HISTORY OF VERMILION SNAPPER, GREATER AMBERJACK, AND GRAY TRIGGERFISH MANAGEMENT IN FEDERAL WATERS OF THE U.S. GULF OF MEXICO - 1984-2005: SEDAR 9

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INTRODUCTION

The Gulf of Mexico Fishery Management Council (Council), under provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), is responsible for management of species within its geographic authority. To manage a given species (or group of species), the Council must first develop a fishery management plan (FMP) and submit it to the Secretary of Commerce (Secretary) for approval. The Reef Fish FMP was one of the first FMPs developed by the Council. It was submitted in August 1981, approved by the Secretary in June 1983, and implemented in November 1984. The goal identified in the FMP was "to manage the reef fish fishery of the United States waters of the Gulf of Mexico to attain the greatest overall benefits to the Nation with particular reference to food production and recreational opportunities on the basis of maximum sustainable yield (MSY) as modified by relevant economic, social, or ecological factors." Pursuant to this goal, one of the primary management objectives set forth in the FMP was to rebuild declining reef fish stocks wherever they occur in the fishery. Other objectives of the FMP are listed in Table 1.

The following history of management pertains only to actions that resulted in regulations directly affecting the vermilion snapper, greater amberjack, and gray triggerfish fisheries. These regulations and effective dates are summarized in Table 2. A more detailed explanation of reef fish management history as it might affect the fishery for these three species is provided in Appendix 1. Additionally, the Council's regulations brochures are provided in Appendices 2 and 3 as a summary of current regulations for the recreational and commercial Gulf of Mexico fisheries.

Vermilion Snapper Management History

Vermilion snapper were included in the Reef Fish Fishery Management Unit (FMU) that was established in the Reef Fish FMP. Species initially included in the FMU were snappers, groupers, and sea basses. Other species such as tilefishes, jacks, triggerfishes, wrasses, grunts, porgies, and sand perches were included in the fishery for data collection purposes, but not the FMU. The FMP also established a collective maximum sustainable yield (MSY) of 51 million pounds and an optimum yield (OY) of 45 million pounds for snappers and groupers of the FMU.

Amendment 1 set a minimum size of 8-inches total length (TL) and was effective on February 21, 1990. The selection of the minimum size limit was based on work by

Grimes and Huntsman (1980) who indicated most fish matured between 6 to 8 inches. The proposed size limit was designed to prevent overfishing and to allow the stock to recover to 20 percent spawning stock biomass ratio (SSBR).

No further regulations were developed for vermilion snapper until January 15, 1997, the effective date for the inclusion of vermilion snapper in the 20-reef fish aggregate bag limit developed in Amendment 12. This bag limit applied only to those species not covered by other bag limits and deemed incidental to the fishery. The list of species included in the bag limit are vermilion snapper, lane snapper, gray triggerfish, almaco jack, tilefish, goldface tilefish, anchor tilefish, blueline tilefish, and blackline tilefish. The purpose of the bag limit was to prevent recreational fishermen from harvesting commercial quantities of reef fish species, which could consequently be sold. The rationale behind using an aggregate rather than species specific bag limits was it would provide protection to a large number of species without the need for fishermen to learn a complex suite of bag and size limits, or deal with species identification issues.

Amendment 15 increased the minimum size for vermilion snapper from 8 to 10 inches TL. The 1996 stock assessment for vermilion snapper (Schirripa, 1996) indicated the stock was not overfished, but the current fishing mortality rate (F) was at a level that, if not reduced, would eventually result in an overfished state. Length frequency information on recreational and commercial landings indicated an increase in the minimum size limit to 10 inches TL would increase yield per recruit and reduce F. Schirripa (1997) provided updated analyses indicating if harvest trends continued in the fishery, the Council would definitely need to take additional regulatory action to prevent the stock from becoming overfished. The Reef Fish Stock Assessment Panel (RFSAP) (1997) indicated the 10-inch size limit would reduce the overall catch by a maximum of 11 percent. Thus, the Council determined an increase in the minimum size was warranted. The Council requested NMFS develop an interim rule to implement the size limit increase sooner than Amendment 15 could be implemented. This interim rule (effective September 14, 1997) was subsequently replaced by Amendment 15 (effective January 29, 1998).

