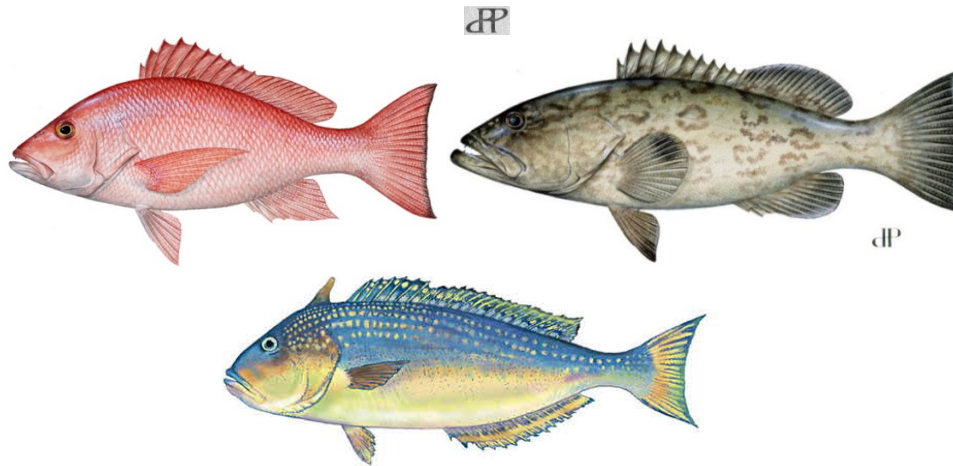


Modifications to Commercial Individual Fishing Quota Programs



Draft Amendment 36C to the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico

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ABBREVIATIONS USED IN THIS DOCUMENT

ACL	annual catch limit
Council	Gulf of Mexico Fishery Management Council
DWG	deep-water grouper
GG	gag (grouper)
GT-IFQ	grouper-tilefish individual fishing quota
Gulf	Gulf of Mexico
gw	gutted weight
IFQ	individual fishing quota
NMFS	National Marine Fisheries Service
PP	public participant
RG	red grouper
RS-IFQ	red snapper individual fishing quota
SERO	Southeast Regional Office
SWG	shallow-water grouper
TF	tilefish

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CHAPTER 1. INTRODUCTION

1.1 Background

There are two commercial individual fishing quota (IFQ) programs in the Gulf of Mexico (Gulf). The red snapper IFQ (RS-IFQ) program began on January 1, 2007 (GMFMC 2006), and the grouper-tilefish IFQ (GT-IFQ) program began on January 1, 2010 (GMFMC 2008). The programs were implemented to reduce overcapacity in the commercial harvest of red snapper, grouper, and tilefish, and to the extent possible, the problems associated with derby fishing conditions.¹ As mandated by the Magnuson-Stevens Fishery Conservation and Management Act, the Gulf of Mexico Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) collaboratively conducted a 5-year review of the RS-IFQ program (GMFMC and NMFS 2013), which was formally approved at the April 2013 Council meeting, and a 5-year review of the GT-IFQ program (GMFMC and NMFS 2018), which was formally approved at the April 2018 meeting.² The next review has begun and will assess both the RS-IFQ and GT-IFQ programs together.

The 5-year reviews concluded that each IFQ program has had moderate success in reducing overcapacity. The 5-year reviews also concluded that the programs have been successful in providing fishermen with the opportunity to harvest and land red snapper, grouper, and tilefish year-round, provided they can obtain the necessary allocation (GMFMC and NMFS 2013, 2018). Further, safety-at-sea has increased and annual fatalities related to fishing have declined. Therefore, the Council indicated that because derby fishing has been eliminated through the IFQ programs, this could be removed as a program goal.

The Council has evaluated potential modifications to the commercial IFQ programs since completion of the RS-IFQ Program 5-year Review, and the Council took final action on Amendment 36A at its April 2017 meeting (GMFMC 2017). Amendment 36A expanded the hail-in requirement to all commercial reef fish vessels landing any reef fish species, returned shares held in non-activated accounts to NMFS, and provided the Regional Administrator the authority to withhold IFQ allocation at the beginning of a year in which a quota reduction is to occur. Amendment 36B is currently under development, and considers requiring IFQ shareholders to possess a commercial reef fish permit. Amendment 36C addresses additional modifications to the IFQ programs to reflect changes in the fishery since implementation of the IFQ programs.

The IFQ programs have fundamentally changed the way the commercial reef fish fishery is prosecuted, including fishing behavior and relationships among those involved in the fishery. This is especially true for red snapper, which have become more common in the eastern Gulf under the red snapper rebuilding plan. At times, this has led to tension between the goal of reducing overcapitalization and ensuring multi-species reef fish fishermen are able to obtain quota for IFQ-managed species, as fishermen must have sufficient allocation in order to land the respective IFQ-managed species. When reef fish permitted vessels without IFQ allocation encounter IFQ-managed species while fishing, they are required to discard those fish or obtain

¹ Appendix A provides the goals of the programs from the respective amendments implementing each IFQ program.

² The conclusions of the reports are provided in Appendix B.

additional allocation. Further, the structure of the IFQ programs has allowed for the emergence of new participation roles such as brokers, who trade (buy and sell) allocation and shares, but may not land IFQ species.

To address some of the changes resulting from the IFQ programs, the Council intends to modify the program using quota set-asides to assist small participants and new entrants, and to reduce discards. In addition, the Council intends to increase access to shares to actively fishing eligible commercial fishermen. The GT-IFQ program 5-year review concluded that fostering access for new entrants would be consistent with the program objectives, as new entrants are often participants in the fishery, e.g., crew and hired captains who do not own shares but could buy allocation. The review suggested consideration of loan programs, share redistributions, and quota banks to provide access to quota (GMFMC and NMFS 2018).

1.2 Purpose and Need

The purpose of this action is to assist small participants and new entrants to the IFQ programs, to reduce discards, and to increase access to shares to actively fishing eligible commercial fishermen.

The need is to modify the IFQ programs to reflect changes in the fishery since implementation of the programs; to address social and economic issues that have affected fishing communities and participation in the fisheries; to prevent overfishing; to achieve, on a continuing basis, the optimum yield from federally managed fish stocks; and to rebuild the red snapper stock.

1.3 Overview and Structure of the IFQ Programs

The RS-IFQ and GT-IFQ programs are both managed using a common online system. This means changes affecting this system for one program are likely to affect the other program as well. Both IFQ programs use shares and allocation to distribute and monitor fishing quotas. Shares for each species or species group (share category) represent a percentage of the commercial quota for that share category, such that 100% of shares represent the total commercial quota for a given IFQ managed species or share category. These shares are durable; that is, they may remain with the shareholder year after year unless transferred to another shareholder account or are revoked, limited, or modified by NMFS. Allocation refers to the pounds of quota represented by the shares (percent of quota) held by a shareholder and is distributed to shareholder accounts by the first of each year or during the year if an in-season quota increase occurs. Allocation may only be used in the year for which it was distributed; remaining annual allocation is removed from all accounts at the end of the year.

Shares and allocation can be transferred among IFQ program participants. The transfer of shares changes ownership of those shares and the transfer of allocation is a one-time transaction for the right to catch the quantity of pounds sold, often referred to as “leasing.” NMFS does not define leasing; when allocation is moved between accounts, it is called an allocation transfer. Leasing is a term used by fishermen, the public, and academics to refer to the broader transaction between IFQ program participants: both transferring allocation through the online IFQ system and the private financial transaction in which the entity receiving the allocation pays a price per

pound of transferred allocation (Pinkerton and Edwards 2009). Appendix C contains a glossary of terms used by NMFS in the IFQ programs.

