in Table 2.3.1.5, imports of frozen grouper products peaked at 2.2 million lb pw in 2021 and have been declining since. The total value of frozen grouper increased sharply from \$1.7 to \$5.8 million from 2020 to 2021 but also declined nearly as sharply in 2022 to \$2.9 million. The average price per lb pw for frozen grouper products was \$2.30 from 2020-2024. Although not shown in the table, imports of frozen grouper products primarily originated in Brazil, Suriname, and Indonesia from 2020-2024.

**Table 2.3.1.5.** Annual pounds and value of frozen grouper, 2020-2024. All monetary estimates are in 2024\$.

<b>Year</b>	<b>Total Pounds (lbs.)</b>	<b>Total Value</b>	<b>Price per Pound (\$/lbs.)</b>
2020	814,426	\$1,718,333	\$2.10
2021	2,190,003	\$5,818,759	\$2.66
2022	1,339,501	\$2,942,717	\$2.20
2023	1,154,097	\$2,676,394	\$2.31
2024	1,097,656	\$2,459,846	\$2.24
<b>Average</b>	<b>1,319,137</b>	<b>\$3,123,210</b>	<b>\$2.30</b>

Source: NOAA Foreign Trade Query Tool, accessed 08/18/24.

### *Snappers*

Imports of fresh and frozen snapper products, which directly compete with domestic harvest of Gulf reef fish species, are described in this section. As shown in Table 2.3.1.6, imports of fresh snapper products were 32.4 million lb pw in 2020. They peaked at 36.0 million lb pw in 2021. The total value of snapper imports increased to a five-year high of \$169 million in 2021 (2024\$). The average price per pound for fresh snapper products was \$4.48 from 2020-2024 and prices varied over this period. Although not shown in the table, imports of fresh snapper products primarily originated in Mexico, Nicaragua, or Panama from 2020-2024.

**Table 2.3.1.6.** Annual pounds and value of fresh snapper imports, 2020-2024. All monetary estimates are in 2024\$.

<b>Year</b>	<b>Total Pounds (lbs.)</b>	<b>Total Value</b>	<b>Price per Pound (\$/lbs.)</b>
2020	32,394,316	\$129,401,869	\$3.99
2021	35,969,857	\$169,002,918	\$4.70
2022	32,180,318	\$150,937,686	\$4.69
2023	32,108,363	\$142,592,355	\$4.44
2024	30,474,645	\$139,494,605	\$4.58
<b>Average</b>	<b>32,625,500</b>	<b>\$146,285,887</b>	<b>\$4.48</b>

Source: NOAA Foreign Trade Query Tool, accessed 10/20/24.

As shown in Table 2.3.1.7, the total value of imports of frozen snapper increased from \$55.2 million (2024\$) in 2020 to a five-year high of \$75.7 million in 2021 (2024\$) followed by a 40% decrease through 2023. The average price per pound for frozen snapper products was \$3.86, with a notable decrease from 2022 to 2023. Although not shown in the table, imports of frozen snapper product primarily originated in Brazil or Suriname, from 2020-2024.

**Table 2.3.1.7.** Annual pounds and value of frozen snapper, 2020-2024.

<b>Year</b>	<b>Total Pounds (lbs.)</b>	<b>Total Value</b>	<b>Price per Pound (\$/lbs.)</b>
2020	15,873,809	\$55,208,728	\$3.48
2021	18,224,848	\$75,715,262	\$4.15
2022	16,941,442	\$70,812,484	\$4.18
2023	11,701,409	\$42,501,474	\$3.64
2024	14,836,601	\$57,206,691	\$3.86
<b>Average</b>	<b>15,515,622</b>	<b>\$60,288,928</b>	<b>\$3.86</b>

Source: NOAA Foreign Trade Query Tool, accessed 10/20/24.

## **Business Activity**

The commercial harvest and subsequent sales and consumption of fish generates business activity as fishermen expend funds to harvest the fish and consumers spend money on goods and services, such as grouper purchased at a local fish market and served during restaurant visits. These expenditures spur additional business activity in the region(s) where the harvest and purchases are made, such as jobs in local fish markets, grocers, restaurants, and fishing supply establishments. In the absence of the availability of a given species for purchase, consumers would spend their money on substitute goods, such as other finfish or seafood products, and services, such as visits to different food service establishments. As a result, the analysis

presented below represents a distributional analysis that only shows how economic impacts may be distributed through regional markets. It should not be interpreted to represent the impacts if these species are not available for harvest or purchase.

Economic impact models can be used to determine the sources of the impacts. Each impact can be broken down into direct, indirect, and induced economic impacts. “Direct” economic impacts are the results of the money initially spent in the study area (e.g., country, region, state, or community) by the fishery or industry being studied. This includes money spent to pay for labor, supplies, raw materials, and operating expenses. The direct economic impacts from the initial spending create additional activity in the local economy, i.e., “indirect” economic impacts. Indirect economic impacts are the results of business-to-business transactions indirectly caused by the direct impacts. For example, businesses initially benefiting from the direct impacts will subsequently increase spending at other local businesses. The indirect economic impact is a measure of this increase in business-to-business activity, excluding the initial round of spending which is included in the estimate of direct impacts. “Induced” economic impacts are the results of increased personal income caused by the direct and indirect economic impacts. For example, businesses experiencing increased revenue from the direct and indirect impacts will subsequently increase spending on labor by hiring more employees, increasing work hours, raising salaries/wage rates, etc. In turn, households will increase spending at local businesses. The induced impact is a measure of this increase in household-to-business activity.

Estimates of the U.S. average annual business activity associated with the commercial harvest of Gulf lane snapper were derived using the model developed for and applied in NMFS (2024)<sup>7</sup> and are provided in Table 2.3.1.8. Specifically, these impact estimates reflect the expected impacts from average annual gross revenues generated by landings of lane snapper IFQ species from 2020 through 2024. This business activity is characterized as jobs (full- and part-time equivalents), income impacts (wages, salaries, and self-employed income), value-added impacts (the difference between the value of goods or services and the cost of materials, supplies, and labor across the supply chain), and output impacts (gross business sales). Income impacts should not be added to output (sales) impacts because this would result in double counting.

The results provided here should be interpreted with caution. The results are based on average relationships developed through the analysis of many fishing operations that harvest many different species.

---

<sup>7</sup> A detailed description of the input/output model is provided in NMFS (2011).

**Table 2.3.1.8.** Average annual business activity (2020 through 2024) associated with the commercial harvest of lane snapper in the Gulf. All monetary estimates are in thousands of 2024 dollars.

<b>Industry Sector</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Harvesters</b>				
Employment impacts	1	0	0	2
Income impacts	\$38	\$7	\$17	\$62
Total value-added impacts	\$40	\$25	\$29	\$95
Output impacts	\$70	\$57	\$57	\$184
<b>Primary dealers/processors</b>				
Employment impacts	0	0	0	1
Income impacts	\$12	\$11	\$11	\$35
Total value-added impacts	\$13	\$15	\$20	\$48
Output impacts	\$40	\$30	\$40	\$110
<b>Secondary wholesalers/distributors</b>				
Employment impacts	0	0	0	0
Income impacts	\$7	\$2	\$8	\$17
Total value-added impacts	\$8	\$4	\$13	\$25
Output impacts	\$20	\$7	\$26	\$53
<b>Grocers</b>				
Employment impacts	1	0	0	1
Income impacts	\$15	\$5	\$8	\$28
Total value-added impacts	\$16	\$8	\$13	\$37
Output impacts	\$26	\$13	\$25	\$64
<b>Restaurants</b>				
Employment impacts	3	0	1	4
Income impacts	\$61	\$18	\$35	\$114
Total value-added impacts	\$65	\$33	\$59	\$157
Output impacts	\$119	\$52	\$116	\$286
<b>Harvesters and seafood industry</b>				
Employment impacts	6	1	1	7
Income impacts	\$134	\$44	\$78	\$256
Total value-added impacts	\$142	\$85	\$134	\$361
Output impacts	\$274	\$159	\$263	\$696

### 2.3.2 Recreational Sector

The recreational sector is composed of the private and for-hire modes. The private mode includes anglers fishing from shore (all land-based structures) and private/rental boats. The for-hire mode is composed of charter vessels and headboats (also called party boats). Charter vessels generally carry fewer passengers and charge a fee on an entire vessel basis, whereas headboats carry more passengers and payment is per person. The type of service, from a vessel- or passenger-size perspective, affects the flexibility to search different fishing locations during the course of a trip and target different species because larger concentrations of fish are required to satisfy larger groups of anglers.