Following the implementation of Amendment 15, Schirripa and Legault (2000) updated the vermilion snapper assessment to include 1998 and some 1999 landings data. The result of this assessment was equivocal in that one model run indicated the stock was overfished and undergoing overfishing, while another model run indicated the stock was healthy. Unfortunately, the RFSAP was not able to review this updated assessment due to time constraints and was not able to make any recommendations.

In October 2001, a new vermilion snapper stock assessment (Porch and Cass-Calay, 2001) was presented to the RFSAP. Two models were applied to the assessment; an age-structured virtual population analysis (VPA) model and a surplus production (Pella-Tomlinson) model. In both cases, the stock biomass was estimated to be below the minimum stock size threshold (MSST) and the fishing mortality rate was estimated to be above the maximum fishing mortality threshold (MFMT); however, each model was highly uncertain. For the age-based VPA model, variable size-at-age information due to

variable growth rates created difficulties in estimating age from length. For the surplus production model, a limited time series (14 years) was available for the assessment. Regardless of these deficiencies, the RFSAP (2001) felt there was enough information in the landings data and CPUE indices to conclude the stock was overfished and undergoing overfishing. Based on the preferred Pella-Tomlinson model, biomass was 32 percent of B_{MSY} in 2000 (well below the proposed MSST of 75 percent of B_{MSY}) and the fishing mortality rate (F) in 1999 was estimated at nearly twice the rate associated with MSY (F_{MSY}).

While the Council's Standing and Special Reef Fish Scientific and Statistical Committee (SSC) and Socio-Economic Panel (SEP) endorsed the RFSAP's report, the Reef Fish Advisory Panel (AP) felt behavioral changes in the fishery could account for the changes in the CPUE indices, not overfishing. Taking into account the AP's concerns as well as the uncertainty expressed about the assessment by both scientific panels and the assessment biologists, the Council did not have a high level of confidence in the status of vermilion snapper and requested additional follow-up analyses when data were available. However, further review by NMFS concurred with the assessment outcome and the Council was informed of the stock's overfished status on October 30, 2003.

In response to this assessment, the Council developed Amendment 23 whose purpose was to set status determination criteria and biological reference points, as well as define a plan to end overfishing and rebuild the vermilion snapper stock to the biomass associated with maximum sustainable yield (B_{MSY}). Status criteria and biological reference points defined by this amendment included:

- MSY for vermilion snapper is the yield associated with F_{MSY} when the stock is at equilibrium. Based on the Pella-Tomlinson surplus production model used in the most recent vermilion stock assessment (Porch and Cass-Calay, 2001), MSY is estimated to be 3.37 million pounds (mp) whole weight (range 3.18 to 4.03 mp).

- OY is the yield corresponding to a fishing mortality rate (F_{OY}) defined as $0.75*F_{MSY}$ (or F_{MSY} proxy) when the stock is at equilibrium. This yield is approximately 94 percent of MSY. During the rebuilding period (2004-2013), OY is defined as the allowable harvest for each year based on the rebuilding strategy chosen in this amendment.

- Set the MFMT = F_{MSY}. The most recent stock assessment estimates F_{MSY} as 0.32 (RFSAP, 2001).

- Set MSST = $(1-M)*B_{MSY}$ (or B_{MSY} proxy). M is currently estimated to be 0.25, and the most recent stock assessment estimates B_{MSY} as 10.6 mp (Porch and Cass-Calay, 2001). Based on this information, MSST would equal 7.95 mp.

The rebuilding plan developed by the Council rebuilds the stock to B_{MSY} in 10 years and uses a stepped strategy to rebuild the stock. It holds harvest constant for an initial 4-year interval at 1.475 mp, followed by two three-year constant harvest intervals where harvest

is increased. The allowable harvest of 1.475 mp starting in 2004 equates to a 25.5 percent reduction in harvest based on the 2003 predicted landings. To achieve the needed recreational harvest reductions, an 11-inch TL minimum size and 10 fish within the 20-reef fish aggregate bag limit will be implemented. These measures achieve a 21.5 percent reduction in harvest for this sector. For the commercial fishery, an 11-inch minimum size and April 22 through May 31 closed season will be implemented. This achieves a 26.3 percent reduction in the commercial fishery. The Council placed more of the harvest reduction on the commercial fishery because this fishery was responsible for the majority of the increase in vermilion snapper landings during the late 1980s and early 1990s. These measures have not been implemented as of June 1, 2005.

