

Modification to the Recreational Red Snapper Annual Catch Target Buffers



A.C.T.

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

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	acceptable biological catch
ACL	annual catch limit
ACT	annual catch target
Council	Gulf of Mexico Fishery Management Council
GMFMC	Gulf of Mexico Fishery Management Council
Gulf	Gulf of Mexico
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MRIP	Marine Recreational Information Program
NMFS	National Marine Fisheries Service
OFL	overfishing limit
SEDAR	Southeast Data, Assessment, and Review process
SEFSC	Southeast Fisheries Science Center
SERO	NMFS Southeast Regional Office
SRHS	Southeast region headboat survey
SSC	Scientific and Statistical Committee
TAC	total allowable catch
TPWD	Texas Parks and Wildlife Department

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CHAPTER 1. INTRODUCTION

1.1 Background

Quota based management of recreational red snapper was implemented in 1997 (GMFMC 1997a) in response to a provision in the Sustainable Fisheries Act of 1996 requiring the Council to establish quotas for the recreational sector and specifically red snapper. From 1997 - 2016, the recreational sector exceeded its allowable catch limit 16 times, and was under the its allowable catch limit four times (Table 1.1.1). The four times when landings were under the its allowable catch limit were 2006 (the final year before a reduction in the annual catch limit (ACL)), 2010 (*Deepwater Horizon* oil spill), 2014 (when a 20% annual catch target (ACT) buffer was applied to the recreational sector), and 2015 (Amendment 40 divided the recreational sector into the private angler and for-hire components; the private recreational component exceeded its ACT, but not its ACL) (Table 1.1.1). Preliminary landings estimates project that the 2016 combined recreational landings exceeded both the ACT and ACL (Table 1.1.2).

Table 1.1.1. Recreational red snapper federal season lengths, quotas, and landings. Quotas and landings are in millions of pounds (mp) whole weight.

Year	Federal Season Dates	# Days Open	ACL	ACT	Landings
1996	January 1 – December 31	365	4.47 mp	-	5.339 mp
1997	January 1 – November 27	330	4.47 mp	-	6.804 mp
1998	January 1 – September 30	272	4.47 mp	-	4.854 mp
1999	January 1 – August 29	240	4.47 mp	-	4.972 mp
2000	April 21 – October 31	194	4.47 mp	-	4.750 mp
2001	April 21 – October 31	194	4.47 mp	-	5.252 mp
2002	April 21 – October 31	194	4.47 mp	-	6.535 mp
2003	April 21 – October 31	194	4.47 mp	-	6.105 mp
2004	April 21 – October 31	194	4.47 mp	-	6.460 mp
2005	April 21 – October 31	194	4.47 mp	-	4.676 mp
2006	April 21 – October 31	194	4.47 mp	-	4.131 mp
2007	April 21 – October 31	194	3.185 mp	-	5.809 mp
2008	June 1 – August 4	65	2.45 mp	-	4.056 mp
2009	June 1 – August 14	75	2.45 mp	-	5.597 mp
2010	June 1 – July 23; Oct 1 – Nov. 21 (Fri, Sat., & Sun.)	77	3.403 mp	-	2.651 mp
2011	June 1 – July 18	48	3.866 mp	-	6.734 mp
2012	June 1 – July 16	46	3.959 mp	-	7.524 mp
2013	June 1 – June 28; Oct 1 – Oct 14	42	5.390 mp	-	9.659 mp
2014	June 1 – June 9	9	5.390 mp	4.312 mp	3.867 mp
2015	June 1 – June 10 (private angling)	10	7.007 mp	5.605 mp	5.966 mp
	June 1 – July 14 (federal for-hire)	44			
2016	June 1 – June 10 (private angling)	10	7.192 mp	5.754 mp	7.322 mp
	June 1 – July 17 (federal for-hire)	47			

Note: In 2014, the season length was estimated based on an ACT of 4.312 mp, reduced from the 5.390 mp quota. Source: Southeast Fisheries Science Center (SEFSC) annual catch limit dataset, including calibrated landings from the Marine Recreational Information Program (MRIP), Texas Parks and Wildlife Department (TPWD), and the Southeast Region Headboat Survey (SRHS) (April 2017).

Table 1.1.2. 2015 and preliminary 2016 landings of recreationally harvested red snapper in the Gulf of Mexico. Landings are in pounds whole weight.

2015 Recreational Landings (lbs) by Two-month Wave												
Species Complex	Open Season	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total Reported	ACT	ACL	ACT %	ACL %
Red snapper For-Hire	Jun 1 - Jul 15	40,069	67,267	1,375,395	553,761	19,145	16,096	2,071,733	2,371,000	2,964,000	87	70
Red snapper Private	Jun 1 - Jun 11	20,732	302,300	2,593,888	496,166	429,434	51,889	3,894,409	3,234,000	4,043,000	120	96
2016 Preliminary Recreational Landings (lbs) by Two-month Wave												
Species Complex	Open Season	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total Reported	ACT	ACL	ACT %	ACL %
Red snapper For-Hire	Jun 1 - Jul 16	48,510	18,872	1,401,828	654,174	1,929	8,692	2,134,005	2,434,000	3,042,000	88	70
Red snapper Private	Jun 1 - Jun 12	185,877	95,737	3,485,444	810,659	420,925	189,259	5,187,901	3,320,000	4,150,000	156	125

Source: [SERO ACL Monitoring webpage](#); accessed May 16, 2016.

