HISTORY OF RED SNAPPER MANAGEMENT IN FEDERAL WATERS OF THE U.S. GULF OF MEXICO - 1984-2004: 2004 RED SNAPPER SEDAR

Peter Hood and Phil Steele NOAA Fisheries Southeast Regional Office St. Petersburg, Florida 33702

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 objectives set forth in the FMP was to rebuild declining reef fish stocks wherever they occur in the fishery.

While encompassing a large number of species, much of the Council's reef fish management activities have pertained to red snapper. The fishery, which is targeted by commercial, for-hire, and recreational fishermen, is classified as overfished and undergoing overfishing. Evidence of a decline in the adult population was documented as early as the late 1980s during which time the fishery was primarily supported by age-1 to age-3 fish. The overfished status of the red snapper fishery is the result of not only an excessive amount of effort in the directed fishery, but also of a high level of bycatch mortality of juvenile red snapper associated with shrimp trawling.

When the Reef Fish FMP was implemented there was no attempt to directly limit effort in the fishery. However, when the first red snapper stock assessment was conducted in 1988 (Goodyear 1988¹), the stock was determined to be so overfished that reductions in fishing mortality of 60 to 70 percent would be required to rebuild the stock to 20 percent spawning potential ratio (SPR) within 10 years. The assessment also confirmed that shrimp trawl bycatch was a significant source of juvenile red snapper mortality.

The following history of management only pertains to red snapper so some other reef fish amendments are not listed. Sections following historical implementation of the FMPs and Regulatory Amendments include the chronology of control dates to the fishery and tables

1Goodyear CP 1988 Recent trends in red snapper fishery of the Gulf of Mexico. NMFS SEFSC Milami FL OPD 87/88-16. Notino. Rpt. 98p.

summarizing bag limits, size limits, and fishing seasons (Tables 1-4). Also included in this report is the portion of the executive summary from Amendment 22 to the Reef Fish FMP (red snapper rebuilding plan). This summary provides the preferred alternatives selected by the Council for red snapper biological reference points and status determination criteria, a stock rebuilding plan, and bycatch reporting requirements as well as an overview of the rationale for their selection.

FISHERY MANAGEMENT PLANS AND REGULATORY AMENDMENTS

The Reef Fish FMP (with its associated environmental impact statement (EIS)) was implemented on November 8, 1984. The regulations, designed to rebuild declining reef fish stocks, included: (1) prohibitions on the use of fish traps, roller trawls, and power head-equipped spear guns within an inshore stressed area; (2) a minimum size limit of 13 inches total length (TL) for red snapper with the exceptions that for-hire boats were exempted until May 8, 1987, and each angler could keep 5 undersize fish; and (3) the establishment of optimum yield (OY) for the snapper/grouper complex [49 FR 39548].

Amendment 1 to the Reef Fish FMP [with its associated environmental assessment (EA), regulatory impact review (RIR), and initial regulatory flexibility analysis (IRFA)], implemented on February 21, 1990, 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. It set a red snapper 7-fish recreational bag limit and 3.1-million pound (MP) commercial quota that together were to reduce fishing mortality by 20 percent and begin a rebuilding program for that stock. A framework procedure for specification of total allowable catch (TAC) was created to allow for annual management changes, and a target date for achieving the 20 percent SSBR goal was set at January 1, 2000. This amendment also established a longline and buoy gear was prohibited and the retention of reef fish captured incidentally in other longline operations (e.g., shark) was limited to the recreational bag limit. Subsequent changes to the longline/buoy boundary could be made through the framework procedure for SPC [55 FR 2078].

A regulatory amendment implemented on March 11, 1991, set the red snapper TAC at 4.0 MP to be allocated with a commercial quota of 2.04 MP and a 7-fish recreational daily bag limit (1.96 MP allocation) beginning in 1991. This amendment also contained a proposal by the Council to effect a 50-percent reduction of red snapper bycatch in 1994 by the shrimp trawl fleet operating in the exclusive economic zone (EEZ), to occur through the mandatory use of finfish excluder devices on shrimp trawls, reductions in fishing effort, area or season closures of the shrimp fishery, or a combination of these actions. This combination of measures was projected to achieve a 20 percent SPR by the year 2007. The 2.04 MP quota was reached on August 24, 1991, and the red snapper fishery was closed to further commercial harvest in the EEZ for the remainder of the year.

At the direction of the Council, the Reef Fish Stock Assessment Panel (RFSAP) met in March

1990 and reviewed the 1990 red snapper stock assessment produced by NOAA Fisheries. The recommendation of the RFSAP at that time was to close the directed fishery because the Allowable Biological Catch (ABC) was being harvested as bycatch by the shrimp trawl fishery. No viable alternatives were identified that would achieve the 20-percent SPR goal by the year 2000 without closure of the directed fishery. This was because no means existed for reducing shrimp trawl bycatch that limited the ability of the stock to rebuild. As a result, Amendment 3 (with its associated EA, RIR, and IRFA), implemented on July 29, 1991, provided additional flexibility in the annual framework procedure for specifying TAC by allowing the target date for rebuilding an overfished stock to be changed depending on changes in scientific advice, except that the rebuilding period cannot exceed 1.5 times the generation time of the species under consideration. It revised the FMP's primary objective, definitions of OY, overfishing, and framework procedure for TAC by replacing the 20 percent SSBR target with 20 percent SPR. The amendment also transferred speckled hind from the shallow-water grouper quota category to the deep-water grouper quota category and established a new red snapper rebuilding target year of 2007 for achieving the 20 percent SPR goal. In 1992, the commercial red snapper quota remained at 2.04 MP. However, extremely heavy harvest rates resulted in the quota being filled in just 53 days, and the commercial red snapper fishery was closed on February 22, 1992 [56 FR 33883]. An emergency rule [56 FR 30513], implemented in 1992 by NOAA Fisheries at the request of the Council, reopened the red snapper fishery from April 3, 1992, through May 14, 1992, with a 1,000-pound trip limit. This rule was implemented to alleviate economic and social upheavals that occurred as a result of the 1992 red snapper commercial quota being rapidly filled. Although this emergency rule resulted in a quota overrun of approximately 600,000 pounds, analysis by NOAA Fisheries' biologists determined that this one-time overrun would not prevent the red snapper stock from attaining its target SPR.

