

**Scoping Document for
Amendment 33 to the
Fishery Management Plan for the
Reef Fish Resources of the Gulf of Mexico**

Commercial Reef Fish Individual Fishing Quota Program

April 2012



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INTRODUCTION

The Gulf of Mexico Fishery Management Council (Council) implemented its first individual fishing quota (IFQ) program, the red snapper commercial IFQ program, in 2007. In 2010, the establishment of this single species IFQ program was followed by the implementation of a multi-species grouper and tilefish IFQ program. In the commercial reef fish fishery, the Council's gradual departure from traditional command-and-control management measures in favor of incentive-based management such as IFQs was reinforced by its decision to appoint an Ad Hoc Commercial Reef Fish IFQ Advisory Panel (Advisory Panel) that would explore the possibility of developing an IFQ program to include all remaining reef fish species with the emphasis of looking at effort shifting, bycatch, access, and over capacity in the commercial sector. The Advisory Panel was appointed in April 2011.

The Advisory Panel met in July 2011 in Tampa, FL and offered recommendations to the Council relative to several reef fish species that are not currently managed through an IFQ program. Specifically, one of the motions approved by the Advisory Panel recommended that the Council develop a Reef Fish IFQ program for red porgy, vermilion snapper, greater amberjack, gray triggerfish, and other jacks (lesser amberjack, almaco, banded rudderfish). The motion also listed objectives to be achieved by the IFQ program, including controlling effort shifting and preventing annual catch limits (ACLs) from being exceeded, minimizing discard rates, increasing the value of the fishery, and, improving accountability through better monitoring and data collection.

Based on the Advisory Panel's recommendations, which were presented before the Council during the August 2011 Council meeting, the Council approved the following motion: "to initiate a plan amendment to incorporate the recommendations of the Ad Hoc Commercial Reef Fish IFQ Advisory Panel to establish a catch share program utilizing the proposed species including vermilion snapper, amberjacks, gray triggerfish, lesser amberjacks, almaco, banded rudderfish, as well as include red porgy. This program may be added to an existing program or stand alone, as appropriate." At the January 30 – February 3, 2012 Council meeting, the Council requested additional information on the reef fish species recommended for inclusion in an IFQ program by the Advisory Panel.

This scoping document for Amendment 33 to the Fishery Management Plan (FMP) for the Reef Fish Resources of the Gulf of Mexico was prepared in response to the Council's motions and is expected to support Council's discussions during the April 2012 meeting. Sections in this document include a purpose and need for the regulatory action under consideration, an overview of the average historical landings for relevant reef fish species, and a scope of potential actions.

PURPOSE AND NEED

The management of commercial reef fish in the Gulf of Mexico relies on two divergent approaches. While red snapper, grouper, and tilefish are managed using incentive-based mechanisms, the remaining reef fish species are still managed with traditional command-and-control measures, including trip limits and season closures.

The purpose of this amendment is to eliminate, reduce, or prevent annual quota closures, market gluts, derby fishing, price volatility, and effort shifting for vermilion snapper, greater amberjack, gray triggerfish, lesser amberjack, almaco jack, banded rudderfish, and red porgy. The needs for the proposed action include the implementation of a management approach consistent with the existing reef fish IFQ programs to further rationalize effort and reduce overcapacity¹ in the commercial reef fish fishery; and, as defined in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), achieve the optimum yield on a continuing basis, considering efficiency in the utilization of fishery resources, minimizing bycatch, and promoting the safety of human life at sea.

¹**Rationalization** is defined as “a management plan that results in an allocation of labor and capital between fishing and other industries that maximizes the net value of production.” (Fina 2003)

Overcapacity “is defined as the difference between harvesting capacity and a management target catch level (TCL) given the stock conditions associated with that TCL.

Excess capacity is defined as the difference between harvest capacity and actual harvests” (Terry and Kirkley 2006)

SCOPE OF ACTIONS

Reef Fish Amendment 33 is expected to include a wide array of actions. Management measures to consider could include the selection and design of an effort and harvest management scheme, the inclusion of several reef fish species in the management scheme selected, the addition of red porgy to the Reef Fish FMP, and, the allocation of fisheries resources between the commercial and recreational sectors.

I. Proposed Species Inclusion

The context for each species recommended by the Advisory Panel for inclusion in a management effort program is outlined here for consideration of its appropriateness for inclusion in an IFQ program. The Advisory Panel's objectives for a reef fish IFQ program included: controlling effort shifting and preventing ACLs from being exceeded; minimizing discard rates; increasing the value of the fishery; and improving accountability (monitoring and data collection).

