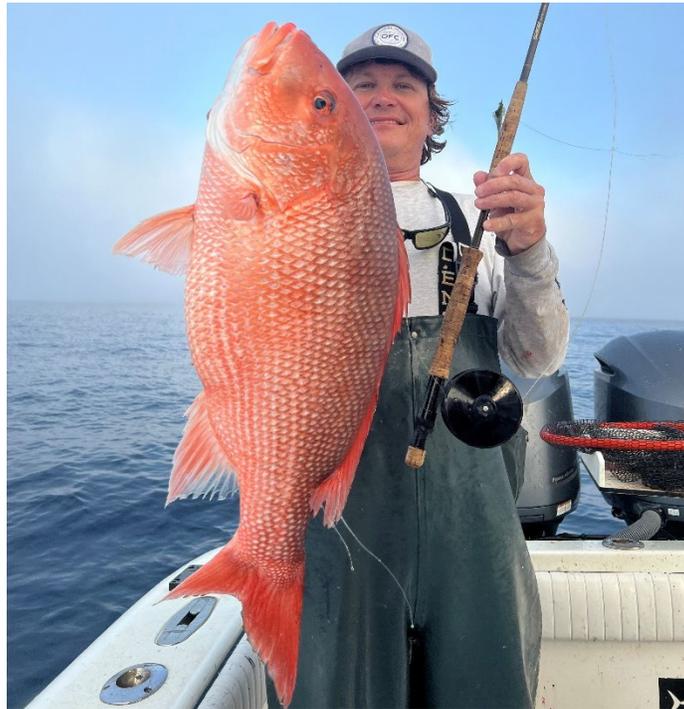


# Modification of Catch Limits for Gulf of Mexico Red Snapper



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

June 2022



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# ENVIRONMENTAL ASSESSMENT COVER SHEET

Framework Action to the Fishery Management Plan for Reef Fish Resources of the Gulf of Mexico: Modification of Annual Catch Limits for Gulf of Mexico Red Snapper, including Environmental Assessment, Regulatory Impact Review, and Regulatory Flexibility Act Analysis.

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## Type of Action

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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 April 30, 2021, and accordingly proceeds under the 2020 regulations.

## ABBREVIATIONS USED IN THIS DOCUMENT

ACL	annual catch limit
AM	accountability measure
AP	Advisory Panel
ATCA	Atlantic Tunas Convention Act
Atlantic HMS	Atlantic Highly Migratory Species Management Division
bandit	electric hook-and-line gear
BEA	Bureau of Economic Analysis
BiOp	biological opinion
CFR	code of federal regulations
CHTS	Coastal Household Telephone Survey
CMP	coastal migratory pelagic
Council	Gulf of Mexico Fishery Management Council
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
DWG	Deepwater grouper
EA	environmental assessment
EEZ	exclusive economic zone
EFH	essential fish habitat
EFP	exempted fishing permit
EJ	environmental justice
E.O.	executive order
ELB	electronic logbook
ESA	Endangered Species Act
FHS	for-hire survey
FMP	Fishery Management Plan
FWC	Florida Fish and Wildlife Commission
GPS	global positioning system
GRSC	Great Red Snapper Count
Gulf	Gulf of Mexico
gw	gutted weight
HAPC	habitat area of particular concern
HMS	highly migratory species
ICCAT	International Commission for the Conservation of Atlantic Tunas
IFQ	individual fishing quota
IPCC	Intergovernmental Panel on Climate Change
KM	king mackerel
LDWF	Louisiana Department of Wildlife and Fisheries
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MMPA	Marine Mammal Protection Act
mp	million pounds
MPA	marine protected area

MRIP	Marine Recreational Information Program
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OY	optimum yield
PAH	polycyclic aromatic hydrocarbons
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
SA	South Atlantic
SAFE	Stock Assessment and Fishery Evaluation
Secretary	Secretary of Commerce
SEDAR	Southeast Data and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
SM	Spanish mackerel
SBREFA	Small Business Regulatory Enforcement Fairness Act
SPGM	Gulf of Mexico Shrimp Commercial Fishing Permit
SRHS	Southeast Region Headboat Survey
SSC	Scientific and Statistical Committee
SWG	shallow water grouper
TPWD	Texas Parks and Wildlife Department
tpy	tons per year
VOC	volatile organic compounds
VMS	vessel monitoring system\
ww	whole weight

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# CHAPTER 1. INTRODUCTION

## 1.1 Background

A Southeast Data, Assessment, and Review (SEDAR) process was completed in 2018 for Gulf of Mexico (Gulf) red snapper. This stock assessment (SEDAR 52) was reviewed by the Gulf of Mexico Fishery Management Council's (Council) Scientific and Statistical Committee (SSC) in May 2018. Based on the SEDAR 52 assessment, the SSC determined that the Gulf red snapper stock is not overfished or undergoing overfishing, and is on schedule to rebuild to 26% spawning potential ratio (SPR), which is the proxy for biomass at the maximum sustainable yield MSY ( $B_{MSY}$ ), by the 2032 target date. The 2016 (terminal year of SEDAR 52) stock biomass was estimated to be 18% SPR Gulf-wide, an increase from the previous 14% SPR in 2014. The current overfished threshold, adopted in Amendment 44 (GMFMC 2017d), is 50% of the biomass at maximum sustainable yield ( $B_{MSY}$ ).

Based on the review of SEDAR 52, the SSC endorsed two possible choices for setting the overfishing limit (OFL) and acceptable biological catch (ABC) for 2019-2021: one, a declining yield stream and two, a constant catch approach using the average of the annual OFL and ABC values from 2019 through 2021. The SSC determined that the two methods of calculating OFL and ABC were equivalent within the considered 3-year period and the Council selected the constant catch approach for management (Table 1.1.1). The Council-approved OFL of 15.5 million pounds whole weight (mp ww) and ABC of 15.1 mp ww are based on the constant catch method and are still in effect as of May 2022.

**Table 1.1.1.** SSC recommendations for OFL and ABC from the SEDAR 52 stock assessment of Gulf red snapper (a) declining yield stream or (b) constant catch. The Council selected the constant catch approach for management. Values are in millions of pounds, whole weight.