Amendment 4 (with its associated EA and RIR), implemented on May 8, 1992, established a moratorium on the issuance of new reef fish permits for a maximum period of three years. The moratorium was created to moderate short-term future increases in fishing effort and to attempt to stabilize fishing mortality while the Council considered a more comprehensive effort limitation program. It allowed the transfer of permits between vessels owned by the permittee or between individuals when the permitted vessel is transferred. Amendment 4 also changed the time of the year that TAC is specified from April to August and included additional species in the reef fish management unit [57 FR 11914].

A regulatory amendment implemented on March 23, 1993, raised the 1993 red snapper TAC from 4.0 MP to 6.0 MP to be allocated with a commercial quota of 3.06 MP and a recreational allocation of 2.94 MP (to be implemented by a 7-fish recreational daily bag limit). The amendment also changed the target year to achieve a 20 percent red snapper SPR from 2007 to 2009, based on the plan provision that the rebuilding period may not exceed 1.5 times the generation time of the stock and an estimated red snapper generation time of 13 years (Goodyear 1992) [58 FR 16371].

A regulatory amendment implemented on January 1, 1994, set the opening date of the 1994 commercial red snapper fishery as February 10, 1994, and restricted commercial vessels to

landing no more than one trip limit per day. The purpose of this amendment was to facilitate enforcement of the trip limits, minimize fishing during hazardous winter weather, and ensure that the commercial red snapper fishery was open during Lent, when there is increased demand for seafood. The TAC was retained at the 1993 level of 6 MP, with a 3.06 MP commercial quota and 2.94 MP recreational allocation.

Amendment 5 (with its associated EIS, RIR, and IRFA), implemented on February 7, 1994, established restrictions on the use of fish traps in the Gulf EEZ, implemented a three-year moratorium on additional participation in the fishery by creating a fish trap endorsement and issuing the endorsement only to fishermen who had submitted logbook records of reef fish landings from fish traps between January 1, 1991, and November 19, 1992; created a special management zone (SMZ) with gear restrictions off the Alabama coast; created a framework procedure for establishing future SMZ's; required that all finfish except for oceanic migratory species be landed with head and fins attached; established a schedule to gradually raise the minimum size limit for red snapper to 16 inches over a period of five years; 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. An emergency rule effective December 30, 1992, created a red snapper endorsement to the reef fish permit for the start of the 1993 season. The endorsement was issued to owners or operators of federally permitted reef fish vessels who had annual landings of at least 5,000 pounds of red snapper in two of the three years from 1990 through 1992. For the duration of the emergency rule, while the commercial red snapper fishery was open, permitted vessels with red snapper endorsements were allowed a 2,000-pound possession limit of red snapper, and permitted vessels without the endorsement were allowed 200 pounds. This emergency action was initially effective for 90 days, and was extended for an additional 90 days with the concurrence of NOAA Fisheries and the Council. A related emergency rule delayed the opening of the 1993 commercial red snapper season until February 16 to allow time for NOAA Fisheries to process and issue the endorsements [59 FR 966].

Amendment 6 (with its associated EA and RIR), implemented on June 29, 1993, extended the provisions of the emergency rule for red snapper endorsements for the remainder of 1993 and 1994, unless replaced sooner by a comprehensive effort limitation program. In addition, it allowed the trip limits for qualifying and non-qualifying permitted vessels to be changed under the framework procedure for specification of TAC [58 FR 33025].

Amendment 7 (with its associated EA, RIR, and IRFA), implemented on February 7, 1994, established reef fish dealer permitting and record keeping requirements; allowed transfer of fish trap permits and endorsements between immediate family members during the fish trap permit moratorium; and allowed transfer of other reef fish permits or endorsements in the event of the death or disability of the person who was the qualifier for the permit or endorsement. A proposed provision of this amendment that would have required permitted vessels to sell harvested reef fish only to permitted dealers was disapproved by the Secretary of Commerce [59 FR 6588].

A regulatory amendment implemented on January 1, 1995, retained the 6 MP red snapper TAC

and commercial trip limits and set the opening date of the 1995 commercial red snapper fishery as February 24, 1995. However, because the recreational sector exceeded its 2.94 MP red snapper allocation each year since 1992, this regulatory amendment reduced the daily bag limit from 7 fish to 5 fish, and increased the minimum size limit for recreational fishing from 14 inches to 15 inches one year ahead of the scheduled automatic increase [59 FR 67646].