For each species or species group, commercial and recreational landings are provided alongside a timeline of relevant management measures that limited access: the commercial permit moratorium and red snapper IFQ program. Indirect impacts of these previous measures could include effort shifts toward other species. Care should be taken in interpreting landings subsequent to implementation of management measures in the following figures, as numerous other factors may have affected effort. Nevertheless, this information is compiled to facilitate consideration of each species or species group for its potential inclusion in a limited access privilege program (LAPP).

Red Porgy

Red porgy is primarily landed in north Florida by hook-and-line fishermen, whereas off the west coast of Florida, pink porgy is more common (G. Bell, pers. comm.). Red porgy is caught among other finfish species, rather than being a targeted fishery. Its ex-vessel value averages \$1.05/lb.²

The addition of red porgy to the Reef Fish Fishery Management Plan (FMP)³ constitutes a prerequisite to its potential inclusion in any future management action because red porgy is not currently managed by the Council. Such an addition would trigger several Magnuson-Stevens Act requirements including: setting the required stock ACL and accountability measures, and determining thresholds such as overfishing limits. Specifically, the addition of red porgy to the Reef Fish FMP would require that the Scientific and Statistical Committee determine an acceptable biological catch and that the Council set or address the following: annual catch limit, accountability measures, overfished and overfishing levels, maximum sustainable yield, optimum yield, essential fish habitat, and bycatch reporting.

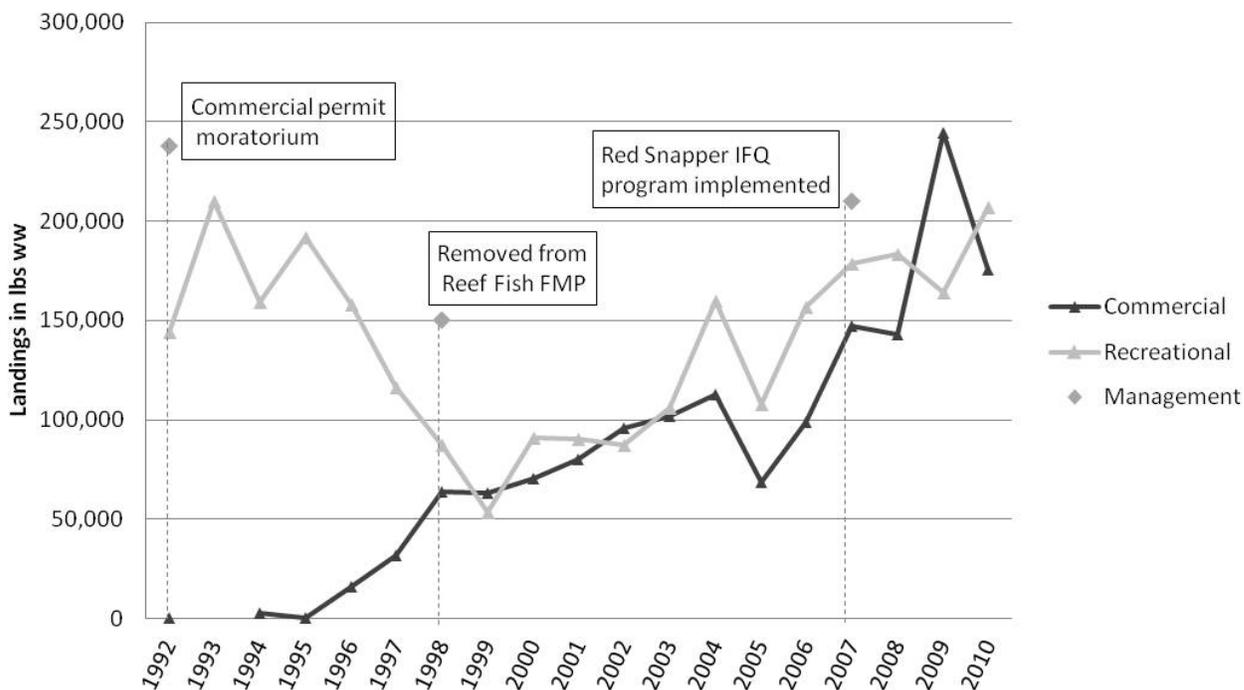


Figure 1. Red porgy landings and reef fish management measures. Source: Recreational landings from SEFSC ACL Dataset (aclspec_rec81_11wv4_09nov11); commercial landings from http://www.st.nmfs.noaa.gov/pls/webpls/MF_ANNUAL_LANDINGS.RESULTS