<b>a. Declining Yield Stream</b>		
<b>Year</b>	<b>OFL</b>	<b>ABC</b>
<b>2019</b>	16.6	16.0
<b>2020</b>	15.4	15.0
<b>2021</b>	14.6	14.3
<b>b. Constant Catch</b>		
<b>Year</b>	<b>OFL</b>	<b>ABC</b>
<b>2019-2021</b>	15.5	15.1

## 1.2 Great Red Snapper Count and SSC Review and Recommendations

At its March 2021 meeting, the SSC reviewed the results of the Great Red Snapper Count (GRSC),<sup>1</sup> which is a Gulf-wide collaborative research project to estimate absolute abundance of age-2 and older red snapper in the Gulf. Red snapper abundance sampling was stratified by habitat type, estimated using direct visual counts, acoustic surveys, depletion surveys, and a Gulf-wide tagging program. Absolute abundance estimates from the GRSC were derived for four regions and estimated in numbers of fish. Of the total 110,000,000 fish estimated to be present (11% coefficient of variation [CV]), approximately 52% were thought to occur in the eastern Gulf (i.e., east of Mississippi River), and 48% in the western Gulf. Larger fish are still proportionately more abundant in the western Gulf. While no previous effort had been made to enumerate the absolute number of red snapper in the Gulf, the estimate from the GRSC was much larger than historical perceptions of abundance considered in previous stock assessments. The primary difference is that the GRSC surveyed uncharacterized bottom habitat (UCB) that was largely not considered in previous stock assessments. Uncharacterized bottom includes all habitats that fall outside the domains of known artificial and natural reefs. It is recognized that the bottom in many of these areas is made up of unconsolidated sediments of various types that hold low densities of red snapper. However, these areas are vast in extent and may include a significant number of red snapper. The UCB includes soft bottom, and also hard bottom or artificial structures that were previously unknown until surveyed, but function similar to other observed reefs. Some examples of UCB that were characterized and documented during the GRSC range from an unmarked cargo box that may have fallen off a tanker to low-relief natural limestone outcroppings. Full details of the peer-review of the GRSC by the SSC at its March 2021 meeting can be reviewed on the Gulf Council's website<sup>2</sup>.

The SEFSC developed catch projections using GRSC estimates of abundance to scale projections that initially used abundance estimates from the last accepted Gulf red snapper stock assessment, SEDAR 52<sup>3</sup>. The SEFSC also developed an analytical process to provide an interim analysis that uses a harvest control rule (HCR) to adjust the catch advice based on an index of relative abundance. Specifically, the HCR compares where the stock seems to be now (observed index value) with where the stock was in the terminal year of the last assessment (reference index value). The chosen HCR adjusts the ABC recommendation based on variation between reference and observed index values. For red snapper, the SEFSC recommended the fishery-independent NMFS Bottom Longline (BLL) index for use in the HCR because of its widespread spatial coverage, consistent sampling design, long time-series, and prevalence of red snapper in the survey. The SEFSC prepared an interim analysis for red snapper based on a Gulf wide NMFS BLL index with data from 2000 – 2020. The SSC reviewed the results of the both analyses, which suggested that the stock might be able to support more removals than previously thought.

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<sup>1</sup> <https://www.harte.org/snappercount>

<sup>2</sup> <https://gulfcouncil.org/wp-content/uploads/Gulf-SSC-Summary-March-April-2021-04092021.pdf>

<sup>3</sup> <https://sedarweb.org/sedar-52-gulf-mexico-red-snapper-final-stock-assessment-report>

With respect to the projections from the GRSC analysis, the SSC noted that fish occupying UCB have historically faced lower fishing mortality than fish occupying known natural and high relief artificial reefs. Thus, basing harvest levels on the entire population may lead to localized depletion on reefs as the overwhelming majority of harvest would be expected to occur on this habitat. However, it is likely that some harvest does occur in the UCB and a subset of the abundance could be included into the “harvestable” population in terms of setting catch advice. Modeling runs estimated that 13% of the sampling sites in the UCB were considered highly suitable and this value was used in the spreadsheet projections. Thus, a catch recommendation scenario was developed based on the abundance of all red snapper over structure (artificial reef, natural reef, and pipeline) and 13% of the abundance estimated to occur on the UCB. Using an  $F_{SPR\ 26\%}$  (i.e., MSY proxy for red snapper), the OFL recommendation was 25.6 mp ww in MRIP-CHTS units based on the GRSC interim analysis using a three-year average of projected biomass.

To provide an ABC recommendation, the SSC determined that it was appropriate to use the NMFS bottom longline (BLL) interim analysis. From the SEDAR 52 stock assessment, the SSC set the OFL at 15.5 mp ww, and the ABC at 15.1 mp ww, given constant catch projections for 2019 – 2021 and subsequent years. The NMFS BLL survey index, including 2020 or excluding 2020 (due to reduced spatial sampling from COVID-19), shows that the highest Gulf-wide abundance of red snapper was in 2016 and has declined since. Similar trajectories in projected biomass in the eastern Gulf with reduced area sampled in 2020 indicate that reduced sampling had little effect on abundance estimates in the eastern Gulf. In the western Gulf, the decline in the 2020 index value was likely because no sampling was performed due to COVID-19.

The SSC considered two main decision points for selecting an ABC based on the NMFS BLL interim analysis: the selection of an index terminal year (2019 or 2020), and the selection of a 3 or 5-year average for the harvest control rule. An SSC member thought that 2020 data should not be used for this interim analysis, given the low sample size and high coefficient of variation (CV) for the data for that year. Moreover, the SSC recommended that the catch advice be derived from the 5-year average. Based on these selections the SSC provided an ABC recommendation of 15.4 mp ww for 2021 in MRIP-CHTS units. This recommendation reflects the SSC determination that the ABC should be considerably more conservative than the current difference between OFL and ABC (i.e., approximately 2.58%), reflecting the uncertainties in the advice based on the interim analysis catch advice derived from absolute abundance estimates from the GRSC and the declining trend in the NMFS BLL survey .

At their April 2021 meeting, the Council approved the adjustments to the red snapper catch limits. The Council chose to modify the red snapper OFL, ABC, ACLs, and recreational ACTs for 2021 based on the OFL and ABC recommendation of the SSC. The OFL choice was based on the interim analysis informed by the results of the GRSC. The ABC was based on the fishery-independent NMFS BLL survey-informed interim analysis. The Council chose to set the stock ACL equal to the ABC (Table 1.2.1), which the Council has demonstrated a pattern of doing when a stock is not overfished or experiencing overfishing.

**Table 1.2.1.** Council-approved OFL, ABC, and ACL (in pounds whole weight) based on the SSC-recommended OFL and ABC.

Year	OFL	ABC	Stock ACL
2021	25,600,000	15,400,000	15,400,000

### 1.3 Revised GRSC Estimates, LGL Study, and SSC Review and Recommendations

At its September 2021 meeting, the SSC reviewed the results of the LGL Ecological Associates, Inc. study to estimate the absolute abundance of red snapper in state and federal waters adjacent to the State of Louisiana ([LGL study](#)), which was commissioned by the Louisiana State Legislature and funded by the Louisiana Department of Wildlife and Fisheries (LDWF). This study was funded by the state as a means to enhance the results from the GRSC (Stunz et al. 2021), and to better inform the state about its adjacent natural resources for improving fisheries management.

The Louisiana Red Snapper Management Area (study area) was divided into three regions (West, Central, and East) and each zone was divided into four depth zones (10 – 25 m, 25 – 45 m, 45 – 100 m, and 100 – 150 m). Sampling occurred during the summer and fall months of 2020. The study area was dominated by mud with much lesser amounts of sand and gravel substrate. Hydroacoustic sampling focused on target species assemblages (reef fish), and excluded sharks and non-target species. Fish density was measured as the number of fish per cubic meter, per each acoustic 20-meter by 10-meter cell. Bait schools were defined and filtered. Fish density was calculated and converted to abundance using the volume of water investigated, with the proportioned abundance determined using camera data. Submersible Rotating Video sampling (SRV) was deployed at discrete sites near structure at predetermined depths to match hydroacoustic sampling. Target drops were used to opportunistically capture fish assemblages at points of interest, with all fish identified to the lowest possible taxon. Vertical hook-and-line sampling was conducted at platforms, artificial reefs, and natural banks. All fish were processed for weight, length, and sex, and otoliths for red snapper were extracted. Mark-recapture sampling was performed at 6 sites (3 oil and gas platforms and 3 artificial reefs).