Amendment 8 (with its associated EA, RIR, and IRFA), which proposed establishment of a red snapper Individual Transferable Quota (ITQ) system, was approved by NOAA Fisheries. The final rule was published in the Federal Register on November 29, 1995 [60 FR 61200]. This amendment provided for an initial allocation of percentage shares of the commercial red snapper quota to vessel owners and historical operators based on fishermen's historical participation in the fishery during the years 1990-1992, set a 4-year period for harvest under the ITQ system, during which time the Council and NOAA Fisheries would monitor and evaluate the program and decide whether to extend, terminate or modify it, and established a special appeals board, created by the Council, to consider requests by fishermen who contested their initial allocations of shares or determination of historical captain status. The appeals board was originally scheduled to meet during January 1996, with the ITO system itself to become operational in April 1996. However, the federal government shutdown of December 1995-January 1996 forced an indefinite postponement of the appeals board meetings, and concerns about Congressional funding of the ITQ system made it inadvisable for the ITQ system to become operational, pending Congressional action. In October 1996, Congress, through re-authorization of the Magnuson-Stevens Act, repealed the red snapper ITQ system and prohibited Councils from submitting, or NOAA Fisheries from approving and implementing, any new individual fishing quota program before October 1, 2000.

Amendment 9 (with its associated EA and RIR), implemented on July 27, 1994, provided for collection of red snapper landings and eligibility data from commercial fishermen for the years 1990 through 1992. The purpose of this data collection was to evaluate the initial impacts of the limited access measures being considered under Amendment 8, and to identify fishermen who may qualify for initial participation under a limited access system. This amendment also extended the reef fish permit moratorium and red snapper endorsement system through December 31, 1995, in order to continue the existing interim management regime until longer term measures could be implemented. The Council received the results of the data collection in November 1994, at which time consideration of Amendment 8 resumed [59 FR 39301].

A regulatory amendment, implemented October 16, 1996, raised the red snapper TAC from 6 MP to 9.12 MP, with 4.65 MP allocated to the commercial sector and 4.47 MP allocated to the recreational sector. Recreational size and bag limits remained at 5 fish and 15 inches TL. The recovery target date to achieve 20 percent SPR was extended to the year 2019, based on new biological information that red snapper live longer and have a longer generation time than previously believed. A March 1996 addendum to the regulatory amendment split the 1996 and 1997 commercial red snapper quotas into two seasons each, with the first spring opening on February 1 with a 3.06 MP quota, and the fall season opening on September 15, with the remainder of the annual quota [61 FR 48641].

Amendment 11 (with its associated EA and RIR) was partially approved by NOAA Fisheries and implemented in January 1, 1996. Approved provisions included: (1) limit sale of Gulf reef fish by permitted vessels to permitted reef fish dealers; (2) require that permitted reef fish dealers purchase reef fish caught in Gulf federal waters only from permitted vessels; (3) allow transfer of reef fish permits and fish trap endorsements in the event of death or disability: (4) implement a new reef fish permit moratorium for no more than 5 years or until December 31, 2000, while the Council considers limited access for the reef fish fishery; (5) allow permit transfers to other persons with vessels by vessel owners (not operators) who qualified for their reef fish permit; (6) allow a one time transfer of existing fish trap endorsements to permitted reef fish vessels whose owners have landed reef fish from fish traps in federal waters, as reported on logbooks received by the Science and Research Director of NOAA Fisheries from November 20, 1992, through February 6, 1994; and (7) implemented a charter vessel/headboat permit [60 FR 64356]. The agency disapproved a proposal to redefine OY from 20 percent SPR (the same level as overfishing) to an SPR corresponding to a fishing mortality rate of F_{0.1} until an alternative operational definition that optimizes ecological, economic, and social benefits to the Nation could be developed. In April 1997, the Council resubmitted the OY definition with a new proposal to redefine OY as 30 percent SPR. The re-submission document was disapproved by NOAA Fisheries. Following the Congressional repeal of the red snapper ITQ system in Amendment 8, an emergency interim action was published in the Federal Register on January 2, 1996, to extend the red snapper endorsement system for 90 days. That emergency action was superseded by another emergency action, published in the Federal Register on February 29, 1996, that extended the red snapper endorsement system through May 29, 1996, and subsequently, by agreement of NOAA Fisheries and the Council, for an additional 90 days until August 27, 1996.

Amendment 12 (with its associated EA and RIR), was implemented on January 15, 1997. NOAA Fisheries disapproved proposed provisions, for the commercial sector, to cancel the automatic red snapper size limit increases to 15 inches TL in 1996 and 16 inches TL in 1998 [61 FR 65983].

Amendment 13 (with its associated EA and RIR), implemented on September 15, 1996, further extended the red snapper endorsement system through the remainder of 1996 and, if necessary, through 1997, in order to give the Council time to develop a permanent limited access system that was in compliance with the new provisions of the Magnuson-Stevens Act [61 FR 48413].

A regulatory amendment implemented on March 17, 1997, changed the opening date of the fall 1997 commercial red snapper season from September 15 to September 2 at noon and closed the season on September 15 at noon; thereafter the commercial season was opened from noon of the first day to noon of the fifteenth day of each month until the 1997 quota was reached. It also complied with the new Magnuson-Stevens Act requirement that recreational red snapper be managed under a quota system by authorizing the NOAA Fisheries Regional Administrator (RA) to close the recreational fishery in the EEZ at such time as projected to be necessary to prevent the recreational sector from exceeding its allocation. Subsequent to implementation of a

recreational red snapper quota, the recreational red snapper fishery filled its 1997 quota of 4.47 MP, and was closed on November 27, 1997, for the remainder of the calendar year [61 FR 46677 and 61 FR 48641].

A regulatory amendment implemented on January 1, 1998, canceled a planned increase in the red snapper recreational minimum size limit to 16 inches TL that had been implemented through Amendment 5, and retained the 15-inch TL minimum size limit [63 FR 443].