History of Recreational Catch Quotas and ACT Buffers

The Sustainable Fisheries Act of 1996 added a provision to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act) requiring that both the commercial and recreational red snapper harvests in the Gulf of Mexico (Gulf) be managed under a quota (Section 407(d)). Consequently, catch quotas for the recreational red snapper sector were implemented under a regulatory amendment in 1997 (GMFMC 1997a). From 1997 through 2013, the recreational quota was set at the recreational allocation of the total allowable catch (TAC), i.e., 49% of the TAC. In 2011, the Generic ACL/Accountability Measures (AMs) Amendment (GMFMC 2011) implemented ACLs and ACTs for all managed species. In 2015, under Amendment 40 (GMFMC 2014a), the recreational TAC was codified as the ACL as 49% of the stock ACL, and the private angler and for-hire components of the recreational sector were established with allocations of 57.7% and 42.3% of the recreational ACL, respectively. Amendment 28 (GMFMC 2015a) changed the recreational allocation to 51.5% of the stock ACL. Litigation led a federal judge to overturn the sector allocation change in Amendment 28 in March of 2017, which reduced the recreational ACL back to 49% of the stock ACL.

Until 2010, the red snapper TAC was set at the acceptable biological catch (ABC) level, which was equivalent to what is now called the overfishing limit (OFL). Beginning in 2010, ABC

became the OFL as reduced to account for scientific uncertainty based on an ABC control rule. In 2009, the Gulf Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) reviewed a red snapper update assessment (SEDAR 7 Update 2009). The Council's ABC control rule had not yet been developed. In the absence of a control rule, the SSC in 2010 set the ABC at 75% of the OFL (GMFMC 2009a). The ABC continued to be set at either 75% of OFL or the yield corresponding to 75% of the fishing mortality level at 25% of the spawning potential ratio ($F_{26\% SPR}$) through 2012.

Prior to 2014, the recreational red snapper season length was based on the projected time needed to reach the ACL. Beginning in 2014, the season length was based on when the ACT was projected to be reached rather than the quota in order to reduce the likelihood of an overharvest exceeding the ACL. In the three years since the ACT was used to project season length, the actual recreational landings have been below the ACL twice (2014 and 2015), and over the ACL once (2016).

Amendment 40 divided the recreational sector into two components: the private angler and for-hire components. The private angler component was apportioned 57.7% of the recreational ACL, and the for-hire component 42.3% (GMFMC 2014). The 20% buffer between the ACL and the ACT was applied to both components individually, meaning that the ACT for each recreational component was 20% lower than that component's allocation of the recreational ACL. Amendment 40 also established a sunset provision, which would end sector separation in three years. Amendment 45 (GMFMC 2016) extended the original sunset date for Amendment 40 from 2017 to 2022. In the two years since Amendment 40 has been in effect, the private angler component has exceeded its ACL once (in 2016), while the for-hire component has not exceeded its ACL or ACT (Table 1.1.3). The AMs in place under Amendment 40 stipulate that if a recreational component exceeds its allocation of the recreational ACL, and the recreational ACL is also exceeded, then in the following fishing year, the amount of the overage from the previous fishing year will be deducted from that component's allocation of the recreational ACL. Two years of landings data do not appear to be enough to assess how successful each of the components is to staying within their respective component ACLs; using the landings data only from 2015 and 2016 to determine an ACT buffer under the Council's ACL/ACT Control Rule does not yield meaningful or informative results (see Appendix A).

Amendment 28 (GMFMC 2015a) increased in the recreational allocation from 49% of the stock ACL to 51.5%, and went into effect for the 2016 fishing season. However, in response to a legal challenge, the sector allocation change in Amendment 28 was overturned in U.S. District Court, reverting the sector allocations back to the previous levels of 49% recreational, 51% commercial.

The most stock assessment (SEDAR 31 Update 2015) for red snapper indicated that the stock was overfished, but was not experiencing overfishing. For 2017, the ABC (which is also the stock ACL) is 13.74 mp whole weight (ww). The recreational allocation (49% of the stock ACL) is 6.733 mp ww, which would normally be allocated 2.848 mp to the for-hire component and 3.885 mp to the private angler component. However, in 2016 the private angler component sector exceeded its allocation, resulting in the stock ACL being exceeded by 129,906 pounds ww. Under the accountability measures (AMs) of the red snapper rebuilding plan, the private angler allocation for 2017 has been reduced by the 129,906 lb overharvest, resulting in an

adjusted private angling component ACL of 3,755,094. The for-hire component, which did not exceed its ACL, will receive its full allocation (Table 1.1.3).

