

State Management Program for Recreational Red Snapper



Draft Amendment to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

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ABBREVIATIONS USED IN THIS DOCUMENT

ACL	annual catch limit
ACT	annual catch target
Council	Gulf of Mexico Fishery Management Council
Gulf	Gulf of Mexico
NMFS	National Marine Fisheries Service
SPR	spawning potential ratio
TL	total length
YPR	yield per recruit

TABLE OF CONTENTS

Abbreviations Used in this Document	ii
List of Tables	iv
List of Figures	iv
Chapter 1. Introduction	5
1.1 Background	5
1.2 Purpose and Need.....	9
Chapter 2. Management Alternatives	10
2.1 Action 1 – Components of the Recreational Sector to include in State Management Programs.....	10
2.2 Action 2 – Apportioning the Recreational ACL (Quota) among States.....	13
2.3 Action 3 – Modify the Federal Recreational Minimum Size Limit.....	16
Chapter 3. References	19
Appendix A. Red Snapper Landings	20

LIST OF TABLES

Table 1.1.1. Recreational red snapper federal season lengths, quotas, and landings.....	6
Table 2.2.1. Resulting percentages of dividing the private angling ACL among the states based on historical landings time series of Alternative 2 , for the <i>private angling component</i> , only. Each row totals 100% of the private angling ACL.....	14
Table 2.2.2. Resulting percentages of dividing the federal for-hire ACL and private angling ACL among the states for Alternative 2 , by component. For each alternative, the sum of the private angling component ACLs totals 57.7% and the sum of the federal for-hire ACLs totals 42.3%.....	15

LIST OF FIGURES

Figure 2.3.1. Red snapper length-weight relationship.....	18
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CHAPTER 1. INTRODUCTION

1.1 Background

From 1996 – 2014, the recreational fishing season for red snapper in federal waters became progressively shorter. Despite regular increases in the recreational annual catch limit (ACL) since 2010 (Table 1.1.1), shorter federal seasons have continued as the quota continues to be caught in a shorter amount of time and inconsistent state water seasons became longer. In 2015, sector separation was implemented, changing how recreational red snapper fishing is prosecuted as the sector was divided into a private angling component and a federal for-hire component. Separate fishing seasons are established for each component based on the component annual catch targets (ACT), which are reduced from the recreational sector's red snapper ACL by the established buffer.

Currently, the recreational harvest of red snapper in federal waters of the Gulf of Mexico (Gulf) is constrained by a 2-fish bag limit, 16-inch total length (TL) minimum size limit, and a fishing season that begins on June 1 and closes when the ACT of each recreational component (i.e., private angling and federal for-hire) is projected to be caught.

Fishermen from different areas of the Gulf have requested more flexibility in recreational red snapper management so that regulations provide greater socioeconomic benefits to their particular area. Referred to in this amendment as *state management*, the Gulf of Mexico Fishery Management Council (Council) is exploring state management as a way to provide greater flexibility in the management of red snapper for the recreational sector. State management refers to allowing recreational regulations (specifically bag limits and season dates) to be different for red snapper landed from federal waters off each state, in contrast to uniform recreational regulations applied to all federal waters in the Gulf.

This amendment would establish the program structure for individual Gulf states to adopt state management through separate amendments. This State Management of Recreational Red Snapper Amendment consists of actions affecting all states and the overall federal management of red snapper, regardless of whether or not all states pursue a state management program. The actions include 1) the apportionment of the recreational red snapper ACL among the Gulf states; 2) the components of the recreational sector that would be included under a state's management program; and 3) the federal minimum size limit of red snapper for the recreational sector. At its April 2017 meeting, the Council approved the initiation of separate amendments to establish state management for the states of Louisiana, Mississippi, and Alabama. Actions specific to a state management program for the recreational harvest of red snapper in each state would be addressed in those separate amendments.

Table 1.1.1. Recreational red snapper federal season lengths, quotas, and landings.

Year	Season dates in federal waters	Number of days open	Recreational Quotas	Recreational Landings
1996	January 1 – December 31	365	4.470 mp	4.346 mp
1997	January 1 – November 27	330	4.470 mp	6.008 mp
1998	January 1 – September 30	272	4.470 mp	4.258 mp
1999	January 1 – August 29	240	4.470 mp	3.999 mp
2000	April 21 – October 31	194	4.470 mp	3.932 mp
2001	April 21 – October 31	194	4.470 mp	4.468 mp
2002	April 21 – October 31	194	4.470 mp	5.383 mp
2003	April 21 – October 31	194	4.470 mp	4.847 mp
2004	April 21 – October 31	194	4.470 mp	4.996 mp
2005	April 21 – October 31	194	4.470 mp	4.084 mp
2006	April 21 – October 31	194	4.470 mp	4.020 mp
2007	April 21 – October 31	194	3.185 mp	4.440 mp
2008	June 1 – August 4	65	2.450 mp	3.712 mp
2009	June 1 – August 14	75	2.450 mp	4.625 mp
2010	June 1 – July 23; Oct 1 – Nov. 21 (Fri, Sat., & Sun.)	77	3.403 mp	2.239 mp
2011	June 1 – July 18	48	3.866 mp	4.603 mp
2012	June 1 – July 16	46	3.959 mp	5.803 mp
2013	June 1 – June 28; Oct 1 – Oct 14	42	5.390 mp	9.575 mp
2014	June 1 – June 9	9	5.390 mp	3.826 mp
2015	June 1 – June 10 (private angling)	10	4.045 mp	3.506 mp
	June 1 – July 14 (federal for-hire)	44	2.965 mp	2.422 mp
2016	June 1 – June 11 (private angling)	11	4.150 mp	5.162 mp
	June 1 – July 16 (federal for-hire)	46	3.042 mp	2.134 mp
2017	June 1-3; – June 16 – Sept 4* (private angling)	3 + 39	3.755 mp	T.B.D.
	June 1 – July 19 (federal for-hire)	49	2.848 mp	

*Season is open Fridays through Sundays, plus July 3-4 and September 4.