Greater Amberjack Management History

Greater amberjack were not included in the FMU established by the FMP, but were included in the fishery for data collection purposes. At that time, greater amberjack were not normally targeted and considered an incidental catch. Additionally, this species was excluded because there was insufficient data available to be considered in the MSY and OY values for the fishery.

Amendment 1 set a minimum size of 28-inches fork length (FL) and a three-fish-per-angler bag limit for the recreational fishery, and a minimum size of 36-inches FL for the commercial fishery. The Council proposed this measure to protect the greater amberjack stock whose landings had been declining since 1983. The Council also noted greater amberjack were being targeted more as the abundance of other target species in fishery declined. The size limits were based on maturity information by Birch (1979) who indicated maturity occurred around 32 inches FL. The objective of the size limits was to prevent overfishing and to allow the stock to recover to 20 percent SSBR. These measures, which became effective on February 21, 1990, also brought the regulations in federal waters into better compliance with similar Florida regulations.

Amendment 1 also added greater amberjack to the FMU. In reviewing the definition of the FMU, the Reef Fish Scientific Task Team and SSC reported the definitions established in the original FMP did not fully characterize the major species comprising the reef fish fishery. They recommended greater amberjack, among other species, be added to the list.

In the mid 1990s, the Council received anecdotal information from eastern Gulf of Mexico fishermen who suggested the stock was in a state of decline. They observed the average size and abundance of fish had decreased. In response, the Council felt these concerns warranted action through a plan amendment (Amendment 12) to decrease the bag limit from three to one fish achieving a harvest reduction of 26 to 78 percent (based on estimates by Cummings-Parrack, 1993). This rule was effective January 15, 1997.

In 1996, a greater amberjack stock assessment was conducted by the SEFSC (McClellan and Cummings, 1996). The assessment was considered by the RFSAP as too imprecise to specify an acceptable biological catch or set a total allowable catch (TAC). However, the Council was concerned abundance was continuing to decline. Therefore, the Council

proposed a seasonal closure (March-May) during the spawning season for the commercial fishery in order to reduce commercial catch by an amount similar to that imposed on the recreational sector with the bag limit reduction to one fish. Another factor used in the Council's rationale for selecting this time period was Florida had a similar seasonal closure (April – May). This rule was effective January 29, 1998.

In 2000, the greater amberjack stock was re-assessed by the SEFSC using data through 1998 (Turner et al., 2000). The assessment used a calibrated VPA and considered a variety of assumptions. The RFSAP (2000) selected four of the runs as most likely to represent stock conditions, all of which showed an overfished condition for greater amberjack in 1998. Two of the runs indicated overfishing also occurred, including the run considered most likely by the RFSAP. The Panel also concluded management actions (bag limit reductions and closed seasons) taken in 1997 and 1998 might reduce fishing mortality sufficiently to eliminate overfishing. NMFS notified the Council in January 2001 the stock was overfished. In response, the Council developed Secretarial Amendment 2, which contained biological reference points, status determination criteria, and a 10-year rebuilding plan.

The biological reference points and status determination implemented through Secretarial Amendment 2 were as follows:

- MSY for greater amberjack is the yield associated with $F_{30\% SPR}$ (proxy for F_{MSY}) when the stock is at equilibrium. The most recent stock assessment estimated the yield at $F_{30\% SPR}$ to be 9.5 mp.

- OY for greater amberjack is the yield associated with an $F_{40\% SPR}$ when the stock is at equilibrium. The most recent stock assessment estimated the yield at $F_{40\% SPR}$ to be 8.5 mp.

