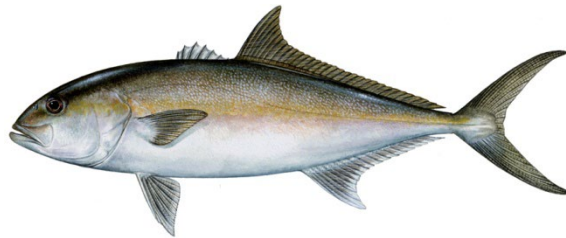


# **Draft Framework Action to Modify the Greater Amberjack and Jacks Complex Management Measures**



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

**January 2023**



*This is a publication of the Gulf of Mexico Fishery Management Council Pursuant to National Oceanic and Atmospheric Administration Award No. NA20NMF4410007.*

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# ENVIRONMENTAL ASSESSMENT COVER SHEET

Draft Framework Action to Modify the Greater Amberjack Recreational Closed Season and Commercial Trip Limit

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## Type of Action

☐ Administrative

☐ Legislative

☒ Draft

☐ Final

This Environmental Assessment is being prepared using the 2020 CEQ NEPA Regulations. The effective date of the 2020 CEQ NEPA Regulations was September 14, 2020, and reviews begun after this date are required to apply the 2020 regulations unless there is a clear and fundamental conflict with an applicable statute. 85 Fed. Reg. at 43372-73 (§§ 1506.13, 1507.3(a)). This Environmental Assessment began on xxl xx, 20xx, and accordingly proceeds under the 2020 regulations.

## ABBREVIATIONS USED IN THIS DOCUMENT

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

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

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# CHAPTER 1. INTRODUCTION

## 1.1 Background

In 2020, a Southeast Data Assessment and Review (SEDAR) was completed for Gulf of Mexico (Gulf) greater amberjack (SEDAR 70, 2020). The Gulf of Mexico Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviewed the assessment results and concluded that greater amberjack is overfished and experiencing overfishing. Earlier stock assessments have also indicated that the stock is overfished and overfishing and this condition has continued despite the implementation of several management measures to constrain catch and reduce the fishing mortality of juveniles (Table 1.1.1). The results of SEDAR 70 required additional modifications to greater amberjack catch limits in order to meet the 2027 rebuilding timeline put in place through a 2017 framework action (GMFMC 2017a). The Council developed Reef Fish Amendment 54 (GMFMC 2023) to modify the greater amberjack rebuilding plan to rebuild the stock by 2027 and immediately end overfishing. The amendment, when implemented will also adjust sector allocations.

**Table 1.1.1.** Summary of stock assessments, outcomes, and subsequent management actions for greater amberjack.

Stock Assessment	Stock Status	Management Action
Turner et al. 2000	Overfished and overfishing	Secretarial Amendment 2 (GMFMC 2002)
SEDAR 9 2006	Overfished and overfishing	Amendment 30A (GMFMC 2008)
SEDAR 9 Update 2011	Overfished and overfishing	Amendment 35 (2012)
SEDAR 33 2014	Overfished and overfishing	Framework Action (2015)
SEDAR 33 Update 2016	Overfished and overfishing	Framework Action (2017)
SEDAR 70 2020	Overfished and overfishing	Amendment 54 (under review by Secretary of Commerce)

The SSC completed an extensive review of SEDAR 70 over the course of several meetings in 2021. This was necessary as separate yield stream projections were required for each allocation scenario being considered by the Council and improved methodologies to provide overfishing limit (OFL) and acceptable biological catch (ABC) advice were developed by the Southeast Fisheries Science Center (SEFSC) and required additional review by the SSC.

At its November 2021 meeting, the SSC provided OFL, ABC, and rebuilding projections based on the allocation scenarios and updated projection protocols and were reviewed by the Council at its January 2022 meeting. The Council requested additional alternative catch level projections in April 2022. These allocation scenarios, collectively, resulted in OFL values that differed by 5% or less. The Council requested additional information about the effect of using Marine Recreational Information Program – Fishing Effort Survey (MRIP-FES) in the most recent stock as compared to the MRIP – Coastal Household Telephone Survey (MRIP-CHTS) that was used

in the prior SEDAR 33 Update assessment that was completed in 2016. The SEFSC completed an analysis that considered the resulting management advice from the SEDAR 33 Update assessment if MRIP-FES data had been available at the time of that original assessment. The results suggest that had MRIP-FES data been available for SEDAR 33 Update in 2016, the stock ACL recommendations considered in Reef Fish Amendment 54 represented approximately a 65% - 79%<sup>1</sup> decrease in yield, depending on year and allocation scenario. The harvest reductions in the projections necessary to end overfishing and rebuild the stock resulted in the Council requesting National Marine Fisheries service to promulgate emergency regulations to reduce the Gulf greater amberjack recreational fishing season while development of Amendment 54 continued (NMFS 2022).

Amendment 54 considered alternatives to modify the allocation of greater amberjack between the recreational and commercial sectors based on updated historical recreational harvest data and modified OFL, ABC, total and sector annual catch limits (ACL) and sector annual catch targets to end overfishing and rebuild the stock by 2027. As part of the amendment, the Council considered four action alternatives to revise the commercial-recreational allocation: maintain the current percentages; maintaining the time series used to set the current allocation (1981-2004) updated with MRIP-FES landings estimates; updating the time series to start when commercial greater amberjack landings began to be identified to species and end when the current allocation was implemented (1993-2007); and updating the time series to start when commercial greater amberjack landings began to be identified to species and end with the most recent year of data available at the time work on this amendment began (1993-2019). Ultimately, the Council determined that it was appropriate to update the allocation using the MRIP-FES adjusted data from 1993-2019 because this represented the longest time series during which commercial greater amberjack landings have been identified to species. However, the Council also recognized that the greater amberjack stock is overfished and has not rebuilt as expected under the current and previous rebuilding plans. Thus, the Council determined that a more cautious approach was warranted and selected lower catch levels than required by the SSC to increase likelihood of rebuilding the stock by 2027 (Table 1.1.3).