Note: Quotas and landings are in millions of pounds (mp) whole weight. Beginning in 2014, the season length was estimated based on an ACT, reduced from the recreational sector ACL (quota) by 20%. The 2016 recreational quota is based on the reallocation implemented through Amendment 28, which was vacated on March 3, 2017. The 2017 recreational quota is based on the previous sector allocation of 49% recreational. Source: MRIP APAIS Adjusted SEFSC Recreational ACL Data (1986-2012), SEFSC Recreational ACL Data (2013-2016; accessed March 2017), LA Creel Survey data (2013-2016), TPWD preliminary data (2016). Quotas and landings from 1996-2012 are from MRFSS; 2013-2017 are from MRIP.

The first action would apportion the recreational sector ACL for red snapper among the five Gulf states, thereby determining the portion that would be provided to a state to manage under an approved state management program. Under an approved state management program, a state would be allowed to establish certain management measures most suited to the state for the recreational harvest of red snapper. The state would need to constrain landings to within its specified portion of the recreational sector ACL. Because the state would receive a designated

portion of the ACL, the harvest by the remaining states without state management programs would be constrained to the remaining balance of the ACL.

The second action addresses the recreational sector components that a state management program would manage. In 2014, the Council divided the recreational red snapper ACL into two components: private angling and federal for-hire. Separate fishing seasons are estimated based on each component's ACT (reduced from the component ACL by 20%), and a separate season closure is triggered when each component's ACT is estimated to have been met. Initially established for 3 years through Amendment 40 (GMFMC 2014), management of the separate component ACLs was extended for an additional 5 years, or through 2022, through Amendment 45 (GMFMC 2016). Because the recreational sector ACL is currently divided between the two components, this action is necessary to determine whether one or both components could be managed under a state management program.

The third action evaluates the federal minimum size limit. For a state to have an approved state management program, the state would be required to adopt the federal minimum size limit as part of its management of red snapper.

Providing flexibility to the states to establish management measures is expected to result in social and economic benefits by providing optimal fishing opportunities for a state's portion of the recreational ACL (quota). Nevertheless, management measures under a state's approved state management program must achieve the same conservation goals as the current federal management measures (i.e., constrain harvest to the region's allocated portion of the recreational sector ACL). Under state management, red snapper would remain a federally managed species. The Council and the National Marine Fisheries Service (NMFS) would continue to oversee management of the stock. This includes continuing to comply with the mandate to ensure the recreational sector's red snapper stock ACL is not exceeded and that conservation objectives are achieved. The Council's Scientific and Statistical Committee would continue to determine the acceptable biological catch for red snapper, while the Council and NMFS would determine the total recreational sector ACL which would be allocated among the states and components of the recreational sector. All federal regulations for the harvest of red snapper would remain effective.

Because not all states may pursue a state management program, the existing bag limit and season start date would remain in place as default federal regulations. For a state with an approved state management program, an exemption from the default federal regulations would be made and the state would establish the bag limit and fishing season for red snapper landed in the state, from both federal and state waters. NMFS would retain authority for the remaining management regulations including implementing ACL adjustments, regulating federal permits, and managing the commercial red snapper individual fishing quota program.

ACL and ACT Designations for Regions and Components

Amendment 40 (GMFMC 2014) established two components within the recreational sector for the harvest of red snapper: a private angling and a federal for-hire component, and apportioned the recreational sector ACL between the components. The final rule specified component ACTs,

which are reduced from the component ACLs (component quotas) by the established buffer (currently 20%). Thus, there are component ACLs (component quotas) and component ACTs.

If a state's management is approved, a state ACL (and potentially component ACLs) would be established for the state's designated portion of the recreational sector ACL. The state ACL (and potentially component ACLs) will be reduced by the established buffer, resulting in a state ACT (or component ACTs). The state would estimate its season length based on the state ACT (or component ACTs), and must constrain landings to not exceed its assigned portion of the recreational sector ACL.

Section 407(d) of the Magnuson-Stevens Fishery Conservation and Management Act mandates that separate quotas be established for commercial fishing and recreational fishing, which includes both the private angling and federal for-hire components. When the recreational sector ACL is reached, further harvest of red snapper is prohibited for the duration of the year. This means that even if a state under a state management program has remaining quota, the state must close its fishing season and prohibit further harvest of red snapper once the recreational sector ACL is determined to have been met.