- Set MFMT = $F_{30\% SPR}$ ($F_{30\% SPR}$ is currently estimated at 0.25); The greater amberjack stock would be considered undergoing overfishing if the probability $F_{current}$ is larger than $F_{30\% SPR}$ is greater than 50 percent.

- Set MSST to (1-M)*B_{MSY} or 75 percent of B_{MSY}. Using the proxy of F_{MSY} being $F_{30\% SPR}$, B_{MSY} is estimated to be 28.4 mp. Greater amberjack stocks in the Gulf of Mexico will be considered overfished if the probability $B_{current}$ is less than MSST is greater than 50 percent.

The rebuilding plan implemented by this amendment limited the harvest of greater amberjack for 3-year intervals with the expected harvest set at the yield associated with $F_{40\%SPR}$ for the first year of each interval (rebuild the stock in 7 years). Expected harvest would be 2.9 mp for 2003-2005, 5.2 mp for 2006-2008, 7.0 mp for 2009-2011, and 7.9 mp for 2012.

The Council received a letter from NMFS dated January 6, 2005, informing them greater amberjack landings during 2003 had exceeded the TAC specified in Secretarial

Amendment 2. Additional analyses prepared by the SEFSC and presented at the January 2005 Council meeting documented landings for the 1999 through 2003 period and extended the estimation of nominal catch rates from commercial and recreational greater amberjack fisheries through 2003. After receiving and reviewing these documents, the Council asked NMFS to provide similar analyses for as much of 2004. However, the only way to determine whether the Gulf of Mexico stock of greater amberjack is improving faster than projections from the 2000 assessment indicated or whether other factors may be contributing to observed changes in harvest and catch rates is to conduct another assessment. The scheduled assessment will address these issues, and if needed, the Council will take action in 2006 to revise the rebuilding plan. However, because landings during 2003 and 2004 exceeded TAC, NMFS has recommended to the Council not to increase TAC until the stock assessment is complete.

Gray Triggerfish Management History

Gray triggerfish were not included in the FMU established by the original FMP, but were included in the fishery for data collection purposes. At that time, gray triggerfish were not normally targeted and considered an incidental catch. Additionally, this species was excluded because there was insufficient data available to be considered in the MSY and OY values for the fishery.

Amendment 1 added gray triggerfish to the FMU. In reviewing the definition of the FMU, the Reef Fish Scientific Task Team and SSC reported the definitions established in the original FMP did not fully characterize the major species comprising the reef fish fishery. They recommended gray triggerfish, among other species, be added to the list.

On January 15, 1997, the effective date for Amendment 12, gray triggerfish were included in the 20-reef fish aggregate bag limit. This bag limit applied only to those species not covered by other bag limits and deemed incidental to the fishery (see the vermilion snapper discussion of Amendment 12 for a list of species). The purpose of this measure was to prevent recreational fishermen from harvesting commercial quantities of reef fish species, which could consequently be sold. The rationale behind using an aggregate rather than species specific bag limits was to provide protection to a large number of species without the need for fishermen to learn a complex suite bag and size limits, or deal with species identification issues.

In Amendment 16b, the Council responded to a request by the Florida Marine Fisheries Commission (now the Florida Fish and Wildlife Conservation Commission (FWC)) to consider implementing bag and size limits for several species that would make both federal and Florida rules consistent. The FWC adopted a 12-inch TL minimum size limit in 1995 based on a NMFS assessment prepared for the South Atlantic Fishery Management Council indicating this minimum size limit would maintain the appropriate SPR for the stock, address growing effort by the fishery, and address public perception that stocks were declining. In response to the FWC's request, a minimum size limit of 12-inches TL was adopted by the Council and made effective November 24, 1999.

In 2001, an assessment of the gray triggerfish stock (Valle et al., 2001) was conducted because there had been a steady decline in Gulf landings from 1990 to 1998. The cause of the decline was unknown, but it could be a result of a consistent increase in fishing effort leading to a possible decrease in stock size. Problems were encountered in the assessment. The production models frequently failed to converge on a satisfactory solution, due to the limited time series of catch and effort data. Nevertheless, there was reasonable evidence the current rate of removal was not sustainable. However, the RFSAP (2001), while complementing the effort to conduct the assessment, felt the data available for gray triggerfish was inadequate to support the assessment methods and determine the status of the stock. One RFSAP member in a minority report suggested overfishing on localized populations could explain the trends observed in the fishery, but overall the stock was in good shape.