#### Angler Effort

Recreational effort derived from the Marine Recreational Information Program (MRIP) database can be characterized in terms of the number of angler trips as follows:

- Target effort - The number of individual angler trips, regardless of duration, where the intercepted angler indicated that the species or a species in the species group was targeted as either the first or the second primary target for the trip. The species did not have to be caught.
- Catch effort - The number of individual angler trips, regardless of duration and target intent, where the individual species or a species in the species group was caught. The fish did not have to be harvested, such as catch and release trips for gamefish and other species.
- Total recreational trips - The total estimated number of recreational trips in the Gulf, regardless of target intent or catch success.

Other measures of effort are possible, such as directed trips (the number of individual angler trips that either targeted or caught a particular species). Estimates of target or catch effort for individual species and additional years, as well as other measures of directed effort, are available via NMFS' MRIP query tool.<sup>8</sup>

Tables 2.3.2.1 and 2.3.2.2 describe the recreational target and catch trips for Gulf lane snapper from 2020 through 2024. There was no recorded target or catch trips in Texas for lane snapper and Louisiana's recreational effort data are currently unavailable. Private vessels represent 80% of this target effort, the vast majority of which occurred in Florida (Table 2.3.2.1). The number of recreational target trips for Gulf lane snapper has increased overall from 2020 through 2024, with a small decline from 2022 to 2023. The majority of catch effort for Gulf lane snapper was also attributed to private vessels in Florida and on average increased by 18% during this timeframe (Table 2.3.2.2).

---

<sup>8</sup> <https://www.fisheries.noaa.gov/data-tools/recreational-fisheries-statistics-queries>

**Table 2.3.2.1.** Lane snapper recreational target trips, by mode and state, \* 2020-2024.

Year	Alabama	Florida	Mississippi	Total
<b>Charter Mode</b>				
2020	0	0	0	0
2021	0	7,520	0	7,520
2022	134	8,515	0	8,649
2023	0	16,138	0	16,138
2024	34	12,476	0	12,511
<b>Private/Rental Mode</b>				
2020	0	28,676	0	28,676
2021	0	21,999	0	21,999
2022	8,213	99,025	0	107,238
2023	5,413	86,678	0	92,091
2024	0	137,166	5,226	142,392
<b>Shore Mode</b>				
2020	0	0	0	0
2021	0	0	0	0
2022	0	5,051	0	5,051
2023	0	12,286	0	12,286
2024	0	2,939	0	2,939
<b>All Modes</b>				
2020	0	28,676	0	28,676
2021	0	29,519	0	29,519
2022	8,347	112,591	0	120,938
2023	5,413	115,102	0	120,515
2024	34	152,581	5,226	157,842

Source: MRIP database, SERO, NMFS (May 2025).

**Table 2.3.2.2.** Lane snapper recreational catch trips, by mode and state, 2020-2024

Year	Alabama	Florida	Mississippi	Total
<b>Charter Mode</b>				
2020	4,171	164,768	0	168,939
2021	5,960	137,813	0	143,773
2022	6,454	121,380	0	127,834
2023	6,019	152,062	0	158,081
2024	7,012	147,411	0	154,422
<b>Private/Rental Mode</b>				
2020	14,278	376,059	0	390,338
2021	5,620	279,345	4,029	288,995
2022	17,847	611,812	1,465	631,124
2023	14,821	725,192	765	740,778
2024	22,157	837,194	7,225	866,577
<b>Shore Mode</b>				
2020	0	294,358	0	294,358
2021	0	253,713	0	253,713
2022	0	273,344	0	273,344
2023	0	302,023	0	302,023
2024	2,028	269,092	0	271,120
<b>All Modes</b>				
2020	18,449	835,185	0	853,635
2021	11,580	670,871	4,029	686,481
2022	24,301	1,006,536	1,465	1,032,302
2023	20,840	1,179,277	765	1,200,882
2024	31,197	1,253,697	7,225	1,292,119

Source: MRIP database, SERO, NMFS (May 2025).

Similar analysis of recreational effort is not possible for the headboat mode because headboat data are not collected at the angler level. Estimates of effort by the headboat mode are provided in terms of angler days, or the total number of standardized full-day angler trips.<sup>9</sup> Headboat angler days across the Gulf increased substantially in 2021 and then decreased steadily through 2024 (Table 2.3.2.3). On average (2020 through 2024), Florida accounted for the majority of headboat angler days reported, followed by Texas. Alabama, Mississippi, and Louisiana combined accounted for only a small percentage (Table 2.3.2.3). Headboat effort in terms of angler days for the entire Gulf tended to be concentrated most heavily during the summer months of June through August (Figure 2.3.2.1).

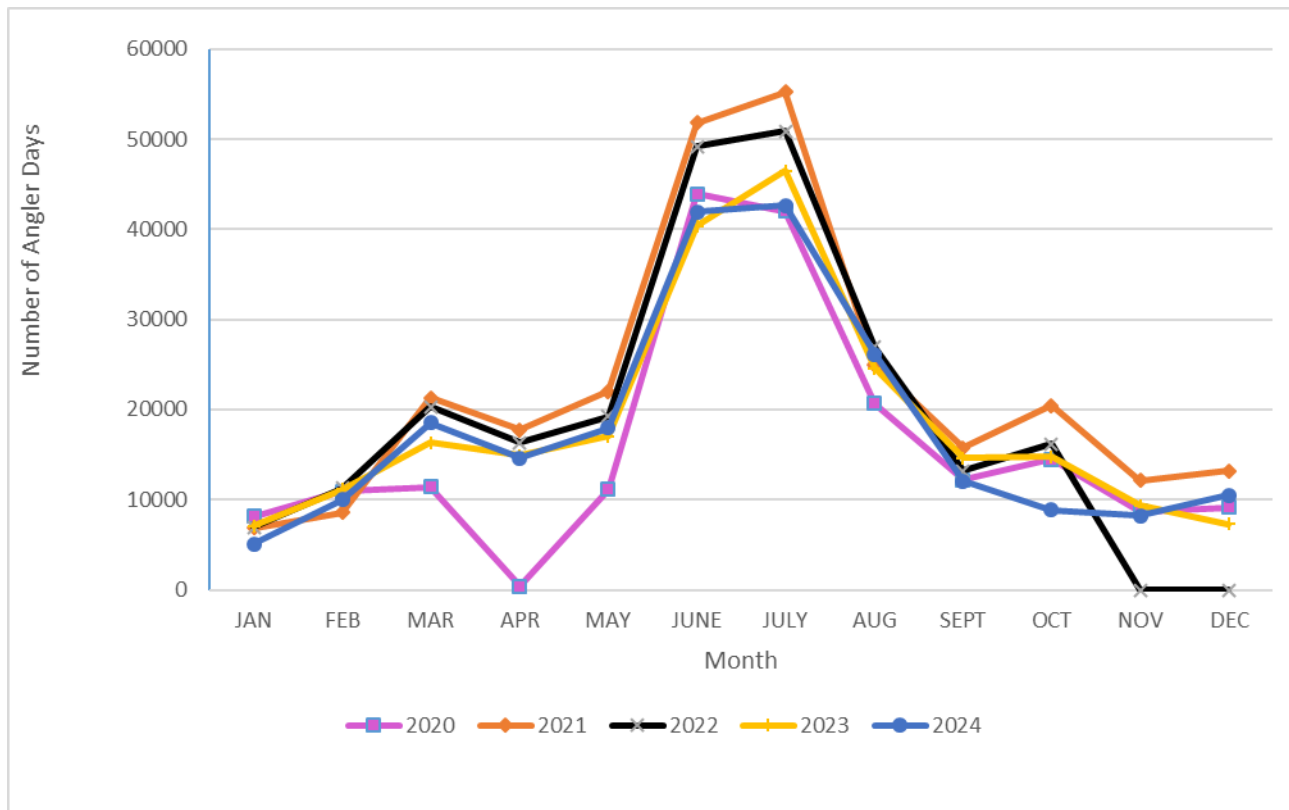
<sup>9</sup> Headboat trip categories include half-, three-quarter-, full-, and 2-day trips. A full-day trip equals one angler day, a half-day trip equals .5 angler days, etc. Angler days are not standardized to an hourly measure of effort, and actual trip durations may vary within each category.