Example: [shares] x [quota] = pounds of allocation

Shares = percentage of the total quota.

Allocation = pounds of the total quota represented by the shares.

Year 1

A shareholder has 3% of shares.

Quota is 1.0 mp.

The shareholder receives 30,000 lbs of allocation at beginning of year 1.

Year 2

The next year, the shareholder still has 3% of shares.

Quota increases to 1.5 mp.

The shareholder receives 45,000 lbs of allocation at beginning of year 2.

Year 3

During year 2, the shareholder sells 1% of shares (he now has 2% of shares).

Quota increases to 2.0 mp.

The shareholder receives 40,000 lbs of allocation at beginning of year 3.

Although the RS-IFQ and GT-IFQ programs were established through separate amendments and IFQ shares were initially distributed independently for each program, both programs use the same web-based monitoring and reporting system. Therefore, the same IFQ accounts are used to participate in both programs (i.e., a fisherman has one IFQ account that can be used for both the RS-IFQ and GT-IFQ programs). For example, in 2016, of the 749 accounts that held shares, 278 (37%) held both RS and GT-IFQ shares (J. Stephen, Southeast Regional Office, pers. comm.), and since implementation of the GT-IFQ program on January 1, 2010, a majority of vessels that land red snapper also land grouper-tilefish species, and vice versa (Table 1.3.1). In addition, both programs follow the same regulations for landing notifications (hail-ins), offloading, cost-recovery fees, and account status determinations (e.g., active or inactive). Thus, the actions in this amendment address both IFQ programs.

Table 1.3.1. Overlap between vessels landing red snapper and grouper-tilefish.

Year	# Vessels landing GT	% Vessels landing GT also landing RS	# Vessels landing RS	% Vessels landing RS also landing GT
2010	452	78%	384	91%
2011	440	75%	362	91%
2012	449	77%	371	94%
2013	414	81%	368	91%
2014	434	83%	401	90%
2015	446	85%	415	91%
2016	441	87%	430	89%
2017	453	87%	449	87%
2018	455	91%	450	91%

Source: Tables 7 and 9 for grouper-tilefish vessels (NMFS 2019b); Table 5 for red snapper vessels (NMFS 2019a).

While the RS-IFQ program includes a single stock, 13 reef fish species are currently managed under the GT-IFQ program under five share categories. Gag and red grouper represent their own share categories, and the remaining species are managed as multi-species share categories (Table 1.3.2). The deep-water grouper (DWG) share category includes four species; the shallow-water grouper (SWG) category includes four species; and the tilefish (TF) category includes three species. Additional flexibility is provided to allow some species to be landed under the allocation of another share category. A proportion of gag (GG) and red grouper (RG) allocation may be designated annually as multi-use and converted to gag multi-use and red grouper multi-use allocation. The multi-use allocation is determined based on a formula utilizing the commercial quota, annual catch limits, and the status of the stock. If either stock is under a rebuilding plan, the percentage of the other species multi-use allocation will equal zero. Red grouper multi-use allocation can be used to harvest gag once all gag and gag multi-use allocation in an account has been harvested or transferred out of the vessel and associated shareholder account, and vice versa. Scamp are designated as a SWG species, but may be landed using DWG allocation after all SWG allocation in an account has been harvested or transferred out of the vessel and associated shareholder account. Similarly, warsaw grouper and speckled hind are designated as DWG, but may be landed using SWG allocation after all DWG allocation in an account has been harvested or transferred out of the vessel and associated shareholder account. For all multi-use or flexibility measures, the system determines the allocation category automatically. In each of the three multi-species share categories, one species comprised the majority of the landings: yellowedge grouper for the DWG category; scamp for the SWG category; and golden tilefish for the TF category (NMFS 2019b).

Table 1.3.2. Share categories for species managed in the GT-IFQ program.

Multi-species share category	Share category Abbreviation	Species Included
Deep-water grouper	DWG	Snowy grouper Speckled hind Warsaw grouper Yellowedge grouper
	GG	Gag
	RG	Red grouper
Shallow-water grouper	SWG	Black grouper Scamp Yellowfin grouper Yellowmouth grouper
Tilefish	TF	Blueline tilefish Tilefish (golden) Goldface tilefish

IFQ Program Accounts

The Southeast Regional Office (SERO) online IFQ system houses both the RS-IFQ and GT-IFQ programs. Participants log into one shareholder account that accesses both programs, and the same account can hold shares and allocation from both programs. Participants in each program are determined annually through the account activity in each program: holding shares, holding allocation, or landing species.

There are three main account types in the SERO IFQ system: shareholder, vessel, and dealer accounts. Shareholder accounts may hold shares and allocation or just hold allocation. Vessel accounts must be associated with shareholder accounts and may hold allocation; they do not hold shares. A vessel account must be linked to a commercial reef fish permit. Because a reef fish permit is required to harvest IFQ species, the IFQ system will deactivate any vessel account without an associated reef fish permit. Dealer accounts are associated with federal dealer permit holders. Allocation must be transferred from a shareholder account to a vessel account, prior to a dealer completing a landing transaction through a dealer account.

Each shareholder account is composed of a unique set of entities and no two accounts are composed of the same set of entities. A unique entity may be a single person or business, or a combination of people and/or businesses. For any business that is part of a shareholder account, NMFS collects the ownership information for that business and the percentage of the business owned by each individual. If a business is owned in part or in total by another business, NMFS collects the ownership information of all parent companies. Owners/shareholders of a business and the percentage held by such an individual may change over time. Any time a change (e.g., ownership, percentage owned, address) is made in ownership within a business, the business must inform NMFS. NMFS tracks owners/shareholders of businesses throughout time using

start and end dates for each change submitted to NMFS. This information is critical to ensuring that no one individual exceeds the share cap for any one share category.

Public Participant (PP) Accounts

For the first 5 years of each program, only those entities that possessed a valid or renewable Gulf commercial reef fish permit were eligible to receive shares and allocation. During those first 5 years, shareholder accounts that no longer had a valid Gulf commercial reef fish permit could maintain or decrease their shares or allocation, but could not obtain additional shares or allocation, nor harvest IFQ species. As of January 1, 2012, for the RS-IFQ program, and January 1, 2015, for the GT-IFQ program, any U.S. citizen or permanent resident is eligible to participate in the respective program as a shareholder.

For the purpose of this document, entities that do not have an associated Gulf commercial reef fish permit while holding IFQ shares or allocation are termed public participants (PP). Thus, all shareholder accounts without a reef fish permit are called PP accounts. These PP accounts may include accounts that were once associated with a Gulf commercial reef fish permit (e.g., initial recipients of shares). As explained above, a shareholder account may hold RS-IFQ shares, GT-IFQ shares, or both types of shares.

PP accounts can be divided into two categories: those that participated in the program prior to the first 5 years (i.e., accounts that previously held Gulf commercial reef fish permits) and those that were created after the first 5 years. Since PP accounts are determined by the permit association and permits can be obtained at any point during the year, the number of PP accounts may fluctuate throughout a year. For the purpose of this amendment, PP accounts are determined by the permit status throughout the year. If an account was associated with a permit at all during the year, it was not considered a PP account for that year. Figure 1.3.1 compares the number and percentage of all shareholder accounts that were associated with a permit (non-public) and those not associated with a permit (public, or PP).



Figure 1.3.1. Public (PP, no permit) and non-public (permit) IFQ shareholder accounts. The figure on the left provides the number of accounts, while the figure on the right provides the percentage of all accounts.