History of Council Discussion on State (Regional) Management

The Council has explored the concept of "regional management" for red snapper for several years. Regional management was discussed by the Ad Hoc Recreational Red Snapper Advisory Panel at its October 2008 meeting, and the Red Snapper Advisory Panel at its December 2009 meeting. Staff presented papers exploring red snapper regional management to the Council at the January 2009, August 2010, and October 2010 meetings.¹

In June 2012, the Louisiana Department of Wildlife and Fisheries presented a proposal to the Council for a recreational red snapper regional management pilot program. The Council requested that Louisiana provide further details of their proposed regional management plan for red snapper, and instructed staff to begin developing a plan amendment for regional management of recreational red snapper. At the August 2012 meeting, the Council requested development of a scoping document for regional management of recreational red snapper (Amendment 39²), which was provided and discussed at the October 2012 meeting. Scoping meetings were held in January 2013. The Council reviewed an options paper at its April 2013 meeting, and the initial public hearing draft at its June 2013 meeting. Public hearings were held around the Gulf in August 2013 and the comments were presented to the Council at its August 2013 meeting.³

By the February 2014 meeting, the Council had selected preferred alternatives for all actions except for how to allocate the recreational red snapper quota among the regions. At its February 2014 meeting, Council staff was directed to postpone further work on the regional management document until progress is made on how to allocate the quota among the regions. In turn, the

¹ http://www.gulfcouncil.org/resources/briefing_book_archive.php

² [http://archive.gulfcouncil.org/council_meetings/BriefingMaterials//BB-01-2016/B%20-%209\(a\)%202016%20Jan%20DEIS%20RF39%20Regional%20Management%2012-8-15.pdf](http://archive.gulfcouncil.org/council_meetings/BriefingMaterials//BB-01-2016/B%20-%209(a)%202016%20Jan%20DEIS%20RF39%20Regional%20Management%2012-8-15.pdf)

³ Written comments submitted in response to Reef Fish Amendment 39 can be found at <https://docs.google.com/spreadsheet/ccc?key=0Atgbk2rxQkqhdFViUTB3VERSX2ZwcXJmckl1QTBXZkE#gid=0>

Council moved forward with Amendment 40 (GMFMC 2014) and approved the action at its October 2014 meeting.

At its January 2015 meeting, the Council reviewed a revised set of actions for regional management reflecting the regulatory changes made to recreational red snapper management since work on the document was postponed. These changes included new accountability measures and the establishment of separate components and ACLs (quotas) for the recreational harvest of red snapper. At its June 2015 meeting, the Council requested staff to hold an additional round of public hearings, which were held following the October 2015 Council meeting. At its January 2016 meeting, the Council postponed further work on the amendment indefinitely.

1.2 Purpose and Need

The **purpose** of this action is to establish a program structure through which a Gulf state may establish a management program that would provide flexibility in the management of the recreational harvest of red snapper for their anglers.

The **need** is to reconsider the management of the recreational harvest of red snapper within the context of the states of the Gulf: to prevent overfishing while achieving, on a continuing basis, the optimum yield from the harvest of red snapper by the recreational sector⁴; take into account and allow for variations among, and contingencies in the fisheries, fishery resources, and catches⁵; and provide for the sustained participation of the fishing communities of the Gulf and to the extent practicable, minimize adverse economic impacts on such communities⁶.

⁴ National Standard 1 https://www.ecfr.gov/cgi-bin/text-idx?SID=71b8c6026001cb90e4b0925328dce685&mc=true&node=se50.12.600_1310&rgn=div8

⁵ National Standard 6: https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=6b0acea089174af8594db02314f26914&mc=true&r=SECTION&n=se50.12.600_1335

⁶ National Standard 8: https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=6b0acea089174af8594db02314f26914&mc=true&r=SECTION&n=se50.12.600_1345

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 – Components of the Recreational Sector to include in State Management Programs

Alternative 1: No Action. Retain current federal management of recreational red snapper in federal waters of the Gulf of Mexico (Gulf). For the years 2015-2022, continue separate red snapper fishing seasons for the federal for-hire and private angling components based on the components' annual catch targets (ACT), reduced from the components' annual catch limits (ACL) by the established buffer.

Alternative 2: For a state with an approved state management program, the state will manage its private angling component, only, and must constrain landings to the state's private angling component ACL as determined in Action 2. The federal for-hire component will continue to be managed Gulf-wide. For states without an approved state management program, a private angling fishing season will be estimated using the remainder of the private angling component ACL, reduced by the established buffer. The state management plan would end when the separate private angling and federal for-hire ACLs end (currently 2022).

Alternative 3: For a state with an approved state management program, the state will manage both its private angling component and federal for-hire components and must constrain landings to the state's component ACLs, as determined in Action 2. For states without an approved state management program, separate fishing seasons based on the component ACTs for the federal for-hire and private angling components would be estimated using the remainder of the recreational sector ACL. The state management plan would end when the separate private angling and federal for-hire ACLs end (currently 2022).

Alternative 4: For a state with an approved state management program, the state will choose whether to manage its private angling component, only, or to manage both its private angling and federal for-hire components. The state must constrain landings to the state's private angling component ACL and federal for-hire component ACL as determined in Action 2. For states without an approved state management program, separate fishing seasons based on the component ACTs for the federal for-hire and private angling components would be estimated using the remainder of the recreational sector ACL. The state management plan would end when the separate private angling and federal for-hire ACLs end (currently 2022).

Discussion:

Amendment 40 (GMFMC 2014) apportioned the recreational sector ACL between the federal for-hire and private angling components of the recreational sector for a period of 3 years (2015-2017), and Amendment 45 (GMFMC 2016) extended the separate management of the federal for-hire and private angling components' portions of the recreational sector ACL through 2022. This action is only applicable if this amendment is implemented while the separate components of the recreational sector are still in effect.