Amendment 14 (with its associated EA, RIR, and IRFA), implemented on March 25 and April 24, 1997, provided for a 10-year phase-out for the fish trap fishery; allowed transfer of fish trap endorsements for the first 2 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. The amendment also provided the RA with authority to reopen a fishery prematurely closed before the allocation was reached and modified the provisions for transfer of commercial reef fish vessel permits [62 FR 13983].

Amendment 15 (with its associated EA, RIR, and IRFA), implemented on January 29, 1998, established a permanent two-tier red snapper license limitation system to replace the temporary red snapper endorsement system. Under the new system, Class 1 licenses and initial 2,000-pound trip limits were issued to red snapper endorsement holders as of March 1, 1997. Class 2 licenses, and initial 200-pound trip limits are issued to other holders of reef fish permits as of March 1, 1997, who had any landings of red snapper between January 1, 1990, and March 1, 1997. Vessels without a Class 1 or Class 2 red snapper license are prohibited from commercial harvest of red snapper, and licences are fully transferable. The commercial red snapper season was split in two, with two-thirds of the quota allocated to a February 1 opening and the remaining quota to a September 1 opening. The commercial fishery was open from noon of the first day to noon of the fifteenth day of each month during the commercial season [62 FR 67714].

A regulatory amendment proposed maintaining the status quo red snapper TAC of 9.12 MP, but set a zero bag limit for the captain and crew of for-hire recreational vessels in order to extend the recreational red snapper quota season. NOAA Fisheries provisionally approved the TAC, releasing 6 MP, with release of all or part of the remaining 3.12 MP to be contingent upon the capability of shrimp BRDs devices to achieve better than a 50-percent reduction in juvenile red snapper shrimp trawl mortality. The zero bag limit for captain and crew of for-hire recreational vessels was not approved. Following an observer monitoring program of shrimp trawl BRDs conducted during the summer of 1998, NOAA Fisheries concluded that BRDs would be able to achieve the reduction in juvenile red snapper mortality needed for the red snapper recovery program to succeed, and the 3.12 MP of TAC held in reserve was released on September 1, 1998. In lieu of implementing the regulatory amendment, NOAA Fisheries implemented an interim rule effective April 14, 1998 (63 FR 18144) which initially allocated only 2/3 of the TAC of 9.12 MP and reduced the recreational red snapper bag limit from 5 to 4 fish for the period January 1 to August 30, 1998. A subsequent interim rule allocated the remainder of the

TAC effective September 1, 1998.

An interim rule implemented by NOAA Fisheries in January 1999 reduced the recreational bag limit for red snapper from 5 to 4 fish per person and retained the 15-inch TL minimum size limit for both the commercial and recreational sectors. It also provided for the reopening of the recreational fishing season to commence in January 1999 [64 FR 47711]. A regulatory amendment implemented on October 1, 1999, maintained the status quo red snapper TAC of 9.12 MP; reduced the recreational bag limit for red snapper to 4 fish for recreational fishermen and zero fish for captain and crew of for-hire vessels (note: the zero fish bag limit for captain and crew was rescinded prior to its going into effect by a December 1999 interim rule); set the opening date of the recreational red snapper fishing season at March 1; reduced the minimum size limit for red snapper to 14 inches TL for both the commercial and recreational fisheries; and changed the opening criteria for the fall commercial red snapper fishing season from the first 15 days to the first 10 days of each month beginning September 1, until the suballocation is met or the season closes on December 31. This regulatory amendment followed up the same set of proposals requested under an emergency action, of which NOAA Fisheries approved only the proposal for a 4-fish bag limit.

Amendment 17 (with its associated EA and RIR) was implemented by NOAA Fisheries on August 2, 2000. It extends the reef fish permit moratorium for another five years, from the existing expiration date of December 31, 2000 to December 31, 2005, unless replaced sooner by a comprehensive controlled access system [65 FR 41016].

A regulatory amendment implemented on September 18, 2000, maintained the status quo red snapper TAC of 9.12 MP for the next two years, pending an annual review of the assessment; increased the red snapper recreational minimum size limit from 15 inches to 16 inches TL; set the red snapper recreational bag limit at 4 fish; reinstated the red snapper recreational bag limit for captain and crew of recreational for-hire vessels; set the recreational red snapper season to be April 15 through October 31, subject to revision by the RA to accommodate reinstating the bag limit for captain and crew; set the commercial red snapper spring season to open on February 1 and be open from noon on the 1st to noon on the 10th of each month until the spring sub-quota is reached; set the commercial red snapper fall season to open on October 1 and be open from noon on the 10th of each month until the remaining commercial quota is reached; retained the red snapper commercial minimum size limit at status quo 15 inches TL; and allocated the red snapper commercial season sub-quota at 2/3 of the commercial quota, with the fall season sub-quota as the remaining commercial quota [65 FR 50158]. These measures were first put in place by an interim rule from January 19 to June 19, 2000 [64 FR 71056], and continued through a second interim rule from June 19-December 16, 2000 [65 FR 36643].

Amendment 19, also know 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 the Gulf fisheries (Amendment 19 to the Reef Fish FMP), establishes two marine reserve areas off the Tortugas area 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), affects the Reef Fish FMP (Amendment 20), the Coastal Pelagic FMP (Amendment 14) was implemented by NOAA Fisheries on July 29, 2002, except for some provisions which will become effective on December 26, 2002. This amendment establishes a 3year moratorium on the issuance of new charter and headboat vessel permits in the recreational for-hire fisheries (reef fish and coastal migratory pelagic fisheries only) in the Gulf EEZ. 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 in the for-hire recreational fishery. Although the control date notice which announced that a limited access system would be considered was dated November 18, 1998, the Council set a qualifying cut-off date of March 29, 2001, in order to include all currently permitted vessels and vessels which applied for a permit as of that date. The qualifying provisions also included persons who had a recreational for-hire vessel under construction prior to March 29, 2001, and who can show expenditures of at least five thousand dollars. In addition, persons who met the eligibility requirements to qualify as a historical captain will be issued a letter of eligibility, which will be replaced by a permit/endorsement valid only on the vessel that is operated by the historical captain [67 FR 43558].