Table 1.1.3. Recreational red snapper federal season lengths, quotas, and landings.

Year	Component	Federal Season Dates	# Days Open	ACL (quota)	ACT	Landings	% ACL
2013	Combined	June 1 – June 28; Oct 1 – 14	42	5,390,000	NA	9,575,022	177.6%
2014	Combined	June 1 – June 9	9	5,390,000	4,312,000	3,825,536	71.0%
2015	Private Angler	June 1 – June 10	10	4,043,000	3,234,000	3,894,409	96.3%
	For-Hire	June 1 – July 14	44	2,964,000	2,371,000	2,071,733	69.9%
2016*	Private Angler	June 1 – June 10	10	4,150,000	3,320,000	5,187,901	125.0%
	For-Hire	June 1 – July 17	47	3,042,000	2,434,000	2,134,005	70.2%
2017*	Private Angler	June 1 – June 4	3	3,755,094	3,004,075	-	-
	For-Hire	June 1 – July 20	49	2,848,000	2,278,000	-	-

2016 preliminary landings are projections reported to the Council in October 2016 and are subject to revision.

*Amendment 28 (GMFMC 2015a) changed the recreational allocation of red snapper from 49% to 51.5% of the stock ACL. In March 2017, a federal judge overturned Amendment 28, reverting the sector allocations back to their pre-Amendment 28 levels. The 2017 private angling component ACL was further adjusted to account for a 129,906 pound stock ACL overage in 2016.

Table 1.1.4. Adjusted 2017 recreational red snapper quota and annual catch target.

Sector or Component	2017 Quota (pounds whole weight)	2017 Annual Catch Target (pounds whole weight)
All Recreational	6,603,094*	n/a
Federal For-hire	2,848,000	2,278,000
Private angling	3,755,094*	3,004,075**

* Adjusted by 129,906 lbs ww to account for 2016 overage. **805 of the adjusted quota

Source: NMFS Southeast Regional Office

Table 1.1.5. Red snapper ABC projections from the September 2015 Gulf SSC meeting (GMFMC 2015c).

Year	ABC Projection
2015	14.30 mp
2016	13.96 mp
2017	13.74 mp
2018	13.38 mp
2019	12.84 mp
2020	12.48 mp

Note: Estimates assume discards continue at 2013 levels. The SSC only recommended ABCs for 2015-2017 because there is increasing uncertainty with the number of years projected. However, the overall trend is downward.

1.2 Purpose and Need

The purpose is to adjust the ACT buffer for the red snapper recreational sector or sector components to a level that will allow a greater harvest without exceeding the component ACLs.

The need is to allow the recreational sector components to harvest red snapper at a level consistent with achieving optimum yield while preventing overfishing, to achieve more accurate and fair implementation of annual catch targets, and to address social and economic impacts of keeping the respective recreational red snapper fishing seasons open longer while allowing rebuilding targets to be achieved.

1.3 History of Management

This history of management covers events pertinent to red snapper allocation and setting quotas. A complete history of management for the FMP is available on the Council's website at http://www.gulfcouncil.org/fishery_management_plans/reef_fish_management.php and a history of red snapper management through 2006 is presented in Hood et al. (2007). The final rule for the Reef Fish FMP (with its associated environmental impact statement [EIS]) (GMFMC 1981) was effective November 8, 1984, and defined the reef fish fishery management unit, which included red snapper.

Currently, the commercial sector fishing for red snapper is regulated by a 13-inch total length (TL) minimum size limit and managed under an individual quota program. Recreational fishing for red snapper is managed with a 16-inch TL minimum size limit, 2-fish bag limit, and a season beginning on June 1 and ending when the recreational quota is projected to be caught. Other reef fish fishery management measures that affect red snapper fishing include permit requirements for the commercial and federal for-hire fleets as well as season-area closures (e.g., Madison-Swanson and the Edges).

Red snapper allocation and quotas: The final rule for **Amendment 1** (GMFMC 1989) to the Reef Fish FMP (with its associated Environmental Assessment (EA), Regulatory Impact Review (RIR, and Initial Regulatory Flexibility Analysis [IRFA]) was effective in February 1990. The amendment specified a framework procedure for specifying the total allowable catch (TAC) to allow for annual management changes. A part of that specification was to establish a species allocation. This was based on the percentage of total landings during the base period of 1979-1987. For red snapper, the commercial sector landed 51% and the recreational sector landed 49% of red snapper over the base period. **Amendment 1** also established a commercial quota of 3.1 million pounds. The recreational quota was established through a 1997 regulatory amendment (with its associated EA and RIR) (GMFMC 1995) with a final rule effective in October 1997. Prior to 1997, the recreational sector had exceeded its allocation of the red snapper TAC, though the overages were declining through more restrictive recreational management measures (see Section 3, Table 3.1.2). With the establishment of a recreational quota, the Regional Administrator was authorized to close the recreational season when the quota is reached as required by the Magnuson-Stevens Act. Commercial and recreational quotas, recreational allocations, and commercial and recreational landings are provided in Table 3.1.2.