The study quantified total fish density and the proportional density of red snapper separately by stratum before being combined and extrapolated, which aided in minimizing the sampling error from magnification. Model outputs were then multiplied for each stratum and random error in red snapper estimates generated across sites before being multiplied by total fish density. A subsequent measure of red snapper by cubic meter was estimated as the product the proportional red snapper and total fish density model outputs. Diagnostic results indicated that model tended to overpredict red snapper estimates, especially at deep depths.

The SSC noted that a direct comparison of the LGL study and the GRSC study was not appropriate due to differences in methods. An SSC member noted that the LGL study may be underestimating the number of small fish substantially, and may also be underestimating the number of large fish to some degree, especially when comparing stereo camera surveys to hook-and-line surveys. Smaller fish are expected to be more prevalent in shallower zones, which were

not sampled as intensively as deeper zones in the LGL study. SSC members agreed that the best method of review and consideration of the universe of all these data would be through the Southeast Data, Assessment, and Review (SEDAR) process. Several SSC members commented that the difference in estimates of absolute abundance was likely heavily influenced by the catch rates observed between the two studies. Bottom longline gear exhibits a dome-shaped selectivity, which may account for underestimation of red snapper at the extremes of the length distribution. Additionally, the presented comparisons between length distribution in the LGL study with those reported by the GRSC from Florida are not directly comparable since the Florida length distributions were obtained using stereo cameras.

The SSC discussed the limitations of interpreting the LGL studies results without fully understanding the rationale of the sampling design. The 106 sites used were proffered by staff from the LDWF but no documentation for that decision had been made available. The SSC requested a written document from the LDWF that would detail the rationale for the selection of these sites. The SSC also asked that the sampling allocation (e.g., the number of samples compared to the total number of samples taken) by strata be detailed in any synthesis of sample site selection. Specific to the LGL study, the SSC thought more information was needed before it could be considered for informing management.

At its March 2022 meeting, the SSC reviewed the study design and the revised results of the LGL study, a post-stratification analysis for the GRSC-derived absolute abundance estimate for Florida, and the revised SEFSC-generated catch analysis using these data. LGL presented their completed research to generate an estimate of absolute abundance of red snapper off Louisiana, noting that their study was designed for model-based inference of red snapper abundance through field surveys. In response to the SSC's previous request, LGL provided justification for their choice of sampling sites. The initial sites were chosen by LDWF and additional sites were included from a previous LGL study contracted by the Bureau of Energy Management. The primary objective of the site selection process was to choose samples representative of the population while reducing costs to within budgetary constraints. As such, the site selection process sacrificed randomness for some habitat types. Site selection was non-informative, in that it was not influenced by *a priori* assumptions of red snapper density. However, some sites were purposefully selected to ensure representation of certain habitat types. To address the reduced randomness of site selection inherent in the sampling design, and account for any autocorrelation associated with sampling a platform site using two survey methodologies, a model-based inference approach was implemented. This approach requires incorporation of all important explanatory variables and their interactions in the model. A generalized additive mixed model<sup>4</sup> (GAMM) was used to account for the stratification of the sampling units (depth) and "sampling site" was included as a random effect to address any correlation within site samples. Five habitat

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<sup>4</sup> A generalized additive model (GAM) is a linear model with a key difference when compared to generalized linear models such as linear regression. A GAM is allowed to learn non-linear features. GAMs relax the restriction that the relationship must be a simple weighted sum, and instead assume that the outcome can be modelled by a sum of arbitrary functions of each feature. To do this, beta coefficients from Linear Regression are replaced with a flexible function which allows nonlinear relationships (Towards Data Science, 2021). GAMMs are an extension of GAMs incorporating random effects. They are widely used to model correlated and clustered responses (Groll and Tutz, 2012).

types (artificial reefs, natural banks, UCB, and oil platforms) were evaluated within depth strata across the Gulf (west, central, and east).

The SSC discussed the differences in the LGL and GRSC estimates for absolute abundance recorded for Louisiana, noting the limitations of the sampling design in the LGL study and the imputation of some Louisiana data from Texas in the GRSC. The comparability of the studies, due to these differences, remains difficult. However, the SSC thought that in general, the differences between the surveys highlights the uncertainty in both estimates, which is likely underestimated. The LGL study was designed to focus on the present habitats off Louisiana, and likely represented a better estimate for that area compared to the same for the GRSC (empirically collected versus partially imputed, respectively).

The SEFSC presented the results from the post-stratification analysis of red snapper absolute abundance estimates in the west Florida shelf from the GRSC, with the purpose being to assign fish to the depth strata where they are observed in other fishery-independent and -dependent surveys. This effort was driven by concerns of higher than expected estimated numbers of fish in the shallow water stratum off Florida. The data were post-stratified from 10 – 40 m to 10 – 25 m and 25 – 40 m. This was done for each Gulf state. In Florida, the analysis still estimated larger relative abundance in the Big Bend region, as well as a larger number of fish in the 25 – 40 m depth bin rather than at 10 – 25 m. Ultimately the SSC agreed that the post-stratification analysis was appropriate and should be included in the calculation of the overall estimate of age 2+ red snapper in the Gulf, informed by the finalized GRSC data and random forest design. The SSC also decided that the LGL study would be an improvement over using the Louisiana GRSC study data in the GRSC study for conducting subsequent catch analyses.

The SEFSC presented their revised catch advice for red snapper based on the estimates of absolute abundance derived from the GRSC for Florida, Alabama, Mississippi, Texas, and the LGL study for Louisiana. This catch analysis uses the post-stratified re-analysis of the GRSC-derived data for Florida. The terminal year of data for the analysis was 2019, with future yields projected forward from that point. After accounting for the inclusion of the LGL estimate and the post-stratification of the Florida estimate from the GRSC-derived estimate using the random forest approach, the revised combined estimate of absolute abundance of age-2+ red snapper was approximately 85.6 million fish Gulf-wide. The SEFSC took the revised absolute abundance estimate (85.6 million fish) and generated annual catch yields for both a three-year and a five-year average. Three scenarios for considering the abundance over the UCB were generated: assuming all structure (e.g., all natural and artificial habitats), all structure plus 10% of the UCB, and all structure plus 15% of the UCB. Age and length composition data were informed by SEDAR 52, using data through 2016. An additional option, which was an ensemble (all artificial and natural structures, plus ~8% UCB fished) approach estimated a grand mean and variance for the catch advice and provided a broader estimate of uncertainty across the three UCB scenarios.