Related Accounts

An entity may be associated with more than one IFQ shareholder account. IFQ shareholder accounts with at least one entity in common are called related accounts. While no two IFQ accounts have the same set of entities, one entity may be associated with multiple IFQ accounts. For example, John Smith may hold an account, and John Smith and Jane Smith may hold another account. These accounts are considered related as John Smith is involved in both accounts. Similarly, if John Smith is an owner of John Smith, Inc., that account is also related to the John Smith account and the John Smith and Jane Smith account. Likewise, an account may be held by John Smith, Inc. and another account is held by Smith LLC. Both John Smith, Inc. and Smith LLC may have one or all owners in common, and therefore are related accounts. Just as the owners or shareholders of businesses may change, relations between accounts may also change over time. For example John Smith may have held shares in ABC, Inc. in 2010, but not in 2014. This would mean that the ABC, Inc. account was related to the John Smith account in 2010, but not in 2014.

CHAPTER 2. ACTIONS AND ALTERNATIVES

2.1. Action 1 – Distribution of Reclaimed Shares

Alternative 1: No Action. Do not distribute reclaimed shares, including the shares reclaimed through Amendment 36A or Action 2 of Amendment 36B.

Alternative 2: Distribute in inverse proportion the reclaimed shares held by the National Marine Fisheries Service (NMFS) among accounts with shareholdings of each share category within one month of the effective date for the final rule implementing this amendment.

Alternative 3: Equally distribute reclaimed shares held by NMFS among accounts with shares that represent no more than 500 lbs of allocation, for each share category to shareholders within one month of the effective date for the final rule implementing this amendment.

Alternative 4: Distribute to a non-profit, third-party administered quota bank the reclaimed shares with oversight from NMFS, the Gulf of Mexico Fishery Management Council (Council), and other involved parties. The quota bank would retain the shares and distribute the allocation associated with the shares each year.

Discussion:

Action 1 would redistribute the shares held in non-activated accounts that were reclaimed by NMFS following implementation of Amendment 36A (GMFMC 2017) and shares that may be reclaimed through Amendment 36B, which is currently under development. Non-activated accounts were those that were never logged into since the creation of the current system in 2010. Currently, red snapper individual fishing quota (RS-IFQ) and grouper-tilefish IFQ (GT-IFQ) shares from non-activated accounts are held by NMFS and have not been redistributed. The Council deferred the decision addressing what to do with the shares, moving the action to Amendment 36B, then later to Amendment 36C for further consideration.

The RS-IFQ program 5-year review (GMFMC and NMFS 2013) noted that landed yield is close to, but below the commercial sector's quotas for red snapper, and the report recommended making available the shares held in accounts that had never been accessed. Since finalization of the report in 2013, the amount of shares held in non-activated accounts, which may hold grouper-tilefish shares as well, continued to decline and represented a relatively small amount of annual allocation for each of the share categories. The amount of shares continued to decline until implementation of Amendment 36A. Table 2.2.1 provides the amount of shares from the non-activated accounts by share category currently held by NMFS and the resulting pounds of allocation represented by the shares for the 2018 quotas.

Table 2.2.1. For each share category, the amount of shares revoked from non-activated accounts, the quota for 2018, and the resulting pounds (gutted weight) of allocation represented by the shares.

Share category	Reclaimed Shares	2018 Quota	2018 Allocation
DWG	0.028405%	1,024,000	291
RG	0.106974%	7,780,000	8,323
GG	0.182621%	939,000	1,715
SWG	0.451821%	525,000	2,372
TF	0.055081%	582,000	321
RS	0.078800%	6,312,613	4,974

Source: IFQ database accessed 7/31/2018.

Under **Alternative 1**, allocation from the reclaimed shares held by NMFS would remain unused, preventing the ability to achieve optimum yield. **Alternatives 2 and 3** would distribute the reclaimed shares to existing shareholders of each share category. **Alternative 2** would distribute the shares for each share category to all existing shareholders holding shares for that share category in inverse proportion to the amount of shares held. Thus, shareholder accounts holding a smaller amount of shares would receive a greater amount of redistributed shares, while an account with a greater amount of shares would receive a smaller amount of redistributed shares. **Alternative 3** would distribute the shares for each share category equally to existing shareholders with shares in that share category that provide 500 lbs of annual allocation or less. Under both alternatives, the shares would be distributed within one month of the effective date for the final rule implementing this amendment is published. The Council would need to decide when to calculate existing shareholdings for the purpose of qualifying for receiving a distribution of reclaimed shares.

If either **Alternative 2 or 3** is selected, it is important to note that shares are limited to six decimal places and cannot be divided beyond that. Thus, if the distribution results in shares of less than 0.000001, it will not be possible to distribute them at this level. NMFS would also have to determine whether any account or entity (such as businesses with multiple owners) is at the share cap or would exceed the share cap by receiving distributed shares. Any entity (account, business, or person) that meets the respective share cap for a species or species group would not be eligible to receive redistributed shares. For any entity for whom the amount of redistributed shares would cause the entity to exceed the share cap, the entity would receive shares up to the share cap, with the remaining portion of shares distributed among others in an iterative process of calculating the redistribution such that no entity exceeds the share cap. The shares would only be distributed to entities that hold shares less than the respective share cap. Because an entity can belong to more than one account, this may result in multiple accounts that cannot receive the redistributed shares due to at least one of the shareholders exceeding the share cap.

Table 2.2.2 provides the number of IFQ accounts at the end of 2018 with shares for each share category, broken down by shareholding size, and the number of accounts with shares representing 500 lbs or less of annual allocation. Some entities have ownership interests in multiple IFQ accounts. If shares are distributed among all shareholder accounts for each share category inversely proportional to shareholdings (**Alternative 2**), those entities that have ownership interests in multiple accounts would likely receive a greater amount of the redistributed shares than would entities who hold all of their shares in a single account. For

example, an entity with a single account in which a larger amount of shares are held than the total amount of shares spread among another shareholder's multiple accounts would receive less shares than the shareholder with multiple accounts.

Table 2.2.2. Number of accounts with shares by share category and shareholding size (small, medium, and large), and number of accounts by share category with an amount of shares less than or equal to 500 lbs gutted weight, at the end of 2018.

Share Category	Small (<0.05%)	Medium (0.05%-1.4999%)	Large (≥1.5%)	Total # of Accounts	# of Accounts with shares ≤ 500 lbs
DWG	208	118	18	344	207
SWG	295	216	10	521	336
RG	303	190	12	505	178
GG	288	223	12	523	291
TF	134	52	19	205	139
RS	199	125	17	341	111

Source: SERO Catch Share Database.

Alternative 3 would distribute the reclaimed shares equally among those accounts that hold shares in each share category if the amount of shares represents not more than 500 lbs of annual allocation. The Council's intent through this alternative would be to provide shares to those with smaller shareholdings. However, those entities that have ownership interests in multiple accounts could receive a greater amount of the redistributed shares than would entities who hold all of their shares in a single account, if those accounts hold shares that represent less than 500 lbs of annual allocation. Further, an account that holds shares representing less than 500 lbs of allocation for one share category may hold a much larger amount of shares in a different share category.

The Council has also expressed its intent to set aside the quota from the non-activated shares for use in a quota bank for addressing commercial discards. **Alternative 4** would establish a quota bank and include the shares reclaimed from non-activated accounts for the purpose of distributing the allocation associated with the shares to eligible recipients. The shares would not be distributed; rather, the annual allocation associated with the shares would be distributed as specified in Action 2. Sub-actions in Action 2 would allow the Council to designate any additional allocation for distribution through the quota bank, identify the recipients who would be eligible for receiving allocation, and the methods for distributing the allocation.