² Average price of red porgy from 2000-2010; <http://www.st.nmfs.noaa.gov/st1/commercial/index.html>

³ In the original Reef Fish FMP, implemented November 1984, red porgy were part of the list of species included in the fishery but not the management unit. That list was for data collection purposes only. Amendment 1, implemented January 1990, added red porgy to the management unit. Amendment 15, which was implemented in January 1998, removed all sea basses, grunts and porgies from the FMP.

Vermilion Snapper

The majority of the commercial catch of vermillion snapper is from the northeastern Gulf between Panama City and the Mississippi River. Until 1984 essentially all landings were made in Florida, particularly in the panhandle area (GMFMC 1990). Nearly all of the commercial catch is caught by hook-and-line. Vermilion snapper's ex-vessel value averaged \$2.08/lb⁴ for the years 2000-2010, but the value varies according to the size of the fish. Of all the species proposed for inclusion in a new LAPP, vermillion has the highest ex-vessel price. This higher ex-vessel price makes it more desirable for commercial fishermen, although it continues to be targeted as part of a multi-species fishing strategy. Commercial regulations for vermillion snapper include a 10-inch total length (TL) minimum size; there is no trip limit or closed season.

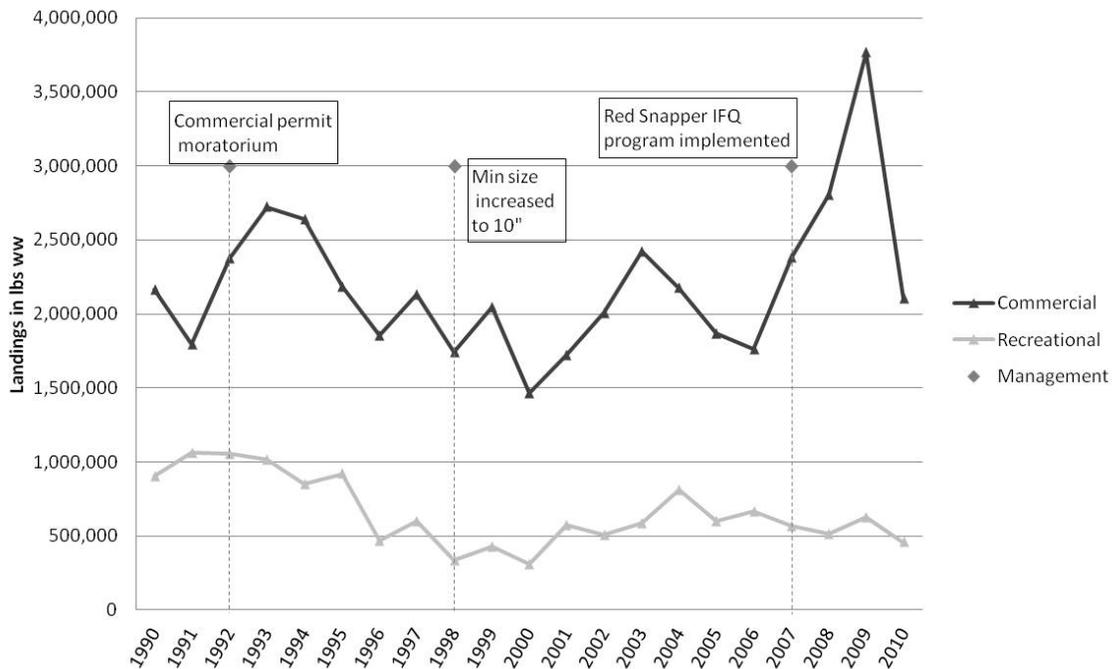


Figure 2. Commercial and recreational landings for vermillion snapper, with commercial reef fish management measures. Source: SEFSC ACL Dataset.

⁴ Average price calculated from querying 2000-2010 vermillion snapper landings for the Gulf at <http://www.st.nmfs.noaa.gov/st1/commercial/index.html>

Jacks

Almaco jack, banded rudderfish, and lesser amberjack are combined together into the species grouping 'jacks' and assigned a single ACL (GMFMC 2011). Landings data is also aggregated for these three species within the Accumulated Landings System (ALS) system. The three species are principally caught by hook-and-line. In the last 10 years, Florida and Louisiana have landed the majority of these species. The classification of these jacks for landings data collection has been problematic in the past, where some of these species have overlapped with the 'unclassified' jacks, or with greater amberjack. This is especially true prior to 1992, so care must be taken in examining the landings over time.