The SEFSC also presented spatial analyses (“Gardner analysis”) of commercial and recreational catch compared to biomass derived from the GRSC. The “Gardner analysis” relied on the spatial distribution of the Karnauskas et al. (2017) study, which derived spatial abundance from data from 2010 and 2011. However, the GRSC abundance data by depth strata and zone are derived from observations made in 2018 – 2019. The Gardner analysis was updated to use the LGL

study estimate for Louisiana, and to post-stratify the shallowest depth stratum in Florida. The Gardner analysis indicated that the majority of the stock (greater than 50%) experiences very low exploitation (less than 1%) by the directed fleets, with the greatest mean exploitation rates observed in Alabama, Mississippi, and Northwest Florida. The SEFSC verified that fishing mortality rates were lower than estimated in SEDAR 52, because of the increased biomass estimate relative to the estimated fleet-specific fishing mortality rates. The SSC acknowledged that the density and distribution of red snapper in the Gulf had likely changed between the completion of the Karnauskas et al. 2017 study and the GRSC. The SSC also noted that other aspects of population dynamics, like recruitment, reproduction, updates to age and length compositions, and other information have not been updated with current information, as is customary from a stock assessment.

SSC members acknowledged that the stock is in fact larger than previously estimated by SEDAR 52, and that exploitation rates are likely lower. Some SSC members thought the issue of localized depletion should be considered by the Council, as evidenced by spatial effort estimation and mark-recapture studies, including those conducted as part of the GRSC. Further, some SSC members thought the average size of red snapper in the eastern Gulf was decreasing. The SSC thought it prudent to continually evaluate the condition of the red snapper stock, to the extent practicable, adding that the previously unaccounted biomass of red snapper recently identified by the GRSC and LGL surveys may explain why a stock-recruit relationship was not previously able to be discerned, and why the stock appeared as resilient as it was to fishing pressure. The SSC ultimately determined that the catch analysis developed by the SEFSC and informed by age-2+ red snapper abundance from the GRSC for Texas, Alabama, Mississippi, and the post-stratified abundance data for Florida, and from the LGL study for Louisiana, is the best scientific information available for abundance information and useful for development of OFL and ABC recommendations. Subsequently, the SSC recommended an OFL based on the ensemble analysis using the 5-year average of 18.91 mp ww (Table 1.3.1).

In determining an appropriate ABC recommendation, the SSC noted the uncertainties in data used in the catch analysis, and the catch analysis itself. The SEFSC discussed the decreasing trend in the NMFS BLL survey in the eastern Gulf (since 2017) and the issue of possible localized depletion. The SSC noted that although the eastern and western Gulf NMFS BLL survey data appear scaled in the same manner, the catches in the western Gulf are much greater than in the eastern Gulf, and the western Gulf age and length compositions show older, larger fish; thus, the eastern and western Gulf data were not comparable as presented. Council staff described the selectivity of the sampling gears, noting that the NMFS BLL survey tends to select for larger, older fish, while the SEAMAP and Florida Fish and Wildlife Commission video surveys select for different age and length compositions dependent on their depth deployments (deeper water = larger, older fish, and vice versa). The combined Gulf-wide NMFS BLL index of relative abundance shows an increasing trend through the mid-2010s, and a leveling off thereafter. Council staff noted that the NMFS BLL survey was not the best for catching all lengths of red snapper, as evidenced by its exclusion from the exploitation analysis in the Gardner analysis. Further, the NMFS BLL survey selects for larger and older fish using 15/0 circle hooks, and thus would not be expected to catch the younger, smaller red snapper estimated to occur in the eastern Gulf. The SSC recommended an ABC of 16.31 mp ww for red snapper,

based on the 5-year average using the ensemble approach, and based on a P\* value of 0.3 (Table 1.3.1).

**Table 1.3.1.** March 2022 SSC-recommended OFL and ABC (pounds whole weight) advice from the SSC for 2022 and subsequent years.

Year	OFL	ABC
2022	18,910,000	16,310,000

## 1.4 Current Gulf Red Snapper Management and Landings

The Gulf red snapper stock is currently under a rebuilding plan. Consistent with this rebuilding plan, both commercial and recreational catch limits have been allowed to increase as the stock has recovered. Red snapper landings for the commercial and recreational sectors in pounds whole weight for the years 2001 through 2021 are given in Table 1.4.1. The 2020 and 2021 recreational landings are considered provisional and have not yet been finalized. Recreational landings are in Marine Recreational Information Program (MRIP) Coastal Household Telephone Survey (CHTS) units. The recreational sector annual catch limit (ACL) is further divided into component and state ACLs. In 2015, the recreational sector ACL was divided into a private angling component and a federal for-hire component (GMFMC 2014a), which receive 57.7% and 42.3%, respectively. The federal for-hire component consists of fishermen fishing from vessels with a federal charter/headboat permit for Gulf reef fish. The private angling component consists of fishermen fishing from privately owned and rented vessels, and for-hire vessels (charter boats and headboats) without a federal permit (i.e., state-licensed for-hire vessels). For-hire vessels without federal permits may not fish for red snapper in federal waters. The private angling ACL is divided into five state ACLs for each of the Gulf states, and each state has been delegated the authority to manage its portion of the private angling ACL. The delegation provision specifies an accountability measure (AM) that requires any overage of a state’s ACL be deducted in the following year contingent on the best scientific information available. The Federal For-Hire ACT is set 9% below the component ACL and used to determine the duration of the for-hire component season. The private angling ACT is set 20% below the ACL and remains in place as part of the default federal regulations that would apply in the event the state’s delegation is no longer in effect.

**Table 1.4.1.** Red snapper landings for the commercial and recreational sectors (in MRIP-CHTS) in pounds whole weight for the years 2001 through 2021.

Year	Commercial	For-Hire	Private Angling	Recreational Total
2001	4,638,087	2,404,653	2,877,533	5,282,186
2002	4,797,144	3,503,625	3,051,803	6,555,428
2003	4,432,297	3,138,399	2,998,835	6,137,234
2004	4,671,302	3,206,803	3,228,439	6,435,242
2005	4,105,622	2,383,084	2,210,569	4,593,653
2006	4,679,893	2,480,471	1,709,911	4,190,382
2007	3,182,731	2,662,717	3,191,247	5,853,964

<b>Year</b>	<b>Commercial</b>	<b>For-Hire</b>	<b>Private Angling</b>	<b>Recreational Total</b>
<b>2008</b>	2,483,603	1,627,797	2,478,110	4,105,907
<b>2009</b>	2,483,565	2,235,562	3,396,531	5,632,093
<b>2010</b>	3,392,209	786,197	1,822,384	2,608,581
<b>2011</b>	3,594,552	1,840,603	4,941,321	6,781,924
<b>2012</b>	4,036,398	2,246,868	5,369,594	7,616,462
<b>2013</b>	5,448,544	1,703,768	7,999,134	9,702,902
<b>2014</b>	5,567,822	599,154	3,085,813	3,684,967
<b>2015</b>	7,184,210	1,998,226	3,785,851	5,784,077
<b>2016</b>	6,723,823	2,139,008	5,047,118	7,186,126
<b>2017</b>	6,978,662	2,339,896	6,331,551	8,671,447
<b>2018</b>	6,977,131	2,441,612	4,849,727	7,291,339
<b>2019</b>	7,658,140	2,558,734	5,434,757	7,993,491
<b>2020*</b>	7,625,612	2,376,677	3,886,220	6,262,897
<b>2021*</b>	6,937,838	2,651,883	4,286,449	6,938,332

Source: Commercial landings from the IFQ database (2007-2022) and the SEFSC Commercial ACL File (2001-2006). Recreational component landings (2001-2021) are from the SEFSC Recreational ACL File (September 14, 2020). Landings include data from MRIP CHTS, SRHS, LA Creel, and Texas Parks and Wildlife Department. \*2020 and 2021 landings are preliminary.