NMFS has recently changed the commercial and recreational allocation through **Amendment 28** (GMFMC 2015a). Amendment 28 reallocates the Gulf red snapper stock ACL between the commercial and recreational sectors from a 51 to 49% split to a 48.5 to 51.5% split, respectively.

At its April 2014 meeting, the Council requested an emergency rule to revise the recreational accountability measures for red snapper by applying a 20% buffer to the recreational quota, which resulted in a recreational ACT of 4.312 million pounds whole weight (NMFS 2014). The Council's decision to request an emergency rule was made following the decision of the U.S. District Court for the District of Columbia in *Guindon v. Pritzker* (March 26, 2014). A 2014 framework action created an ACT and a quota overage adjustment to apply to the 2015 fishing year and beyond (GMFMC 2014b). The action adopted an ACT based on a 20% buffer to the recreational quota. The Council also selected as preferred an overage adjustment such that the amount by which the recreational quota is exceeded in a fishing season is deducted from the following year's quota.

The Council established a federal for-hire and a private angling component within the Gulf recreational sector fishing for red snapper through **Amendment 40** (with its associated EIS, RIR, and Regulatory Flexibility Act analysis) which was implemented by NMFS on May 22, 2015 (GMFMC 2014a). The federal for-hire component is comprised of all for-hire operators with a valid or renewable federal charter vessel/headboat permit for reef fish and the private angling component is comprised of other for-hire operators and private recreational anglers. Amendment 40 allocated the red snapper recreational quota and ACT among the federal for-hire (42.3%) and private angling (57.7%) components.

For-hire permit requirements: The requirement to have a permit to operate for-hire vessels in the Gulf exclusive economic zone for reef fish fishing was implemented through **Amendment 11** (with its associated EA, RIR, and IRFA) on April 1, 1996 (GMFMC 1995). The initial purpose of the permits was to address potential abuses in the two-day bag limit allowance. It was thought that by having a permit to which sanctions could be applied would improve compliance with the two-day bag limit. In addition, the permit requirement was seen as a way to enhance monitoring of for-hire vessels in the recreational sector. **Amendment 20** (with its associated EA and RIR; GMFMC 2003), implemented on June 16, 2003, established a three-year moratorium on the issuance of new charter and headboat Gulf reef fish permits to limit further expansion in the for-hire fisheries, an industry concern, while the Council considered the need for more comprehensive effort management systems. The moratorium was extended indefinitely in **Amendment 25** (with its Supplemental EIS, RIR, and IRFA, implemented June 15, 2006 [GMFMC 2006]).

CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1 – Modify Red Snapper Recreational Annual Catch Target (ACT) Buffers

Alternative 1: No Action. The ACTs for the combined and component recreational red snapper sectors remain at 20% below the combined and component recreational annual catch limits (ACLs).

Alternative 2: Set the ACT for the combined recreational red snapper sector at some percentage below the combined recreational ACL. This is contingent on the final combined recreational landings estimates for red snapper in 2017 being within some percentage of the combined component ACLs.

Option 2a: Set the combined ACT *25% below* the combined ACL in the event that the 2017 landings are at least 5% over the 2017 combined ACL.

Option 2b: Set the combined ACT *15% below* the combined ACL so long as 2017 landings are at least 5% below the 2017 combined ACL.

Option 2c: Set the combined ACT *10% below* the combined ACL so long as 2017 landings are at least 10% below the 2017 combined ACL.

Alternative 3: Set the ACT for the private angler component of the recreational red snapper sector some percentage below the private angler component ACL. This is contingent on the final private angler component landings estimates for red snapper in 2017 being within some percentage of the private angler component ACL.

Option 3a: Set the private angler component ACT *25% below* the private angler component ACL in the event that the 2017 landings are at least 5% over the 2017 private angler component ACL.

Option 3b: Set the private angler component ACT *15% below* the private angler component ACL so long as 2017 landings are at least 5% below the 2017 private angler component ACL.

Option 3c: Set the private angler component ACT *10% below* the private angler component ACL so long as 2017 landings are at least 10% below the 2017 private angler component ACL.

Alternative 4: Set the ACT for the for-hire component of the recreational red snapper sector some percentage below the for-hire component ACL. This is contingent on the final for-hire component landings estimates for red snapper in 2017 being within some percentage of the for-hire component ACL.

Option 4a: Set the for-hire component ACT *25% below* the for-hire component ACL in the event that the 2017 landings are at least 5% over the 2017 for-hire component ACL.

Option 4b: Set the for-hire component ACT *15% below* the for-hire component ACL so long as 2017 landings are at least *5% below* the 2017 for-hire component ACL.

Option 4c: Set the for-hire component ACT *10% below* the ACL so long as 2017 for-hire component landings are at least *10% below* the 2017 for-hire component ACL.