**Table 2.3.2.3.** Gulf headboat angler days and percent distribution by state (2020 through 2024).

	Angler Days				Percent Distribution		
	FL	AL-MS-LA	TX	Total	FL	AL-MS-LA	TX
<b>2020</b>	126,794	14,819	51,498	193,111	65.66%	7.67%	26.67%
<b>2021</b>	181,632	17,041	71,344	270,017	67.27%	6.31%	26.42%
<b>2022</b>	149,368	18,263	62,705	230,336	64.85%	7.93%	27.22%
<b>2023</b>	149,735	15,757	58,279	223,771	66.91%	7.04%	26.04%
<b>2024</b>	146,544	12,874	57,074	216,492	67.69%	5.95%	26.36%
<b>Average</b>	150,815	15,751	60,180	226,745	66.48%	6.98%	26.54%

Source: NMFS Southeast Region Headboat Survey (SRHS) (2024).

\*Headboat data from Alabama, Mississippi, and Louisiana are combined for confidentiality purposes.



**Figure 2.3.2.1.** Gulf headboat angler days by year and month (2020 - 2024).

Source: NMFS SRHS (2024).

## Permits

There are no specific federal permitting requirements for private recreational anglers to fish for Gulf reef fish species, such as lane snapper. The same is true for private recreational vessel owners. Instead, private anglers are required either to possess a state recreational fishing permit

that authorizes saltwater fishing in general, or to be registered in the federal National Saltwater Angler Registry system, subject to appropriate exemptions. As a result, it is not possible to identify with available data how many individual private anglers or private recreational vessels would be expected to be affected by the actions in this amendment.

For anglers to fish for or possess reef fish species in or from the Gulf EEZ on for-hire vessels, those vessels are required to have a Gulf charter/headboat permit for reef fish (Gulf reef fish for-hire permit). As of August 26, 2021, there were 1,273 valid or renewable<sup>10</sup> Gulf reef fish for-hire permits. The total number of valid or renewable Gulf reef fish for-hire permits has been relatively stable with less than a 1% change from year to year during 2016 through 2020 (Table 2.3.2.4). Note more recent permit information is currently unavailable.

Although the permit application collects information on the primary method of operation, the permit itself does not identify the permitted vessel as either a headboat or a charter vessel and vessels may operate in both capacities. However, if a vessel meets the selection criteria used by the NMFS Southeast Region Headboat Survey (SRHS) and is selected to report by the Science Research Director of the Southeast Fisheries Science Center (SEFSC), it is determined to operate primarily as a headboat and is required to submit harvest and effort information to the SRHS. As of July 31, 2024, 68 Gulf headboats were registered in the SRHS (R. Cheshire, NMFS SEFSC, pers. comm. 2024).

**Table 2.3.2.4.** Number of valid or renewable Gulf reef fish for-hire permits, 2016-2020.

Year	Number of Permits
2016	1,282
2017	1,280
2018	1,279
2019	1,277
2020	1,289

Source: NMFS SERO Sustainable Fisheries (SF) Access permits database (accessed 05/17/22).

## Economic Value

Participation, effort, and harvest are indicators of the value of saltwater recreational fishing. However, a more specific indicator of value is CS, which is the difference between the maximum amount an angler would be willing to pay for a fish and the amount they actually do pay.<sup>11</sup> CS represents a savings of one's income that can be spent later on other goods and services, leading to an overall increase in utility or satisfaction for the angler and a benefit to the economy. All else equal, the amount anglers are willing to pay and the costs of fishing can vary depending on expected catch rates, harvest rates, and existing regulations. The economic value of changes in expected catch rates, harvest rates, or existing regulations can be measured by any associated changes in CS. However, because recreationally caught fish are non-market goods and there are

<sup>10</sup> A renewable permit is an expired permit that may not be actively fished, but is renewable for up to one year after expiration.

<sup>11</sup> This difference assumes that income and the prices of other goods are constant.

no transaction data available, CS cannot be measured directly. Instead, using survey elicitation methods and stated or revealed preference models, it is possible to estimate willingness-to-pay (WTP) values<sup>12</sup> that are a close approximation to the individual CS an angler would derive from an additional fish that is caught and kept. Direct estimates of the WTP for lane snapper are not available, but other estimates can serve as close proxies. Haab et al. (2012) estimated the recreational CS for an additional snapper harvested on a trip using a mail survey of recreational anglers fishing in the Gulf. Their estimated CS for harvesting one additional snapper was \$15.50 (2024\$).

Economic value for the for-hire component of the recreational sector can be measured in many ways. According to Savolainen et al. (2012), the average charter vessel operating in the Gulf is estimated to receive approximately \$107,000 (2024\$) in gross revenue and \$32,000 (2024\$) in net income (gross revenue minus variable and fixed costs) annually. The average headboat is estimated to receive approximately \$325,000 (2024\$) in gross revenue and \$95,000 (2024\$) in net income annually. More recent estimates of average annual gross revenue for Gulf headboats are provided in Abbott and Willard (2017) and D. Carter, SEFSC, pers. comm. 2018. Abbott and Willard (2017) suggest that Savolainen, et al.'s estimate of average annual gross revenue for headboats may be an underestimate, as data in the former suggest that average gross revenue in 2009 for the vessels in their sample was about \$575,000 (2024\$). Further, their data suggest average annual gross revenue per vessel had increased to about \$694,000 (2024\$) by 2014. However, Abbott and Willard's estimates are based on a sample of 17 headboats that chose to participate in the headboat collaborative program in 2014, while the Savolainen, et al. estimates are based on a random sample of 20 headboats. The headboats that participated in the collaborative program may be economic highliners, in which case Abbott and Willard's estimates would overestimate average annual gross revenue for Gulf headboats. D. Carter, SEFSC, pers. comm. 2018 recently estimated that average annual gross revenue for Gulf headboats was approximately \$514,000 (2024\$) in 2017. This estimate is likely the best current estimate of annual gross revenue for Gulf headboats, as it is based on a relatively large sample of 63 boats, or more than 90% of the active fleet, and is more recent.

However, gross revenues overstate the annual economic value and profits generated by for-hire vessels. Economic value for for-hire vessels can be measured by PS per passenger trip (the amount of money that a vessel owner earns in excess of the cost of providing the trip). Estimates of revenue, costs, and trip net revenue (TNR) for trips taken by headboats and charter vessels in 2017 are available from Souza and Liese (2019). After accounting for transaction fees, supply costs, and labor costs, net revenue per trip was 42% of revenue for Gulf charter vessels and 54% of revenue for Southeast headboats<sup>13</sup> or \$938 and \$2,179 (2024\$), respectively (Table 2.3.2.5). When TNR is divided by the number of anglers on a trip, it represents cash flow per angler (CFpA), which approximates PS per angler trip. The estimated CFpA value for an average Gulf charter angler trip is \$171 (2024\$) and the estimated CFpA value for an average Gulf headboat

---

<sup>12</sup> These are measures of compensating surplus, or the amount of money that an angler would be willing to pay in order to harvest the additional fish, while maintaining the same level of utility.

<sup>13</sup> Southeast headboats include headboats operating in either the Gulf or South Atlantic. Souza and Liese (2019) state "the sample size available for headboats is limited (n=30) and, hence, the results are presented at an overall SE aggregation."

angler trip is \$77 (2024\$; Souza and Liese 2019). Estimates of CFpA for individual Reef Fish species or species-group target trips, in particular, are not available.