Shareholders vary in the amount of shares each holds and how long they have held shares. Although some shareholders were initial recipients of shares, others have become shareholders after implementation of the program and obtained shares through purchase, inheritance, etc. Some shareholders use most or all of the annual allocation associated with their shares, while others transfer some or most of their allocation to other program participants (i.e., leasing). It is likely that establishing a quota set-aside or quota bank could affect groups of shareholders and allocation-only holders in unintended ways.

2.2 Action 2 – Quota bank

Action 2 and sub-actions are only applicable if Alternative 4 of Action 1 is selected as preferred.

Should the Council pursue a quota redistribution or quota set-aside, several issues would need to be addressed. The Council would need to determine how much quota from which share categories would be set-aside (Actions 2.1), who would be the recipients of the allocation (Action 2.2), and how much and how allocation would be distributed to eligible recipients (Actions 2.3 and 2.4). Only allocation (not shares) would be distributed through the quota bank. Recipients could be small shareholders, new entrants replacing exiting fishermen, or some other group specified by the Council. For example, the Council added as a program objective to assist small participants and new entrants (i.e., replacement or next generation of fishermen), and to reduce discards.

2.2.1 Action 2.1 – Thresholds of allocation to add to quota bank

Alternative 1: No Action. Do not add allocation to the quota bank from any share category. The quota bank holds shares reclaimed through Amendment 36A or Action 1 of Amendment 36B.

Alternative 2: Each year on January 1, add to the quota bank the amount of allocation greater than the commercial quota at the time of the respective RS-IFQ or GT-IFQ program's final approval by the Council for the selected share category(s):

Option 2a: red snapper.

Option 2b: all grouper-tilefish share categories.

Alternative 3: Each year, add to the quota bank the amount of allocation greater than the largest commercial quota between 2007 and 2018 of the respective share category for the selected share category(s):

Option 3a: red snapper.

Option 3b: all grouper-tilefish share categories.

Discussion:

This sub-action is only applicable if a quota bank is established in Action 1. For the purpose of discussing this action, under **Alternative 1** the shares reclaimed from the non-activated accounts (Amendment 36A; GMFMC 2017) and any shares reclaimed through Action 2 of Amendment 36B (currently under development) would be held by a third-party quota bank with oversight from NMFS. Only the allocation associated with these shares would be distributed through the quota bank. Table 2.2.1 provides the amount of shares that were reclaimed from the non-activated accounts through Amendment 36A (GMFMC 2017). The amount of shares that would be reclaimed through Amendment 36B is unknown at this time.

Only allocation (not shares) would be added and distributed through the quota bank. This action establishes the threshold of commercial quota that would be the maximum amount of allocation distributed among existing shareholders, with the remainder being added to the quota bank. In other words, when the quota is greater than the amount specified in the selected alternative, the amount of quota above the threshold will be added as allocation to the quota bank for distribution to eligible recipients in that year, and the allocation up to the threshold will be distributed to shareholders according to existing shareholdings on January 1. However, no redistribution or set-aside would apply if the quota drops below the threshold. For red snapper, the annual catch limit (ACL) is the quota, and for the grouper-tilefish share categories, the annual catch target is the quota.

Commercial quotas for IFQ species have changed since implementation of each program (Table 2.2.1.1). While existing shareholders' amount of shares as a percentage may stay the same, setting aside allocation would result in existing shareholders receiving less allocation, because the shares are not applied to the entire commercial quota but to a reduced threshold of the quota.

Table 2.2.1.1. Commercial quotas (2007-2011) and ACLs (2012-2018) in pounds gutted weight since implementation of each IFQ program.

Year	RS	GG	RG	SWG	DWG	TF
2007	2,986,486					
2008	2,297,297					
2009	2,297,297					
2010	3,190,991	1,410,000	5,750,000	410,000	1,020,000	440,000
2011	3,300,901	430,000	5,230,000	410,000	1,020,000	440,000
2012	3,712,613	567,000	5,370,000	509,000	1,127,000	582,000
2013	5,054,054	708,000	5,530,000	518,000	1,118,000	582,000
2014	5,054,054	835,000	5,630,000	523,000	1,110,000	582,000
2015	6,570,270	939,000	5,720,000	525,000	1,101,000	582,000
2016	6,097,297	939,000	7,780,000	525,000	1,024,000	582,000
2017	6,312,613	939,000	7,780,000	525,000	1,024,000	582,000
2018	6,312,613	939,000	7,780,000	525,000	1,024,000	582,000

Under **Alternative 1**, annual allocation would continue to be distributed to shareholders by January 1 each year or at the time of an in-season quota increase. The allocation associated with the shares held by NMFS would remain unused. **Alternatives 2 and 3** provide different thresholds of quota above which allocation would be added to the quota bank for distribution to eligible recipients. **Alternative 2** would set aside allocation when the quota is greater than the commercial quota at the time of the Council's final approval of each IFQ program amendment: 2006 for red snapper and 2009 for the grouper-tilefish share categories. **Alternative 3** would set aside allocation when the quota is greater than the largest commercial quota for the respective share category between 2007 and 2018. Table 2.2.1.2 provides the quotas that would represent the thresholds under **Alternatives 2 and 3**.

Table 2.2.1.2. The quotas (pounds gutted weight) that would represent the threshold for adding allocation to the quota bank under **Alternatives 2 and 3.**

Alternative	RS	GG	RG	SWG	DWG	TF
2	4,650,000	1,320,000*	5,750,000*	410,000*	1,020,000	440,000
3	6,570,270	1,410,000	7,780,000	525,000	1,127,000	582,000

*The total shallow-water grouper quota in 2009 (7.48 million pounds gutted weight [mp gw]) was an aggregate of the other shallow-water grouper species, red grouper, and gag. Within this aggregate, red grouper had a quota of 5.75 mp gw and gag had a quota of 1.32 mp gw. The remainder of the total shallow-water grouper quota (0.41 mp gw) is provided as the shallow-water grouper quota.

Options are provided for each alternative threshold to select the share category(s) from which allocation would be added to the quota bank. **Options a** would indicate that red snapper allocation would be added to the quota bank when the commercial quota is greater than the selected threshold, and **Options b** would add quota from all grouper-tilefish share categories when the commercial quota is greater than the selected threshold. Both **Options a** and **b** may be selected as preferred for either **Alternative 2** or **3**. The commercial quota up to the amount of the threshold would continue to be distributed as allocation based on shareholdings. The amount of quota above the threshold would be transferred as allocation to the quota bank.

2.2.2 Action 2.2 – Eligible recipients of allocation from the quota bank

At its October 2017 meeting, the Council added as a goal of the IFQ programs that quota set-asides, such as a quota bank, be used to address and assist small participants, new entrants, and to reduce discards. At its April 2018 meeting, the Council indicated its intent to use a NMFS-administered quota bank containing the shares from non-activated accounts to address commercial discards. Thus, the Council would need to define small participants, new entrants, and those who would qualify for the purpose of reducing discards, and specify the eligible recipients of the allocation held in the quota bank. The definitions and determinations as to the beneficiaries of the quota bank, including the decisions pertaining to how much quota should be diverted to the quota bank and how much quota each eligible recipient should receive, should be supported by the objectives of the IFQ programs.

After defining the universe of eligible recipients, additional questions would need to be addressed which may require one or more actions. These questions include:

- How much quota would be provided to each type of recipient (i.e., small participants and new entrants versus eligible recipients to reduce discards)?
- How would the quota be distributed (e.g., lottery, auction, etc.)?
- For how many years would recipients be eligible?

Currently, there is no definition of “small participant” or “new entrant” in the commercial IFQ programs, and it is likely that the characteristics of each would overlap. The Council would also need to define who would be eligible to receive quota for the purpose of reducing discards. This section would enable the Council to evaluate the characteristics of and to define small participants and new entrants in the RS-IFQ and GT-IFQ programs, as well as those for whom quota would be made available to address discards for the purpose of distributing allocation from the quota bank.