Beginning in 2007, the commercial sector’s harvest of red snapper has been managed through an individual fishing quota (IFQ) program that distributes the commercial ACL as pounds of allocation to shareholders (GMFMC 2006). The IFQ program serves as an accountability measure (AM) and a buffer below the ACL is not used to constrain harvest.

Table 1.4.2 provides a breakdown of the catch limits for Gulf red snapper from the OFL to the state-specific ACLs. If the OFL and ABC are modified, the remaining catch limits would be determined through established calculations as shown in the table. The Council has set the stock ACL equal to the ABC. The stock ACL is divided between the commercial (51%) and recreational (49%) fishery components. The recreational sector ACL is further subdivided between the for-hire component (42.3% of recreational ACL) and the private angling component (57.7%). The private angling ACL is divided into five state ACLs for each of the Gulf states, and each state has been delegated the authority to manage its portion of the private angling ACL (GMFMC 2019). The delegation provision specifies an AM that requires any overage of a state’s ACL be deducted in the following year contingent on the best scientific information available. The federal for-hire ACT is set 9% below the component ACL and used to determine the duration of the for-hire component’s fishing season. The private angling ACT is set 20% below the ACL and remains in place only as part of the default federal regulations that would apply in the event a state’s delegation is no longer in effect.

**Table 1.4.2.** Current Gulf red snapper catch limits by type and sector in pounds whole weight. For a modified OFL and ABC, the remaining catch limits would be calculated relative to the previous catch limit as specified.

Catch Limit Type	Current Catch Limits (lbs ww)	Calculation
<b>OFL</b>	15,500,000	N/A
<b>ABC</b>	15,100,000	2.581% less than OFL
<b>Stock ACL</b>	15,100,000	ACL = ABC
<b>Commercial ACL</b>	7,701,000	51% of ABC
<b>Recreational ACL</b>	7,399,000	49% of ABC
<b>Federal For-Hire ACL</b>	3,130,000	42.3% of Recreational ACL
<b>Federal For-Hire ACT</b>	2,848,000	9% less than For-Hire ACL
<b>Private Angling ACL</b>	4,269,000	57.7% of Recreational ACL
<b>Private Angling ACT</b>	3,415,200	20% below Private Angling ACL
<b>Florida ACL</b>	1,913,451	44.822% of Private Angling ACL
<b>Alabama ACL</b>	1,122,662	26.298% of Private Angling ACL
<b>Mississippi ACL</b>	151,550	3.55% of Private Angling ACL
<b>Louisiana ACL</b>	816,233	19.12% of Private Angling ACL
<b>Texas ACL</b>	265,105	6.21% of Private Angling ACL

Note: The private angling ACL is currently managed through individual ACLs for each of the five Gulf states. A private angling ACT is not currently used for management, but remains in place as part of the default federal regulations that would apply to a state in the event the state's delegation is no longer in effect.

## 1.5 Purpose and Need

The purpose is to modify the Gulf red snapper catch limits including the OFL, ABC, sector ACLs, and sector ACTs based on the 2022 catch analysis completed by the SEFSC and approved as the best scientific information available by the SSC.

The need for this action is to use the best scientific information available to prevent overfishing while achieving optimum yield, consistent with the red snapper rebuilding plan and the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

## 1.6 History of Management

The **Fishery Management Plan (FMP) for Reef Fish Resources in the Gulf of Mexico (Reef Fish FMP)** was implemented in November 1984. The original list of species included in the management unit consisted of snappers, groupers, and sea basses. This summary focuses on management actions pertinent to catch limits of red snapper. A complete history of management

for the **Reef Fish FMP** is available on the Council's website<sup>5</sup> including other actions affecting red snapper management.

In 1990, **Amendment 1** established the first red snapper rebuilding plan. From 1990 through 2009, red snapper harvest was managed using an annual total allowable catch (TAC), which was divided 51% to the commercial and 49% to the recreational based on the average of historical landings during 1979 through 1987. Amendment 1 also established a commercial red snapper quota of 3.1 mp ww. There was no recreational quota specified, only a bag limit of seven fish and a minimum size limit of 13 inches total length (TL) (GMFMC 1989). Based on the 51:49 commercial to recreational sector allocation, the commercial quota implied a TAC of approximately 6.1 mp ww in 1990, followed by explicit TACs of 4.0 mp ww in 1991 and 1992, 6.0 mp ww in 1993 through 1995, and 9.12 mp ww from 1996 through 2006. The TAC was reduced to 6.5 mp ww in 2007 and 5.0 mp ww in 2008 and 2009.

The **Generic Sustainable Fisheries Act Amendment** (1999) required the establishment of quotas for recreational and commercial fishing that, when reached, result in a prohibition on the retention of fish caught for each sector for the remainder of the fishing year. With the establishment of a recreational quota in 1997, the NMFS Southeast Regional Administrator was authorized to close the recreational season for each species when the quota is reached, as required by the Magnuson-Stevens Act.

In 2006, **Amendment 26** established a red snapper IFQ program for the commercial sector. Commercial fishermen received red snapper shares based on their catch history. Allocation of the annual commercial harvest of red snapper is awarded to IFQ shareholders each year based on the commercial ACL and how many shares they hold. They are then able to fish that allocation throughout the year until they run out of allocation. Both shares and allocation are transferable, so a fisherman may purchase either shares or allocation from another fisherman during the fishing year (GMFMC 2006a).

From 2010 through 2012, the SSC recommended the red snapper ABC at 75% of the OFL and the Council set the ACL equal to the ABC (GMFMC 2012f). In 2010, the total ACL was increased to 6.945 mp ww. This increased the commercial quota from 2.550 mp ww to 3.542 mp ww and the recreational quota from 2.450 mp ww to 3.403 mp ww. In 2011, the ACL was raised to 7.185 mp ww, resulting in a 3.664 mp ww commercial quota and a 3.525 mp ww recreational quota. On August 12, 2011, NMFS published an emergency rule that, in part, increased the recreational red snapper quota by 345,000 lbs for the 2011 fishing year.

In 2012, the SSC recommended that the ABC should be set at the yield corresponding to 75% of F<sub>SPR26%</sub>. The Council set the ACL equal to the ABC, which increased the ACL to 8.080 mp ww, resulting in a commercial quota of 4.121 mp ww and recreational quota of 3.96 mp ww (GMFMC 2012f).

The **Generic ACLs/AMs Amendment** (2012) addressed a requirement in the Magnuson-Stevens Reauthorization Act of 2006 to establish ACLs and AMs for federally managed species.