**Table 2.3.2.5.** Trip economics for offshore trips by Gulf charter vessels and Southeast headboats in 2017 (2024\$).

	<b>Gulf Charter Vessels</b>	<b>Southeast Headboats</b>
Revenue	100%	100%
Transaction Fees (% of revenue)	3%	6%
Supply Costs (% of revenue)	27%	19%
Labor Costs (% of revenue)	27%	22%
Net Revenue per trip including Labor costs (% of revenue)	42%	54%
Net Revenue per Trip	\$938	\$2,179
Average # of Anglers per Trip	5.5	28.2
Trip Net Cash Flow per Angler Trip	\$171	\$77

Source: Souza and Liese (2019).

### **Business Activity**

The desire for recreational fishing generates economic activity as consumers spend their income on various goods and services needed for recreational fishing. This spurs economic activity in the region where recreational fishing occurs. Note, in the absence of the opportunity to fish, the income would presumably be spent on other goods and services and these expenditures would similarly generate economic activity in the region where the expenditure occurs. As such, the analysis below represents a distributional analysis only.

Estimates of the business activity (economic impacts) associated with recreational angling for Gulf lane snapper were calculated using average trip-level impact coefficients derived from the 2022 Fisheries Economics of the U.S. report (NMFS 2024) and underlying data provided by the National Oceanic and Atmospheric Administration Office of Science and Technology.

Economic impact estimates in 2022 dollars were adjusted to 2024 dollars using the annual, not seasonally adjusted, gross domestic product (GDP) implicit price deflator provided by the U.S. Bureau of Economic Analysis.

Business activity (economic impacts) for the recreational sector is characterized in the form of jobs (full- and part-time), income impacts (wages, salaries, and self-employed income), output impacts (gross business sales), and value-added impacts (contribution to the GDP in a state or region). Estimates of the average annual economic impacts (2020-2024) resulting from Gulf lane snapper charter, private vessel, and shore target trips are provided in Table 2.3.2.6. These impacts should not be added together because this would result in double counting. The average impact coefficients, or multipliers, used in the model are invariant to the “type” of effort (e.g., target or catch) and can therefore be directly used to measure the impact of other effort measures such as Gulf lane snapper catch trips. To calculate the multipliers from Table 2.3.2.6, simply divide the desired impact measure (value-added impact, sales impact, income impact, or

employment) associated with a given state and mode by the number of target trips for that state and mode.

The estimates provided in Table 2.3.2.6 only apply at the state-level. Addition of the state-level estimates to produce a regional (or national) total may underestimate the actual amount of total business activity, because state-level impact multipliers do not account for interstate and interregional trading. It is also important to note that these economic impacts estimates are based on trip expenditures only and do not account for durable expenditures. Durable expenditures cannot be reasonably apportioned to individual species or species groups. As such, the estimates provided in Table 2.3.2.6 may be considered a lower bound on the economic activity associated with those trips that targeted Gulf lane snapper. Estimates of the business activity associated with headboat effort are not available. Headboat vessels are not covered by MRIP in the Southeast, so, in addition to the absence of estimates of target effort, estimation of the appropriate business activity coefficients for headboat effort has not been conducted.

**Table 2.3.2.6.** Estimated average annual economic impacts (2020-2024) from Gulf charter, private vessel, and shore lane snapper target trips, by state,\* using state-level multipliers. All monetary estimates are in 2024 dollars in thousands.

	FL	AL	MS
<b>Charter Mode</b>			
Target Trips	8,930	34	0
Value Added Impacts	\$6,017	\$14	\$0
Sales Impacts	\$9,530	\$24	\$0
Income Impacts	\$4,102	\$10	\$0
Employment (Jobs)	85	0	0
<b>Private/Rental Mode</b>			
Target Trips	74,709	2,725	1,045
Value Added Impacts	\$2,672	\$106	\$11
Sales Impacts	\$4,464	\$229	\$30
Income Impacts	\$1,310	\$46	\$5
Employment (Jobs)	25	1	0
<b>Shore</b>			
Target Trips	4,055	0	0
Value Added Impacts	\$234	\$0	\$0
Sales Impacts	\$386	\$0	\$0
Income Impacts	\$125	\$0	\$0
Employment (Jobs)	2	0	0
<b>All Modes</b>			
Target Trips	87,694	2,759	1,045
Value Added Impacts	\$8,923	\$120	\$11
Sales Impacts	\$14,380	\$253	\$30
Income Impacts	\$5,537	\$56	\$5
Employment (Jobs)	113	1	0

\*There was no recorded target effort for lane snapper in Texas, and Louisiana data are currently unavailable.

National-level multipliers must be used to account for interstate and interregional trading when calculating a national total of economic impacts. Between 2020 and 2024, and using national-level multipliers, Gulf lane snapper target effort generated employment, income, value-added, and output (sales) impacts of 140 jobs, \$13.5 million, \$7.9 million, and \$24.6 million per year, respectively, on average.

## 2.4 Impacts of Management Measures

This framework action increases the overfishing limit (OFL) to 1,336,445 lb whole weight (ww) and the acceptable biological catch (ABC) to 1,304,917 lb ww, for 2026-2028 and subsequent years. The stock ACL is set equal to the ABC, and so the stock ACL would increase by 216,044 lb ww. As lane snapper has a stock ACL, without sector ACLs, this analysis examines how the proposed increase in the stock ACL may affect the two sectors proportionally, based on the two sectors' average historical usage of the stock ACL. Based on the commercial and recreational sector-specific landings from 2020-2024, the recreational sector accounted for 97.44% of landings, while the commercial sector accounted for 2.56% of landings. Therefore, if that relative sector usage persists with the increase, the recreational sector would utilize an additional 210,515 lb ww, while the commercial sector would utilize an additional 5,529 lb ww.<sup>14</sup>

### Recreational Sector

Estimated changes in economic value to recreational fishermen are approximated by multiplying the expected change in the number of fish harvested by a CS estimate. The most recent proxy for a CS estimate for lane snapper is the estimated value of the CS for a 1 fish change in snapper harvest. A value of \$15.50 (Haab et al.; values updated to 2024\$) reflects recreational WTP for 1 additional lane snapper harvest. For the **Preferred Option 2**, the change in expected recreational landings of 210,515 lb ww is divided by the average weight of a recreationally landed lane snapper (0.766883 lb ww) from 2020 to 2024 (M. Larkin, SERO, pers. comm. 2026) to determine the increase in the number of fish landed by the recreational sector. The increase in the number of fish (274,507, as seen in Table 2.4.1) is then multiplied by the value of \$15.50 to calculate the expected change in the recreational sector's CS, which equates to \$4,254,854. The expected change in the recreational CS in Table 2.4.1 may be an upper bound, as it assumes recreational anglers would increase their harvest rates in response to the increased stock ACL; however, some of the stock ACL may remain unharvested as no season closure is anticipated (see Appendix A).

---

<sup>14</sup> The economic effects of the proposed increase to the Gulf lane snapper stock ACL may be an overestimate in Section 2.4, as it compares the proposed stock ACL with the current stock ACL. It also assumes that the lane snapper fishery will fully utilize the proposed increase to the stock ACL due to landings exceeding the current stock ACL of 1,088,873 lb ww in recent years (2022-2024). This suggests that the increase to the stock ACL would be utilized, in part if not in whole, by the lane snapper fishery.

**Table 2.4.1.** Expected change in the recreational sector’s CS under the **Preferred Option 2**. Values are in 2024\$.

Expected Change in Rec Landings (lb ww)	Expected Change in Rec Landings, Expressed as Number of Fish	Expected Change in Rec Sector CS
210,515	274,507	\$4,254,854

The PS of the for-hire component of the recreational sector, composed of charter vessels and headboats, would be impacted by a change in the number of targeted trips. In the long run, factors of production, such as labor and capital, can be used elsewhere in the economy, and so only short-term changes to PS are expected. In the Gulf, headboat trips take a diverse set of anglers on a single vessel, generally advertising a diverse range of species to be caught. Therefore, an assumption that no headboat trips would be gained or lost due to a change in the recreational ACL is reasonable and supported by the percent distribution by mode of recreational landings from 2020-2024, which shows only 5% of recreational sector landings are from headboats (A. Stemle, SERO, pers. comm. 2026). However, charter vessel trips that are targeting lane snapper may be added by anglers and are the focus of the recreational sector PS analysis. From 2021-2025, season closures occurred in 2021, 2022, and 2024; however, a recent framework action under the Reef Fish FMP (GMFMC 2025) would implement a 10-inch minimum size limit for lane snapper, which is expected to lengthen the season such that no season closure would occur either with the current stock ACL or the stock ACL under the **Preferred Option 2** (see Appendix A). The positive economic impacts to the for-hire component from additional for-hire trips due to no season closure are already accounted for in the recent framework action (GMFMC 2025). Therefore, as the season cannot be further lengthened and no additional for-hire trips are expected to occur as a result of the increase in the stock ACL in this abbreviated framework action, no economic effects to the for-hire component of the recreational sector are expected from the **Preferred Option 2** in this abbreviated framework action.