The average ex-vessel prices for the years 2000-2010 are \$.94/lb for almaco jack; \$.79/lb for banded rudderfish; and \$1.13/lb for lesser amberjack. Commercial management regulations for banded rudderfish and lesser amberjack include a 14-inch to 22-inch FL slot limit. There is no trip limit or closed season. A single ACL was set for the three species at .312 mp whole weight (ww), and an ACT at .278 mp ww. No allocation has been established.

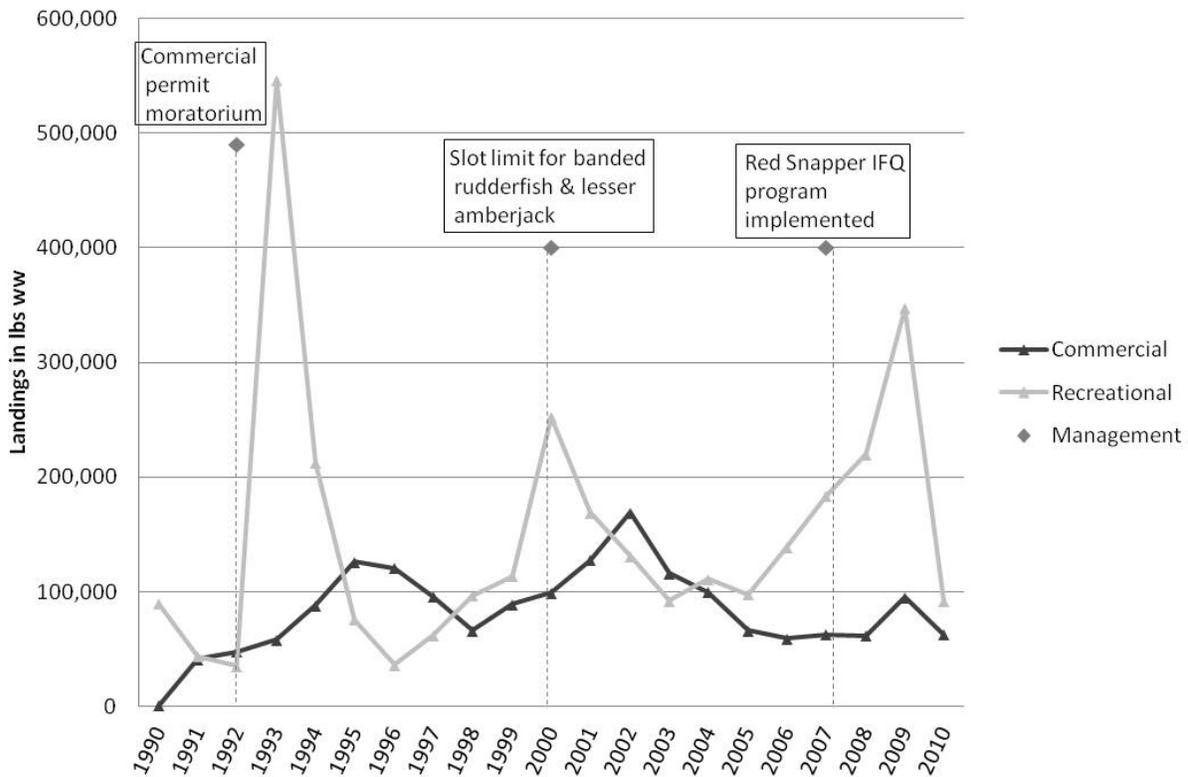


Figure 3. Commercial and recreational landings for three species of jacks, with commercial management measures including limited access programs. Source: SEFSC ACL Dataset.

Greater Amberjack

Nearly all (90%) greater amberjack is caught by hook-and-line. Florida lands the most, although its proportion of the commercial catch has decreased in recent years alongside landings in Louisiana and Texas. The average value was \$1.01/lb for the years 2000-2010.⁵ Commercial regulations mandate a 36-inch FL minimum size and a March – May closed season. Amendment 30A established both an ACL and interim allocation at 27% commercial: 73% recreational. Amendment 35, currently under development, will likely implement a 2,000 lbs trip limit and reduce the ACL for the commercial and recreational sectors. The 2011 and 2012 commercial quotas were reduced to account for overages in 2010 and 2011, respectively. On March 29, 2012, NOAA Fisheries published a fishery bulletin indicating that the commercial sector would remain closed for the remainder of the fishing season.