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<sup>5</sup> <https://gulfcouncil.org/fishery-management/implemented-plans/reef-fish/>

A scheduled ACL increase in 2013 to 8.69 mp ww was cancelled due to an overharvest in 2012 by the recreational sector. After an analysis of the impacts of the overharvest on the red snapper rebuilding plan, the 2013 ACL was increased to 8.46 mp ww. In July 2013, the SSC reviewed a new benchmark assessment (SEDAR 31 2014) which showed that the red snapper stock was rebuilding faster than projected. The SSC used Tier 1 of the ABC and the rebuilding yield level was set as the yield that would rebuild the stock to 26% SPR by 2032 under a constant fishing mortality rate strategy ( $F_{\text{rebuild}26\% \text{ SPR}}$ ) (GMFMC 2013b). This increased the ABC for 2013 to 13.50 mp ww, but the SSC warned that the catch levels would have to be reduced in future years if recruitment returned to average levels. To reduce the possibility of having to decrease the ACL later, the Council set the 2013 stock ACL to 11.00 mp ww and the commercial quota at 5.61 mp ww and the recreational quota at 5.39 mp ww. Beginning in 2014, the recreational season length was set using an ACT that is 20% below the recreational ACL. A post-season AM that required an overage adjustment if the recreational ACL was exceeded if the stock was overfished was also implemented in 2014. The total ACL was set at 10.40 mp ww in 2014, 14.30 mp ww in 2015, 13.96 mp ww in 2016, and 13.74 mp ww in 2017 and subsequent years.

**Amendment 40** divided the recreational quota into a federal for-hire component quota (42.3%) and a private angling component quota (57.7%) (GMFMC 2014d). In 2015, this resulted in an ACT of 2.371 mp ww for the federally permitted for-hire component and 3.234 mp ww for the private angling component. The amendment also included a 3-year sunset provision on the separation of the recreational sector into distinct components. **Amendment 45** extended the separate management of the federal for-hire and private angling components for an additional 5 years through the 2022 red snapper fishing season (GMFMC 2016f). In 2018, the ACT and ACL were 2.278 mp ww and 2.848 mp ww for federally permitted for-hire component, and 3.108 mp ww and 3.885 mp ww for the private angling component.

For 2018, NMFS established a 51-day red snapper fishing season for the federal for-hire component [83 FR 17623] based on the component's ACT. For the private angling component, the 2018 and 2019 red snapper fishing seasons were set by the individual states through exempted fishing permits (EFP) approved by NMFS. The EFPs allocated a portion of the private-angling ACL to each state for harvest during the 2018 and 2019 fishing years.<sup>6</sup>

**Amendment 36A** modified the commercial IFQ programs. It included a provision that allows NMFS to withhold a portion of IFQ allocation at the start of the year equal to an anticipated quota reduction, which became effective in 2018.

A 2018 Framework Action titled **Modification of the Recreational Red Snapper Annual Catch Target Buffers** reduced the federal for-hire buffer by setting the ACT at 9% below the component's ACL for the 2019 fishing season only.

**Amendments 50A-F** (GMFMC 2019a-f) became effective February 6, 2020, establishing a state management program in each Gulf state for the private angling component's harvest of red snapper. Under Amendments 50A-F, each Gulf state is responsible for managing its annual

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<sup>6</sup> For more information: <https://www.fisheries.noaa.gov/southeast/state-recreational-red-snapper-management-exempted-fishing-permits>

allocation of the private angling component ACL for red snapper using size limits, bag limits, and seasonal closures. If a state exceeds its allocation in a given fishing year, then the amount of the overage would be deducted from that state's quota for the following fishing year. The individual Gulf states are responsible for their own quota monitoring, and each has a data collection program in place to monitor that state's private angling landings. The individual states would determine if additional catch limit buffers (e.g., an ACT set lower than an ACL, with the fishing season based on the ACT) are necessary to successfully manage that state's allocated quota. A private angling ACT remains in place in the event a state's delegation is no longer effective. The federal for-hire component's harvest of red snapper will continue to be federally managed.

A Framework Action implemented in 2019 titled **Modify Red Snapper and Hogfish Catch Limits** increased the ACL for red snapper for 2019 and subsequent years. In 2019 another Framework Action titled **Modification to the Recreational For-hire Red Snapper ACT Buffer** established a federal for-hire ACT 9% below the component's ACL, extending the buffer reduction adopted through the 2018 Framework Action.

A 2021 Framework Action titled **Gulf of Mexico Red Snapper Recreational Data Calibration and Recreational Catch Limits** was transmitted in June 2021, and modified recreational catch limits for the state-specific private angling ACLs beginning January 1, 2023. Another 2021 Framework Action titled **Modification of Annual Catch Limits for Gulf of Mexico Red Snapper** increased the ACLs for red snapper after implementation. As of the date of this framework action, neither of these 2021 framework actions has been implemented.

## CHAPTER 2. MANAGEMENT ALTERNATIVES

### 2.1 Action 1: Modification of Gulf of Mexico (Gulf) Red Snapper Catch Limits

**Alternative 1:** No Action. The red snapper overfishing limit (OFL), acceptable biological catch (ABC), annual catch limits (ACL) and recreational annual catch targets (ACT) will remain at current levels (implemented in 2019), as shown in the table below:

Catch Limit Type	Current Catch Limits	Calculation
<b>OFL</b>	15,500,000	N/A
<b>ABC</b>	15,100,000	2.581% less than OFL
<b>Total ACL</b>	15,100,000	ACL = ABC
<b>Commercial ACL</b>	7,701,000	51% of ABC
<b>Recreational ACL</b>	7,399,000	49% of ABC
<b>Federal For-Hire ACL</b>	3,130,000	42.3% of Recreational ACL
<b>Federal For-Hire ACT</b>	2,848,000	9% less than For-Hire ACL
<b>Private Angling ACL</b>	4,269,000	57.7% of Recreational ACL
<b><i>Private Angling ACT</i></b>	<i>3,415,200</i>	<i>20% below Private Angling ACL</i>
<b>Florida ACL</b>	1,913,451	44.822% of Private Angling ACL
<b>Alabama ACL</b>	1,122,662	26.298% of Private Angling ACL
<b>Mississippi ACL</b>	151,550	3.55% of Private Angling ACL
<b>Louisiana ACL</b>	816,233	19.12% of Private Angling ACL
<b>Texas ACL</b>	265,105	6.21% of Private Angling ACL

Note: Values are in pounds whole weight. Units are in MRIP-CHTS. A private angling ACT is not currently used for management, but remains in place as part of the default federal regulations that would apply to a state in the event the state's delegation is no longer in effect.

**Alternative 2:** Modify the red snapper OFL, ABC, ACLs, and recreational ACTs for 2022 and subsequent years based on the OFL and ABC recommendation of the Scientific and Statistical Committee (SSC) at the March 8 – 10, 2022, SSC meeting. These catch limits are based on data derived from the Great Red Snapper Count (GRSC), including a post-stratification analysis of the data for Florida, and on the LGL Ecological Associates, Inc. study (LGL study) of the absolute abundance of red snapper off Louisiana.