The expected net economic benefits to the recreational sector are a summation of the changes in the recreational sector’s CS and PS. The expected net economic benefit to the recreational sector from the **Preferred Option 2** is equal to the expected change in the recreational sector’s CS of \$4,254,854.

### Commercial Sector

To calculate the expected change in commercial CS due to the expected additional 5,529 lb ww of commercial landings, own-price flexibility<sup>15</sup> for the Gulf lane snapper commercial sector would be required to derive the expected average price change. Asche (2020) estimated a Marshallian own-price flexibility for “other snappers,” inclusive of lane snapper, of -0.340. The expected change in commercial CS is displayed in Table 2.4.2.

<sup>15</sup> The own-price flexibility is the percentage change in a product’s price relative to the percentage change of a product’s quantity sold. This shows the responsiveness of a product’s price to the quantity being sold.

**Table 2.4.2.** Expected change in the commercial sector’s CS under the **Preferred Option 2**. Values are in 2024\$.

Expected Change in Landings by Commercial Sector (lb ww)	Expected Average Price Change (\$/lb)	Expected Change in CS (2024\$)
5,529	-\$0.24	\$7,480

To determine the respective expected change in ex-vessel revenue as a result of the proposed change to the stock ACL, the difference is calculated between (i) the expected new ex-vessel price per lb ww of \$3.38 multiplied by the expected commercial landings of 33,397 lb ww under the proposed stock ACL (\$112,882) and (ii) the current ex-vessel price per lb ww of \$3.62 multiplied by the expected commercial landings of 27,868 lb ww under the current stock ACL (\$100,882). The commercial PS for vessels that harvested lane snapper in the Gulf is estimated as 51% of the ex-vessel value (Section 2.3.1). The expected changes in commercial revenue and in commercial PS, along with the total expected change in net economic benefits for the commercial sector from the **Preferred Option 2** are shown in Table 2.4.3.

**Table 2.4.3.** Expected changes in the commercial sector revenue and PS, along with total expected change in net economic benefits to the commercial sector, under the **Preferred Option 2**. Values are in 2024\$.

Fishing Year	Expected Change in Comm Revenue	Expected Change in Comm PS	Total Expected Change in Comm Net Economic Benefits (2024\$)
2026+	\$12,000	\$6,120	\$13,600

### Net Economic Benefits

The total expected change in net economic benefits for both the recreational and commercial sectors can be calculated by summing both the recreational and commercial sectors’ expected changes in net economic benefits. The total expected changes in net economic benefits are \$4,268,464.

## 2.5 Public and Private Costs of Regulations

The preparation, implementation, enforcement, and monitoring of this or any federal action involves the expenditure of public and private resources, which can be expressed as costs associated with the regulations. Costs to the private sector and program-related administrative costs to NMFS are discussed under Section 2.4: “Impacts of Management Measures.” Public costs associated with the development of this amendment, including Council costs of document preparation, meetings, public hearings, and information dissemination, as well as NMFS administrative costs of document preparation, meetings and review, are treated as sunk costs and excluded from this analysis per Office of Management and Budget (OMB) guidance. Council and NMFS administrative costs directly attributable to the development of this amendment and

the rulemaking process would be incurred prior to the effective date of the final rule implementing this amendment.

Additionally, this analysis does not include any additional law enforcement costs. Any enforcement duties associated with this action would be expected to be covered under routine enforcement costs rather than an expenditure of new funds.

## 2.6 Net Benefits of the Regulatory Action

It is important to specify the time period being considered when evaluating benefits and costs. According to the OMB's Circular A-4,<sup>16</sup> "[t]he stream of annualized estimates should begin in the year in which the final rule will begin to have effects, even if the rule does not take effect immediately.... The time frame for your analysis should cover a period long enough to encompass all the important benefits and costs likely to result from the rule."

For current purposes, the reasonably "foreseeable future" is considered to be the next 3 years (2027-2029). The reason that this analysis uses a 3-year timeframe is based on the SEDAR timeline for when the OFL and ABC values for lane snapper will be analyzed again as part of a Full Assessment, although an Interim Analysis has been requested whereupon the Council may review those values sooner. The 3-year timeframe also accounts for the estimated time for completion of a subsequent framework action and associated rulemaking.

The annual effects from this regulatory action are expected to be \$4,268,464. Over a 3-year timeframe of 2027-2029, the expected increase in the discounted net present value of economic benefits from this amendment would be \$12,073,826 using a 3% discount rate and \$11,201,799 using a 7% discount rate.

Based on this information, this regulatory action is expected to increase net economic benefits to the Nation.

## 2.7 Determination of Significant Regulatory Action

Pursuant to E.O. 12866, a regulation is considered a "significant regulatory action" if it is likely to result in: 1) an annual effect of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, territorial, or tribal governments or communities; 2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; 3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; or 4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this E.O. Based on the information in Sections 2.4 through 2.6, the annual effects from this regulatory action are expected to be \$4,268,464; there are no estimated economic costs or transfers. In summary, annual economic effects from this action are not expected to meet or exceed the \$100 million

---

<sup>16</sup> See <https://www.whitehouse.gov/wp-content/uploads/2025/08/CircularA-4.pdf>

threshold. Thus, this action has been determined to not be economically significant for the purposes of E.O. 12866.

## CHAPTER 3. REGULATORY FLEXIBILITY ACT ANALYSIS

The purpose of the Regulatory Flexibility Act (RFA) is to establish a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure such proposals are given serious consideration. The RFA does not contain any decision criteria; instead the purpose of the RFA is to inform the agency, as well as the public, of the expected economic effects of various alternatives contained in the regulatory action and to ensure the agency considers alternatives that minimize the expected economic effects on small entities while meeting the goals and objectives of the applicable statutes (e.g., the Magnuson-Stevens Fishery Conservation and Management Act [Magnuson-Stevens Act]).

With certain exceptions, the RFA requires agencies to conduct an initial regulatory flexibility analysis (IRFA) for each proposed rule. The IRFA is designed to assess the effects various regulatory alternatives would have on small entities, including small businesses, and to determine ways to minimize those effects. An IRFA is primarily conducted to determine whether the proposed regulatory action would have a significant economic effect on a substantial number of small entities. In addition to analyses conducted for the Regulatory Impact Review (RIR), the IRFA provides: 1) a description of the reasons why action by the agency is being considered; 2) a succinct statement of the objectives of, and legal basis for, the proposed regulatory action; 3) a description and, where feasible, an estimate of the number of small entities to which the proposed regulatory action will apply; 4) a description of the projected reporting, record-keeping, and other compliance requirements of the proposed regulatory action, including an estimate of the classes of small entities which will be subject to the requirements of the report or record; 5) an identification, to the extent practicable, of all relevant federal rules, which may duplicate, overlap, or conflict with the proposed rule; and 6) a description of any significant alternatives to the proposed regulatory action which accomplish the stated objectives of applicable statutes and would minimize any significant economic effects of the proposed regulatory action on small entities.

In addition to the information provided in this section, additional information on the expected economic effects of the proposed action is included in the RIR.