**Table 1.1.2.** Overfishing limit, ABC, sector ACLs and Sector ACTs from greater amberjack as recommended by the Council in Reef Fish Amendment 54 (GMFMC 2023)<sup>2</sup>. Values are in lbs ww.

Year	OFL	ABC	Total ACL	Rec ACL	Rec ACT	Com ACL	Com ACT	Allocation (Rec/Com)
2022+	2,033,000	505,000	505,000	404,000	335,320	101,000	93,930	80:20

At its August 2022 meeting, the Council directed staff to begin of development of a framework action for greater amberjack to modify commercial and recreational management measures. These measures are addressed in this framework action, and include modifications to the recreational fixed-closed season, modifications to commercial trip limits, and modifications to the recreational Jacks Complex fishing season.

<sup>1</sup> Based on the yield stream from 2023 through 2027.

<sup>2</sup> This amendment is under review and will be effective if approved by the Secretary of Commerce

### *Management Measures*

Recreational and commercial management measures for the harvest of greater amberjack are summarized in Table 1.1.3. The fishing year for commercial greater amberjack is January 1 – December 31 with a fixed-closed season from March 1 – May 31 (GMFMC 1981 and 1997). The fishing year for recreational greater amberjack is August 1 – July 31 with fixed closed seasons from November 1 – April 30 and June 1 – July 31 (GMFMC 2017b). The minimum size limits for greater amberjack are a 36-inch fork length (FL) for the commercial sector (GMFMC 1989), and 34-inch FL for the recreational sector (GMFMC 2015). The commercial trip limit is 1,000 lbs gutted weight (gw) with a step down to 250 lbs gw when 75% of the ACT has been harvested (GMFMC 2019). The recreational bag limit is one fish per person per day (GMFMC 1995).

**Table 1.1.3.** Recreational and commercial management measures for the harvest of greater amberjack.

	<b>Recreational</b>	<b>Commercial</b>
<b>Fishing Year</b>	Aug 1 – July 31	Jan 1 – Dec 31
<b>Fixed Closed Season(s)</b>	Nov 1 – Apr 30 and June 1 – July 31 <sup>3</sup>	Mar 1 – May 31
<b>Minimum Size Limit</b>	34-inch FL	36-inch FL
<b>Bag/Trip Limit</b>	1 fish per person per day	1,000 lbs gw until 75% of ACT is reached, then 250 lbs gw

Currently, the commercial and recreational sectors have ACTs set at 13% and 17% below their respective ACLs (GMFMC 2017a) and the ACT is equal to the quota for each sector. If Reef Fish Amendment 54 (GMFMC 2023) is approved by the Secretary of Commerce, the commercial ACT will be reduced from 13% to 7% upon implementation of the rule. Both sectors have an in-season AM such that when either sector's landings reach or are projected to reach its ACT, that sector is closed to harvest for the remainder of its fishing year. If either sector's landings exceed its ACL, then in the following fishing year, a post-season AM overage adjustment (also called a payback) is applied that reduces that sector's ACL in the following year by the amount of the overage in the previous year and adjusts the ACT accordingly (GMFMC 2008). Table 1.1.4 provides recreational landings, commercial landings, and total landings for greater amberjack.

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<sup>3</sup> An emergency rule, effective July 25, 2022, modified the recreational fixed closed season to be August 1 – 31, 2022 and November 1, 2022 through July 31, 2023. At the end of the emergency rule time period, or implementation of Reef Fish Amendment 54, whichever comes first, the recreational fixed closed season will revert back to what is presented in Table 1.1.4.

**Table 1.1.4.** Commercial and recreational landings of greater amberjack for calendar years 1981-2021. Units in lbs whole weight (ww). Recreational landings in Marine Recreational Information Program (MRIP)-Fishing Effort Survey (FES) units.

	Commercial	Recreational	Total (Com + Rec)
<b>1981</b>	232,739	1,535,588	1,768,327
<b>1982</b>	221,683	14,249,538	14,471,221
<b>1983</b>	276,074	8,744,054	9,020,128
<b>1984</b>	523,645	1,933,531	2,457,176
<b>1985</b>	761,646	5,788,808	6,550,454
<b>1986</b>	1,129,479	7,741,413	8,870,892
<b>1987</b>	1,561,381	18,301,807	19,863,188
<b>1988</b>	2,077,356	3,267,167	5,344,523
<b>1989</b>	1,968,751	8,948,748	10,917,499
<b>1990</b>	1,264,664	1,417,110	2,681,774
<b>1991</b>	1,782,934	6,030,388	7,813,322
<b>1992</b>	1,062,769	11,920,679	12,983,448
<b>1993</b>	1,623,943	4,857,808	6,481,751
<b>1994</b>	1,287,402	3,364,206	4,651,608
<b>1995</b>	1,243,250	1,109,144	2,352,394
<b>1996</b>	1,246,440	2,623,428	3,869,868
<b>1997</b>	1,069,462	2,211,032	3,280,494
<b>1998</b>	655,805	1,901,048	2,556,853
<b>1999</b>	728,441	2,540,025	3,268,466
<b>2000</b>	850,537	2,369,875	3,220,412
<b>2001</b>	706,405	2,270,655	2,977,060
<b>2002</b>	768,941	4,339,407	5,108,348
<b>2003</b>	960,552	6,463,326	7,423,878
<b>2004</b>	951,048	6,671,435	7,622,483
<b>2005</b>	717,170	3,262,366	3,979,536
<b>2006</b>	591,947	3,034,526	3,626,473
<b>2007</b>	587,865	1,287,113	1,874,978
<b>2008</b>	468,859	2,561,504	3,030,363
<b>2009</b>	594,833	2,482,621	3,077,454
<b>2010</b>	554,510	2,992,744	3,547,254
<b>2011</b>	519,564	2,082,231	2,601,795
<b>2012</b>	315,165	2,987,024	3,302,189
<b>2013</b>	471,301	3,217,306	3,688,607
<b>2014</b>	532,032	2,327,463	2,859,495
<b>2015</b>	500,613	2,618,841	3,119,454
<b>2016</b>	478,545	2,353,695	2,832,240
<b>2017</b>	484,024	1,011,487	1,495,511
<b>2018</b>	325,545	2,508,766	2,834,311
<b>2019</b>	362,126	701,480	1,063,606
<b>2020</b>	311,484	1,451,031	1,762,515
<b>2021</b>	328,092	945,542	1,273,634

Source: Recreational landings April 2021 MRIP\_FES\_rec81\_20wv6\_02Mar21w2014to2020LAcreel.xlsx. MRIP-CHTS: MRIPACLspec\_rec81\_20wv6\_02Mar21w2014\_2020LAcreel.xlsx. Commercial landings from SEDAR 70 (2020) for 1981-2018 and ACL dataset WH\_ACLS\_2014-2020\_05APR2021workingcopy.xlsx for 2019.