Catch Limit Type	Current Catch Limits	Calculation
<b>OFL</b>	18,910,000	N/A
<b>ABC</b>	16,310,000	13.7% less than OFL
<b>Total ACL</b>	16,310,000	ACL = ABC
<b>Commercial ACL</b>	8,318,100	51% of ABC
<b>Recreational ACL</b>	7,991,900	49% of ABC
<b>Federal For-Hire ACL</b>	3,380,574	42.3% of Recreational ACL
<b>Federal For-Hire ACT</b>	3,076,322	9% less than For-Hire ACL
<b>Private Angling ACL</b>	4,611,326	57.7% of Recreational ACL
<b>Private Angling ACT</b>	3,689,061	20% below Private Angling ACL
<b>Florida ACL</b>	2,066,889	44.822% of Private Angling ACL
<b>Alabama ACL</b>	1,212,687	26.298% of Private Angling ACL
<b>Mississippi ACL</b>	163,702	3.55% of Private Angling ACL
<b>Louisiana ACL</b>	881,686	19.12% of Private Angling ACL
<b>Texas ACL</b>	286,363	6.21% of Private Angling ACL

Note: Values are in pounds whole weight. Units are in MRIP-CHTS. A private angling ACT is not currently used for management, but remains in place as part of the default federal regulations that would apply to a state in the event the state’s delegation is no longer in effect. Changes in the respective Gulf states’ ACLs are being considered in a June 2021 framework action to address issues related to calibration of recreational data among the various state data collection programs.

### **Discussion:**

The SSC met March 8 – 10, 2022, to review the GRSC-derived estimate of absolute abundance of age-2+ red snapper, a post-stratification analysis of those data for Florida, and the LGL study of absolute abundance of age-2+ red snapper for Louisiana; these data were used to generate catch advice in a simulation produced by the Southeast Fisheries Science Center (SEFSC).

The SSC recommended the OFL for Gulf red snapper be 18.91 million pounds whole weight (mp ww), and the ABC be 16.31 mp ww, using recreational landings in Marine Recreational Information Program (MRIP) Coastal Household Telephone Survey (CHTS) units based on the amalgamated analyses, and using a 5-year average at F<sub>SPR26%</sub>.

**Alternative 1** (No Action) would maintain the OFL equal to 15.5 mp ww. The ABC and total ACL would remain at 15.1 mp ww. **Alternative 1** would maintain the current ACL for the commercial sector at 7.701 mp ww, and the current recreational ACL at 7.399 mp ww. It would

maintain the current ACL for the private angling component at 4.269 mp ww, and the current ACT and ACL for the federal for-hire component at 2.848 and 3.130 mp ww. The private angling ACL is currently managed through individual ACLs for each of the Gulf states. A private angling ACT is not currently used for management, but remains in place as part of the default federal regulations that would apply in the event a state's delegation is no longer in effect. The private angling ACT is currently set at 3.415 mp ww. **Alternative 1** does not incorporate the most recent SSC recommendations.

In June 2021, the Council transmitted framework actions to modify recreational catch limits for the state-specific private angling ACLs beginning January 1, 2023<sup>7</sup> (Data Calibration FA), and to modify the ACLs for Gulf red snapper for 2021 and subsequent years<sup>8</sup> (Catch Limits FA) based on SSC recommendations from the SSC's March 30 – April 2, 2021, meeting. The Data Calibration FA would use calibration ratios to modify the state-specific private angling ACLs to a commensurate data currency for quota monitoring and stock assessment purposes; while, the Catch Limits FA would increase the Gulf red snapper OFL to 25.6 mp ww based on the GRSC, and the ABC to 15.4 mp ww based on an SEFSC interim analysis using its NMFS Bottom Longline survey. As of the date of this framework action, neither of these 2021 framework actions has been implemented.

**Alternative 2** would incorporate the results of the GRSC-derived estimate, the post-stratification analysis of those data for Florida, and the LGL study as used in the catch analysis produced by the SEFSC and reviewed by the SSC. It would establish an OFL of 18.91 mp ww and an ABC of 16.31 mp ww for Gulf red snapper in 2022 and subsequent years, consistent with the SSC's recommendations. In comparison to **Alternative 1**, **Alternative 2** would increase the OFL by 3.41 mp ww and the ABC by 1.21 mp ww for 2022 (Table 2.1.1). Like **Alternative 1**, the sector and component allocations would remain unchanged and each sector and component would receive an increase in the respective sector and component ACLs. Although not used for management, a private angling component ACT of 3,689,061 lbs ww would be established as part of the default federal regulations that would apply in the event a state's delegation is no longer in effect.

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<sup>7</sup> <https://gulfcouncil.org/wp-content/uploads/B-8a-Red-Snapper-Data-Calibration-and-ACL-Modification-04072021.pdf>

<sup>8</sup> <https://gulfcouncil.org/wp-content/uploads/FINAL-DRAFT-Red-Snapper-and-Hogfish-ACL-Modification-101918.pdf>

**Table 2.1.1.** Changes to the OFL, ABC, ACLs, and ACT for red snapper for **Alternative 2** relative to **Alternative 1**. Values are in pounds whole weight.

<b>Catch Limit Type</b>	<b>Change Relative to Alternative 1</b>
<b>OFL</b>	3,410,000
<b>ABC</b>	1,210,000
<b>Total ACL</b>	1,210,000
<b>Commercial ACL</b>	617,100
<b>Recreational ACL</b>	592,900
<b>Federal For-Hire ACL</b>	250,797
<b>Federal For-Hire ACT</b>	228,225
<b>Private Angling ACL</b>	342,103
<i>Private Angling ACT</i>	273,861
<b>Florida ACL</b>	153,338
<b>Alabama ACL</b>	89,966
<b>Mississippi ACL</b>	12,145
<b>Louisiana ACL</b>	65,410
<b>Texas ACL</b>	21,245

Note: A private angling ACT is not currently used for management, but remains in place as part of the default federal regulations that would apply to a state in the event the state’s delegation is no longer in effect.

The state-specific ACL values are subject to the measures approved in the Data Calibration FA (if implemented). That framework action and final rule would codify the state ACLs in each state’s data collection units. The state ACLs would be determined based on ratios developed by the NMFS Office of Science and Technology and the Gulf states, and convert each state’s ACL in MRIP-CHTS currency to that state’s ACL in its own survey units. The state-specific private recreational data calibrations from the Data Calibration FA are shown in Table 2.1.2. The states will monitor their private angling landings in their respective data currencies, which will then be converted back to the commensurate MRIP-CHTS data currency, which will be used to monitor harvest at the federal level. Depending upon the outcome of the Data Calibration FA, the final state-specific ACL values may be different than the values presented in Alternative 1 and Alternative 2 (see Table 2.1.3 for what catch limits may be based on the pending framework actions).

**Table 2.1.2.** Gulf state-specific private recreational data calibration ratios for converting federal state-specific private angling ACLs in MRIP-CHTS data currency to state survey data currencies, as specified in the Data Calibration FA. These ratios are multiplied by the state-specific private angling ACL in MRIP-CHTS data currency to derive the ACL in that state’s survey currency. These calibration ratios are unitless and are not additive.