### 3.1 Statement of the need for, objective of, and legal basis for the proposed action

A discussion of the reasons why action by the agency is being considered is provided in Chapter 1. In summary, there is a need to update the existing lane snapper catch limits based on the best scientific information available and to achieve optimum yield while preventing overfishing, consistent with the requirements of Magnuson-Stevens Act. The objective of this proposed

regulatory action is to modify the overfishing limit (OFL), acceptable biological catch (ABC), and stock annual catch limit (ACL) for Gulf of America (Gulf) lane snapper based on the 2026 SEDAR 49 Interim Analysis (IA). The Magnuson-Stevens Act provides the statutory basis for this proposed regulatory action. All monetary estimates in the following analysis are in 2024 dollars

### **3.2 Description and estimate of the number of small entities to which the proposed action would apply**

The proposed regulatory action would revise the Gulf lane snapper OFL from 1,116,331 pounds (lb) whole weight (ww) to 1,336,445 lb ww in 2026 and subsequent years. In addition, this proposed regulatory action would also revise the Gulf lane snapper ABC from 1,088,873 lb ww to 1,304,917 lb ww in 2026 and subsequent years. The proposed regulatory action would set the Gulf lane snapper stock ACL equal to the ABC.

The proposed changes to the Gulf lane snapper OFL, ABC, and stock ACL would apply to commercial fishing businesses, for-hire fishing businesses, and recreational anglers that fish for lane snapper in federal waters of the Gulf. The RFA requires the National Marine Fisheries Service (NMFS) to describe the impact of the proposed rule on small entities (5 U.S.C. 603). Small entities include small businesses, small organizations, and small governmental jurisdictions (5 U.S.C. 601(3)-(6)). Recreational anglers are not businesses, organizations, or governmental jurisdictions, so they are outside the scope of this analysis.

As of August 26, 2021, there were 814 valid or renewable commercial Gulf reef fish permits. In order to commercially harvest Gulf lane snapper, a vessel must have a valid Gulf reef fish commercial permit. However, not all vessels with a Gulf reef fish permit actively harvest lane snapper in the Gulf. On average from 2020 through 2024, there were 261 vessels reporting landings of lane snapper in the Gulf. From 2020 through 2024 the maximum annual gross revenue earned by a single commercial lane snapper vessel during this time was approximately \$4.37 million, while the average annual gross revenue for a vessel commercially harvesting lane snapper was \$211,285. Ownership data regarding vessels that harvest lane snapper is incomplete. Therefore, it is not currently feasible to accurately determine affiliations between these particular vessels. Because of the incomplete ownership data, for purposes of this analysis, it is assumed each of these vessels is independently owned by a single business, which is expected to result in an overestimate of the actual number of businesses directly regulated by this proposed action. Thus, it is assumed this proposed action would regulate 261 commercial fishing businesses.

A valid charter-headboat (for-hire) Gulf reef fish vessel permit is required in order for for-hire vessels to legally harvest lane snapper in the Gulf. NMFS does not possess complete ownership data regarding vessels that hold charter-headboat (for-hire) Gulf reef fish vessel permits, and thus potentially harvest lane snapper. Therefore, it is not currently feasible to accurately determine affiliations between these vessels and the businesses that own them. As a result, for purposes of this analysis, it is assumed each for-hire vessel is independently owned by a single business,

which is expected to result in an overestimate of the actual number of for-hire fishing businesses regulated by this proposed action.

This proposed action would only be expected to alter the fishing behavior of for-hire businesses that target lane snapper in the Gulf (i.e., the behavior of for-hire businesses that incidentally harvest lane snapper in the Gulf is not expected to change). Therefore, only for-hire vessels that target lane snapper in the Gulf are expected to be directly affected by this proposed action. NMFS does not possess data indicating how many for-hire vessels actually harvest or target lane snapper in a given year. However, in 2020, there were 1,289 vessels with valid charter-headboat Gulf reef fish vessel permits. Further, lane snapper is primarily targeted in waters off the west coast of Florida. Of the 1,289 vessels with valid charter-headboat Gulf reef fish vessel permits, 803 were homeported in Florida. Of these permitted vessels, 62 are primarily used for commercial fishing rather than for-hire fishing purposes and thus are not considered for-hire fishing businesses. In addition, 41 of these permitted vessels are considered headboats, which are considered for-hire fishing businesses. However, headboats take a relatively large, diverse set of anglers to harvest a diverse range of species on a trip, and therefore do not typically target a particular species. Therefore, it is assumed that no headboat trips would be canceled, and thus no headboats would be directly affected as a result of this proposed action. However, charter vessels often target lane snapper. Of the 803 vessels with valid charter-headboat Gulf reef fish vessel permits that are homeported in Florida, 700 of them are assumed to be charter vessels. Souza and Liese (2019) reported that 76% of charter vessels with valid charter-headboat permits in the Gulf were active in 2017 (i.e., 24% were not fishing). A charter vessel would only be directly affected by this proposed action if it is fishing. Given this information, the number of charter vessels that are likely to target lane snapper in a given year is 532. Thus, this proposed action is estimated to regulate 532 for-hire fishing businesses. NMFS does not have data to estimate the maximum gross revenue for charter vessels. However, the maximum annual gross revenue for a single headboat in the Gulf was about \$1.45 million in 2017 (D. Carter, SEFSC, pers. comm. 2018), and according to Savolainen et al. (2012), on average, annual gross revenue for headboats in the Gulf is about three times greater than annual gross revenue for charter vessels

On December 29, 2015, NMFS issued a final rule establishing a small business size standard of \$11 million in annual gross receipts (revenue) for all businesses primarily engaged in the commercial fishing industry (NAICS code 11411) for RFA compliance purposes only (80 FR 81194, December 29, 2015). In addition to this gross revenue standard, a business primarily involved in commercial fishing is classified as a small business if it is independently owned and operated and is not dominant in its field of operations (including its affiliates). Based on this information, all commercial fishing businesses directly regulated by this proposed action are determined to be small entities for the purpose of this analysis.

For other industries, the Small Business Administration has established size standards for all major industry sectors in the U.S., including for-hire businesses (NAICS code 487210). A business primarily involved in for-hire fishing is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has annual receipts (revenue) not in excess of \$14 million for all its affiliated

operations worldwide. Based on this information, all for-hire fishing businesses directly regulated by this proposed action are determined to be small businesses for the purpose of this analysis.

### **3.3 Description of the projected reporting, record-keeping and other compliance requirements of the proposed action**

This proposed action would not establish any new reporting, record-keeping, or other compliance requirements.

### **3.4 Identification of all relevant federal rules, which may duplicate, overlap or conflict with the proposed action**

No federal rules have been identified that duplicate, overlap or conflict with the proposed action.

### **3.5 Significance of economic impacts on a substantial number of small entities**

#### Substantial number criterion

If implemented, this proposed action is expected to directly affect 261 of the 837 vessels with commercial Gulf reef fish permits, or approximately 32% of those commercial fishing businesses. Further, this proposed action is expected to directly affect 532 of the 1,227 for-hire fishing businesses with valid charter/headboat permits in the Gulf reef fish fishery, or approximately 43% of those for-hire fishing businesses. All regulated commercial and for-hire fishing businesses have been determined, for the purpose of this analysis, to be small entities. Based on this information, the proposed action is expected to affect a substantial number of small businesses.

#### Significant economic effects

The outcome of “significant economic impact” can be ascertained by examining two factors: disproportionality and profitability.

Disproportionality: Do the regulations place a substantial number of small entities at a significant competitive disadvantage to large entities?

All entities directly regulated by this regulatory action have been determined to be small entities. Thus, the issue of disproportionality does not arise in the present case.

Profitability: Do the regulations significantly reduce profits for a substantial number of small entities?

For vessels that commercially harvest lane snapper in the Gulf, currently available data indicates that economic profits are approximately 32% of annual average gross revenue. Given that their average annual gross revenue is \$211,285, annual average economic profit per vessel is estimated to be approximately \$67,611. The proposed action to increase the stock ACL for lane snapper would increase the total amount of lane snapper available for harvest by the commercial sector. Specifically, the proposed action is expected to increase lane snapper commercial landings by 5,529 lb ww. To determine the respective expected change in ex-vessel revenue as a result of the proposed change to the Gulf lane snapper ACL, an own-price flexibility of -0.340 is utilized which yields a new ex-vessel price per lb of \$3.38. The new ex-vessel price per lb is multiplied by the expected commercial landings of 33,397 lb ww under the proposed stock ACL which is equal to \$112,882. In comparison, the current ex-vessel price per lb ww of \$3.62 multiplied by the expected commercial landings of 27,868 lb ww under the status quo stock ACL is equal to \$100,882. Consequently, the proposed fishery management action is expected to increase annual gross revenue by \$12,000. Economic profit, therefore, is expected to increase by \$3,840. On a per vessel basis, annual gross revenue and economic profit are expected to increase by \$46 and \$15, respectively.