Amendment 21 (with its EA, RIR, and IRFA) was approved in March 2004. The amendment will extend the Madison-Swanson and Steamboat Lumps marine reserves closures for an additional six years and modify fishing restrictions allowed within the reserves.

Proposed Amendment 22 (with its Draft Supplemental EIS (DSEIS), RIR, and IRFA) provides alternatives to set biological reference points and status determination criteria for red snapper, establish a rebuilding plan for the red snapper stock, and improve bycatch monitoring in the reef fish fishery.

Amendment 9 to the Shrimp FMP [with its associated SEIS, RIR, IRFA, and Social Impact Assessment (SIA)], approved in May 1998, required the use of a NOAA Fisheries-certified bycatch reduction devices (BRDs) in shrimp trawls used in the EEZ from Cape San Blas, Florida (85°30' W. Longitude) to the Texas/Mexico border and provided for the certification of the Fisheye BRD in the 30-mesh position. The purpose of this action was to reduce the bycatch mortality of juvenile red snapper by 44 percent from the average mortality for the years 1984-89. This amendment exempted shrimp trawling for royal red shrimp outside of 100 fathoms, as well as groundfish and butterfish trawls. It also excluded small try nets and no more than two ridged roller frame trawls that do not exceed 16 feet. Amendment 9 also provided mechanisms to change the bycatch reduction criterion and to certify additional BRDs [63 FR 18139].

Amendment 10 to the Shrimp FMP (with its associated EA, RIR, and IRFA), approved in March 2004, required the installation of a NOAA Fisheries-certified BRDs that reduces the bycatch of finfish by at least 30 percent by weight in each net used aboard vessels trawling for shrimp in the Gulf EEZ east of Cape San Blas, Florida (85° 30' W. Longitude). Vessels trawling

for groundfish or butterfish are exepted. A single try net with a headrope length of 16 feet or less per vessel and no more than two rigid roller frame trawls limited to 16 feet or less, are also exempted [69 FR 1538].

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 method is under consideration by the Council. If a program to limit access is established, anyone not participating in the fishery or using the fishing method 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. A reference to the full *Federal Register* notice is included with each summary.

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 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 for the reef fish and coastal migratory pelagics charter vessel 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].

December 6, 2003 - On April 29, 2003, NOAA Fisheries published an advanced notice of proposed rulemaking that established a control date of December 6, 2003, for the commercial shrimp fishery operating in the Gulf EEZ. By way of the notice, the public is advised that, in the future, the Council may consider management measures to limit entry into the shrimp fishery, and may use this control date as a qualifying criterion for participation in the fishery [68 FR 22667].

INDIVIDUAL FISHING QUOTA (IFQ) PROGRAM

Overall, it could be concluded that a "derby " situation in the red snapper fishery had developed by 1992. Despite the aforementioned increase in regulations, initiated in an attempt to ameliorate the adverse affects of "derby" fishing, including the implementation of a two-tier system with differential trip limits and numerous seasonal closures, the fishery still harvests its quota in a relatively short time. In 2000, for example, the commercial fishery remained open for only 76 days despite a commercial quota of 4.65 MP. In essence, while the commercial quota has increased by 50 percent between 1990 and 2000 (i.e., 3.1 MP to 4.65 MP), the length of the season has been reduced by about three-quarters (from 365 days to 76 days). It is the results of the reduced season length, marketing conditions, and safety-at-sea issues that the Council is now developing options for an IFQ program for the Gulf of Mexico red snapper fishery.

RED SNAPPER REBUILDING PLAN

Executive Summary

The red snapper stock is in an overfished condition and undergoing overfishing. Currently this stock is under a rebuilding plan to restore the stock to 20 percent SPR by 2019. However, this plan is inconsistent with NOAA Fisheries National Standard Guidelines (NSGs). Definitions of stock size, the overfished threshold, and yield must be biomass-based, but overfishing definitions can be based on SPR proxies for the fishing mortality rate that would provide MSY. Therefore, before a rebuilding plan can be initiated to halt overfishing and rebuild a stock, overfished and overfishing targets and thresholds must be specified so that rebuilding goals are known.

For overfished stocks, a recovery plan must be developed to end overfishing and restore the stock to the biomass level capable of producing MSY on a continuing basis (B_{MSY}). This goal is more conservative than that currently specified (20 percent SPR), which is estimated to be the minimal level needed to prevent future declines in the stock. Rebuilding is to occur in as short a time period as possible, but should not exceed 10 years unless conditions dictate otherwise. For red snapper, it would take more than 10 years to rebuild the stock even if the directed fishery was closed. The longest rebuilding period recommended by the NSGs is the time to recover in the absence of fishing mortality (12 years) plus the mean generation time (19.6 years). This equals 31.6 years for red snapper. The Council did submit a recovery plan through a regulatory amendment that met the new guidelines in 2001. It set a recovery target of 2032 or earlier for the stock. However, this amendment was returned to the Council by NOAA Fisheries with a request to further explore alternative rebuilding plans based on realistic expectations for future reductions in shrimp trawl bycatch, and to more fully evaluate the effects of alternatives through a SEIS.