Discussion:

The commercial harvest of red snapper has been below the commercial quota each year since implementation of the red snapper individual fishing quota (IFQ) system in 2007. However, recreational red snapper landings have exceeded the recreational ACL every year since 1996, except for 2006 and 2010 (Table 1.1.1). On March 26, 2014, in response to a legal challenge from commercial fishermen, the U.S. District Court for the District of Columbia ruled that NMFS failed to require adequate accountability measures for the recreational sector, failed to prohibit the retention of fish after the recreational ACL had been harvested, and failed to use the best scientific information available when determining whether there should be a 2013 fall fishing season. In response to the Court's decision and to reduce the probability of the recreational sector exceeding its ACL, the Council reviewed an analysis of buffer levels presented at the April 2014 Council meeting (Figure 2.1.1). A 20% buffer was expected to result in a 15% probability of overfishing (i.e., exceeding the ABC), and the Council requested, through an emergency rule, that NMFS implement an ACT that was 20% less than the 2014 recreational ACL and would be used to set the season length (Figure 2.1.1). An October 2014 framework action (GMFMC 2014b) subsequently established a recreational red snapper ACT that is 20% less than the recreational ACL. The framework action also established a recreational accountability measure (AM) as long as red snapper is overfished. If the recreational red snapper ACL is exceeded, the overage would be deducted from the recreational red snapper ACL in the following season unless the best scientific information available determines that a greater, lesser, or no overage adjustment is necessary.

2014 Red Snapper Season Lengths



Recreational Quota = 5.39 mp ww

Buffer (%)	Rec ACT (lbs ww)	Federal Season (days)	Prob. of Exceeding Quota
0%	5.39	17	50%
20%	4.312	11	15%
30%	3.773	8	5%
40%	3.234	5	<1%
60%	1.889	0	<1%



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Figure 2.1.1. Analysis of probability of recreational red snapper quota being exceeded in 2014 at various ACT buffer levels. Source: NMFS/SERO

The 20% ACT buffer for 2014 resulted in a recreational ACT of 4.312 million pounds (mp) whole weight (ww) reduced from an ACL of 5.39 mp ww. After taking into consideration inconsistent state regulations, a 9-day federal recreational red snapper season was announced for 2014, opening at 12:01 a.m., June 1, and closing at 12:01 a.m., on June 10. The ACTs for 2015 through 2017 were also adopted based on a 20% buffer under a 2015 framework action (GMFMC 2015d). The subsequent federal private recreational fishing seasons in 2015 and 2016 were 10 days and 11 days, respectively.

With the 20% ACT buffer in place, the total recreational harvest (private angler and for-hire vessels combined) was 28% below its ACL in 2014, 13% below its ACL in 2015, and is projected to be 2% over its ACL in 2016. In 2015, sector separation (Amendment 40; GMFMC 2014a) went into effect, dividing the private angler and for-hire components of the recreational sector, with respective allocations of 57.7% and 42.3% of the recreational ACL. The 20% ACT buffer was applied to each component. In 2015, the private angler and for-hire components landed 96% and 70% of their respective ACLs. In 2016, the private angler and for-hire components landed 125% and 70% of their respective ACLs. This suggests that the 20% ACT buffer is constraining harvest below the ACL for the for-hire component, but not for the private angler component.

One possible qualitative approach to adjusting the ACT buffer is to reduce it by the amount of excess buffer that is projected to occur in 2017. However, it is not possible to use the landings from 2015 and 2016 to reliably estimate the landings for 2017. First, relying on only two years of landings data to forecast future landings does not provide a quantitatively adequate amount of contrast in the data. Second, only two years have passed since the implementation of sector separation, which does not yield enough data to use the Council's ACT/ACT Control Rule to estimate the size of the component-specific ACT buffers (see Appendix A).

Because of these uncertainties, the alternatives presented in this action would modify the buffer to either increase it to 25%, or decrease it to 15% or 10% of the ACL, contingent on the final landings estimates for red snapper in 2017 being within some percentage of the ACL. Implementation of the modified buffer would be delayed until the final 2017 landings are available. If the final 2017 landings would have been below the ACL even with the reduced buffer, it would be an indication that the National Marine Fisheries Service (NMFS) is successfully constraining catch, and the reduced buffer would be implemented. However, if the 2017 landings would have exceeded the ACL under the reduced buffer, then the ACT buffer would be retained or increased.

Alternative 1 (no action) retains the recreational ACT being set at 20% below the recreational ACL. The ABCs (and the resulting ACLs and ACTs) are projected to decline at least through 2020 (Table 1.1.4). As the ACLs and ACTs decline, it may become more difficult for NMFS to accurately project the number of fishing days needed to land the ACT, increasing the likelihood that ACT and ACL could be exceeded. Since the implementation of sector separation, the for-hire component of the recreational sector has not exceeded its ACT or ACL, while the private angler component has exceeded its ACT twice and its ACL once. This suggests that while the current 20% buffer (**Alternative 1**) appears to be properly constraining harvest for the for-hire component, the same cannot be said for the private angler component.