State	Ratio
Alabama	0.4875
Florida	1.0602
Louisiana	1.06
Mississippi	0.3840
Texas	1.00
<b>Total</b>	-

The Gulf states will set their private angling fishing seasons and monitor landings in their own state survey data currencies, which will then be converted back to MRIP-CHTS units by NMFS to monitor the federal ACLs, ABC, and OFL. These calibrated values are shown in Table 2.1.3. This table contains the current catch limits as of this writing, which were implemented in 2019 as part of a Framework Action to the Reef Fish FMP (GMFMC 2018a); the proposed catch limits from the Catch Limits FA (set to be implemented in the same rulemaking as the Data Calibration FA), and, the proposed catch limits from this draft framework action.

**Table 2.1.3.** Catch limits for: Alternative 1 (“Catch Limit in CHTS: 2019”), the pending Catch Limits FA (“Catch Limit in CHTS: 2021”); and, Alternative 2 (“Catch Limit in CHTS: 2022”). All catch limits are in lbs ww. State-calibrated catch limits are not additive.

Catch Limit Type	Catch Limit in CHTS: 2019	Catch Limit in CHTS: 2021	State Calibrated Catch Limits: 2021	Catch Limit in CHTS: 2022	State Calibrated Catch Limits: 2022
<b>OFL</b>	15,500,000	25,600,000		18,910,000	
<b>ABC</b>	15,100,000	15,400,000		16,310,000	
<b>Total ACL</b>	15,100,000	15,400,000		16,310,000	
<b>Commercial ACL</b>	7,701,000	7,854,000		8,318,100	
<b>Recreational ACL</b>	7,399,000	7,546,000		7,991,900	
<b>Federal For-Hire ACL</b>	3,129,777	3,191,958		3,380,574	
<b>Federal For-Hire ACT</b>	2,848,097	2,904,682		3,076,322	
<b>Private Angling ACL</b>	4,269,223	4,354,042		4,611,326	
<b>Private Angling ACT</b>	3,415,378	3,483,234		3,689,061	
<b>Florida ACL</b>	1,913,551	1,951,569		2,069,053	
<b>Alabama ACL</b>	1,122,720	1,145,026	558,200	1,212,687	591,185
<b>Mississippi ACL</b>	151,557	154,568	59,354	163,702	62,862
<b>Louisiana ACL</b>	816,275	832,493	882,442	881,686	934,587
<b>Texas ACL</b>	265,119	270,386	270,386	286,363	286,363

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## APPENDIX A. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 et seq.) provides the authority for management of stocks included in fishery management plans (FMP) in federal waters of the exclusive economic zone. However, management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making include the Endangered Species Act (Section 3.2.2), E.O. 12866 (Regulatory Planning and Review, Chapter 5) and E.O. 12898 (Environmental Justice, Section 3.4.3). Other applicable laws are summarized below.

### **Administrative Procedure Act**

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (5 U.S.C. Subchapter II), which establishes a “notice and comment” procedure to enable public participation in the rulemaking process. Under the Act, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The Act also establishes a 30-day waiting period from the time a final rule is published until it takes effect. Proposed and final rules will be published before implementing the action in this framework.

### **Coastal Zone Management Act**

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state’s coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in the National Oceanic and Atmospheric Administration (NOAA) regulations at 15 CFR part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state’s coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary of Commerce, NMFS will determine if this framework is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

### **Data Quality Act**

The Data Quality Act (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by

federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the Act directs the Office of Management and Budget to issue government wide guidelines that “provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies.” Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: (1 ensure information quality and develop a pre-dissemination review process; (2 establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and (3 report periodically to Office of Management and Budget on the number and nature of complaints received.

Scientific information and data are key components of FMPs and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Act. To be consistent with the Magnuson-Stevens Act, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

### **National Historic Preservation Act**

The National Historic Preservation Act (NHPA) of 1966, (Public Law 89-665; 16 U.S.C. 470 *et seq.*) is intended to preserve historical and archaeological sites in the United States of America. Section 106 of the NHPA requires federal agencies to evaluate the impact of all federally funded or permitted projects for sites listed on, or eligible for listing on, the National Register of Historic Places and aims to minimize damage to such places.

Historical research indicates that over 2,000 ships have sunk on the Federal Outer Continental Shelf between 1625 and 1951; thousands more have sunk closer to shore in state waters during the same period. Only a handful of these have been scientifically excavated by archaeologists for the benefit of generations to come.<sup>9</sup>

The proposed action does not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor is it expected to cause loss or destruction of significant scientific, cultural, or historical resources. In the Gulf of Mexico (Gulf), the *U.S.S. Hatteras*, located in federal waters off Texas, is listed in the National

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<sup>9</sup> <http://www.boem.gov/Environmental-Stewardship/Archaeology/Shipwrecks.aspx>

Register of Historic Places.<sup>10</sup> Fishing activity already occurs in the vicinity of this site, but the proposed action would have no additional adverse impacts on listed historic resources, nor would they alter any regulations intended to protect them.

## **Executive Orders (E.O.)**

### **E.O. 12630: Takings**

The E.O. on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication Assessment. The NOAA Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

### **E.O. 12962: Recreational Fisheries**

This E.O. requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council (NRFCC) responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The NRFCC also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the E.O. requires NMFS and the United States Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

### **E.O. 13089: Coral Reef Protection**

The E.O. on Coral Reef Protection requires federal agencies, whose actions may affect U.S. coral reef ecosystems, to identify those actions, utilize their programs and authorities to protect and enhance the conditions of such ecosystems, and, to the extent permitted by law, ensure actions that they authorize, fund, or carry out do not degrade the condition of that ecosystem. By

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<sup>10</sup> Further information can be found at <http://www.boem.gov/Environmental-Stewardship/Archaeology/Shipwrecks.aspx>.

definition, a U.S. coral reef ecosystem means those species, habitats, and other national resources associated with coral reefs in all maritime areas and zones subject to the jurisdiction or control of the United States (e.g., federal, state, territorial, or commonwealth waters).

Regulations are already in place to limit or reduce habitat impacts within the Flower Garden Banks National Marine Sanctuary. Additionally, NMFS approved and implemented Generic Amendment 3 for Essential Fish Habitat (GMFMC 2005), which established additional habitat areas of particular concern (HAPC) and gear restrictions to protect corals throughout the Gulf. There are no implications to coral reefs by the actions proposed in this amendment.

### **E.O. 13132: Federalism**

The E.O. on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The E.O. serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This E.O. is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes and local entities (international too).

No Federalism issues were identified relative to the action to modify the gray triggerfish catch levels. Therefore, consultation with state officials under Executive Order 12612 was not necessary.

### **E.O. 13158: Marine Protected Areas**

This E.O. requires federal agencies to consider whether their proposed action(s) will affect any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural or cultural resource within the protected area. There are several marine protected areas, HAPCs, and gear-restricted areas in the eastern and northwestern Gulf. The existing areas are entirely within federal waters of the Gulf. They do not affect any areas reserved by federal, state, territorial, tribal or local jurisdictions.