This action determines whether a state with an approved state management program would only manage its private angling component (**Alternative 2**), manage both components (**Alternative 3**), or choose to manage the private angling component only, or manage both components (**Alternative 4**). Depending on the alternative selected, state private angling ACLs would need to be established (**Alternative 2**) or state private angling and federal for-hire component ACLs would need to be established (**Alternatives 3 and 4**). A state or states with an approved state management program would constrain its landings to its respective ACLs.

Alternative 1 would continue the separate management of the federal for-hire and private angling components until the sunset date. Currently, the recreational sector ACL is divided into two component ACLs for the years 2015-2022 and will revert to a single recreational sector ACL at the start of 2023.

Under **Alternative 2**, a state with an approved state management program would manage the state's private angling component only. Depending on the number of states that develop state management programs, up to six component ACLs could be established under **Alternative 2**: five state private angling ACLs derived from the private angling component ACL, and one federal for-hire component ACL. Management of the federal for-hire component would continue to be managed Gulf-wide under the federal regulations for the federal for-hire component. Based on the Action 2 alternatives, the resulting percentages for the five potential state private angling ACLs are provided in Table 2.2.1.

Under **Alternative 3**, a state with an approved state management program would manage both the state's private angling component and federal for-hire component. Two state component ACLs would be established for each state: a state private angling component ACL and a state for-hire component ACL. Depending on the number of states that develop state management programs, up to ten component ACLs could be established under **Alternative 3**. Federal for-hire and private angling component ACLs would continue to be used for states without an approved state management program. Based on the Action 2 alternatives, the resulting percentages for the ten potential state component ACLs are provided in Table 2.2.2.

Under **Alternative 4**, a state with an approved state management program would be able to choose whether to manage its private angling component only, or to manage both its private angling component and federal for-hire component. As with **Alternative 3**, two state component ACLs would be established for each state: a state private angling component ACL and a state for-hire component ACL. Depending on the number of states that develop state management programs, up to ten component ACLs could be established under **Alternative 4**. For a state that decides to manage its private angling component only, the state's federal for-hire ACL would remain part of the Gulf-wide federal for-hire ACL. Federal for-hire and private angling component ACLs would continue to be used for states without an approved state management program. Based on the Action 2 alternatives, the resulting percentages for the ten potential state component ACLs are provided in Table 2.2.2.

For a state to manage both components (**Alternative 3** and optional under **Alternative 4**), the state would specify the management measures to be applied to each component in its conservation equivalency plan or state regulations established for delegated management

authority. The state must ensure that the landings by each component are constrained to that component's ACL. For states without an approved state management program, the federal for-hire component would continue to be managed Gulf-wide under the federal regulations for the federal for-hire component.

Regardless of the alternative selected, a state with an approved state management program must estimate its fishing season length based on the state ACT or state component ACT, which is reduced from the respective ACL by the established buffer. In addition, for-hire vessels must have a federal permit to harvest red snapper from federal waters. Although state-licensed for-hire vessels are part of the private angling component, these vessels may not harvest red snapper from federal waters, even if an approved state management program is in place.

Currently, the Gulf of Mexico Fishery Management Council (Council) is evaluating allocation-based management programs for the federal for-hire component through Amendments 41 (charter vessels) and 42 (headboats). Should the Council establish an allocation-based management program for one or both sub-components through Amendments 41 and 42 before establishing state management through this amendment, **Alternative 3** and **Alternative 4** may not be viable, as federal for-hire vessels would be part of a NMFS-administered management program.

2.2 Action 2 – Apportioning the Recreational ACL (Quota) among States

Alternative 1: No Action – Retain current federal management of the recreational red snapper private angling and federal for-hire components throughout federal waters of the Gulf for the years 2015-2022. Do not establish an allocation of the recreational sector component ACLs that may be used for state management programs.

Alternative 2: Establish an allocation of the recreational sector ACL that may be used for state management programs by apportioning the private angling ACL and federal for-hire ACL among the states based on the average of historical landings for the years:

Option 2a: 1986-2015.

Option 2b: 1996-2015.

Option 2c: 2006-2015.

Option 2d: 50% of average historical landings for the years 1986-2015 and 50% of average historical landings for the years 2006-2015.

Alternative 3: In calculating state apportionments, exclude from the selected time series:

Option 3a: 2006 landings.

Option 3b: 2010 landings (landings not currently available).

Option 3c: 2014 landings.

Option 3d: 2015 landings.

Discussion:

For a red snapper state management program to be enacted, a portion of the recreational sector ACL would need to be designated for that state. The recreational sector ACL is currently divided into separate private angling and federal for-hire component ACLs. This action addresses how to apportion the component ACLs of the recreational sector to provide a portion of the recreational ACL to a state that has an approved state management program for red snapper. A state would establish its state management program through a state-specific plan amendment. For states that do not participate in state management, management would continue with the remaining private angling and federal for-hire component ACLs.

Allocation is an inherently controversial issue because a limited resource is divided among competing user groups, each of which benefits from receiving the largest portion possible. In this action, the Council is determining the method to calculate the apportionment, not the percentage each state would receive. The percentages would change based on the data used in the calculation equation. Additionally, the landings are subject to high levels of uncertainty, especially for Mississippi, and should be viewed with caution. Regardless of the alternative selected, in some years, each state's landings exceeds its average landings (see Appendix A). This means that requiring a state with an active state management program to constrain its catches to a fixed percentage of the recreational sector ACL could restrict the fluctuations in annual landings that occur in some years.