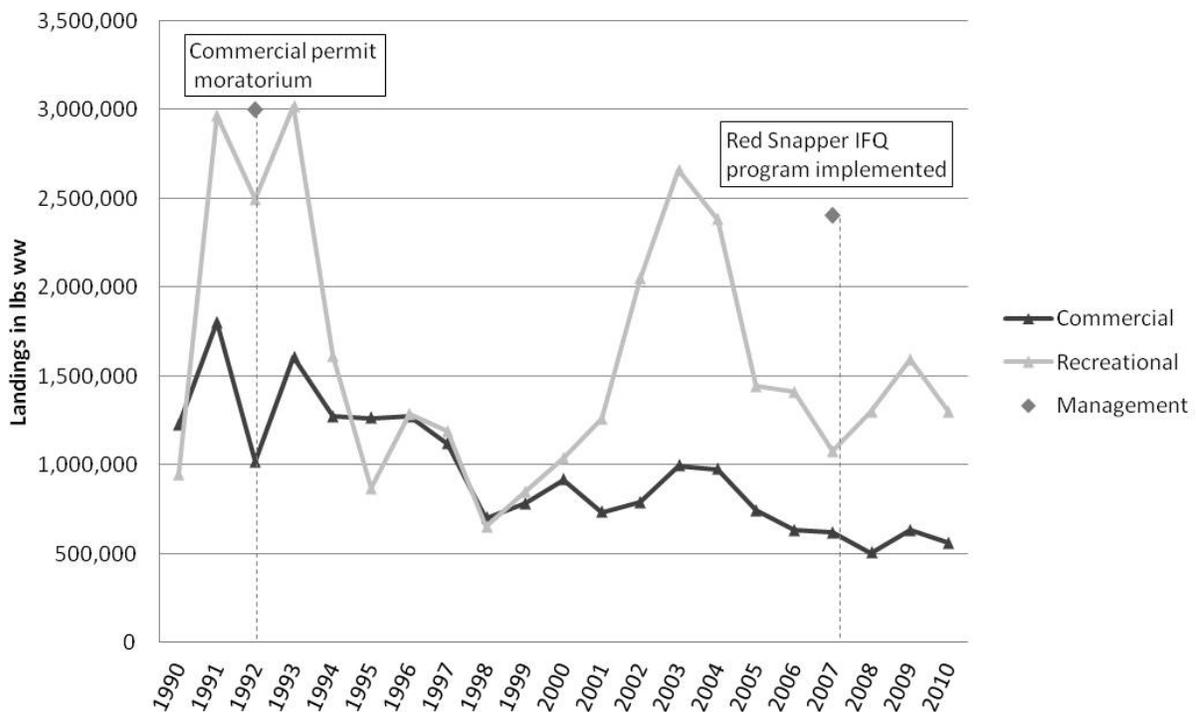


Figure 4. Commercial and recreational landings for greater amberjack, with commercial limited access management measures. Source: For 1990-2009, recreational data from Table 4.1.3.1 and commercial data from Table 3.2.3 (SEDAR Update 2011). Recreational data (2010) from Larkin, SERO; commercial data (2010) from the Fishery Bulletin.

⁵ Average price calculated from querying 2000-2010 greater amberjack landings for the Gulf at <http://www.st.nmfs.noaa.gov/st1/commercial/index.html>

Gray Triggerfish

Most gray triggerfish is caught by hook-and-line in the eastern Gulf of Mexico. The average value was \$1.03/lb for the years 2000-2010.⁶ Commercial regulations include a 14-inch FL minimum size; there is no trip limit or closed season. Amendment 30A established an ACL and an implicit allocation set at 21% commercial: 79% recreational.