Additionally, the Magnuson-Stevens Act requires that FMPs establish a standardized methodology to assess the amount and type of bycatch occurring in the fishery and to identify and implement conservation measures that, to the extent practicable, minimize bycatch.

Therefore, the purpose of this amendment is to:

1) Review, and redefine as needed, biological reference points and status determination criteria;

2) Establish a plan to end overfishing and rebuild the red snapper stock to a level consistent with current fishery management standards;

3) Establish a standardized methodology to collect bycatch information in the directed red snapper fishery; and

4) Evaluate the practicability of additional measures to reduce bycatch and bycatch mortality in the directed red snapper fishery.

Description of Alternatives

Biological Reference Points and Status Determination Criteria

Status determination criteria are defined by 50 CFR '600.310 to include a minimum stock size threshold (MSST), i.e., the overfished criterion, and a maximum fishing mortality threshold (MFMT), i.e, the overfishing criterion. Together with MSY and optimum yield (OY), these parameters are intended to provide fishery managers with the tools to measure fishery status and performance.

Estimates of MSY, B_{MSY} , and the rate of fishing mortality that achieves MSY (F_{MSY}) provided by the most recent peer-reviewed stock assessment (Schirripa and Legault, 1999) serve as the foundation of the alternative bundles of reference points and status determination criteria considered in this amendment for red snapper. The 1999 assessment produced a range of point estimates for MSY based on various assumptions about the stock-recruitment relationship. These assumptions were defined by varying two parameters: (1) steepness and (2) estimated maximum recruitment. These parameters are used to make assumptions about or provide quantitative estimates of the productivity of a stock. The estimated productivity level of a stock increases and decreases in response to a respective increase or decrease in the values used for these parameters in the assessment model. Data from these assessment runs are used to calculate alternative definitions of OY, MSST, and MFMT.

The preferred alternative for the biological reference points and status criteria are as follows:

Alternative 2 (Preferred): MSY for red snapper equals the yield associated with fishing at F_{MSY} , or 41.13 million pounds (MP) whole weight (wwt), assuming low maximum recruitment and an initial steepness of 0.90 for the stock-recruitment relationship.

Until recovery, the harvest for red snapper will be defined as consistent with the rebuilding strategy selected in this amendment. After achieving the rebuilding target, the OY for red snapper shall correspond to a fishing mortality rate (F_{OY}) defined as:

 $F_{OY} = 0.75 * F_{MSY} = 0.069$

Red snapper MSST shall equal: (1-M) $B_{MSY} = 2,453$ MP wwt where $B_{MSY} = 2,726$ MP wwt and M = 0.1

Red snapper MFMT is equal to: F_{MSY} .

The red snapper stock would be considered undergoing overfishing if F_{CURR} is greater than MFMT.

Plan to End Overfishing and Rebuild the Red Snapper Stock to $B_{\rm MSY}$

The cause of the overfishing and overfished status of the red snapper fishery in the Gulf of Mexico is unique to many American fisheries. This status was not only the result of fishing mortality from the directed fishery, but also due to a high level of bycatch mortality on juvenile red snapper by the shrimp trawl fishery. This non-directed fishery catches substantial numbers of juvenile red snapper as bycatch such that without some reduction in bycatch, stock assessments have projected that the stock cannot rebuild to B_{MSY} even if no harvest was allowed by the directed fishery. Therefore, to end overfishing and rebuild the red snapper stock, large reductions in bycatch mortality from the shrimp fishery need to be achieved either through technological means such as bycatch reduction devices (BRD), or through a reduction in effort by the shrimp fishery. Currently, BRDs are estimated to achieve about a 40 percent reduction in red snapper bycatch. In addition, recent analyses of the economic performance of the shrimp fishery have indicated an economic downturn that will likely cause shrimp effort to decline. Projections show that red snapper stock can rebuild within 31 years which is the longest recommended period by the NOAA Fisheries NSGs. Given the unique effect the Gulf shrimp fishery (one of the most economically important fisheries to the United States of which the Gulf of Mexico contributes over 70 percent to the total pounds landed (NOAA Fisheries, 2003a²)) has on rebuilding the red snapper, the general guidance provided by the NSGs to assist with determining the rebuilding schedule may not apply. Therefore, rebuilding strategy alternatives based on longer rebuilding periods were also explored.

The alternative for ending overfishing and rebuilding the stock are as follows:

Alternative 2 (Preferred): Maintain TAC at 9.12 MP wwt, end overfishing between 2009 and 2010, and rebuild red snapper by 2032. Review and adjust this policy, as necessary, through periodic assessments. Monitor annual landings to ensure quota is not exceeded.

Bycatch Reporting Methodology

Current regulations require selected commercial and recreational for-hire participants in the Gulf reef fish fishery to maintain and submit a fishing record on forms provided by NOAA Fisheries. Bycatch is reported for the commercial fishery via the Coastal Fisheries Logbook Program (CFLP). The Marine Recreational Fisheries Statistical Survey (MRFSS) collects fishery information including bycatch data from private recreational vessels, as well as the recreational for-hire sector. Other methodologies including expanded reporting programs and observers, are ways to increase the scope of bycatch reporting. While data on bycatch in the Gulf of Mexico shrimp fishery are important to the understanding of the recovery rate of red snapper, it is

²NDAAFisheries. 2003. Fisheries of the United States, 2002. NDAAFisheries, Silver Springs, MD 126p

beyond the scope of this amendment to include bycatch reporting methodologies for the shrimp fishery. Modifications to the bycatch reporting methodologies used in the shrimp fishery must to be addressed through an amendment to the Shrimp FMP. Currently such alternatives are being considered in Shrimp Amendment 13.