Alternative 1 (No Action) would not apportion the recreational sector ACL among the states. Currently, there is no expressed state allocation; the proportion of the total recreational landings made up by each state varies from year to year. Recreational landings by state from 1986 – 2015 are provided in Appendix A. Tables are provided for landings by the recreational sector as a whole, the private angling component, and the federal for-hire component. Landings from 2010 are excluded due to complicating factors associated with the *Deepwater Horizon* oil spill and associated fishing closures.

Alternative 2 provides four options to apportion the recreational sector ACL based on the average proportion of historical landings for various time series. Table 2.2.1 provides the resulting percentages from apportioning the private angling component ACL by state, which is 57.7% of the recreational sector ACL. In the table, the sum of the state private angling ACLs for each alternative totals 100% of the private angling ACL. The federal for-hire component, with 42.3% of the recreational sector ACL, would remain under federal management. If Alternative 2 is selected in Action 1, Table 2.2.1 shows the resulting percentages of the private angling ACL that would become each state’s private angling component ACL under an approved state management program.

Table 2.2.1. Resulting percentages of dividing the private angling ACL among the states based on historical landings time series of **Alternative 2**, for the *private angling component*, only. Each row totals 100% of the private angling ACL.

	AL	FL	LA	MS	TX
Alternative 2, Option 2a: 1986-2015	36.0%	27.7%	21.4%	8.0%	7.0%
Alternative 2, Option 2b: 1996-2015	38.5%	32.8%	17.4%	4.7%	6.6%
Alternative 2, Option 2c: 2006-2015	34.1%	39.8%	18.7%	2.1%	5.4%
Alternative 2, Options 2d: 50% 1986-2015; 50% 2006-2015	35.0%	33.7%	20.0%	5.1%	6.2%
Alt. 3: Options a-d removed from Alt. 2d	36.2%	33.5%	19.1%	5.7%	5.6%

Note: Landings from 2010 excluded from all alternatives.

Table 2.2.2 provides the resulting percentages from apportioning the total recreational sector ACL into private angling and federal for-hire ACLs by state. For each of the options for **Alternative 2**, the sum of the private angling component’s percentages of the ACL for the five states totals 57.7%, and the sum of the federal for-hire percentages of the ACL for the five states totals 42.3%. Together, these state component ACLs equal 100% of the recreational sector ACL. If Alternative 3 or 4 is selected in Action 1, Table 2.2.2 shows the resulting percentages of the recreational sector ACL that would become the state private angling and federal for-hire component ACLs under an approved state management program.

Table 2.2.2. Resulting percentages of dividing the federal for-hire ACL and private angling ACL among the states for **Alternative 2**, by component. For each alternative, the sum of the private angling component ACLs totals 57.7% and the sum of the federal for-hire ACLs totals 42.3%.

	Component	AL	FL	LA	MS	TX
Alt 2, Option 2a: 1986-2015	Private	20.7%	16.0%	12.4%	4.6%	4.0%
	For-hire	10.7%	15.8%	5.4%	0.3%	10.1%
Alt 2, Option 2b: 1996-2015	Private	22.2%	18.9%	10.0%	2.7%	3.8%
	For-hire	11.1%	18.6%	4.0%	0.2%	8.4%
Alt 2, Option 2c: 2006-2015	Private	19.7%	22.9%	10.8%	1.2%	3.1%
	For-hire	10.1%	20.4%	3.9%	0.1%	7.7%
Alt 2, Option 2d: 50% 1986-2015; 50% 2006-2015	Private	20.2%	19.4%	11.6%	2.9%	3.6%
	For-hire	10.4%	18.1%	4.7%	0.2%	8.9%
Alt. 3, Options 3a-3d removed from Alt. 2d	Private	20.9%	19.4%	11.0%	3.3%	3.2%
	For-hire	10.2%	18.6%	4.8%	0.2%	8.5%

Note: Landings from 2010 excluded from all alternatives.

Alternative 3 provides options for excluding particular years from the historical landings averages: 2006 (**Option 3a**), 2010 (**Option 3b**), 2014 (**Option 3c**), and 2015 (**Option 3d**). Options to exclude 2006 and 2010 are due to impacts that affected recreational fishing opportunities during or immediately preceding those years. Hurricane Katrina struck late in the fishing season of 2005, therefore landings from 2006 are provided for exclusion. The *Deepwater Horizon* MC252 oil spill began in April 2010, prior to the opening of the 2010 recreational red snapper season. As noted, due to the complexity associated with assigning landings between components given the substantial fishery closures and the extended federal season, landings from 2010 are currently excluded from the provided landings data. The Southeast Regional Office has excluded 2010 landings in all season projection analyses for similar reasons. Options to exclude landings from 2014 and 2015 are provided because these years were not included in the allocation formula used to calculate the private angling and federal for-hire components allocation in Amendment 40, and because the headboat collaborative pilot program operated during those years. An option may be selected individually, or multiple options could be selected with any one of **Alternative 2, Options 2a-2d**. In Amendment 40 (GMFMC 2014), the Council chose to exclude landings from 2010 (**Option 3b**) from the allocation formula, but did not exclude landings from 2006 (**Option 3a**).

It is possible that not all states will choose to participate in state management. If only one state participates, the fishing season in federal waters for the remaining states would be estimated based on the remaining aggregate portion of the ACL, as specified in the selected preferred alternative, and reduced by the established buffer. Should only one state not participate, the participating states would still receive their respective portions of the recreational ACL. The state ACL that would have been distributed to the non-participating state would be used to estimate the length of the fishing season for that one state, reduced by the established buffer and any projected landings to occur in state waters. Anglers from a non-participating state would fish under the default federal regulations.