The proposed action would also increase the total amount of lane snapper available for harvest by the recreational sector. Specifically, the proposed action could be expected to increase recreational charter target trips for Gulf lane snapper. However, a recent framework action (GFMC 2025) modified the minimum size limit for Gulf lane snapper which was expected to lengthen the overall recreational fishing season, thereby increasing recreational charter trips. The associated economic impacts of the increase to recreational charter target trips are captured in that framework action (GFMC 2025). The recreational lane snapper season is no longer expected to close under the new size limit established in GFMC 2025, even under the status quo ACL. Therefore, because the proposed action to modify the Gulf lane snapper stock ACL is not expected to result in lengthening the recreational season further, no additional trips or earnings are expected as a result of the proposed action.

### **3.6 Description of the significant alternatives to the proposed action and discussion of how the alternatives attempt to minimize economic impacts on small entities**

This proposed action, if implemented, would not be expected to have a significant economic impact on a substantial number of small entities. As a result, the issue of significant alternatives is not relevant.

## CHAPTER 4. LIST OF PREPARERS

### PREPARERS

Name	Expertise	Responsibility	Agency
Ryan Rindone	Fishery Biologist	Co-Team Lead – Amendment development	GFMC
Kelli O’Donnell	Fishery Biologist	Co-Team Lead – Amendment development	SERO
Matt Freeman	Economist	Regulatory Impact Review, Regulatory Flexibility Act Analysis	GFMC
Adam Stemle	Economist	Regulatory Impact Review, Regulatory Flexibility Act Analysis	SERO
Mike Larkin	Fishery Biologist	Data analyses	SERO

### REVIEWERS

Name	Expertise	Responsibility	Agency
Mara Levy	Attorney	Legal review	NOAA GC
Adam Bailey	Technical writer and editor	Regulatory writer	SERO
Frank Helies	Fishery Biologist	Review	SERO
David Dale	EFH Biologist	Review	SERO
Jennifer Lee	Protected Resources	Review	SERO
David Records	Economist	Review	SERO
Francesca Forrestal	Research Ecologist	Review	SEFSC
Anabelle Sutor	Anthropologist	Review	GFMC
John Froeschke	Fishery Biologist	Review	GFMC
Carrie Simmons	Fishery Biologist	Review	GFMC

GFMC = Gulf Fishery Management Council; NOAA GC = National Oceanic and Atmospheric Administration General Counsel; SEFSC = Southeast Fisheries Science Center; SERO = Southeast Regional Office of the National Marine Fisheries Service

## CHAPTER 5. REFERENCES

Abbott, J.K., and D. Willard. 2017. Rights-based management for recreational for-hire fisheries: Evidence from a policy trial. *Fisheries Research*. 196. 106–116 pp.

Asche, F. 2020. Supply chains and markets for red snapper. University of Florida. Institute for Sustainable Food Systems. 22p.

GMFMC. 2021a. Framework Action to the Fishery Management Plan for Reef Fish of the Gulf of Mexico. Gulf of Mexico Fishery Management Council, Tampa, Florida. 106pp.

GMFMC. 2021b. Amendment 48 to the Fishery Management Plan for the Reef Fish Resources of the Gulf and Amendment 5 to the Fishery Management Plan for the Red Drum Fishery of the Gulf. Gulf of Mexico Fishery Management Council, Tampa, Florida. 169pp. [https://gulf-council-media.s3.amazonaws.com/uploads/2025/03/Amendment-RF48-RD5\\_04262021\\_Final\\_Transmittal\\_revised.pdf](https://gulf-council-media.s3.amazonaws.com/uploads/2025/03/Amendment-RF48-RD5_04262021_Final_Transmittal_revised.pdf)

GMFMC. 2024. Framework Action to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico. Gulf of Mexico Fishery Management Council, Tampa, Florida. 61pp. [https://gulf-council-media.s3.amazonaws.com/uploads/2025/03/Catch-Limit-Modifications-for-Gulf-of-Mexico-Lane-Snapper\\_03042024\\_final\\_amended.pdf](https://gulf-council-media.s3.amazonaws.com/uploads/2025/03/Catch-Limit-Modifications-for-Gulf-of-Mexico-Lane-Snapper_03042024_final_amended.pdf)

GMFMC. 2025. Framework Action to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico. Gulf of Mexico Fishery Management Council, Tampa, Florida. 100pp. [https://gulf-council-media.s3.amazonaws.com/uploads/2025/08/FA-Modifications-to-Size-Limit-for-Gulf-Lane-Snapper\\_Transmitted.pdf](https://gulf-council-media.s3.amazonaws.com/uploads/2025/08/FA-Modifications-to-Size-Limit-for-Gulf-Lane-Snapper_Transmitted.pdf)

Haab, T., R.L. Hicks, K. Schnier, and J.C. Whitehead. 2012. Angler heterogeneity and the species-specific demand for marine recreational fishing. Appalachian State University, Department of Economics, Working Paper, Number 10-02. 47 pp.

Keithly W.R., Jr. and M. Tabarestani. 2018. The Gulf of Mexico grouper/tilefish fishery after introduction of an individual fishing quota program: The impact on ex-vessel prices. 17 pp.

Liese, C. 2023. Economics of the Gulf of Mexico Reef Fish Fishery - 2018. NOAA Technical Memorandum NMFS-SEFSC-772. 148 p. <https://doi.org/10.25923/t6zj-c759>.

NMFS. 2011. A user's guide to the National I/O Model. NMFS Office of Science and Technology. Silver Spring MD, 39 pp.

NMFS. 2024. Fisheries Economics of the United States, 2022. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-248B. 28 pp.

Savolainen, M.A., R.H. Caffey, and R.F. Kazmierczak, Jr. 2012. Economic and attitudinal perspectives of the recreational for-hire fishing industry in the U.S. Gulf of Mexico. Center for Natural Resource Economics and Policy, LSU AgCenter and Louisiana Sea Grant College

Program, Department of Agricultural Economics and Agribusiness, Louisiana State University, Baton Rouge, LA. 171 pp. [www.laseagrant.org/wp-content/uploads/Gulf-RFH-Survey-Final-Report-2012.pdf](http://www.laseagrant.org/wp-content/uploads/Gulf-RFH-Survey-Final-Report-2012.pdf)

SEDAR 49. 2016. SEDAR 49. Gulf of Mexico Data-limited Species: Red Drum, Lane Snapper, Lesser Amberjack. North Charleston, South Carolina.

Souza, P. M., Jr. and C. Liese. 2019. Economics of the Federal For-Hire Fleet in the Southeast - 2017. NOAA Technical Memorandum NMFS-SEFSC-740, 42 p.