The Council chose two preferred alternatives for the commercial and for-hire fisheries. These will not replace existing methodologies over the short-term because a baseline needs to be maintained for comparative purposes.

Commercial and Recreational For-Hire Fisheries

Alternative 4 (Preferred). Develop an observer program managed by NOAA Fisheries for the reef fish fishery. NOAA Fisheries will develop a random selection procedure for determining vessels that will be required to carry observers in order to collect bycatch information. In selecting vessels, the agency will consider the suitability of the vessel for such purpose and ensure that the universe of vessels included are representative of all statistical sub-zones in the Gulf. Vessel permits will not be renewed for vessels that fail or refuse to carry observers in accordance with this process. The requirement for the observer program to be implemented is contingent on NOAA Fisheries obtaining sufficient funding for the program.

Alternative 6 (Preferred). Enhance the MRFSS by including headboats using the same sampling methodology as used for charter vessels.

Private Recreational Fishery

Alternative 1 (Preferred). No Action (status quo). Use the existing MRFSS catch and effort program to continue collecting bycatch information from the private recreational sector.

Bycatch Minimization Measures

The evaluation of the practicability of additional management measures to reduce bycatch and bycatch mortality considers the status of the stock, and the impacts of that bycatch from various fisheries. Anecdotal information suggests that the red snapper stock has improved since it was last assessed in 1999, and that red snapper bycatch mortality in the shrimp fishery has declined considerably (estimated 40 percent) due to the implementation of BRDs. The current assessment indicates that any action taken to reduce bycatch in the directed fishery would not likely effect the status of the red snapper stock. However, an assessment is due to be completed in 2004 and is expected to provide additional information on the implications of current bycatch mortality on the red snapper stock from the directed fishery.

The 2004 assessment will incorporate a great deal of new information, including five years of observer data on shrimp trawl bycatch, fishery-dependent data on observed changes in lengths of

harvested fish, and estimates of changes in age-one recruitment from the Southeast Area Monitoring and Assessment Program (SEAMAP) data. Additionally, the results of new research into red snapper stock structure in the northern and western Gulf and new estimates of discard mortality should be available to use in the assessment. This new information, combined with four years of data on the fishery under the same management regulations, is expected to provide us with a better understanding of the impacts of BRDs, the effectiveness of regulations in the directed fishery, and the possible impacts of new regulations on the red snapper stock.

The Council plans to use the results of the 2004 assessment to develop logical and defensible measures to reduce shrimp trawl bycatch and/or directed fishery discards. Shrimp trawl bycatch must be addressed in the Shrimp FMP. Options for bycatch minimization are being considered in Amendment 14 of the Shrimp FMP.

The preliminary analysis of the practicability factors indicates that there would not likely be positive biological impacts associated with further reducing bycatch in the directed red snapper fishery unless the 2004 stock assessment shows a major increase in the relative proportion of bycatch taken in the directed fishery. Many of the minimization measures considered (e.g., minimum sizes, seasonal closures, education, and an individual fishing quota for the commercial fishery) would result in short-term adverse economic and social impacts. Consequently, the Council has concluded that it would not be practicable to take action to further reduce bycatch in the directed fishery at this time based on the best available scientific information. The Council will review this decision in Amendment 18 to the Reef Fish FMP and may wish to take further actions based on the results of the 2004 red snapper stock assessment.

Major Conclusions and Areas of Controversy

The selections by the Council for preferred alternatives for biological reference points and status determination criteria, rebuilding plans, and bycatch reporting methodology reflect positive actions in long-term managing of the red snapper stock and fishery. The Council selected the most precautionary alternative presented for MSY which results in the lowest estimate of stock production relative to the other alternatives. The potential disadvantage of this alternative is forgone yield should the stock be more productive. The advantage of using a more conservative estimate of stock productivity is that the chance of over harvesting the stock diminishes. Preferred alternatives for OY and status determination criteria follow NOAA Fisheries' technical guidance for precautionary approaches to these parameters.

Red snapper stock rebuilding cannot occur without reductions of juvenile red snapper bycatch by the shrimp fishery. Projections indicate that even with a 40 percent reduction of bycatch mortality by using BRDS, the stock cannot rebuild to B_{MSY} . The preferred rebuilding plan alternative selected by the Council takes into account predicted reductions in bycatch achieved through decreases in effort in the shrimp fishery. This plan is projected to rebuild the stock by holding TAC constant at 9.12 MP to B_{MSY} by 2032.

Bycatch reporting methodologies are required for FMPs. Data collected on bycatch is important

for assessing stocks and developing appropriate management actions. The preferred alternatives selected by the Council for observers and expansion of the MRFSS survey to include headboats should enhance information needs for better management decisions. Observers improve the precision of catch and bycatch data; however, observer programs are expensive and funding would need to be identified before implementing a program. Currently, headboats are not sampled for bycatch, so adding this component of the recreational fishery to MRFSS should improve bycatch data. The Council determined that for the recreational fishery, the current MRFSS program was sufficient to obtain bycatch information.

Year	Size Limit (Inches TL)	Daily Bag Limit (Number of Fish)	Season Length (days)	Allocation (Million Pounds)
1984	13 ¹	no bag limit ²	365	
1990	13	7	365	2.97
1994	14	7	365	1.96
1995	15	5	365	1.96
1996	15	5	365	2.94
1997	15	5	330 ³	2.94
1998	15	4^4	272 ⁵	2.94
1999	15 ⁶	4	240 ⁷	4.47
2000	16	4	194 ⁸	4.47
2001	16	4	194	4.47
2002	16	4	194	4.47
2003	16	4	194	4.47

Table 1. Changes in recreational red snapper size limits, bag limits, season length, and allocation.