2.3 Action 3 – Modify the Federal Recreational Minimum Size Limit

Alternative 1: No Action – Retain current federal regulations for the minimum size limit for recreational red snapper in federal waters of the Gulf. The federal minimum size limit is 16 inches total length (TL).

Alternative 2: Reduce the federal minimum size limit to 14 inches TL.

Alternative 3: Reduce the federal minimum size limit to 15 inches TL.

Alternative 4: Increase the federal minimum size limit to 17 inches TL.

Alternative 5: Increase the federal minimum size limit to 18 inches TL.

Discussion:

Previously, the Council expressed their intent to establish limitations on the minimum size limits that may be adopted by the states due to biological concerns associated with high-grading and discard mortality. Additionally, the Council felt varying the minimum size limit among states may pose issues in terms of the stock assessment. The red snapper stock is still under a rebuilding plan and stock assessments must take into account minimum size limits for each sector and gear type. For a state management program to be effective, that state must adhere to the federal minimum size limit. Because a state management program must adopt the federal minimum size limit, this action is provided to evaluate modifying the current federal minimum size limit. The current minimum size limit for red snapper is 16 inches TL in the Gulf for recreational anglers (**Alternative 1**) and for all state waters except Texas. In state waters off Texas the recreational red snapper minimum size limit is 15 inches TL (consistent with **Alternative 3**).

All of the minimum size limits proposed in the alternatives are estimated to be greater than the size of reproductively mature fish. All red snapper (100%) are estimated to be reproductively mature at age-2 (SEDAR 31 2013) at approximately 358 mm or 14 inches TL using the age-length equation in Szedlmayer and Shipp (1994). For this reason, minimum size limits smaller than 14 inches TL are not considered. Due to age truncation in the red snapper stock smaller, younger fish are caught more quickly due to their disproportionately larger abundance when compared with older, larger fish. The smallest minimum size considered in this action is 14 inches TL (**Alternative 2**). Spawning potential ratio (SPR) is the spawning potential of the stock relative to the stock with no fishing mortality. Yield-per-recruit (YPR) addresses the fishing mortality rate that produces the maximum yield of the fishery. The YPR for red snapper is maximized at 15 inches TL (**Alternative 3**), based on the YPR and SPR analyses conducted by the Southeast Fisheries Science Center in 2013 for the recreational sector, which used a discard mortality estimate of 10%. It should be noted that SPR increases for red snapper as the

minimum size limit increases.⁷ The largest minimum size limit considered in this action is 18 inches TL (**Alternative 5**) and that size has the largest spawning potential for the stock. Due to the status of the red snapper stock and selectivity patterns, minimum size limits from 13-18 inches TL are considered effective for managing red snapper because the YPR varies little between that size range. If the management goal is to achieve a higher SPR, then increasing the minimum size to 17 inches TL (**Alternative 4**) or 18 inches TL (**Alternative 5**) would be beneficial. For example, it has been well documented that larger, older females produce more eggs and spawn more frequently throughout the season than younger, smaller red snapper (Collins et al. 2001; Porch et al. 2013). However, larger red snapper are targeted by recreational anglers, making release mortality a more important consideration than it might be for other snapper species. Thus, the SPR and YPR analyses reveal a trade-off between the two metrics. If the management goal is to maximize YPR, then **Alternative 3** would be most appropriate; whereas, if the management goal is to maximize SPR, then **Alternative 5** would most appropriate.

Discard mortality also plays an important role in considering minimum size limits in the Gulf. Recreational discard mortality of red snapper was estimated in SEDAR 7 (2005) and SEDAR 31 (2013). The assessments found a consistent, Gulf-wide trend among discard mortality data, where depth of capture and release mortality were positively correlated. The release mortality for recreationally caught red snapper was averaged by eastern and western Gulf and estimated at 21% (Table 6.5 in SEDAR 7 2005). The most recent stock assessment estimated discard mortality for the recreational sector at 10% (SEDAR 31 2013), when circle hooks and venting tools were used. However, the data workshop report noted that release mortality was related less to region and more on a combination of factors including, but not limited to, depth, thermal stress, venting versus non-venting, and handling time.

Based on length-weight relationship of red snapper used during SEDAR 31 (2013), a 16-inch TL red snapper (**Alternative 1**) is estimated to weigh 1.8 lbs ww and an 18-inch TL (**Alternative 5**) red snapper is estimated to weigh 2.6 lbs ww (Figure 2.3.1). The average size of recreational red snapper landed in 2012 was 8 lbs ww and approximately 24 inches TL (SERO 2012). The differences in the minimum size limits (**Alternatives 2-5**) and corresponding estimated landed weights (ranging from 1.2 lbs ww at 14 inches TL and 2.6 lbs ww at 18 inches TL) are expected to result in minimal differences in the rate at which fish are landed, as most recreational anglers are targeting larger “trophy” fish (Figure 2.4.1). Generally, lower minimum size limits result in the rapid harvest of higher numbers of smaller fish, thereby filling the quota more quickly. Higher minimum size limits typically result in the decelerated harvest of larger fish, thereby filling the quota more slowly and concurrently increasing the season length. Recently, the average landed weight of recreational red snapper has been estimated separately for the eastern and western Gulf due to differences in the data collection programs and by separate modes (i.e., headboats, charter vessels, and private anglers). In 2014, the average weight of landed red snapper in the eastern Gulf for private, charter vessel, and headboats were 7.5, 8.5, and 4.9 lbs ww, respectively. The average weight of landed red snapper in the western Gulf for private, charter vessels, and headboats were 6.98, 10.0, and 5.4 lbs ww, respectively (SERO-LAPP-2015-04).