At its February 2011 meeting, the Council passed several motions pertaining to the establishment of a finance program for each of the commercial IFQ programs. The finance programs were intended for entry level fishermen and fishermen who fish from small vessels to obtain quota shares. For the purpose of the RS-IFQ and GT-IFQ finance programs, the Council used the following definitions:

- an ***entry level fisherman*** is defined as a federal commercial reef fish permit holder who has not purchased, previously held, or holds:

- GT-IFQ shares in excess of the percentage of shares that produces 8,000 lbs gutted weight of quota allocation; and,

- RS-IFQ shares in excess of the percentage of shares that produces 4,000 lbs gutted weight of quota allocation.

- ***fishermen who fish from small vessels*** are defined as federal commercial reef fish permit holders who fish from a vessel whose length as defined in the reef fish permit is less than or equal to 45 feet and who have not purchased, previously held, or holds:

- GT-IFQ shares in excess of the percentage of shares that produces 8,000 lbs gutted weight of GT quota allocation.

- RS-IFQ shares in excess of the percentage of shares that produces 4,000 lbs gutted weight of RS quota allocation.

The Council further indicated that participation in the finance programs should be limited to fishermen who hold quota shares representing no more than 12,000 lbs gutted weight combined in both the RS-IFQ and GT-IFQ programs. At the time, 30.8% of RS-IFQ program participants each owned shares equivalent to 100 lbs or less, 78% of the commercial red snapper fleet was prosecuted on vessels of 45 feet in length or less, and the 4,000-lb ownership limit could have allowed as much as 79.9% of RS-IFQ program participants to be eligible to apply for IFQ financing. For the GT-IFQ program, 44.4% of participants owned shares equivalent to 100 lbs or less, 80% of the commercial grouper-tilefish fleet was prosecuted on vessels of 45 feet in length or less, and the 8,000-lb ownership limit could have allowed as much as 84.2% of GT-IFQ program participants to be eligible to apply for IFQ financing. In establishing these definitions, the Council's intent was for the smallest participants in the IFQ programs to be the primary beneficiaries of the financing opportunities. The Council may find these definitions applicable to defining small participants for the purpose of redistributing shares or allocation from inactivated accounts. Since then, a federal fishery finance program has been approved. This program is open to all applicants within a catch share program and is not limited to new entrants or small participants.

Based on more recent Council discussion, the primary characteristics of a small participant in the IFQ programs is someone who is actively engaged in fishing, possesses a commercially permitted reef fish vessel, and makes landings of IFQ species. New entrants have been discussed as replacement fishermen for those exiting the fishery, and would likely share characteristics with small participants. Thus, the definitions of an entry level fisherman and a fisherman who fishes from a small vessel may not be sufficient for identifying small participants or new entrants for the purpose of distributing allocation from the quota bank. Further, it would be necessary to identify those participants who satisfy the characteristics based on the way the IFQ system

stores, organizes, and monitors information about IFQ program participants. The following list of potential characteristics of a “small participant” or “new entrant” are provided for further discussion. The characteristics are not mutually exclusive but rather, reflect multiple ways of evaluating and measuring participation in the commercial IFQ programs; multiple characteristics could be used to refine the list of qualifying persons.

Potential characteristics of a “Small Participant” or “New Entrant” for both shareholders and non-shareholders

As indicated at the January 2020 meeting, small participants or new entrants may be shareholders who qualify as small participants for all share categories of the IFQ programs. In terms of shareholdings, “small” would be defined based on this share bin size in the annual reports for the IFQ programs.

Whether or not they hold shares, small participants or new entrants may also be defined as those who have landed more allocation than the amount of allocation they received from any shares held.

Other potential definitions of small participants or new entrants are shareholders who:

- Hold a small amount of shares (need to define quantity; consider across share categories)
- Have landed more pounds of IFQ allocation than the amount of allocation received at the beginning of the year from the shares held, in any or each of the past 2, 3, or 5 years.
- Are eligible to participate in the finance program as entry level fishermen.
- Are eligible to participate in the finance program as fishermen who fish from small vessels.
- Do not own shares in excess of a determined amount of shares for any share category.
- Across all share categories in both the RS and GT-IFQ programs, have greater than zero shares in at least one share category, but does not possess more than the percentage of shares that produces a determined amount of pounds gutted weight of quota allocation across all share categories.
 - In 2016, the total pounds of allocation for all six share categories equaled 14,887,297 lbs gw. A small participant could be defined as owning less than an amount of shares across all share categories represented by a selected amount of pounds, such as 1,000 lbs, 2,500 lbs, or 5,000 lbs.

Small participants or new entrants are account holders without shares who:

- Obtain (“lease”) allocation and have made landings of any IFQ species during the last 2, 3, or 5 years.
 - A range for the amount of landings made could be evaluated as alternatives.

Potential characteristics that could apply to small participants or new entrants, whether or not shares are held:

- Possess a commercial reef fish permit on a vessel that is associated with the same shareholder account.
- Own and operate a single permitted vessel.
- Have a single IFQ shareholder account and are not associated with or related to another IFQ account shareholder or entity.

- It would be important to specify whether small participants will be defined at the individual or business entity level; the Council may also wish to consider how the level of participation would be verified.
- Have made landings of at least one IFQ managed species within the last 2, 3, or 5 years on the vessel associated with the shareholder's account.

It would be important to examine program participation across both IFQ programs and share categories, as an entity may qualify as a small participant in one IFQ program (or share category), but not the other. For example, an entity may qualify as a small participant in the RS-IFQ program, but hold a large amount of shares in the GT-IFQ program. To address this, share ownership could be evaluated in brackets for each share category's share cap, and a small participant could be defined as an entity that holds some percentage of shares of a share category's share cap (5%, 10%, etc.).

Potential characteristics of those who would receive quota to account for commercial discards

The Council would also need to define those who would be eligible to receive allocation to account for commercial discards. Council discussion has identified this as a problem with red snapper discards in the eastern Gulf. Thus, vessels that make landings in the eastern Gulf would be expected to be eligible. However, given the number of vessels that make landings in the eastern Gulf, the Council would need to specify the conditions for which vessels could receive allocation, including the amount of allocation. The Council would also need to define the geographic area for targeting a reduction in discards. Other considerations may include whether vessels must both make landings and be homeported in the eastern Gulf, and whether to provide more allocation to longline vessels, which have higher dead discard rates than vertical line vessels. It should be noted that providing for discards in the eastern Gulf may increase discards in the western Gulf.

2.3.3 Action 2.3 – Amount of allocation available for eligible recipients

Assuming that eligible recipients of the quota bank are defined in Action 2.2, the Council would need to determine how much allocation would be provided to each group of recipients (i.e., small participants and new entrants, and for addressing discards), and each individual recipient. It is assumed that small participants and new entrants would be eligible for allocation from all share categories, while allocation provided to reduce discards is assumed to be limited to red snapper only. These alternatives will be developed based on how eligible recipients are defined.

2.3.3 Action 2.4 – Distribution of allocation from the quota bank

Next, the Council would need to determine the method for distributing the allocation to eligible recipients. Approaches to distributing allocation from the quota bank to eligible recipients may include:

- Distributing allocation for each share category equally among all eligible recipients.

- Weighting the distribution of allocation by some measure of fishing activity, such that those who can demonstrate more fishing activity would receive more quota.
- Applying an adaptive management redistribution method based on cyclical redistribution, which depends on fishing participation to distribute the annual allocation in the quota bank.
- Distributing the allocation by lottery.