¹ For-hire boats exempted until 1987.
² Allowed to keep 5 undersized fish per day.
³ Fishery closed on November 27, 1997.
⁴ Bag limit was 5 fish from January through April, 1998.
⁵ Fishery closed on September 30, 1998.
⁶ Size limit was 18 inches from June 4 through August 29, 1999.
⁷ Fishery closed on August 29, 1999.
⁸ Fishing access and a second states and a second states at 12:01 cm. April 21 and also at 12:01 cm.

⁸ Fishing season opens at 12:01 a.m. April 21 and closes at 12:00 midnight October 31.

Year	Allocation (MP)	Size Limit (Inches TL)	Calendar Days Open		
1984-1989	na	13	365		
1990 ¹	3.1	13	365		
1991	2.04	13	236 ²		
1992	2.04 + emergency season	13	53+42=95 ³		
1993 ⁴	3.06	13	94		
1994	3.06	14	77		
1995	3.06	15	50+2=52 ⁵		
1996	3.06	15	$65+22=87^{6}$		
1997	3.06	15	53+20=73 ⁷		
1998 ⁸	3.06	15	42+30=72		
1999	4.65	15	45+25=70 ⁹		
2000	4.65	15	38+28=66 ¹⁰		
2001	4.65	15	56+23=79		
2002	4.65	15	64+27=91		
2003	4.65	15	67+27=94		

Table 2. Changes in commercial red snapper allocation, size limits, and season length by year.

¹ Bottom longlines prohibited within 50 fathoms west of Cape San Blas, FL, and within 20 fathoms elsewhere.

² First year that commercial red snapper fishery was closed.

³ Season re-opened April 4-May 15 with 1,000-pound trip limit.

⁴ First year of two-tiered system of trip limits; 2,000 pounds for boats with endorsements and 200 pounds for other boats with reef fish permits.

⁵ Season re-opened for 36 hours Nov 1-2. Two-tiered system of trip limits.

⁶ First year of planned spring (3.06 million pounds) and fall (for the remaining unfilled quota) seasons.

⁷ The fall season opened for the first 15 days of each month or until the quota is filled.

⁸ First year of license limitation system with trip limits of 2000 pounds for Class 1 boats and 200 pounds for Class 2 boats.

⁹ The fall season opened during the first 10 days of each month or until the quota is filled.

¹⁰ The spring and fall season opened during the first 10 days of each month or until the quota is filled.

Year	Commercial Quota	Commercial Harvest	Recreational Allocation/Quota	Recreational Harvest		
1990	3.1 MP	2.66 MP	No allocation was explicitly specified	1.24 MP		
1991	2.04 MP	2.23 MP	1.96 MP	1.94 MP		
1992	2.04 MP plus emergency season	3.14 MP	1.96 MP	3.03 MP		
1993	3.06 MP	3.02 MP	2.94 MP	5.29 MP		
1994	3.06 MP	3.25 MP	2.94 MP	4.26 MP		
1995	3.06 MP	2.95 MP	2.94 MP	3.25 MP		
1996	4.65 MP	4.35 MP	4.47 MP	3.57 MP		
1997	4.65 MP	4.79 MP	4.47 MP (quota begins)	5.41 MP		
1998	4.65 MP	4.61 MP	4.47 MP	5.76 MP		
1999	4.65 MP	4.67 MP	4.47 MP	5.51 MP		
2000	4.65 MP	4.84 MP	4.47 MP	3.92 MP		
2001	4.65 MP	4.75 MP	4.47 MP	4.52 MP		
2002	4.65 MP	4.78 MP	4.47 MP	5.32 MP (estimated)		
2003	4.65 MP	4.58 MP (preliminary)	4.47 MP	4.58 MP (estimated)		

Table 3. Commercial and recreational red snapper allocation/quota and harvest for years 1990-2003.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Full Days	Half days	Total Cal- endar Days	Total hours
1990	1-31	1-28	1-31	1-30	1-31	1-30	1-31	1-31	1-30	1-31	1-30	1-31	365		365	8,760
1991	1-31	1-28	1-31	1-30	1-31	1-30	1-31	1-24					236		236	5,664
1992	1-31	1-22#		3-30	1-14								94	1	95	2,268
1993		16-28	1-31	1-30	1-20								94		94	2,256
1994		10-28	1-31	1-27									77		77	1,848
1995		24-28	1-31	1-14							1-2#		51	1	52	1,236
1996		1-29	1-31	1-5					15-30	1-6			87		87	2,088
1997		1-28	1-25						2-15*	1-6*			69	4	73	1,704
1998		1-15*	1-15*	1-12*					1-15*	1-15*			62	10	72	1,608
1999		1-15*	1-15*	1-15*					1-10*	1-10*	1-5*		58	12	70	1,536
2000		1-10*	1-10*	1-10*	1-8*					1-10*	1-10*	1-8*	52	14	66	1,416
2001		1-10*	1-10*	1-10*	1-10*	1-10*	1-6*			1-10*	1-10*	1-3*	61	18	79	1,680
2002		1-10*	1-10*	1-10*	1-10*	1-10*	1-7*	1-7*		1-10*	1-10*	1-7*	71	20	91	1,944
2003		1-10*	1-10*	1-10*	1-10*	1-10*	1-10*	1-7*		1-10*	1-10*	1-7*	74	20	94	2,016

Table 4. Dates the red snapper commercial fishing season has been open from 1990 to 2002. * denotes a monthly opening begins and ends at noon rather than midnight. # denotes a monthly opening begins at midnight and ends at noon.