Alternative 2 would set the ACT for the combined recreational red snapper sector at some percentage below the combined recreational ACL, contingent on the final combined recreational landings estimates for red snapper in 2017 being within some percentage of the combined ACL as defined in **Options 2a-2c**. **Option 2a** would broaden the combined ACT buffer to 25% below the combined ACL in the event that the 2017 landings are at least 5% over the 2017 combined ACL; **Option 2b** would narrow the combined ACT buffer to 15% below the combined ACL so long as 2017 landings are at least 5% below the 2017 combined ACL; and **Option 2c** would narrow the combined ACT buffer to 10% below the combined ACL so long as 2017 landings are at least 10% below the 2017 combined ACL. **Alternative 2** would apply the same buffer to both the private angler and for-hire components of the recreational sector equally. Based on an examination of the 2015 and 2016 landings data, **Option 2a** may constrain harvest by the private angler component below that component's ACL; however, neither **Option 2b** nor **Option 2c** appear likely to have a similar effect because the buffer would be reduced. Alternatively, **Options 2a, 2b, and 2c** are decreasingly likely to constrain harvest by the for-hire component below that component's ACL.

Alternatives 3 and 4 would modify the ACT buffer to some percentage below the ACL for the recreational sector components individually. This means that options from both **Alternative 3** and **4** may be selected simultaneously, and need not be identical.

Alternative 3 would set the ACT for the private angler component of the recreational red snapper sector at some percentage below the private angler component's ACL, contingent on the final private angler component's landings estimates for red snapper in 2017 being within some percentage of the private angler component's ACL as defined in **Options 3a-3c**. **Option 3a** would increase the private angler component's ACT buffer to 25% below the private angler component's ACL in the event that the 2017 landings are at least 5% over the 2017 private angler component's ACL; **Option 3b** would narrow the private angler component's ACT buffer to 15% below the private angler component's ACL so long as 2017 landings are at least 5% below the 2017 private angler component's ACL; and **Option 3c** would narrow the private angler component's ACT buffer to 10% below the private angler component's ACL so long as 2017 landings are at least 10% below the 2017 private angler component's ACL. Based on an examination of the 2015 and 2016 landings data, **Option 3a** may constrain harvest by the private angler component below that component's ACL; however, neither **Option 3b** nor **Option 3c** appear likely to have a similar effect because the buffer would be reduced.

Alternative 4 would set the ACT for the for-hire component of the recreational red snapper sector at some percentage below the for-hire component's ACL, contingent on the final for-hire component's landings estimates for red snapper in 2017 being within some percentage of the for-hire component's ACL as defined in **Options 4a-4c**. **Option 4a** would increase the for-hire component's ACT buffer to 25% below the for-hire component's ACL in the event that the 2017 landings are at least 5% over the 2017 for-hire component's ACL; **Option 4b** would narrow the for-hire component's ACT buffer to 15% below the for-hire component's ACL so long as 2017 landings are at least 5% below the 2017 for-hire component's ACL; and **Option 4c** would narrow the for-hire component's ACT buffer to 10% below the for-hire component's ACL so long as 2017 landings are at least 10% below the 2017 for-hire component's ACL. Based on an examination of the 2015 and 2016 landings data, **Options 4a, 4b, and 4c** are decreasingly likely to constrain harvest by the for-hire component below the for-hire component's ACL.

The for-hire and private recreational components are part of a single recreational sector. As a result, the overharvest payback provision is triggered only if the total recreational ACL for the for-hire and private angler components combined is exceeded. If one component exceeds its ACL while the other component harvests less than its ACL, the combined catch may be less than the total recreational ACL, in which case there is no payback required. Even if the total recreational ACL is exceeded, the payback is only the amount by which the total recreational ACL is exceeded, not the individual component ACL. For example, in 2016, the private angler component harvested 25% above its ACL, while the for-hire component harvested 30% below its ACL. When the catches were combined, the total recreational ACL was exceeded by just 2%. Therefore, the private angler component only had a 2% payback in 2017 instead of a 25% payback. Adjusting the ACT buffer in only one component may result in larger paybacks in the other component if the ACL is exceeded.

The primary tool currently used to control recreational harvest and prevent the ACL from being exceeded in a given year is season length. The ACT buffer is used to account for uncertainty in keeping recreational catches from exceeding the ACL. At its January 5-6, 2016 meeting the Standing and Special Reef Fish SSC reviewed the methodology used by NMFS to set recreational red snapper season lengths. Numerous sources of uncertainty in projecting season length were identified, including:

- Prediction of state season lengths
- Prediction of state catch rates
- Effort compression during federal season
- Catch rates vs. rebuilding
- Fuel prices, economy, angler behavior
- Weather conditions
- States managing toward unofficial “ACLs” vs. “ACTs”
- Time-lag in receiving recreational landings estimates
- Fall re-openings uninformed by Wave 3 data
- Challenges estimating fall catch rates
- Precision issues with landings data
- Changes in recreational surveys
- Multiple sources for landings data, often with different estimates

The SSC discussed possible approaches to that could be used to evaluate a change in the ACT buffer. However, SSC members thought that, due to the numerous sources of uncertainty, there were too many moving parts to be able to establish a scientific justification for either changing or retaining the 20% buffer. In addition, with only two years of landings data under sector separation (Amendment 40), there are little data on which to base any analysis. The SSC members suggested that the buffer be re-evaluated in three to four years when more landings data under sector separation are available.