⁷ <http://gulfcouncil.org/docs/Presentations/Gulf%20Red%20Snapper%20Size%20Limit%20Analysis%20-%20Presentation.pdf>

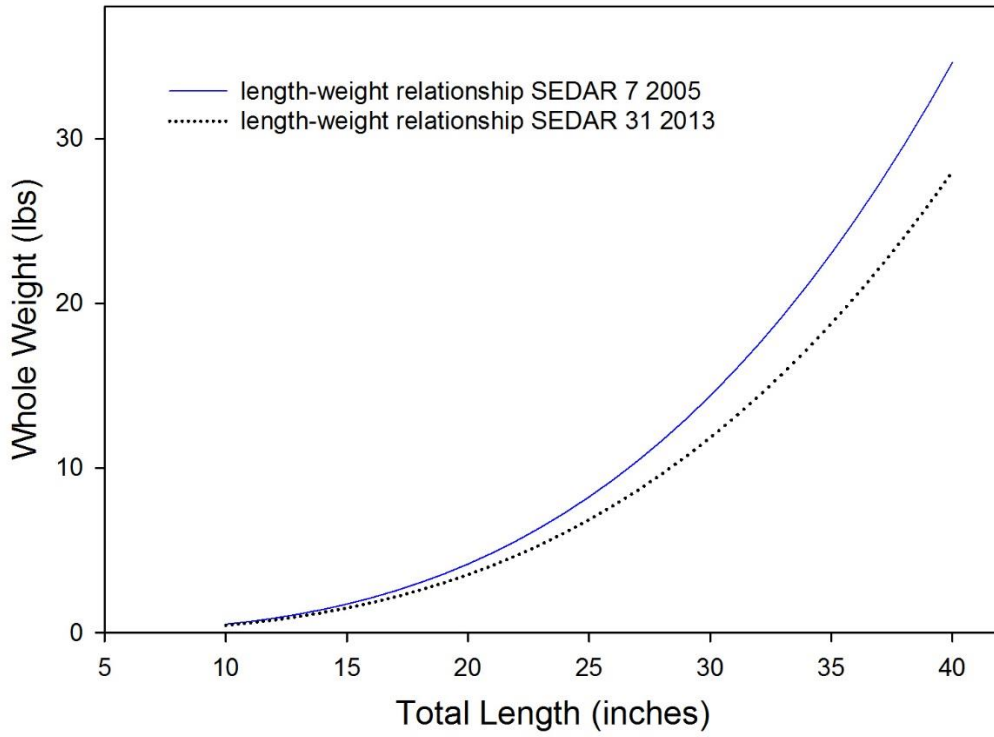


Figure 2.3.1. Red snapper length-weight relationship.
 Source: Conversion factors from SEDAR 7 (2005) and SEDAR 31 (2013).

CHAPTER 3. REFERENCES

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APPENDIX A. RED SNAPPER LANDINGS

Table A-1. Annual recreational red snapper landings *for all modes* by state (1986-2015), in whole weight (ww) of fish.

Year	Alabama	Florida	Louisiana	Mississippi	Texas
1986	401,123	1,929,702	631,294	3,482	525,241
1987	387,077	912,826	281,413	54,031	454,200
1988	516,328	940,254	1,038,395	21,783	622,380
1989	544,007	362,359	708,400	345,009	980,566
1990	644,860	289,177	274,815	55,440	360,243
1991	877,662	439,237	968,807	179,601	451,819
1992	1,510,823	372,642	1,129,185	764,794	840,845
1993	2,095,900	1,250,350	1,626,283	907,243	1,281,487
1994	1,950,457	846,569	1,284,747	491,146	1,502,841
1995	1,742,758	565,356	1,543,765	156,083	1,455,780
1996	1,752,107	998,533	885,325	212,843	1,490,081
1997	2,660,697	1,007,177	1,145,689	664,884	1,325,782
1998	1,446,734	1,391,640	721,783	189,014	1,104,926
1999	1,975,892	1,422,359	784,324	201,749	588,084
2000	1,405,596	1,701,732	881,480	53,551	707,747
2001	2,221,042	2,095,911	316,993	108,454	509,885
2002	2,620,872	2,528,289	404,563	238,011	743,411
2003	2,315,502	2,213,246	544,732	365,829	666,135
2004	1,937,219	3,484,522	376,281	25,571	636,651
2005	1,361,826	2,242,440	484,250	5,222	582,181
2006	826,956	2,106,536	504,844	32,808	659,988
2007	1,134,694	3,295,292	908,429	3,399	466,980
2008	695,131	2,332,925	638,159	39,193	350,466
2009	1,207,913	2,630,439	1,054,595	43,574	660,335
2010					
2011	3,606,454	1,975,772	600,358	69,478	482,046
2012	2,701,304	2,445,940	1,446,106	314,154	616,737
2013	4,424,247	3,622,036	589,642	412,432	489,112
2014	1,158,780	1,630,751	1,098,410	40,579	395,597
2015	2,468,809	1,620,208	1,193,988	44,694	600,381

Note: Landings exclude shore mode and incorporate the MRIP APAIS adjustment. Headboat landings from Alabama and the Florida panhandle reported to the same headboat area (area=23) have been assigned to state based on homeport from Headboat Survey vessel records. Homeports prior to 2003 were unavailable; landings from Area 23 prior to 2003 were assigned to state based on the mean ratio of Alabama to Florida landings 2003-2014. Source: MRIP APAIS Adjusted SEFSC Recreational ACL Data (1986-2012), SEFSC Recreational ACL Data (2013-2016; accessed Mar 2017), Louisiana landings (2014 & 2016 private, 2014-2016 charter) from LA Creel, TPWD preliminary data (2016).