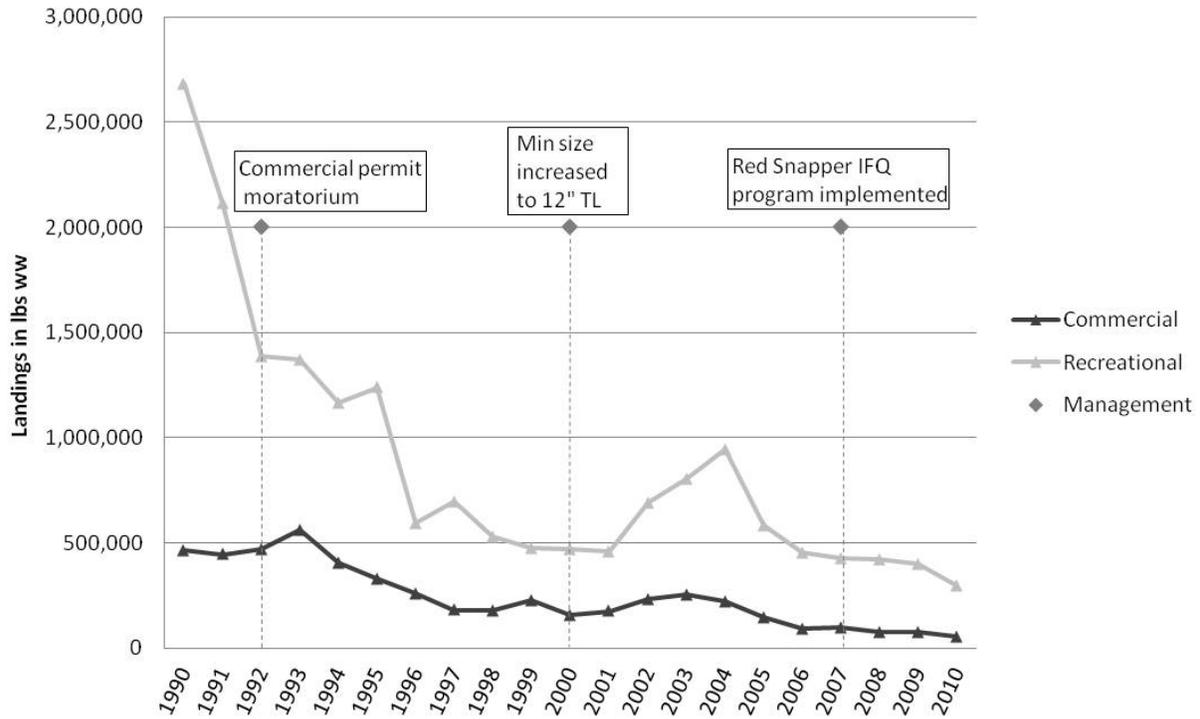


Figure 5. Commercial and recreational landings for gray triggerfish, with commercial management measures including limited access programs. Source: SEFSC ACL Dataset.

Average commercial and recreational landings for the reef fish species under consideration are provided in Table 1. Gray triggerfish landings reported include unclassified triggerfish. The jack complex includes almaco jack, banded rudderfish, and lesser amberjack. Species misidentification issues, especially for the commercial sector, could be a concern for reported landings data between 1986 and 1991.

⁶ Average price calculated from querying 2000-2010 gray triggerfish landings for the Gulf at <http://www.st.nmfs.noaa.gov/st1/commercial/index.html>

Table 1: Average landings (lbs whole weight) for species without allocations in the Gulf of Mexico.

Species	1986-2009		1992-2009	
	Commercial	Recreational	Commercial	Recreational
Gray triggerfish	240,681	963,920	229,838	728,048
Greater amberjack ²	1,095,140	2,013,101	920,794	1,566,014
Jacks complex	84,656	141,287	91,713	162,459
Vermilion snapper	2,108,258	683,274	2,226,113	634,388
Red porgy	78,941	196,560	78,941	135,934
Species	2001-2009		2006-2009	
	Commercial	Recreational	Commercial	Recreational
Gray triggerfish	151,865	575,686	85,334	424,999
Greater amberjack ²	735,971	1,686,427	597,013	1,346,262
Jacks complex	95,396	165,735	69,830	222,482
Vermilion snapper	2,323,679	605,253	2,679,326	591,932
Red porgy	121,402	137,146	158,392	170,625

Source: Red Porgy from NMFS website; other species from SEFSC-SERO (2011)

Although an IFQ program may work well for some stocks in particular settings, IFQ programs may not be appropriate in all places at all times. Each species should be considered for its appropriateness in addressing identified problems. This section compares the information above across the species, and analyzes their applicability in addressing the identified goals and objectives of an IFQ program.