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Table 1. Objectives of the Reef Fish FMP.

MANAGEMENT OBJECTIVE	FMP/AMENDMENT
1. Rebuild the declining reef fish stocks wherever they occur within the fishery.	Original FMP November, 1984
2. Establish a fishery reporting system for monitoring the reef fish fishery.	Original FMP
3. Conserve reef fish habitats and increase reef fish habitats in appropriate areas and provide protection for juveniles while protecting existing and new habitats.	Original FMP
4. Minimize conflicts between user groups of the resource and conflicts for space.	Original FMP
5. Stabilize long-term population levels of all reef fish species by establishing a certain survival rate of biomass into the stock of spawning age to achieve at least 20 percent spawning stock biomass per recruit.*	Amendment 1 January, 1990
6. To reduce user conflicts and nearshore fishing mortality [modifies Objective 4].	Amendment 1
7. To respecify the reporting requirements necessary to establish a database for monitoring the reef fish fishery and evaluating management actions [modifies Objective 2].	Amendment 1
8. To revise the definitions of the fishery management unit and fishery to reflect the current species composition of the reef fish fishery.	Amendment 1
9. To revise the definition of optimum yield to allow specification at the species level.	Amendment 1
10. To encourage research on the effects of artificial reefs.	Amendment 1
11. To maximize net economic benefits from the reef fish fishery.	Amendment 1
12. To avoid to the extent practicable the “derby” type of fishing season.	Amendment 8 July, 1995
13. To promote flexibility for the fishermen in their fishing operations.	Amendment 8
14. To provide for cost-effective and enforceable management of the fishery.	Amendment 8
15. To optimize net benefits to the fishery [modifies Objective 11].	Amendment 8

*Identified as the primary objective of the Reef Fish FMP.

Table 2. Effective date of regulations for the Gulf of Mexico vermilion snapper, greater amberjack, and gray triggerfish fisheries.

Vermilion snapper	
Effective Date	Action
February 21, 1990	Establish minimum size of 8 inches TL
January 15, 1997	Establish 20-fish aggregate bag limit
September 14, 1997*	Raise minimum size to 10 inches TL
July 1, 2005 (est date)	Raise minimum size to 11 inches TL
July 1, 2005 (est date)	Establish a 10 vermilion snapper within the 20-reef fish aggregate bag limit
July 1, 2005 (est date)	Establish a April 22 through May 31 closure for the commercial fishery

Greater amberjack	
February 21, 1990	Establish recreational 3 fish bag limit and 28 inches FL minimum size
February 21, 1990	Establish commercial minimum size of 36 inches FL
January 15, 1997	Reduce recreational bag limit to 1 fish
January 29, 1998	Establish March, April, and May closure for the commercial fishery

Gray triggerfish	
January 15, 1997	Put in 20-fish aggregate bag limit
November 24, 1999	Establish a 12-inch TL minimum size limit

*Initially implemented through an interim rule (62 FR 47765).

Appendix 1. Management History of the Reef Fish FMP as it Pertains to the Vermilion Snapper, Greater Amberjack, and Gray Triggerfish Fisheries

The Reef Fish FMP (with its associated environmental impact statement [EIS]) was implemented in November 1984. It established four management objectives for the reef fish fishery (Table 1). The FMP established the list of species in the management unit, which included vermilion snapper, and an inshore stressed area within which certain gear was prohibited, including fish traps and roller trawls [49FR 39548]. *Seriola* species, including greater amberjack, were in a second list of species included in the fishery, but not in the management unit. The species in this list were not considered to be target species because they were generally taken incidentally to the directed fishery for species in the management unit. Their inclusion in the FMP was for purposes of data collection, and their take was not regulated.

Amendment 1 (with its associated environmental assessment [EA], regulatory impact review [RIR], and initial regulatory flexibility analysis [IRFA]) to the FMP, was implemented in January, 1990. It revised and added seven objectives to the FMP (Table 1).