### *Modifications of Greater Amberjack Closed Season*

In December 2017, NMFS implemented a framework action (GMFMC, 2017a) that modified the recreational fixed closed season for greater amberjack from June 1 through July 31 (established in Amendment 35 to the FMP [GMFMC, 2012]) to a longer closure that spanned each year from January 1 through June 30. The intent of the rule was to protect greater amberjack during their peak spawning months (March through April) in the majority of the Gulf, with the intent that this would contribute to rebuilding the Gulf greater amberjack stock.

In March 2018, NMFS implemented another framework action (GMFMC 2017b) that changed the Gulf recreational greater amberjack fishing year from January 1 – December 31 to August 1 – July 31. The intent of this change was to allow for greater amberjack recreational harvest to occur later in the year and provide an opportunity to harvest greater amberjack when harvest of many other reef fish species was prohibited due to in-season closures as a result of harvest limits. By starting the fishing year in August when fishing effort is less, NMFS and the Council expected enough recreational quota remaining to allow for harvest during May of the following calendar year. Also, in this framework action, the Council modified the recreation fixed closed season. The new fixed closed season has three closure periods over the course of the fishing year: November 1 – December 31, January 1 – April 30, and June 1 – July 31. Greater amberjack recreational harvest was planned to be open August through October and in May each fishing year, unless an in-season closure was necessary to constrain harvest to the recreational quota. NMFS and the Council expected the recreational fixed closed season to reduce recreational landings and also expected this change to reduce the likelihood of an in-season closure and landings exceeding the recreational ACL.

In a recently completed action, NMFS issued (87 FR 44027; July 25, 2022), and extended (87 FR 77526; December 19, 2022), a final temporary rule implementing emergency measures due to “recently discovered circumstances (i.e. SEDAR 70) that present serious conservation issues for the greater amberjack stock in the Gulf”. As requested by the Council, NMFS issued this final temporary rule to reduce overfishing, conserve the resource of greater amberjack in the Gulf, and reduce the likelihood of adverse socio-economic impacts that would occur if additional reductions in harvest were required to rebuild the stock. NMFS adhered to the Council suggestion that, in order to reduce overfishing of greater amberjack, the fixed closed season be expanded such that the season would only be open from September 1 through October 31 for the 2022-2023 fishing year. This emergency rule will be in effect only through the end of the 2022-2023 fishing year (i.e., expires July 31, 2023), after which the rule will expire and previous measures will become effective unless Reef Fish Amendment 54 is implemented prior to expiration of the rule.

Because this temporary rule will expire at the end of the 2022/2023 greater amberjack fishing year, the Council requested that revisions to the fixed closed seasons be examined for long-term management in order to reduce the likelihood of overfishing and meet the 2027 greater

amberjack rebuilding timeline. The intent of this action is to implement revisions to the fixed closed season that are likely to constrain catch to the recreational ACT, while also allowing recreational fishermen the opportunity to harvest greater amberjack.

### *Modifications of Greater Amberjack Commercial Trip Limits*

The commercial sector harvest of greater amberjack is managed to an ACT (quota) and harvest is closed for the remainder of the fishing year when the quota is met or projected to be met. The commercial season opens January 1 each year, is closed from March 1 through May 31 to protect the stock during the spawning period, and re-opens on June 1 if the quota has not yet been met. Greater amberjack are not a common target species for the reef fish commercial sector and are typically caught while fishermen are targeting other reef fish. As a result, the majority of Gulf reef fish commercial trips land less than 500 lbs gutted weight (gw) of greater amberjack. Although, until recently, commercial landings for greater amberjack routinely met or exceeded the quota before the end of the commercial fishing year, requiring an in-season closure and if necessary, a payback of any overage in excess of the commercial ACL. Because greater amberjack are sometimes caught incidentally, commercial fishermen have expressed during public comment that they prefer as long of a fishing season as possible (as opposed to a higher trip limit), since these incidentally caught fish must be discarded if the season is closed. The Council established a commercial trip limit of 2,000 lbs whole weight (ww) (1,923 lbs gw) in 2013 (GMFMC 2012), and reduced the trip limit to 1,500 lbs gw in 2016 (GMFMC 2015).

In a 2020 final rule (85 FR 20611; April 14, 2020), NMFS reduced the Gulf greater amberjack commercial trip limit again to 1,000 lbs gw, and additionally reduced the trip limit to 250 lbs gw when 75% of the commercial quota has been landed (GMFMC 2019). This commercial trip limit reduction was intended to extend the length of the commercial fishing. An in-season closure of the commercial sector for greater amberjack was still expected to occur as a result of the commercial quota being reached, but was expected to occur later in the fishing year than the season closures that occurred in prior years. However, since implementation of the 1,000-lbs gw trip limit, the commercial quota has not been met, nor has the 250-lbs gw trip limit that is put in place when 75% of the quota is met been triggered.

### *Jacks Complex Fishing Season*

The Gulf “Jacks Complex” is made up of lesser amberjack, almaco jack, and banded rudderfish. Each of these species resemble both each other and juvenile greater amberjack (especially lesser amberjack), and may be misidentified as greater amberjack, or vice versa. The Jacks Complex is monitored as a group under a combined (recreational and commercial) stock ACL.