2.3 Action 3 – Accuracy of estimated weights in advance landing notifications

Alternative 1: No Action. Do not change the current reporting requirement regarding estimated weight of IFQ species to be landed on the advance landing notification.

Alternative 2: When the estimated weight for a share category is less than the actual landed weight of that share category, the difference between the estimated weight and the actual landed weight cannot be greater than 25% of the estimated weight. This requirement applies when the actual landed weight of that share category is equal to or greater than

Option 2a: 100 lbs.

Option 2b: 500 lbs.

Option 2c: 750 lbs.

Alternative 3: When the estimated weight for a share category is less than the actual landed weight of that share category, the difference between the estimated weight and the actual landed weight cannot be greater than 50% of the estimated weight. This requirement applies when the actual landed weight of that share category is equal to or greater than

Option 3a: 100 lbs.

Option 3b: 500 lbs.

Option 3c: 750 lbs.

Alternative 4: When the estimated weight for a share category is less than the actual landed weight of that share category, the difference between the estimated weight and the actual landed weight cannot be greater than 75% of the estimated weight. This requirement applies when the actual landed weight of that share category is equal to or greater than

Option 4a: 100 lbs.

Option 4b: 500 lbs.

Option 4c: 750 lbs.

Alternative 5: When the estimated weight for a share category is less than the actual landed weight of that share category, the difference between the estimated weight and the actual landed weight cannot be greater than 100% of the estimated weight. This requirement applies when the actual landed weight of that share category is equal to or greater than

Option 5a: 100 lbs.

Option 5b: 500 lbs.

Option 5c: 750 lbs.

Discussion:

Among other requirements, commercial vessels intending to land IFQ species must include an estimate of the weight of IFQ-managed reef fish that will be landed on the advance landing notification (**Alternative 1**); however, there is no guidance on how accurate that estimate has to be. The advance landing notification is provided to law enforcement, which makes random dockside inspections of landings. At its April 2018 meeting, the Council received a report from the Law Enforcement Technical Committee regarding landings of commercial red snapper

exceeding the estimated weight provided in the advance landing notifications. The Law Enforcement Technical Committee expressed concern that actual landed weights may not be accurately reported and deducted from the commercial quota when law enforcement are not present.³ The Council is considering a requirement that the estimated weight of IFQ-managed species be within some range of the actual landed weight. The Council further refined its intent to require accuracy for estimates that are less than the actual landed weight, and not for estimates that are greater than actual landed weights.

Alternatives 2-5 specify the percentage within which estimated weights must be accurate below the actual landed weight (25%, 50%, 75%, or 100%) for trips exceeding a given minimum actual weight (100 lbs, 500 lbs, and 750 lbs options). The options for a minimum actual landed weight are provided, because it could be difficult to estimate to within a certain percentage for a very low weight (e.g., within 10% could be a matter of a single fish). **Alternative 2** would require the estimated weight on advance landing notifications to be no more than 25% below the actual landed weight, **Alternative 3** would require the estimated weight to be no more than 50% below the actual landed weight, **Alternative 4** would require the estimated weight to be no more than 75% below the actual landed weight, and **Alternative 5** would require the estimated weight to be no more than 100% below the actual landed weight per share category. For example, if a vessel's actual landed weight of red snapper is 1,500 lbs, under **Alternative 3**, the estimated weight on the advance landing notification would need to be equal to or greater than 1,000 lbs, because the difference between the estimate (1,000 lbs) and actual landed weight (1,500 lbs) is 500 lbs, which is 50% of the estimated weight. The options would require that the estimated weight be within the specified range of accuracy when the total landed weight of that share category is greater than 100 lbs (**Options a**), 500 lbs (**Options b**), and 750 lbs for (**Options c**). For example, under **Alternative 3 Option b**, a vessel with 300 lbs of tilefish and 1,000 lbs of red grouper would be required to estimate the weight of the red grouper within 50%.

Alternative 2 establishes a maximum threshold for the allowable divergence between estimated weights and actual landed weights when the estimated weight is less than the actual landed weight. As a percent of the estimated weight, the maximum allowable difference between the estimated weight for a share category and the actual landed weight for that share category cannot exceed 25% under **Alternative 2**. For example, if a vessel operator reports on an advance landing notification an estimated weight of 1,000 lbs of red grouper, the actual landed weight of red grouper could not exceed 1,250 lbs (25% of the 1,000 lbs estimated to be landed). **Alternative 2 Options 2a-2c** set minimum actual landed weights below which this requirement does not apply. **Options 2a, 2b, and 2c** set minimum actual landings at 100 lbs, 500 lbs, and 750 lbs, respectively.

Alternatives 3-5 would establish different thresholds for the allowable divergence between estimated weights and actual landed weights. As a percent of the estimated weight, the maximum allowable difference between the estimated weight for a share category and the actual landed weight for that share category could not exceed 50%, 75%, and 100% under **Alternatives 3, 4, and 5**, respectively. **Alternatives 3-5 also** set minimum actual landed weights below which this requirement does not apply (**Options a-c**).

³ Law Enforcement Technical Committee meeting at the March 2018 Gulf States Marine Fisheries Commission meeting. Meeting summary can be found at: <http://gulfcouncil.org/wp-content/uploads/K-6-LETC-LEC-meeting-summary-Mar-2018.pdf>

CHAPTER 3. REFERENCES

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APPENDIX A. GOALS OF THE IFQ PROGRAMS

Red Snapper IFQ Program (Amendment 26; GMFMC 2006)

The purpose of the IFQ program proposed in this amendment is *to reduce overcapacity in the commercial fishery and to eliminate, to the extent possible, the problems associated with derby fishing*, in order to assist the Council in achieving OY. In a 1999 review of the effectiveness of IFQ programs worldwide, the National Research Council concluded such programs are valuable in addressing these two long-standing fishery problems (NRC 1999). Case studies describing the effects of existing IFQ programs are provided in Appendix G of that publication. The harvest privileges provided by IFQ programs are intended to give fishermen a long-term interest in the health and productivity of the fishery and, thus, an incentive to conserve it for the future. By eliminating the incentive to over invest in the fishery, these privileges eliminate the incentive to race for fish. IFQ programs are generally effective in controlling exploitation, reducing the incentive to fish during unsafe conditions, improving fishery profitability, and extending the availability of fresh fish products to consumers. In some cases, these programs also have been shown to increase product quality by improving fishing and handling methods by allowing fishermen greater flexibility in operations. The proposed IFQ program is intended to help the Council address overfishing by reducing the rate of discard mortality that normally increases with increased fishing effort in overcapitalized fisheries (NRC 1999; Leal et al. 2005). IFQs provide the opportunity to better utilize fishing and handling methods and reduce bycatch of non-targeted species. Improving catch efficiency may also result in a decrease in regulatory discards of red snapper and other reef fish species by allowing fishermen the choice on when and where to fish. Additionally, the slower paced fishery anticipated under the IFQ program will support fewer fishermen operating over a longer season.

Grouper-Tilefish IFQ Program (Amendment 29; GMFMC 2008)

The purpose of this amendment is to rationalize effort and reduce overcapacity in the commercial grouper and tilefish fisheries in order to achieve and maintain optimum yield (OY) in these multi-species fisheries. 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” (Fin 2003). Terry and Kirkley (2006) defined overcapacity as the difference between harvesting capacity and a management target catch, given the stock conditions associated with that target catch. Excess capacity is defined as the difference between harvest capacity and actual harvests.