Amendment 1 also set a vermilion snapper minimum size limit of 8 inches TL; however, vermilion snapper were excluded from the 10-snapper recreational bag limit. It set a greater amberjack recreational minimum size limit of 28 inches FL and a 3 fish recreational bag limit, and a commercial minimum size limit of 36 inches FL. This amendment set as a primary objective of the FMP the stabilization of long-term population levels of all reef fish species by establishing a survival rate of biomass into the stock of spawning age to achieve at least 20 percent spawning stock biomass per recruit (SSBR), relative to the SSBR that would occur with no fishing. A framework procedure for specification of TAC was created to allow for annual management changes. The procedure included subdividing TAC into commercial and recreational allocations of 67 percent and 33 percent, respectively for greater amberjack. This amendment established a commercial vessel reef fish permit as a requirement for harvest in excess of the bag limit and for the sale of reef fish. In addition, this amendment prohibited the use of longline and buoy gear for the directed harvest of reef fish inside of the 50 fathom isobath west of Cape San Blas, Florida (85E30'W) and inside of the 20 fathom isobath east of Cape San Blas, Florida (85E30'W) [55 FR 2078].

Amendment 4 (with its associated EA and RIR), implemented in May 1992, added the remaining *Seriola* species (banded rudderfish and Almaco jack) to the management unit, and established a moratorium on the issuance of new commercial reef fish vessel permits for a maximum period of three years. It also established a moratorium on the issuance of new commercial reef fish vessel permits for a maximum period of three years [57 FR 11914].

Amendment 5 (with its associated SEIS, RIR, and IRFA), implemented in February 1994, required that all finfish, except for oceanic migratory species, be landed with head and fins attached, and closed the region of Riley's Hump (near Dry Tortugas, Florida) to

all fishing during May and June to protect mutton snapper spawning aggregations [59 FR 966].

Amendment 8 (with its associated EA and RIR) was implemented in July 1995. This amendment proposed to establish a red snapper individual transferable quota system; however, the regulatory portions of the amendment were disapproved through Congressional action. Amendment 8 added and revised five management objectives of the FMP (Table 1) [60 FR 61200].

Amendment 11 (with its associated EA and RIR) was partially approved by NOAA Fisheries and implemented in January 1996. It implemented a new reef fish permit moratorium for no more than five years or until December 31, 2000, during which time the Council was to consider limited access for the reef fish fishery [60 FR 64356].

Amendment 12 (with its associated EA and RIR), submitted in December 1995 and implemented in January 1997. It reduced the greater amberjack bag limit from 3 fish to 1 fish per person, and created an aggregate bag limit of 20 reef fish for all reef fish species not having a bag limit (including vermilion snapper, gray triggerfish, lesser amberjack, banded rudderfish, and Almaco jack). NMFS disapproved proposed provisions to include lesser amberjack and banded rudderfish along with greater amberjack in an aggregate 1-fish bag limit and to establish a 28-inch FL minimum size limit for those species [61 FR 65983].

Amendment 14 (with its associated EA, RIR, and IRFA), implemented in March and April, 1997, provided for a ten-year phase-out for the fish trap fishery; allowed transfer of fish trap endorsements for the first two years and thereafter only upon death or disability of the endorsement holder, to another vessel owned by the same entity, or to any of the 56 individuals who were fishing traps after November 19, 1992 and were excluded by the moratorium; and prohibited the use of fish traps west of Cape San Blas, Florida.

Amendment 15 (with its associated EA, RIR, and IRFA), implemented in January 1998, permanently increased the vermilion snapper size limit from 8 to 10 inches TL; closed the commercial greater amberjack fishery Gulfwide during the months of March, April, and May; prohibited harvest of reef fish from traps other than permitted reef fish traps, stone crab traps, or spiny lobster traps; removed black sea bass, rock sea bass, bank sea bass, and all species of grunts and porgies from the Reef Fish FMP; and removed sand perch and dwarf sand perch from the recreational 20-reef fish aggregate bag limit. [62 FR 67714].