With implementation of the red snapper and grouper/tilefish IFQ programs, it is likely that fishermen with limited IFQ shares and allocation holdings would shift fishing effort towards other species, including reef fish species under consideration in this action. The species proposed for inclusion are part of a multi-species fishing strategy employed by many hook-and-line commercial vessels. Rather than target a particular species, fishermen catch several reef fish species. In some years, some of the species may be more abundant than others. This fishing strategy allows for such unpredictable fluctuations in species composition and promotes flexibility of commercial fishermen. This is an important feature for sustainable fishing: rather than targeting a primary species directly, fishermen catch a broad assortment of species. A recent paper by Garcia et al. (2012) supports the idea that a multi-species fishing strategy is more sustainable and aids in minimizing ecosystem impacts than selective targeting of single species.

Red snapper, grouper, and tilefish are targeted species with higher ex-vessel prices than those reef fish species under consideration here. When shares were distributed, those who received larger initial apportionments were likely targeting directly those stocks. Those who engage in a multiple species strategy have lower landings of individual species, although their overall poundage of reef fish species may be great. The species considered here are not targeted species and thus, assigning quotas to them may be more complex to manage by species than those species currently under IFQ programs.

II. Commercial and Recreational Allocations

Among the species under consideration, greater amberjack and gray triggerfish are the only ones with an allocation between the commercial and recreational sectors. For greater amberjack, the prevailing commercial and recreational allocations are 27% and 73%, respectively. In Reef Fish Amendment 30A, gray triggerfish was implicitly allocated between the sectors as 79% recreational and 21% commercial. However, the consideration of limited access privilege programs such as catch shares as potential alternatives for the management of the reef fish species and groups mentioned above would require clearly defined resource allocation between the commercial and recreational sectors. Thus, this amendment is expected to include management actions to determine the allocation of vermilion snapper, jacks complex (excluding greater amberjack), and red porgy.

The determination of these commercial and recreational allocations would follow the principles and guidelines for allocation developed by the Council. To illustrate the relative magnitude of commercial and recreational landings for various time intervals, Table 2 provides average percentages landed by each sector.

Table 2: Proportion of landings by sector for selected species without allocations in the Gulf of Mexico.

Species	1986-2009		1992-2009	
	Commercial	Recreational	Commercial	Recreational
Jacks complex	37.5	62.5	36.1	63.9
Vermilion snapper	75.5	24.5	77.8	22.2
Red porgy	28.7	71.3	36.7	63.3
Species	2001-2009		2006-2009	
	Commercial	Recreational	Commercial	Recreational
Jacks complex	36.5	63.5	23.9	76.1
Vermilion snapper	79.3	20.7	81.9	18.1
Red porgy	47.0	53.0	48.1	51.9

III. Effort and Landings Management

The motion approved by the Gulf Council to initiate Reef Fish Amendment 33 was explicit in indicating the type of management measure to consider. The Advisory Panel was also specific in the management approach recommended to the Council. Both indicated that this amendment should develop an IFQ program for the management of vermilion snapper, amberjacks, gray triggerfish, lesser amberjacks, almaco jack, banded rudderfish, and, red porgy. Nevertheless, the development of this regulatory action would benefit from the consideration of other practicable management approaches, such as endorsements. Measures such as the elimination of latent commercial permits are not considered here. In the Gulf of Mexico, there is no species-specific reef fish permit for the commercial sector. The revocation of a permit because the permit holder's harvest of a given species (or group of species) did not meet a predetermined landings threshold would therefore be difficult to justify and could cause undue economic hardship.

Permit Endorsement

An endorsement to the commercial reef fish permit would grant recipients, under specific conditions, the right to harvest one or several pre-determined reef fish species in the Gulf of Mexico. Endorsement provisions typically include a maximum allowable harvest per trip. Examples of permit endorsements in the Gulf include the two-tiered red snapper endorsement later replaced by an IFQ program; the former gillnet and fish trap endorsements; and the grouper longline endorsement. An endorsement to the reef fish permit would not unduly penalize reef fish permit holders with limited landings for the species in question who elected to specialize in other reef fish fisheries.

Permit endorsements constitute a direct approach to limiting the number of participants in a fishery but their long term effectiveness in managing effort is generally limited. In the short run, fishing effort could be decreased, especially if a large proportion of fishermen did not qualify for the endorsement. However, remaining participants are expected to gradually increase their effective fishing effort either through vessel, crew, and equipment upgrades or via additional or longer fishing trips; creating or intensifying derby conditions and possibly leading to shorter fishing seasons. Due to the limited long term impact on fishing effort and derby conditions, the permit endorsements are not expected to noticeably improve market conditions for the portion of the commercial reef fish fishery considered in this amendment.