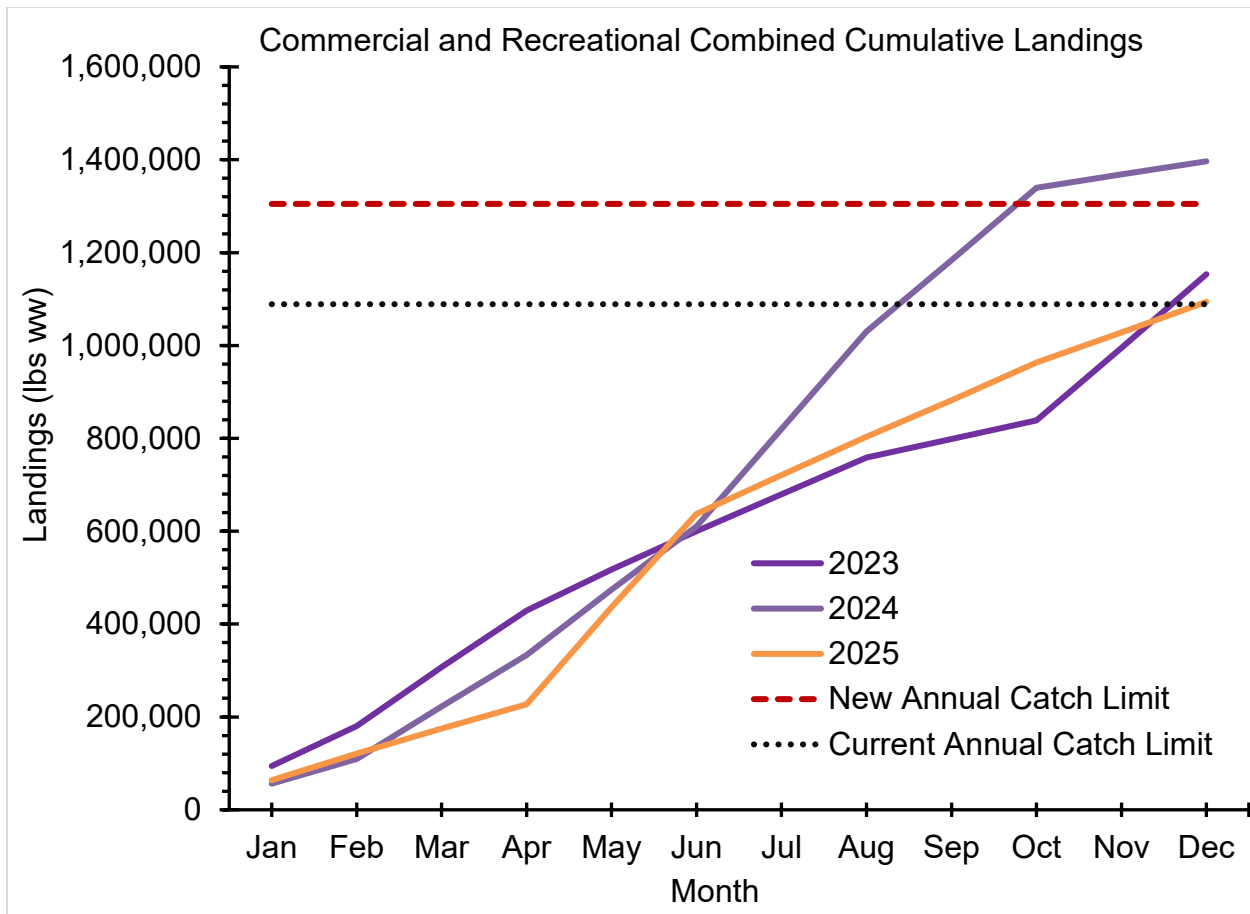
## APPENDIX A. GULF LANE SNAPPER MINIMUM SIZE LIMIT AND SEASON PREDICTION ANALYSIS

The Gulf Council (Council) recommended changes to the lane snapper minimum size limit for both the commercial and recreational sector to the National Marine Fisheries Service (NMFS) in August 2025. The Gulf of America (Gulf) lane snapper fishery has experienced high landings in recent years which has led to closures due to the annual catch limit (ACL) being reached or projected to be reached. New regulations relative to the lane snapper minimum size limit are being considered by NMFS to reduce harvest and avoid quota closures. The minimum size limits (current and proposed) were analyzed and compared to predicted landings, in conjunction with the catch limit increase proposed in Chapter 1, to determine if they will collectively prevent landings from exceeding the stock ACL in the future.

### Predicted Landings

The Gulf lane snapper stock is monitored by combining the commercial and recreational landings against a single stock ACL. The fishing season for this stock has been closed one out of the past three years because the ACL was met or projected to be met. This quota closure was based on the current ACL of 1,088,873 lb ww. Herein, the Council is considering a Framework Action to increase the ACL to 1,304,917 lb ww, in response to updated catch advice from the Council's Scientific and Statistical Committee. Additionally, an increase to the minimum size limit to 10 inches TL was recommended to NMFS by the Council in August 2025. The percent reductions in harvest from the minimum size limit changes above are applied here to the predicted future landings to determine if the ACL will be met. Therefore, an estimate of predicted future landings are needed.

This Abbreviated Framework would increase the Gulf lane snapper ACL from 1,088,873 lb ww to 1,304,917 lb ww. The average of the combined commercial and recreational landings for 2023 and 2025 did not exceed the higher proposed ACL. However, combined commercial and recreational landings in 2024 were higher than the proposed ACL. A summary of recent cumulative lane snapper landings is shown in Figure A1.



**Figure A1.** Gulf lane snapper commercial and recreational cumulative landings by month from 2023, 2024, and 2025. The black dashed line is the current ACL of 1,088,873 lb ww, and the red dashed line is the proposed ACL of 1,304,917 lb ww.

Landings before 2025 are final, and 2025 landings are preliminary. To capture a range of landings options two different landings scenarios were used to reflect future landings. The first scenario is an average of 2023, 2024, and 2025 landings. However, in 2024 both the commercial and recreational sectors were closed to harvest on November 26, on account of the ACL being projected to be met. The November 2024 landings were modified for this closure analysis by calculating a daily catch rate based on the open days in November 2024 and applying that catch rate to the entire month. However, since the Gulf lane snapper fishery was closed for all of December 2024, a prediction of landings for this month came from an average of the December 2023 and 2024 landings. The second scenario only uses the 2024 landings to reflect a maximum landings situation since only the recent year of 2024 had landings that exceeded the proposed ACL of 1,304,917 lb ww.

*Combining reductions from the minimum size limit to predicted landings to evaluate if the ACL will be met*

The percent reductions in harvest from the minimum size limit were calculated for the commercial sector and for the four recreational surveys. These minimum size limit percent reductions were weighted by the percent of landings from the directed fleet surveys (Table A3)

and applied to the two different landings scenarios. Table A1 provides the results of weighting each percent reduction by the proportion of landings contribution.

**Table A1.** Estimated percent reduction in Gulf lane snapper landings calculated from weighting the percent reduction from the commercial and four recreational surveys from the proportion of landings each contributed to the total Gulf lane snapper landings. Generated from data from 2023 through 2025. The current minimum size limit is 8 inches TL.

Minimum Size Limit	Overall Harvest Reduction
8 inches TL (Status Quo)	0.0%
10 inches TL	31.5%

The predicted landings per day for each of the two scenarios were cumulatively summed to determine when and if the current and future ACLs were projected to be met. The predicted landings were reduced by the percent reductions in Table A1 to account for potential changes in landings due to the minimum size limit change. Table A2 provides the closure dates when and if the current or proposed ACLs were projected to be met. The current ACL is expected to be met as early as September 12 and the proposed ACL is expected to be met as early as October 25. However, when accounting for the minimum size limit increase to 10 inches TL, neither ACL is expected to be met.

**Table A2.** Predicted closure dates when the current and future ACLs are expected to be met for the Gulf lane snapper stock with changes to the size limit.

Regulation	ACL of 1,088,873 lb ww	ACL of 1,304,917 lb ww
Average 2023, 2024, and 2025 Landings		
8 inches TL (Status Quo)	19-Oct	No Closure
10 inches TL	No Closure	No Closure
Only 2024 Landings		
8 inches TL (Status Quo)	12-Sep	25-Oct
10 inches TL	No Closure	No Closure

One of the landings scenarios assumes the high Gulf lane snapper stock landings that were observed in 2024 would continue in the future. If future landings are lower and similar to 2023 and 2025, then the proposed ACL is not expected to be met even without any change to the minimum size limit. However, if future landings are similar to the landings in 2024, then the Council’s recommended change to a minimum size limit of 10 inches TL is expected to prevent the ACL from being met.

## APPENDIX B. PUBLIC COMMENTS RECEIVED

### Summary of Written Public Comment Catch Limit Modifications for Gulf of America Lane Snapper

**37 public hearing video views**  
**7 comments received**

- Support for catch limit increase.
  - Lane snapper population is healthy.
- Support for status-quo.
  - The population is dwindling.
  - 2025 was the worst lane snapper year to date.
  - Smaller than average size and less fish.
  - Need to travel farther to target them.
- Support for a minimum size limit increase.
  - Suggestions to increase the minimum size limit to 12 inches.
  - Allow for growth and increase quality.
  - 8-inches barely yields any meat.
  - Encouragement for implementation of the 10-inch minimum size limit.
- Support for 10 per person bag limit.
- Dissatisfaction with overregulation of gag grouper and concern that short gag seasons cause effort shifting.
- Support for increasing the mangrove snapper and red snapper size limits.