Due to difficulty in differentiating between the three Jacks Complex species and juvenile greater amberjack (Figure 1.1.1.), it is likely that some landings that are recorded as Jacks Complex are actually greater amberjack. Commercial fishermen generally have greater knowledge of fisheries and skill in fish identification, so it is likely that the majority of such misidentifications occur in the recreational sector. For this reason, the Council wished to examine the impacts of revising the recreational component Jacks Complex season such that it coincides with the greater



amberjack recreational season. The Council speculated that this might reduce the number of greater amberjack harvested as misidentified as Jacks Complex species, which could aid in recovery of the greater amberjack stock.

The Jacks Complex fishing year runs concurrent with the calendar year, and does not have a fixed closed season (Table 1.1.5.). Jacks Complex landings are dominated by recreational catch (~82.5% of landings), and vary greatly by year (Table 1.1.6.). Although landings over the past ten years have mostly been below and often substantially below the ACL, landings in two of the past three years have exceeded the ACL. In 2021, the ACL was exceeded by over 200,000 lbs ww (65%).

**Table 1.1.5.** Jacks Complex landings (whole weight) from 2012-2021, including landings by sector.

Species	Season	Minimum size limit	Recreational Bag Limit	Commercial Possession Limit
<b>Lesser amberjack</b>	Open year-round	14 - 22 inch FL slot limit	5 fish combined (lesser amberjack and banded rudderfish)	none
<b>Banded rudderfish</b>	Open year-round	14 - 22 inch FL slot limit	5 fish combined (lesser amberjack and banded rudderfish)	none
<b>Almaco jack</b>	Open year-round	none	20 reef fish combined	none

**Table 1.1.6.** Jacks Complex landings (whole weight) from 2012-2021, including landings by sector.

Jacks Complex						
Year	Fishing Year	Recreational Landings	Commercial Landings	Total Landings	ACL	ACL %
2021	Jan 1 - Dec 31	475,283	39,387	514,670	312,000	165.0
2020		145,544	48,222	193,766	312,000	62.1
2019		349,803	41,383	391,186	312,000	125.4
2018		138,664	29,630	168,294	312,000	53.9
2017		177,332	30,093	207,425	312,000	66.5
2016		206,726	35,150	241,876	312,000	77.5
2015		98,860	33,801	132,661	312,000	42.5
2014		141,487	59,542	201,029	312,000	64.4
2013		263,136	77,515	340,651	312,000	109.2
2012		224,126	75,746	299,872	312,000	96.1



# You Don't Know Jacks

## a guide to Gulf of Mexico *Seriola* jacks

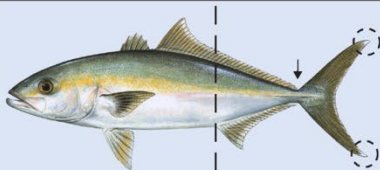
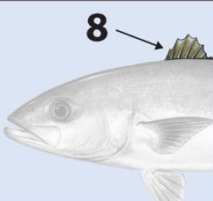
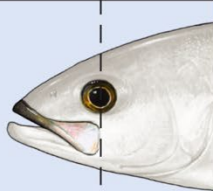
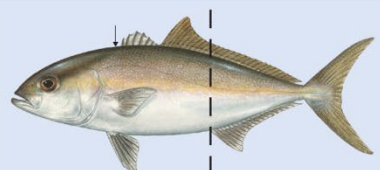
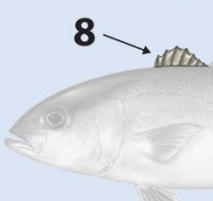
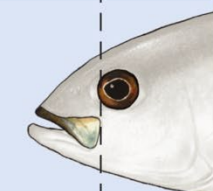
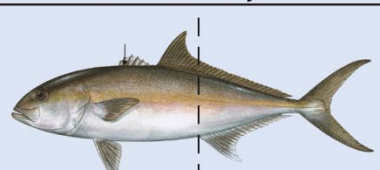
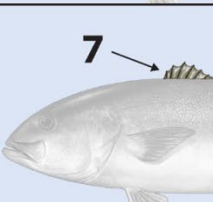
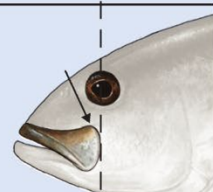

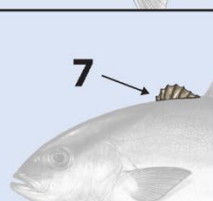
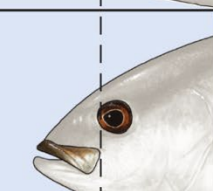
You don't know jacks - or do you? Below are some useful hints to help you correctly identify your fish.

- Is it larger than 3 feet? If so, it's a greater amberjack
- Is it deep-bodied with a tall dorsal fin? If so, it's an almaco jack

If not, the number of spines and position of the eyes will help you determine the species.

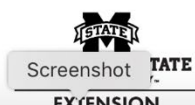
For a more comprehensive and interactive identification guide, scan the QR code in the bottom left.

For up-to-date fishing regulations, scan the QR code in the bottom right.

Full Body	First Dorsal Fin Spine #	Maxilla-Eye Alignment	Key Characteristics
 <p><b>Banded Rudderfish</b></p>	 <p>8</p>		<ul style="list-style-type: none"> <li>• bony keel by tail</li> <li>• white-tipped tail</li> <li>• flat-edged mouth</li> <li>• max. fork length: 2'3"</li> </ul>
 <p><b>Lesser Amberjack</b></p>	 <p>8</p>		<ul style="list-style-type: none"> <li>• blunt mouth</li> <li>• stripe not to first dorsal fin</li> <li>• proportionally larger eye</li> <li>• max. fork length: 2'2"</li> </ul>
 <p><b>Greater Amberjack</b></p>	 <p>7</p>		<ul style="list-style-type: none"> <li>• slender body</li> <li>• stripe to first dorsal fin</li> <li>• corner of mouth upturned</li> <li>• max. fork length: 3'7"</li> </ul>
 <p><b>Almaco Jack</b></p>	 <p>7</p>		<ul style="list-style-type: none"> <li>• deep body</li> <li>• tall dorsal and anal fins</li> <li>• max. fork length: 2'7"</li> </ul>

Dashed lines in the first column indicate position of anal fin relative to second dorsal fin

MASGP-22-038



**Figure 1.1.1.** A guide highlighting the differences between the jacks. Guide provided used with permission as a product of Mississippi-Alabama Sea Grant Consortium (MASGP-22-038) and Mississippi State University Extension Service (3852).