Issues:

- Species-specific endorsement or single endorsement for all the species considered
- Selection of a minimum harvest requirement; qualifying base years
- Trip limits
- Incidental catch provisions
- Issues with a multi-species catch mix matching the IFQ holdings of the vessel (discards; do you want to make a species group for several or all of these species?)

Individual Fishing Quota

The establishment of an incentive-based management program such as an IFQ is anticipated to reduce overcapitalization in the fleet, extend the fishing season and lower operating costs by affording IFQ participants more flexibility in their input choices and trip planning. An IFQ program is also expected to improve market conditions through a steadier supply of fresh fish, increased ex-vessel prices, and improved safety at sea. The magnitude of expected effects of an incentive-based management program depends in large part on the program design. Main design elements to consider include program duration, initial apportionment method, transferability provisions, monitoring, and enforcement provisions. For multi-species programs, flexibility measures should be included to facilitate balancing catches with quotas held. Design characteristics including the exclusivity, durability, transferability, security, flexibility, and divisibility of the rights or privileges will collectively determine the “desirability” or quality of the property right or privilege granted to program participants (Scott 1999). For incentive adjusting management instruments such as IFQs, individual shares are commonly expressed in percentage of the quota or ACL. Annual harvest privileges (or annual allocations) are expressed in pounds of fish. In a multi-species fishery, program designers may either elect to implement a series of single species IFQs or establish a multi-species program.

The rationalization of effort, i.e., the mitigation of overcapacity problems, constitutes one of the benefits expected from the implementation of an IFQ program. As IFQ shares and annual harvest privileges are traded, marginal and less efficient operations are expected to exit the fishery. The anticipated effort consolidation may impact employment in fishing communities. IFQ programs are expected to impact overall market conditions by eliminating seasonal product gluts and ensuring a steadier supply of fresh fish leading to higher prices; improving product quality and altering product composition (increased percentage of fresh product); and lowering fishermen’s operating costs through increased efficiency (optimal trip length and input selection). For fishing operations, the cumulative effect of these impacts is a net gain in profitability. IFQ programs eliminate incentives to race for fish and thus are expected to improve safety at sea and working conditions. Potential effects of IFQ programs have been discussed or reviewed by several authors, including, Copes (1986), Arnason (1993), McCay (1995, 2004), Sutinen (2001), Pascoe et al. (2002), Costello and Deacon (2007), Lowe and Carothers (2008), Weninger (2008), and Pinkerton and Edwards (2009).

Issues

In response to the Advisory Panel’s preference for an IFQ program, the Council elected to proceed with the development of a program that would be consistent with the red snapper and grouper/tilefish programs. The Advisory Panel further recommended that the grouper/tilefish program be used as a template for the design of the program to be developed. All design elements included in Amendment 29 to the Reef Fish FMP, with the exception of the trip allowance and the IFQ finance alternatives, are to be considered in this regulatory action.

Design elements to consider include:

- Definition of Substantial Participants
- Eligibility for Initial IFQ Shares
- Initial Apportionment of IFQ Shares

- IFQ Share Definitions
- Multiuse Allocation
- Transfer Eligibility Requirements
- Caps on IFQ Share Ownership
- Caps on IFQ Allocation Ownership
- Adjustments in Annual Allocations of Commercial ACL
- Establishment and Structure of an Appeals Process
- Use it or Lose it Policy for IFQ Shares
- Cost Recovery Plan
- Approved Landing Sites

As mandated by the Magnuson-Stevens Act, the multi-species IFQ program in development would be subject to a referendum.

The species proposed for inclusion in a new IFQ program are at different stages of regulatory control, meaning that some will require more regulatory measures than others prior to inclusion in a LAPP. This might be a consideration for including or omitting a stock. Of all the species proposed to be included under a new IFQ program, red porgy would require the most administrative and management steps, as it must first be added to the FMP and assigned an allocation and an ACL. Currently, there are no federal regulations for commercial harvest of red porgy. In addition, the consideration of management measures addressing resource allocation between the commercial and recreational sectors may unduly add to the complexity of the regulatory action under consideration. In terms of ease of integration into an IFQ program, then, greater amberjack and gray triggerfish, which are already allocated between the commercial and recreational sectors, would require the fewest regulatory steps.

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