An August 1999 regulatory amendment (with its associated EA, RIR, and IRFA) closed two areas (i.e., created two marine reserves), known as Steamboat Lumps and Madison-Swanson (104 and 115 square nautical miles respectively), year-round to all fishing under the jurisdiction of the Gulf Council with a four-year sunset closure [65 FR 31827].

Generic Sustainable Fisheries Act Amendment (with its associated EA, RIR, and IRFA), partially approved and implemented in November 1999, set MFMT for vermilion

snapper and greater amberjack at $F_{30\% SPR}$. Estimates of MSY, MSST, and OY were disapproved because they were based on SPR proxies rather than biomass based estimates [67 FR 47967].

Amendment 16B (with its associated EA, RIR, and IRFA), implemented in November 1999: 1) sets a slot limit of 14 to 22 inches FL for banded rudderfish and lesser amberjack for both the commercial and recreational fisheries; 2) removes queen triggerfish from the Reef Fish FMP; 3) removes the distinction between reef fish species in the management unit and those in the fishery but not in the management unit, with the intent that sand perch and dwarf sand perch will not be included in the aggregate reef fish bag limit; 4) adopts a 12-inch TL minimum size limit for cubera snapper, dog snapper, mahogany snapper, schoolmaster, and gray triggerfish, a 12-inch FL minimum size limit for hogfish and 16-inch TL minimum size limit for mutton snapper and scamp; 5) adopts a recreational bag limit of 5 hogfish per person for the entire Gulf EEZ; and, 6) sets a recreational bag limit of 1 speckled hind and 1 warsaw grouper per vessel, with the prohibition on the sale of these species when caught under the bag limit [64 FR 57403].

Amendment 17 (with its associated EA), implemented by NOAA Fisheries in August 2000, extended the commercial reef fish permit moratorium for another 5 years, from December 31, 2000 to December 31, 2005, unless replaced sooner by a comprehensive controlled access system [65 FR 41016].

Proposed Amendment 18 is being developed as an options paper and contains several actions that could impact the vermilion snapper fishery. There are proposed measures to reduce bycatch in the reef fish fishery, to add new closed areas to protect grouper spawning aggregations, and to change framework procedures for developing and managing TACs.

Amendment 19, also known as the **Generic Amendment Addressing the Establishment of the Tortugas Marine Reserves** (with its associated EIS, RIR, and IRFA), was submitted to NOAA Fisheries in March 2001, and implemented on August 19, 2002. This amendment, affecting all FMPs for Gulf fisheries, establishes two marine reserve areas off the Tortugas and prohibits fishing for any species and anchoring by fishing vessels inside the two marine reserves [67 FR 47467].

Amendment 20, also known as the **Charter/Headboat Moratorium Amendment** (with its associated EA and RIR), amended the Reef Fish FMP and the Coastal Migratory Pelagic FMP (Amendment 14) and was implemented by NOAA Fisheries on July 29, 2002, except for some provisions which became effective on December 26, 2002. This amendment establishes a 3-year moratorium on the issuance of new charter and headboat vessel permits in the recreational for-hire fisheries in the Gulf exclusive economic zone (EEZ). The moratorium expires June 16, 2006. The purpose of this moratorium is to limit future expansion in the recreational for-hire fishery while the Council monitors the impact of the moratorium and considers the need for a more comprehensive effort management system [67 FR 43558].

Secretarial Amendment 2, including EA, RIR and RFA, was submitted to NMFS in November 2002, and was approved on June 17, 2003. It proposed the specification of MSY, OY, MFMT, and MSST levels for greater amberjack that are in compliance with the Sustainable Fisheries Act, and it establishes a rebuilding plan for greater amberjack based on three-year intervals. No specific management measures were proposed in this amendment, since the greater amberjack harvest is currently within the TAC specified for the first three-year interval [68 FR 29898].

Amendment 21 (with its EA, RIR and IRFA) was implemented on June 3, 2004, and will extend the Madison-Swanson and Steamboat Lumps closures for an additional six years. Additionally, surface trolling is to be allowed during the months of May through October; whereas, the original regulatory amendment did not allow any fishing [69 FR 24532].