## 1.2 Purpose and Need

The purpose of this framework action is to modify the greater amberjack recreational fixed-closed season, commercial trip limit, and modify the recreational fishing season for the Gulf of Mexico “Jacks Complex”.

The need for this framework action is to maintain recreational and commercial access to the greater amberjack component of the reef fish fishery while meeting the objectives of the greater amberjack rebuilding plan.

## 1.3 History of Management

The **Reef Fish FMP** (with environmental impact statement [EIS]) was implemented in November 1984 and set a calendar fishing year for those species in the FMP. The original list of species included in the management unit consisted of snappers, groupers, and sea basses. *Seriola* species, including greater amberjack, were in a second list of species included in the fishery, but not in the management unit. The species in this list were not considered to be target species, because they were generally taken incidentally to the directed fishery for species in the management unit. Their inclusion in the Reef Fish FMP was for purposes of data collection, and their take was not regulated. This history of management covers actions pertinent to the harvest of Gulf greater amberjack. A complete history of management for the Reef Fish Fishery Management Plan (Reef Fish FMP) is available on the Council’s website.<sup>4</sup>

**Amendment 1** (with environmental assessment [EA], regulatory impact review [RIR], and regulatory flexibility analyses [RFA]) implemented in 1990, added greater amberjack and lesser amberjack to the list of species in the management unit. It set a greater amberjack recreational minimum size limit of 28 inches fork length (FL), a 3-fish recreational bag limit, and a commercial minimum size limit of 36 inches FL.

**Amendment 12** (with EA, RIR, and RFA), implemented in 1997, reduced the greater amberjack bag limit from three fish to one fish per person, and created an aggregate bag limit of 20 reef fish for all reef fish species not having a bag limit (including lesser amberjack, banded rudderfish, and almaco jack). Check about minimum size limit for jacks

**Amendment 15** (with EA, RIR, and RFA), implemented in 1998, established a fixed closed season for the commercial harvest of greater amberjack in the Gulf during the months of March, April, and May.

**Amendment 16b** set a slot limit for banded rudderfish and lesser amberjack of 14 inches to 22 inches FL, and set an aggregate recreational bag limit of 5 fish for banded rudderfish and lesser amberjack to reduce harvest of misidentified juvenile greater amberjack.

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<sup>4</sup> [http://www.gulfcouncil.org/fishery\\_management\\_plans/reef\\_fish\\_management.php](http://www.gulfcouncil.org/fishery_management_plans/reef_fish_management.php)

**Generic Sustainable Fisheries Act Amendment** (with EA), partially approved and implemented in 1999, set the maximum fishing mortality threshold (MFMT) for greater amberjack at the fishing mortality necessary to achieve 30% of the unfished spawning potential ratio (SPR)  $F_{30\% SPR}$ .

**Secretarial Amendment 2** (with EA, RIR, and RFA), implemented in 2003, specified maximum sustainable yield (MSY) for greater amberjack as the yield associated with  $F_{30\% SPR}$  (proxy for fishing mortality rate corresponding to an equilibrium yield of MSY [ $F_{MSY}$ ]) when the stock is at equilibrium, optimum yield as the yield associated with an  $F_{40\% SPR}$  when the stock is at equilibrium, MFMT equal to  $F_{30\% SPR}$ , and minimum stock size threshold (MSST) equal to  $(1-M)*B_{MSY}$  (where  $M$  = natural mortality and  $B_{MSY}$  = stock biomass level capable of producing an equilibrium yield of MSY) or 75% of  $B_{MSY}$ . It also set a rebuilding plan expected to rebuild the stock in 7 years (by 2009). Regulations implemented in 1997 and 1998 (Amendments 12 and 15) were deemed sufficient to comply with the rebuilding plan so no new regulations were implemented.

**Amendment 30A** (with EIS, RIR, and RFA), implemented in 2008, was developed to stop overfishing of greater amberjack. The amendment established ACLs and AMs for greater amberjack. The rebuilding plan was modified to be rebuilt by 2012, the recreational minimum size limit was increased to 30 inches FL, and a zero bag limit was implemented for captain and crew of for-hire vessels. **Amendment 30A** also established an allocation for greater amberjack harvest of 73% recreational and 27% commercial, which would be in effect until such time that the Council, through the recommendations of an Ad Hoc Allocation Committee, could implement a separate amendment that fairly and equitably allocated Reef Fish FMP resources between recreational and commercial sectors.

**A Regulatory Amendment** (with EA, RIR, and RFA), implemented in 2011, specified the greater amberjack recreational fixed closed season during the months of June and July. The intended effect of this final rule was to mitigate the social and economic impacts associated with implementing in-season closures.

**Amendment 35** (with EA, RIR, and RFA), implemented in 2012 in response to a 2010 update stock assessment, modified the greater amberjack rebuilding plan and established a reduced the total stock ACL and set it equal to the ABC. Reducing the ABC by 18% was expected to end overfishing. The rule also established a commercial trip limit of 2,000 lbs ww throughout the fishing year and set commercial and recreational ACTs.

**2015 Framework Action** (with EA, RIR, and RFA), implemented in 2016 created a new rebuilding plan (stock rebuilt by 2019), reduced the total stock ACL, reduced the commercial trip limit from 2,000 lbs ww to 1,500 lbs gw, and increased the recreational minimum size limit from 30 inches FL to 34 inches FL.

**Amendment 44** (with EA), was implemented in December 21, 2017. This amendment changed the MSST for seven species in the Reef Fish FMP, including greater amberjack. After the

approval of Amendment 44, the greater amberjack stock was still classified as overfished and undergoing overfishing.