CHAPTER 3. REFERENCES

- GMFMC. 1997a. Regulatory amendment to the reef fish fishery management plan to set 1997 commercial red snapper season and authorize recreational quota closures. Gulf of Mexico Fishery Management Council, Tampa, Florida. 36 p.
<http://gulfcouncil.org/Beta/GMFMCWeb/downloads/RF%20RegAmend%20-%201997-03.pdf>
- GMFMC. 2013a. Framework action for a red snapper 2013 quota increase and supplemental recreational season. Gulf of Mexico Fishery Management Council, Tampa, Florida. 87 p.
<http://www.gulfcouncil.org/docs/amendments/Final%20Red%20Snapper%20Framework%20Action%20Set%202013%20Quotas%2008-01-13.pdf>
- GMFMC. 2014a. Final amendment 40 to the reef fish fishery management plan for the reef fish resources of the Gulf of Mexico – recreational red snapper sector separation. Gulf of Mexico Fishery Management Council, Tampa, Florida. 274 p.
<http://www.gulfcouncil.org/docs/amendments/RF%2040%20-%20Final%2012-17-2014.pdf>
- GMFMC. 2014b. Framework action: Recreational accountability measures for red snapper. Gulf of Mexico Fishery Management Council, Tampa, Florida. 106 p
<http://www.gulfcouncil.org/docs/amendments/Final%20Recreational%20AMs%20for%20Red%20Snapper%2010-6-2014.pdf>
- GMFMC. 2015a. Final amendment 28 to the reef fish fishery management plan for the reef fish resources of the Gulf of Mexico – red snapper allocation. Gulf of Mexico Fishery Management Council, Tampa, Florida. 302 p.
<http://gulfcouncil.org/docs/amendments/Final%20Red%20Snapper%20Allocation%20-RF%20Amendment%2028.pdf>
- GMFMC. 2015b. Standing and special reef fish SSC meeting summary, May 20, 2015. Gulf of Mexico Fishery Management Council, Tampa, Florida. 15 p.
- GMFMC. 2015c. Standing and special reef fish SSC meeting summary, September 1-2, 2015. Gulf of Mexico Fishery Management Council, Tampa, Florida. 11 p.
- GMFMC. 2015d. Framework action: Red snapper quotas for 2015-2017+. Gulf of Mexico Fishery Management Council, Tampa, Florida. 66 p.
<http://gulfcouncil.org/docs/amendments/Final%20Red%20Snapper%20Framework%20Action%20Set%202015-2017%20Quotas.pdf>
- SEDAR 7 Update. 2009. Update stock assessment report of SEDAR 7 Gulf of Mexico red snapper. Southeast Data, Assessment, and Review. North Charleston, South Carolina.
<http://www.sefsc.noaa.gov/sedar/>.
- SEDAR 31. 2013. Stock assessment report Gulf of Mexico red snapper. Southeast Data, Assessment, and Review. North Charleston, South Carolina.
<http://www.sefsc.noaa.gov/sedar/>.

APPENDIX A: ACL/ACT CONTROL RULE WORKSHEETS

ACT/ACT Control Rule for the private angler component of the recreational sector for Gulf red snapper