Amendment 22 (with its SEIS, RIR and IRFA) was submitted to NOAA Fisheries on May 25, 2004 for implementation. Besides setting biological reference points and a rebuilding plan for red snapper, it provides alternatives to improve bycatch monitoring in the reef fish fishery. When implemented, these monitoring requirements will improve future stock assessments for vermilion snapper.

Amendment 23 (with its SEIS, RIR and IRFA) was submitted to NOAA Fisheries in October 2004 for implementation. This amendment 1) Establishes status determination criteria and biological reference points for vermilion snapper; 2) establishes a 10-year vermilion snapper rebuilding plan, structured in one 4-year interval followed by two 3-year intervals, that would end overfishing and rebuild the stock to B_{MSY}; and 3) establishes measures to constrain the allowable harvest to that required for the rebuilding plan. A 25.5-percent reduction in harvest based on the 2003 predicted landings is required to achieve the allowable harvest for the first 4-year interval of the rebuilding plan (1.475 mp). The following proposed measures in Amendment 23 are designed to achieve the reduction fairly and equitably between the commercial and recreational sectors: a minimum size of 11 inches TL for both the recreational and commercial fisheries, a bag limit of 10 vermilion snapper within the 20-reef fish aggregate bag limit for the recreational fishery, and a closed season from April 22 through May 31 for the commercial fishery.

Control date notices

Control date notices are used to inform fishermen that a license limitation system or other method of limiting access to a particular fishery or fishing gear is under consideration. If a program to limit access is established, anyone not participating in the fishery or using the fishing gear by the published control date may be ineligible for initial access to participate in the fishery or to use that fishing method. However, a person who does not receive an initial eligibility may be able to enter the fishery or fishing method after the limited access system is established by transfer of the eligibility from a current participant, provided the limited access system allows such transfer. Publication of a control date does not obligate the Council to use that date as an initial eligibility criteria. A different date could be used, and additional qualification criteria could be established.

The announcement of a control date is primarily intended to discourage entry into the fishery or use of the gear based on economic speculation during the Council's deliberation on the issues. The following summarizes control dates that have been established for the Reef Fish FMP.

November 1, 1989 - Anyone entering the commercial reef fish fishery in the Gulf of Mexico and South Atlantic after November 1, 1989, may not be assured of future access to the reef fish resource if a management regime is developed and implemented that limits the number of participants in the fishery [54 FR 46755].

November 18, 1998 - The Council is considering whether there is a need to impose additional management measures limiting entry into the recreational-for-hire (i.e., charter vessel and headboat) fisheries for reef fish and coastal migratory pelagic fish in the EEZ of the Gulf of Mexico and, if there is a need, what management measures should be imposed. Possible measures include the establishment of a limited entry program to control participation or effort in the recreational for-hire fishery for reef fish and coastal migratory pelagics. [63 FR 64031]. (In the Charter/Headboat Moratorium Amendment, approved by the Council for submission to NOAA Fisheries in March 2001, a qualifying date of March 29, 2001 was adopted.)

July 12, 2000 - The Council is considering whether there is a need to limit participation by gear type in the commercial reef fish fisheries in the EEZ of the Gulf of Mexico and, if there is a need, what management measures should be imposed to accomplish this. Possible measures include modifications to the existing limited entry program to control fishery participation, or effort, based on gear type, such as a requirement for a gear endorsement on the commercial reef fish vessel permit for the appropriate gear. Gear types which may be included are longlines, buoy gear, handlines, rod-and-reel, bandit gear, spearfishing gear, and powerheads used with spears [65 FR 42978].

March 29, 2001 - The Council is considering whether there is a need to limit participation in the reef fish and coastal migratory pelagics charter and headboat fisheries. The intent of this notice is to inform the public that entrants into the charter vessel/headboat fisheries after this date may not be assured of a future access to the reef fish and/or coastal migratory pelagics resources if: 1) an effort limitation management regime is developed and implemented that limits the number of vessels or participants in the fishery; and 2) if the control date notice is used as criterion for eligibility [67 FR 32312].