The Council approved two framework actions in 2017 that addressed management of Gulf greater amberjack. **Modifications to Greater Amberjack Allowable Harvest and Rebuilding Plan** (with EA, RIR, and RFA), implemented on January 27, 2018 modified the rebuilding time period to end in 2027 and set the sector-specific ACLs and ACTs for 2018 to 2020 and beyond. In addition, this framework action modified the fixed season closure for the recreational sector to be January 1 through June 30 each year.

**Modifications to the Greater Amberjack Fishing Year and the Recreational Fixed Closed Season** (with EA, RIR, and RFA), implemented on April 20, 2018 modified the recreational fishing year to begin on August 1 and run through July 31 of the following year. It also modified the fixed closed season so that recreational harvest is prohibited from November 1 – April 30 and June 1 – July 31. The framework was implemented on April 30, 2018.

**2019 Framework Action** (with EA, RIR, and RFA), implemented in 2020 reduced the commercial trip limit from 1,500 lbs gw to 1,000 lbs gw with a step down to 250 lbs gw when 75% of the commercial ACL was harvested.

**2022 Emergency Rule** modified the recreational fixed closed season to be August 1 – 31, 2022 and November 1, 2022 through July 31, 2023. The rule became effective July 25, 2022.

**Amendment 54** (with EA, RIR, and RFA), was completed in response to a 2020 stock assessment, modified the greater amberjack rebuilding plan including changes to catch limits and sector allocations. This Amendment was transmitted to the Secretary in January 2023 and is currently in the rulemaking process.

## CHAPTER 2. MANAGEMENT ALTERNATIVES

### 2.1 Action 1: Modify the Recreational Fixed Closed Season for Greater Amberjack and the Jacks Complex

**Alternative 1:** No Action. Do not modify the current regulatory recreational fixed closed season. The current fixed closed season is January 1 – April 30, June 1 – July 31, and November 1 – December 31 (open May 1 – May 31 and August 1 – October 31).<sup>5</sup>

**Alternative 2:** Modify the recreational fixed closed season to be January 1 – July 31, September 1 – December 31 (open August 1 – August 31).

**Option a:** Modify the recreational fishing season for the Gulf “Jacks Complex” (i.e. lesser amberjack, almaco jack, banded rudderfish) such that this season is open only coincident with the greater amberjack recreational season as defined above.

**Alternative 3:** Modify the recreational fixed closed season to be January 1 – August 31, November 1 – December 31 (open September 1 – October 31).

**Option a:** Modify the recreational fishing season for the Gulf “Jacks Complex” (i.e. lesser amberjack, almaco jack, banded rudderfish) such that this season is open only coincident with the greater amberjack recreational season as defined above.

Note: **Alternatives 2 or 3 and option a** can be selected as preferred together.

#### **Discussion:**

**Alternative 1** would maintain the current regulatory recreational fixed closed season January 1 – April 30, June 1 – July 31, and November 1 – December 31 that was put in place to prevent recreational overages while providing better regional access to greater amberjack. However, the reduction in allowable harvest specified in Reef Amendment 54 (GMFMC 2023) would require additional modification to the recreational closed season to avoid quota overages and triggering associated accountability measures that require a reduction in the next year’s annual catch limit (ACL) and annual catch target (ACT) to account for a prior overage.

Splitting recreational fishing into two open seasons was intended to allow for greater amberjack recreational harvest to occur during times the year when harvest of many other reef fish species was prohibited due to in-season closures as a result of harvest limits. By starting the fishing year in August when fishing effort is less than peak summer months, National Marine Fisheries Service (NMFS) and the Gulf of Mexico Fishery Management Council (Council) expected enough recreational quota remaining to allow for harvest during May of the following calendar

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<sup>5</sup> An emergency rule, effective July 25, 2022, modified the recreational fixed closed season to be August 1 – 31, 2022 and November 1, 2022 through July 31, 2023.



year. However, the split season (i.e., open August 1 – October 31, open May 1 – 31) has not always worked as intended. For example, in the 2018/2019 season, the May recreational season did not open because the recreational catch limit was caught in the August 1 – October 31 season. Based on the current projections of recreational harvest and the 404,000 lbs ww ACL proposed in Amendment 54, the estimated harvest in the August – October season is 880,000<sup>6</sup> lbs ww and exceeds the current ACL and ACT by 476,000 lbs ww and 544,000 lbs ww respectively.

**Alternative 1** provides the longest season duration and greatest number of fishing days of the alternatives. However, it is unlikely to be effective in constraining catch to the recreational ACT or ACL (Table 2.1.1), and unless the season is closed early because the ACT is met, **Alternative 1** is expected to result in the highest recreational catch of the alternatives considered. However, the accountability measures in place for greater amberjack require NMFS to close when the ACT is met or projected to be met and likely would close the season prior to the completion of both the fall and spring seasons. Moreover, it can difficult to accurately estimate landings in-season given the lag between when fishing takes place and estimates of efforts of landings (e.g. recreational landings estimates from August would not be available until mid-November, and landings estimates from September and October would not be available until early the following year). Therefore, it is likely that, given the lower ACTs that could be implemented in Reef Fish Amendment 54 (GMFMC 2023), a season closure date may have to be estimated prior to receiving any landings data. This may lead to large overages in the recreational landings under **Alternative 1**. In addition, given the greatly reduced quotas, it is very likely that the recreational ACT would be met during the August through October season, which would preclude the May season from occurring.

**Alternative 2** would allow for a recreational fishing season that is open for the month of August only. The recreational season under **Alternative 2** would be the shortest of the fishing seasons, although it is projected to exceed the recreational ACL by 128,000 lbs ww and the recreational ACT by 196,912 lbs ww<sup>7</sup> (Table 2.1.1). Because data would not be available to estimate landings in-season, a projection would have to be made prior to the season in order to implement a closure prior to the end of the season (i.e., before August 31). However, these projections rely on the assumption that future year harvest rates will be similar to recent past years and it is possible that fishing effort may change from previous seasons due to the shorter season set in **Alternative 2**. This could result in greater fishing effort (or catch rate) and amberjack harvest due to fishermen concentrating effort during this condensed season.