Rationalizing effort should mitigate some of the problems resulting from derby fishing conditions or at least prevent the condition from becoming more severe. Reducing overcapitalization should improve profitability of commercial grouper fishermen. Collectively, working conditions including safety at sea should improve and bycatch in the tilefish and grouper fisheries should be reduced, and a flexible and effective integrated management approach for tilefish and the grouper complex and tilefish should follow. This amendment evaluates several management programs that could be capable either independently or in combination of accomplishing the objectives specified above.

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APPENDIX B. CONCLUSIONS FROM THE RED SNAPPER AND GROUPER-TILEFISH 5-YEAR REVIEWS

The Red Snapper Individual Fishing Quota (IFQ) program 5-year review was completed by NMFS and Council staff (GMFMC and NMFS 2013). The conclusions from the review are provided below.

The original purpose and need defined in Amendment 26 (GMFMC 2006), reads as follows:

The purpose of the IFQ program proposed in this amendment is to reduce overcapacity in the commercial fishery and to eliminate, to the extent possible, the problems associated with derby fishing, in order to assist the Council in achieving OY.

National Standard 1 of the Magnuson-Stevens Act mandates conservation and management measures prevent overfishing and achieve OY from a fishery. OY is defined as the amount of fish that will provide the greatest overall benefit to the nation, particularly with respect to food production and recreational opportunities. OY must take into account the protection of marine ecosystems and is prescribed based on the maximum sustainable yield (MSY) from the fishery, as reduced by any relevant economic, social, or ecological factors. In practice, the commercial sector's share of the quota is equivalent to the sector's share of OY for the red snapper fishery. Commercial harvests that are equal or very close to the quota without exceeding it would be consistent with the prevention of overfishing and achievement of OY mandated by the Magnuson-Stevens Act.

The RS-IFQ program 5-year review (GMFMC and NMFS 2013) evaluated the progress of the program towards achieving its goals and objectives. The performance of the RS-IFQ program in achieving OY was assessed by measuring its ability to constrain harvest at or below the quota while allowing RS-IFQ participants to harvest as much red snapper as possible.

Recommendations from the review have been presented to the Council and incorporated into the potential changes included in this scoping document. As part of the process of considering program modifications, the Council may wish to evaluate modifications to continue progress towards the program's goals and objectives, to improve program performance, participant satisfaction, and to continue assisting the Council in achieving OY.

The conclusions of the RS-IFQ program 5-year review⁴ are:

Participant Consolidation and Overcapacity

Conclusion 1: The RS-IFQ program has had moderate success reducing overcapacity, however economic analyses indicate that additional reductions in fleet capacity are still necessary.

⁴ The full supporting summaries for each conclusion are provided in Appendix B. The entire Red Snapper IFQ Program 5-year review may be accessed at <http://www.gulfcouncil.org/docs/amendments/Red%20Snapper%205-year%20Review%20FINAL.pdf>

Achievement (or Harvesting) of Optimum Yield

Conclusion 2: The RS-IFQ program has been successful in reducing quota overages, which is consistent with the achievement of OY. Landings have averaged greater than 95% of the commercial quota; however, many inactive accounts remain and account for as much as 1.5% of the commercial quota.

Mitigating the Race to Fish and Safety at Sea

Conclusion 3: The RS-IFQ program was successful at mitigating the race to fish providing fishermen with the opportunity to harvest and land red snapper year-round. Inflation-adjusted share, allocation, and ex-vessel prices increased, indicating that fishermen were successfully maximizing profits and had increased confidence in the RS-IFQ program. Safety at sea has increased and annual mortalities related to fishing have declined since the RS-IFQ implementation. [According to Boen and Keithly (2012),] medium and large shareholders perceive that the RS-IFQ program has improved safety at sea.

Biological Outcomes

Conclusion 4: The implementation of the RS-IFQ program coupled with revisions to the red snapper rebuilding plan and reductions in quota and the commercial size limit, have all contributed to lower commercial fishing mortality rates and reduced discards. The RS-IFQ system has also prevented commercial quota overruns, which were frequent prior to RS-IFQ implementation. Discards continue to be high in the eastern Gulf where a large percentage of legal-sized red snapper are discarded by fishermen due to a lack of allocation.

Social Impacts

Conclusion 5: Large shareholders and western Gulf shareholders are generally more supportive of the RS-IFQ program than small to medium shareholders and those from the eastern Gulf. Entry and participation in the red snapper fishery is now more difficult and costly due to the increased costs of shares and allocation. Consolidation has resulted in less competition for harvest and higher revenues per trip. Crew sizes are smaller, but the ability to hire and keep stable crews has improved. The increase in the number of shareholders not landing any fish has led to perceptions that many are profiting from the program at the expense of hard-working fishermen.

Enforcement and Program Administration

Conclusion 6: RS-IFQ participants are generally satisfied with the IFQ online system and customer service when contacting NMFS and the 24-hour call service for advance landing notifications. Vessel monitoring systems, notification requirements, and random dockside inspections aid enforcement in monitoring program compliance; however, a variety of enforcement violations have been identified. Compliance has improved since RS-IFQ program implementation but additional enforcement efforts may be necessary to deter violations. IFQ program expenses currently exceed the 3% cost recovery collected for program administration, research, and enforcement.

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The Grouper-Tilefish Individual Fishing Quota (IFQ) program 5-year review was completed by NMFS and Council staff (GMFMC and NMFS 2018). The conclusions from the review are provided below.

The original purpose and need defined in Amendment 29 (GMFMC 2008), reads as follows:

The purpose of this amendment is to rationalize effort and reduce overcapacity in the commercial grouper and tilefish fisheries in order to achieve and maintain optimum yield (OY) in these multi-species fisheries.

This section summarizes the main conclusions of this initial review of the grouper-tilefish individual fishing quota (GT-IFQ) program and discusses the progress made towards achieving the stated goals and objectives of the program. In addition, the section includes recommendations made by the Gulf of Mexico Fishery Management Council (Council), its scientific and statistical committees (Standing and Socioeconomic SSCs) and advisory panel (Ad Hoc Red Snapper and Grouper-Tilefish IFQ Advisory Panel).

Data Collection and Reporting

- The collection of share and allocation prices has greatly improved since the addition of transfer reasons. However, gaps still exist in the data. Additional measures such as mandatory price reporting and further limiting the range of prices that can be entered may be needed.
- Different data collection programs, which are run for different purposes, have led to duplicative reporting and data discrepancies. Efforts are under way to reduce the data inconsistencies between the IFQ, coastal logbooks, and trip ticket data collection programs.

Participation and Operational Changes

- Stochastic frontier analyses indicate that following the implementation of the GT-IFQ program, fishing capacity and overcapacity have declined. Capacity utilization has increased and the technical efficiency of the fleet has increased for remaining vessels.
- The GT-IFQ program, in conjunction with other regulations, especially the enactment of a bottom longline (BLL) endorsement, has resulted in consolidation and efficiency gains within the BLL and vertical line (VL) sectors, which have seen a reduction in active vessels by 48% and 33%, respectively. However, further consolidation is possible as fishing capacity remains large relative to the available quotas.

Share and Allocation Caps

- Based on Gini coefficient estimates, the distributions of shares as well as landings by share category at the lowest known entity level have changed little if at all since the IFQ programs were implemented.
- Market power analyses concluded that market power does not exist in any of the markets for landings, shares, or annual allocation and that economies of scale are not being exhausted, i.e., average costs of production are not being minimized.
- Existing share and annual allocation caps are not constraining landings. Retaining the current share and annual allocation caps would still prevent participants from exercising market power and would not preclude businesses from achieving economies of scale under current market conditions. Additional flexibility from expanding the size of some of the smaller caps would not create additional risk of market power being exercised, and would provide even more flexibility for the type of consolidation that would improve cost efficiency.