As of 4/18/2017							
ACL/ACT Buffer Spreadsheet		version 4.1 - April 2011				Red Snapper	
sum of points	4.5			Private Angler		Recreational - 2017/w 2016 preliminary landings	
max points	6.5			Buffer between ACLand ACT (or ABC and ACL)		Unweighted	13
Min. Buffer	0	min. buffer	User adjustable			Weighted	17
Max Unw. Buff	19	max unwt. Buff					
Max Wtd Buff	25	max wtd. buffer	User adjustable				
Component							
Stock assemblage	Element score	Element		Selection	Element result		
	0	This ACL/ACT is for a single stock.		x	0		
	1	This ACL/ACT is for a stock assemblage, or an indicator species for a stock assemblage					
Ability to Constrain Catch	0	Catch limit has been exceeded 0 or 1 times in last 4 years			2.5		
	1	Catch limit has been exceeded 2 or more times in last 4 years		x			
		For the year with max. overage, add 0.5 pts. For every 10 percentage points (rounded up) above ACL		1.5			
		Not applicable (there is no catch limit)					
Apply this component to recreational fisheries, not commercial or IFQ fisheries							
Precision of Landings Data Recreational	0	Method of absolute counting			1		
	1	MRIP proportional standard error (PSE) <= 20		x			
	2	MRIP proportional standard error (PSE) > 20					
		Not applicable (will not be included in buffer calculation)					
Apply this component to commercial fisheries or any fishery under an IFQ program							
Precision of Landings Data Commercial	0	Landings from IFQ program			not applicable		
	1	Landings based on dealer reporting					
	2	Landings based on other					
		Not applicable (will not be included in buffer calculation)		x			
Timeliness	0	In-season accountability measures used or fishery is under an IFQ			1		
	1	In-season accountability measures not used		x			
				Sum	4.5		
Weighting factor							
	Element weight	Element		Selection	Weighting		
Overfished status	0	1. Stock biomass is at or above B_{OY} (or proxy).			0.3		
	0.1	2. Stock biomass is below B_{OY} (or proxy) but at or above B_{MSY} (or proxy).					
	0.2	3. Stock biomass is below B_{MSY} (or proxy) but at or above minimum stock size threshold (MSST).					
	0.3	4. Stock is overfished, below MSST.		x			
	0.3	5. Status criterion is unknown.					
Year	Catch	ACL	Over/Under %				
				No sector separation			
				No sector separation			
2015	3,894,409	4,043,000	-4%	Charter For-hire component			
2016	5,187,901	4,150,000	25% <--	Charter For-hire component			
No sector separation in 2013 and 2014. Landings/ACL are for total combined recreationa							
Maximum overage in years with sector separation = 25% = 1.5 points							
ACL exceeded 1 time in last 2 years							
Data Source ACL Data set SERO 18 April 2017							
Year	PSE						
2013	13.2						
2014	19.5						
2015	20.9						
2016	14.4						
Average 2011-20	17	Avg PSE < 20					

Figure 1: ACT/ACT Control Rule for the private angler component of the recreational sector for Gulf red snapper. 2016 landings are preliminary at the time of this analysis: 18 April 2017.

As of 4/18/2017		version 4.1 - April 2011		Red Snapper	
ACL/ACT Buffer Spreadsheet				For-Hire Recreational - 2017/w 2016 preliminary landings	
sum of points	2			Unweighted	8
max points	5.0	Buffer between ACL and ACT (or ABC and ACL)		Weighted	10
Min. Buffer	0 min. buffer	User adjustable			
Max Unw. Buff	19 max unw. Buff				
Max Wtd Buff	25 max wtd. buffer	User adjustable			

Component	Element score	Element	Selection	Element result
Stock assemblage	0	This ACL/ACT is for a single stock.	x	0
	1	This ACL/ACT is for a stock assemblage, or an indicator species for a stock assemblage		
Ability to Constrain Catch	0	Catch limit has been exceeded 0 or 1 times in last 4 years	x	0
	1	Catch limit has been exceeded 2 or more times in last 4 years		
		For the year with max. overage, add 0.5 pts. For every 10 percentage points (rounded up) above ACL Not applicable (there is no catch limit)	0.0	
Apply this component to recreational fisheries, not commercial or IFQ fisheries				
Precision of Landings Data Recreational	0	Method of absolute counting		1
	1	MRIP proportional standard error (PSE) <= 20	x	
	2	MRIP proportional standard error (PSE) > 20		
Not applicable (will not be included in buffer calculation)				
Apply this component to commercial fisheries or any fishery under an IFQ program				
Precision of Landings Data Commercial	0	Landings from IFQ program		not applicable
	1	Landings based on dealer reporting		
	2	Landings based on other		
Not applicable (will not be included in buffer calculation)				
Timeliness	0	In-season accountability measures used or fishery is under an IFQ		1
	1	In-season accountability measures not used	x	
			Sum	2

Weighting factor				
	Element weight	Element	Selection	Weighting
Overfished status	0	1. Stock biomass is at or above B _{OY} (or proxy).		0.3
	0.1	2. Stock biomass is below B _{OY} (or proxy) but at or above B _{MSY} (or proxy).		
	0.2	3. Stock biomass is below B _{MSY} (or proxy) but at or above minimum stock size threshold (MSST).		
	0.3	4. Stock is overfished, below MSST.	x	
	0.3	5. Status criterion is unknown.		

Year	Catch	ACL	Over/Under %	
				<-- No sector separation
2015	2,071,733	2,964,000	-30%	No sector separation
2016	2,134,005	2,434,000	-12%	Charter For-hire component
				Charter For-hire component
No sector separation in 2013 and 2014. Landings/ACL are for total combined recreational				
No ACL overage in years with sector separation - 0 points				
ACL exceeded 0 times in last 2 years				
Data Source ACL Data set SERO 18 April 2017				
Year	PSE			
2013	11.1			
2014	26.4			
2015	12.2			
2016	11.9			
Average 2011-20	15.4	Avg PSE < 20		

Figure 2: ACT/ACT Control Rule for the for-hire component of the recreational sector for Gulf red snapper. 2016 landings are preliminary at the time of this analysis: 18 April 2017.