Table A-2. Annual recreational red snapper landings by *private anglers and state-licensed for-hire vessels*, by state (1986-2015), in whole weight (ww) of fish.

Year	Alabama	Florida	Louisiana	Mississippi	Texas
1986	88,934	335,079	400,320	3,333	173,165
1987	179,372	348,166	76,970	53,757	60,455
1988	43,382	421,639	925,766	12,445	85,993
1989	71,790	176,352	570,607	339,838	37,181
1990	346,253	118,793	98,628	41,105	42,978
1991	458,409	156,370	29,944	168,884	72,367
1992	975,232	146,444	463,028	753,354	82,183
1993	1,056,027	149,020	891,726	827,117	105,634
1994	1,148,528	100,145	647,130	374,162	201,842
1995	927,739	45,798	832,915	151,391	289,472
1996	730,964	115,271	476,778	170,157	286,699
1997	1,298,954	56,515	633,592	581,760	264,840
1998	546,059	57,090	512,346	176,348	224,600
1999	1,425,824	363,453	586,835	189,986	156,918
2000	730,732	550,832	687,928	37,528	146,520
2001	1,370,655	1,047,142	229,816	87,634	119,065
2002	1,598,077	1,036,957	109,925	173,038	132,558
2003	1,357,478	955,587	247,210	325,327	112,956
2004	1,183,065	1,841,276	54,611	18,991	100,658
2005	719,236	1,182,012	82,982	5,222	165,723
2006	249,366	1,085,879	144,582	29,437	182,983
2007	542,033	1,784,411	684,663	3,399	128,486
2008	436,888	1,385,430	376,502	37,542	157,294
2009	839,053	1,514,201	802,254	43,574	170,410
2010					
2011	3,127,693	994,134	538,459	59,448	171,889
2012	2,197,377	1,424,435	1,188,763	306,854	171,307
2013	3,878,108	2,936,240	489,204	408,640	254,563
2014	1,007,805	1,415,855	1,059,139	38,886	201,891
2015	1,761,669	417,735	1,056,974	34,209	235,304

Note: Landings exclude shore mode and incorporate the MRIP APAIS adjustment. Landings from 2010 are excluded due to complicating factors associated with the *Deepwater Horizon* oil spill and associated fishing closures.

Source: MRIP APAIS adjusted SEFSC recreational ACL data (1986-2012), SEFSC recreational ACL data (2013-2016; accessed Mar 2017), LA Creel Survey data (2013-2016), TPWD preliminary data (2016).

Table A-3. Annual recreational red snapper landings by *federally for-hire vessels* (charter vessels and headboats), by state (1986-2015), in whole weight (ww) of fish.

Year	Alabama	Florida	Louisiana	Mississippi	Texas
1986	312,189	1,594,623	230,974	149	352,077
1987	207,705	564,660	204,443	274	393,745
1988	472,946	518,615	112,629	9,338	536,387
1989	472,217	186,007	137,793	5,171	943,384
1990	298,607	170,384	176,187	14,335	317,265
1991	419,253	282,867	938,863	10,717	379,452
1992	535,591	226,198	666,157	11,440	758,662
1993	1,039,873	1,101,330	734,557	80,126	1,175,853
1994	801,929	746,424	637,617	116,984	1,300,999
1995	815,019	519,558	710,850	4,692	1,166,308
1996	1,021,143	883,262	408,547	42,686	1,203,382
1997	1,361,743	950,662	512,097	83,124	1,060,942
1998	900,675	1,334,550	209,437	12,666	880,326
1999	550,068	1,058,906	197,489	11,763	431,166
2000	674,864	1,150,900	193,552	16,023	561,226
2001	850,387	1,048,769	87,177	20,820	390,820
2002	1,022,795	1,491,332	294,638	64,973	610,853
2003	958,024	1,257,659	297,522	40,502	553,180
2004	754,154	1,643,246	321,670	6,580	535,993
2005	642,590	1,060,428	401,268	0	416,458
2006	577,590	1,020,657	360,262	3,371	477,005
2007	592,661	1,510,881	223,766	0	338,495
2008	258,243	947,495	261,657	1,651	193,172
2009	368,860	1,116,238	252,341	0	489,926
2010					
2011	478,761	981,638	61,899	10,030	310,158
2012	503,927	1,021,505	257,344	7,300	445,429
2013	546,138	685,796	100,438	3,792	234,549
2014	150,975	214,896	39,270	1,693	193,706
2015	707,139	1,202,472	137,014	10,485	365,077

Note: Landings from 2010 are excluded due to complicating factors associated with the *Deepwater Horizon* oil spill and associated fishing closures.

Source: MRIP APAIS adjusted SEFSC recreational ACL data (1986-2012), SEFSC recreational ACL data (2013-2016; accessed Mar 2017), LA Creel Survey data (2013-2016), TPWD preliminary data (2016).