**Alternative 3** would implement a 61-day season beginning September 1 and running through October 31. This is consistent with the 2022 Emergency Rule that modified the recreational

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<sup>6</sup> All catch limit values and recreational landings projections are in Marine Recreational Information Program-Fishing Effort Survey units.

<sup>7</sup> Based on current projections, the recreational sector would harvest the recreational ACT by August 19 (19 day season)

fixed closed season to be August 1 – 31, 2022 and November 1, 2022 through July 31, 2023. When available, landings information from this season could better inform season projections for the 2023-2024 fishing year and beyond. Although **Alternative 3** would result in a longer fishing season than **Alternative 2** and a shorter season than **Alternative 1**, **Alternative 3** is projected to result in fewer landings than **Alternatives 1** or **2**. Projected harvest under **Alternative 3** is 12,000 lbs ww above the recreational ACT<sup>8</sup> but 57,000 lbs ww below the recreational ACL. However, similar to **Alternative 2**, reducing the season length in comparison to **Alternative 1** could increase daily effort in the season in comparison to previous seasons. This is difficult to forecast in-season but could be observed if the season is sufficiently short to encourage “derby-like” effort from recreational anglers. However, if recent historical patterns of monthly harvest continue, then season would be substantially longer than **Alternative 2** while constraining harvest below the ACL. In addition, the increase in season length may reduce “derby-like” behavior in comparison to **Alternative 2** and improve the accuracy of resulting fisheries data that tend to be more accurate with longer season durations.

**Table 2.1.1.** Summary of the seasons, season lengths, recreational ACL, recreational ACT, and projected landings for recreational seasons.

Recreational Season Alternatives	Max Open Days	Rec ACL	Rec ACT	Projected landings	Landings – ACL	Landings – ACT
<b>Alt. 1: Aug 1-Oct 31; May 1-31</b>	123	404,000	335,320	1,141,082	737,082	805,762
<b>Alt 2: Aug 1-Aug 31</b>	31	404,000	335,320	535,660	128,232	196,912
<b>Alt: Sep 1-Oct 31</b>	61	404,000	335,320	347,344	-56,656	12,024

Note: Values are in pounds whole weight

**Option a** under **Alternatives 2** and **3** would set the recreational Jacks Complex fishing season to have the same start and end date as the greater amberjack recreational season. The Jacks Complex fishing season in the Gulf currently runs year-round, with no fixed closed season. The intent of **option a** is to reduce harvest of greater amberjack that are misidentified by recreational anglers as one of the similar-looking species in the Jacks Complex. Undersize or out of season greater amberjack could be inadvertently harvested as one of the other jacks. Thus, the rationale for **option a** is to reduce the likelihood of inadvertently harvesting greater amberjack thereby, increasing the likelihood of ending overfishing and rebuilding the stock by 2027 in accordance with the rebuilding plan that was modified in Reef Fish Amendment 54 (GMFMC 2023). In the past five years, the Jacks Complex has exceeded its ACL twice (2019 and 2021), including a substantial overage (~165% of the ACL) in 2021. There is no accountability measure requiring a payback for overages in Jacks Complex landings. In the three other years, harvest of Jacks Complex species did not approach the ACL (range from 54-67% of ACL). Given this pattern landings, it is expected that both **Alternative 2 option a** and **Alternative 3 option a** would result in greatly reduced landings of Jacks Complex species due to the vastly shortened seasons (i.e.,

<sup>8</sup> Based on current projections, the recreational sector would harvest the recreational ACT by October 28 (58 day season)

**Alt. 2a:** 31 days max; **Alt. 3a:** 61 days max) relative to the current year-round season for the Jacks Complex. In addition, Jacks Complex species are not commonly targeted, and are thus generally caught when fishing for other species. By reducing the season during which these species can be harvested, there would be a resulting increase in bycatch, because captured Jacks Complex species would be obligatory discards when not in season. Because these species resemble each other, it is likely that misidentification does occur in the recreational sector. However, because landings of Jacks Complex species are generally far lower than those of amberjack, and the extent of misidentifications are unknown, it is difficult to characterize the impact these options would have on the greater amberjack stock.

## 2.2 Action 2: Modify the Greater Amberjack Commercial Trip Limit

**Alternative 1:** No Action. Do not modify the current commercial trip limit for Gulf greater amberjack of 1,000 lbs gutted weight (gw) (1,040 lbs whole weight [ww]). When 75% of the ACT is projected to be met, reduce the commercial trip limit to 250 lbs gw (260 lbs ww).