Share, Allocation, and Ex-Vessel Prices

- Analyses of share and allocation prices have been hindered by missing or erroneous (e.g., under-reported values such as \$0.01 per pound) data. The collection of accurate share and allocation prices continue to be a challenge.
- Although grouper ex-vessel prices increased during the review period, the introduction of the GT-IFQ program does not appear to have an appreciable effect on ex-vessel prices for Gulf groupers.
- The flexibility afforded by the GT-IFQ program has improved the profitability of fishing operations. Fishermen are able to reduce operating costs, thereby improving net revenues

Catch and Sustainability

- The GT-IFQ program has provided year-round fishing opportunities to participating commercial fishermen for all grouper and tilefish species included in the program.

- Gag (GGM) and red grouper (RGM) multi-use shares were not as effective as anticipated. As a result, the program could be streamlined by eliminating GGM and RGM shares and distributing red grouper and gag shares exclusively as red grouper and gag, respectively.
- Multi-use provisions for other shallow-water grouper (SWG) and DWG and overage provisions for all GT-IFQ categories should be maintained as they effectively contributed to reducing discards of GT-IFQ species.
- The GT-IFQ program has successfully met its objectives relative to discard reduction for red grouper. After the implementation of the GT-IFQ, red grouper discards and discard ratios significantly decreased across the Gulf of Mexico and for all gear types. However, due to a significant quota reduction, gag discards and discard ratios increased in 2011 but declined afterwards as the gag quota increased.

Safety-at-Sea

- The GT-IFQ program has successfully met its objectives relative to improving the safety-at sea of participating commercial fishermen.
- The GT-IFQ has allowed fishermen to select more favorable weather conditions to plan fishing trips and has resulted in significant decreases in the number of fatalities (Marvasti and Dakhliya 2017).
- Safety-at sea improvements were corroborated by which were corroborated by survey responses provided by captains and crewmembers

New Entrants

- Promoting new entrants may seem inconsistent with the program goal of reducing overcapacity. However, new entrants are often participants in the fishery, e.g., crew and hired captains who do not own shares but could buy allocation.
- Fostering access by new entrants would be consistent with the program objectives. Loan programs, share redistributions and quota banks could be considered.

Monitoring and Enforcement

- Seized annual allocation cannot be deducted from the shareholder's account before settlement of the case. Seizures may not be the strongest deterrent from violation of IFQ regulations because of the lengthy delay between the seizure and the adjudication of the citation.
- Updates to the Southeast Region summary settlement schedule to allow for greater penalties in relation to red snapper violations improved the enforcement of the red snapper (RS)-IFQ program. A similar approach could be considered for the GT-IFQ program.

Administration and Cost Recovery

- During the review period, collected cost recovery fees have fully funded the GT-IFQ program (including enforcement activities and salaries and benefits of staff working on the program).
- Changes to the administration of the program, including the provision of outreach material, are enacted on an as needed basis. Several administrative changes have been implemented during the review period, e.g., improvements to the reporting of share and allocation transfer prices.

Program Duration

- GT-IFQ shares are issued for 10 years, but they will be renewed if not rescinded, limited, or modified. Longer duration is more conducive to longer term planning and conservation.
- To promote the full utilization of the available quotas, the Council has revoked IFQ shares from non-activated accounts, i.e., accounts possessing shares but none of the shares or annual allocation associated with the shares has been landed or transferred to another account since 2010.

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APPENDIX C. INDIVIDUAL FISHING QUOTA PROGRAM GLOSSARY

Active Account – An account in which the allocation holder has landed, bought, and/or sold (i.e., transferred) allocation within that year. Account activity status changes yearly based on the actions taken by the account holder.

Advance Landing Notification – A required 3-24 hour advanced landing notification stating the vessel identification, approved landing location, dealer's business name, time of arrival, and estimated pounds to be landed in each IFQ share category. Landing notifications can be submitted using either a vessel's VMS unit, through an IFQ entity's on-line account, or through the IFQ call service. The landing notification is intended to provide law enforcement officers the opportunity to be present at the point of landing so they can monitor and enforce IFQ requirements dockside. For the purpose of these regulations, the term landing means to arrive at the dock, berth, beach, seawall, or ramp.

Allocation – Allocation is the actual poundage of IFQ-managed species by which an account holder is ensured the opportunity to possess, land, sell, or transfer during a given calendar year. IFQ allocation is distributed to each IFQ shareholder at the beginning of each calendar year, and expires at the end of each calendar year. Annual IFQ allocation is determined by the amount of the shareholder's IFQ share and the amount of the annual commercial quota. Dealer accounts may not possess allocation.

Allocation Transfer – A transfer of allocation (pounds) from one shareholder account to another shareholder or vessel account. Allocation transfers are an immediate one-step process. As soon as the allocation holder completes the transfer, the allocation is in the recipient's account. This is different from the two-step share transfer process, and was created so that allocation could immediately be placed in a vessel account.

Entity – An individual, business, or association participating in the IFQ program. Each IFQ account is owned by a unique set of entities.

Gulf of Mexico Commercial Reef Fish Permit Holder – An entity that possesses a valid Gulf commercial reef fish permit and therefore, is eligible to be exempt from bag limits, to fish under a quota, or to sell Gulf reef fish in or from the Gulf exclusive economic zone. There is an annual fee associated with the permit.

IFQ Dealer Endorsement – The IFQ dealer endorsement is a document that a dealer must possess in order to receive Gulf IFQ species. The dealer endorsement can be downloaded free of charge from the IFQ dealer's online account.

Inactive Account – An account, in which the allocation holder has neither landed, bought, sold, nor transferred allocation within that year, including those who never logged into their account. Accounts activity status changes yearly based on the actions taken by the account holder.

Initial Account – An account which was never logged into by the account’s owner(s) in the current online system, which began in 2010.

Landing Transaction – A report that is completed by an IFQ dealer using the online IFQ system. This report includes the date, time, and location of the transaction; weight and actual ex-vessel price of IFQ fish landed and sold; and information necessary to identify the fisherman, vessel, and dealer involved in the transaction. The fisherman landing IFQ species must validate the dealer transaction report by entering his unique vessel’s personal identification number when the transaction report is submitted. After the dealer submits the report and the information has been verified, the website will send a transaction approval code to the dealer and the allocation holder.

Participant – An individual, business, or other entity that is part of an IFQ entity. For example, John Smith, the participant, may belong to multiple entities such as John Smith, John and Jane Smith, and ABC Company. Share and allocation caps are tracked at the IFQ participant level and not the IFQ entity level.

Public Participant Account – A shareholder account that was opened after January 1, 2012, for red snapper, or January 1, 2015, for grouper-tilefish, that does not have a permit associated with the account. Public participants may hold, buy, sell, and transfer shares and allocation, but cannot harvest IFQ species.

Share – A share is the percentage of a commercial quota assigned to a shareholder account that results in allocation (pounds) equivalent to the share percentage of the quota. Shares are permanent until subsequently transferred or revoked. Dealer accounts may not possess shares.

Share Cap – The maximum share allowed to be held by a person, business, or other entity. The share cap prevents one or more IFQ shareholders or entities from purchasing an excessive amount of IFQ shares and holding a monopoly in the IFQ program.

Share Transfer – Moving shares from one shareholder account to another shareholder account. A shareholder must initiate the share transfer and the receiver must accept the transfer by using the online IFQ system. Share transfers are a two-step process with the transferor initiating the transfer, but the completion does not occur until the transferee accepts the transfer. There may be a delay between initiation of the transfer and final acceptance of the transfer.

Shareholder – An entity that holds a percentage of commercial IFQ quota for any share category.

Shareholder Account – A type of IFQ account that may hold shares and/or allocation. This includes accounts that only hold allocation.