**Alternative 2:** Establish a commercial trip limit for Gulf greater amberjack of 250 lbs gw (260 lbs ww).

**Alternative 3:** Establish a commercial trip limit of 5 fish (~ 150 lbs gw [155 lbs ww]).

### Discussion:

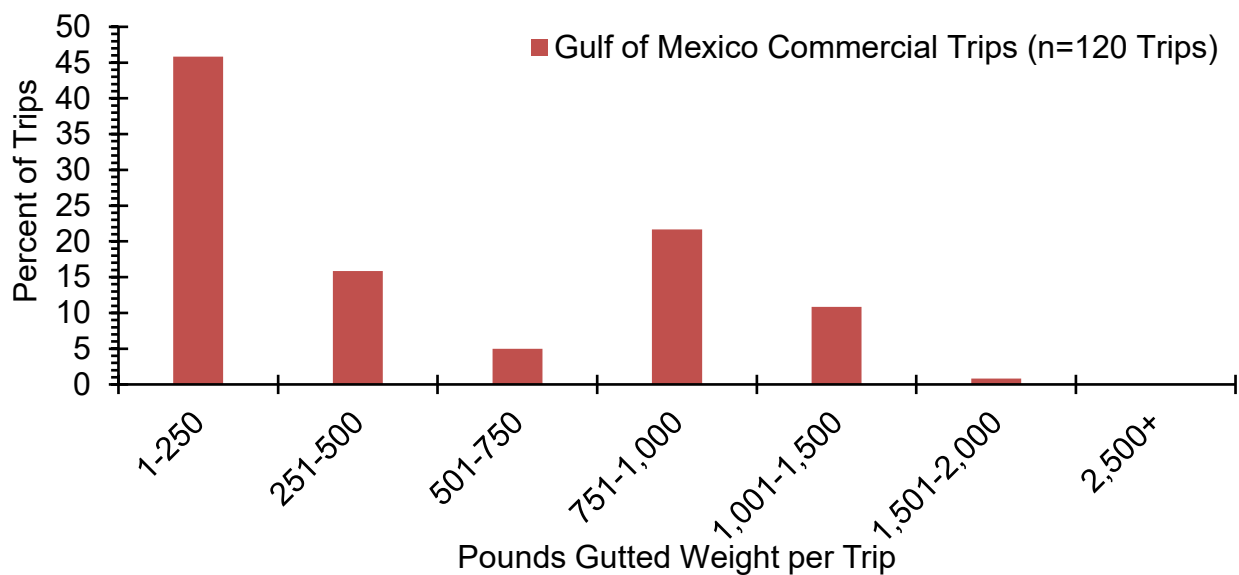
A commercial trip limit for Gulf greater amberjack is a cap on the amount of fish (either numbers or weight) that may be possessed on board or landed, purchased, or sold from a federally permitted commercial vessel per trip. Commercial trip limits may not be combined with any trip or possession limits applicable to state waters. Greater amberjack harvested in the Exclusive Economic Zone (EEZ) cannot be transferred at sea, regardless of where such transfer takes place. Commercially harvested greater amberjack are typically landed as gutted rather than whole. Therefore, the management alternatives are provided in gutted weight (gw) with equivalent whole weight (ww) conversions noted in parentheses where applicable.

In 2020, the commercial trip limit was reduced from 1,500 lb gw to 1,000 lbs gw with a step-down to 250 lbs gw when 75% of the commercial ACT was harvested. Further reductions in the trip limit are considered in this action based on the results of the SEDAR 70 stock assessment and subsequent reductions in greater amberjack catch limits Reef Fish Amendment 54 (GMFMC 2023) that, if implemented by the Secretary of Commerce, would reduce allowable catch limits for both the recreational and commercial sectors, and modify the sector allocations. Specifically, Reef Fish Amendment 54 would reduce the commercial ACT from 421,411 lbs ww to 93,930 lbs ww (78% decrease).

The current management measures for the commercial sector are a closed fixed season from March 1 through May 31, a minimum size limit of 36 inches, a 1,000 lbs gw trip limit, and a reduction of the trip limit down to 250 lbs gw when 75% of the ACT is reached.



Since the implementation of the current trip limit in May 2020 (i.e. Alternative 1), approximately 60% of trips harvest less than 500 lbs gw. (Figure 2.2.1). Approximately 22% percent of trips harvested between 751 and 1,000 lbs gw per trip, suggest some commercial harvest up to the allowable trip limit with approximately 11% of commercial harvest in excess of the trip limit. The step-down provision to 250 lbs gw was not used during this time period and the commercial ACT was not exceeded. However, given the 78% decrease in quota that would be implemented in Reef Fish Amendment 54, it is more likely that the lower ACT in future fishing seasons will be fully utilized, even with the step-down provision (**Alternative 1**) that is intended to slow harvest as the ACT is approached.



**Figure 2.2.1.** The percent of commercial trips (n=120) harvesting Gulf of Mexico greater amberjack by weight bin from June 2020 to May 2021. Source: SEFSC commercial logbook (May 6, 2021).

**Alternatives 2-3** would establish a new commercial trip limit lower than specified in **Alternative 1**. **Alternative 2** would implement a commercial trip limit of 250 lbs gw. **Alternative 2** is intended to reduce greater amberjack harvest rate by the commercial fleet in effort to extend the season within the constraints of the commercial ACT. If implemented, this alternative would likely further reduce the commercial greater amberjack fishery to an opportunistic (rather than targeted) fishery. **Alternative 2** would be expected to result in markedly reduced harvest of greater amberjack on trips where greater amberjack are harvested, because only 46% of trips from recent years harvested less than 250 lb (Figure 2.2.1). Thus, **Alternative 2** would be expected to reduce greater amberjack harvest on 54% of trips landing greater amberjack and is expected to reduce the likelihood that the commercial quota would be exceeded. The Council’s Reef Fish Advisory Panel (Reef Fish AP) discussed greater amberjack commercial trip limits at its October 2022 meeting. The Reef Fish AP discussed that the stock is depleted and that the commercial reef fish fishery treats greater amberjack as a bycatch fishery

given the low abundance and previous implementation of trip limits. The Reef Fish AP discussed that further reductions in trip limits may be necessary to promote recovery of the stock. The Reef Fish AP also discussed the variability in the weights observed of greater amberjack and recommended setting a trip limit in number of fish instead of pounds.

**Alternative 3** would implement a commercial trip limit of 5 greater amberjack. The intent of **Alternative 3** is to make it easier for commercial fishermen to know when they have harvested their trip limit as recommended by the Reef Fish AP. Figure 2.2.1 demonstrates that approximately 15% of trips that harvest greater amberjack exceed the current commercial trip limit. Although there may be several reasons for this, at least some of it is likely attributable to difficulty in accurately estimating the weight of captured amberjack. In comparison to **Alternatives 1 and 2**, **Alternative 3** is expected to further reduce trip limits. Using commercial data from 2019-2021, the average weight of greater amberjack is 30 lbs gw and on average, equivalent to a 150 lbs gw trip limit. In comparison to **Alternative 1**, **Alternative 3** would reduce the commercial trip limit by 85% prior to implementing the step-down to 250 lbs gw in **Alternative 1**. To date, the step-down option in **Alternative 1** has not been used. In comparison to **Alternative 2**, **Alternative 3** would reduce the commercial trip limit by 40% and is the most restrictive alternative under consideration. However, **Alternative 3** would be expected to result in a longer commercial season than **Alternative 1** or **2**. A trip limit analysis will be provided in a subsequent draft of this document to facilitate comparisons among Alternatives 1-3.

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GMFMC = Gulf of Mexico 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

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